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**Cooperation between the United Nations and the
Preparatory Commission for the Comprehensive
Nuclear-Test-Ban Treaty Organization**

Cooperation between the United Nations and the Preparatory Commission for the Comprehensive Nuclear- Test-Ban Treaty Organization

Note by the Secretary-General

The report of the Executive Secretary of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization covering the year 1999 is submitted herewith to the General Assembly pursuant to the provisions of article IV, paragraph 1, of the Agreement to Regulate the Relationship between the United Nations and the Preparatory Commission (General Assembly resolution 54/280, annex). The Executive Secretary will report on the recent activities of the Commission in his statement before the General Assembly.



Annex

**Report of the Executive Secretary of the Preparatory
Commission for the Comprehensive Nuclear-Test-Ban
Treaty Organization to the eleventh session of the
Preparatory Commission***

Summary

The Executive Secretary reports to the Preparatory Commission on the activities undertaken by the Provisional Technical Secretariat during 1999. These included developments in: the commissioning of the International Monitoring System; the execution of the Progressive Commissioning Plan of the International Data Centre; the establishment of the global communications system; the development of the on-site inspection Operational Manual, training, and procurement of OSI equipment; the development of the evaluation framework, promotion of a CTBTO Quality Assurance System, and increase of synergies between evaluation and quality assurance; support to Policy-making Organs; finance and budgetary matters; personnel issues; procurement; internal audit; legal services; outreach activities relating to public information, external relations and international cooperation; and the conference held pursuant to Article XIV of the Treaty in October 1999.

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INTRODUCTION

1. This report gives an account of the activities undertaken by the Provisional Technical Secretariat (PTS) of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization during 1999, in the implementation of Major Programmes 1 to 7.

* Originally issued under the symbol CTBT/PC-11/1/Annex III.

A. MAJOR PROGRAMME 1: INTERNATIONAL MONITORING SYSTEM

2. This section reports on the activities of the International Monitoring System (IMS) Division and the progress in commissioning the IMS described in the 1997, 1998 and 1999 programmes.
3. During 1999, the first stations in each of the IMS technologies began to send data to the International Data Centre (IDC). This has necessitated close coordination of the efforts of the Global Communications Section and the IMS and IDC Divisions in installing Global Communications Infrastructure (GCI) equipment at stations and National Data Centres (NDCs), preparing the IDC software to accept data from new stations, and assessing the quality and completeness of data from these stations.
4. A major advance was made in the procurement of equipment for seismic, T-phase and radionuclide stations through "call-off contracts" established by international tender that will provide most of the equipment required for at least two programme years. This will both reduce the workload on the Procurement Section and provide increased standardization of equipment throughout the IMS.

A.1 IMS Commissioning

5. A summary of the status of the site survey and station installation programmes at the end of 1999 is given in Tables 1 and 2.

Table 1. Status of the Site Survey Programme at the End of 1999

Technology	Complete/ Not Required	Under Way	Contract Pending	Not Started
Primary seismic	43	1	0	6
Auxiliary seismic	94	8	6	12
Infrasound	22	11	10	17
Hydroacoustic	3	5	0	3
Radionuclide	34	14	6	26

Table 2. Status of the Station Installation Programme at the End of 1999

Technology	Complete/ Substantially Meets Specifications	Under Way	Contract Pending	Not Started
Primary seismic	14*	15	2	19
Auxiliary seismic	29*	3	3	85
Infrasound	3	13	8	36
Hydroacoustic	0	4	0	7**
Radionuclide	4	15	9	52

* Many existing seismic stations that substantially meet specifications still require authentication and a GCI connection.

** Three hydroacoustic stations exist and are sending data, but they will need significant upgrades.

6. A brief summary of the status of the commissioning of each of the IMS technologies, giving the main highlights for the past year, is presented below. A comprehensive,

updated summary of the status of the work at each station in the 1997, 1998 and 1999 programmes is contained in document CTBT/PTS/INF.142/Rev.3:

A.1.1 Seismological Monitoring System

7. The major accomplishments in the seismological monitoring system have been in the upgrades of existing seismic monitoring facilities to meet the technical requirements of the Preparatory Commission, and in laying the groundwork for installations of many new stations in the near future by means of rigorous site survey and site preparation programmes. Priority was given to the primary seismic network. Site surveys were carried out for six new seismic arrays and several new three-component stations during 1999. Contracts are pending, or in planning, for the site preparation and construction for many of these facilities. At the end of 1999, call-off proposals to supply complete seismic acquisition systems for at least four array stations and eight three-component stations were in the final stage of evaluation.
8. Immediately after the acceptance of the Authentication Implementation Plan by the Preparatory Commission, the IMS Division began exploring authentication hardware and standards on the commercial market. Technical requirements for authentication solutions are now included in every procurement for seismic monitoring systems.
9. Technical staff carried out station visits for certification purposes to four existing primary seismic stations during 1999 and in all cases found that some improvements were required. Cooperative technical work with the host institutions continued to bring these facilities to the state in which their compliance with certification requirements can be re-examined.
10. Having the most mature monitoring technology, the seismological monitoring programme was at a stage where many facilities were to be subjected to testing and evaluation in the first part of 2000. With a steady state of station operation being on the horizon, the concepts outlined in the draft Operational Manual were being developed into working procedures for station operation.

A.1.2 Infrasound Monitoring System

11. The major focus in the infrasound monitoring programme during 1999 continued to be the completion of site surveys. A new set of site survey equipment was assembled. Three independent field teams became available for site survey, installation and station certification work. A total of 12 site surveys were completed during the year, one under contract, one under reduced assessment and 10 by PTS staff. Two stations were installed under reduced assessment. Installation work was in progress at nine stations and at two others under reduced assessment. The installation work at three of these stations was nearly complete and it was expected that these stations will be in operation early in 2000. Contracts for installation work at 11 additional stations were under negotiation.

A.1.3 Hydroacoustic Monitoring System

12. The major achievement of the hydroacoustic monitoring programme during 1999 was the commencement and progression of work on three hydrophone stations (the most expensive of all IMS stations). For two of these stations, design and manufacture

were almost complete, preparing the way for installation to take place before the middle of 2000. In the case of the third station, although the contract for this work had been signed shortly before the end of 1999, by the end of the year work was already under way, with installation scheduled for early 2001. Two of the stations are fully funded by the Preparatory Commission, following a process of international tendering. The third is funded partly by national funds and partly by the Preparatory Commission. Owing to success in advancing this programme, the funds obligated for the hydroacoustic part of the IMS during 1999 were high and will drop substantially in 2000.

13. Significant progress was also made on T-phase stations in 1999. At one station, a seismometer was installed and is now transmitting data. A second seismometer system was prepared to complete this station, and was ready for installation early in 2000. The fieldwork for two T-phase site surveys was also carried out during the year.

A.1.4 Radionuclide Monitoring System

14. During 1999 three call-off contracts were established for the procurement of detector systems, air sampler systems and automatic station systems. Detectors and air samplers were ordered and it was expected that the commercial evaluation of the proposals for the automatic systems would be completed by the end of January 2000.
15. Thirty-three site surveys were completed and approved and fieldwork for 16 other sites was completed. Of the 19 stations whose installation was under way, four installations were carried out under reduced assessment and seven others by national funding. Eight installations under PTS contracts were nearly completed.
16. In the noble gas experiment, a noble gas system was installed at the Institut für Atmosphärische Radioaktivität (IAR) in Freiburg, Germany, in October 1999. At the end of 1999, 64 samples had been collected and analysed by the system, and analysed in parallel by the IAR. Contracts for the purchase of two additional noble gas systems had been concluded.

A.2 Training Programmes

17. The fifth Introductory Training Programme for trainees from the Eastern Europe and the North America and Western Europe geographical regions took place in Dubna, Russian Federation, from 8 to 12 June 1999. Twenty-nine participants from 18 countries attended.
18. The series of Technical Training Programmes (TTPs) that began in 1998 continued. The 1999 TTP was held in Vienna from 27 September to 1 October, and the more-technical part, focusing on the respective technologies, took place in various institutions during October and November. Fifteen participants from 10 countries attended only the first part in Vienna. Twenty-six participants from 20 countries attended the second parts in Australia and Argentina (radionuclide), France (infrasound) and Norway (seismic).

B. MAJOR PROGRAMME 2: INTERNATIONAL DATA CENTRE

19. This section summarizes the accomplishments within the four IDC programmes during 1999 as part of the IDC Progressive Commissioning Plan. The most significant achievements were:
- Completion of all milestones from Phase 3 (Establishment of Initial Operations at the Vienna IDC) of the IDC Progressive Commissioning Plan, and commencement in March 1999 of Phase 4 (Initial Testing of the IDC Hardware and Software);
 - Installation, validation, testing and initial assessment of Releases 2 and 2.1 of the IDC applications software;
 - Increase in the number of data days for which human analysis was performed from two per week up to five per week in support of testing and assessment of the software releases;
 - Initiation of preparatory work for providing the first test data, products and services to States Signatories;
 - Completion of the 1999 procurement programme;
 - Completion of two IDC and two NDC training courses;
 - Establishment of a new, integrated office and scientific computer network to better serve the States Signatories and all PTS staff;
 - Improvement in the integration with other Divisions through effective multi-Divisional task groups on IMS/GCI implementation, IMS data acquisition and information technology issues, as well as the development of a centralized database of project management data for use by the entire PTS.
20. Because of the nature of the work to be done, IDC staff often worked in integrated teams to support efforts involving several Major Programmes and organizational units.

B.1 Management, Technical Coordination and Training Programme

21. This programme supports planning, management and coordination of the programmes within Major Programme 2, and between the IDC and the other Divisions. Significant achievements were made in the areas set out below.

B.1.1 IDC Monitoring Applications Software Releases

22. As a result of the close cooperation between the staff of the prototype IDC (pIDC) and staff from all Sections of the IDC Division, the delivery and testing of Releases 2 and 2.1 of the IDC monitoring applications software were a success.
23. Release 2 was the second of four major releases from the pIDC. Release 2.1 was a significant software update to ensure that IDC systems were prepared for operating into the next millennium. The primary new functions provided with Releases 2 and 2.1 are the capabilities to request auxiliary data and to perform basic atmospheric transport calculations, as well as a number of additional enhancements and software defect repairs. Most importantly, the new software provides the basis for the start of test distribution of IMS data and IDC products to States Signatories. Preparatory testing of this major capability began in late November.

24. A major focus during 1999 was preparation for and operation and maintenance of the computer hardware and commercial software to support Releases 2 and 2.1. The pIDC provided a detailed checklist for installing and configuring the computers, commercial off-the-shelf software and public domain software packages.
25. Though the Release 2 Implementation Plan foresaw the Release 2 delivery in February 1999, the delivery was delayed owing to problems in the United States of America related to finalizing of the export licence. As a result of the delay, the infrastructure which had been prepared for Release 2 by January 1999 had to be reconfigured to support Release 1 again. The infrastructure was reconfigured once more according to the Release 2 checklist in advance of the delivery in May. Delivery of Release 2 commenced on 10 May 1999 and the validation test was completed on 19 July. Upgrades to the hardware and software to remedy year 2000 problems and to prepare for Release 2.1 were conducted throughout the third quarter of the year. Delivery of Release 2.1 started on 28 September, and was completed on 16 November with the successful conclusion of validation testing and testing across a simulated year 2000 time boundary.
26. Detailed testing and assessment of Release 1 continued from 1998 and several important studies were finalized in 1999. By the end of 1999 work had already started on the assessment and detailed testing of Release 2.1. Initial work focused on quality control of data used in the Detection and Feature Extraction (DFX) software and on the detection algorithm for hydroacoustic processing. Further work was undertaken to exploit the information obtained from the comparison of the benchmarks for tuning the data processing from seismic stations (reducing the amount of false detections and increasing the detection process efficiency).

B.1.2 Training

27. The objective of the IDC training courses is to increase the pool and geographical distribution of possible candidates for future posts in the IDC Division. Trainees receive a thorough introduction to the Treaty, PTS functions, and IDC duties and responsibilities, and extensive hands-on data analysis experience using the IDC monitoring applications software. The Third IDC Training Course, which was the first to be held at the IDC facilities in Vienna, concluded on 4 May 1999, when six trainees from six different countries completed their six-month training course. The five trainees, from five different countries, selected for the Fourth IDC Training Course completed their work on 12 November 1999. Five persons were selected from 80 applicants to start the Fifth IDC Training Course, scheduled to begin in March 2000.
28. Two pilot courses to support NDCs were introduced with the objective of providing information and instruction necessary for States Signatories to take full advantage of the data, products and services of the IDC. Twenty-one participants from 21 States Signatories attended the Introductory Training Course for NDC Managers, which took place in Vienna from 8 to 12 November. Eleven participants from 11 States Signatories participated in the Introductory Training Course for NDC Technical Staff, which was held from 29 November to 10 December.

B.2. Monitoring Programme

29. This programme was established to conduct integrated operational testing of the IDC software and services to States Signatories. The dominant accomplishments of 1999 were the operational testing of Releases 2 and 2.1 of the IDC software, and the build-up towards issuing standard products for seven data days per week starting in 2000.

B.2.1 Seismic, Hydroacoustic and Infrasound Processing and Analysis Testing

30. During 1999 the number of stations able to contribute to the seismoacoustic data products increased from 44 to 82. The poor availability of data flowing from some of these voluntary stations through the pIDC to the IDC, largely due to station, ad hoc communications and NDC outages, continued to be a major impediment to the production of quality test products. Data availability exceeded 95% typically at only 15-20 stations, and quite often little or no data were received from particular stations. This situation should improve as stations transmitting over the GCI are progressively integrated during 2000.
31. Automatic data acquisition and processing continued 24 hours per day and seven days per week, with interruptions during release installations, to assess the capability and robustness of Releases 1, 2 and 2.1 during the year. While awaiting the delivery of Release 2 early in the year, the IDC Division reinstalled the Release 1 software for testing. During that time the IDC Division produced the automatic Standard Event List 1 (SEL1) for 50 days with 4684 events and Reviewed Event Bulletins (REBs) for 24 days with 963 events. Between the validation test of Release 2 in July and the end of November, human analysts contributed to the production of REBs for a total of 51 days (Table 3), beginning with two data days per week and reaching five data days per week.

