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**COMMUNICATION STRATEGY FOR GLOBAL COMPLIANCE
WITH THE MONTREAL PROTOCOL**

(Submitted by UNEP)

Executive Summary

Since the late 1970s, public awareness activities on ozone layer protection have been undertaken by scientists, media, NGOs, industries, governments and academia. From 1991 onwards, the Executive Committee of the Multilateral Fund has recognised the importance of the public awareness activities in Article 5 countries. UNEP's OzonAction Programme was the main implementing agency to develop and implement public awareness campaigns that contributed to the ozone layer protection through the ODS phase-out. UNEP collaborated with other agencies for the effective implementation.

From the year 2000 onwards, Article 5 countries entered into the compliance regime of the Montreal Protocol. In the same year, the Executive Committee approved US\$ 200,000 per year towards such awareness-raising activities in the regions, first from a re-allocation of UNEP's core budget later from 2002 onwards as part of its Compliance Assistance Programme (CAP).

UNEP proposed that a communication strategy is needed to proceed on public awareness activities in the new compliance regime that Article 5 countries are experiencing. At no point in the history of the Montreal Protocol, or for that matter of any multilateral environmental agreement, have developing countries needed such activities to comply with strict control measures such as those contained in the Protocol. The responsibility of Article 5 countries is unique and challenging. Article 5 countries need a strategy for awareness activities based on the time-targeted experiences of international agencies in the field of health and disease eradication (WHO), children's education and welfare (UNICEF), and social and environmental education (UNESCO) and similar sectors. The Article 5 countries also needed to create a high-level awareness to expedite policy-setting and to meet the remaining challenges under the Montreal Protocol, i.e. illegal trade and phase-out in the SME sector.

The Executive Committee at its 35th meeting approved the proposal to prepare such a communication strategy in this context and in the context of the strategic planning exercise that it has undertaken to benefit Article 5 countries.

The research and consultation to develop this Communications Strategy document were conducted between November 2001 and April 2002. The basic assignment was to find out:

- Recognising that significant level of the public awareness activities have already been undertaken by various stakeholders, can strategically heightened public awareness in the developing countries assist the governments to meet with or accelerate the compliance with the Montreal Protocol from now on?
- What could be the methodological issues that need to be considered in designing such strategically heightened activities involving information, education and communication activities (IEC).

The answer to the first question is a qualified 'Yes'. The overwhelming finding is that a precondition for reaching every successful internationally-agreed target is public support. Accordingly, targeted and strategic awareness among different stakeholder groups is a necessary pre-condition for the success of national strategies from now on to comply with the Montreal Protocol. The exact composition of the stakeholder groups, and the degree and nature of the awareness may vary, however.

As for the second question, the principal finding of this strategy is that depletion of the ozone layer has now become a non-issue for the public in the Article 5 countries. Regarding the modalities for raising awareness to create an enabling environment for the Montreal Protocol, the permutations are as varied as is the diversity of the socio-economic and cultural situation of

the Article 5 countries. There is no practical alternative to a country-driven approach. However, this would be extremely costly if activities are undertaken at the level of intensity and detail necessary to make a difference. Significant new funding at the level of millions of dollars would be required. This is the ideal situation, where in time and money resources are limited for Article 5 countries, for designing the strategy for the communication in the compliance period. The optimisation between the resources needed for the diverse activities and the available resources to meet the strategic communication activities is required.

In this document five options have been set out for moving ahead in enhancing the IEC activities in Article 5 countries to create action oriented understanding and popular support for ODS phase out. These options range from continuing the business as usual, targeting priority countries, and the setting up of a new entity dedicated solely to catalysing and enabling IEC activities on ozone depletion and ODS phase out.

It can be concluded that it is certainly feasible to enhance public awareness during the remaining compliance period between 2002 and 2010 to assist the Article 5 countries in implementation of the Montreal Protocol targets. The resources already agreed to under the Multilateral Fund will certainly be necessary to get going on this activity but may not be adequate if the universal and accelerated compliance is to be achieved.

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Acronyms and Abbreviations

BBC	British Broadcasting Corporation
BP	British Petroleum
BSE	Bovine Spongiform Encephalopathy
CBO	Community-based Organisation
CCTV	China Central Television
CFC	Chloro-Fluoro Carbon
CNN	Cable News Network
CRI	China Radio International
CSE	Centre for Science and Environment, India
CSO	Civil Society Organisation
DDT	Dichloro diphenyl trichloroethane
DFID	Department for International Development, UK
EC	European Commission
ECPAT	Ending Child Prostitution in Asian Tourism
EETPC	Environmental Education Television Project for China
FAO	Food and Agriculture Organisation
FOE	Friends of the Earth
GE	General Electric
GEF	Global Environment Facility
HCFC	Hydro-Chloro-Fluoro-Carbon
HFC	Hydro-Fluoro-Carbon
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
IEC	Information, Education, and Communication
ILO	International Labour Organisation
IMF	International Monetary Fund
INRA	International Research Associates
IPM	Integrated Pest Management
IUCN	The World Conservation Union
MAI	Multilateral Agreement on Investment
MB	Methyl Bromide
MF	Multilateral Fund (of the Montreal Protocol)
MIT	Massachusetts Institute of Technology
NEFEJ	Nepal Forum of Environmental Journalists
NGO	Non Governmental Organisation
NOU	National Ozone Units
ODS	Ozone Depleting Substances
OECD	Organization for Economic Cooperation and Development
ORT	Oral Rehydration Therapy
PSA	Public Service Announcements
TVE	International Television Trust for the Environment
UN	United Nations
UNDP	United Nations Development Programme
UNEP/DTIE	United Nations Environment Programme, Division for Technology, Industry and Environment
UNESCO	United Nations Educational, Scientific & Cultural Organization
Unicef	United Nations Children's Fund
US EPA	United States Environmental Protection Agency
USAID	United States Agency for International Development
UVI	Ultraviolet Index
VNR	Video News Release
WHO	World Health Organisation

WSSD World Summit on Sustainable Development (also known as Rio+10)
WTO World Trade Organisation
WWF Worldwide Fund for Nature

A. Background, objectives, methodology and limitations

A1. Background and objectives

A1.1 Context and background

The Montreal Protocol is completing 15 years, and the Multilateral Fund is in its 11th year. The remarkable success of the phase out of ozone depleting substances (ODS) in developing countries thus far can be attributed to a very high degree to the far-reaching policies and measures pursued by the Multilateral Fund through investment and non-investment projects. The Multilateral Fund has recognised that legislative, regulatory and technological interventions need to be complemented by measures to enhance the gathering and dissemination of information and knowledge. This recognition has been the basis for strengthening the National Ozone Units (NOUs) and other relevant structures in countries that operate under Article 5 of the Protocol (Article 5 countries). This support has played a key role in information, education and communication (IEC) activities related to ozone depletion.

However, the task is not yet completed, and the remaining phase-out will have to be addressed in a shorter time period with limited resources, on an equitable basis. In this scenario, enhanced awareness is an essential first step. During the period 2002 to 2010, awareness among key actors such as industry, customs and government officials as well as the consumer, will assume far greater importance than in the past if compliance targets are to be met and the phase out sustained. And the overwhelming consensus among members of the Executive Committee of the Multilateral Fund attending the 36th Meeting is that it can play a crucial role helping countries move towards meeting their compliance targets.

In particular, it is hoped the enhanced awareness at high levels of governments and industry, and among the general public will encourage and inspire countries to take greater ownership of the compliance process, thus not continuing to rely heavily on external assistance. Such increased ownership will pave the way to self-reliance that will become necessary beyond the life of the Multilateral Fund.

As awareness raising needs vary from country to country, and are closely tied to local cultural and socio-economic factors, it is essential to adopt a country-driven approach. Already, countries are engaged in carrying out a variety of IEC activities, with varying degrees of outreach, impact and success. To successfully meet the challenges of the current decade, these IEC efforts will need to be more targeted, intensified and better supported with professional approaches and additional resources.

While scaling up continuing IEC activities is required, it is necessary for countries to be more innovative and strategic. In consultations with the countries, UNEP had discerned a widely-shared need for advice and guidance from communications professionals to achieve this task. It is also important to transfer lessons learned and successful approaches to ODS phase out efforts done from developed countries, to help raise awareness, change behaviour amongst the public and/or targeted audiences.

A1.2 Objectives

The overall objectives of this strategy are to:

- Contribute to promoting a country-driven approach to awareness raising as highlighted in the Strategic Planning process initiated by the Executive Committee;
- Support compliance of developing countries in the phase out of ODS under the Montreal Protocol through wider involvement of civil society in developing countries;

- Sustain the momentum of the phase out process during the compliance period by securing the broader involvement and support of the general public in Article 5 countries in the implementation of the Montreal Protocol;
- Assist in preventing “back sliding” to ODS use due to various factors, including ODS dumping, by promoting active involvement of local organisations and NGOs.

Specific objectives include:

- Assist countries in designing and developing specific awareness-raising activities and materials that will facilitate sustaining the momentum of ODS phase out globally;
- Enhance awareness at high level in governments on ozone depletion in general, and on the national and global significance of ODS phase-out targets in order to enforce the compliance regime on a national, regional and global level;
- Promote phase out by reaching out to specific sectors that have not yet received assistance, particularly the small and medium-sized enterprise (SME) sector, the end user and informal servicing sectors through regional awareness and education activities;
- Develop an overall communication strategy and time-bound awareness programme to be generated and supported through a decentralised but centrally facilitated generation of country-specific needs.

A1.3 Consultants

In October 2001, UNEP engaged the services of the International Television Trust for the Environment (TVE International, hereinafter referred to as TVE) based on an open bidding process. The bidders comprised five organisations specialising in public awareness and communications. TVE was given the task of preparing the communications strategy in consultation with communications experts at UNEP, other UN agencies and non-UN organisations. TVE is an independent, non-profit Trust established in 1984 by UNEP to use the media to raise awareness levels on environment and development issues. It has wide and varied experience in working globally, regionally and locally. Terms of Reference were prepared and discussed with the Expert Group and agreed with some experts and stakeholders.

In November 2001, TVE mobilised a team of researchers comprising staff and external experts to consult widely, and to gather information and expert opinions needed to prepare the communications strategy. TVE’s Executive Director assumed overall management. TVE Asia Pacific Regional Office, in Colombo, Sri Lanka, carried out the principal research, consultations and initial drafting. Annex 1 lists the researchers involved in this task.

A2. Methodology and consultative process

The methodology leading to the preparation of this communications strategy involved the following activities, carried out at a global level covering all geographical regions:

Desk study

- Review and analysis of information, education and communication (IEC) activities implemented by the UNEP information clearinghouse;
- Literature survey covering research publications on public awareness, mass media penetration, public education and social marketing issues going back 30 years;
- Internet search covering the public accessed websites of UNEP, other UN agencies, environmental and communications organisations, civil society organisations and academic organisations.
- Bilateral communications with members of the Executive Committee of the Multilateral Fund

Interviews

- Personal interviews with key officials or experts at organisations specialising in public awareness, education and outreach activities related to environment, health, social development and public safety issues¹;
- Interviews and consultations with mass media practitioners, media managers and media researchers working in all sections of the media – covering print, electronic and new media – and including advertising and marketing professions;
- Additional long-distance interviews, via email, with further individuals in the above two categories who could not be met in person.
- Interviews with Executive Committee members during the 36th meeting of the Executive Committee.

Country level assessments

- Questionnaires sent to NOUs seeking their experiences and opinions on ozone related information, education and communication activities carried out at national level;
- Three detailed country studies on three continents, carried out by national organisations according to set criteria and format;
- Information on ozone programmes that have had success in implementing phase out (i.e. US-EPA programmes, Swedish programmes, etc);
- Outputs and costing exercise for one country (China).

Open call

- An open call for information, opinions and recommendations that was widely circulated to networks of science and/or environment communicators, educators and civil society organisations.

In total, over 400 individuals and institutions in developing and developed countries were consulted to provide inputs to this Strategy, spanning public and private communications experts, media representatives, government officials, international organisations. A summary of these wide-ranging inputs is described below.

Consulting with NOUs and Parties to the Montreal Protocol

Concerted attempts were made to consult NOUs in the Article 5 countries. A questionnaire was circulated to all NOUs in Article 5 countries, to assess their current levels of IEC activities, constraints encountered, unmet needs and priorities. In two rounds, a total of 24 NOUs

¹ These were carried out in Geneva, Gland, London, Montreal, Mumbai, New York, Paris, Singapore, Tokyo and Washington, DC.

responded to the questionnaire. In addition, the TVE Director presented the preliminary conclusions (see Annex 22) to the 36th meeting of the Executive Committee of the Multilateral Fund (held in Montreal from 20 to 22 March 2002) and noted the comments of the delegations which have now been taken into account in the final draft. Informal consultations were also undertaken with Executive Committee members through a letter that was circulated in English, French and Spanish (see annex 20). The letter outlined the main findings the Consultants intended to present. A total of four responses were received up to the time this strategy was finalised.

Country studies

In preparing this strategy, TVE commissioned three of its national partner organisations in each of the regions – Africa (Nigeria), Asia Pacific (China) and Latin America (Chile) to carry out a country level study of ozone related IEC activities in their country during the period 1997 to 2001 inclusive. Their main tasks were to:

- Interview key people from government, civil society, media, industry and academia;
- Review material and curricula, compile a concise overview on how the country has responded to the ozone layer issue and the targets of the Montreal Protocol with emphasis on information, education and communication activities;
- Assess the achievements thus far; and
- Recommend measures for the future to make IEC activities more effective.

These country studies were carried out in close collaboration with the NOU of that country. Concise reports were produced according to a pre-determined reporting format. Under this activity, over 200 additional people were consulted from government, civil society, media, industry and academia in the three countries studied.

Open call for inputs

The open call for communications and environmental professionals to contribute ideas and suggestions for the strategy was widely circulated through specialised networks as well as public-access websites. Apart from being displayed on the UNEP OzonAction and TVE websites, and sent to the NOUs via the electronic forums of the Regional Networks, the call for contributions was also carried by multipliers such as the Communications Initiative, IUCN Commission on Education and Communication, International Science Writers Association, International Federation of Environmental Journalists and One World International. These helped elicit responses from over 30 individuals and organisations in different parts of the world. In addition the TVE Director contacted TVE's 47 other partner organisations in the Article 5 countries. This elicited a positive response, indicating a willingness to participate in country-driven IEC activities.

Consultations with UN agencies and other organisations

Communication experts from UNEP and other UN organisations identified with successful communications campaigns – such as WHO, UNICEF, UNAIDS and UNESCO – were consulted on how their large-scale global information and education campaigns have met their set objectives. Attempts were made specifically to elicit innovative ideas from these and other experts about how their programmes have reached marginalised target groups to identify viable approaches to reach small ODS using sectors such as SMEs and the servicing sector. A specific attempt was made to study how particular communications campaigns were implemented to achieve targeted outcomes within defined timeframes, which is the remaining task involving the phase-out of ODS. Under this activity, a total of 104 officials and experts from over 60 organisations were consulted. They are listed in Annex 2.

Peer review process

The first draft of the communications strategy was circulated by UNEP to an Expert Group constituted for this process, for peer review. Their advance comments and feedback were received and incorporated into a revised version.

UNEP convened in Paris from February 28 to March 1, 2002, an expert group meeting to further discuss the revised communications strategy and to provide expert inputs towards finalising the strategy. Besides UNEP and TVE representatives, this meeting was attended by experts representing governments, non-governmental organisations (from both Article 5 and non-Article 5 countries) as well as by other UN agencies. The participants are listed in Annex 3.

Their comments were taken into account in a summary document presented to the 36th Meeting of the Executive Committee. This final version takes account of comments made by Executive Committee members during that meeting as well as further consultations undertaken between March and mid-May 2002.

A3. Limitations of the strategy

The research, consultation and analysis for the communications strategy were carried out at a global level within a timeframe of 6 months, from November 2001 to April 2002 inclusive. While every attempt was made to cover all essential elements, and to consult with as many stakeholders and relevant sources as possible, this strategy is presented acknowledging the following limitations, which reflect the limitations of budget and timeframe within which this process was carried out:

- The more in-depth country studies were carried out only in three countries, one each in Africa, Asia Pacific and Latin America. While these were chosen to represent different socio-economic and cultural backgrounds, and involved different levels of ODS production and/or consumption, more research and further data gathering is necessary in order to show the complete spectrum of the needs of Article 5.
- Despite extensions of deadline and active follow-up by phone, fax and email, only 24 NOUs responded to the brief questionnaire. Several others that promised to respond failed to do so. This may indicate that ozone officials are overwhelmed by their workload and having to respond to too many queries and requests.
- Interviews were carried out in person in several key cities in Europe, North America and the Asia Pacific. The coverage was partly limited by what the consultants could access within the short timeframe, and what was feasible within travel budgets at their disposal. Some additional material was gathered through long distance methods.
- The objectives and scope of the communications strategy process were announced through various global and regional communications networks, with an open call for inputs. Some useful and relevant submissions were received, but compared to the wealth of expertise that exists, the response rate was disappointing. Some respondents sought financial remuneration before providing their inputs, which was not a viable proposition.
- While the consultants worked in three international languages – English, French and Spanish – for the individual consultations and interviews, there was a bias towards English. Encouragingly, on a per capita basis there were strong responses from several Spanish and French speaking countries.
- Informally the Consultants carried out extensive consultations. Officials specializing in information and communication from other UN agencies were also contacted on a bilateral basis. Formal consultation was restricted largely to the Expert Group convened by UNEP.
- The team that prepared this strategy consisted of communications professionals with wide and varied experience in print, broadcast and new media, and in environmental education and communication. It was led by TVE's director, who, in addition to being Science Writer and Senior Policy and Communications consultant to the executive director of UNEP (1982-1992) had been Communications Director with IUCN (1979-81) and features editor of IIED's Earthscan (1977-1979). TVE's Director has, *inter alia*, completed communications strategies for Unicef, World Bank, GEF, DFID, and NRMP (for USAid). TVE has received over 350 awards recognising its excellence. TVE is an acknowledged leader in using the media for raising environment and development related awareness. In particular it has retained a close relationship with UNEP, completing above 300 separate communications projects completed with an editorially-independent remit. Given that UNEP set up TVE specifically to produce and publish multi-media coverage on an independent basis for the mass media, there has been a bias towards practical recommendations in this Strategy document.

B. IEC on ozone: past achievements and current status

B1. Ozone communications: a brief history

B1.1 How the ozone hole galvanised action

The threat to the ozone layer has a long pedigree. It was on the agenda for the 1972 Stockholm Conference on the Human Environment. Erroneously at the time, high-flying supersonic aircraft were seen as the principal danger.

Then came the discovery in 1974 in a laboratory in Berkeley by Sherwood Rowland and Mario Molina, that in a complex chemical reaction, chlorine released from CFCs and halons destroy ozone molecules. If the process was taking place in the upper atmosphere, its role as filter of harmful levels of UV radiation must be compromised – thereby posing danger to human health and essential ecological processes.

In June of that year, Sherwood Rowland and Mario Molina published a paper in *Nature*, suggesting a link between CFCs and the destruction of the ozone layer. The article received little attention outside specialist circles. At a scientific meeting a few months later, the two scientists held an impromptu press conference. The media covered their discovery and for the first time the public became aware of the potential threat. "Eventually, we caught people's attention," Molina recalls. Ozone landed on the public agenda.

Over the next few years, letters about CFCs poured into the US Congress – the final tally was second only to the number received about the Vietnam War. The US government responded quickly, passing amendments to the Clean Air Act in 1977 that called for the regulation of any substance "reasonably anticipated to affect the stratosphere." Soon afterwards, the use of CFCs as propellants in aerosols was banned, and chemical companies began to seek alternatives to CFCs.

However, few countries followed suit. The turning point, almost a decade later, occurred when the mass media latched on to the 'discovery' by British scientist Jo Farman of the seasonal 'hole' in the sky over Antarctica. In the industrialised countries, ozone layer depletion rapidly overtook acid rain as the best known global environmental issue.

The public at that time understood that chemicals could destroy human protection against harmful quantities of UV radiation. If no action was taken, people might get skin cancer, go blind and see crops wither. Intergovernmental action under the aegis of the United Nations Environment Programme was needed. In contrast to the diminution of biodiversity in the tropics, or the death of one child every five seconds in the developing world due to poor sanitation, ozone depletion was an issue that an individual in an industrialised country could also personally do *something* about: by, for example, buying CFC-free sprays and refrigerators; and by not lying on a beach without sunscreen.

If an advertising agency had been responsible for attracting public attention to the ozone issue to force the hand of governments, it would have won every accolade in the business. But even the best agency in the world could not have invented the ozone hole, which triggered the avalanche of public concern.

And when the public cared for the ozone layer, the politicians began to pay attention as well. In the early 1980s, British Prime Minister Margaret Thatcher famously said that she had the best job in the world even though sometimes she had to give a little of her time to "boring" matters like ozone and the environment. Ten years later, she personally convened the London ozone

conference, making ozone and climate change one of her government's biggest concerns. It is said Mrs Thatcher was convinced by her civil servants about the impeccable ozone science. It is far more likely the party in power observed that with the media maintaining its interest, expressions such as 'CFCs' or 'Greenhouse Effect' had become household words. Opinion polls had shown to politicians that there were kudos and votes in the environment.

It is therefore no coincidence that shortly following this groundswell of public concern, the Montreal Protocol was agreed. As the then Executive Director of UNEP, Mostafa Tolba, pointed out at the time, "I have known of no successful action on the environment that was not generated by public concern which, in turn, is generated by mass media coverage."

Dr. Tolba had in mind not only the Montreal Protocol, but also the banning of lead in petrol, cross border accords to cut down sulphur dioxide, and the Basel Convention on trans-boundary movement of hazardous waste. All had been preceded by intense and sustained mass media coverage.

What all these international agreements or commitments had in common was a direct and perceptible threat to an individual's health and welfare:

- lead damages children's brains;
- air pollution causes respiratory disease; and
- chemicals leaking from dumped toxic barrels poisons people.

What commentators then and since have pointed out is another common factor, namely that all the issues were of perceptible concern to the public in the industrialised nations. The research conducted for this strategy has consistently found that with a handful of notable exceptions, the threat posed by ODS to the ozone layer has barely registered as a concern for the public in the developing (Article 5) nations.

During the research for this document it was also found that most people in developed countries perceived ozone layer depletion as an issue that is 'solved'. Though there is potential for presenting the activities carried out under the Multilateral Fund as a sustainable development 'success story', this has not been fully realised. During the 36th Executive Committee Meeting, the leader of the Japanese delegation remarked on the need for raising public awareness not only in the Article 5 countries but also in his own country. This underlines the need for raising ozone related awareness in developed countries as well, even though the approaches as well as resources for such awareness raising will necessarily be different from those discussed in this strategy that addresses Article 5 country needs.

B1.2 The Montreal Protocol

In his Millennium Report, the Secretary General of the United Nations cited the Montreal Protocol as one of the UN's most successful accomplishments, "Perhaps the single most successful international agreement to date."²

Now that industrialised countries have phased out their production³ and much of their remaining consumption ozone-destroying chemicals, the focus is on the developing countries. Article 5 countries have been given a 10 years' grace period to meet the Protocol's targets, with a compliance deadline of 2010. They have already met the first and most important deadline in 1999, when the consumption of one group of CFCs was frozen at 1995-97 levels. In 2002 there

² Koffi Annan, "We the Peoples: The Role of the United Nations in the 21st Century", p. 56

³ Except for essential uses and production for Basic Domestic Needs of Article 5 countries.

will be a similar freeze on halons used in fire-fighting equipment as well as on methyl bromide used as a fumigant in agriculture. More phase-outs of more chemicals are planned.

The Multilateral Fund was set up in 1990 to facilitate technology transfer to the Article 5 countries as part of the Protocol's Financial Mechanism. The developed nations contributed to this fund to help developing countries switch to chemicals and processes that do not damage the ozone layer. In the first decade of the Multilateral Fund, most investments have gone into areas such as technology transfer and adoption, policy and legislative interventions. Of the US\$ 1.3 billion disbursed so far, over 95% has been spent on these. The rest has been on "non-investment" sectors, i.e., capacity building, training and information. Just 3.6% – or US\$47 million – has gone into education, information and awareness-raising.

The Montreal Protocol includes a provision for Parties to "co-operate in promoting public awareness of the environmental effects of the emissions of controlled substances and other substances that deplete the ozone layer."⁴ During the period 2002 to 2010, the remaining ODS phase-out has to be addressed in a shorter time period with limited resources, on an equitable basis. In this situation, awareness will assume far greater importance than in the past, and will play a crucial role as countries move towards meeting their compliance targets. In particular, it is hoped the enhanced awareness in high levels of governments, industry, and the general public will encourage and inspire countries to take greater ownership of the compliance process, thus not continuing to rely heavily on external assistance. Such increased ownership will pave the way to self-reliance that will become necessary beyond the life of the Multilateral Fund.

⁴ Article 9, Section 2

B2. IEC activities carried out by UNEP

An important part of the support provided by the Multilateral Fund to Article 5 countries is the provision of global information exchange services. The mandate for these services is provided in the Montreal Protocol itself.⁵ The Second Meeting of the Parties decided⁶ that the Multilateral Fund shall finance clearinghouse functions to: assist Article 5 countries to identify their needs; facilitate technical co-operation to meet these needs; distribute information and relevant materials and to hold workshops, training sessions and other related activities.