Table 3. Events in IDC and pIDC Event Lists and Bulletins for the Period 1 July to 30 November 1999

Product	IDC	pIDC
Automatic Standard Event List 3 (SEL3) for 153 days	9334	9140
Reviewed Event Bulletin (REB) for the 51 IDC days	1955	1921

32. All of the production and non-production testing proved invaluable for identifying defects in the software and improving procedures. Experiments where all analysts independently reviewed the same data in parallel identified inconsistencies in analyst practice, as well as potential improvements in procedures and guidelines. Comparisons of the REBs of the pIDC and IDC suggest that even when both centres had very similar data availability, about 14% of the events were unique to either bulletin, probably owing to different results of automatic data processing and different analyst review procedures. These issues will receive attention during 2000.

B.2.2 Radionuclide Processing and Analysis Testing

33. During 1999 the number of stations contributing to the radionuclide data processing bulletins increased from 16 to 18, thus providing preliminary, though important, testing of Releases 1, 2 and 2.1. Six of the 18 stations providing data to the IDC

operated in a daily monitoring mode, and 12 operated with weekly sampling periods. Of the daily stations, three operated in an "IMS mode", with 24 hour sampling, decay and acquisition times and seven daily periods per week, while three others operated with four days per week plus weekend sampling. Radionuclide data processing and analysis were normally carried out for all days that data were received, as long as the IDC monitoring software was operational (Table 4).

Table 4. Spectra Received and Processed during the Period 1 January to 17 December 1999 Together with Categorization Levels for Release Spectra

Category of Spectra	Total	Level 1	Level 2	Level 3	Level 4	Level 5
Received for processing	2032	-	-	-	-	-
Automatically processed	2030	1055	213	229	326	30
Reviewed	2030					
Released with categorization	1853	1357	90	338	68	0
Reviewed but not released with categorization	177					

B.2.3 Fusion, Review and Services

34. The IDC Division tested for the first time the performance and capabilities of the Atmospheric Transport Modelling (ATM) software and the associated fusion and visualization tools available during Releases 2 and 2.1. Daily activities included the retrieval of meteorological data, ATM system monitoring and generation of "fields of regard".
35. As part of a quality assurance programme for the products and the data processing, the IDC Division conducted regular comparisons of IDC test products with those from other international organizations. In addition, a proposal for a set of decision criteria was derived to guide analysts during their interactive review of radionuclide spectra to reduce the probability of a false Level 4 radionuclide event when a peak at 140 keV from germanium-75m is mistakenly associated with technetium-99m.
36. In 1999, 50 requests from non-IDC sources were resolved. These sources included other PTS Divisions, the pIDC, Permanent Missions and several NDCs. Requests were made for technical information about the IDC, Automatic Data Request Manager (AutoDRM), accessing data and products, and station usage and availability statistics.
37. Preparatory work began on providing data, products and services to States Signatories on a regular basis starting in 2000. A draft of the IDC Users' Guide was posted on the Experts Communication System (ECS) and distributed at the Tenth Session of Working Group B (WGB), describing how the NDCs will be able to access IMS data and IDC products. From 25 November 1999, a small number of NDCs that responded to an offer at the Tenth Session of WGB to work with the IDC Division began testing the newly delivered capability to access data and products through subscriptions, AutoDRM and the World Wide Web. Preparatory work continued with the distribution to all States Signatories of a Secure Signatory Account Registration Form and a Questionnaire on National Requirements for Data Acquisition, Forwarding, Access and Analysis.

38. To familiarize visitors and potential users of data and products with the IDC and Preparatory Commission, three open houses were conducted during the Ninth and Tenth Sessions of WGB in May and September, and for the delegates of the Article XIV conference (Conference on Facilitating the Entry into Force of the Comprehensive Nuclear-Test-Ban Treaty), in October 1999. In addition, 35 tours of the IDC were conducted during the year.

B.3 Scientific Methods and Data Fusion Programme

39. This programme covers the installation, management, assessment, progressive development and documentation of the IDC applications software and scientific methods. It is currently changing its focus from the software products delivered from the pIDC to more independent management and improvement of the scientific methods employed. A large part of the effort of the programme during 1999 was devoted to planning, installation and validation testing of Releases 2 and 2.1.

B.3.1 Seismic, Hydroacoustic and Infrasound Methods

40. The results of work in this programme have been documented in the IDC Technical Reports series. The report entitled *Fixed Data Set Test* (PTS/IDC-1999/6) describes how this data set was used for studying the stability and reliability of the Release 1 software. The WGB IDC Expert Group on Data Analysis Procedures recommended the study contained in *DFX Status Report: Assessment of Release One Automatic Detection Processing* (PTS/IDC-1999/8) as a means of understanding the signal processing software DFX, and the impact of variable data interval scheduling and timeliness on processing correctness, robustness and repeatability. *Assessment of Release 1 Automatic Processing using a Benchmark Detection and Event List* (PTS/IDC-1999/7) demonstrated the usefulness of a benchmark data set based on real data analysed under controlled conditions by human analysts to (a) assess the performance of the automatic processing system, (b) localize areas for further improvements, (c) provide information for future tuning of the system, (d) compare the performance of the analysts, and (e) increase the standards and help improve the procedures of the analysts' review process. *Assessment of Hydroacoustic Processing in the CTBT Release One Monitoring Software* (PTS/IDC-1999/10) took a first look at the hydroacoustic data processing, and discovered that the "probability weighted time" measure of the arrival time of the hydroacoustic energy and its uncertainty will have to be reconsidered, and that the identification of H and T phases and their association will have to be studied further once more hydrophone and T-phase stations start sending data to the IDC. *A Short Note on the Automatic Location of the Kazakhstan Calibration Shot, 22 August, 1998* (PTS/IDC-1999/1) examined the automatic processing of data from a calibration explosion at the former Soviet test site in Kazakhstan.
41. The most important outcomes of the studies conducted in this programme were concrete proposals for changes in the scientific methods, software and/or procedures, all aimed at improving the products and services of the IDC and the efficiency with which these are provided. One concrete result already obtained from the detailed Release 2.1 testing is that, in close cooperation with the monitoring programme, the scientific methods and data fusion programme documented over 100 software problems and forwarded them to the pIDC for resolution. It is hoped that many of

these will be resolved promptly through patches to Release 2.1 or inclusion in Release 3.

42. A proposed suite of high level requirements for improved continuous data formats and protocol was prepared jointly by the IDC and IMS Divisions, and a discussion of this issue was opened on the ECS. As an intermediate step towards satisfying these requirements, CD-1.1 was defined, and is currently under development at the pIDC. A preliminary release of CD-1.1 was scheduled for January 2000, thus providing a capability for the IMS and IDC Divisions to understand and test the new system and its capability to support improved data acquisition, authentication, state of health information and commands.

B.3.2 Radionuclide and Fusion Methods

43. A study to define the concept of CTBT relevant radionuclides was carried out and reported (PTS/IDC-1999/2). The primary object was to recommend which nuclides should be used to assign gamma measurements to a higher level in the five-level screening schema adopted in 1998. The proposed relevant nuclides are being used for other studies. One ongoing study examines how specific isotopic activity ratios can be used by States Signatories to interpret the source of the activity measurement data.
44. Much effort was also devoted to expert analysis of IMS spectra and to extending the knowledge and interpretations of earlier unknown gamma peaks. One such example was a small peak that occurs occasionally and can be easily mistaken for the very important nuclide barium-140. This was shown to be due to neutron excitation of a level in lead-206 in the detector shield.
45. The IMS and IDC Divisions, in cooperation with station and laboratory operators, embarked on an exercise to test the procedures and commercial arrangements for the transportation, tracking and archiving of IMS radionuclide samples. The test started on 22 November with 11 radionuclide stations and 15 radionuclide laboratories participating.
46. Discussions with the World Meteorological Organization (WMO) and its associated national meteorological centres continued in 1999 to explore possible avenues for cooperation, including the provision of meteorological data and analysis expertise to the PTS. The target date for developing an agreement on some of these issues for consideration by the Preparatory Commission and WMO is May 2000.

B.3.3 Software Integration

47. Nineteen ninety-nine marked the first year when all monitoring applications software was placed under the control of the IDC Division within a software configuration and version tracking tool. Given this circumstance the IDC Division and the Evaluation Section cooperated in November and December on a project to examine in detail the quality of the software programming, as opposed to the scientific methods contained therein. The results of this project will be available in early 2000.
48. An important and ongoing activity is the implementation and testing of data acquisition methods and software to allow data to flow directly to the IDC from IMS stations. The IDC and IMS Divisions prepared a working document for the

coordination of the actions of the PTS, IMS station operators, communications operators and NDCs, and to give them guidelines on how to initiate the testing of new data streams, leading to integration of data into IDC processing. Tools have also been developed to receive data and to compare the flow of data into the IDC with the concurrent data flow into the pIDC during an initial testing period.

49. The Preparatory Commission has shown a growing interest in the issue of NDC software. In response a software package called Geotool is being assembled as a prototype, and will soon be available for testing and review by States Signatories.

B.3.4 Library and Technical Documentation

50. The IDC Division coordinates both PTS relations with the Vienna International Centre Library and PTS book acquisitions and journal subscriptions. Regarding the former, a survey conducted by the IDC Division at the end of 1999 found that most PTS staff do not utilize the existing library services, and that perhaps there is a more cost-effective way to provide these services to the staff. The IDC Division is also working with the Conference Services Section to standardize the style and processes in the PTS for publishing Technical Reports, and is developing plans for satisfying the significant requirements for technical documentation on IDC monitoring software, infrastructure and procedures.

B.4 Infrastructure Programme

51. This programme provides for the implementation, administration, maintenance and secure operation of computer hardware and commercial software. The most significant achievements during 1999 are summarized below.

B.4.1 Acquisition of Hardware and Commercial Software

52. The IDC Division, supported by other PTS Divisions, completed its entire procurement programme for 1999. Many of the procurement activities focused on improving the overall reliability and security of the PTS computing systems. However, three large procurements, of approximately US\$1,000,000 each, dominated the work in this area during 1999.
53. The first large procurement completed in 1999 was for the third major suite of workstations and servers for the IDC Division. This purchase was coordinated with the requirements for similar equipment within other Divisions to ensure conformity of specification and to secure a more favourable price. The entire system has been delivered and installed, thus providing the IDC Division with a capability to test new and upgraded software without a total shutdown of ongoing testing of IDC release software. The second major procurement was for a 70 terabyte mass data storage system. This important system is planned to be operational by the third quarter of 2000. Though originally scheduled to be procured in 2000, WGB recommended acceleration of a third large procurement for 1999, consisting of a public key infrastructure to support the generation and management of authentication keys for the validation of incoming IMS data and other information, and digital signing of outgoing information and products.

B.4.2 IDC Facilities

54. The physical facilities for the IDC were essentially completed in 1999. The Operations Centre was finished, and used by the entire PTS to host 158 sessions in 1999, including the monitoring of IDC testing, on-site inspection (OSI) exercises, training, demonstrations and teleconferences. The most important remaining activity in this area is a thorough verification and validation of the physical facilities, including power, air conditioning, fire protection and access control. A service level agreement was negotiated with the Building Management Service of the United Nations Industrial Development Organization (UNIDO) for it to assume responsibility for routine operation and maintenance of the power and environmental systems.

B.4.3 PTS Computing Support

55. With the infrastructure to support IDC monitoring applications on track, attention turned in 1999 to improving the infrastructure necessary to support the information technology needs of the PTS as a whole. Upon the advice of the External Auditor, a strategic plan for information technology was being developed to ensure a cost-effective and technology-effective approach to the long term computing requirements of the PTS. This includes taking into account not only future releases of IDC software but also the office and administrative functions, and scientific development, testing, operation and evaluation functions required by the other Divisions in the future. One particularly important emphasis was on developing a secure, robust and flexible computing environment that will accommodate the testing, authentication and confidentiality requirements being developed within the Preparatory Commission. This planning exercise will provide more detailed documentation on the PTS computer network required at present and in the future, and new policies and procedures necessary to make this network operational.
56. By the end of 1999, the IDC Division was already providing a substantial level of information technology support for the entire PTS. The Computing Support Service, the "help desk", was established in August with a modern problem reporting and tracking system, to attend to the hardware and software needs of the PTS. In August, after months of preparation and planning, the IDC Division took over from the United Nations Office at Vienna (UNOV) the provision of office computing services, using a new network based on modern standards, including Windows NT. The IDC's UNIX network was extended to support the UNIX requirements of the IMS and OSI Divisions and Evaluation Section. The security of all networks was improved through the installation and tuning of a new firewall system.
57. In cooperation with all other Divisions of the PTS, the IDC Division began the process of integrating and improving a suite of Web and database systems, including the Preparatory Commission's public web site, the ECS, and the IDC products and services web site. In addition, the IDC Division is in the process of developing a central, extendable Web and database system to consolidate information for tracking activities in and with States Signatories.

C. MAJOR PROGRAMME 3: COMMUNICATIONS

58. Managed by the Global Communications Section of the IDC Division, Major Programme 3 has as its main task the collection of IMS and ancillary data at the IDC and the distribution of IMS data and IDC products to States Signatories. The 1999 activities are summarized below.

C.1 GCI Topology

59. The PTS received 10 confirmations from States Signatories for independent subnetworks, and six confirmations for a combination of basic topology and independent subnetwork. Discussions with several States Signatories on their subnetwork implementations continued. The changing topologies and special requirements of States Signatories continued to raise technical issues for the Global Communications Section.
60. The Legal Section worked on developing a draft model agreement on independent subnetworks that would establish procedures, terms and conditions whereby allowances could be paid to States hosting such subnetworks. The Global Communications Section worked on standard forms for independent subnetworks to submit their technical details and plans according to the requirements of the Preparatory Commission.

C.2 GCI Implementation

61. The GCI moved from concept to implementation during 1999. Global satellite coverage was established by the end of June 1999, with the commissioning of very small aperture terminal (VSAT) hubs in Griesheim, Germany, for coverage of the Middle East and Europe, in Fucino, Italy, for the Atlantic and Indian Ocean region, and in Steel Valley, California, USA, for the Pacific Ocean region. Terrestrial links were established to the independent subnetworks of the USA (March), Canada (May), France (June) and Norway (November). Acceptance was pending with regard to Norway. By the end of 1999 these subnetworks were sending data to the IDC. In September and December, continuous data began flowing from the primary seismic stations PS40 at Sonseca, Spain, and PS19 at Freyung, Germany. The former was the first IMS station to send data continuously over the GCI through a basic topology VSAT satellite link, and its operation proved that the GCI Internet protocol addressing design works properly with the continuous data protocol.
62. The roll-out of GCI VSAT stations continued, with 25 stations installed at the end of the year. In addition, a total of 37 GCI site surveys had been completed.
63. In June, the Eutelsat 2F4 satellite was replaced by Eutelsat W3. W3 is a new satellite, with a stronger and wider beam, providing coverage of the Middle East as well as Europe over the Ku band.
64. A prototype Network Management System was delivered by the GCI contractor for use by the PTS. The final specifications were agreed and the GCI contractor submitted the work plan for completion to the PTS.

65. The GCI design was enhanced with the inclusion of edge routers at NDC and IMS remote sites to provide for the security of the GCI and to ease the network implementation constraints on States Signatories.
66. A prototype domain name server system was functioning over the GCI, and the final implementation was to be completed in 2000.

C.3 Internet Communication

67. The procurement process was completed for a leased line of 2 megabits per second between the PTS and the Internet backbone. This was to be established at the beginning of 2000 to carry the data to the Internet service provider. The new link should improve connectivity for many States Signatories both to the ECS and for retrieval of data and products from the IDC.

C.4 GCI Workshop

68. A workshop on GCI-Related Topics was held in Vienna on 13-15 September for the purpose of enhancing understanding of the steps necessary to prepare for, connect to and transmit data over the GCI. There were 67 participants from the PTS, the GCI contractor and 16 States Signatories. The workshop provided an effective forum for the discussion of security, independent subnetworking, data forwarding and other communications issues, and States Signatories provided valuable input to the PTS. The workshop materials and final report are available on the ECS.

D. MAJOR PROGRAMME 4: ON-SITE INSPECTION

D.1 Methodology and Documentation Projects

D.1.1 Support for the Development of the OSI Operational Manual

69. The Preparatory Commission has all along regarded the development of the OSI Operational Manual as a priority task for the States Signatories and the PTS. The PTS provided substantive support to WGB and its OSI experts during both the WGB sessions and the intersessional periods, assisted the OSI Programme Coordinator in coordinating input to the manual from various States Signatories and the PTS, organized workshops for the purpose of generating resources for the manual, and assisted in setting up an improved mechanism for further development of the manual in 2000. Other efforts of the PTS in this respect include the creation of a computer aided Operational Manual access tool, a manual resource database and OSI workshop material that has been further reviewed for use in the development of the manual.

D.1.2 Compilation of OSI Operational Manual Chapters

70. The OSI Operational Manual is a voluminous document to guide the execution of OSI operations. As a result of contributions received from many interested States Signatories, resource material is now available for many of the chapters. This material

includes chapters on standing arrangements, procedures for the conduct of inspections, confidentiality policy, and the future Technical Secretariat infrastructure related to OSI. Since Chapter VI, on the conduct of inspections, was accorded the highest priority, it is the most developed chapter and WGB recommended that it be used provisionally for OSI training purposes.

71. The most noteworthy achievement in 1999 was the production of document WGB-10/TL-4/14/Rev.1. This contains the first batch of elements of rolling text for the Operational Manual, which were edited by a group of OSI experts. WGB recommended that this document serve as a basis for further work on the manual.

D.1.3 Computer Aided Tool for Operational Manual Facilitation and Analysis

72. For the purpose of supporting WGB in drafting the Operational Manual, the PTS initiated an analysis of OSIs considered as a system. As a result, the PTS began developing a list of issues that would require future consideration by WGB. To facilitate access to and utilization of the results of the OSI system analysis, the PTS developed a user-friendly computer based tool. This tool provides for easy access to any part of the Operational Manual as well as, through the different interfaces, access to the relevant references to the Treaty and to the results of the system analysis. This tool was introduced at the Ninth Session of WGB and is available to States Signatories for their use in developing the manual.

D.1.4 OSI Databank

73. In 1999 the PTS continued its work on the OSI databank as part of its overall conceptual design for the future Technical Secretariat infrastructure required for the preparation and execution of OSIs. As illustrated by various OSI projects in 1999, including training courses, an experiment and a tabletop exercise, there is a growing need for early agreement on the concepts, corresponding rules and policies, structural design and physical requirements for such a databank. It is believed that the databank will also benefit the development of the Operational Manual.

D.1.5 OSI Workshops

74. For the purpose of assisting the development of the Operational Manual, the PTS organized two OSI workshops in 1999. Experts from 26 States Signatories attended these workshops. Workshop-4, on later periods of OSI: methodology, equipment and logistics, was held in Vienna in May and concentrated on such topics as technologies and equipment specifications for later periods of inspection, software and data analysis techniques and inspection related logistical issues. Workshop-5, conducted in November at the Defence Evaluation and Research Agency in the United Kingdom with the support of the British Government, was entitled Planning and Examination of Inspection Phases and focused on OSI related technical as well as procedural issues that are pertinent to manual development. These topics mainly include the logistical issues for the pre-inspection period and the application of technologies for the initial and continuation periods of inspection. The reports of both workshops have been circulated to States Signatories.

D.1.6 Inspection Experiment in Kazakhstan

75. At the invitation of the Republic of Kazakhstan, an OSI experiment was conducted at the former Semipalatinsk Test Site from 1 to 11 October 1999. A scenario was developed, covering the request, notifications and conduct of the OSI, based on a 100 tonne non-nuclear explosion for calibration purposes in a tunnel in the Degelen Mountain. This shot was conducted by the National Nuclear Centre of Kazakhstan and the Defence Threat Reduction Agency of the USA.
76. The inspection team consisted of 12 participants from China, France, Israel, Kazakhstan, the Russian Federation, the United Kingdom, the USA and the PTS. Realism was achieved through conditions typical of those that might be faced by an OSI team, and by keeping the inspection team uninformed about the location and other details of the explosion. The experiment was very successful in exploring techniques and methodologies for the initial OSI period. The problems encountered and the lessons learned are useful resources for developing procedures for the Operational Manual, future field experiments and exercises and operational testing.

D.2 Training and Operations

77. During 1999 the OSI Division developed and implemented its Training and Exercise Programme (TEP) as approved by WGB and the Preparatory Commission.
78. Two introductory courses were executed successfully in March and in August 1999. So far, 104 trainees from 42 States Signatories have participated in OSI introductory courses and provided a very positive feedback on the courses. An OSI roster has been created as a basis for further advanced training activities and for potential OSI inspectors.
79. In December 1999 the first OSI tabletop exercise was conducted in Vienna following a comprehensive planning process by a control team, established by WGB, with the participation of 30 national experts volunteered by States Signatories and 10 PTS staff. Twenty-eight observers from States Signatories observed the tabletop exercise. During the exercise several phases of the OSI process, including pre-inspection, point of entry and the first few days of OSI activities in the field, were simulated by an inspection team, an Inspected State Party team and an Operations Support Centre (OSC) team.
80. The exercise aimed at supporting the development of the Operational Manual and provided many lessons that are elaborated in a separate report to WGB. The second objective was to test the tabletop exercise as an element of the TEP. As such it proved to be a useful tool, providing insight into the complex and sensitive OSI process.
81. In 1999 the PTS also worked on the preparation of an initial concept and design of the future OSC. The design, in particular the operational procedures, has not yet been developed.
82. The work done jointly by the Russian Federation, France and the PTS on the curriculum and organization of OSI Advanced Courses in these countries represented an important step in the development of the TEP. While the organization of the

Advanced Courses has been agreed upon, the curriculum has not yet been completed and adjusted to the development of the Operational Manual.

D.3 Equipment

83. The PTS finalized the contract with the preferred supplier for items of passive seismic equipment for testing and training purposes. In anticipation of the delivery of this sophisticated system in April 2000, the PTS accelerated its work towards developing an Equipment Testing Programme. PTS proposals for such a programme as requested by the Tenth Session of WGB were tabled at its Eleventh Session (February 2000).
84. The PTS has also initiated work on acquisition of radionuclide survey and analysis equipment. Following the implementation of competitive action tools initiated jointly by the Equipment and Procurement Sections, the PTS circulated for comment by States Signatories the final procurement specifications for hand- and vehicle-portable gamma search and limited identification tools. Further technical comments were received by the PTS and in accordance with the procedures for procurement of OSI equipment the review period was extended further. Technical issues remain to be resolved and only then will the PTS be in a position to continue with this procurement action. For the high resolution gamma spectrometer tool for field or laboratory use the competitive action undertaken by the PTS, based on the technical requirements adopted by the Preparatory Commission, has revealed that no single supplier approached is currently capable of fully meeting the established technical requirements. A review by the PTS is under way and proposals for expediting acquisition will need to be further developed. Work has been initiated towards securing equipment for xenon sampling, purification and analysis
85. The initial experience gained from the procurement of OSI equipment items using the procedures adopted by the Preparatory Commission indicates that the overall procurement process takes much longer than initially projected and this has an adverse impact for execution of the mandate within the framework of the Preparatory Commission's Financial Regulations. The PTS is developing proposals to solve this problem.

E. MAJOR PROGRAMME 5: EVALUATION

86. During 1999 implementation of Major Programme 5 was conducted along the following lines:
 - Development of the evaluation framework, based on the definition of appropriate metrics and the design and implementation of evaluation tools;
 - Promotion of a CTBTO Quality Assurance System, based on the Quality Manual, through effective application within the verification Divisions;
 - Increase of synergy between the interactive tasks of evaluation and quality assurance, with the use of joint approaches within the PTS as well as the organization of workshops on topical issues;
 - Interaction with States Signatories, especially their NDCs, on evaluation and quality assurance work.

87. The activities were prioritized and, with a view to cost-efficiency, external expertise was used, especially on quality related issues. The above mentioned approaches for the work of the Evaluation Section defined and streamlined a consolidated framework for future PTS activity in the implementation of Major Programme 5.

E.1 Evaluation

88. With regard to evaluation, work was conducted in promoting and developing metrics previously defined, especially for the activities of the IMS and IDC Divisions and the Global Communications Section related to the IMS. Input from WGB based on the outcomes of the workshop on Contribution of CTBT Signatory States to the Evaluation of the Verification Regime (described in Section E.4) was considered. Evaluation work placed emphasis on the interaction of different components of the CTBTO verification system during its development process, as well as the need for systems integration in this context.
89. In 1999 the Evaluation Section presented to WGB two software tools specially designed to assess CTBTO monitoring activities and their products. The first tool, named Eeva (Extended Evaluation), is based on a time series approach, allowing the presentation of different graphics relating to performances of radionuclide stations with respect to time. Eeva is intended for station certification and for long term quality assessment. It is also a general interface to the radionuclide data, allowing navigation through a large amount of IDC results according to a specific interest. Through a graphical user interface it is possible to have a comprehensive understanding of the quality, performance and detection capability of a given IMS radionuclide station. Possible quality failures can be identified and, furthermore, using data plotted in time series, it may be possible to predict a station performance failure. This has a crucial impact on data availability. Starting from a prototype tool in the Evaluation Section, additional features were developed, particularly taking into account feedback from the IMS Division. The most important amendment is a direct link to IDC products. A long term goal is to extend the application of this software to waveform technologies.
90. A second tool, currently in a prototype stage, provides a visual presentation of quality parameters for any event from the REBs issued by the IDC. Quality parameters are visualized along radiating lines and the resulting polygon is compared with a reference polygon, providing an immediate presentation of the quality of an event that is also easy to handle. A short term goal is to fit the reference polygon with appropriate metrics and then to make use of the work completed for the graphical user interface of Eeva, a long term objective being to adapt it to all four technologies.

E.2 Quality Assurance

91. In the first part of 1999, work initiated in 1998 on specific quality assurance requirements related to IMS monitoring technologies was accomplished. On the basis of this work, suggestions were made for further addressing quality assurance issues in the documents on station certification, in the terms of reference for contracted activities related to IMS implementation and, as suggested during a workshop organized by the Task Leader on IMS Operational Manuals in Arlington, Virginia, USA, in April 1999, in the four IMS Operational Manuals.

92. The Evaluation Section drafted a working paper containing evaluation and quality assurance considerations and recommendations relating to the draft rolling text for Chapter VI of the OSI Operational Manual, for consideration by the OSI Division and the WGB OSI task group.
93. In the second part of 1999, the Evaluation Section reviewed procedures drafted by the Global Communications Section after the outage of the GCI network in the middle of the year. The review resulted in the identification of the need and opportunity for the development of a programme for certification by the International Organization for Standardization, with the view to improving efficiency, coordination and credibility.
94. The Evaluation Section participated in the OSI tabletop exercise in December and provided comments and suggestions to the OSI Programme Coordinator regarding the inclusion of appropriate checklists and procedures in the OSI Operational Manual and the possibility for the PTS to further develop some of them, such as those related to the OSC.

E.3 Synergy between Evaluation and Quality Assurance

95. Regarding synergy between evaluation and quality assurance, the main action undertaken in 1999 was the quality assessment of Release 2 of the IDC software. As a formal quality assurance standard was not part of the requirements for Release 2, the Evaluation Section initiated work to provide advice on how close the software is to international quality standards and to estimate its intrinsic quality. The assessment work is being conducted with input from externally contracted expertise and in cooperation with the IDC Division. The first part of the assessment is made by comparison of the analysed source code against international quality standards for software programming. The second part of the assessment is made on the basis of a list of metrics covering software structure, system architecture, interface analysis, efficiency, maintainability, flexibility, reusability, repeatability of computations and portability. The structure and logic of the software components are also described. In addition, detection of errors and of potential "troublemaking" areas is addressed. It is expected that the first results will be available for the Eleventh Session of WGB.
96. Another evaluation and quality assurance issue is the quality assessment of the pIDC documentation associated with Release 2, as the accompanying documentation is an important component of packages associated with IDC software releases. The purpose of the documentation expected from the pIDC is to provide confidence in the algorithms used and to ensure the smooth running of the monitoring operations at the IDC through information and references necessary to perform various routine tasks. In cooperation with the IDC Division, work was initiated on the available documents related to users' guides, technical instructions and software. The goal is to provide advice on the completeness of the description of algorithms, modules and parameters used, as well as on update procedures and formatting of electronic versions. The contract for complementary external expertise has been signed and the final report from the contractor will be available in the first half of 2000.