UNEP was selected as the implementing agency responsible for providing this clearinghouse function. UNEP fulfils this role through its Division of Technology, Industry and Economics (DTIE) under the OzonAction Programme. This chapter looks at highlights of the IEC activities inspired, carried out or supported by OzonAction Programme.⁷

The OzonAction Programme assists developing countries in making informed decisions on policies and investments needed for compliance with the Montreal Protocol. The Programme's information output and outreach take different forms, including printed documents (newsletters, posters, brochures, reports), videos, web-based information, email based network and news services, and personal telephone support.

UNEP DTIE's IEC work comprises more than just public awareness, and includes other elements such as disseminating specialised information related to technology adoption or policy formulation, and training activities. The cornerstone activities of information exchange services include:

- Regular document distribution (public awareness materials, NOU handbooks, case studies, technical reports, training materials, etc.);
- Development and distribution of the OzonAction Newsletter (3 issues per year);
- Responding to ozone related queries received via phone, fax, email or post;
- Weekly ozone news email service (OzoNews);
- Monthly email news service Regular Update of Methyl Bromide Activities (RUMBA) and bimonthly Climate and Ozone News;
- Maintenance of OzonAction website; and
- OASIS CD-ROM.

These IEC activities have evolved through the years, and have been developed following a need-based analysis.⁸ While there has been no formal strategy to guide information exchange activities, UNEP works closely with an Informal Advisory Group (IAG) to obtain guidance with regard to the development and implementation of products and services within the OzonAction Programme, including those related to IEC activities. In terms of working modalities for approved IEC projects, "the main reference for undertaking the work has always been the Work Programme which is submitted to the Executive Committee of the Montreal Protocol for approval".⁹ Under this Programme, the objectives, target groups, activities, expected outputs and milestones are outlined. These then form the basis of what the information exchange team implements. Similarly, the mandate given to UNEP to serve as information clearinghouse under the Protocol¹⁰ has been perceived until now to be sufficient to provide general direction to IEC activities.

⁵ Articles 9 and 10

⁶ Decisión II/18 paragraph 3b

⁷ This chapter is based on interviews with key DTIE officials and perusal of internal reports, including the most recent *Report on the Extended Desk Study on Clearinghouse Evaluation*, UNEP/OzL.Pro/ExCom/36/5

⁸ Email correspondence with DTIE OzonAction Programme staff.

⁹ Ibid.

¹⁰ Article 10

Out of the 617 projects approved for UNEP during the years 1994 to 2001, 141 projects with a value of US\$ 14,532,100 are for clearinghouse activities. Clearinghouse projects represent 26% of all funding approved so far for projects to be implemented by UNEP, or 1.28% of all Multilateral Fund approvals to the end of 2001.

Table 1 shows categories and regional distribution of the clearinghouse projects.

Category	Global	Africa	Asia and Pacific	Latin America & Caribbean
Document / video / diskette	29	0	0	0
Information exchange	59	0	1	0
Technical assistance / support	34	8	2	3
Training Programme / workshop	5	0	0	0
Total	127	8	3	3

Source: Report on the Extended Desk Study on the Clearinghouse Evaluation, 2001

Within the global category, the distribution of clearinghouse projects according to the type of product or service provided is analysed in Table 2.

Awareness materials	6
Case study / fact sheet	7
CD-ROM	6
Data collection	8
Database	8
Dissemination	9
Guidebook / Manual	20
Halon bank clearinghouse	9
Multiple activities	5
Newsletter	8
Outreach	8
Query response	8
Strategy	1
Study	2
Training manual	6
Translation	6
Video	4
Website	6
Total	127

Source: Report on the Extended Desk Study on the Clearinghouse Evaluation, 2001

The IEC activities of the OzonAction Programme fall broadly under two main categories, as follows:

Public awareness and outreach activities

These were aimed at a lay audience and were produced in the principal international languages (English, French, Spanish). Some were later adapted into national languages, reproduced and disseminated by interested NOUs. These included:

- Brochures and booklets
- Posters
- Information notes and media backgrounders
- General-purpose video programmes
- Audio and music tapes
- Overhead slides
- Competitions, e.g. for children's paintings, video productions

Many of these materials were used around the world during national, regional or international conferences on ozone depletion, as well as during the International Day for the Preservation of the Ozone Layer in September. The full list of communications outputs is given in Annex 4.

Outreach activities for specialised audiences

These were meant for specific target groups such as government officials, industrialists and entrepreneurs, NGO activists and educators. Information and analysis covered more technical aspects, and provided policy and implementation guidelines for adoption at national or regional levels. These activities included:

- Case studies of best practices on phasing out ozone-eating chemicals
- Guidelines for national policy formulation and programme implementation
- Information notes and papers
- Inventories
- Sourcebooks and technical brochures
- Specialised video programmes
- Awareness raising and information sharing workshops at national and regional levels
- Translation and adaptation of material into local languages

The specialised nature of phasing out ozone-depleting chemicals requires the dissemination of information at multiple levels. For example, the guidebooks for specific industries detail alternatives and the potential for recycling chemicals or recovering them from used items like refrigerators.

Case studies are often used to illustrate points. For example, how Ghana successfully phased out the chemicals through a judicious mix of technological interventions and information and capacity-building initiatives. Training manuals have been produced for sectors like the tourism industry, providing it with information on how it can reduce and eventually phase out the use of ozone-eaters in hotel rooms as well as in hotel refrigeration.

The complete list of communications outputs in this category is given in Annex 5.

Website

Some of DTIE's IEC activities straddled both public and specialised sector communications. An example is the OzonAction Programme's main website¹¹, which includes both general and technical information. The website has attracted a consistently growing number of users since it was started in 1996.

¹¹ www.uneptie.org/ozonaction

Visitor statistics to the site, made available by DTIE, showed the following highlights and trends:

- Visitor numbers have increased from 420 per month in mid 1996 to nearly 59,000 per month by mid 2001. (Detailed breakdowns are available only from October 1999.)
- Between June 2000 and May 2001, a total of 597,164 hits were recorded, at a monthly average of 49,794. For the same period, the number of unique users was 40,087, of whom 8,743 visited the site more than once.
- For the 6 month period December 2000 May 2001, the monthly average of hits had risen to 59,570.
- By May 2001, the latest month for which statistics were available, the average number of user sessions per day was 351. An average user spent a little over eight minutes at the site. (During 1999 and 2000, this has averaged between six and nine minutes.)
- The website is still primarily used by those accessing it from the developed countries, but it is also increasingly used and appreciated by those from developing countries.

The website provides a cost-effective opportunity for users to obtain UNEP information documents. It is also demand-driven dissemination. Many of the print publications are offered as downloadable pdf files on the website. For example, during May 2001 alone, there were pdf downloads from the site close to 1,500 times.

In 2001, UNEP launched a business-to-business (B2B) web portal to facilitate international exchange of 'banked' halons – this provides a virtual marketplace where persons can match demand with supply, helping companies that use halons for essential or critical applications. This replaced the online halon banking system that existed earlier.

Regional Ozone Networks

UNEP support to NOUs is provided both bilaterally as well as through several networks arranged geographically. Networking provides a platform for Ozone Officers from Article 5 countries to exchange experiences, develop their skills and tap the expertise of their peers in both developing and developed countries. Conducted at regional level, the networking activity builds NOU capacity for implementing and managing their national ODS phase-out programmes.

There are currently four regional and three sub-regional networks that bring together a total of 114 developing and 9 developed countries. The main network activities are annual and follow-up workshops, and regular communications between UNEP and the Ozone Officer to provide information and assistance in addressing any difficulties they encounter. The networks are managed on a day-to-day basis by Regional Network Coordinators (RNCs) who are based in the UNEP Regional Offices.

As part of the consultative process for this strategy, the five RNCs were approached with a set of five simple questions (see Annex 6). Four RNCs responded. The following key points arise from their responses.

The work of RNCs involves a substantial amount of IEC activities, which forms an essential part of their capacity building work. They are responsible, inter alia, for providing the NOUs in their region with accurate technical information and updates on the latest technical developments regarding ODS, and also with the official documents relating to the Montreal Protocol. They encourage countries to produce awareness materials and review drafts to ensure accuracy. They are responsible for maintaining a network of information, so that experiences and best practices can be shared by all countries. Two RNCs mentioned that they use an e-forum, and one uses the regional UNEP home page to update visitors on ozone issues.

- All RNCs agreed that it is relevant and useful to enhance the role of IEC in support of ODS phase-out between now and 2010. They stressed its important because of the need to reach the end users and the general public. As different countries aim to reach different target groups, RNCs are aware that different IEC activities will need to happen.
- Lack of resources and time available to work more closely with the countries are the main constraints identified by the RNCs. Other constraints include language barriers and the shortage of material in local languages. Another concern is that some NOUs are not professionally trained or experienced for IEC work which involves specialised tasks.
- Asked about the most important needs to increase IEC work, RNCs cited: having suitable materials for the mass media; more financial and human resources; and material in more languages.

Assessing impact of IEC activities

The recent independent evaluation¹² of the clearinghouse by a consortium of two Canadian consulting companies found that the users, in particular the NOUs, valued the materials. A clear majority of respondents confirmed the positive impact on their countries' capacity to phase out ODS. A majority, too, reported that UNEP's information services have helped to raise awareness about ozone issues and solutions among the general public/consumers in their countries. However, it did appear that these were impressions rather than the result of any methodological assessment (via, for example, focus groups and opinion polls, etc.).

The same assessment states "the non-tangible nature of information exchange activities makes it difficult to analyse the impact of the project in Article 5 countries. Even field visits would not generate clear cut and quantifiable evidence". It is indeed a challenge to determine the extent and nature of impact resulting from IEC activities. This task is made harder by the fact that the OzonAction Programme's IEC output has been disseminated to a global audience, currently consisting of 138 Article 5 countries and 45 non-Article 5 countries¹³.

The evaluation further noted: "Demonstrating the direct influence that information has in supporting country efforts to phase-out ODS continues to be a challenge. Users know that without UNEP information they would not be able to educate themselves or other stakeholders within their countries regarding the Montreal Protocol; however, it is difficult to trace a direct path between information services provided and phase-out activities."

UNEP regularly collects feedback from users through a number of tools, including paper surveys distributed with each printed document distributed, a brief survey by e-mail that is enclosed with all e-mail responses to information queries received by UNEP, and recent one-time surveys to the newly established OZONEWS weekly email news service and to the OzonAction Newsletter. Other sources of feed back are: Business Plan inputs; network meetings, comments from NOUs; questionnaires/surveys, feedback of participants in workshops; comments from implementing and bilateral agencies; reports of the Meetings of the Parties, Open-Ended Working Group, Executive Committee, TEAP/TOC; journals/newsletters, and purchases and/or requests for free copies of publications.¹⁴

It is beyond the scope of this communications strategy to evaluate the IEC output of OzonAction Programme. This chapter has merely tried to summarise the broad range of global, regional and

¹² Report on the Extended Desk Study on Clearinghouse Evaluation, UNEP/OzL.Pro/ExCom/36/5

¹³ Status of Ratification, as of 15 April 2002.

¹⁴ Extended Desk Study, *ibid.*, pg. 9. UNEP defines feedback as comments or opinions about the quality, usefulness or appropriateness of services provided, received from someone who has used that service.

national level IEC activities that UNEP has implemented or supported, as a means of taking stock of current and recent initiatives. In this regard, the following findings and remarks of the evaluation of the clearinghouse are also pertinent, and echo the communications strategy team's own observations.

- Too much information is leading to information overload. NOUs are regularly faced with large amounts of information on a number of topics – on paper and in electronic formats. While many are interested in reviewing or using most or all of this information, the demands of their job often makes that difficult.
- There is a need to shift focus from the global to the regional and national levels in information provision. To be most useful, information needs to be customised to suit individual countries.
- Providing more information in languages other than English is required.
- Technical documents and training materials are considered useful by most specialised target groups, but are too often out of date or not specific enough.
- While the information output and services have covered a wide range of topics, some gaps remain. Example: a regularly updated global summary of CFC/HCFC specific regulations by country (Article 5 and non-Article 5), including any accelerated phase-out dates.
- More needs to be done to clarify the prevailing confusion among the public, and in some sections of the media, between ozone depletion and climate change. Since both issues are atmosphere related, many people are easily confused about the relationship between the two.
- Accessing small and medium sized enterprises (SMEs) with information regarding ODS phase-out remains a challenge. Effective and innovative ways need to be found to reach out to SMEs.

B3. IEC work carried out by National Ozone Units (NOUs)

National level compliance of Montreal Protocol commitments and the implementation of ODS phase-out activities are carried out by NOUs. These NOUs, mostly located within Ministries of environment or natural resources, are also charged with the responsibility of inspiring, supporting or in some cases implementing information, education and communications (IEC) activities related to ozone, either through their Institutional Strengthening projects, through individual projects funded through the Multilateral Fund or a combination of both.

It is therefore crucial to involve and strengthen the NOUs in all such activities. In an attempt to assess the levels of IEC interest and capability within NOUs, two information gathering activities were undertaken.

Firstly, a simple questionnaire was circulated to all NOUs to assess their current levels of IEC activities, constraints encountered, unmet needs and priorities. The questionnaire is given as Annex 7.

Secondly, examples of IEC activities that are available with UNEP DTIE OzonAction Programme were studied. This included press clippings, publicity material and videos.

NOU responses to the questionnaire

From among over 100 NOUs who were sent the questionnaire, a total of 24 responded in two rounds.¹⁵ The following is a brief analysis of responses received.

Types of activity

NOUs are engaged in a wide range and variety of IEC activities, but most of them use conventional approaches to material production and distribution, and engaging the mass media. While these approaches are valid, the effectiveness could be enhanced using more innovative approaches - which were few and far between.

Asked about the most noteworthy IEC activities conducted in the country during the past three years, NOUs reported engaging in the following types of activities:

- Producing print materials (posters, banners, pamphlets, leaflets, books, calendars, greeting cards, stickers, etc.);
- Producing consumer items (mugs, caps, T-shirts, etc.);
- Organising public events (seminars, workshops, lectures, marches, etc.);
- Organising specialised events for technicians, customs officers or other specific target audiences;
- Producing broadcast media materials (radio and TV spots, or longer programmes);
- Participating in broadcast media discussions and interactive programmes;
- Briefing media professionals through press releases and press conferences, etc.

Innovations

Amidst the many conventional approaches adopted by NOUs for IEC activities, a few innovative ones stood out. Some countries mentioned arranging art competitions to engage children on the issue, while others reported organising outdoor awareness campaigns about the adverse health

¹⁵ NOUs in the following 24 countries responded (listed alphabetically): Antigua, Argentina, Bolivia, Brazil, Republic of Congo, Croatia, Egypt, El Salvador, The Gambia, Haiti, India, Jamaica, Jordan, Namibia, Paraguay, Samoa, Singapore, Trinidad and Tobago, Turkey, Tuvalu, Venezuela, Uruguay, Vietnam, Yemen

effects. These were carried out in parks, beaches and other open spaces especially during the summer or during peak periods of ozone holes in countries that came within or close to the hole.

Among the more innovative uses of mass media were: a Caribbean Ozone Song produced by Jamaica in collaboration with Trinidad and Tobago through funds provided under regional awareness raising activities as per Decision 32/49; and the use of radio talk shows to reach the public in Namibia. Vietnam reported an annual national ozone award; Trinidad and Tobago worked with children's groups; and El Salvador has been distributing thousands of shirts, posters and magazines with ozone messages, illustrations and slogans.

Another area of innovation, albeit one that is currently being undertaken at a very modest level, relates to financing arrangements for IEC activities in Article 5 countries. Some proactive NOUs (e.g. China, Lebanon) have mobilised supplemental funding from the private sector in their countries to undertake public awareness projects. Companies manufacturing or selling alternative chemicals or equipment have proven interested in supporting awareness projects that provide wide visibility to their services to potential client groups, through (for example) inclusion of the company's logo on ozone protection posters or brochures disseminated by the national environmental ministry. In the future, this approach of reaching out to the private sector could potentially be used by many NOUs to supplement or magnify the support provided by the Multilateral Fund for IEC activities.

Ozone Day

The International Day for the Preservation of the Ozone Layer (September 16) is an important opportunity to raise public awareness on ozone in both developed and developing countries. Most NOUs (and some of their counterparts in developed countries) organised one or several activities on or around Ozone Day in 2001, and have been doing so annually for several years. Some NOUs seem to concentrate most or all their public outreach activities during that period.

Based on a review of the reports of the 2001 meetings of the Regional Networks of ODS Officers¹⁶, NOUs undertook the following types of activities as part of their celebration of Ozone Day:

- Use of the mass media to raise awareness
- Organising lectures for general audiences
- Public activities for children, including paintings on giant banners
- Organizing activities/competitions in schools: essay, poetry and poster painting competitions, quizzes, conducting inventories of CFC-using equipment, counting the number of refrigerators and air conditioners.
- Organizing industry exhibitions/trade fairs to show ozone friendly equipment
- Broadcasting a TV series on ozone protection on the national TV station
- Broadcast a special programme on National radio
- Organizing a talk show on ozone protection
- Publishing a series of articles in the national newspaper
- Holding public logo design competitions
- Issuing a special magazine or issue of an environmental ministry newsletter
- Distributing umbrellas with ozone protection messages on them.
- Publishing posters
- Organizing workshops in cooperation with NGOs
- Distributing a booklet describing the Country Programme, NOU and national strategy to comply with the Montreal Protocol
- Developing an ozone protection postal stamp
- Establishing a website for the NOU

¹⁶ UNEP DTIE, May 2002.

- Publishing a book on Questions and Answers about the Atmosphere
- Holding an industry voluntary pledge signing ceremony
- Distributing environmentally-friendly bags, vehicle stickers, and normal stickers
- Displaying large banners at key intersections/locations
- Organizing video competitions
- Convening high-level forums with ministers.
- Publishing a textbook
- Organizing seminars for ozone officers of municipalities.
- Presenting awards to persons who contributed to promoting ozone layer protection activities.
- Organizing meetings with industry to review measures taken to comply with the Montreal Protocol

Adapting communications materials

Many NOUs reported having translated, adapted or versioned an existing print or electronic material into their local language. In a majority of such cases, the original material had come through UNEP. Such local adaptations were cheaper and quicker to produce, especially in the case of television and video material which require larger investments. A case in point is the UNEP/TVE video *Saving the Ozone Layer: Every Action Counts* (15 mins, 1995) that has been translated into many local languages. Similarly, the OzonAction Newsletter has inspired and contributed material for a number of national newsletters of the same or similar name.

Integrating ozone content in the formal education system

The educational sector was involved only marginally in most responding countries, and no country reported having adequate coverage of ozone content in the curriculum. In some cases ozone content forms part of science curriculum, while in others it was included in environmental studies. The extent of coverage, and the level at which ozone concepts were introduced varied considerably.

NOUs reported a dearth of textbooks and other educational material containing current and relevant information on ozone that teachers can use. Some countries have developed their own material or adapted from international ones. In India, for example, the NOU has developed an Educators' Kit on Ozone Layer Protection, a comprehensive information package that contains 30 transparencies carrying key messages on ozone.

Mass media coverage

Mass media interest and coverage of ozone issues varied enormously across the two dozen countries that responded to the survey. It ranged from a complete lack of interest and coverage to moderate or high levels of coverage. NOUs, with limited resources at their disposal, find it difficult or impossible to buy newspaper space or broadcast media time at commercial rates. In some cases where the media have agreed to donate time or space, the lack of updated information and usable imagery affected the quality of coverage. Croatia, interestingly, was an exception to this rule: the NOU reported having had animated videos on ozone broadcast every day for five years on three national and two regional TV channels.

NOU-inspired media coverage of ozone has been dominated by official statements, press releases or articles – most of them discussing governmental policies or action to phase out ODS. While these have served their purpose, they have been insufficient to raise general awareness on the causes, effects and remedies of ozone depletion.

Constraints

The questionnaire prompted 7 likely constraints and asked NOUs to identify up to three key ones they have encountered in carrying out IEC work. "Lack of funds to undertake more education and awareness work" was clearly the most widely shared constraint, cited by 19 NOUs. The other three widely shared constraints were:

- The fact that ozone layer is too far removed from the public mind (10)
- Overall problems of illiteracy and lack of education among the public (10)
- Highly scientific and technical nature of the subject (9)

Other constraints included the fact that ODS phase-out activities were not seen as an overall national priority or objective, and being relegated to the ozone units or the Ministry of Environment. An NOU from a Spanish-speaking country pointed out that much of the information available internationally was only in English, and adapting it into Spanish cost time and money. In response to a related question, most NOUs said that they would undertake more IEC activities if additional financial and human resources were available.

These constraints and preferences have been taken into account in later sections of this strategy when formulating recommended approaches and action.

Most important concerns on ozone depletion

NOU views were also sought on what they regarded as the most important concerns about ozone depletion that the public in their countries should know more about. Nine concerns were prompted, of which NOUs were asked to mark any three. The most important concerns identified were:

- Adverse health impacts of UV radiation (19 NOUs)
- ODS use in consumer products and services (14)
- Impact of UV radiation on crops and livestock (9)
- Costs involved in adopting substitutes to ODS (9)

At least a quarter of all responding NOUs also listed the need to strengthen national laws and regulations for ODS phase out, and the need to publicise the benefits the country has gained from the Montreal Protocol and the Multilateral Fund.

NOU priorities for IEC activities

Finally, NOUs were asked which priority activities they would like to undertake in IEC if additional funds were available. Responses to this were wide and varied. Some would like to do more of the same, in a more professional and targeted manner. Other NOUs would like to organise training programmes and workshops for specialised groups, and to produce country-specific, indigenous media materials on ozone. One NOU saw the improvement of cooperative structures between government, industry and the educational system as paramount. Producing web pages and increasing educational programmes were also mentioned in the wish lists.

These preferences have been taken into account in later sections of this strategy in formulating recommended approaches and action.

Interpreting NOU feedback

Only a limited number of NOUs responded to the questionnaire in spite of sending it out twice during a four-month period, and being given extensions on deadlines. This, by itself, may be an indication of the capacity limitations within NOUs where a few staff members (and in some cases a single staff member) have to attend to a multitude of tasks. Responses from 24 NOUs are not fully representative of all the Article 5 countries (even though there are large, medium

and small sized countries in this group), yet some patterns of NOU needs and preferences can be discerned from this feedback.

- Many NOUs would like to do more of the same, and better, if additional funding is available. There is a clear justification for scaling up current activities to cover more target groups or to achieve greater intensity. Often, the operating and logistical costs of scaling up are not high, and comparatively small amounts of funds can inspire much new energy and enthusiasm in a national ozone programme.
- Likewise, the lack of innovation in terms of ozone related IEC activities may have more to do with resource constraints than an unwillingness to experiment. The infusion of new resources and technical assistance could spark off innovation.
- It appears that most NOUs have not had the time or resources to assess and rank national and local needs and to plan IEC activities accordingly. Prevailing limitations of resources and staffing have probably led to opportunistic, reactive and sometimes ad hoc implementation of IEC activities.
- In order to optimise current levels of resources and staffing, NOUs need to engage more in strategising and targeting specific audiences. For example, in countries that remain significant ODS producers, targeting such industries should be a priority.
- Likewise, the impact of most IEC activities was not systematically assessed. This underlines the need to build in, at a programme or project's inception, provision for adequate monitoring and evaluation. There are well honed methodologies – focus groups, sample respondents, in-situ fact finding, audience appreciation indexes, ratings, readership breakdowns and so forth – that could be employed to gauge impact on the public and target sectors.
- It was interesting to note how several NOUs cited the complexity and technical nature of ozone depletion as a constraint. Experience of other NOUs demonstrates that the complexity is manageable, especially by breaking it down to key messages that are relevant to public health, consumer choices and industrial activity. More assistance and advice may be required for those NOUs that find the science of ozone depletion a challenge.

Other impressions of NOU capability and needs

Other insights into NOUs were available from perusing the information on NOUs' IEC activities, and a collection of NOU-produced or NOU-inspired media and communications materials available with UNEP DTIE OzonAction Programme. A recently completed evaluation of the UNEP Clearinghouse on Ozone was also referred. The following additional findings related to IEC were derived from these sources:

- As instigators or implementers of IEC activities on ozone, NOU staff need to have up-to-date, clear information on ozone depletion, and must have the capability to strategically work with education, media and information sectors in their countries. An essential prerequisite in this process is to strengthen NOU staff capacity for IEC. NOUs need to be able to choose from a menu of media and communications tools or options what is best suited to reach different target groups, and what best suits available funds and skills. Enabling NOUs to make the right choices in IEC activities will be a major step forward.
- Most NOUs are overwhelmed with the multitude of tasks they have to perform on policy, legislative, technology transfer and IEC fronts, and by having to cope with large amounts of

information on a wide range of ozone related topics. The clearinghouse evaluation noted that 'too much information is leading to information overload'. There is a need for streamlining information products and their delivery to NOUs.

- Similarly, a number of NOUs responding to the clearinghouse evaluation questionnaire had advocated the need to shift focus from the global to regional or national information. There is an unmet need to deliver specific, tailored advice and information directly to countries. Some NOUs also said that there may be limited value in providing general policy and legislation advice (related to ozone) since the circumstances and issues are unique in each country.
- While many NOUs have relied on funding made available by their governments, or provided through the Multilateral Fund, to engage in IEC activities, a few have demonstrated initiative to raise additional funds from other sources. For example, NOUs in China and Lebanon have raised private sector funds.
- There is a case for strengthening links between NOUs and business and industrial sectors within their countries and regions. In the clearinghouse evaluation survey, some NOUs reported that they had first found out about a new technology from the business sector contacts. This is evidence of industrialists keeping abreast of latest developments, which can feed into and support IEC activities initiated by NOUs.

Montreal Protocol Units in developed countries

It is also worth recording that the equivalent of NOUs in developed countries that manage their national Montreal Protocol programmes have inspired, funded or carried out many IEC activities related to ozone awareness in their countries. Virtually all developed countries have invested substantial funds and efforts in national awareness activities to support implementation of the treaty, albeit with different approaches and objectives. The most experienced among such countries include Australia, Canada, Japan, New Zealand and the United States. The experience and expertise available in these ozone focal points should be tapped when designing IEC programmes for Article 5 countries.

The United States Environmental Protection Agency (US EPA), for example, has implemented many IEC activities involving industry or public audiences, both within the US and at an international level. These include:

- informative website presence¹⁷ as well as a toll-free 800-number to provide information about ozone depletion, health effects, and regulations to the public;
- working with industry associations and trade press to share information about upcoming regulations, policy changes, and enforcement/compliance activities;
- annual sponsorship of the Earth Technologies Forum, an international conference for discussion of technical developments, policy advances, etc.;
- participating in and sharing information around the US on International Ozone Day;
- experienced staff regularly participating in information-sharing sessions with international counterparts (e.g., Technical Options Committee);
- programmes providing hands-on technology transfer expertise to industry and government groups in developing countries;
- launching the UV Index daily forecast program in 1994, alerting people around the US about next day's expected level of UV radiation intensity;
- launching the SunWise School Program to educate young children and their care-givers about ozone depletion, UV radiation, UV-related health effects, and how to reduce risk of overexposure to UV radiation¹⁸.

¹⁷ <http://www.epa.gov/ozone>

Other developed countries too have been exchanging information and cooperating with NOUs on ozone related IEC activities, especially during meetings of the Regional Networks. An interesting initiative involved cooperation between a developing country (Argentina) and a developed country (Finland) occurred at the time of International Ozone Day in 2000. Focusing on one city in each country, one near the Arctic and the other close to the Antarctic, the event was conducted through a teleconference. The event generated much attention in the media in both countries.

B4. Findings of three country studies

As part of the research and consultative process leading to this strategy, three country studies were carried out to elicit information and insights on ozone related awareness, communication and education work at national level.

These three studies were in the following developing countries:

- Asia Pacific region: China
- Latin American region: Chile
- African region: Nigeria

The three countries were chosen to achieve a diversity of socio-economic backgrounds and other factors. Geographically, two countries (China and Nigeria) are in the northern hemisphere while the other – Chile – is one of the southernmost countries: southern areas of Chile fall within the Antarctic ozone hole. The levels of industrial development are also very different in these three countries: when developed countries phased out production of ODS, China became the world's largest producer and consumer of these substances. Chile and Nigeria, in contrast, are merely consumers of ODS. All three governments have made commitments to phasing out ODS. They are parties to the Vienna Convention, the Montreal Protocol and subsequent amendments. With country-specific variations, they all have national programmes in place to phase out ODS by internationally set targets. In all three countries, industrial conversion activities are underway.

The country study process involved consultations with NOUs, other government and NGO institutions, the mass media and environmental experts. The studies were carried out and reported on a standardised methodology and format, which is given as Annex 8.

Summaries of each country study are given as Annexes 9 (Chile), 10 (China) and 11 (Nigeria).

Overall findings: highlights

The following are the key overall findings that emerged from the country studies:

- China has the strongest scientific research and development capability, with over 20 research institutes contributing to national efforts for ozone layer protection. Chile's Magellan University runs an ozone monitoring laboratory studying the ozone layer, UV levels and the Antarctic ozone hole. Nigeria reports of no scientific efforts.
- On the whole, ozone depletion was not a priority for civil society in these countries. Only in Chile were environmental organisations taking some interest in this issue – a reflection that it is a public concern in that country. Recently a Chilean NGO leader travelled to Europe to develop contacts to declare Chile as a "vulnerable country" due to ozone depletion. They

¹⁸ SunWise is modeled on the successful Australian SunSmart Programme

hope to obtain international support to carry out research, education and communications activities.

- China has produced by far the greatest number of public awareness and information materials – print, video and web. Assessments in Chile and Nigeria both came to the same conclusion: despite a few commendable but scattered efforts, there is a scarcity of quality, locally relevant and useful information material on ozone.
- In none of the three countries does the formal education system cover ozone depletion in any depth or detail. Only Nigeria reported ozone content being included at university level. In China, while the curriculum does not formally include ozone layer depletion, the state environmental agency conducts many extra-curricular activities for school children to raise awareness on the issue.
- Consumer awareness and activism are also at a low level in all three countries. Chinese consumers know that CFC-free products benefit the ozone layer, but most don't link their individual choices to impact on the ozone layer. They choose ozone-friendly products mainly because media commercials urge them to do so – and because it's trendy! Random interviews with Chilean consumers showed that most didn't know ozone-friendly products existed, or their environmental significance.
- Nigeria documented an example of how a well-meant government measure to ban used (second-hand) refrigerators and air conditioners has led to widespread resistance. The traders in Lagos had demonstrated against it, and random interviews showed consumers were not in favour of the government's 'sudden' decision. Ironically, these Nigerians were only aware of the ban, but not of the reasons that led to it. Many who cannot afford new refrigerators complained of 'victimisation'.
- Chinese consumers were the most progressive among those surveyed in three countries. Although they did not have sufficient knowledge of ozone-friendly products, they were willing to pay a bit more "if the price was affordable and the products really good for the environment and also for themselves".
- International Ozone Day (September 16) does inspire enhanced activity in Chile and China. China reported on a range of media, public and schools activities for each of the past three years. In Nigeria, Ozone Day is completely ignored.
- In each country, the health/medical and agricultural sectors' awareness and involvement were also assessed. The findings are listed in Annex 12. There is greater awareness on ozone among officials and experts in these sectors than among the general public. However, misconceptions persist, e.g. some doctors interviewed in Nigeria thought dark pigmentation was a protection against UV-caused skin cancer. In China, a child with cataract had drawn media and medical attention to health impacts.

Media coverage on ozone

The three country studies also assessed the quantity and quality of mass media coverage of ozone related issues in each country. This was done through consultations with key media managers, media practitioners and researchers, and through content analysis. The following were the key findings in this respect:

Chile

- Local press in southern Chile – within reach of the Antarctic ozone hole – covers the issue regularly, with focus on research findings and health impacts. National media, in contrast, takes less interest.
- Media coverage is superficial. Among other things: ODS's effect on ozone is mentioned, but not related to their phase-out requirements; insufficient localisation of the problem and solutions; Methyl Bromide completely overlooked and only CFCs mentioned; coverage heavily biased towards protecting people from UV exposure; and link between ozone depletion and consumer action not stressed.
- Media professionals face many constraints. Among them: lack of public or private sources of information; inadequacy of contact between researchers and the media; lack of visual materials – including moving images – on the subject; and overall low priority assigned to the subject in the national media.

China

- Media coverage is directly proportionate to other activities taking place on ozone, e.g., when China conducted the first scientific ozone layer measurement in 1998-99, media interest rose. Coverage is concentrated around Ozone Day.
- The quality and depth of coverage were also linked to the public's understanding of the issue. Before 1998, the Chinese public had little idea about how the ozone layer related to their life, and the mass media were indifferent to the issue. After ozone layer measurement – and when scientists reported finding differences in the thickness of ozone layer over the South and the North of China – the public began to appreciate the importance of the ozone layer. Media coverage likewise increased.
- Since the mass media began carrying a daily report of UV intensity in 1999, public concern about the ozone layer increased – as did their support for phase-out.
- Media coverage focused on the state of ozone layer, changes in ozone hole, causes of ozone depletion, and advantages of substitutes.
- From 1999, public awareness of ozone has grown from a very low to a relatively high level of concern – and the mass media have been largely responsible. However, most media cover only a small range of harmful uses – mainly refrigeration and aerosols. There's little or no reference to uses in agriculture, electronics industry, plastic manufacture or fire control.
- Reports and articles in *China Environment News* are of the highest quality. These spread extensively to many websites, and influence journalists of other media. On the whole, reports in the Chinese mass media about ozone are scientifically accurate, but lack depth due to limited knowledge.

Nigeria

- The level of media interest in ozone is negligible. In-depth environmental reporting is focused on waste management and sanitation issues. Regular coverage was also given to oil spills, gas flaring, and their effects on health, vegetation and water.
- Coverage between 1998 and 2001 in newspapers, magazines, on TV and radio showed a concentration of coverage around World Environment Day; direct reproduction of government press releases; and lack of critical reporting.
- While radio carries environmental reports everyday, an environmental reporter with the Voice of Nigeria admitted that she had never done a story on ozone.
- In both print and broadcast media, coverage on ozone – when it did occur – involved governmental action or an event concerning ozone rather than dealing with scientific facts or health effects.

Although the findings in three countries were specific and necessarily different, some common denominators could also be found: by and large, the public and the media are uninformed and disinterested about ozone; the level of public and media interest increases along with scientific

and/or governmental activity on the issue; and even where some awareness exists, it is often incomplete, out of date or has failed to lead to individual or collective action. The verdict from the three country studies, therefore, is that much more remains to be done to make ozone a public and media concern in countries of the south.

C. Learning from others

C1. Learning from other communications campaigns

Sustainable development is not possible without communication – if the players and beneficiaries of development do not understand and appreciate the processes involved, its full potential cannot be reached.

As the mass media grew in sophistication and increased its outreach and influence over the public, practitioners of development began using the media as a major communications vehicle to reach out to their various publics. From these efforts emerged social marketing, which was inspired by a question that was first raised in the United States in the 1950s: “*Why can’t you sell brotherhood like you sell soap?*”

From the simplistic approaches in the early days, social marketing – and social mobilisation – have emerged as specialised fields of study and practice. While academics argued over theories and models, practitioners the world over just went ahead and learned much of what they now know by simply doing.

In preparing this communications strategy, dozens of successful social marketing activities and communications campaigns in different parts of the world – both in the north and the south – were studied. The aim was to distil from these examples some salient points that can inspire and guide stakeholders in communicating the ozone message to different constituencies.

C1.1 Lessons from health, social development and human rights

In the areas of health, social development and human rights, the following key points emerged from the examples studied – several representative case studies are presented in Annex 13.

- ***Children have powerful emotional appeal across cultures.*** Evidence for this is in various campaigns for asserting children’s rights, against child labour, and in support of child survival and development.
- ***Localise, localise, localise.*** Most people cannot and do not relate to the bigger picture. To reach and touch people at national and local levels, messages needs to be localised, using familiar cultural icons, local languages, and local flavour.
- ***The best successes do not always come from large agencies with large budgets.*** Sometimes passionate individuals can capture global attention and thereby catalyse action.
- ***High profile outputs are the tip of the iceberg.*** A great deal of groundwork, including research, analysis and lobbying, happens away from the public and media glare, yet these elements are crucial for campaigns to succeed.
- ***Partner or perish.*** No single agency can reach everybody – it’s essential to form strategic partnerships and alliances with like-minded groups. Among the many advantages is the creation of a strong sense of ownership.
- ***It’s a digital village.*** With the proliferation of media products and channels nationally and globally, social campaigns now have more channels for reaching the people. At the same time, this makes it more difficult to choose the right media for the right purpose.

- **Celebrities sell.** Many social campaigns use celebrities – from actors and musicians to sports stars – to support their cause. Example: WHO using high-profile personalities in its anti-polio drive, including Martina Hingis and Mia Farrow (who had herself suffered from polio), and the UN using Michael Douglas for its disarmament campaign.

C1.2 Lessons from environment and consumer rights

Many reforms in environment and consumer movements have resulted from sustained communications campaigns at local, national or international levels. A study of several dozen examples in these two spheres helped identify the following key points that have enabled many campaigns to succeed:

- **The heart rules:** An emotional appeal is far more compelling with most people than strictly scientific or rational arguments in changing their attitudes or practices. Campaigns should be up close and personal – a series of brilliant advertisements made consumers feel guilty about wearing furs.
- **Think health:** People care about their family's health – the link, for example, between falling sperm counts and chemical pollution is a growing public concern.
- **and wealth:** and about their pocket books – organically grown, 'fair trade' coffee has only become a consumer preference now that it retails at the same price as the familiar brands. Feel good without hitting the pocket.
- **Don't get nerdy:** Simplifying while keeping the basic science correct is the constant challenge – 'falling sperm counts', *not* 'endocrine disruption'!
- **Get nimby:** Bring the issue to the neighbourhood – when it's perceived to be on an individual's doorstep, that individual is generally more prepared to act
- **Things happen to real people:** Putting a human face – and a name – to cold statistics and data usually makes it come alive, and people react far more positively. In Brazil, for example, Chico Mendes is an icon for the forest conservation movement.
- **It's a divided world:** As global marketers and social campaigners found out, the world is divided along geographical and ethnic lines. To evoke empathy and support, imagery from the same region or recognizable ethnic groups is best. For example, when campaigning to persuade Inuits not to kill whales, the images should show Inuits and not white Alaskans or Canadians harpooning.
- **Focus on the good:** With enough bad news surrounding them, people are more likely to pay attention if a campaign tells them ways to improve their lives, lifestyles or surroundings in practical ways.
- **Where are the goods?** It's no good promoting a behavioural change or a practice if the necessary products or services are not easily, locally and cheaply available – no better example than the Montreal Protocol itself.

Several case studies that illustrate the above findings are given in Annex 14.

C2. Advice and cautions from other agencies

A large number of international and inter-governmental organisations were consulted, and key communications professionals and officials interviewed during the research phase of strategy preparation. These interviews elicited a great deal of insights on how public interest messages can be communicated effectively and engagingly.

The agencies also shared information and insights on their current or recent IEC activities, and offered advice based on their experience. Some were tried-and-tested approaches; others were exceptional or original but had worked under specific and favourable conditions – including the provision of large, dedicated budgets. A few were cautionary, telling how not to do a campaign.

The most interesting and relevant such advice and cautions are summarised in Annex 15.

C3. Adapting other campaign experiences to ozone communications

Based on the many examples and case studies documented during the research phase of this strategy, the following can be cited as hallmarks of a powerful message that grips and changes people:

- Simple, easy-to-understand language
- Unambiguous and clear message/s
- Emotional and personal appeal to individuals
- Informed (i.e. backed by facts and science) yet not too technical
- Suggesting choices or options or allowing room for personal action

However, none of the many communication experts and organisations consulted could guarantee a direct link between greater awareness and desired action. While increased awareness has, on most occasions in most subjects, led to positive action by governments, industry or the public, there are instances where it has not produced full and conclusive results.

- Notwithstanding this caveat, it is reassuring that in all the apparent communications successes that were analysed for this strategy, public information and communication had played a crucial role.
- Encouragingly, a communications strategy tailored to the Montreal Protocol lends itself well to the main 'elements' of success identified above. These are:
 - **Single issue.** Phasing out ODS can be disentangled from climate change and the energy conundrum. Jubilee 2000's 'Debt forgiveness' campaign, wildlife NGO campaigns for dolphin-friendly tuna, tackling causes of acid rain in the ECE countries have all been phenomenally successful because they stayed focussed or remained 'on message'.
 - **A clear end in sight.** The agreed targets and timetable provide a ready-made framework for a strategy to assist with the ODS phase out. Eradicating smallpox or polio also had such 'do-able' targets the public could grasp and participate in.
 - **Montreal Protocol is an off-the-shelf sustainable development success story.** In the run-up to WSSD, the UN's Department for Public Information is building a strategy that will supply the mass media and other categories of multipliers with unambiguous examples. In the short term, therefore, there is huge potential to revive interest in the phase out of ODS by 'positioning' the Montreal Protocol and the Multilateral Fund as a rare, sustainable 'success' story .
 - **Direct link to an individual's health.** In Australia, for example, there has been sustained educational and mass media attention on this. In less than a decade, there has been a complete revolution in knowledge, awareness and practice related to exposure to sun and UV. Weather bulletins, for example, now regularly carry UV reports and forecasts.
 - **Phasing out ODS can be positioned as a 'them and us' issue in the Article 5 countries.** Governments, business and industry and the consumer all have a mutually reinforcing role to play.
 - **Crucially this is a 'problem' for which there are tried and tested solutions.** There is a parallel here with the landmines treaty. First you stop making them. Second – and by far the most difficult – you find ways to safely dispose of existing stocks. It is the same with ODS.

D. Strategic analysis: challenges and opportunities

D1. Ozone Communication Challenges

- Public awareness is a dynamic phenomenon. As activists and public relations professionals all over the world know, it can rise and fall quickly; sustaining awareness over time is a major challenge. The global attention given to the scientific discoveries in Berkeley, and the British Antarctica Survey in Cambridge put ozone on the agenda for international action, respectively, in the 1970s and 1980s. Since then, new scientific findings about the ozone layer have occasionally made the news headlines, and may continue to do so.
- However, 25 years on, phasing out of ODS is not a new subject; for a mass audience it is not particularly interesting either.
- Even in the formal sectors of governments and industry, the three country studies commissioned for this strategy found out that awareness levels were low. Because the issue of ozone depletion cuts across sectors – covering environment, health, industry and agriculture ministries and various agencies under them – not all policy-makers or decision-makers in these multiple sectors are sufficiently well aware of the relevance of ozone to their work. The same country studies showed that there was also a lack of awareness or understanding of the technical and funding support available to developing countries under the Multilateral Fund.¹⁹
- The challenge set to the consultants is how to put the issue of ozone depletion on the agenda of stakeholder and public concerns in the developing world? There is little in current ozone science or diplomacy to capture the imagination of the public in the Article 5 countries, many of which are afflicted by what are perceived to be more serious and immediate economic, social and environmental problems, for example, water shortages, degrading soils, air pollution. These environmental crises are of much more immediate concern to developing nations.
- In the developed nations, too, there is a widely shared public perception of repairing the ozone layer as a problem on its way to being solved. Ozone depletion is also confused with climate change (though this ‘confusion’ is not based on any awareness that the latest scientific evidence indicating that there is a connection). For example, all the comments from all the non-specialist public information experts convened by UNEP betrayed a complete ignorance that a thinning ozone layer was in any way unconnected with climate change.
- With the principal goal being to generate awareness in the Article 5 countries, the approach recommended by this strategy is to concentrate on rendering this quintessential ‘global’ issue into one of local relevance. This is without doubt a daunting undertaking. But an analysis of communications experiences of the UN organisations, bilateral agencies, governments and NGOs – in areas such as public health and environmental communications – shows that it is indeed possible to devise a framework that will optimise prospects of achieving ODS phase-out compliance.

¹⁹ Fifty companies contacted on a telephone poll during the Nigerian country study said they were minimally aware of issues about the ozone layer, and had taken no direct measures to enhance the phasing out of ODS. Of these, 10% said that they are willing to pay attention to ozone projects if the “government invites them” because “such measures are not in consonance with their corporate policy”.

Among the key communications challenges are the following:

- Making the depletion of the ozone layer an issue of public concern in the North and South, i.e. 'registering' it in the South, and 'reviving' it in the North;
- Mobilising consistent and informed support for the Protocol's aims and phase-out timetable;
- Explaining in clear, simple terms the consequences of inadequately applied compliance commitments, i.e. the human health and ecosystem impacts;
- Facilitating an action-oriented response that is adapted to widely differing socio-economic and cultural circumstances;
- Identifying the points of leverage – mass media, business and industry, NGOs and IGOs, educational bodies, governments and providing assistance in the Article 5 countries on how to operate the 'levers' of change;
- Minimising the potential for confusion with open-ended sustainable development issues, such as climate change, freshwater management and biodiversity conservation; and
- Initiating a cost-effective communications response that will target the 'drivers' or agents of change – e.g. recycling industry, refrigeration manufacture and maintenance sectors, customs officers, compliance officials in national and local government, farm-workers – as well as the public at large.

The ozone communications task is made even more difficult and complicated by the prevalence of a number of myths and misconceptions about the causes and effects of ozone depletion. Some of the most pervasive myths were documented by the strategy research process, and are listed in Annex 15. IEC activities on ozone will, in some cases, need to confront and clarify these misconceptions.

D1.1 Responding to the challenges

Being aware of the formidable challenges, and looking at how other development communications campaigns succeeded, this strategy proposes ways of meeting the challenges.

With the possible exception of the public in the Southern Cone countries, ozone depletion is as remote to most people as climate change is. It is instructive to consider findings of a 1998 study²⁰ commissioned for UNEP's Climate Awareness Programme, which surveyed opinion leaders in ten developing countries around the world.²¹ The results showed that overall the issue of climate change was not considered among the top priority issues. It ranked far behind 'bread and butter' issues such as unemployment and worry over the increasing gap between the rich and the poor. It was, however, viewed as ranking in importance with such issues as crime and human rights. "The results point to the need to extend climate change awareness programmes to new audiences, and the need to find new ways of linking climate change with domestic issues more effectively," the Report noted, adding: "At the end of the day, climate change may always be perceived as less important than the immediate issues...Any efforts to localise its impact can potentially increase people's perception of its importance."

This applies equally for ozone depletion. Scientific evidence is unambiguous that continuing depletion of the ozone layer will expose humanity – along with other animals and plants on the planet – to serious risks and effects. The challenge, therefore, is to communicate to ordinary people in their terms and in ways that engage their interest the nature of the ozone problem, its effects, and precautionary or preventive measures. Accomplishing this without distortion, exaggeration or creating unnecessary panic is part of that challenge. In all these respects, this is a formidable task in public communications of a scientific message.

²⁰ *Climate Awareness Programme Research Survey*, UNEP, December 1998

²¹ China, Cuba, Brazil, Kenya, Peru, Philippines, Russia, South Africa, Tanzania and Zimbabwe.

During the 36th Executive Committee meeting, it also emerged that some Article 2 countries joined colleagues not only in endorsing the need to raise awareness in Article 5 countries, but also to inform their own public. Such information would be designed to maintain understanding and public support to the Multilateral Fund. The new multi-media environment that has fostered proliferation (see below) offers myriad opportunities to adapt the messages targeted at the ODS users and general public in Multilateral Fund donor nations.

For example, during the consultations for this strategy, and partly inspired by it, an agreement was reached between TVE International and the Australian Broadcasting Corporation (ABC) to produce a major two part documentary based on *OzonAction's* special edition on the illegal trade in ODS. This film, which will be co-financed by ABC and other funding sources accessed by TVE, will be broadcast internationally on BBC World and other television channels; it will be seen in both Article 5 and Article 2 countries. The same footage will then be used to produce a video to accompany the Manual for Customs Officers that has already been produced by UNEP DTIE. This illustrates the multiplier approach advocated in this strategy, and shows that outputs – with very little adaptation – can be made more effective and put to multiple uses.

D2. Opportunities

The challenges, therefore, are formidable and they should not be underplayed. However, as the above example demonstrates these challenges can be turned into opportunities.

There are opportunities to educate general and specific publics at different levels, and to build widespread support for the Montreal Protocol. The strategy elements that follow in Section E are based on this premise. The strategy would facilitate the involvement of a broad range of multipliers. It may be starting virtually from scratch in some of the Article 5 countries, but it has one huge advantage. As with getting the public to wear seat belts, or persuading motor cyclists to wear safety helmets, the public can learn that their governments are signed up to an 'end-game' (or more accurately an end tournament, since there are quite a few games to be won before the tournament is finished). In each case, governments did not simply bring in the legislation with any explanation – sustained information campaigns involving the multipliers showed how lives could be saved and injuries avoided. Thus, compliance in the road safety measures was facilitated not just by law, not just by making it mandatory for manufacturers to include safety devices, but also by getting the public to understand why these measures were being taken.

With the Montreal Protocol, some of the early targets have already been achieved. The countdown is now on to achieve developing country phase-out targets by 2010. Specifically, the opportunities are to communicate the Montreal Protocol as:

- A means to save lives and to preserve good health;
- An instrument for international solidarity – a level playing field where (unlike in Kyoto) all the industrialised countries have already recognised their responsibility;
- A practical accord for compliance regime that is friendly to economic growth.

Coming at the time it does in the first decade of the 21st century, this strategy can seize other opportunities that have resulted from the media proliferation and a resurgence in civil society.

Media proliferation

Fuelled by factors such as economic globalisation and deregulation, the 1990s saw a proliferation of media channels, products and outlets. This led to the barriers of distance, language and isolation being replaced by connectivity, better services, and in many cases, a reduction of access costs. These trends have brought in a new influx of capital, technology and

human resources that, in the end, have increased the choice available to audiences. It has opened up new opportunities for entertainment, information and education to be purveyed to media audiences. Paradoxically, however, the amount of time and space available for public service content has shrunk in many countries even as outlets multiplied. This, in turn, has challenged educators to adopt newer and more innovative formats and approaches to engage the increasingly commercial media, and the increasingly sophisticated audiences.

Civil society resurgence

Another trend that accelerated in the 1990s was the rise of civil society organisations (CSOs). The basic definition of civil society is that it lies outside the formal structures of government, and that actions are taken – by individuals or groups – on a voluntary basis. In recent years, numbers of civil society organisations at local, national, regional and international levels have increased, and many groups have become specialised in education, awareness raising, activism, research and investigation in relation to environment and sustainable development. A notable example of the power and sophistication of CSO-managed campaigns was the successful Internet-based movement to defeat the proposal for the Multilateral Agreement on Investment (MAI). At the same time, CSOs have developed partnerships to work with government agencies for mutual benefit. The existing expertise and capacity for IEC activities in CSOs in many Article 5 countries should be seen as an opportunity and a resource when implementing IEC activities inspired by this communications strategy.

D3. Principal obstacles

For most people, most of the time – especially in the developing nations – the ozone layer is not only out of sight, it is also out of mind. During more than three months of widespread consultations conducted for this Strategy, this was our main finding: the majority impression appears that even in best-case scenarios, the threat seems a remote one.