E.4 Workshops

97. In 1999 the Evaluation Section held two workshops. The first workshop, organized in cooperation with the German NDC, was entitled Contribution of CTBT Signatory States to the Evaluation of the Verification Regime and was held in Hanover, Germany, on 21-23 June. It was particularly addressed to experts from NDCs of States Signatories. The workshop concentrated on topics related to evaluation of scientific, technical and operational aspects of the IMS. Evaluation tools and metrics related to the interaction between the IDC and NDCs were specifically addressed. Twenty-five contributions were presented. The workshop offered a good opportunity to deal, for the first time in a PTS setting, with matters related to data exchange and cooperation between NDCs. The workshop provided a broad spectrum of recommendations, at both conceptual and practical levels, for future consideration by the PTS and WGB.
98. The second workshop, on the Status of the Establishment of a Quality Assurance System for the CTBT Verification Regime, was held in Vienna on 22-23 November. The workshop concentrated on the specificity of a Quality Assurance System in the CTBTO context for ensuring efficiency and cost-effectiveness, on interaction with States Signatories regarding quality assurance issues, and on future work. Twenty contributions were presented. The workshop proved to be beneficial both for the assessment of the present status of quality assurance in the PTS and for the planning of future work.

F. MAJOR PROGRAMME 6: POLICY-MAKING ORGANS

99. The Conference Services Section provided support to the Policy-making Organs in close cooperation with the interpretation, translation, documents control and documents distribution services of UNOV. In the course of 1999, the Preparatory Commission and its subsidiary bodies, Working Group A (WGA), WGB and the Advisory Group, each held three sessions, totalling approximately 15 weeks of meetings.

G. MAJOR PROGRAMME 7: ADMINISTRATION, COORDINATION AND SUPPORT**G.1 Conference Services**

100. Conference Services staff assisted the Chairpersons of the Policy-making Organs in the preparation and conduct of their meetings. They also assisted in preparing speaking notes for the Chair, and in drafting and editing conference documents, including the final reports of each session, as well as Information Papers and Task Leader Papers. The Secretaries of the Working Groups also provided liaison between the Chairpersons of the Groups and the Task Leaders. A new system of editing the draft Working Group reports by projecting them on to the screen in the conference room was successfully introduced.
101. During 1999, a total of 3,177,884 pages of official documents were printed and 196,993 copies were distributed to States Signatories through pigeonholes or by mail, representing increases of 8% and 44%, respectively, relative to 1998.

102. As one measure aimed at improving the clarity and presentation of PTS and Preparatory Commission documents, the establishment of an editorial unit began in 1999, with the first editor having taken up his post in October.

G.1.1 Electronic Document Distribution

103. The PTS continued to promote the electronic distribution of documents. A new version of the Electronic Document Archive CD-ROM, containing a complete set of the reports of the Preparatory Commission to date, as well as other background information and documents, was distributed to States Signatories in 1999. An increased number of conference documents and reports were made available in electronic form on the ECS.

G.1.2 Protocol

104. Conference Services assisted States Signatories in accrediting their Permanent Representatives to the Preparatory Commission and, when required, provided support in obtaining Austrian visas to delegates coming to Vienna from abroad. In 1999, 23 new Permanent Representatives were accredited, bringing the total number to 85, as compared with 80 at the end of 1998. The Permanent Missions booklet continued to be revised and updated in 1999, with new issues being published in January and September.

G.2 Finance

G.2.1 Closure of 1998 accounts

105. The first quarter of 1999 was primarily devoted to the closure of the 1998 accounts, the first closure for which the PTS was fully responsible. The accounts were submitted to the External Auditor before the deadline set by the Financial Regulations. The External Auditor placed an unqualified opinion on the accounts and the Ninth Session of the Preparatory Commission formally accepted the 1998 audited financial statements. The Financial Services Section also compiled the first Programme and Budget Performance Report (CTBT/PTS/INF.128), pursuant to provisional Financial Rule 4.5.02.

G.2.2 Information Technology Applications

106. Following up on the External Auditor's recommendation, the Financial Services Section achieved a fully operational accounting system in 1999. The ACCPAC system, a commercial, off-the-shelf software adapted to meet the PTS's specific requirements, was successfully implemented and was used to produce financial statements. The Section also took part, in close collaboration with the General Services Section, in the implementation of a fully integrated travel software, providing for streamlined procedures based, inter alia, on electronic transactions and electronic signatures. Full implementation of this travel system, similar to that used by the International Atomic Energy Agency (IAEA), began in November 1999.

G.2.3 1999 Assessed Contributions Income

107. By 31 December 1999, 65 States Signatories had made full payments and 9 had made partial payments of 1999 assessed contributions. Collected dues amounted to US\$61,351,916 or 95% of the total assessment of US\$64,559,000. Annex I¹ to this report contains the detailed status. (As decided by the Seventh Session of the Preparatory Commission, 1999 budget appropriations in the amount of US\$74,741,146, in addition to the above mentioned assessment, were also financed by 1999 estimated income, 1997 provisional cash balance and projected 1998 unspent appropriation authority.)

G.2.4 Taxation and the Preparatory Commission

108. In 1999, the following amounts of indirect taxes were recorded by the PTS: disbursements US\$152,520; obligations US\$626,396. In addition, a contract involving an estimated amount of US\$442,000 of indirect taxes (customs duties and value added tax) was signed in 1999. This amount has been booked against the 2000 Budget.

G.2.5 1999 Programme and Budget Implementation

109. The Tenth Session of the Preparatory Commission took the following action with regard to the approved 1999 Programme and Budget of US\$74,741,146:
- (a) took note of transfers within Major Programmes of less than 15% (CTBT/PC-10/1/Annex IX);
 - (b) approved a US\$4,000,000 transfer from Capital Investment Fund (CIF) Project 1.B.1.01, Establishment of IMS Primary Seismic Station Network, to CIF Project 1.D.1.01, Establishment of IMS Hydroacoustic Station Network (CTBT/PC-10/1/Annex IX); and
 - (c) approved extension of part of the already extended 1998 obligating authority in Major Programme 4, On-site Inspection, in the amount of US\$410,000 until 31 December 2000 (CTBT/PC-10/1/Annex VII).
110. Closure operations of the 1999 accounts have begun and, in accordance with Financial Regulation 12.3(a), the Preparatory Commission's 1999 financial statements were prepared for submission to the External Auditor by 31 March 2000. The Advisory Group will review the 1999 financial statements, as well as the External Auditor's report, during its Eleventh Session in April for comment and consideration by WGA at its Fifteenth Session in June and by the Preparatory Commission at its Twelfth Session in August 2000.

G.3 Personnel

111. The Personnel Section continued to secure the necessary human resources for the operations of the PTS. The PTS matured and the Personnel Section's work moved in 1999 towards maintaining the strength of the personnel base of the PTS as well as addressing specific needs. The Section's responsibilities covered regular staff members and short term and daily paid staff, as well as consultants, cost-free experts and interns. As of 31 December 1999, the PTS had 216 staff members, from 66 countries, compared with 168 staff members at the end of 1998, while seven offers of appointment had been sent out in late 1999 and were accepted by future staff members for starting dates in the first three months of 2000.

¹ The annexes to this report are being issued as a separate document, in the English language only.

112. More detailed and comprehensive data on human resource issues are contained in the 1999 Annual Report on Human Resources Management (CTBT/PTS/INF.241).

G.3.1 Recruitment

113. The PTS experienced greater staff turnover in 1999. Although this was expected and is part of the PTS's normal development, this factor places greater demands on recruitment efforts. Taking into account the demands and requirements of the work programme, the PTS followed procedures whereby all positions were advertised by way of vacancy announcements with, as a rule, a three-month deadline for applications for Professional and internationally recruited General Service positions in order to afford the maximum lead time possible for interested candidates to respond. A small number of positions were advertised with shorter deadlines where a more urgent need to fill the post was identified. As in 1998, the PTS faced difficulties in recruiting well qualified candidates on as broad a geographical basis as possible, in particular for positions where qualifications related to information technology were being sought. This was the case, in general, for positions at the P-4 level, where also the remuneration package offered by the PTS, combined with the effects of the Preparatory Commission's being a non-career organization, often did not suffice to attract candidates with the required level of experience. The PTS therefore had to re-advertise several positions.
114. The role of the Personnel Advisory Panels which are set up by the Executive Secretary to make recommendations for recruitment action was expanded to include recommendations for possible extensions of appointment as the first three-year appointments in the PTS expire in early 2000.
115. In addition to regular staff members, the PTS brought in several experts who were put at its disposal by States Signatories to perform specific tasks. This group included Junior Professional Officers whose positions are financed by individual States Signatories for periods of one to two years. The first such Junior Professional Officer, financed by the Italian Government, was appointed in 1999.

G.3.2 Equal Employment Opportunities

116. In line with the Preparatory Commission's Decision on Equal Employment Opportunities – Women in the PTS (CTBT/PC-5/1/Add.7 of 15 April 1998), and as outlined in the Note by the Executive Secretary on Equal Employment Opportunities – Women in the Provisional Technical Secretariat (CTBT/PTS/INF.127/Rev.1 of 4 October 1999), the PTS continued its work in order to improve the representation of women in Professional positions. This work took place against the background of the limited number of responses of female Professional applicants to the majority of the PTS's vacancy announcements for positions in scientific and information technology related areas. The percentage of women in the Professional staff reached 21.97% in late 1999.
117. In March 1999 the Executive Secretary established the position of a focal point for gender issues in the PTS. The PTS continued to pay particular attention to selecting female candidates for its training programmes. The PTS further modified working arrangements in order to reduce potential sources of work-family conflict.

G.3.3 Staff Administration

118. Although interviewing and selection of qualified candidates and bringing staff on board (including travel and transport of personal effects) continued to occupy a large part of the resources of the Personnel Section, equal attention was given to issues related to staff on board and their entitlements. As an example, the PTS's Group Medical Insurance Plan was renegotiated and, inter alia, reduced premiums to the insurance plan were agreed upon, with effect from 1 January 2000, which also considerably reduces the subsidy paid by the Preparatory Commission. The Personnel Section also further developed the programme of training courses offered to staff members, in particular in the information technology field. The Staff Council completed its first term of office in 1999. Elections were held to appoint representatives for the second term.
119. The process of developing and establishing administrative practices of the PTS in the personnel field through Administrative Directives and Information Circulars continued. Major advances in this respect were made as a result of the promulgation by the Executive Secretary of the Staff Rules following their approval by the Preparatory Commission at its Ninth Session (CTBT/PC-9/1/Annex I, Appendix I of 30 August 1999). The promulgation of the Staff Rules marked an important step in the development of the legal framework supporting the PTS's work. This followed the adoption of the Staff Regulations in August 1998 (CTBT/PC-6/2 of 21 August 1998). The Preparatory Commission thus established the basis for the operation of the PTS in the personnel field and brought legal security to the employment of staff.

G.4 Procurement

120. The build-up of the Procurement Section, established in 1998, continued during 1999. Four new staff members (three Professional positions and one General Service position) were recruited and took up their positions during the year. Throughout the year consultants supported the Section.
121. Apart from its main task of managing and executing procurement activities for the PTS, efforts were also devoted to developing and streamlining internal procedures and training newly recruited staff. Participation in international fora on procurement contributed to raising the profile of the PTS.
122. A summary of the procurements done in 1999 for both verification-related and non-verification-related categories is contained in Annex II.

G.4.1 Audit Reports

123. As follow-up action in respect of the 1997 Report of the External Auditor (contained in document CTBT/PTS/INF.25), procurement was developed as an autonomous area and core activity of the PTS. Particular attention was given to streamlining procurement procedures in cooperation with the verification Divisions.

G.4.2 Vendor Data and Procurement Management System

124. The gradual growth of potential vendors' and suppliers' interest in the PTS continued during the year. All respondents were sent a questionnaire for registration. Initial contact with the United Nations Inter-Agency Procurement Services Office (IAPSO) in Copenhagen and Oslo was made to seek advice in setting up the PTS's Vendor Database and linking this to the United Nations Vendor Database. Owing to the procurement workload, follow-up action could not be given the desired attention in 1999.
125. With regard to the Procurement Management System, recommended by the External Auditor, an initial needs analysis study was performed and several approaches were studied. Comprehensive terms of reference for this system are being prepared.

G.4.3 Procurement Contracts

126. Work on standardizing model contracts while retaining sufficient flexibility to meet specific requirements continued during the year. The Legal Services Section assisted in the negotiations with awarded companies and gave advice on the drafting and interpretation of contracts, as well as on compliance with the relevant regulations, rules and administrative directives on the procurement of goods and services. The Procurement Section also consulted with the IMS Division to increase the overall efficiency in contracting for site surveys, site preparations and site upgrades. Call-off contracts were concluded where required and feasible.
127. The table presented in Annex II displays the summarized breakdown of the procurement activities in 1999 categorized by Major Programme and subdivided into "Capital Investment Fund" and "General Fund". In 1999 the Procurement Section processed 209 procurements. The total value of the procurement volume dealt with in 1999 amounted to US\$45 million.

G.4.4 Committee on Contracts and the Legal-Finance Review Team

128. The Committee on Contracts continued to meet weekly in accordance with provisional Financial Rule 11.5.04. In addition, all contracts involving US\$2500 or above were reviewed by the Legal-Finance Review Team pursuant to provisional Financial Rule 11.5.09.

G.4.5 GCI Contract

129. Three contract amendments and two change orders to the GCI contract were signed in 1999. Negotiations for two more change orders were also initiated. The Legal Services Section provided advice and assistance in this regard.
130. Payments made in 1999 through the Procurement Section in connection with this contract amounted to US\$4,296,019.72.