To be successful, therefore, this strategy must overcome the following main obstacles encountered during the research for this document:

- **Low overall priority:** Ozone depletion ranks lower in most developing countries' list of environmental priorities. Protecting the ozone layer therefore receives less attention than the more pressing concerns such as fresh water resources or food security.
- **Confusion about the science.** For many people, the ozone layer in the stratosphere is closer than the distance they travel to work every day. But it is difficult for most lay people to grasp concepts such as the stratospheric concentrations of ozone, dynamic creation and destruction of molecules and ultraviolet A, B and C rays.
- **Changing science.** The frontiers of scientific understanding are changing all the time. For example, the new chemical culprits such as n-propyl bromide and halon-1202.
- **Fact and theories.** Lack of firm data that in the developing world that greater quantities of UV radiation let in by a thinning ozone layer are dramatically increasing skin cancers, eye cataracts and damaging crops and livestock.
- **Lingering myths.** As documented in Annex 15, prevailing misconceptions on ozone depletion have both resulted from, or been reinforced by, sensational and inaccurate media coverage.
- **Lack of awareness:** Beyond the immediate circles of NOUs and Ministries in charge of environment, there is very limited awareness in Article 5 countries that their governments are committed to the ODS phase out.
- **Limitations of resources:** As cited by many NOUs consulted, IEC activities on ozone depletion are contained and constrained by a lack of financial and human resources.
- **Socio-economic factors:** Again, as pointed out by some NOUs, the overall inadequacies in literacy, education and media penetration in some developing countries are obstacles to the successful implementation of IEC activities relating to ozone.

E. Communications Strategy

Based on the analysis and assessments conducted by the Consultants – and taking into account, particularly, the views of the Experts and contributions to the 36th meeting of the Executive Committee, a broad communications strategy is presented in this section.

The simple fact that the ozone layer makes all life on earth possible is the advantage the strategy will start with: the ozone layer is life's ultimate vaccine.

A strategy for persuading consumers to adopt ozone-friendly lifestyles and practices, starts with another massive advantage. It has to a large degree been accomplished in the industrialised countries; it is a tried and tested approach. While the challenge will be much greater in the Article 5 countries, it is still feasible (though heavily dependent on adequate funding to be mobilised).

However, note has been taken of one view as expressed before – and during – the 36th Meeting that that the 'end-game' (namely the complete phase out) is already underway and that heightened public awareness – while desirable – will not necessarily speed compliance. In this view, the phase out leading to a complete shut off in supply will achieve the goal of ensuring ODS are no longer manufactured. While this argument is based on logic, it needs to be placed in the context where this has not turned out to be the case in developed countries that have already phased out production and use of ODS. These countries continue to face problems such as illegal trade, ODS smuggling and fridge mountains in the EU. The developing country SMEs will need heightened awareness if the Montreal Protocol is to meet its phase out targets in the developing countries, and if the developing countries are to avoid problems similar to those currently faced by developed countries.

E1. Goals and objectives

E1.1 Goals

The primary goal of this communications strategy is:

- to generate popular support in Article 5 countries, through action-oriented understanding, for phasing out and ultimately eliminating the use of all ODS.

In order to:

- prevent the world population and essential life-support processes from being exposed to avoidably high levels of UV radiation and thus meet the commitments under the Montreal Protocol.

A subsidiary goal is to:

- achieve greater public understanding in the Article 2 countries in order to sustain and increase their support to ODS phase-out activities and investments.

While the above two goals are complementary, they are also distinctive and require different IEC approaches. Priority is given in this strategy to the primary goal, which has a definite timeframe between 2002 and 2010. The subsidiary goal may be pursued as an optional addition.

E1.2 Objectives

In pursuit of the above goals, the communications strategy seeks to achieve the following main objectives:

- Showing that despite considerable progress, the ozone layer has not been saved yet, and that a considerable amount of work remains to be done, especially in the Article 5 countries.
- Demonstrating that the switch to ozone-friendly substitutes and technologies is painless for the consumer and profit-making for big and small scale enterprises alike.
- Creating awareness of the Montreal Protocol and the Multilateral Fund as an effective international mechanism and model for sustainable development.
- Indicating to the public in the North that their governments' investment in the Multilateral Fund is vital and fully justified – akin to an insurance policy on preserving life on earth.
- Increasing the public understanding of the impacts of ozone depletion, and encouraging people everywhere to adopt safeguards against excessive exposure to ultraviolet rays.
- Building wide-spread multiplier (mainly mass media) and other stakeholder support for the remaining phase-out of ODS in Article 5 countries, thereby assisting the MP parties in their goal of compliance.

E2. Priority target audiences

At the broadest level, the target audience covers the general public in the 138 countries that are classified as operating under Article 5. However, resource and time limitations require that a more strategic approach is adopted, by identifying more specific target groups to be reached out on a priority basis.

The following is a listing of such target groups, especially for achieving the primary goal of generating popular support for ODS phase-out in Article 5 countries. It is presented with the proviso that not all these target groups will apply in all the Article 5 countries. Each country has its own IEC priorities based on its unique cultural, economic and societal conditions. Accordingly, every country needs to identify target audiences for IEC activities in ways that best reflect their own reality. For example, a low volume consuming country (LVC) with most of its consumption in the refrigeration sector may consider targeting IEC at the general public to increase purchases of non-CFC domestic appliances and educating refrigeration servicing technicians about good servicing practices. A large country whose NOU wishes to introduce a suite of ozone protection legislation affecting many industry sectors may consider parliamentarians their priority targets for IEC. Another country more advanced in its phase out implementation may consider that the general public is no longer a priority and may instead focus exclusively on industries that use ODS to inform them that ODS supply is restricted and will be eliminated in the near future. In summary, the unique cultural context of each country means that it will need to decide its own priority targets for IEC activities, and that there is no single, uniform approach.

Target audience category	Main groups involved
A. Those directly involved in activities that damage the ozone layer (by releasing ODS)	<ul style="list-style-type: none"> ▪ Industries that produce ODS ▪ Industries, including SMEs, that use ODS ▪ Technicians repairing, installing and servicing refrigerators and air conditioners ▪ Users of halon-based equipment ▪ Farmers using methyl bromide in agriculture
B. Those with a financial stake in phasing out ODS, reducing ozone depletion and minimising impacts on health and environment.	<ul style="list-style-type: none"> ▪ Healthcare systems in every country ▪ Health insurance companies ▪ Companies manufacturing and/or marketing substitutes for ODS
C. Government officials who either implement ODS phase-out activities, or are involved in law enforcement related to ODS production, transportation or use.	<ul style="list-style-type: none"> ▪ National Ozone Units (focal points for Montreal Protocol implementation at national level) ▪ Parliamentarians/legislators ▪ Customs officers ▪ Consumer protection officers ▪ Import and export officials ▪ Armed forces personnel
D. General public	<ul style="list-style-type: none"> ▪ Consumers ▪ Shapers or holders of public opinion ▪ children

NOUs have been included in the above list for a specific reason. Consultations with NOUs (summarised in B3) indicated the need to strengthen the knowledge base and communications skills of staff members attached to NOUs. By including them above as a target group, recognition is given to these needs.

E2.1 ODS constituency

Large, medium or small scale industries producing and/or using ODS covers a very large number of players and entities. Depending on the extent of ODS production/use in a country, it will be necessary to further define this 'ODS constituency'. It includes, but is not limited to those that:

- Manufacture any one or more of the ODS controlled by the Montreal Protocol
- Import/export ODS or ODS containing equipment
- Supply/distribute ODS
- Repair or service ODS containing equipment
- Dispose of equipment that uses ODS
- Use ODS containing equipment or appliances.

E2.2 Multipliers

Another important target group, that can be instrumental in reaching out to all other target groups, is multipliers whose support and participation is to be secured for the implementation of this strategy (see also section E6, strategic partnerships).

Target audience category	Main groups involved
Multipliers who can spread the message on ODS phase out and benefits of the ozone layer	<ul style="list-style-type: none"> ▪ Environmental educators (formal & non-formal) ▪ Journalists in all types of mass media outlets ▪ Business leaders and trade union leaders ▪ Non-governmental organisations/civil society groups ▪ Consumer associations, activists and groups ▪ Professional groups in health and medical sectors ▪ Scientists in natural and social sciences (including meteorologists) ▪ University teachers and researchers ▪ Schoolchildren (as bearers of messages to their parents, and future citizens themselves)

Additionally, in relation to the subsidiary goal of preventing all people and essential life-support processes from exposure to damaging levels of UV radiation, the following target groups should receive priority attention. It is acknowledged here that while there is a clear need for this communication to be undertaken, the implementation of this Strategy will remain focused on the primary goal of ODS phase-out.

Target audience category	Main groups involved
High-risks groups who are most affected by ozone depletion (through exposure to ultraviolet rays)	<ul style="list-style-type: none"> ▪ Schoolchildren ▪ All outdoor workers (farmers, herdsmen, fishermen, policemen) ▪ Those engaging in outdoor sports ▪ Users of beaches, parks and other open spaces

E2.3 Reaching out to the northern public

The Montreal Protocol has been ratified by 183 UN member states. The state of the ozone layer remains a global concern in rarefied parts of the scientific and governmental communities. A regional/country-driven response in Article 5 countries, while extremely important for the remaining ODS phase-out process running to 2010, is insufficient to reach the opinion-formers

or public in the Article 2 countries. These Article 2 countries are donors providing financial contributions to the Multilateral Fund. To reach these countries and publics, a complementary international communications output may be adopted. Therefore, while this strategy is mainly aimed at Article 5 countries, it also recognises the need to address IEC needs in the industrialised countries, for which slightly different delivery and funding mechanisms need to be identified. (The Consultants acknowledge that the non-Article 5 public could be considered outside the TOR of the Multilateral Fund). The Australia and the EU refrigerator problems clearly point out that more needs to be done in the A 2 countries. Need to stop production of Ozone Depleting Substances in developed countries is a critical issue-needs buy in of political leadership and industry-needs awareness of the oversupply situation and illegal traffic and continued use of CFCs impacting on the efforts of the international community to phase out the use of ODS)

E3. Priority countries

Activities in the 138 countries that fall within the Article 5 definition do not have equal impact on the ozone layer. While every country is engaged in the phase out of ODS production and use, a handful of larger countries – with either or both larger populations and higher levels of industrial activity – account for most of the remaining ODS production and use in the world.

This strategy advocates that the remaining larger producers and users of ODS should be targeted as a matter of priority in the IEC activities inspired and supported from 2002 to 2010.

These major ODS producer/user countries include Argentina, Brazil, China, India, , DPR Korea, Mexico, Republic of Korea, and Venezuela. Since ODS production and consumption trends are carefully monitored, the other bigger impact countries can easily be identified.

While this Strategy was under preparation, in April 2002, four companies in India moved to introduce new production technologies that will curb the emission of ODS. These four companies alone account for 15% of the world's total CFC production. Achieving such changes therefore has an immediate and measurable global impact.

Appropriate IEC activities and programmes can be intensified in these countries with a view to:

- Raising awareness and understanding within government, industry and the public;
- Persuading remaining users of ODS to switch to alternatives and, in the meantime, to adopt safe handling methods;
- Identifying and intercepting any illicit use or distribution of ODS;
- Strengthening the institutional capacity and motivation of government officials supporting ODS phase-out, and law enforcement officials helping the process;
- Enlisting the support of media and civil society groups to help meet ODS phase-out targets on schedule or ahead of schedule.

In this process, a uniform and equitable distribution of IEC support and resources may not be feasible or advisable. Those countries with larger ODS consumption levels should be provided with resources in proportion to their status as manufacturers and consumers of ODS. To indicate the level of those resources that would be required, the Consultants commissioned its partner organisation in China to provide a table of costing for the minimum outputs – it came to US\$250,000 for one year (see annex 21). Another indicative costing is a 30 month GEF-UNDP/European Commission project currently underway for Latin America to originate multi-media information outputs on practical aspects of sustainable development. The objective is to produce country-driven outputs suitable for viewers and readers in Latin America. The total costing is US\$2million (Highly relevant to this Strategy, the project documents can be submitted on request.

E4. Choosing and adapting messages

One great advantage pertaining to ozone layer depletion is that there is, to a very large extent, scientific unanimity about its causes and potential effects, and there is a clearly defined set of measures and targets for the international community. It is a scientific fact that the ozone layer is being depleted by the continued use and release into the atmosphere of ODS. But that does not mean the outputs recommended in this strategy must try to explain the physical process every time.

E4.1 Ten key messages

A tried-and-tested approach is to identify a set of key messages and articulate them in non-technical terms. An effective precedent for this is *Facts for Life: A Communication Challenge*, a commendably ultra slim volume produced in the late 1980s by UNICEF, WHO and UNESCO. It condensed the vital information on child survival and health for the benefit of governments, NGOs, media and communities, and was used as an essential reference tool for health educators and communicators worldwide for at least a decade. It presented information in the form of key messages under each topic.²² A pocket-sized publication funded by UK-DFID on the internationally-agreed poverty reduction targets imitated this successful approach.

In the same vein, this strategy identifies the following set of 10 key messages that could become the focus of a globally implemented and locally-adapted communications campaign.

Ten Key Message on Ozone Depletion	
1	The ozone layer in the upper atmosphere is a filter preventing harmful quantities of the sun's ultraviolet (UV) rays from reaching us.
2	A few dozen man-made chemicals when released to the air damage the protective ozone layer. When ozone layer is thinned, more harmful UV will fall on the earth.
3	These ozone-damaging chemicals are used in refrigerators, air conditioners and fire fighting equipment. Some are used in industrial processes and also in agriculture.
4	Ultraviolet causes skin cancer, and can also wrinkle your skin to make you look older than you are.
5	Ultraviolet causes cataracts, and can lead to preventable blindness.
6	Ultraviolet rays weaken the human body's natural resistance to disease (immunity).
7	Children are particularly at risk of cancer, blindness and illness from ultraviolet rays.
8	Alternative, affordable chemicals exist for all the ozone-damaging chemicals, and these substitutes don't harm the ozone layer.
9	Countries of the world have made a legal commitment to phase-out using all main types of ozone-damaging chemicals through the Montreal Protocol. Industrialised countries have already met these targets, and developing countries have time till 2010.
10	The ozone layer will heal in about 50 years if no further ozone-damaging chemicals are released to the atmosphere. Meanwhile, we all need to cut down on time spent in the sun, or cover ourselves as much as possible when we have to work or play outdoors. Sunglasses, sun protection lotions and large hats can all help protect us from harmful ultraviolet rays.

²² The topics covered were: timing births, safe motherhood, breastfeeding, child growth, immunisation, diarrhoea, coughs and colds, home hygiene, malaria, AIDS.

E4.2 Key attributes of messages

As stressed throughout this Strategy, the messages communicated should have several essential attributes to be effective.

Holistically, in all IEC related to ozone depletion:

- Information is scientifically accurate, and up-to-date;
- Messages are informed by science, but not too cluttered by jargon or technical terms;
- The sources are credible;
- Localise the message as far as possible with local sources, experts and data.

Demand side - messages aimed at the general public:

- Simple, emotive messages that relate the global ozone problem to the individual;
- Focus on health impacts of ultraviolet rays: cancer, blindness, premature ageing, weakened resistance to illness;
- Stress the imperatives of survival – ‘save the ozone layer and we shall save ourselves’;
- Emphasise that children are particularly at risk – and our action will reduce this threat;
- Keep to a minimum references to international agreements, governmental policies and targets;
- Relate macro with micro by telling people, repeatedly, what they can do as consumers or in their daily work, to save ozone/save ourselves.

Supply side - messages aimed at industry, technicians and SMEs:

- Continuing to use ODS will make businesses soon obsolete;
- Adopting ozone-friendly processes and technologies is a sound business move;
- Technical and financial assistance are available for large, medium and small enterprises to phase out ODS;
- ODS is emitted not only in production, but also in repair, servicing and use of equipment that contain ODS;
- Constant reminders that phasing out the manufacture and use of ODS is national and international law;
- Stress profit-making opportunities for recycling and safe disposal of ODS.

E4.3 Customising messages to suit different target groups

What do a Mexican industrialist using CFCs, a Chinese farmer applying methyl bromide and a Kenyan refrigerator technician have in common? In fact, very little – except that each one uses an ozone depleting substance in the course of his or her work.

Customising messages will therefore be essential to influence and persuade the highly diverse target groups. This means, *inter alia*:

- Messages are adapted to suit cultural differences and sensitivities – e.g. no scantily clad sun-bathers in Islamic countries;
- Messages are localised as much as possible, e.g. by using local examples, personalities or situations (a cricketer in India; a baseball player in the Dominican Republic);
- The level of detail is adjusted according to the target audience e.g. information on alternatives to methyl bromide for Chinese farmers, a multi-media pack for customs officials – a press and video news release for both for the general public;
- Messages are kept non-technical and general for the public, and made more detailed and specific for specialised audiences e.g. why and where to buy a hydrocarbon fridge (for the consumer) and safety procedures for manufacture and transport for the industry and government officials;

- Different professions, industries, entrepreneurs and multipliers receive information and messages most relevant to their work.

Annex 17 presents a matrix of different ozone audiences and appropriate messages.

E5. Delivering messages: four approaches

Given the high degree of diversity of target audiences and the cultural, socio-economic and other variables, it is not realistic to recommend a single set of delivery mechanisms. It is however possible to identify the different approaches and levels for implementing this strategy. These are mutually reinforcing.

- **The ‘ODS Constituency’ approach:** Staggered measures to create awareness of the specific target dates for ODS chemicals. For example, for Carbon tetrachloride, an 85% reduction by 2005 is planned. IEC activities related to this should target the particular industries that manufacture the industrial solvent, and the countries which import it for use. No attempt needs to be made to communicate this to the wider public. IEC outputs would include specialist print and audio visual products directed to the manufacturers and end-users. In essence, this is akin to what the UNEP-managed information clearinghouse has been doing, and that work should continue, while implementing all the recommendations made in the 2001 evaluation.
- **Targeting the bigger ODS producer/user countries:** The overwhelming finding of this study is that a greater sense of ownership has to be achieved in the Article 5 countries. Achieving a cadre of stakeholders requires identifying and augmenting existing centres of networking in different regions of the world. There are 138 countries operating under Article 5. As the three country surveys and other consultations for this Strategy have demonstrated, their needs vary widely. Ideally, in each Article 5 country, a country-driven strategy should be devised in partnership with the NOU concerned, and other national level stakeholders. But this would be neither feasible nor affordable within available budgets. A viable alternative is to target the major ODS manufacturing and consumer countries, arresting the use of which will have major global impacts. A regional IEC approach may be adopted where it is built in and mainly targeted at the larger ODS countries, but incidentally benefit neighbouring countries through a ‘ripple’ effect. For example, a timetable and set of outputs designed for IEC work in India would be relevant to neighbouring countries in South Asia. Likewise, what suits Brazil and Mexico can be adapted to their neighbouring countries in Central and South America. Fortuitously, the bigger ODS consumers and manufacturers are also the regional mass media leaders.²³
- **Working with multipliers:** No single entity has the resources or outreach to undertake all IEC work on its own. In implementing this strategy, alliances and partnerships should be formed with multipliers – those who can take the message on to their various audiences and networks. Annex 18 provides more details on the kind of multipliers with whom such partnerships should be pursued.
- **Creating greater ownership:** While adapting internationally available materials has been done by many NOUs for reasons of saving time and money, communications campaigns that have had most success are developed in the countries or regions themselves. The essential ingredient for success is for the partners to develop a strong sense of ownership over the communications materials and the resulting campaign. Wherever possible, encouragement and funding support should be provided for developing materials locally, which are more culturally appropriate as well.

²³ In the current media environment, where trans-boundary media outlets such as satellite television are increasing their outreach, IEC activities targeting the media in countries such as Brazil, India and Mexico will easily reach many more people in neighbouring countries at no extra cost or effort.

E6. Institutional arrangements: five options

It is not possible to recommend one institutional arrangement for the implementation of a global communications strategy of this nature. Even within the 138 Article 5 countries, and the dozen or so sub-regions into which they can be geographically grouped, there is vast socio-economic and cultural diversity that will render a uniform approach impractical.

This strategy therefore presents five options. Some are mutually exclusive, while others are mutually reinforcing.

- **Adaptable IEC products/services delivered via clearinghouse:**
- As the recent extended desk study on the UNEP Clearinghouse²⁴ demonstrates, the mechanism appears to function effectively and its products and services are highly valued by the NOUs. The main target groups served by the Clearinghouse will continue to be those within government or industry who deal with ODS related matters. They will continue to be provided with technical assistance, advice, information and institutional strengthening grants. Print, video, CD-ROM and web-based materials are produced on an on-going basis, according to a work plan. However, the evaluation did not attempt any primary analysis of the impact on public awareness in Article 5 countries. The Consultants working on this strategy could find no clear evidence that a discernible impact had been made either among stakeholder groups or the general public.
- **Country-based IEC products/services delivered via regional mechanisms:**
In this scenario, NOUs are provided additional funding and technical assistance to undertake more IEC activities specifically supportive of national ODS phase-out targets. These funds will be drawn from the additional funding of US\$200,000 currently being provided for under the Multilateral Fund. These funds would be channelled to countries through UNEP DTIE for advisory, monitoring and reporting reasons. To be eligible for such support, NOUs will need to present IEC activity proposals and a communications plan. There can be an element of competition to reward more innovative ideas. Ideally, funding allocations would be needs-based and demand-driven, i.e. there will be no uniform country allocation. However, it should be pointed that in the opinion of the Consultants (drawing on 18 years practical work in development communications and on the analysis of public information campaigns undertaken by various UN agencies) that the amounts of funds that have been indicated as available for this purpose are totally inadequate. Therefore IEC activities undertaken at country level can be inspired and guided by this Communications Strategy, to the extent relevant and financially feasible.
- **Priority-country approach:**
This option begins with the acknowledgement that the costs of mounting comprehensive country-driven strategies in all Article 5 countries is considered by the Executive Committee to be prohibitive. Therefore, the major ODS producing and/or consuming countries are singled out for IEC activities and support. For example, pilot activities can target the consumers of ODS and agents of change in countries such as Brazil, China, India and Mexico. Within these countries, the initial steps could be: Identify partners (for example NGOs, private sector PR companies) via an open tendering process. The appointed partners would submit two communications plans for outreach to the key ODS users actors and consumers. The criteria for the open tendering process can include: past performance; ability to raise co-finance; leveraging options; awareness of national media and multiplier landscape; and plans for cross-border distribution of outputs.

²⁴ UNEP/OzL.Pro/ExCom/36/5

This option allows the limited funding to be disbursed in fewer countries with greater chances of producing a limited number of desirable impacts for ODS phase-out. However, this will reduce, or completely rule out, the ability to offer other countries any funding support for IEC.

- **Sub-contracting approach:**

In this option, instead of working with and through the already over-worked and overwhelmed NOUs, the resources are provided to one or several international and/or regional NGOs with a proven track record in designing and delivering communications campaigns to southern audiences. The Multilateral Fund and Montreal Parties will play only a supervisory and monitoring role, while the organisations chosen will produce a work plan on an annual basis to address the needs and concerns of Article 5 countries. The NGO will annually report to the Multilateral Fund, and have internal and external evaluations carried out periodically. The criteria for selecting such NGOs will include: outstanding performance and demonstrated competence; ability to raise co-finance; leveraging options; familiarity with national media and multiplier landscape; and plans for cross-border distribution of outputs. A variation of this option is to commission a commercially operated, profit-making communications/advertising/PR company to carry out the same tasks.

- **Create a dedicated communications entity: “Ozone Media”:**

This option proposes the creation of a new communications entity – “Ozone Media” – that is solely and exclusively dedicated to communicating the ozone message to local, national, regional and global audiences. Such an entity will be once or twice removed from the formal inter-governmental structures of the Montreal Protocol, but will remain accountable to the Parties and the Multilateral Fund. This option takes account of the cross-cutting nature of the challenges set out in this strategy, and assumes that there is willingness to sanction sufficient funds for the elements of the strategy. The entity would raise additional funding for IEC work from sources other than the Multilateral Fund. By being pro-active and media-savvy, the entity will be distinctively different from the ozone information clearinghouse currently managed by UNEP. A proposal further outlining such an entity, provisionally titled Ozone Media, is given as Annex 19.

In addition to pursuing any one of the above options, a ‘hybrid approach’ may also be taken, where two or more options are pursued in a suitable combination to achieve complementarity.

E7. Monitoring and evaluation

It is never easy to discern direct cause-and-effect relationships between communications activities and social or behavioural change. However, there are various indirect ways and methodologies to assess and evaluate impact.

Built into every IEC activity should be provisions to monitor their outreach and impact. One overriding criterion should for sanctioning all IEC activities should be: is the output supporting compliance with ODS phase-out targets and processes?

After IEC activities have been implemented, it should always be subjected to an evaluation. The methodology may vary from region to region and involve, *inter alia*, focus groups, industry surveys, consumer surveys, NOU feedback, etc. A tried and trusted means is to commission independent market survey specialists. Gathering reliable information is expensive and it is a specialist activity.²⁵ But building in evaluation in any project is cost *effective* since the results

²⁵ Assessing the effectiveness of a Leprosy awareness project in five Indian states in 2000-2001 cost close to US\$100,000. This is listed as case study 7 in Annex 13. In this case, a cross section of 1,000 people were polled to gauge the impact of the US\$1.6 million leprosy IEC campaign.

will enable adjustments and/or revisions of the strategy to be made and will also make a convincing case to donors that the objectives were met.

Provision would be made for an independent analysis of this strategy's implementation. The objectives would be to:

- Assess how the output had increased public awareness about ozone layer depletion. For example, had the science been better understood? Was there a greater knowledge of the MP and what it was achieving? And how it is achieving it? Are they going to change their behaviour?
- Did NOUs report an increase in demand for their materials?
- Was international and local media coverage helpful?
- Did business and industry report an increase in demand for the ozone friendly alternatives?

E8. Financing the implementation of the communication strategy

As discussed in sections E5 and E6, this strategy has provided several different options for implementation. Depending on which option or combination of options are chosen, the resource requirements will vary considerably.

It is understood that the intensive and sustained implementation of IEC activities as outlined and recommended in this strategy require consume funding levels running into millions of dollars. This is partly a reflection of the scale and volume of needs in Article 5 countries, and partly due to the very nature of IEC activities. However, implementing IEC activities may be undertaken at low, medium or high levels of intensity and frequency. Even low level investments, if applied strategically, can produce tangible results in some situations.

It is also stressed that the Multilateral Fund should not be seen as the sole source of funding support for implementing this strategy. While the Multilateral Fund would be expected to provide initial investments and play a key role in supporting the strategy's implementation, every effort must be made to raise additional funding support from a multitude of other sources. The shared global nature of the overall goal of this strategy should be used to persuade such sources and to attract such additional support.

The following are some alternative sources of funding support that may be approached:

From bilateral and multilateral sources

Even as overall ODA budgets shrink in real terms, some donors – such as UK DFID – have been increasing their support for information and communications activities. As more donors realise that investments in communications pay better development dividends than, say, hardware or infrastructure, there will be greater opportunities for well-conceived projects and programmes to be funded by donors.

Private foundations

Beyond the better known Rockefeller and Ford foundations (both with strong programme interests in communications as well as in health), hundreds of philanthropic foundations exist in the north and south – always looking for innovative, worthwhile projects to support. An early task for UV Media will be to identify foundations that best suit its niche and needs.²⁶

From corporate sources

The success of other UN agencies and conservation groups to raise sponsorships from corporate sources indicates the potential here. Past examples, albeit at small scale, include Friends of the Earth partnering with the Body Shop on ozone awareness. An obvious starting point would be industries manufacturing or marketing ozone-friendly products. Specifically targeted should be industries with most to gain – for instance, sunscreen manufacturers, sunglass designers and makers, and refrigeration companies.²⁷

Corporate goodwill gestures

Make the ozone/UV a worthwhile cause for companies to be associated with. Example: a global cosmetics manufacturer formed the MAC AIDS Fund and donated \$25,000 to UNDP to help treat patients. It raised US\$ 22 million worldwide through sales of lipstick and "Kids Helping

²⁶ For example, the Moores Foundation was set up with the Intel founder's funding. It has a strong environmental remit and is a major contributor to Conservation International.

²⁷ (Electrolux has a corporate goodworks funding programme)

Kids" greeting cards. In 2001, it donated US\$ 500,000 to jump-start UNDP's AIDS campaign in Africa and recently, provided another US\$ 250,000 to NGOs in several African countries.²⁸

Tie-ins with celebrities

A tried-and-tested approach already used by agencies such as UNICEF, ILO and UNDP, this can bring in both direct and indirect support for ozone communications. Beyond the goodwill ambassador concept, performing artistes or sports stars may be asked to place ozone related logo/slogans/messages on their products, or on themselves. The exposure potential is enormous.

Piggyback onto other events

Strategically identify regional or international sporting or cultural events that can provide a ready-made platform to peddle ozone messages. For example sequences from TVE's programmes on water will be shown on a giant screen in Yokohama at the World Cup final.

Contributions in kind

This can include persuading the best advertising, marketing or PR firms to come on a pro bono basis. David Ogilvy, a founder of WWF, was instrumental in persuading several magazines to donate space for WWF, including *Time*, *Newsweek*, *Reader's Digest*, *Asiaweek*, and *Fortune*. According to WWF, between July 2000 and June 2001 alone, this amounted to roughly US\$ 5 million worth of advertising space.²⁹ Industry leaders are more likely to provide pro bono services than second tier ones.

Barter arrangements

This works with news agencies, broadcasters or film/TV production organisations. In return for something they value and want – such as world class footage or news material – they might be persuaded to donate air time, editing suites or dissemination. TVE barter programming with National Geographic.

Innovative methods

As countless charities – from the Salvation Army to Greenpeace – have found out, individual donations can add up to large amounts over time. This requires direct marketing skills, sincerity of purpose and innovative methods, plus a good understanding of the philanthropic inclinations of the growing middle classes around the world.

²⁸ "Cosmetics major funds AIDS NGO", Business Standard, Mumbai, Jan 21, 2002

²⁹ Using part of the money thus saved, WWF places paid advertisements in selected family, housekeeping and gardening magazines.

Annex 1: TVE research team involved in the preparation of the communications strategy

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Annex 2: Organisations and individuals consulted during research

Name of Person contacted	Organisation	Based in
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Sharon Brand-Self Media Relations		
Ian Willmore Media Coordinator	Friends of the Earth	UK
Nicky Stoupe Press Officer	Environmental Investigation Agency	UK
Linda Bukåsen Project Assistant	"Felleskampanjen", this year organised mainly by the Norwegian Refugee Council, Norway	Norway
Simon Pahle Communications and Campaigns Advisor	Norwegian Church Aid	Norway
Thomas Scalway AIDS Programme Officer	The Panos Institute London	UK
Jan Voorwouw Regional Director for the Caribbean and Central America	The Panos Institute	Haiti
Jon Tinker	International Institute for Sustainable Development	Canada
Salil Tripathi	Amnesty International	UK
Anumita Roychowdhury	Centre For Science & Environment	India
Tony Hill Coordinator/editor "Go Between"	UN Non-Governmental Liaison Service (NGLS)	Switzerland
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Ken Roth Executive director		
Aravind Ganesan		

Name of Person contacted	Organisation	Based in
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Wendy Goldstein		
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Richard Engelhardt Regional Advisor for Culture in Asia and the Pacific		
Claude Van Engeland Chief, Audiovisual Division Office of Public Information	United Nations Educational, Scientific and Cultural Organisation (UNESCO)	France
Theresa Kilbane Campaign for ratification of the UN Convention on the Rights of the Child	United Nations Children's Fund (Unicef)	USA
Eirah Gorre-Dale Advocacy and Media Adviser, Water Supply and Sanitation Collaborative Council	World health Organisation (WHO)	Switzerland
Iain Simpson Communications and Media Relations Communicable Diseases Programme		
Eva Rehfuess INTERSUN Programme Protection of the Human Environment		
Gregory Hartl WHO Spokesperson		
Chitra Subramaniam		
Claudia Drake		
Thomas Schultz-Jagow Director of Communications	WWF International	Switzerland
Mark Wagner		
Dr.Darren Saywell Programme Manager	WASH, C/o WHO	Switzerland
Gourishankar Ghosh		
Ranjan Kapur / Lorraine Martin / Piyush Pande	Ogilvy & Mather	India
Titoo Ahluwalia	ORG-MARG	India
Helen Anchan Gulan Kripalani	Lintas	India

Ranjan Biswas	Trailblazers	India
Sandeep Kulkarni	Monsanto (Mumbai)	India
Sangita Mehta Project Manager	BBC World Service Trust	India
Peter Gill		

Annex 3: Participants at the Expert Group meeting held in Paris (February 28 – March 1, 2002)

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Annex 4: List of public awareness materials produced by UNEP DTIE OzonAction Programme, 1994-2001

No.	Name of communications output	Date/Description
1.	Overview of the OzonAction Programme, July 2001	OzonAction Programme, July 2001.
2.	UNEP OzonAction Programme under the Multilateral Fund for the Implementation of the Montreal Protocol	OzonAction Programme, December 1998.
3.	Information, Options, Solutions...The UNEP OzonAction Web Site	A short flyer describing the web site and its features. OzonAction Programme, December 1998.
4.	Five Steps for Raising Awareness on Ozone Depletion	OzonAction Programme, 1996.
5.	Healing the Ozone Layer with Small Brushes	OzonAction Programme, September 2001.
6.	Online Photo Gallery	View each of the 53 children's paintings with our on-line photo gallery
7.	Methyl Bromide: Getting Ready for the Phase Out	OzonAction Programme, November 1998.
8.	List of Ozone Protection Videos	OzonAction Programme, March 1996.
9.	Press Backgrounder	UNEP Ozone Secretariat, September 1998.
10.	What's the Ozone Layer? Song (English version)	A song written by Yumiko Hagi and performed at the 9th meeting of the Montreal Protocol held in Costa Rica 1996. Tatsushi Hirata also collaborated on the song.
11.	OzonAction Posters: "Protect our Earth", "Every Action Counts"	OzonAction Programme, 1994.
12.	Posters	Describing how the OzonAction Programme supports developing country compliance with the Montreal Protocol: displayed by UNEP at the 12th Meeting of the Parties in Ouagadougou, Burkina Faso.
13.	Customs Poster Against CFC Smuggling	Undated
14.	Methyl Bromide Public Service Announcement	OzonAction Programme, August 1999.
15.	Protection of the Ozone Layer - Montreal Protocol Themes for 1998: On-line Slides	Ozone Secretariat, September 1998.
16.	Making Good Decisions: How to use UNEP DTIE's OzonAction Clearinghouse (English)	OzonAction Programme, 1997
17.	Global Video Competition on Ozone Layer Protection	2001. A 9-minute Cuban film, titled <i>Relaciones Peligrosas</i> (Dangerous Relations), won the first prize.
18.	Saving the Ozone Layer: Every Action Counts	TVE was commissioned to make this 18-minute video in 1996 to communicate to a general audience.

Annex 5: List of UNEP DTIE communications outputs for specialised target groups, 1994-2001

No.	Publication	Date/Description
1.	Aerosol Sector Conversion in Action	OzonAction March 1995.
2.	Alternatives to Methyl Bromide: Technologies with Low Environmental Impact	OzonAction Programme, 2000.
3.	Avoiding a Double Phase Out: Alternative Technologies to HCFCs in Refrigeration and Air Conditioning	OzonAction Programme, June 1999
4.	Eliminating Dependency on Halons: Case Studies	OzonAction Programme, April 2001
5.	Foam Sector Technologies in Use	OzonAction Programme, August 1995.
6.	Making a Good Catch: Non-CFC Technologies in the Fishery Cold Chain	OzonAction Programme, 2001
7.	Successful Conversion to Non-ODS Refrigeration: the New Zealand Experience	OzonAction Programme, August 1995.
8.	Surpassing the Montreal Protocol Objectives: Ghana's Success Story	Ghana EPA, September 1997.
9.	How Small and Medium-Sized Enterprises in Developing Countries can Protect the Ozone Layer	OzonAction Programme, 2001
10.	Global Report on Validated Alternatives to the Use of Methyl Bromide for Soil Fumigation	Prepared by the Food and Agriculture Organization of the United Nations (FAO) and sponsored by UNEP DTIE, 2001.
11.	Eliminating Dependency on Halons: Self-Help Guide for Low-Volume Consuming Countries	Undated
12.	How the Hotel and Tourism Industry Can Protect the Ozone Layer	Undated
13.	Maintaining Military Readiness by Managing Ozone Depleting Substances: Guidelines for Armed Forces in Developing Countries	Undated
14.	Saving the Ozone Layer: Guidelines for United Nations Offices	OzonAction Programme, 1997
15.	Towards Methyl Bromide Phase Out: A Handbook for National Ozone Units	OzonAction Programme, 1999
16.	CFC Production and Related Issues	
17.	Cyclopentane: A Blowing Agent for Polyurethane Foams for Insulation in Domestic Refrigerators-Freezers	OzonAction Programme, 1994.
18.	Elimination of CFC Refrigerants From Domestic Refrigeration Manufacture	OzonAction Programme, October 1994
19.	Halon Management: Banking for the Future	OzonAction Programme, 1994.
20.	HCFCs and Air-conditioning: Montreal Protocol Controls and Options	Based on the 1994 Report of the UNEP Technology and Economic Assessment Panel
21.	List of Manufacturers of Halon Recycling, Recovery and Reclaim Equipment	OzonAction Programme, January 2002.
22.	Retrofitting with Non-CFC Substitutes	OzonAction Programme, September 1994.
23.	Safety Aspects of Hydrocarbon Refrigerators	June 1996, OzonAction Programme

No.	Publication	Date/Description
24.	Inventory of Trade Names of Chemical Products Containing Ozone Depleting Substances and their Alternatives	OzonAction Programme, October 2001
25.	Inventory of Technical and Institutional Resources for Promoting Methyl Bromide Alternatives	OzonAction Programme, March 1999.
26.	Sourcebook of Technologies for Protecting the Ozone Layer: Alternatives to Methyl Bromide	Undated
27.	Sourcebook of Technologies to Protection the Ozone Layer: Flexible and Rigid Foams	OzonAction Programme, September 1996.
28.	Study on the Potential for Hydrocarbon Replacements in Existing Domestic and Small Commercial Refrigeration Appliances	Undated
29.	Protecting the Ozone Layer, Volume 6: Methyl Bromide	OzonAction Programme, 1998.
30.	Making Good Decisions: How to use UNEP DTIE's OzonAction Clearinghouse (English)	OzonAction Programme, 1997

Annex 6: Letter sent to Regional Network Coordinators (RNCs)

Dear UNEP Regional Network Coordinator,

19 March 2002

We are an international non-profit organisation specialising in using the mass media to communicate information and messages related to sustainable development. We have recently been commissioned by the United Nations Environment Programme (UNEP) to prepare a global communications strategy that will help save the world's protective ozone layer. The strategy, to be presented to the Parties to the Montreal Protocol in May this year, will lead to a global public awareness and education programme to sustain the phase out of ozone depleting substances (ODS).

As you are no doubt aware, media coverage and other information and education activities played a key role in galvanising governmental and industrial action to phase out ODS in the 1980s and 1990s. The Montreal Protocol is now shifting its focus from industries and governments to the end users – consumers and civil society. This calls for sustained awareness and education programmes to influence individuals and communities. UNEP recognises that this strategic shift needs a change in public attitudes and behaviour. Awareness is key to this change.

In preparing this strategy, TVE will document case studies of successful communications campaigns that have led to tangible changes in other sectors such as health, human rights, social development, road and chemical safety and international humanitarian efforts. Action on issues such as debt relief, HIV/AIDS and child immunisation have demonstrated that public involvement – through behavioural change, advocacy and a heightened level of awareness of the key issues – is essential to ensuring that internationally-agreed targets are met and laws are complied with. Experiences of UN agencies, governments, activist groups and NGOs are currently being studied to identify valid, generic approaches. We have also commissioned three representative country studies in Africa, Asia Pacific and Latin America regions to look at specific activities carried out to communicate messages on saving the ozone layer.

Drawing on the experience of others, we hope to produce a workable document with realistic recommendations that will achieve a multiplier effect among the different civil society actors. It is anticipated the strategy will recommend, inter alia:

directions for sustainable advocacy by NGOs and civil society groups
approaches to engage the electronic and print mass media to involve the consumer
targeted communications aimed at reaching out to entrepreneurs
means of involving educational planners, teachers and students in formal education
approaches for engaging professionals and practitioners in health and agricultural sectors
ways in which public involvement can be mobilised imaginatively and innovatively
methodologies for monitoring and evaluation of the implementation of the Strategy.

In preparing the strategy, we are extremely eager to consult with UNEP Regional Network Coordinators who perform a pivotal role in the phase out of ODS. We would like to hear from you, and your colleagues, about your views on communicating the ozone messages to industry, government, private and civil society sectors in your region. Your experiences, impressions -- and cautions, if any -- would be invaluable to us in formulating strategies that can help strengthen and expand the great deal of work that is already being carried out.

We would like to have your brief responses to the following 5 questions:

a. To what extent does your work currently involve Information, Education and Communication (IEC) activities?

b. Do you consider it relevant and useful to enhance the role of IEC in support of ODS phase-out between now and 2010?

c. What constraints do you face in engaging in IEC related work on ozone at the moment? (please list at least 3)

d. What are the most important needs for you to carry out more IEC activities better? (please list 3)

e. Would you like to share any specific examples of innovative and successful IEC activities carried out during the past two years?

We thank you for your co-operation, and look forward to hearing from you by or before 31 March 2002.

Yours sincerely,

Merethe Borge
Research Officer, Ozone Communications Strategy
TVE International, London
Email: merethe.borge@tve.org.uk

Annex 7: Letter and questionnaire to National Ozone Units

Dear National Ozone Unit colleague,

10 December 2001

We are an international non-profit organisation specialising in using the mass media to communicate information and messages related to sustainable development. We have recently been commissioned by the United Nations Environment Programme (UNEP) to prepare a global communications strategy that will help save the world's protective ozone layer. The strategy, to be presented to the Parties to the Montreal Protocol next year, will lead to a global public awareness and education programme to sustain the phase out of ozone depleting substances (ODS).

As you are no doubt aware, media coverage and other information and education activities played a key role in galvanising governmental and industrial action to phase out ODS in the 1980s and 1990s. The Montreal Protocol is now shifting its focus from industries and governments to the end users – consumers and civil society. This calls for sustained awareness and education programmes to influence individuals and communities. UNEP recognises that this strategic shift needs a change in public attitudes and behaviour. Awareness is key to this change.

In preparing this strategy, TVE will document case studies of successful communications campaigns that have led to tangible changes in other sectors such as health, human rights, social development, road and chemical safety and international humanitarian efforts. Action on issues such as debt relief, HIV/AIDS and child immunisation have demonstrated that public involvement – through behavioural change, advocacy and a heightened level of awareness of the key issues – is essential to ensuring that internationally-agreed targets are met and laws are complied with. Experiences of UN agencies, governments, activist groups and NGOs are currently being studied to identify valid, generic approaches. We have also commissioned three representative country studies in Africa, Asia Pacific and Latin America regions to look at specific activities carried out to communicate messages on saving the ozone layer.

Drawing on the experience of others, we hope to produce a workable document with realistic recommendations that will achieve a multiplier effect among the different civil society actors. It is anticipated the strategy will recommend, inter alia:

- directions for sustainable advocacy by NGOs and civil society groups
- approaches to engage the electronic and print mass media to involve the consumer
- targeted communications aimed at reaching out to entrepreneurs
- means of involving educational planners, teachers and students in formal education
- approaches for engaging professionals and practitioners in health and agricultural sectors
- ways in which public involvement can be mobilised imaginatively and innovatively
- methodologies for monitoring and evaluation of the implementation of the Strategy.

In preparing the strategy, which will be presented to UNEP early in 2002, we are extremely eager to consult with the National Ozone Units who perform a pivotal role in the phase out of ODS in their countries. We would like to hear from you, and your colleagues, about your views on communicating the ozone messages to industry, government, private and civil society sectors in your country. Your experiences, impressions -- and cautions, if any -- would be invaluable to us in formulating strategies that can help strengthen and expand the great deal of work that is already being carried out.

To make your task easier and simpler, we have devised a simple questionnaire which is given below. We would be very grateful if you can take a few minutes to complete this and return it to

us, by email or by airmail. We would much like to hear from you by or before 15 January 2002, but would be delighted if you respond sooner.

You might also wish to send us by mail or courier samples of public awareness and information material you have produced (in any language) or reports of your work. We are working very closely with UNEP DTIE's OzonAction Programme and already have access to their reports and materials.

We thank you for your co-operation, and look forward to hearing from you.

Yours sincerely,

(Mr) Nalaka Gunawardene
*Project Coordinator, Ozone Communications Strategy Preparation
Asia Pacific Regional Representative, TVE International*

Email: ozone@tveap.org

Attached: Two-page questionnaire, with a total of 9 questions

Copy: OzonAction Programme, DTIE-UNEP, Paris

Preparation of a Global Communications Strategy on the Phase-out of Ozone Depleting Substances: Questionnaire for National Ozone Units

Please return by or before **15 January 2002** to:
Television Trust for the Environment, Asia Pacific Regional Office
No 24, First Lane, Koswatte, Nawala, near Colombo, Sri Lanka.
Fax: (94 74) 403 443; Email: <ozone@tveap.org>

Please enter your contact data here:

Name of person completing questionnaire	
Designation	
Institution	
Postal address	
Email address (if available)	

Please respond briefly to the following few questions. You may send additional material along with this response.

1. What are the most noteworthy information, education and communications activities conducted in your country during the past three years? Please list 5 below.
2. From among the above, please describe in one paragraph below what you think is the single most important ozone awareness activity:

The International Day for the Preservation of the Ozone Layer (September 16) is an important opportunity to raise public awareness on this issue. Can you list the main activities that were carried out to mark the Day in 2001?

4. What are the main information and communications materials that your organization has produced, or commissioned, for public awareness raising on ozone?
5. In the formal education system, i.e. primary and secondary schools in your country, do students learn about the ozone layer? If so, under which subject/s is it taught, and in what manner?
6. What kind of interest does the print and electronic mass media take in the ozone issue? What level of media coverage has been given to the ozone problem, solutions, precautions and ODS phase out measures?

What have you encountered as the main constraints or difficulties in raising public awareness on ozone layer depletion? (Please tick up to three responses)

- Highly scientific and technical nature of the subject
- Scientific uncertainties on some of the issues involved
- The fact that ozone layer is too far removed from the public mind
- Lack of funds to undertake more education and awareness work
- Overall problems of illiteracy and lack of education among the public
- Lack of cooperation from health and scientific professionals
- Lack of interest in the mass media to carry information on this issue
- Other (please specify)

What, in your view, are the three most important concerns related to ozone layer depletion that the public in your country should know more about? (Please tick only three from the list below).

- Adverse health impacts of UV radiation
- Impact of UV radiation on crop production and livestock
- ODS use in consumer products and services
- Smuggling of phased-out or banned ODS
- Use of ODS in agricultural processes
- Costs involved in adopting substitutes to ODS
- Measures taken by government under the Montreal Protocol
- Need to strengthen national laws and regulations for ODS phase out
- Benefits from the Montreal Protocol and Multilateral Fund

9 If you had more resources, what are the three priority activities you would like to undertake in areas of information, education and communication on ozone?

- 9.1
- 9.2
- 9.3

Thank you very much for completing and returning this questionnaire.

Annex 8: Format for detailed country studies carried out in Chile, China and Nigeria

- 1 Country introduction (1 page)**

Introduce the country's main demographic, economic and industrial features and basic data, etc. Also provide basic data on the country's formal education system, mass media (print, radio, TV, web) penetration and environmental management system.
- 2 Context for ozone (all of this should be available with the National Focal Point for the Montreal Protocol) 1-2 pages**

Present data on the country's level of industrial activity, agricultural activity and consumer activity that have implications for the ozone layer – i.e. the main sources or means from which ODS are released.

What are the key institutions involved in phasing out ODS?

What are the main measures adopted by government, corporate/industry sector, research institutes and civil society in supporting ODS phase out?
- 3 Government responses to ozone depletion (1 page)**

When did the country sign the Vienna Convention of 1985 and Montreal Protocol of 1987 and subsequent amendments?

What is the national focal point for the Montreal Protocol in the country?

What are this agency's main functions in relation to the ozone layer?

Summarise what measures have been taken at policy, legislative and regulatory levels to comply with Montreal Protocol targets.
- 4 National capacity for meeting Montreal Protocol targets (0.5 page)**

Summarise the scientific, technological, industrial and managerial capability that is available for meeting Montreal Protocol targets.

In particular, report on the training and capacity building aspects for technicians, industry and other key stake-holders.
- 5 Public awareness on ozone related issues (0.5 page)**

What is the level of public awareness on the following topics: ozone layer depletion (Ozone Hole); causes of ozone depletion; the role of chlorofluorocarbons or CFCs in ozone depletion; other chemicals damaging the ozone layer; where and how these ozone depleting chemicals are used in everyday products and processes; the availability of ozone-friendly substitutes; the adverse health effects of ozone depletion; the Montreal Protocol and other international measures to save the ozone layer.

To assess this, talk to officials at the Ministry of Environment, key environmental educators and environmental journalists; refer to any surveys on public awareness or perceptions on environment, etc.
- 6 Information, education and communication on ozone (1 page)**

What are the main IEC (information, education and communication) activities carried out by the national focal point since 1998? Summarise main initiatives and interventions on this front. Is there a national plan or strategy for these activities? (If so, annex an English version of the strategy). Does the formal education system cover this issue in any subject at primary, secondary and tertiary levels? If so, under which subject and in what manner is this covered? (Summarise rather than include full details.)
- 7 Specialised sector awareness (1 page)**

Find out and report on the following:

How the country's medical and health professionals perceive the enhanced health risks of ozone depletion, and what measures they advise to minimise UV exposure.

Is the country's agricultural sector aware of ODS use in certain agricultural activities? Are actions being taken to phase out these, and to switch to substitutes?

8 Ozone Day activities (1 page)

In what ways has the International Day for the Preservation of the Ozone Layer (September 16) been observed in your country in 1998, 1999, 2000 and 2001?

Include a summary of activities on this page; if a detailed list of activities is available, attach it as an annex.

Describe not only government-inspired activities but also those by civil society organisations, trade and industry and other sections of society.

9 Media coverage of ozone issues (1 page)

What is the level of interest shown by the mass media on this issue?

Summarise your impressions of such coverage in the print, radio, television and other forms of mass media.

How would you rate the quality and depth of media coverage?

What are the main strengths and weaknesses in the media coverage?

What are the main constraints that the media have in covering this issue?

10 Consumer awareness and activity (1 page)

Summarise in a paragraph or two the level of consumer awareness and mobilisation in your country both to assert their own rights and to engage in responsible consumer action.