G.4.6 Contracts Awarded in Accordance with Financial Rule 11.5.06

131. Provisional Financial Rule 11.5.06, Exceptions to Competitive Procedures, stipulates that the Preparatory Commission should be informed about all contracts over

US\$150,000 which were awarded after one of the exceptions listed in the aforementioned Rule had been invoked. In 1999, 18 contracts falling into the above category were concluded with a total value of US\$9,492,304.00. A breakdown is presented in Annex III.

G.4.7 Agreements

132. The agreement with UNIDO for the provision of procurement services and trainee placement services was, as far as procurement is concerned, dormant during 1999. For procurements initiated prior to 1 January 1999 and handled by UNIDO, fees in the amount of US\$56,754.22 were paid to UNIDO. Since procurement is a core activity of the PTS, it is not expected that procurement services will be outsourced to UNIDO in the future.

G.5 Internal Audit

133. The total number of staff in Internal Audit increased to three with the appointment of the associate internal audit officer in January 1999.

G.5.1 Provident Fund Financial Formula

134. Internal Audit developed a formula to determine the interest rate earned by each staff member contributing to the Provident Fund.

G.5.2 Evaluation of Budgetary Control System

135. Internal Audit conducted a review and evaluation of the Budgetary Control System. In the process, Internal Audit contributed to the revision of the Administrative Directives on the delegation of authority, allotment account codes, objects of expenditure and obligations.

G.5.3 Review of Procurement

136. Internal Audit documented and evaluated the existing procurement system and followed up on the outstanding recommendations relative to procurement contained in the 1997 and 1998 External Auditor's Reports and Management Letters.

G.5.4 Audit of Imprest Funds and Review of Bank Reconciliation Statements

137. During the first quarter of 1999 Internal Audit continued the audit to ascertain the cash accountabilities of Imprest Fund custodians and to determine the adequacy of internal controls over the funds. Bank reconciliation statements prepared by the Financial Services Section were also reviewed to ascertain the accuracy of records of cash in bank accounts.

G.5.5 Other Activities

138. Internal Audit continued to coordinate efforts with the staff of the External Auditor and furnished them with copies of Internal Audit observations and findings on Internal Audit activities undertaken during the year.

G.6 Legal Services

139. The Legal Services Section comprises the legal adviser, four legal officers, a legal clerk and a secretary. During 1999, the Section provided advice on legal issues affecting the Preparatory Commission, States Signatories and the PTS in the establishment of the verification regime, and on internal organizational and legal issues in the administrative, financial and personnel fields. The main activities of the Section were as follows.

G.6.1 Negotiation and Advice Concerning Agreements or Arrangements under International Law

G.6.1.1 Facility Agreements

140. The process of negotiating facility agreements, which are required to implement the IMS work programme in States which host monitoring facilities, was intensified in 1999. The Legal Services Section was requested to give advice on numerous interim exchanges of letters authorizing the PTS to undertake activities in host States, pending the conclusion of an appropriate facility agreement. A draft agreement on allowances for independent subnetworks was also developed, which text could be incorporated into facility agreements with States hosting these subnetworks.
141. In 1999, six facility agreements were concluded between the Preparatory Commission and States hosting monitoring facilities, namely Argentina, Jordan, Kenya, South Africa, Ukraine and the United Kingdom. Thus, with the two facility agreements concluded in 1998, a total of eight facility agreements have been concluded, of which those with Canada, Jordan, Kenya and South Africa have entered into force. In addition, 42 interim exchanges of letters were completed in 1999.
142. As of the date of this report, appropriate legal arrangements in the form of facility agreements or arrangements, or exchanges of letters have been concluded to regulate PTS activities at a total of 256 monitoring facilities in 55 countries.

G.6.1.2 Host Country Agreements for Technical Meetings of the Commission

143. States Signatories hosting technical meetings of the Preparatory Commission need to conclude agreements or arrangements with it covering all aspects of the meetings. Technical meetings include IMS introductory and technical training programmes, and OSI, Evaluation and International Cooperation workshops. Legal Services assisted in the drafting and negotiation of agreements or arrangements for technical meetings that were held in Argentina, Australia, Egypt, France, Germany, Kazakhstan, Norway, the Russian Federation and the United Kingdom.
144. The Section also prepared a draft model agreement on meetings of the Preparatory Commission hosted outside of Austria for the consideration of WGA, with a view to a recommendation for its adoption by the Commission. The use of a model agreement would ensure that, in future, States Signatories undertake substantially uniform obligations when they host technical meetings.

G.6.1.3 Relationship Agreements and Arrangements and Cooperation with Other International Organizations

145. During 1999, Legal Services continued to provide advice concerning the draft agreement between the Preparatory Commission and the United Nations. Permanent Missions were briefed on the informal discussions held between the PTS and the United Nations and on the next negotiating steps. The Section drafted and gave advice on several agreements of the Commission: with UNOV on the provision of conference services; with UNIDO on technical support and maintenance of the IDC; and with the IAEA on the provision of computer services. The legal adviser also participated in a coordination meeting of the legal advisers of organizations in the common system.

G.6.1.4 Issues Relating to the Host Country Agreement

146. The Section gave advice on the interpretation and implementation of the Host Country Agreement, especially provisions concerning the rights and privileges of the Preparatory Commission. The Section was closely involved in the negotiations between the PTS and the Austrian authorities on a supplemental agreement on social security.

G.6.2 Treaty Issues

G.6.2.1 Privileges and Immunities

147. Legal Services provided advice and assistance on issues related to the status, legal capacity and personality of the Preparatory Commission, and the privileges and immunities of the Commission and its officials. This included advice on the interpretation of the 1946 Convention on Privileges and Immunities of the United Nations, which several States Signatories have agreed to apply to the activities of the Commission. Pursuant to a request made by the Bureau of the Preparatory Commission, the Section prepared a note on the functional privileges and immunities necessary to implement the work programme effectively and a draft decision providing for the provisional application of the Convention on Privileges and Immunities of the United Nations to the activities of the Commission (CTBT/PTS/INF.130). The outcome of the discussion of this issue in WGA and the Preparatory Commission was recommendation (8) contained in document CTBT/PC-9/1/Annex I.

G.6.2.2 National Implementation Measures

148. The Section developed an information note (CTBT/PTS/INF.203) for the Preparatory Commission on national implementation measures to be taken in accordance with Article III of the Treaty. The Section continued to provide advice and relevant information to States Signatories in this regard.

G.6.2.3 Policy on Confidentiality

149. The Section provided legal advice to the Task Leader on confidentiality and to WGB, and responded to the questions of States Signatories concerning the confidentiality of information and data. Legal advice was also provided to substantive Divisions on

questions of confidentiality arising out of procurement contracts, agreements and interaction with States Signatories and other international organizations.

G.6.3 Administrative and Managerial Issues

150. The Section continued to assist in the interpretation of the Financial and Staff Regulations and Rules, as well as in the drafting and interpretation of Administrative Directives implementing them. Legal support was also provided concerning the recognition by the Preparatory Commission of the jurisdiction of the Administrative Tribunal of the International Labour Organisation in respect of possible employment disputes between staff members and the Commission. Services were also necessary concerning the amendment of the Charter of the Provident Fund and the administration of the fund in general. These services included secretarial services for the Management Board of the fund.

G.6.4 Support for the Governing Bodies and Training Programmes

151. As required, the Section provided legal assistance at meetings of the Preparatory Commission, WGA and WGB, as well as related Task Leader meetings. Legal briefings or presentations were also given to government designees, experts, and trainees participating in several technical and non-technical training programmes in Vienna.

G.7 External Relations

G.7.1 Advancement of Entry into Force

152. The External Relations Section established dialogue with capitals of all States Signatories listed in Annex 2 to the Treaty. In 1999, 13 of these States, whose ratification is required for the Treaty's entry into force, ratified the Treaty.

G.7.2 Assistance in the Establishment of the Global Verification Regime

153. External Relations undertook outreach activities, in cooperation with and in coordination with the verification Divisions, to enhance States Signatories' understanding for establishment of the global verification regime. To this end, in addition to regular contacts with Permanent Missions in Vienna, Geneva, New York and elsewhere, 33 IMS host States were briefed in capitals.

G.7.3 Enhancement of Participation in the Work of the Commission

154. The Section used all appropriate opportunities to encourage Missions and capitals to participate in the work of the Policy-making Organs.

G.7.4 Expansion of Commission Membership and Furthering of Ratification

155. External Relations continued to develop contacts with international and regional organizations, such as the United Nations, the IAEA, the World Health Organization (WHO), the World Meteorological Organization (WMO), the International Telecommunication Union (ITU), the Organisation for the Prohibition of Chemical

Weapons (OPCW), the Caribbean Community (CARICOM), the League of Arab States, the Organization of American States (OAS), the Organization of African Unity (OAU), the South Pacific Forum (SPF), and the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (OPANAL), and at various fora, such as the NPT review process, with a view to deepening understanding of the Treaty regime, increasing the number of States Signatories and furthering ratification.

G.7.5 Signatures and Ratification

156. In 1999, four States (Guatemala, Oman, Singapore and Zimbabwe) signed the Treaty, and 25 States (Azerbaijan, Belgium*, Bolivia, Bulgaria*, Estonia, Finland*, Greece, Hungary*, Ireland, Italy*, Lesotho, Luxembourg, Mali, Mexico*, the Netherlands*, New Zealand, Norway*, Panama, Poland*, the Republic of Korea*, Romania*, Senegal, Slovenia, South Africa* and Switzerland*) ratified the Treaty (asterisks denote States listed in Annex 2 to the Treaty). As of 31 December 1999, 155 States had signed the Treaty and 51 States, including 26 States listed in Annex 2 to the Treaty, whose ratification is a requirement for entry into force, had deposited their instruments of ratification with the Secretary-General of the United Nations.
157. Pakistan maintained observer status with the Preparatory Commission, while a quiet dialogue continued with India; efforts were directed at developing dialogue with the Democratic People's Republic of Korea.

G.7.6 Participation in the Work of the Commission

158. During 1999, 78, 74 and 77 States, respectively, participated in the Eighth, Ninth and Tenth Sessions of the Preparatory Commission. Efforts continued to encourage the participation of those States which have not yet participated actively in the work of the Policy-making Organs.

G.7.7 National Authorities and Focal Points

159. By the end of 1999, 61 States had notified the PTS of their designation of National Authorities or focal points, in accordance with the provisions of Article III, paragraph 4, of the Treaty.

G.7.8 Interaction with States and International Organizations

160. In 1999, the Executive Secretary and External Relations staff reached out to Permanent Missions of 28 IMS host States not represented in Vienna. Missions were also undertaken to 40 States in the six geographical regions to advance the cause of the Treaty.
161. The Executive Secretary or PTS staff briefed:
- the First Committee of the United Nations General Assembly in New York;
 - a meeting of the United Nations Headquarters Africa Group of the Whole in New York;
 - the third session of the NPT 2000 Review Conference Preparatory Committee in New York;

- the forty-third session of the IAEA General Conference in Vienna; and
- the OAS Permanent Council in Washington, D.C.

162. By invitation, PTS staff also participated at:

- the fourth session of the OPCW Conference of States Parties at The Hague;
- the fourth session of the CARICOM Central American Ministerial Meeting in Georgetown;
- the twenty-ninth session of the OAS General Assembly in Guatemala City;
- the thirty-fifth session of the OAU summit meeting in Algiers; and
- the sixteenth session of the OPANAL General Conference and its international disarmament seminar in Lima.

G.8 Public Information

G.8.1 Outreach Activities

G.8.1.1 Printed Material

163. The *Guide to the Establishment of IMS Facilities* was compiled in response to requests from prospective host States of IMS stations for greater clarity and assistance in taking Treaty provisions, Financial Regulations and Preparatory Commission decisions, and turning them into tasks and actions. It is expected to be a useful reference for other States as well, especially those States unable to participate fully in meetings of the Policy-making Organs, and is also intended for use at workshops, training programmes and seminars.
164. Eight issues of *CTBTO News*, summarizing the Executive Secretary's reports on PTS activities and the decisions of the Policy-making Organs, were issued in 1999. The newsletter is meant to inform States Signatories that are not able to fully follow the Commission's work.
165. A third edition of the pocket-sized Treaty booklet, incorporating markers to assist users in locating specific text, was issued. The booklet's compact format, bringing basic texts together in one volume, was well received by different target audiences and various international organizations.
166. Information kits for the use of the media, the public and PTS staff on duty travel were continuously updated, expanded and customized.
167. Forty-one press releases and information notes were issued in 1999, announcing new signatures and ratifications, signature of facility agreements and the convening of the Article XIV conference, and reporting on the progress of PTS work.

G.8.1.2 Electronic Material

168. The ECS continued to be fine-tuned to meet the needs of its users and ensure its continuous functionality. Participation increased by one third in 1999. As of 20 January 2000, the ECS had 535 registered users, 401 of whom had accessed it at least

once, compared with 401 registered users at the beginning of 1999. In 1999, 21 discussions were launched, compared with 9 in 1998.

169. Towards the end of the year, given the significant increase in news items on the Treaty, the Public Information Section initiated, for the reference of senior staff, an electronic clipping service on related news items.

G.8.1.3 Audiovisual Material

170. The first versions of the 45-minute film entitled *The Eyes of Truth* and a 10-minute trailer were made. The film focuses on the establishment of the IMS network and includes footage of the Vienna International Centre (VIC), the IDC and work at facilities in Argentina, Australia, Germany, New Zealand and South Africa. The film is designed to appeal to and to reach a non-specialist audience through television networks.
171. The Section arranged for photographs to be taken of the signing of facility agreements, and of the opening of the Article XIV conference and the press conference held immediately after it.

G.8.1.4 Briefings

172. Eighteen briefings were held at PTS headquarters for various groups. They were attended by a total of 10 parliamentarians, 140 young diplomats, 110 students, 48 non-governmental organizations (NGOs), 32 high-school teachers and 13 university professors. The Section briefed trainee guides for VIC tours on the work of the Preparatory Commission. Further, at the invitation of the NGO Committee on Disarmament, the Executive Secretary addressed some 250 representatives of NGOs in New York during Disarmament Week.

G.8.1.5 Media Relations

173. Press conferences given by the Chairperson of the Preparatory Commission, attended by a total of 68 media representatives, were held at the conclusion of each of the sessions of the Commission in 1999. The Executive Secretary was interviewed by representatives of five print media, a television station and a radio station. The Directors of the IMS and IDC Divisions were interviewed by a newspaper, and the Section briefed a magazine about PTS activities.

G.8.1.6 VIC-based Activities

174. The Section and the IAEA Division of Public Information jointly organized the photo exhibition *The United Nations and Nuclear Disarmament: Achievements on the Way to a Nuclear-Weapon-Free World*. Forty photographs charting the milestones leading to the opening of the Treaty for signature in 1996 were exhibited.
175. The Section prepared a display for the VIC 20th Anniversary Exhibition, to form part of a permanent exhibition in the United Nations Information Service area.

G.9 International Cooperation

G.9.1 Interaction with States Signatories

176. The International Cooperation Section continued to work in tandem with the External Relations Section, and focused its attention on States and regional organizations of three geographical regions, Africa, Latin America and the Caribbean (LAC), and South-East Asia, the Pacific and the Far East (SEAPFE), in the preparation of and follow-up to International Cooperation workshops.
177. Concurrently, several technologically advanced States were contacted with a view to soliciting further support for the Section's work. Details and arrangements are under discussion.

G.9.2 Regional Workshop on CTBTO International Cooperation, Cairo

178. With the strong support of the Egyptian Government, the International Cooperation Section organized the first Regional Workshop on CTBTO International Cooperation, in Cairo in June 1999. Twenty-two African States took part and discussed ways and means to advance the cause of the Treaty in the region. A summary of the workshop's results is contained in document CTBT/PTS/INF.173/Rev.1.

G.9.3 Preparatory Work for Regional Workshops for the LAC and SEAPFE Regions

179. Bilateral and multilateral discussions were held with Vienna-based representatives of the regions concerned, to develop concepts and frameworks for the two regional workshops proposed in the 2000 programme of work. At the proposal of the Chinese and Peruvian Governments, Beijing and Lima have been agreed as the venues for these two workshops. Preliminary discussion with the Peruvian authorities took place in Lima in December 1999; the Section finalized preparations for a mission to Beijing on 18-20 January 2000.

G.9.4 Database of Scientific Meetings of Interest for CTBT-related Researchers

180. Development of the Database of Scientific Meetings of Interest for CTBT-related Researchers proceeded in close cooperation with the verification Divisions. As of the end of 1999, more than 100 meetings and conferences held or planned in 35 States for the period 1998-2001 had been identified and included in this database.
181. With the support of the US Department of Energy, the database was made fully accessible through the Internet. This collaboration was described in an invited paper, "Scientific meetings database: A new tool for CTBT-related international cooperation", jointly prepared with a staff member of Sandia National Laboratories, and presented to the 21st Seismic Research Symposium on Technologies for Monitoring the CTBT, Las Vegas, 21-24 September 1999.

H. CONFERENCE CONVENED PURSUANT TO ARTICLE XIV OF THE CTBT

H.1 Preparatory Activities

182. The conference convened pursuant to Article XIV of the CTBT (Conference on Facilitating the Entry into Force of the Comprehensive Nuclear-Test-Ban Treaty), held in the Hofburg from 6 to 8 October 1999, marked a major event in the 1999 meetings calendar. The conference was supported by a joint secretariat, comprising PTS staff members and staff members from the United Nations secretariats in New York and Vienna. A task force, headed by the Chief of Conference Services and including members of the Office of the Executive Secretary and the Legal Services, Public Information and External Relations Sections, was set up in the PTS to prepare for the conference and to ensure coordination with the other elements of the joint secretariat.
183. In preparation of the conference, PTS staff prepared a draft budget, drafted summary records of meetings of States Signatories and States that had ratified the Treaty, and revised and updated the texts of the Rules of Procedure, draft agenda and timetable and the draft Final Declaration of the conference. During the preparatory process, Legal Services gave opinions and advice on the interpretation of provisions of the Treaty and the draft texts under discussion. Public Information compiled precedents for the participation of NGOs in intergovernmental conferences and made proposals concerning media participation. With the support of the Austrian Government, the secretariat worked to enhance participation, in particular, of least developed countries (LDCs). Ninety-two States, including seven LDCs, attended the conference.

H.2 Conference Support

184. The Executive Secretary served as Secretary of the Conference. Conference Services staff were responsible for protocol and accreditation for the conference, establishing and updating the list of speakers, and providing support and advice to the elected officers during the conference. Legal advice was provided by the Chief of Legal Services. The Public Information Section prepared a conference information kit, issued press releases on the conference, accredited the 82 media representatives and 13 NGOs present, conducted briefings and arranged interviews with delegates. The Section also held one press conference before the conference and organized a press conference with the President of the Conference, Masahiko Koumura, former Minister of Foreign Affairs of Japan, immediately thereafter. During the conference, three screenings of the documentary *The Eyes of Truth* were held, as well as demonstrations of the public web site. In connection with the conference, the International Cooperation Section coordinated PTS Open House Days activities for delegates to the conference, to better acquaint them with the work of the PTS. The conference provided an opportunity for the PTS to interact with delegations, focusing attention on those States not having diplomatic representation in Vienna, and those whose ratification is needed for the Treaty to enter into force or which are to host IMS facilities.

APPENDIX I

**STATUS OF ASSESSED CONTRIBUTIONS TO THE REGULAR BUDGET AS OF
31 December 1999
(IN US DOLLARS)**

	Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)
Albania						
	WCF	1	00.003	63	-	63
	1997	2	00.010	2,785	-	2,619
	1998	1	00.010	5,844	166	5,844
	1999	1	00.003	1,937	-	1,937
			10,629	-	166	10,463
Algeria						
	WCF	1	00.094	1,974	1,974	-
	1999	1	00.094	60,685	60,685	-
	Last Payment Date		12-November-1999	62,659	62,659	-
Andorra						
	WCF	1	00.004	84	210	(126)
	1999	1	00.004	2,582	-	2,456
	Last Payment Date		14-May-1998	2,666	210	-
Angola						
	WCF	1	00.010	210	210	-
	1999	1	00.010	6,456	6,456	-
	Last Payment Date		12-November-1999	6,666	6,666	-
Antigua and Barbuda						
	WCF	1	00.002	42	-	42
	1997	2	00.010	1,602	-	1,602
	1998	1	00.010	5,844	-	5,844
	1999	1	00.002	1,291	-	1,291
			8,779	-	-	8,779
Argentina						
	WCF	1	01.029	21,609	21,609	-
	1998	1	00.486	284,016	272,613	11,403
	1999	1	01.029	664,312	-	664,312
	Last Payment Date		29-November-1999	969,937	294,222	-
Armenia						
	WCF	1	00.011	231	-	231
	1997	2	00.051	13,924	-	13,106
	1998	1	00.051	29,804	-	29,804
	1999	1	00.011	7,101	-	7,101
			51,060	-	818	50,242
Australia						
	WCF	1	01.489	31,269	31,269	-
	1999	1	01.489	961,284	961,095	189
	Last Payment Date		20-January-1999	992,553	992,364	189

Note: 1 and 2 refers to budget periods (1) and (2)

	Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)
Austria						
	WCF	1	19,845	19,845	-	-
	1999	1	610,083	610,083	-	-
Last Payment Date 22-January-1999			629,928	629,928	-	-
Azerbaijan						
	WCF	1	462	-	-	462
	1997	2	10,068	-	-	10,068
	1998	1	64,868	-	-	64,868
	1999	1	14,203	-	-	14,203
			89,601	-	-	89,601
Bahrain						
	WCF	1	357	357	-	-
	1999	1	10,975	10,912	63	-
Last Payment Date 20-July-1999			11,332	11,269	63	-
Bangladesh						
	WCF	1	210	-	-	210
	1997	2	2,785	-	166	2,619
	1998	1	5,844	-	-	5,844
	1999	1	6,456	-	-	6,456
			15,295	-	166	15,129
Belarus						
	WCF	1	1,722	5,943	(4,221)	-
	1998	1	165,384	115,088	4,221	46,075
	1999	1	52,938	-	-	52,938
Last Payment Date 04-October-1999			220,044	121,031	-	99,013
Belgium						
	WCF	1	23,268	23,268	-	-
	1999	1	715,314	715,309	5	-
Last Payment Date 26-February-1999			738,582	738,577	5	-
Benin						
	WCF	1	42	210	(168)	-
	1998	1	5,844	-	171	5,673
	1999	1	1,291	-	-	1,291
Last Payment Date 13-October-1997			7,177	210	3	6,964
Bolivia						
	WCF	1	147	-	-	147
	1997	2	2,785	-	166	2,619
	1998	1	5,844	-	-	5,844
	1999	1	4,519	-	-	4,519
			13,295	-	166	13,129
Bosnia and Herzegovina						
	WCF	1	105	-	-	105
	1997	2	2,785	-	161	2,624
	1998	1	5,844	-	-	5,844
	1999	1	3,228	-	-	3,228
			11,962	-	161	11,801

Note: 1 and 2 refers to budget periods (1) and (2)

	Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)
Brazil						
	WCF	1	01.477	31,017	31,017	-
	1999	1	01.477	953,536	3,408	-
Last Payment Date 06-January-1999			984,553	34,425	-	950,128
Brunei Darussalam						
	WCF	1	00.020	420	420	-
	1998	1	00.020	11,688	-	6
	1999	1	00.020	12,912	-	-
Last Payment Date 23-July-1997			25,020	420	6	24,594
Bulgaria						
	WCF	1	00.019	399	1,701	(1,302)
	1999	1	00.019	12,266	10,964	1,302
Last Payment Date 27-December-1999			12,665	12,665	-	-
Burkina Faso						
	WCF	1	00.002	42	-	-
	1997	2	00.010	2,785	-	166
	1998	1	00.010	5,844	-	-
	1999	1	00.002	1,291	-	-
			9,962	-	166	9,796
Burundi						
	WCF	1	00.001	21	-	-
	1997	2	00.010	2,785	-	166
	1998	1	00.010	5,844	-	-
	1999	1	00.001	646	-	-
			9,296	-	166	9,130
Cambodia						
	WCF	1	00.001	21	21	-
	1999	1	00.001	646	646	-
Last Payment Date 13-July-1999			667	667	-	-
Canada						
	WCF	1	02.766	58,086	58,086	-
	1999	1	02.766	1,785,702	1,777,701	8,001
Last Payment Date 11-January-1999			1,843,788	1,835,787	8,001	-
Cape Verde						
	WCF	1	00.002	42	-	-
	1997	2	00.010	2,785	-	166
	1998	1	00.010	5,844	-	-
	1999	1	00.002	1,291	-	-
			9,962	-	166	9,796
Chad						
	WCF	1	00.001	21	-	-
	1997	2	00.010	2,785	-	166
	1998	1	00.010	5,844	-	-
	1999	1	00.001	646	-	-
			9,296	-	166	9,130

Note: 1 and 2 refers to budget periods (1) and (2)

	Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)	
Chile							
	WCF	1	00.132	2,772	1,701	-	1,071
	1999	1	00.132	85,218	-	-	85,218
Last Payment Date 29-June-1998			87,990	1,701	-	-	86,289
China							
	WCF	1	00.977	20,517	20,517	-	-
	1999	1	00.977	630,741	630,740	1	-
Last Payment Date 01-March-1999			651,258	651,257	1	-	-
Colombia							
	WCF	1	00.109	2,289	-	-	2,289
	1997	2	00.101	27,848	-	1,653	26,195
	1998	1	00.101	59,024	-	-	59,024
	1999	1	00.109	70,369	-	-	70,369
			159,530	-	1,653	-	157,877
Comoros							
	WCF	1	00.001	21	-	-	21
	1997	2	00.010	2,785	-	166	2,619
	1998	1	00.010	5,844	-	-	5,844
	1999	1	00.001	646	-	-	646
			9,296	-	166	-	9,130
Congo							
	WCF	1	00.003	63	-	-	63
	1997	2	00.010	2,785	-	-	2,619
	1998	1	00.010	5,844	-	-	5,844
	1999	1	00.003	1,937	-	-	1,937
			10,629	-	166	-	10,463
Cook Isl.							
	WCF	1	00.001	21	-	-	21
	1998	1	00.010	5,844	-	-	5,844
	1999	1	00.001	646	-	-	646
			6,511	-	-	-	6,511
Costa Rica							
	WCF	1	00.016	336	-	-	336
	1997	2	00.010	2,785	-	166	2,619
	1998	1	00.010	5,844	-	-	5,844
	1999	1	00.016	10,329	-	-	10,329
			19,294	-	166	-	19,128
Côte d'Ivoire							
	WCF	1	00.009	189	-	-	189
	1997	2	00.010	2,785	-	166	2,619
	1998	1	00.010	5,844	-	-	5,844
	1999	1	00.009	5,810	-	-	5,810
			14,628	-	166	-	14,462
Croatia							
	WCF	1	00.036	756	756	-	-
	1998	1	00.091	53,180	150	-	53,030
	1999	1	00.036	23,241	-	-	23,241
Last Payment Date 14-October-1999			77,177	906	-	-	76,271

Note: 1 and 2 refers to budget periods (1) and (2)

	Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)
Cyprus						
	WCF	1	00.034	714	-	-
	1999	1	00.034	21,950	-	-
Last Payment Date 21-January-1999			22,664	22,664	-	-
Czech Republic						
	WCF	1	00.122	2,562	-	-
	1999	1	00.122	78,762	2,751	-
Last Payment Date 16-February-1999			81,324	78,573	2,751	-
Democratic Republic of Congo						
	WCF	1	00.007	147	-	147
	1997	2	00.010	2,785	166	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.007	4,519	-	4,519
			13,295	-	166	13,129
Denmark						
	WCF	1	00.694	14,574	-	-
	1999	1	00.694	448,039	735	-
Last Payment Date 10-February-1999			462,613	461,878	735	-
Djibouti						
	WCF	1	00.001	21	-	21
	1997	2	00.010	2,785	166	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.001	646	-	646
			9,296	-	166	9,130
Dominican Republic						
	WCF	1	00.015	315	-	315
	1997	2	00.010	2,785	166	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.015	9,684	-	9,684
			18,628	-	166	18,462
Ecuador						
	WCF	1	00.020	420	-	-
	1997	2	00.020	5,570	331	582
	1998	1	00.020	11,688	-	11,688
	1999	1	00.020	12,912	-	12,912
Last Payment Date 08-March-1999			30,590	5,077	331	25,182
Egypt						
	WCF	1	00.065	1,365	-	-
	1999	1	00.065	41,963	336	-
Last Payment Date 05-August-1999			43,328	42,992	336	-
El Salvador						
	WCF	1	00.012	252	-	252
	1997	2	00.010	2,785	166	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.012	7,747	-	7,747
			16,628	-	166	16,462