Then, by talking to one or more leading consumer activists, try to answer the following questions:

Does the average consumer know how their choices can impact the ozone layer?

Do they know enough about ozone-friendly products?

Are consumers willing to pay a little more for ozone-friendly products?

11 Assessment and recommendations (2 pages)

This is the most important section of the report. Based on the information and impressions summarised in the sections above, we ask you to assess the status of IEC on ozone, and to recommend measures to make it more effective. You don't have to be scientific experts to provide these inputs; your expertise and experience in environmental awareness, education and communication is what matters most.

11.a Assessment (1 page)

What is your assessment of the effectiveness of IEC activities on ozone? For example, are they sufficiently well targeted? Are they adequate? Have these contributed to a tangible raising of awareness? What gaps remain among which sections of the population?

It would also be interesting to document, if you can, what misconceptions persist about the ozone layer.

11.b Recommendations (1 page)

Based on the information gathered and the assessment you have made of ozone related IEC activities so far, what are the main recommendations you offer to make these activities more effective and better targeted?

What more needs to be done to inspire responsible industrial, agricultural and consumer action? What can influence and change people's behaviour in ways that will benefit the ozone layer?

Annex 9: Country study summary: Chile

Parts of Chile are annually affected by the ozone hole that extends to southern parts of the country. Thus, the country's involvement in ozone related activities assumes a particular significance. Chile does not produce and ODS, and is simply a user of certain types of imported ODS – mainly CFC11, CFC12 and Methyl Bromide. These are used for producing polyurethane plastic froth, refrigeration, fumigation and quarantine purposes.

Government action

- Chile signed the Montreal Protocol in 1987, and in March of 1990, ratified the Vienna Convention. It has also subscribed to the amendment made in London (1990), Copenhagen (1992), Montreal (1997) and Beijing (1999). All these have been ratified and are law of the Republic.
- Main national actions for ODS phase-out have been:
 - After July 1999, no more than 835 tons per year of CFC imported.
 - In 2002, upper limits for Halons and Methyl Bromide introduced.
 - In 2005, an additional reduction of 50% in the imports of CFC.
 - In 2010, complete elimination of the CFC.
 - In 2015, to end with the elimination of other DOS.
- Country programme to protect the ozone layer is implemented by National Environmental Commission (CONAMA) and financed by the Multilateral fund.
- World Bank funded project (1994 – 2003) provides US\$ 6.5 million for these activities which cover the following: public awareness raising; creation of an ozone label; incentives to convert industrial activities away from DOS use; and training in new technologies.
- Between 1996 and 2001: about 40 industrial conversion projects financed; and three demonstration projects implemented on methyl bromide use. Overall, 500 tones of ODS eliminated.

Scientific research

- Magellan University runs an ozone monitoring laboratory dedicated to the study of the ozone layer, UV levels and the Antarctic ozone hole. It also produces UV indices for Punta Arenas, Puerto Natales, Porvenir and Puerto Williams localities.
- The Technical University Federico Santa Maria of Valparaiso carries out studies on the ozone layer, while the University of Chile has several professionals working in this area.

Civil society

- NGOs are engaged in information dissemination and awareness raising activities through workshops, websites and media work. Recently a Chilean NGO leader travelled to Europe to start the contacts declare Chile as a "vulnerable country" due to ozone depletion. The hope is to obtain international support to carry out research, education and communications activities.
- In the southern part of Chile, where the problem is more acute, an NGO called FIDE XII carried out awareness and monitoring activities related to ozone. UV awareness campaigns are conducted during summer on beaches. However, these isolated initiatives are inadequate to meet the needs.

Public awareness assessment

- Email survey carried out covering government officials and NGO activists involved in environment, industry and education sectors, and several journalists. This indicated a medium level awareness of ozone depletion, its causes and remedial action.
- While the CFC link to ozone depletion was better known, there was a low level of information availability and public understanding on other ODS. Similarly, there is little awareness or appreciation of national measures taken under the Montreal Protocol.

- The only area where there was heightened concern was on health impacts of ozone depletion – which is a matter of direct concern to most Chileans.

IEC activities

- On the whole, the level of IEC activity is low, irregular, untargeted and lacks in depth.
- In the summer of 1996, CONAMA carried out awareness campaign on ozone depletion, telling people on the beaches and at swimming pools how to protect themselves from excessive exposure to UV.
- An ‘ozone label’ was introduced – signifying industries and products that have converted from ODS to substitutes.
- University of Magellan collaborates with Health Ministry, CONAMA and others to monitor UV levels – which generates public and media interest. This system predicts UV levels and advises people on preventive action.
- Interest in, and activities for, Ozone Day are scattered and insignificant. A few media activities undertaken in recent years for this day.
- Very few information materials available in local languages and local context.
- Information dissemination and technology transfer to the industrial and agricultural sectors is inadequate.

Education system

- The formal education system does not, as yet, have any component or activity on the ozone layer. While environmental education has been introduced and is widely practised in Chile, the contents and emphasis are left to the teachers.
- In the non-formal sector, some initiatives have been undertaken. For example, fourteen Chilean schools are participating in a GLOBE Project³⁰ activity where school children measure meteorological data and send them to the US for analysis.

Media coverage

- Local press in southern Chile covers ozone issue systematically. Focus is on research findings and health impacts. National media, in general, takes less interest in this subject.
- Coverage in both print and broadcast media increases each year when Ozone Hole appears in the southern hemisphere. Most widely covered topics are: health risks, dangers of UV and origins of ozone depletion.
- Survey of media coverage revealed that it was superficial and irregular. Among other things: ODS effect on ozone layer mentioned, but not related to ODS phase out needs; insufficient localisation of the problem and solutions; media completely overlooks the Methyl Bromide factor and focuses only on CFCs; media coverage is heavily biased towards protecting people from UV exposure, rather than helping ODS phase-out; and the direct link between ODS and responsible consumer action is not stressed.
- Media professionals face many constraints in covering ozone related issues. Among them: lack of public or private sources of information; inadequacy of contact between researchers and the media; lack of visual materials – including moving images – on the subject; and overall low priority assigned to the subject in the national media.

Consumer awareness and action

- Consumer protection and activism are still at a low level of organisation in Chile. Relatively few consumer associations have taken an interest in linking ODS to consumer choices.
- Conscious Consumers’ Leave is working towards raising awareness on the issue, and to exert pressure on government.

³⁰ GLOBE, Global Learning and Observation to Benefit the Environment, a practical international program of science and environmental education where 90 countries participate. <http://globe.fsl.noaa.gov/>

- Information available to consumers is rather limited – usually confined to health precautions to avoid prolonged exposure to UV. No clear links made between ODS use, ozone depletion, and increased UV. “In general, people know that if they use sprays they can weaken the ozone layer, but rarely they understand the meaning of this.”
- No information campaigns on the consequences of ozone depletion and how to reduce threats to the ozone layer. Some products carry the ozone-friendly label, or indicate that they are free of CFCs.
- Random interviews with consumers at supermarkets showed that a majority was unaware of ozone friendly products and their significance to the environment and health.

Note: The original country study was produced in Spanish. This summary is based on an English translation.

Annex 10: Country study summary: Nigeria

Nigeria is a multi-ethnic, multi-cultural and multi-lingual country with over 250 ethnic groups and three major tribes. The country is divided into six geo-political zones and has a population of about 110 million.

Governmental action:

- Signed the Vienna Convention in 1985 and the Montreal Protocol in 1987.
- Party to the London amendment of 1990, and represented in 1992 in Copenhagen for the further amendments to the protocol.
- National structures were set up in 1996 to carry out the elimination of ODS: National Advisory Ozone Committee and the National Ozone Office under the Federal Ministry of Environment.
- Banned used refrigerators and air conditioners using chlorofluorocarbon (CFC) gases with effect from August 2001.
- Embarked upon (through the use of the Multilateral Fund) industrial conversion projects in the foam sector. Already, 532.27 metric tonnes of CFC have been eliminated.
- Established an ODS import/export licensing system in 1998 under the Ministry's Hazardous Chemical Tracking and Toxic Wastes Dump Watch programme

Investments

- In 1996, Nigeria received a grant of US\$ 3.4 million from the Multilateral Fund (as a party operating under Article 5 of the protocol) to meet the target of 1999 freeze on CFCs. In 2001, received US\$ 1.2 million to support its implementation – this has enabled some Nigerian industries to convert to ozone friendly technology in production processes.
- 50 diverse companies contacted on a telephone poll said they were minimally aware of issues about the ozone layer, but had taken no direct measures to enhance the phasing out of ODS. Of these, 10% said that they are willing to pay attention to ozone projects if the “government invites them” because “such measures are not in consonance with their corporate policy”.

National interest and priority

- Research institutes and universities focus on environmental education -- but give priority to “issues of national interest”, e.g. reforestation, desertification, soil and coastal erosion, and waste management. No significant research has been carried out to support ODS phase-out.
- In civil society, environmental education generally does not focus on the ozone layer. Only a few NGOs have tried to raise public awareness on ozone through seminars, conferences and workshops – often as part of discussions on climate change. The Nigerian Environmental Study/Action Team (NEST) had a public awareness workshop in 1999 on the negative impacts of refrigerants. The Nigerian Conservation Foundation (NCF) runs tertiary level environmental education courses with a substantive focus on the ozone layer.

Awareness assessment:

- Public awareness on ozone depletion, its consequences, ODS and effects on people is very low.
- A NEST³¹ survey of stakeholders at a 1999 workshop on the impact of refrigerants showed “vast ignorance on the part of those who manufacture refrigerators and other cooling equipment”.

³¹ Nigerian Environmental Study/Action Team

- A random, cross-sectoral survey of both producers and consumers of ODS by the Environmental Management Association of Nigeria showed a “very poor public awareness” of the ozone layer.
- Dr. Muhtari Aminu-Kano, an environmental scientist and Executive Director of NCF attributes this lack of knowledge to a “poor effort to communicate”.

Awareness activities by National Ozone Office

- Press releases on activities of the national focal point
- Zonoutreach, a biannual news bulletin (not published since 1998 due to lack of funds)
- Capacity building and in-house training for programme implementation staff
- Ozone Day “not in the calendar of Nigerian government”. But World Environment Day is observed by both government and NGOs.

Education sector

- The formal education system focuses on ozone at tertiary level, under chemistry, geography and environmental education in the areas of climate change, natural laws, environmental management and geophysics.
- In secondary school syllabus, there is minimal reference to the ozone layer, and the effects of greenhouse gases in geography, physics, chemistry and biology. The stratosphere is only vaguely explored.
- At primary level, the environment is covered under health and elementary sciences, and in social studies – but “ozone” is deliberately left out and “pollution” is used.

Media coverage

- The level of media interest on ozone is “very low”; so is the “rate of quality and depth of coverage”. In-depth environmental reporting is on waste management and environmental sanitation issues.
- Coverage between 1998 and 2001 in five daily newspapers³² one magazine³³, on national TV, one private-owned TV station³⁴ and Federal Radio Corporation was assessed. It found, inter alia: a concentration of environmental coverage around World Environment Day; low media awareness of ozone press releases; direct reproduction of government press releases; and the lack of investigative reporting on this issue.
- On the whole, the Nigerian media showed a far greater interest in environmental issues such as oil spills, gas flaring, and their effects on health, vegetation and water.
- While radio carries environmental reports everyday, an environmental reporter with Voice of Nigeria admitted that she had never done a story on ozone: she declined to answer questions on the issue saying “I don’t know anything about the ozone”.
- Television carried some in-depth, investigative reporting on the effects of gas flaring and oil spills. Ozone was covered mostly under “the foreign file”. The Nigerian Television Authority (NTA 2, Channel 5) had three tapes on ozone and climate change.
- In both print and broadcast media, coverage on ozone – when it did occur, rarely – was on some governmental action or event concerning ozone than on the scientific facts or health effects.
- Interviews with 10 environmental correspondents revealed the following main constraints: lack of access to up to date, reliable information, lack of opportunities for practical training to better understand the issues; editors who would never consider an investigative report on the ozone layer as a front page story; inadequacy of government/media interface; and the exclusion of environmental journalists from international negotiation meetings, government sponsored tours and inspection of industries using ODS.

³² *The Punch, This Day, Vanguard, The Guardian and The Comet*

³³ *Nigeria’s Oil & Gas*

³⁴ DBN, Lagos

Consumer awareness and involvement

- The level of consumer awareness is very low.
- The August 2001 ban of used refrigerators led to a demonstration by traders of used, imported refrigerators at the Alaba market in Lagos State.
- Random interviews revealed that the general public is not in favour of the government's "sudden" decision to ban used refrigerators and air conditioners.
- Ironically, the consumer public is only aware of the ban, but not of the *reasons for it*. People see government action as sheer victimisation – many cannot afford new refrigerators.
- Random interviews at electronics markets in Lagos revealed that although the consumers know a little about the ozone layer ("what makes the sun hot"), they have not in any way linked it to refrigerators -- nor could they explain how their choices impacted on the ozone layer.
- Almost none of the respondents any idea if their refrigerators or air conditioners had CFCs.. They also did not know CFC harms the ozone layer.
- There was no indication that the consumers know enough about ozone-friendly products. Only 5% recalled having seen the words ozone-friendly on aerosol products; but only 2% could explain what it meant and why it was written. The rest never cared to find out what it meant; others simply never noticed it.
- Only 10% said they would be willing to pay a little more for ozone-friendly products -- provided that the prices were still affordable.

Overall assessment

- Governmental actions on ozone are not understood by most Nigerians -- who are unable and/or unwilling to make environmentally friendly consumer choices due to poverty and ignorance.
- It is clear that much still needs to be done to fill the information gap between policy makers and the general public. Up till now, many people are kicking against governmental actions, which they see as misdirected, mis-focused and unrealistic.
- The Nigerian Press needs to be a lot more active in reporting on issues relating to the ozone layer, explaining government policies as well as the reasons behind the policies, offering neutral analysis of policies and activities.

Annex 11: Country study summary: China

China, located in the east of Asian continent, covers 9,600,000 square kilometers (6.5% of the world's and 25% of Asia's land area). With a population of 1,265 million, China accounts for more than one fifth of the world's population.

- When developed countries stopped ODS production and consumption in 1996, China became the largest ODS producer and consumer in the world.
- In 1997, there were 50 ODS production plants in China, and 37 of them producing CFCs with a total designed annual production capacity of 122,000 tons.
- The total consumption of ODS for industrial and consumer activities in 1997 reached to 87,000 tons of ODP (ozone depletion potential), which was contributed by the uses of ODS for fire extinguishers (40.8%), foam (27.2%), refrigeration and air-condition (22.4%), electronic solvent (5.2%), aerosol (3.2%) and tobacco expansion (1.2%).
- About 5,120 enterprises and production lines of 8 industrial sectors were ODS users.
- The ODS used for agriculture purpose in China is MB (Methyl Bromide) at a consumption level of around 3,000 tons per year.

Governmental action

- China ratified the Vienna Convention in November 1989, and ratified the Montreal Protocol and its London Amendment in June 1991. China Country Program for Ozone Depleting Substances Phase-out was established in 1992.
- In July 1999, China froze the ODS production and consumption levels at the average of 1995-1997.
- China's control target for ODS is to reduce 50% of the frozen level by 2005 and to stop production and consumption by January 1, 2010.
- The Leading Group for Ozone Layer Protection of China, established in 1991, is the key decision-making group for the implementation of Montreal Protocol in China, participated by 18 governmental agencies, led by State Environmental Protection Administration (SEPA).
- From 1991 to 2001, some 40 policies and measures have been issued jointly or independently by 18 governmental agencies of the *Leading Group* to comply with the Protocol. Standards and regulations for substitutes were also established. Important measures issued by government include 9 to control ODS production, 10 to control ODS consumption, 7 to control ODS import & export, and 2 for registration & report of ODS discharges.
- In 2000, the item "Government encourages production & consumption of ODS substitutes" was added to the *Law on Air Pollution Control of People's Republic of China*.

Industrial action

- China's industrial sector has taken several measures to phase out ODS, including: 1) applying for support of Multilateral Fund to import advanced technologies for ODS substitution; 2) undertaking research for ODS substitutes and domestic technologies; 3) raising public awareness and interest in CFC-free products and active marketing.
- 5 sectors show notable achievements in ODS reduction/phase-out, viz: aerosols (stopped ODS use in 1999); refrigeration (80% of products CFC-free); mobile air-conditioning (stopped CFC-12 by end 2001); Halon (annual production reduced from 12,000 tons in 1997 to 3,200 tons in 2001); and chemical industry (30 of 37 CFC production plants closed by 2001).
- China's total annual CFCs production has been reduced from 51,321 tons to 36,961 tons.

Scientific research

- Over 20 research institutes have contributed to establishing national strategies for ozone layer protection.

- The Center for Environmental Sciences of Peking University is a major contributor to *Update of China's Country Program for ODS Phase-out*.
- The institute of Plant Protection of Chinese Academy of Agricultural Sciences works on adopting Methyl Bromide substitutes.

Information sources:

- SEPA Information Center has website called *Ozone Action in China*³⁵, which provides a variety of information on ozone layer and ODS.
- *China Environment News* under SEPA publishes articles on ozone, which are often quoted by professional environmental websites and the mass media.
- SEPA has issued 6 professional periodicals, translated and compiled 7 popular science books, and edited 20 technical books and materials on ozone.
- Center for Environmental Sciences of Peking University has a specific web page on ozone layer.³⁶

Education and communications activities

- Because of its complex chemistry, ozone issues are not covered in China's formal education system. Some environmental education activities refer to it in passing.
- Government places emphasis on school education, public education and educating industry on ozone related issues.
- In 1998 - 2001, SEPA has organized many activities such as children's painting competitions, cartoon book donations, and video screenings to engage students on ozone.
- In September 1998, Chinese scientists started the first ozone layer measurement activity in China, over two Chinese cities - Beijing and Guangzhou. The media coverage of this activity enhanced awareness. In 2000, SEPA helped industrial sectors call for strengthening environmental management inside enterprises to reduce ODS emission and to do ODS recycling.
- In 2001, *China Environment News* opened a special column to provide readers with ozone layer protection knowledge related to daily life.

The 11th Meeting of the Parties to the Montreal Protocol held in Beijing in 1999 and the meeting's Exhibition of International "Ozone Layer Protection" Products provided good opportunities for public communication on ozone.

In 2001, SEPA cooperated with *China Environment News* to collect designs for labels and slogans for raising public awareness on ozone. Thousands of suggestions were received from factory workers, teachers and students.

Ozone Day activities

Many IEC activities carried out on or around Ozone Day. Highlights:

1999: SEPA organized the first media training course on ozone, and also held a ceremony in Beijing for donation of cartoon books on ozone layer protection to school children.

2000: SEPA launched a pledge programme among industrial sectors to preserve ozone layer. The pledge signing ceremony and international workshop on training strategies for local authorities held.

2001: Videos produced on ozone, and public competitions held to design a label and suggest a slogan. Special column started in *China Environment News* to publicize a decade of progress in ozone protection. Training workshop on ODS import and export control held for raise customs officials. Students from Shuangyu Middle School in Beijing made a calling to all elementary and

³⁵ ozone.zhb.gov.cn

³⁶ www.ces.pk.edu.cn/ozone

middle school students in China to protect the ozone layer through their actions in schools and at home.

▪ **Media coverage**

- Media coverage is usually related and directly proportionate to other activities taking place on this issue, e.g. when China conducted the first scientific ozone layer measurement in late 1998 and early 1999, media interest rose appreciably. Coverage is also high around the Ozone Day when there are many activities.
- The quality and depth of coverage also related to the public's understanding of the issue. Before September 1998, Chinese public had little idea about how ozone layer related to their life, and the mass media were indifferent to the issue. After ozone layer measurement – and when scientists reported finding differences in the thickness of ozone layer over the South and the North of China – public began to appreciate the value of ozone layer. Media coverage too increased.
- Since mass media began carrying a daily report of UV intensity in 1999, public concern on the ozone layer increased as did their support for policies to phase out ODS.
- Media coverage spans aspects such as the state of ozone layer, changes in ozone hole, causes of ozone depletion, and advantages of ODS substitutes.
- From 1999 onwards, public awareness on ozone has grown from being very low to a relatively high level of concern – and the mass media has been largely responsible. However, most media cover only a small range of ODS uses – such as refrigeration and aerosol – and there is little or no reference to ODS uses in agriculture, electronics industry, plastic manufacture and fire control.
- Reports and articles in *China Environment News* have the highest quality. These spread extensively to many websites, and influence journalists of other media. On the whole, reports in the Chinese mass media about ozone are scientifically accurate, but lack in depth due to knowledge limitations.

Consumer awareness and action

- Chinese consumers know that CFC-free products benefit the ozone layer, but most don't link their choices to impact on the ozone layer. They choose CFC-free products mainly due to advertisements and because it's trendy.
- Consumers don't have sufficient knowledge of ozone-friendly products, but "they are willing to pay a bit more if the price is affordable and the products really good for the environment and also for themselves".

Overall assessment

- While a great deal has been done to phase out ODS and to raise public awareness on ozone issues, most citizens still don't know how their lifestyles and choices affect the ozone layer. There are many gaps in their knowledge.
- Many people now know of UV levels and the need to protect themselves against excessive or prolonged exposure. But most don't know enough about ODS and how ozone is damaged.
- Investigations found many people counting SO₂, CO₂, car emissions and even steam as ODS – showing that IEC activities have given enough scientific basis for the public. Lack of simple, easy to understand, direct and vivid educational materials is one reason.
- The public also knows little or nothing about ODS uses in agriculture, electronics industry, tobacco cultivation, plastic processing, or fire fighting. This highlights the need for IEC to broaden their approach to include all ODS sources and uses.
- Rural people's lack of access to information is another major concern. Millions have never heard of ozone, even though some may be engaged in ODS uses. "Without knowing the dangers of ODS, rural people may either become direct victims of ODS (like Methyl Bromide) misuse, or be inadvertent ODS releasers."

Annex 12: Specialised sector awareness on ozone in the three countries studied

Sector	Chile	China	Nigeria
Health & medical sectors and professionals	<ul style="list-style-type: none"> • State health organisations have a clear perception of health risks posed by excessive UV. Health professionals in Magellan region are particularly aware of this. • In some parts of Chile, red alerts declared at times to urge people to avoid prolonged exposure to UV. • In 1992, there was no appreciable incidence of skin cancer due to outdoor work; this had been recorded by 1999. • Awareness campaigns undertaken to tell people when to avoid prolonged exposure to the sun – especially during Summer. • Campaigns focus on preventing or minimising health risks, and how to treat sun burns. 	<ul style="list-style-type: none"> • Health professionals have recorded higher incidence of cataract in Qinghai-Tibet Plateau – indicating direct impact of ozone depletion on people’s health. • Unprecedented appearance of a child with cataract in this area drew medical and media attention. • Cataract incidence in high altitude areas of China higher than elsewhere. • From 1999, daily UV intensity reports appear on Chinese TV. • Doctors advise people to avoid prolonged exposure to UV and to use light-coloured umbrellas and sunglasses in summer. 	<ul style="list-style-type: none"> • Oncologists, ophthalmologists and opticians “don’t appear concerned about health risks associated with ozone depletion”. • Interviews revealed a general belief that “skin cancer is not associated with the black race, except for albinos”. • Medical experts interviewed cited very few cases of skin cancer in their knowledge. But they encouraged timely action as “health is not just about the immediate but also about society’s future needs. We don’t have to wait till the effects are obvious.” • Ophthalmologists reported “many cases of burnt retina, cataract and pterygium” – but no research done to prove a link to ozone depletion. They recommend use of sunglasses to protect eyes from UV.
Agricultural sector	<ul style="list-style-type: none"> • Peasant farmers have little or no idea of ODS. Agriculture Development Institute (INDAP) that works with small farmers has no programme activity on Methyl Bromide use. • There is greater awareness in larger agricultural industries. Public-private collaborative research is underway to replace MB. Already, methods found to replace it in quarantine of fruit. • Other approaches include promoting integrated pest management, and use of substitutes. 	<ul style="list-style-type: none"> • Over 3,350 tons of Methyl Bromide was used in Chinese agriculture in 1999: 70% for fumigation, balance for pest control and quarantine. • Peasant farmers don’t use MB due to high cost. • Ministry of Agriculture has “fully recognised the danger of MB...and is responsible for phase-out of MB.” • Two MB projects supported by Multilateral Fund since 1997. • Phasing out MB and other chemicals and adopting eco-friendly agriculture is the current trend in China. 	<ul style="list-style-type: none"> • Ministry of Agriculture aware of many uses of Methyl Bromide (as a fumigant) and as pesticide to control locust invasions. • Action are “in the pipeline” to “encourage” aerosols free of CFCs and fumigants free of MB.

Sources: Country studied commissioned specifically for this report.

Annex 13 : Case studies of successful communications campaigns that made a difference in the health, social development and human rights spheres

Case study 1: Some Learning Aids

By any reckoning, AIDS campaigners have spread public awareness in a remarkably short time and this is a model for other social and environmental movements. Key lessons:

- **Strategise globally, but act locally:** At all times, place a major stress on the local ownership of the project, allowing you to sustain the programme at progressively lower costs in future. This is self-evident when campaigns are transferred from industrial to developing countries: there are lower costs for salaries as well as materials, media time, etc. Panos moving the management of its AIDS awareness campaign from London to Lusaka is an example.
- **Use countries in the region as staging posts:** for instance, Thailand's media programmes beam out to Laos & Cambodia; India's to Pakistan, Nepal and Bangladesh. In Latin America, larger countries reach their neighbours. There is a media-multiplier effect, where a limited exposure goes a much longer way.
- **Under the umbrella of the global strategy, target the most vulnerable,** e.g. Care's campaigning with lorry drivers and prostitutes in Cameroon.
- **Work hand in hand with ministries:** these programmes must run in collaboration with the ministries involved. Otherwise, they might obstruct them. Typically, international campaigns have limited reach in target countries, while the government has a presence in every district and can be leveraged to deliver the goods.
- **Seeing, more than hearing:** all communicators believe that radio is *the* medium for developing countries, given its local-ness, language and flexibility. However, research now shows that the reach of TV is gaining ground rapidly. In Sri Lanka, for example, 70% of the rural population has regular access to TV broadcasts.
- **Budget for monitoring and evaluation:** while campaigners spend a lot of energy and resources on running programmes, their evaluation is generally relegated to the end, if at all. These costs should be built into the strategy, so that there is constant assessment of its effectiveness. Target groups should be polled and their findings fed back into the system so that it is regularly updated.

Case study 2: Covering all bases in Cambodia

The BBC World Service Trust recently completed a DFID-funded four-week feasibility mission to Cambodia for an HIV/AIDS awareness campaign. The team leaders are proposing a US\$ 7.5 million campaign based on the following approaches:

- ***Saturation and repetition:*** make sure you can't avoid seeing, hearing the messages.
- ***Entertainment:*** need not be boring, hence "edutainment" or infotainment". Soap operas have been innovatively used to promote family planning and the like.
- ***Sustainable formats:*** important for a sustained campaign to build a *brand* identity for the outputs – this will attract loyal audiences.
- ***Context driven:*** national partners to determine cultural and political acceptability, especially in socially sensitive areas (sex, family planning) or economically important areas (child labour, trade, international debt).
- ***Focused on decision-making process:*** people must be convinced that individuals need to take positive decisions to make a difference.

[Source: BBC World Service Trust]

Case Study 3: Somewhere, a child is crying...

ILO's campaign for eradication of child labour is directed at both specific target groups and the general public. At a global level, it has commissioned TVE to make a film series in alliance with local producers. Other methods include the use of celebrities. Singer Youssou N'dour has agreed to place the International Programme for the Elimination of Child Labour logo on 600,000 audio cassettes of a song titled "My Hope Is in You". At the African Cup of Nations, the campaign popularised the slogan "Red card to child labour".³⁷ In 75 countries, the campaign has built coalitions through collaboration with governments, employers' and workers' organisations, NGOs, the international donor community and multilateral agencies.

The UNICEF-sponsored Convention on the Rights of the Child is extremely successful in its widespread ratification and public support. It has focussed attention on children's issues and fostered a broad coalition of groups. As a result civil society in many countries has successfully lobbied for legal changes and policy reform.

Sources: ILO and UNICEF

Case Study 4: Bury the Debt, not Children!

Poor countries owe about \$70 billion to the IMF and the World Bank. In these countries, precious resources are diverted from health, education and sanitation towards debt service. That, in turn, reduces social development and removes safety nets, without which the world's poor cannot survive. This is the single and powerful message with which Ann Pettifor, a political activist, started Jubilee 2000 in 1996. It soon became an international movement in over 65 countries to advocate writing off debt at the start of the new millennium. It called for cancellation of the debts of the 52 poorest countries by the end of 2000. More than 100 national and international organisations joined the Jubilee 2000 coalition.

The campaign was endorsed by pop stars and world leaders, including Bono, Bob Geldof, Nelson Mandela and the Pope. Jubilee 2000 came up with the world's largest petition, which was signed by 24 million people in 166 countries.

One sign of its effectiveness is that initially the countries with the second and third biggest economies, Japan and Germany, stood out against unconditional forgiveness. By the end of the first phase of the Campaign – with the USA and Britain 'converted' - the G7 nations moved in unison and pledged to cancel \$110 billion of debt. At the end of 2000, due to the overwhelming public response, a successor called Jubilee Plus was formed to continue the original work. This movement demonstrates how the vision of one dynamic person can move the rest of the world by working with coalitions and communicating a powerful moral message.

Sources:

The world will never be the same again – because of Jubilee 2000', Ann Pettifor, www.jubileeplus.org/analysis

Jubilee 2000 Press Briefing, www.jubileeplus.org/media/jubilee2000_archive

Jubilee Plus, www.jubilee2000uk.org

'Shadowy Figures: The G7, IMF and World Bank-globalisation and debt'; Ann Pettifor, John Garrett, www.jubileeplus.org/analysis/reports/shadow0900.htm '

³⁷ FIFA, the official world soccer body, was reluctant to "politicise" such events.

Case Study 5: Saving Lives with Salt

In 1978, USAID contracted the Academy for Educational Development to address acute diarrhoeal dehydration in Honduras. The agency initiated a Mass Media and Health Practices Programme, and in a year, infant mortality dropped from 47.5% to 25%. The programme soon became a model for child survival programmes.

The project was designed to deliver information for home treatment of infant diarrhoea and to demonstrate how to prepare and use oral rehydration therapy ORT. The campaign trained 900 healthcare workers who reached out to mothers and grandmothers, telling them about ORT, breast-feeding, cooking and personal hygiene. When a rural family completed this training, a flag was posted at their house – so that others knew where they could obtain advice.

A media campaign accompanied the training. Print materials and radio ads were developed to issue basic messages about ORT. The messages emphasized the correct way to use ORT, and encouraged mothers to breastfeed during infant diarrhoea, and to seek medical help if the condition worsened. Print materials included posters and flipcharts illustrating ORT; radio announcements were 30-60 second spots, often including a jingle, slogan, or song.

Sources:

www.social-marketing.org/success/cs-massmedia.html

www.unu.edu/unupress/unupbooks/80634c80634Eob.htm

Case Study 6: Soul City – Matlakala’s World

Two doctors, Shereen Usdin and Garth Japhet, created the Soul City Project because they found that the residents of South African townships didn’t know much about basic health. Instead of pontificating to people with facts and figures, they decided to get this information across through entertainment television.

Soul City’s first series focused on the health of mothers and their children. All episodes were based on a typical young township woman called Matlakala, living in the fictional Soul City. The series was backed by newspaper columns, radio programmes and education material targeted at children and adults. The resounding success of the first series made Soul City a regular feature on South Africa’s prime time TV. Today it is being shown in several other African countries, and a subsidiary campaign for children called Soul Buddyz has been started. Matlakala has become a brand name in South Africa. To sustain public interest in the campaign, Soul City has an annual competition to announce the “Health Worker of the Year”.

Among the key lessons of ‘Soul City’:

- Campaigns are more effective when a multi-media strategy is adopted.
- It is important to provide training to the key players in the targeted community. Educational material could be provided to school children and adults.
- Strategic partnerships with various NGOs and governmental organisations could also be made use of.

Source:

Tufte, Thomas, ‘Entertainment-education and participation; Assessing the communication strategy of Soul City’, *The Journal of International Communication* (2001), 7 (2).

Case Study 7: Changing KAP through Mass Media

Over a 12 month period in 1999/2000, a mass media campaign, focussed on five Indian states, set out to explode popular beliefs about leprosy. The campaign was managed by the BBC World Service Trust to bolster India's National Leprosy Eradication Programme. Destroying the belief that the disease is hereditary or can be passed on by simple contact was one of the goals. A final evaluation by India's ORG Centre for Social Research measured positive changes in the so-called KAP – knowledge, attitudes and practices. It found that 59 per cent of the Survey's 1000 respondents had been reached by the campaign. Among them, the belief that leprosy is inherited fell 37 percentage points from 56% to 19%. And over the period of the campaign, the national prevalence rate fell from 6.1 to 5.2 cases per 10,000.

The campaign focused on the mass media serving Bihar, UP, Madhya Pradesh, West Bengal and Orissa. The centrepiece of the campaign was free-of-charge broadcasts of 250 advertising spots, short dramas, talk shows and soap operas as well as more than 200 news and feature articles in national and regional newspapers. Significantly, the evaluation showed that all sections of the population had been reached. The evaluation concluded: 'Positive KAP changes were experienced across all five states, with little disparity on the basis of gender, income and spatial location. The experience appears to demonstrate that entertainment-based mass media campaigns have significant potential in India to promote social development objectives on a large scale'.

The total direct cost to the funder – the UK's DFID – was US\$1.6 million. However, to scale things up to cover the whole of India – and to sustain the campaign over the longer period – would cost several times this figure.

Source: BBC World Service Trust website

Annex 14: Case studies of successful communications campaigns that made a difference in the environmental and consumer spheres

Case study 1: Runs Better Unleaded

From the time Esso started adding lead to petrol to reduce the knocking in car engines in 1927, critics were worried about possible health impacts.³⁸ Industry dismissed these fears, saying the amount was too small to cause any harm. However, health researchers later found that lead in the air was poisoning the atmosphere and causing serious damage to children's brains.

Fifty years later, thanks to enhanced public awareness, there was a major campaign to get rid of lead in the atmosphere – mainly emanating from cars, but in homes and other uses as well. President Richard Nixon – a conservative politician not particularly known for his green credentials – finally cracked down on lead in the US in 1970. By the 1980s, the industrialised world had almost completely phased out lead in petrol.

The US-EPA has now launched a major campaign against the hazards of lead poisoning in the homes and set 2010 as the deadline for its elimination.³⁹ It distributes posters in poor communities, and has published a reference guide for parents to identify and minimize the sources of lead poisoning in their homes. An illustrated strip for children accompanies the reference guide. EPA has also released a media kit and has a training course for people working in areas exposed to high concentrations of lead dust. To promote safety standards that are relevant to industry and consumers alike, it has launched a Lead-based Paint Training and Certification Programme. EPA has also published a series of documents that address the various legal issues concerned with emergency renovations, renovation work in common areas and renovations performed by non-profit organisations.

Case Study 2: The Answer is Blowin' in the Fridge

Greenpeace has demonstrated how a well-honed communications campaign can influence manufacturers and consumers. Since the early 1990s, it has promoted the virtues of refrigerators that use hydrocarbons instead of CFCs, both as a coolant and as foam agent. After initial criticism from the refrigerator industry, which was using HCFCs – also an ozone-eating chemical – some manufacturers have fallen in line and today market refrigerators are using hydrocarbons like butane and pentane.

Interestingly, this is a time-tested technology: hydrocarbons were used in refrigerators before CFCs were developed. Their only handicap is that they are inflammable, but that can be controlled. A clear advantage is that these gases are entirely patent-free. While working on the communications front, Greenpeace also collaborated with German companies to produce hydrocarbon refrigerators for the market. Within two to three years, this technology revolutionised the industry. Germany's Foron was the first company to win the country's prestigious Blue Angel award of approval and made 160,000 fridges worth DM 100 million within a year. The same year, Bosch, Siemens and Liebherr also decided to embrace hydrocarbon.

Greenpeace has sustained its global campaign promoting hydrocarbon refrigerators. The best indicator of its success is political endorsement: Environment Ministers in Britain, Denmark and the Netherlands have publicly supported the campaign and personally own such refrigerators.

³⁸ www.pricethecar.com

³⁹ www.epa.gov

In 1992, 18,000 people signed a Greenpeace petition, calling on shops to stock the “new” fridge. By 1996, 10 million units had been produced in Europe.

China, Japan and India have also started producing hydrocarbon refrigerators. Greenpeace now urges consumers in Europe to select only hydrocarbon models, to lobby high street shops to stock them and to ask local authorities to recycle CFC models when they are scrapped. This is perhaps the most striking example of how sustained campaigning can change people’s – and companies’ – behaviour to save the ozone layer.

Sources: Saving the Ozone Layer with Greenfreeze, Greenpeace (undated); www.greenpeace.org/~ozone/greenfreeze

Case Study 3: Freezing out Coke

The Sydney 2000 Olympics was labelled as the Green Games because of the strict environmental guidelines imposed on the Olympic Village and at the various sports venues. Coca-Cola, a main sponsor, violated these guidelines when it installed refrigeration equipment that emitted HFCs, a greenhouse gas. In response, Greenpeace launched a Coke Spotlight website, which enabled people around the world to campaign against Coca-Cola's policy on HFCs. The site provided a comprehensive campaign kit including downloadable stickers, posters, postcards and email images to lobby Coca-Cola directly. The campaign featured polar bears, a Coca-Cola icon. This was an example where consumers were encouraged and helped to protest to the manufacturer directly.

Though the campaign didn't make Coca-Cola withdraw its existing refrigeration equipment, the company did take note: they pledged that by the 2004 Olympics, it would no longer purchase cold drink equipment with HFCs where alternatives were available. Coca-Cola also promised to expand its research and development to identify and test alternative refrigeration technologies. Suppliers would be required to announce specific time schedules to use HFC-free foam insulation and refrigeration in all new cold drink equipment by 2004. Coca-Cola also reached an agreement with a large commercial refrigeration company to develop the capability to produce large single door, high performance commercial coolers using hydrocarbon refrigerants. These are flammable but have a negligible impact on global warming.

Sources: www.greenpeace.org.au; www.cokespotlight.org; www.adbusters.org

Case Study 4: Right to Clean Air Campaign

The landlocked Indian capital of Delhi has been choking under vehicle emissions for years. The seat of power in the world's largest democracy seemed quite powerless to do anything about it – until a leading environmental NGO, the Centre for Science and Environment (CSE), decided to attack the issue head-on. CSE launched a major campaign for cleaner air in 1996 with a study titled *Slow Murder: The Deadly Story of Vehicular Pollution in India*. It found the problem was a combination of outdated engine technology, poor fuel quality, poor transportation planning and bad maintenance of vehicles. To help citizens see through the smokescreen of pollution and protect public health, CSE launched the Right To Clean Air Campaign that year. Since then CSE has sustained the campaign to improve air quality planning and raise public awareness about risks to public health.

The campaign was pursued on scientific, judicial and public awareness fronts. Highlights:

1996: On the basis of media reports on CSE's findings, the Supreme Court of India issued a *suo moto* notice to the Delhi local government to submit an action plan to control air pollution.

1996: The local government presented the first ever action plan to solve the problem.

1997: CSE released its findings on mortality and morbidity in Indian cities resulting from air pollution, and held government responsible for this major public health crisis.

1998: The Supreme Court directed the government to set up an agency to monitor implementation of its directives.

CSE's public strategy ensures that it is heard at all levels. The campaign has used ideas, knowledge and science as warheads in knowledge-based activism. It explained the science of pollution in layperson terms to push for policies on industry and refineries, exposed shocking data on health effects of air pollution to galvanise public opinion, organised public events to involve people, networked with experts, doctors, technologists among others to improve technical understanding to push for change and fight misinformation. This media-savvy, science-based organisation has almost single-handedly prodded Delhi to clean up its air – the results of which are already beginning to show with improved air quality.

Source: Communications from CSE; www.cseindia.org

Case Study 5: A Breath of Fresh Air

On the other side of the planet, the Clean Air Initiative, launched in 1999 by the World Bank, seeks to improve air quality in Latin American cities. The initiative complements previous attempts by the Bank to improve urban air quality in the region.

Initially, the emphasis was on organizing meetings, and less on communications. However, communications became a higher priority in order to keep the six partners and the stakeholders informed. A TVE-produced public service announcement (PSA) video was produced before the launch of the project, and was aired often in the region and worldwide on CNN. The 2001 Progress Report has become a key communication tool for the project. Each of the six city workshops has generated CD-ROMs, posters, brochures, and PSAs for local and national media coverage. Partners use the Internet to keep in touch. The most important tool is a trilingual website that focuses on sharing current information about CAI meetings, activities and best practices in air quality management.

Positive project results thus far have inspired the initiation of three other projects in Sub-Saharan Africa, Southeast Asia, and Eastern Europe / Central Asia.

Sources: www.worldbank.org/wbi/cleanair/progress-report-english.pdf

www.worldbank.org/html/extdr/video/psa-cleanair.htm

www.worldbank.org/html/extdr/video/psa-cleanaireca.htm

Annex 14: Case studies of successful communications campaigns that made a difference in the environmental and consumer spheres

Case study 1: Runs Better Unleaded

From the time Esso started adding lead to petrol to reduce the knocking in car engines in 1927, critics were worried about possible health impacts.⁴⁰ Industry dismissed these fears, saying the amount was too small to cause any harm. However, health researchers later found that lead in the air was poisoning the atmosphere and causing serious damage to children's brains.

Fifty years later, thanks to enhanced public awareness, there was a major campaign to get rid of lead in the atmosphere – mainly emanating from cars, but in homes and other uses as well. President Richard Nixon – a conservative politician not particularly known for his green credentials – finally cracked down on lead in the US in 1970. By the 1980s, the industrialised world had almost completely phased out lead in petrol.

The US-EPA has now launched a major campaign against the hazards of lead poisoning in the homes and set 2010 as the deadline for its elimination.⁴¹ It distributes posters in poor communities, and has published a reference guide for parents to identify and minimize the sources of lead poisoning in their homes. An illustrated strip for children accompanies the reference guide. EPA has also released a media kit and has a training course for people working in areas exposed to high concentrations of lead dust. To promote safety standards that are relevant to industry and consumers alike, it has launched a Lead-based Paint Training and Certification Programme. EPA has also published a series of documents that address the various legal issues concerned with emergency renovations, renovation work in common areas and renovations performed by non-profit organisations.

Case Study 2: The Answer is Blowin' in the Fridge

Greenpeace has demonstrated how a well-honed communications campaign can influence manufacturers and consumers. Since the early 1990s, it has promoted the virtues of refrigerators that use hydrocarbons instead of CFCs, both as a coolant and as foam agent. After initial criticism from the refrigerator industry, which was using HCFCs – also an ozone-eating chemical – some manufacturers have fallen in line and today market refrigerators are using hydrocarbons like butane and pentane.

Interestingly, this is a time-tested technology: hydrocarbons were used in refrigerators before CFCs were developed. Their only handicap is that they are inflammable, but that can be controlled. A clear advantage is that these gases are entirely patent-free. While working on the communications front, Greenpeace also collaborated with German companies to produce hydrocarbon refrigerators for the market. Within two to three years, this technology revolutionised the industry. Germany's Foron was the first company to win the country's prestigious Blue Angel award of approval and made 160,000 fridges worth DM 100 million within a year. The same year, Bosch, Siemens and Liebherr also decided to embrace hydrocarbon.

Greenpeace has sustained its global campaign promoting hydrocarbon refrigerators. The best indicator of its success is political endorsement: Environment Ministers in Britain, Denmark and

⁴⁰ www.pricethecar.com

⁴¹ www.epa.gov

the Netherlands have publicly supported the campaign and personally own such refrigerators. In 1992, 18,000 people signed a Greenpeace petition, calling on shops to stock the “new” fridge. By 1996, 10 million units had been produced in Europe.

China, Japan and India have also started producing hydrocarbon refrigerators. Greenpeace now urges consumers in Europe to select only hydrocarbon models, to lobby high street shops to stock them and to ask local authorities to recycle CFC models when they are scrapped. This is perhaps the most striking example of how sustained campaigning can change people’s – and companies’ – behaviour to save the ozone layer.

Sources: *Saving the Ozone Layer with Greenfreeze*, Greenpeace (undated); www.greenpeace.org/~ozone/greenfreeze

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www.worldbank.org/html/extdr/video/psa-cleanaireca.htm

Annex 15: Advice and cautions from UN and other agencies on communications campaigns

- **UNFPA:** The most important recent campaign was the Day of the Six Billion, which culminated on 19 October 1999 when the world's population reached 6 billion. It took one year to prepare, and six months more to produce the campaign – and included posters, travelling exhibits, dedicated website, partnerships with selected large NGOs, and extensive media relations. It was event-driven, and used the UN's existing media connections and NGO networks.
- **Conservation International:** A major recent awareness and fund-raising campaign is on to save 25 internationally significant biodiversity 'hot spots' identified globally. A small, glossy booklet circulated to prospective donors, with introductions from two US business leaders -- the founder of Intel and CEO of Ford Motor Co. Target of US\$200 million already exceeded. Awareness work on going, with focus on stopping practices harmful to the environment, and setting up new protected areas.
- **UN-DPI:** Works with and through 70 UN information centres around the world, and with high profile media outlets used and respected by policy makers and opinion leaders. Professional PR companies engaged to impress New York City around the UN Millennium Summit held in 2000; and for UNGASS on HIV in 2001. "Secretary General was a key asset in these PR campaigns."
- **UNDP:** Does not have big campaigns as such, but mounts media and PR efforts around key events, such as the launch of their annual Human Development Report. Prefers low-cost outreach activities with large multiplier effects. Netaid.org – started for training volunteers – now raises funds for charity/NGOs, and is endorsed by top musicians in concerts worldwide.
- **Worldwatch Institute:** Modern communications begins with the Internet. UN and other large organisations seem to underestimate and under-use the interactive possibilities of the Internet. E-mail alerts are an effective medium to reach large numbers in a short time at low cost. The annual 'State of the Planet' publication continues to attract worldwide media attention.
- **World Resources Institute:** *World Resources Report 2000-2001* was a huge success mainly because, *for the first time*, there was a million dollar budget for 'development and outreach'. Book was translated into several languages and summary into 3 languages; and launch events held around the world – using a PR firm. Thanks to all this, 25,000 copies were sold in English alone – up from the usual 2,000 for previous editions.
- **Pan American Health Organisation:** When pursuing campaigns, it is very important to do the research (e.g. focus groups, in depth interviews) ahead of time to find out what drives your audience. Information does not drive behaviour; emotions do. It is our belief that progressive policies and adequate infrastructure need to be in place before communications campaigns can be undertaken.
- **UNICEF:** With a mandate enabling it to raise funds directly from the public, UNICEF is the UN agency with the strongest incentive to keep itself in the public eye. Consequently, it is constantly evaluating its IEC initiatives. One of these is the International Children's Day of Broadcasting (ICDB). The idea was simple: UNICEF asked the world's radio and television broadcasters to pay special attention to children's issues on one day of the year – the second Sunday of December. Although the idea worked in many countries in the initial

years, it fizzled out when the explosion in digital channels and the influence of the public service broadcasters declined. An evaluation of ICDB found that despite an excellent set of core outputs, a reasonable level of funding and country offices and national committees whose job was to deal with national broadcasters, the impact was patchy. Indonesia completely ignored ICDB because it clashed with its own national day. In contrast, in Zambia the complete day's output of the national broadcaster was exclusively on children's issues. There were many reasons for the uneven response – a broadcast media tired of too many 'good cause' events; insufficient funds to originate and adapt videos supplied by the main offices; overburdened country offices; an 80s idea that had its day. But in nearly every case where national organisations had made ICDB a success, there was an enthusiastic individual in a committee or country office who made it happen.

- **TVE International** -- the communications organisation that produced this strategy – also has many relevant experiences and insights. To cite just one: Since 1996, TVE has collaborated with the British charity Intermediate Technology to produce *Hands On*, a multimedia series (consisting of TV programmes, radio features, website and technical enquiry service) that highlights environmentally-sound technologies and business practices. Global broadcasts raise general awareness that, across the world, entrepreneurs are making profits. The fact that they are 'green' profits is incidental to each story. The approach is designed to steer would-be viewers and radio listeners to the back-up service available by fax, post, e-mail, handbook and Internet. The accompanying pack for each promising new enterprise featured, provides the interested viewer with essential data and referral information. There is documented evidence that broadcasts have stimulated local initiatives. A recent independent evaluation -- which included tests with focus groups in the developing countries – found the messages to be clear but stories generally too short and sometimes not relevant to regional needs. TVE responded by raising additional funds to enable Latin American partners to adapt the existing output, produce 50 new 5-minute stories shot by indigenous producers and to create a back-up information delivery service in Spanish, Portuguese and English.

Annex 16: Ozone myths and misconceptions

Widely held and believed 'ozone myths' are another hurdle that need to be demystified when communicating on this issue. While it is not easy to pinpoint the origin of most of these myths or misconceptions, at least some have emanated from the anti-environmental camp that has been increasingly vocal in the west in the 1990s. Among other things, they try to disprove a human involvement in global warming and ozone depletion, citing natural phenomena instead as causes. In other cases, a lack of scientific understanding in the mass media has helped pervey and perpetuate some ozone myths – confusing the public mind, and obfuscating education and communication efforts to enhance awareness.

Among the most pervasive ozone myths are the following, listed along with scientific facts.

Myth: “Because CFCs are heavier than air, they can’t reach the ozone layer”

Facts:

- CFCs weigh much more than air, but settle only in quiet air.
- Winds mix the atmosphere quite well.
- Measurements show even distribution of CFCs worldwide.
- Thousands of measurements have found CFCs in the ozone layer and higher.

Myth: “Volcanoes are the real source of atmospheric chlorine, not CFCs”

Facts:

- Few volcanoes are strong enough to penetrate the stratosphere.
- Not enough volcanic activity to account for ozone depletion.
- No sudden jump in volcanic activity that matches observed ozone depletion.
- Volcanic chlorine most often rains out.
- Mt. Pinatubo eruption did not increase stratospheric chlorine.
- Aerosol particles are quickly removed.

Myth: “The Antarctic ozone hole was there all along; it was discovered in the 1970s because that’s when satellite measurements started.”

Facts:

- The 'hole' was actually discovered using a ground-based instrument in use since 1956.
- There was no 'hole' until about 1976, i.e., for 20 years of measurements.

Our survey in China revealed the following misconceptions among the Chinese public:

- Ozone layer is destroyed by carbon dioxide, methane and other greenhouse gases.
- Ozone layer will be safe if all people use CFC-free refrigerators.
- Ozone depletion is harmful for people, but good for plants.
- Nature itself releases Methyl Bromide in large quantities, so phasing-out its use is a futile task.
- Changes in the ozone layer are similar to changing weather; sooner or later it will recover by itself.