Note: 1 and 2 refers to budget periods (1) and (2)

	Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)
Equatorial Guinea						
	WCF	1	00.001	21	-	21
	1997	2	00.010	2,785	-	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.001	646	-	646
			9,296	-	166	9,130
Estonia						
	WCF	1	00.015	315	315	-
	1999	1	00.015	9,684	9,159	525
Last Payment Date 16-February-1999			9,999	9,474	525	-
Ethiopia						
	WCF	1	00.006	126	-	126
	1997	2	00.010	2,785	-	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.006	3,874	-	3,874
			12,629	-	166	12,463
Fiji						
	WCF	1	00.004	84	210	-
	1999	1	00.004	2,582	2,582	-
Last Payment Date 15-September-1999			2,666	2,792	(126)	-
Finland						
	WCF	1	00.544	11,424	11,424	-
	1999	1	00.544	351,201	349,458	1,743
Last Payment Date 13-January-1999			362,625	360,882	1,743	-
France						
	WCF	1	06.569	137,949	137,949	-
	1999	1	06.569	4,240,881	4,240,881	-
Last Payment Date 26-March-1999			4,378,830	4,378,830	-	-
Gabon						
	WCF	1	00.015	315	-	315
	1997	2	00.010	2,785	-	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.015	9,684	-	9,684
			18,628	-	166	18,462
Georgia						
	WCF	1	00.019	399	-	399
	1997	2	00.112	30,633	-	28,828
	1998	1	00.111	64,868	-	64,868
	1999	1	00.019	12,266	-	12,266
			108,166	-	1,805	106,361
Germany						
	WCF	1	09.851	206,871	206,871	-
	1999	1	09.851	6,359,707	6,359,707	-
Last Payment Date 12-July-1999			6,566,578	6,566,578	-	-

Note: 1 and 2 refers to budget periods (1) and (2)

	Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)	
Ghana							
	WCF	1	00.007	147	210	(63)	-
	1998	1	00.010	5,844	-	66	5,778
	1999	1	00.007	4,519	-	-	4,519
Last Payment Date 18-April-1997			10,510	210	3	10,297	
Greece							
	WCF	1	00.353	7,413	7,413	-	-
	1999	1	00.353	227,893	227,221	672	-
Last Payment Date 18-May-1999			235,306	234,634	672		
Grenada							
	WCF	1	00.001	21	-	-	21
	1997	2	00.010	2,785	-	166	2,619
	1998	1	00.010	5,844	-	-	5,844
	1999	1	00.001	646	-	-	646
			9,296	-	166	9,130	
Guinea							
	WCF	1	00.003	63	-	-	63
	1997	2	00.010	2,785	-	166	2,619
	1998	1	00.010	5,844	-	-	5,844
	1999	1	00.003	1,937	-	-	1,937
			10,629	-	166	10,463	
Guinea-Bissau							
	WCF	1	00.001	21	-	-	21
	1997	2	00.010	1,602	-	-	1,602
	1998	1	00.010	5,844	-	-	5,844
	1999	1	00.001	646	-	-	646
			8,113	-	-	8,113	
Haiti							
	WCF	1	00.002	42	-	-	42
	1997	2	00.010	2,785	-	166	2,619
	1998	1	00.010	5,844	-	-	5,844
	1999	1	00.002	1,291	-	-	1,291
			9,962	-	166	9,796	
Holy See							
	WCF	1	00.001	21	21	-	-
	1999	1	00.001	646	457	189	-
Last Payment Date 25-January-1999			667	478	189		
Honduras							
	WCF	1	00.003	63	-	-	63
	1997	2	00.010	2,785	-	166	2,619
	1998	1	00.010	5,844	-	-	5,844
	1999	1	00.003	1,937	-	-	1,937
			10,629	-	166	10,463	
Hungary							
	WCF	1	00.121	2,541	2,541	-	-
	1999	1	00.121	78,116	77,675	441	-
Last Payment Date 28-January-1999			80,657	80,216	441		

Note: 1 and 2 refers to budget periods (1) and (2)

	Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)
Iceland						
	WCF	1	00.032	672	672	-
	1999	1	00.032	20,659	20,659	-
Last Payment Date 11-January-1999			21,331	21,331	-	-
Indonesia						
	WCF	1	00.185	3,885	2,982	903
	1998	1	00.142	82,984	39,654	43,330
	1999	1	00.185	119,434	-	119,434
Last Payment Date 21-October-1998			206,303	42,636	-	163,667
Iran (Islamic Republic of)						
	WCF	1	00.194	4,074	9,555	(5,481)
	1998	1	00.455	265,900	135,036	5,481
	1999	1	00.194	125,244	-	125,244
Last Payment Date 19-November-1999			395,218	144,591	-	250,627
Ireland						
	WCF	1	00.225	4,725	4,725	-
	1999	1	00.225	145,258	145,258	-
Last Payment Date 25-January-1999			149,983	149,983	-	-
Israel						
	WCF	1	00.347	7,287	7,287	-
	1999	1	00.347	224,020	224,020	-
Last Payment Date 15-July-1999			231,307	231,307	-	-
Italy						
	WCF	1	05.456	114,576	114,576	-
	1999	1	05.456	3,522,339	3,522,339	-
Last Payment Date 12-November-1999			3,636,915	3,636,915	-	-
Jamaica						
	WCF	1	00.006	126	126	-
	1999	1	00.006	3,874	3,874	-
Last Payment Date 29-June-1999			4,000	4,000	-	-
Japan						
	WCF	1	20.073	421,533	421,533	-
	1999	1	20.073	12,958,928	12,958,928	-
Last Payment Date 04-October-1999			13,380,461	13,380,461	-	-
Jordan						
	WCF	1	00.006	126	210	(84)
	1999	1	00.006	3,874	3,790	84
Last Payment Date 14-October-1999			4,000	4,000	-	-
Kazakhstan						
	WCF	1	00.066	1,386	-	1,386
	1997	2	00.193	52,912	-	49,788
	1998	1	00.192	112,204	3,124	112,204
	1999	1	00.066	42,609	-	42,609
			209,111	-	3,124	209,987

Note: 1 and 2 refers to budget periods (1) and (2)

	Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)
Kenya						
	WCF 1	00.007	147	210	(63)	-
	1998 1	00.010	5,844	2,924	63	2,857
	1999 1	00.007	4,519	-	-	4,519
Last Payment Date 03-December-1998			10,510	3,134	-	7,376
Kuwait						
	WCF 1	00.135	2,835	2,835	-	-
	1999 1	00.135	87,155	85,958	1,197	-
Last Payment Date 18-February-1999			89,990	88,793	1,197	-
Kyrgyzstan						
	WCF 1	00.008	168	-	-	168
	1997 2	00.030	8,354	-	492	7,862
	1998 1	00.030	17,532	-	-	17,532
	1999 1	00.008	5,165	-	-	5,165
			31,219	-	492	30,727
Lao People's Democratic Republic						
	WCF 1	00.001	21	-	-	21
	1997 2	00.010	915	-	-	915
	1998 1	00.010	5,844	-	-	5,844
	1999 1	00.001	646	-	-	646
			7,426	-	-	7,426
Latvia						
	WCF 1	00.024	504	504	-	-
	1999 1	00.024	15,494	15,494	-	-
Last Payment Date 20-April-1999			15,998	15,998	-	-
Lesotho						
	WCF 1	00.002	42	-	-	42
	1997 2	00.010	2,785	-	166	2,619
	1998 1	00.010	5,844	-	-	5,844
	1999 1	00.002	1,291	-	-	1,291
			9,962	-	166	9,796
Liberia						
	WCF 1	00.002	42	-	-	42
	1997 2	00.010	2,785	-	166	2,619
	1998 1	00.010	5,844	-	-	5,844
	1999 1	00.002	1,291	-	-	1,291
			9,962	-	166	9,796
Liechtenstein						
	WCF 1	00.006	126	126	-	-
	1999 1	00.006	3,874	3,790	84	-
Last Payment Date 09-February-1999			4,000	3,916	84	-
Lithuania						
	WCF 1	00.022	462	462	-	-
	1999 1	00.022	14,203	12,964	1,239	-
Last Payment Date 26-May-1999			14,665	13,426	1,239	-

Note: 1 and 2 refers to budget periods (1) and (2)

	Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)
Luxembourg						
	WCF	1	00.068	1,428	-	-
	1999	1	00.068	43,900	63	-
Last Payment Date 20-May-1999			45,328	45,265	63	-
Madagascar						
	WCF	1	00.003	63	-	63
	1997	2	00.010	2,785	166	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.003	1,937	-	1,937
			10,629	-	166	10,463
Malawi						
	WCF	1	00.002	42	-	42
	1997	2	00.010	2,785	166	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.002	1,291	-	1,291
			9,962	-	166	9,796
Malaysia						
	WCF	1	00.181	3,801	-	-
	1999	1	00.181	116,852	-	-
Last Payment Date 27-December-1999			120,653	120,653	-	-
Maldives						
	WCF	1	00.001	21	210	(189)
	1999	1	00.001	646	457	189
Last Payment Date 04-February-1999			667	667	-	-
Mali						
	WCF	1	00.002	42	-	42
	1997	2	00.010	2,785	166	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.002	1,291	-	1,291
			9,962	-	166	9,796
Malta						
	WCF	1	00.014	294	-	-
	1999	1	00.014	9,038	-	-
Last Payment Date 18-January-1999			9,332	9,332	-	-
Marshall Islands						
	WCF	1	00.001	21	210	(189)
	1998	1	00.010	5,844	3	5,652
	1999	1	00.001	646	-	646
Last Payment Date 27-March-1998			6,511	213	-	6,298
Mauritania						
	WCF	1	00.001	21	-	21
	1997	2	00.010	2,785	166	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.001	646	-	646
			9,296	-	166	9,130

Note: 1 and 2 refers to budget periods (1) and (2)

	Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)
Mexico						
	WCF	1	00.984	20,664	20,664	-
	1999	1	00.984	635,261	635,261	-
Last Payment Date 12-November-1999			655,925	655,925	-	-
Micronesia (Federated States of)						
	WCF	1	00.001	21	210	(189)
	1999	1	00.001	646	-	189
Last Payment Date 05-August-1998			667	210	-	457
Monaco						
	WCF	1	00.004	84	84	-
	1999	1	00.004	2,582	2,456	126
Last Payment Date 11-January-1999			2,666	2,540	126	-
Mongolia						
	WCF	1	00.002	42	42	-
	1999	1	00.002	1,291	1,291	-
Last Payment Date 05-May-1999			1,333	1,333	-	-
Morocco						
	WCF	1	00.041	861	861	-
	1999	1	00.041	26,469	26,469	-
Last Payment Date 27-April-1999			27,330	27,330	-	-
Mozambique						
	WCF	1	00.001	21	-	21
	1997	2	00.010	2,785	-	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.001	646	-	646
			9,296	-	166	9,130
Myanmar						
	WCF	1	00.008	168	-	-
	1999	1	00.008	5,165	42	5,123
Last Payment Date 27-April-1999			5,333	210	-	5,123
Namibia						
	WCF	1	00.007	147	147	-
	1999	1	00.007	4,519	4,456	63
Last Payment Date 14-May-1999			4,666	4,603	63	-
Nepal						
	WCF	1	00.004	84	210	(126)
	1999	1	00.004	2,582	2,456	126
Last Payment Date 09-September-1998			2,666	2,666	-	-
Netherlands						
	WCF	1	01.638	34,398	34,398	-
	1999	1	01.638	1,057,476	1,057,476	-
Last Payment Date 22-January-1999			1,091,874	1,091,874	-	-
New Zealand						
	WCF	1	00.222	4,662	5,103	(441)
	1999	1	00.222	143,321	142,880	441
Last Payment Date 18-December-1998			147,983	147,983	-	-

Note: 1 and 2 refers to budget periods (1) and (2)

	Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)
Nicaragua						
	WCF 1	00.001	21	-	-	21
	1997 2	00.010	2,785	-	166	2,619
	1998 1	00.010	5,844	-	-	5,844
	1999 1	00.001	646	-	-	646
			9,296	-	166	9,130
Niger						
	WCF 1	00.002	42	-	-	42
	1997 2	00.010	2,785	-	166	2,619
	1998 1	00.010	5,844	-	-	5,844
	1999 1	00.002	1,291	-	-	1,291
			9,962	-	166	9,796
Norway						
	WCF 1	00.613	12,873	12,873	-	-
	1999 1	00.613	395,747	395,747	-	-
	Last Payment Date 16-March-1999		408,620	408,620	-	-
Panama						
	WCF 1	00.013	273	273	-	-
	1997 2	00.010	2,785	1,272	213	1,300
	1998 1	00.010	5,844	-	-	5,844
	1999 1	00.013	8,393	-	-	8,393
	Last Payment Date 19-January-1999		17,295	1,545	213	15,537
Papua New Guinea						
	WCF 1	00.007	147	210	(63)	-
	1998 1	00.010	5,844	-	66	5,778
	1999 1	00.007	4,519	-	-	4,519
	Last Payment Date 03-July-1997		10,510	210	3	10,297
Paraguay						
	WCF 1	00.014	294	-	-	294
	1997 2	00.010	2,785	-	166	2,619
	1998 1	00.010	5,844	-	-	5,844
	1999 1	00.014	9,038	-	-	9,038
			17,961	-	166	17,795
Peru						
	WCF 1	00.095	1,995	1,995	-	-
	1999 1	00.095	61,331	61,331	-	-
	Last Payment Date 20-August-1999		63,326	63,326	-	-
Philippines						
	WCF 1	00.080	1,680	1,680	-	-
	1999 1	00.080	51,647	51,647	-	-
	Last Payment Date 09-July-1999		53,327	53,327	-	-
Poland						
	WCF 1	00.208	4,368	4,368	-	-
	1999 1	00.208	134,283	131,637	2,646	-
	Last Payment Date 29-January-1999		138,651	136,005	2,646	-

Note: 1 and 2 refers to budget periods (1) and (2)

	Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)
Portugal						
	WCF	1	8,799	8,799	-	-
	1999	1	270,502	270,502	-	-
Last Payment Date 04-June-1999			279,301	279,301	-	-
Qatar						
	WCF	1	693	693	-	-
	1999	1	21,304	21,304	-	-
Last Payment Date 27-July-1999			21,997	21,997	-	-
Republic of Korea						
	WCF	1	20,958	20,958	-	-
	1999	1	644,299	644,299	-	-
Last Payment Date 12-May-1999			665,257	665,257	-	-
Republic of Moldova						
	WCF	1	378	-	-	378
	1997	2	3,661	-	-	3,661
	1998	1	47,336	-	-	47,336
	1999	1	11,621	-	-	11,621
			62,996	-	-	62,996
Romania						
	WCF	1	1,407	-	-	1,407
	1997	2	41,772	-	2,479	39,293
	1998	1	88,828	-	-	88,828
	1999	1	43,255	-	-	43,255
			175,262	-	2,479	172,783
Russian Federation						
	WCF	1	31,374	90,741	(59,367)	-
	1999	1	964,511	905,144	59,367	-
Last Payment Date 14-October-1999			995,885	995,885	-	-
Saint Lucia						
	WCF	1	21	21	-	-
	1999	1	646	189	-	457
Last Payment Date 19-April-1999			667	210	-	457
Samoa						
	WCF	1	21	21	-	-
	1999	1	646	457	189	-
Last Payment Date 07-July-1999			667	478	189	-
San Marino						
	WCF	1	42	-	-	42
	1997	2	2,785	-	166	2,619
	1998	1	5,844	-	-	5,844
	1999	1	1,291	-	-	1,291
			9,962	-	166	9,796
Sao Tome Principe						
	WCF	1	21	-	-	21
	1997	2	2,785	-	166	2,619
	1998	1	5,844	-	-	5,844
	1999	1	646	-	-	646
			9,296	-	166	9,130

Note: 1 and 2 refers to budget periods (1) and (2)

	Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)
Senegal						
	WCF	1	00.006	126	-	126
	1997	2	00.010	2,785	-	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.006	3,874	-	3,874
			12,629	-	166	12,463
Seychelles						
	WCF	1	00.002	42	-	42
	1997	2	00.010	2,785	-	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.002	1,291	-	1,291
			9,962	-	166	9,796
Slovakia						
	WCF	1	00.039	819	819	-
	1999	1	00.039	25,178	24,296	-
	Last Payment Date		12-January-1999	25,997	25,115	882
Slovenia						
	WCF	1	00.061	1,281	1,281	-
	1999	1	00.061	39,381	39,171	-
	Last Payment Date		05-May-1999	40,662	40,452	210
Solomon Islands						
	WCF	1	00.001	21	-	21
	1997	2	00.010	2,785	-	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.001	646	-	646
			9,296	-	166	9,130
South Africa						
	WCF	1	00.368	7,728	7,728	-
	1999	1	00.368	237,577	237,576	-
	Last Payment Date		16-July-1998	245,305	245,304	1
Spain						
	WCF	1	02.600	54,600	54,600	-
	1999	1	02.600	1,678,534	1,678,534	-
	Last Payment Date		26-April-1999	1,733,134	1,733,134	-
Sri Lanka						
	WCF	1	00.012	252	252	-
	1999	1	00.012	7,747	7,747	-
	Last Payment Date		22-January-1999	7,999	7,999	-
Suriname						
	WCF	1	00.004	84	84	-
	1999	1	00.004	2,582	-	2,456
	Last Payment Date		04-May-1998	2,666	84	2,456
Swaziland						
	WCF	1	00.002	42	-	42
	1997	2	00.010	2,785	-	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.002	1,291	-	1,291
			9,962	-	166	9,796

Note: 1 and 2 refers to budget periods (1) and (2)

	Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)
Sweden						
	WCF	1	01.089	22,869	-	-
	1999	1	01.089	703,048	3,276	-
Last Payment Date 18-January-1999			725,917	722,641	3,276	
Switzerland						
	WCF	1	01.220	25,620	-	-
	1999	1	01.220	787,620	102	-
Last Payment Date 29-January-1999			813,240	813,139	102	
Tajikistan						
	WCF	1	00.005	105	-	105
	1997	2	00.020	5,570	331	5,239
	1998	1	00.020	11,688	-	11,688
	1999	1	00.005	3,228	-	3,228
			20,591	-	331	20,260
Thailand						
	WCF	1	00.168	3,528	-	-
	1999	1	00.168	108,439	20	-
Last Payment Date 02-March-1999			111,987	111,967	20	
The Former Yugoslav Republic of Macedonia						
	WCF	1	00.004	84	-	84
	1998	1	00.005	243	-	243
	1999	1	00.004	2,582	-	2,582
			2,909	-	-	2,909
Togo						
	WCF	1	00.001	21	-	21
	1997	2	00.010	2,785	166	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.001	646	-	646
			9,296	-	166	9,130
Tunisia						
	WCF	1	00.028	588	-	-
	1997	2	00.030	8,354	496	392
	1998	1	00.030	17,532	-	17,532
	1999	1	00.028	18,077	-	18,077
Last Payment Date 28-January-1999			44,551	8,054	496	36,001
Turkey						
	WCF	1	00.442	9,282	-	-
	1998	1	00.385	224,992	8	20,417
	1999	1	00.442	285,351	-	285,351
Last Payment Date 03-March-1999			519,625	213,849	8	305,768
Turkmenistan						
	WCF	1	00.008	168	-	168
	1997	2	00.030	8,354	492	7,862
	1998	1	00.030	17,532	-	17,532
	1999	1	00.008	5,165	-	5,165
			31,219	-	492	30,727

Note: 1 and 2 refers to budget periods (1) and (2)

	Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)
Uganda						
	WCF	1	00.004	84	-	84
	1997	2	00.010	2,785	-	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.004	2,582	-	2,582
			11,295	-	166	11,129
Ukraine						
	WCF	1	00.303	6,363	2,080	4,283
	1997	2	01.105	303,545	-	285,615
	1998	1	01.103	644,588	-	644,588
	1999	1	00.303	195,614	-	195,614
	Last Payment Date 22-May-1998		1,150,110	2,080	17,930	1,130,100
United Arab Emirates						
	WCF	1	00.179	3,759	-	3,759
	1997	2	00.193	52,912	-	49,771
	1998	1	00.192	112,204	3,141	112,204
	1999	1	00.179	115,561	-	115,561
			284,436	-	3,141	281,295
United Kingdom of Great Britain and Northern Ireland						
	WCF	1	05.113	107,373	107,373	-
	1999	1	05.113	3,300,902	3,295,232	-
	Last Payment Date 26-May-1999		3,408,275	3,402,605	5,670	-
United States of America						
	WCF	1	25.111	527,331	527,331	-
	1999	1	25.111	16,211,410	16,211,410	-
	Last Payment Date 17-March-1999		16,738,741	16,738,741	-	-
Uruguay						
	WCF	1	00.048	1,008	1,008	-
	1999	1	00.048	30,988	-	30,988
	Last Payment Date 13-December-1999		31,996	1,008	-	30,988
Uzbekistan						
	WCF	1	00.037	777	2,772	(1,995)
	1998	1	00.132	77,140	39,385	33,768
	1999	1	00.037	23,887	-	23,887
	Last Payment Date 17-September-1998		101,804	42,157	1,992	57,655
Vanuatu						
	WCF	1	00.001	21	-	21
	1997	2	00.010	2,785	-	2,619
	1998	1	00.010	5,844	-	5,844
	1999	1	00.001	646	-	646
			9,296	-	166	9,130
Venezuela, Bolivarian Republic of						
	WCF	1	00.177	3,717	991	2,726
	1997	2	00.335	91,899	-	86,458
	1998	1	00.334	195,188	-	195,188
	1999	1	00.177	114,269	-	114,269
	Last Payment Date 14-May-1998		405,073	991	5,441	398,641

Note: 1 and 2 refers to budget periods (1) and (2)

	Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)
Viet Nam						
	WCF 1	00.007	147	147	-	-
	1999 1	00.007	4,519	4,519	-	-
Last Payment Date	27-January-1999		4,666	4,666	-	-
Yemen						
	WCF 1	00.010	210	-	-	210
	1997 2	00.010	2,785	-	166	2,619
	1998 1	00.010	5,844	-	-	5,844
	1999 1	00.010	6,456	-	-	6,456
			15,295	-	166	15,129
Zambia						
	WCF 1	00.002	42	-	-	42
	1997 2	00.010	2,785	-	166	2,619
	1998 1	00.010	5,844	-	-	5,844
	1999 1	00.002	1,291	-	-	1,291
			9,962	-	166	9,796

Note: 1 and 2 refers to budget periods (1) and (2)

Year	Scale	Payable a	Applied Amount b	Adjustment c	Outstanding d = a-(b+c)
Sub totals					
WCF ¹		2,100,000	2,150,321	(74,193)	23,872
1996 ¹		140,383	131,051	9,332	-
1996 ²		33,178	30,974	2,204	-
1997 ¹		296,389	277,034	19,355	-
1997 ²		27,458,316	25,082,653	1,658,131	717,532
1998 ¹		58,439,527	55,895,467	391,994	2,152,066
1999 ¹		64,559,006	61,258,547	93,369	3,207,090
Total (Excluding WCF)		150,926,799	142,675,727	2,174,385	6,076,688

**Status of Assessed Contributions to the Regular Budget
New Member States**

Year	Scale	Payable	Applied Amount	Adjustment	Outstanding
Guatemala					
		Date Of Entry: 20-September-1999			
WCF ¹	00.018	378	-	-	378
1999 ¹	00.018	1,937	-	-	1,937
Last Payment Date:		2,315	-	-	2,315
Oman					
		Date Of Entry: 23-September-1999			
WCF ¹	00.051	1,071	-	-	1,071
1999 ¹	00.051	5,488	-	-	5,488
Last Payment Date:		6,559	-	-	6,559
Singapore					
		Date Of Entry: 14-January-1999			
WCF ¹	00.176	3,696	3,696	-	-
1999 ¹	00.176	94,687	94,687	-	-
Last Payment Date: 24-February-1999		98,383	98,383	-	-
Zimbabwe					
		Date Of Entry: 13-October-1999			
WCF ¹	00.009	189	-	-	189
1999 ¹	00.009	484	-	-	484
Last Payment Date:		673	-	-	673
Grand Total		107,930	98,383	-	9,547

Note: 1 and 2 refers to budget periods (1) and (2)

APPENDIX II
1999 PROCUREMENT

Major Programme	Total Number of Contracts/ Purchase Orders	Value in US\$
1. INTERNATIONAL MONITORING SYSTEM	100	33,186,001.45*
CIF US\$ 33,005,191.45		
General Fund: US\$ 180,810.00		
2. INTERNATIONAL DATA CENTRE	55	5,555,130.90
3. COMMUNICATIONS	0	4,296,019.72
4. ON-SITE INSPECTION	5	335,539.18
5. EVALUATION	5	335,041.00
7. ADMINISTRATION, COORDINATION AND SUPPORT	44	1,307,622.34
GRAND TOTAL	209	GRAND TOTAL 45,015,354.59
Purchase orders, contracts issued by PTS	209	
Purchase orders, contracts issued by UNIDO on behalf of PTS	0	
* Includes US\$1,745,335 for HA1 (Cape Leeuwin) to be obligated against 2000 funds (CIF).		

APPENDIX III

1999 PROCUREMENT ABOVE US\$150,000: SOLE SUPPLIER/CONTRACTOR

Major Programme	Description	Station Code	Contractor	Country	Fin. Rule No.	Value in US\$	Total in US\$
1. INTERNATIONAL MONITORING SYSTEM	Site Prep. & Construction, Makanchi	PS23	NNC	Kazakhstan	11.5.06(d)	1,082,788.00	9,033,304.00
	Noble Gas Equipment	N/A	Khlopin Institute	Russian Fed.	11.5.06(a)	210,428.00	
	Site Surveys, Equipment & Installation in USA	IS53 to IS60	Univ. of Mississippi	USA	11.5.06(f)	827,850.00	
	Equipment for 4 IS Stations	N/A	Tekelec	France	11.5.06(f)	924,320.00	
	Contract for 11 IMS Stations	11 stations	DASE	France	11.5.06(a,c,d)	1,406,236.00	
	Site Preparation, Warramunga	IS7	ANU	Australia	11.5.06(d)	190,340.00	
	Site Installations, Melbourne, Perth	RN4, RN10	ARPANSA	Australia	11.5.06(d)	655,308.00	
	Installation of a Boiler	N/A	RIPT	Russian Fed.	11.5.60(d)	169,782.00	
	Site Survey & Array Design, China	PS12, PS13	China Seismol. Bureau	China	11.5.06(a)	198,384.00	
	Site Installations, Chatham, Kaitia, Cook Islands	RN23, RN46, RN47	NRL	New Zealand	11.5.06(d,e)	1,101,803.00	
	Testing & Evaluation, Seismic Array, Warramunga	PS2	ANU	Australia	11.5.06(a,c,d)	303,454.00	
	Site Prep. & Installation, Norway	PS28	NORSAR	Norway	11.5.06(d)	377,091.00	
	6 Site Surveys in Russian Fed.	6 stations	RIPT	Russian Fed.	11.5.06(a)	250,400.00	
	Site Survey & Array, Mongolia	PS25	DASE	France	11.5.06(c,d)	759,267.00	
	Site Installation, Stockholm	RN63	FOA	Sweden	11.5.06(d)	338,021.00	
Equipment for 5 IS Stations	N/A	DASE	France	11.5.06(e)	237,832.00		
							9,033,304.00
2. INTERNATIONAL DATA CENTRE	Link to Arlington, VA	N/A	Telecom Austria	Austria	11.5.06(e)	234,000.00	459,000.00
	IDC Consulting Services	N/A	Taylor McKenzie	USA	11.5.06(e)	225,000.00	
	Grand Total						9,492,304.00