Debunking these and other myths, and cleansing the whole issue with an infusion of scientific facts is an essential part of the communications challenge on ozone.

[Sources: www.epa.gov/docs/ozone/science, as viewed on 22.01.2002; China Country Study commissioned specially for this purpose.]

Annex 17: Matrix of Ozone Audiences and Messages

“General” audiences & messages	“Implementation” audiences & messages	“Compliance” audiences & messages
<p>General public: WHY ARE WE DOING THIS?</p> <ul style="list-style-type: none"> • Science of ozone depletion, including information about status of the ozone hole • Health effects of ultraviolet (UV) radiation, including increased incidence of skin cancer, eye damage including cataracts, and suppression of the immune system <p>WHAT ACTIONS CAN I TAKE?</p> <ul style="list-style-type: none"> • Action steps for sun protection: use of SPF 15+ sunscreen; wearing sunglasses; limiting time in the sun from 10am to 4pm, seeking shade, wearing a hat and long-sleeved garments, and watching for the UV Index forecast on a daily basis • Steps the public can take to protect the ozone layer, including use of ozone-friendly car and home refrigerants, proper disposal of appliances 	<p>National and regional governments in developing countries: WHY ARE WE DOING THIS?</p> <ul style="list-style-type: none"> • Science of ozone depletion, including information about status of the ozone hole • Health effects of ultraviolet (UV) radiation <p>WHAT IS REQUIRED OF ARTICLE 5 NATIONS?</p> <ul style="list-style-type: none"> • Montreal Protocol requirements (e.g., deadlines, compliance/enforcement mechanisms) • Montreal Protocol resources available through Multilateral Fund, other sources • Examples from developed and/or developing world that they can follow: case studies of successful implementation; collateral materials for distribution to secondary audiences such as general public, etc., sample refrigerant management plans; awards programs and other incentives to use in the marketplace; information about alternative approaches to phaseout, such as USA’s Significant New Alternatives Policy (SNAP) Program; technical assistance and training program examples 	<p>Targeted communities that will have to help make the phaseout work; these target audiences and specialized messages include:</p> <ul style="list-style-type: none"> • Auto repair technicians: Need to convert to the use of non-ozone depleting refrigerants in cars • Air conditioning technicians: Promote the use of ozone-friendly refrigerants • Industry associations: Leverage government and NGO messages by “selling” compliance and enforcement messages through associations’ newsletters, conferences, meetings, sharing of expertise, websites, etc. • Equipment manufacturers and suppliers: Provide information about new technologies and ozone-friendly compounds • Importers and exporters: Same as above,, plus compliance/enforcement information • Customs officials: Make them partners in enforcement and compliance once national regulatory framework has been established • Agricultural community, farmers: Will need information about alternatives to the effective fumigant methyl bromide
<p>Meteorologists (multipliers):</p> <ul style="list-style-type: none"> • Broadcast the UV Index on TV and radio weather reports • Health effects information • Action steps for sun protection 	<p>Non-government organizations (multipliers):</p> <ul style="list-style-type: none"> • Provide same information as above, but look for ways that NGOs can collaborate to educate the public about what implementation will require • NGOs can help facilitate “technology 	<p>Messages applicable to all target audiences: WHY ARE WE DOING THIS?</p> <ul style="list-style-type: none"> • Science of ozone depletion, including information about status of the ozone hole • Health effects of ultraviolet (UV) radiation <p>WHAT IS REQUIRED OF US?</p>

“General” audiences & messages	“Implementation” audiences & messages	“Compliance” audiences & messages
	<p>transfer” from NGOs, governments in other nations</p> <ul style="list-style-type: none"> • Can help focus public attention on UV-related health risks, as well as actions that people can take to protect themselves and the ozone layer 	<ul style="list-style-type: none"> • National phaseout requirements (e.g., deadlines, compliance/enforcement mechanisms once these have been determined) • National grant or other resources • Examples from developed and/or developing world that they can follow: case studies of the use of new technologies and compounds; collateral materials for distribution to secondary audiences such as general public, etc., sample refrigerant management plans; awards programs and other incentives available • Technical assistance and certification/labeling training programs are very effective in promoting behavior change in the marketplace (I can provide more information)
<p>Journalists (multipliers):</p> <ul style="list-style-type: none"> • Regular updates about ozone science developments, e.g., condition of Antarctic ozone hole; thinning of ozone over the Arctic, Europe • Rising incidence of UV-related health effects • Critical UV exposure risks in South America • Success to date of the Montreal Protocol, and need for continued vigilance by all parties 		
<p>Health professionals (multipliers):</p> <ul style="list-style-type: none"> • Health effects information • Action steps for sun protection 		
<p>Educators (multipliers):</p> <ul style="list-style-type: none"> • Vis-à-vis SunSmart (Australia) and 		

“General” audiences & messages	“Implementation” audiences & messages	“Compliance” audiences & messages
<p>SunWise (USA) programs, teach young children early about how to reduce their long-term risk of overexposure to UV radiation</p> <ul style="list-style-type: none"> • Ozone-depletion and health-effects information can be compelling classroom lessons and activities 		

Source: Kevin Rosseel, US Environmental Protection Agency

Annex 18: Strategic partnerships with multipliers for implementing the strategy

It is understood that NOUs will instigate and facilitate the communications strategy implementation at national level. Given the urgency of the communication task, and limitations of resources, an effective way to communicate messages to target audiences is for NOUs to form strategic partners with key multipliers. These multipliers could take on the message and – at no cost or low cost – disseminate them to large numbers in a short period of time.

The main multipliers identified for this purpose are as follows:

- The mass media of all kinds
- The traditional media
- Educational channels – both formal and non-formal
- Healthcare delivery systems
- Small and medium scale industries
- Civil society groups
- Training institutions

Listed below are brief descriptions as to how the strengths of each of these channels can be harnessed for delivering the ozone messages.

- **The mass media:** There is estimated to be 1.2 billion TV sets and three times as many transistor radios. Stories arising from press releases and workshops in the print media are frequently taken up by the broadcast media. Photos and radio actuality can be instantly transmitted via the Internet. Digital pictures can be adapted for local consumption. It should be noted that in new media landscape, the traditional divisions between different media have all but dissolved. The analysis carried out for this strategy demonstrates that the concentration must be on the organs of the mass media.
- **New media:** Although the Internet is still an elite medium, the 400 million+ people who are connected to it represent an important audience, especially as that includes many of the high-level consumers and those influencing key sectors. Particular attention would be paid to exploiting the interactive opportunities possible in the internet and CD-ROMs. While the mass media are used to disseminate highlight information to the general public, the Internet can be used to provide detailed or customised information for specialist users or needs. Website hits are also a rough yet useful indicator of the demand for different types of information.
- **Traditional media:** In many developing country situations, using traditional media – such as folk singers and dance forms – is both effective and inexpensive. At the same time, social marketing campaigns have successfully adapted traditional media approaches modern mass media channels such as radio and television.
- **The education system:** The formal education systems have their limitations particularly in the developing world, but in the medium and long terms, they are an effective way to get the ozone message across to the future generations. Environment education has been introduced in many countries, but the country studies showed how little ozone-related content is currently taught in schools or universities in the South.
- **Healthcare delivery systems:** People come to doctors and hospitals and midwives and health educators go to the people. Most countries have these networks and systems already

in place. Because ozone depletion has powerful health implications, it is necessary to find ways of enlisting the support of health workers and health educators to integrate ozone messages in their dissemination and communication work. This interpersonal method of communication is important and effective in many societies.

- **Small and medium scale enterprises:** In the developing world, servicing and repairing refrigerators, air conditioners and other equipment containing ozone-eating chemicals is carried out mostly by small-scale service shops and individual technicians. Medium scale enterprises are often engaged in the production of this equipment, and are users of ozone-eaters. To reach these entrepreneurs, it is necessary to work with and through entrepreneur/industry associations and networks. Such contact can also sensitise them about technical assistance and funding support available from the Multilateral Fund.
- **Civil society groups:** The findings of this strategy preparation process indicate that most NGOs or citizen groups working on health, environment or industrial issues have not addressed ozone depletion as something relevant to their work. By convincing these groups of ozone depletion's threats to human health and survival, their effective and multiple channels of reaching out to people can be used.
- **Training institutions:** Government officials and law enforcement officers are among important target audiences who need to be reached and influenced with the ozone message. While using the media and other direct methods, links should be developed with training institutions that provide pre-service or in-service training to tens of thousands of officials and armed forces personnel – to ensure that ozone content is integrated into their curricular and content.

There will be many opportunities for the above delivery mechanisms to work in tandem, and to find synergy. For example, the 'highlight' information delivered through the mass or traditional can be backed up and reinforced by websites, or by interpersonal communication carried out by healthcare professionals or civil society groups.

Annex 19: Ozone Media: An innovative approach to communicate the ozone message

Presented here is an approach that could help Article 5 countries, UNEP and the Multilateral Fund to achieve information, education and communications objectives related to ODS phase-out in an effective and affordable manner. This note draws on the research for this document and TVE International's 18-years of experience in assisting UNEP and other UN agencies to deliver priority messages to the public.-Not in box

association, Ozone Media will have non-governmental or international organisation status such as IPPF or IPGRI. Its governing body would include representatives from governments, UN agencies, civil society groups, the media and industry.

The purpose would be to create a mechanism to mobilise matching funding and for shared ownership of strategy, tactics and outputs.

The proposal is made in a context that major assumptions are accepted by the Montreal Parties:

- A fits-and-starts campaign would be a waste of resources – a sustained education and awareness raising campaign is the essential pre-condition for success.
- Significant additional funding will not be available from the Montreal Parties – and that the mechanism we propose will be charged with mobilising funding outside the UN system.
- A high level delegation of work to regional and national partners such as governments, civil society organisations and media specialist NGOs will have to be achieved.
- Ozone Media will focus most attention initially on the major ODS producing and manufacturing countries.
- To have credibility, especially with the independent mass media, Ozone Media will have a large degree of scientific and editorial independence.

With these assumptions taken into account the mission of Ozone Media will be to:

- Develop a work plan for a global output – produce and commission communications activities and products pegged to major events in the calendar such as World Ozone Day
- Respond to breaking stories such as the launch of a new scientific assessment or a new scientific discovery
- Develop a targeted work plan with specific target dates for the phase-out and produce and commission activities and outputs with agents of change as the main customers
- Oversee the commissioning of the regional/country-driven activities
- Make institutional strengthening grants to enable NOUs to mobilise additional funding
- Maintain and update an ozone databank of science, stills, video
- Manage 'message' development, testing and co-ordination
- Mobilise co-financing from private sector, foundation and donor sources for overall Workplan and specific projects
- Oversee implementation of monitoring and evaluation
- Manage a dedicated website
- Maintain relations with mass media journalists and other categories of 'multipliers' – NGOs, labour unions, business and industry
- Promote existing publications (via, for instance, reviews in industry newsletters) and commission new publications for specialised target groups
- Initiate joint projects with international and national partners. For example, after reading an early draft of this communications Strategy division of WHO has suggested a joint project

The vision is that Ozone Media will combine the following:

- Scientific credentials of the best research institutes
- Media savvy of the top advertising and PR agencies
- Global outlook of the United Nations
- Grassroots grounding of civil society groups
- Credibility and standing of the most trusted news media
- Effectiveness of the best educators
- Marketing savvy of the top multinational companies

Strategic partnerships

How would Ozone Media reach the main target categories and get to a global public in general?

The main channels identified are as follows:

- The mass media of all kinds
- The traditional media
- Educational channels – both formal and non-formal
- Government National Ozone Units (NOUs)
- Healthcare delivery systems
- Small and medium scale industries
- Civil society groups
- Training institutions

Ozone Media would do this by performing three key functions:

1. **Catalyst** – seed funding to partners to produce outputs such as TV documentaries, training videos, schools packs
2. **Clearinghouse** – maintaining a database of up-to the minute scientific information and products
3. **Evaluation** – constantly evaluating the impact of outputs and making that information available to participating networks

Annex 20: Letter sent to member delegations of the Multilateral Fund Executive Committee (English, French and Spanish versions)

English version

From: the Executive Director of TVE

To:

Date:

Dear

RE: PREPARATION OF A COMMUNICATIONS STRATEGY FOR GLOBAL COMPLIANCE
(DECISION
35/63)

At the 36th meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol, I was honoured to be invited to make a verbal presentation of the 'work in progress' for the above Strategy. My presentation was based on document UNEP/OzL.Pro/ExCom/36/Inf.2.

My team at the Television Trust for the Environment in London and Sri Lanka is now completing the study for submission to UNEP DTIE OzonAction Programme. Full account shall be taken of the comments made during the ExCom discussions in Montreal. We are also making a final effort to contact the NOUs, TEAP members and Article 5 experts who have not yet responded to our Questionnaire.

Drawing on the above, as well as extensive consultations with communications experts, analysis of 'successful' information and public awareness campaigns and - most importantly - the likely nature of the costs of implementing a Strategy aimed at aiding compliance, TVE is highly likely to submit to UNEP DTIE 4 options, as follows:

- * Business as Usual - How best to expend the funds already committed.
- * Catalysis - Using funds committed to mobilise in-country, regional and international finance to extend outreach.
- * Targetting - Not try to target the general public, but instead to just reach key actors such as government officials, SMEs and so forth.
- * Generic - Produce a package of outputs such as videos and CD ROMs that can be adapted and used at local and national levels by NOUs and other in-country users.

By themselves, these options are inadequate for the task. However, they are a realistic response to what appears to be the level of funding that might become available. For example, one of the most effective awareness raising campaigns we studied in our research cost a European donor country US\$ 1.5 million dollars and was confined to one country and implemented over 14 months. As part of the preparations for this Strategy, we also commissioned a costing for audio visual coverage for one year in one country, China, and this came out at around US\$ 260,000.

Regarding the USA's critique. I am pleased to affirm that arising from this Study will come a major one hour documentary based on UNEP's excellent OzonAction publication. This will cost the television company and TVE over US\$200,000. We have also mobilised funds to do several television items targetted at SMEs. These films will be made available completely free of charge to Article 5 countries.

My purpose in writing to the Montreal participants is to invite any comments you may wish to make on my presentation, the document that was circulated, and this letter. Full attention will be given to these as we complete our work on the final draft for UNEP DTIE.

In order for us to meet the tight deadline set for completion of our task, we need to hear from you by or before April 25. All we seek is a few lines or paragraphs - sent via email - that capture

the essence of your thinking on information, education and communication in relation to the phase out of ODS.

I look forward to hearing from you.

Yours sincerely,

Robert Lamb
Executive Director, TVE

French Version

De la part du: Directeur Exécutif de TVE

A l'attention de:

Date:

Cher/Chère

OBJET: PREPARATION D'UNE STRATEGIE DE COMMUNICATIONS POUR LA GARANTIE D'UNE CONFORMITE UNIVERSELLE (DECISION 35/63)

Dans le cadre de la 36^{ème} réunion du Comité Exécutif du Fonds Multilatéral de Réalisation du Protocole de

Montréal, on me fit le grand honneur de m'inviter à faire une présentation verbale des 'développements' de la Stratégie susmentionnée. Mon exposé était fondé sur le document UNEP/Ozl.,Pro/ExCom/36/Inf.2.

Mon équipe au Television Trust pour l'Environnement à Londres et à Sri Lanka est actuellement en train de terminer l'étude à soumettre au Programme UNEP DTIE OzonAction. Un compte-rendu complet sera fait des commentaires formulés au cours des discussions ExCom qui se sont tenues à Montréal. Nous sommes également en train de tout mettre en œuvre pour contacter les NOUs, les membres TEAP et les experts de l'Article 5 qui n'ont pas encore répondu à notre Questionnaire.

En tenant compte du susdit, ainsi que par le biais de longues consultations avec des experts des communications, l'analyse des informations 'à succès' et les campagnes de sensibilisation du public et – surtout – la nature probable des frais de mise en place d'une Stratégie ayant pour objectif de garantir la conformité, TVE est fortement susceptible de soumettre à UNEP DTIE les 4 options suivantes:

* *Les affaires comme d'habitude* – Comment utiliser au mieux les fonds déjà engagés.

* *Catalyse* – Utiliser des fonds engagés pour mobiliser les finances nationales, régionales et internationales en vue du développement de l'aide sur le terrain.

* *Ciblage* – Ne pas essayer de cibler le grand public, mais plutôt les protagonistes tels que les responsables du gouvernement, les Petites et Moyennes Entreprises, et ainsi de suite.

* *Générique* – Produire un programme de produits, tels que des vidéos et des CD ROMs, qui peuvent être adaptés et employés à l'échelon local et national par des NOUs et autres utilisateurs nationaux.

Par elles-mêmes, ces options sont inadéquates pour cette mission. Elles représentent néanmoins une solution réaliste à ce qui semble être le niveau de financement qui sera peut-être disponible. Par exemple, l'une des campagnes de sensibilisation la plus productive que nous ayons étudié au cours de notre enquête coûta à un pays donateur européen 1.5 millions de dollars américains et fut confinée à un seul pays et réalisée sur 14 mois. Dans le cadre des préparations à cette Stratégie, nous avons également demandé une estimation de coût pour une couverture audiovisuelle d'une année dans un seul pays, la Chine, et cela s'élevait à environ 260,000 dollars américains.

En ce qui concerne la critique des Etats-Unis, j'ai le plaisir d'affirmer que, suite à cette Etude, un important documentaire d'une heure, basé sur l'excellente publication OzonAction d'UNEP, sera présenté. Cela coûtera à la société de télévision et à TVE plus de 200,000 dollars américains. Nous avons également mobilisé des fonds pour réaliser plusieurs programmes de télévision

visant les Petites et Moyennes Entreprises. Ces films seront mis à la disposition entièrement gratuite des pays de l'Article 5.

Mon but en écrivant aux participants de Montréal est de vous encourager à formuler tous les commentaires que vous souhaitez faire au cours de ma présentation, le document que l'on a fait circuler, et cette lettre. Une attention toute particulière leur sera accordée lorsque nous terminerons notre travail sur la version finale du UNEP DTIE.

Afin que nous soyons en mesure de respecter notre délai serré fixé pour terminer notre mission, nous devons obtenir une réponse de votre part le 25 avril au plus tard ou avant si possible. Il vous suffit de nous faire parvenir quelques lignes ou paragraphes – envoyés par e-mail – qui capturent l'essence de vos opinions concernant l'information, l'éducation et la communication en ce qui concerne le retrait progressif des ODS.

Dans l'attente de votre réponse, je vous prie d'agréer, cher , l'assurance de mes sentiments distingués

Robert Lamb
Directeur Exécutif, TVE

Spanish Version

De: Director Ejecutivo de TVE

Para:

Fecha:

Estimado/Estimada

REF: PREPARACION DE UNA ESTRATEGIA DE COMUNICACIONES PARA UN ACUERDO GLOBAL
(DECISION 35/63)

En la 36a. reunion del Comité Ejecutivo de la Fundación Multilateral para la Implementación de el Protocolo de Montreal, fui honrado con la invitación para hacer una presentación verbal de el "trabajo en progreso" de la estrategia arriba mencionada. Mi presentación fue basada en el documento de la UNEP/OzL.,Pro/exCom/36/Inf.2.

Mi grupo de trabajo en 'Television Trust for the Environment' en London y Sri Lanka estan ahora completando el estudio para la presentación a UNEP DTIE del Programa 'OzonAction'. Tenemos que tener en cuenta comentarios hechos durante las discusiones del 'ExCom' en Montreal. También estamos realizando un último esfuerzo para contactar los miembros de NOUs, TEAP y expertos Artículo 5, que todavía no han respondido nuestro cuestionario.

Desarrollando lo anterior y también basados en extensas consultas con expertos en comunicación, análisis de información exitosa y campañas públicas de concienciación y - más importante aun - la razonable naturaleza de los costos de implementar una Estrategia intencionada a ayudar el acuerdo, es muy probable que TVE presente a UNEP DTIE 4 opciones, tal como sigue:

* Negocios como de costumbre - Que mejor que gastar los fondos que ya han sido comprometidos.

* Catalisis - Usando fondos comprometidos para movilizar en el pais, finanza regional e internacional para extender cobertura.

* Objetivo - No dirigirse al publico en general, en cambio alcanzar los actores principales, como son los oficiales del gobierno, SMEs, etc.

* Generico - Producir un paquete de produccion como son videos y CD ROMs que podran ser adaptados y usados a nivel local y nacional por NOUs y otros usuarios.

Estas opciones por si mismas son inadecuadas para el cometido. Por lo tanto, ellas son una respuesta realistica para lo que parece va ser el nivel de fondos que estaran disponibles. Por ejemplo uno de las mas efectivas campanas de concienciacion que hemos estudiado en nuestra investigacion costo a un pais donador europeo US\$ 1.5 millones de dolares y fue limitado a un pais e implimentado por mas de 14 meses. Como parte de las preparaciones para esta Estrategia, nosotros tambien hemos comisionado un costo para cubrimiento audio visual por un anio en un pais, China y fue alrededor de US\$260,000.

De acuerdo a la critica de USA. Estoy muy complacido al afirmar que el resultado de este estudio sera un importante documental de una hora, basado en la excelente publicacion sobre el AccionOzono de UNEP. Esto costara a la compania de television y a TVE mas de US\$ 200,000. Hemos tambien movilizado fondos para hacer varios programas de television dirigidos a SMEs. Estos programas seran disponibles completamente gratis a los paises
Articulo 5.

Mi objetivo en escribir a los participantes de Montreal es para invitarlos a enviar cualquier comentario que usted desee que incluya en mi presentacion, el documento que fue circulado y esta carta. Se dara completa atencion a esto en cuanto completamos el borrador final para UNEP DTIE.

Para tener tiempo de incluir sus comentarios y cumplir con la fecha limite fijada para la culminacion de nuestra tarea, necesitamos oir de ustedes antes del 25 de abril. Todo lo que necesitamos es unos paragrafos, los cuales pueden enviar por --correo electronico-- que capture la esencia de su pensamiento en informacion, educacion y comunicacion en relacion a la retirada por etapas de los ODS.

Espero oir pronto de usted.

Sinceramente,

Robert Lamb
Director Ejecutivo, TVE

Annex 21: Cost estimate for one year of IEC activities in China

Raising public and specialised awareness on ozone depleting substances in China Using the mass media and through educational and industry networks					
Output	Time Frame	Target Audience	Distribution Medium	Evaluation/ Monitoring	Budget
3 video news releases on positive steps on China's MB compliance	VNR's filming in first 3 months of project, post-production and distribution following	Consumer-general public, opinion formers and drivers	Television and radio broadcasts: information and list to send to TV stations and information included on Earthview and partner websites	Reporting from TV and radio stations of use and broadcast; broadcast to include website information for viewers to log in with opinions/for more info	3 x \$10,000 = \$30,000
3 PSAs	Filming in first 3 months of project, Post-production and distribution following	Consumer-general public, opinion formers and drivers	Television and radio broadcasts: information and list to send to TV stations and information included on Earthview and partner websites	Reporting from TV and radio stations of use and broadcast; broadcast to include website information for viewers to log in with opinions/for more info	3 x \$5,000 = \$15,000
30 min documentary on the challenges of MB in China	Filming in first 3 months of project, Post-production and distribution following	World-wide on BBC World, then to general audience in China as well	Television broadcast, and distribution on VCD to NGOs and other categories of multiplier organisations – schools, etc.	World-wide via usual TVE channels, web, etc; in China from TV stations and from multiplier orgs via VCD lending network	\$10,000 for additional editing
3 press releases and op-ed pieces	Released at the same time as VNR's to be aired on television	Chinese media; especially those outlets concerned with environment	Chinese print media	Reporting from print media	\$2,000.
Press event for World ozone Day	Around the same time as VNR's and PSA's release on TV	All press; to the general population	Chinese TV and print media, international media in China, UN organizations, etc.	Media and web-based feedback	Fly someone out from UN and TVE \$8,000 travel costs, venue/speakers \$4,000= \$14,000 total
Kit for schools and other educational institutions	Following on the press events and TV airing	Students from elementary school to university	Distribution via pre-established networks to Green Hope Schools, CAST, etc.	Feedback from distributing organizations, schools, students	\$5,000 printing, designing

Raising public and specialised awareness on ozone depleting substances in China
Using the mass media and through educational and industry networks

Output	Time Frame	Target Audience	Distribution Medium	Evaluation/ Monitoring	Budget
China's ODS challenge: Series of videos (3 x 20')(accompanied by technical materials) on the chemicals China must phase out and stop importing	Production of films in first 6 months; post-production and distribution following to target groups	Responsible agencies NOU Government and provincial officials Manufacturers Importers SMEs Farmers and agriculturaleal sector University teachers Customs officials Actual and would be recycling enterprises	Via government channels, and responsible agencies listed in ODS country study	Feedback from responsible agencies and government agencies	3 x \$20,000 = \$60,000 plus \$4,000 for materials printing
Articles for trade and specialist journals	Produced once the specialized videos are ready for distribution –films referred to and advertised as available	Trade and specialist journals	Via responsible agencies listed in ODS country study and other journalist contacts.	Feedback from journals readers	Consultant to write \$2,000
Core of ODS films in Chinese: acquire 30 films; translate; version; copy to VCD	12 months	General, students	TVE VCD lending libraries and extension libraries throughout the country	VCD lending library feedback database system also has survey capability	Transfer of tapes \$7,500, versioning \$30,000, producing VCDs 500 is \$35,000: \$72,500 total
					\$250,000

\$250,000 total for one year

This estimate was prepared in March 2002 by Television Trust for the Environment China Office based on known costs. These cost estimates will remain valid for 12 months.