

**CBS Extraordinary session 2002**  
**Cairns, Australia, 4 to 10 December 2002**

**ACTION SHEET**

<b>Para.</b>	<b>Subject</b>	<b>Action required</b>	<b>Responsible</b>	<b>Deadline</b>	<b>Status/remarks</b>
Rec 6.1/1 6.1/x 6.2/1 6.2/x 6.3/1 9/1 10.2/1	Approval of recommendations	To prepare EC document on the report of CBS-Ext.(02) with recommendations	D/WWW-B	February 2003	done
3.4	Innovative Collaboration	(a) The OPAGs to consider the report of the Rapporteur on Innovative Collaboration and to identify the subjects that are relevant to their respective programme areas and to take benefit of the relevant findings.  (b) The Secretariat to develop a project for an Internet Newsgroup, and to submit it to the Management Group for consideration and possible follow-up action	Chairs of the OPAG  D/WWW-B	May 2003  May 2003	Consultant (March 03)
4.5 (PINK4(1))	Future WMO Information System	The Secretary-General to submit the outcome of CBS work to the Executive Council Advisory Group on the Role and Operation of NMHSs.	C/TEM	Feb 2003	Draft available; to be sent to chair of EC group; contribute para to EC/R&Ops report to Cg thru D/PLA and develop Add to Doc 3.1.2
4.3 (PINK 4(2))	Total quality management	The Secretary-General to make information material on ISO 9000 and related quality management systems available to Members.	D/WWW-B	May 2003	
4-4 to 4-15 (PINK 4(2))		To inform Cg, EC and the bureau of the views of CBS on the issue	D/WWW-B	February 2003	Done; include in Cg Doc 3.1.0

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6.1.11	Plans for multi-purpose geostationary and polar-orbiting satellites	To suggest that the Republic of Korea should approach CGMS for appropriate consultations.	SSO/SAT	February 2003	
6.1.19	Requirement for four LEO satellites	To update the Manual on GOS	AC/OSY	ASAP	
6.1.20	Redesign of the GOS	<p>(a) To develop as soon as possible an infrastructure and implementation plan including a detailed time schedule within WMO to assure full utilisation of the evolving GOS;</p> <p>(b) To support a focused funded activity for the study of observing system design;</p> <p>(c) To continue updating the database of user requirements and observing system capabilities and include user reviewed R&amp;D expected performances;</p> <p>(d) To continue the RRR process in application areas already started and expand into new areas relevant to missing disciplines;</p> <p>(e) To facilitate organisation of the next Workshop on Impact of Various Observing Systems on NWP during the first quarter of 2004;</p> <p>(f) To pursue early implementation (with particular attention to the developing countries).</p>	Chair of the OPAG-IOS AC/OSY, SSO/SAT	(a) , (b), (c), (d), (f) and (e) ongoing during 2003	
6.1.26	OSEs and OSSEs	Leading NWP centres and relevant scientific groups to continue their efforts in OSEs and OSSEs.	Chair of the OPAG-IOS	Ongoing	

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6.1.30	Satellite system utilisation and products	To implement the recommendations and strategies as contained in the Status of the Availability and Use of Satellite Data and Products by WMO Members, (WMO/TD-No. 1119, SAT-30)	Chair of the OPAG-IOS SSO/SAT	Ongoing	
6.1.32	Requirements and representation of data from AWSs	To implement the recommendations of the Expert Team on Requirements for Data from Automatic Weather Stations	Chair of the OPAG-IOS AC/OSY	Ongoing	Also involving OPAG-ISS and CIMO
6.1.33	Manual on the GOS	The Secretary-General to publish the revised document at the earliest practical time	AC/OSY	I Quarter 2003	
6.1.35	Improvement of Volume A	(a) To describe the consequences of the changes in the index numbering system. (b) To initiate the implementation of the proposed changes to Volume A.	AC/OSY	II Quarter 2003	Consultant (Apr 03)
6.1.37	GCOS	To invite countries concerned to assume responsibilities of the CBS lead monitoring centres (one for GUAN and one for GSN) on a trial basis	AC/OSY in coordination with C/TEM and GCOS Office	May 2003	
6.1.38		Points of Contact (POC) to be nominated by each NMHS			
6.1.39		To re-emphasise that GCOS CLIMAT and CLIMAT TEMP messages should be produced and distributed globally on the GTS.			
6.1.40		To urge all Members concerned to assure that network operators, monitoring centres, telecommunication centres, CBS Lead Centres for GCOS Data and the GCOS Data and Analysis Centres to adhere to the guidelines given in the <i>Guide to the GCOS Surface and Upper-Air Networks: GSN and GUAN</i>			
6.1.x.7 PINK 6.1(3)	New WMO Space Programme	(a) To formulate relevant tasks for the OPAGs (including both IOS and ISS). (b) To include representatives from the R&D space agencies the membership of appropriate Expert Teams and Implementation/Coordination Teams .	Chairs of the OPAG-ISS and IOS, SSO/SAT	June 2003	CBS-MG meeting June 03

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6.1.x8 PINK 6.1(3)	CGMS	WMO Members to be kept informed of the need to convert satellite ground receiving stations as and when new satellite systems become available.	SSO/SAT	Ongoing	
6.1.x5 PINK 6.1(4)	Scientific Evaluation Group (SEG) of the Coordination Group on the Composite Observing System for the North Atlantic	The Management Group to review the working arrangements of the OPAG-IOS with respect to retaining in the OPAG the tasks of the SEG, which are carried out by the global NWP Centres.	CBS/MG	June 2003	CBS-MG meeting June 03
6.2.15	GTS protocols	(a) To assess a practical date for the implementation of the file naming convention (b) To develop urgently the detailed complementary procedures for the application of the file naming convention (c) To address the requirements of the distribution and downloading modes	Chair of the OPAG-ISS C/TEM	CBS-XIII	ET-EUDCS tasks; 2 <sup>nd</sup> half of 2003
6.2.17	Request-reply mechanisms using Internet	The OPAG on ISS to study further that matter in the more general framework of delivery of information upon request	Chair of the OPAG-ISS C/TEM	CBS-XIII	ET-EUDCS tasks; 2 <sup>nd</sup> half of 2003
6.2.18	Guidance for using the Internet between GTS centres	To publish the guidance document on VPNs in an electronic form on the WMO server and to provide in printed form to NMHSS on request	C/TEM	February 2003	
6.2.19	Online information on data comms systems & techniques	To invite all WWW centres to continue contributing to, and making use of, those information resources	C/TEM	ongoing	
6.2.20	Functions and responsibilities of RTHs	To invite RAs I, II, III and IV to consider aligning, accordingly, the corresponding text in their respective parts of Volume II.	C/TEM	ongoing	Reg. WG-PIW

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6.2.21	Extension of the maximum length of messages to 500 Koctets	The OPAG on ISS to assess a realistic implementation date, and the Secretariat to carry out an enquiry to RTHs	Chair of the OPAG-ISS C/TEM	End 2003 Enquiry: March 2003	
6.2.27	Allocation of abbreviated headings for the migration to TDCF	Tables (B3, C6 and C7) of Attachment II-5 of the Manual on the GTS to be reviewed and revised accordingly, as soon as the actual need for exchanging the various type of "migrated data" arose, and the OPAG on ISS to keep the matter under continuous review.	Chair of the OPAG-ISS C/TEM SO/DPS	Ongoing	ICT-ISS task
6.2.38	Radio frequencies for meteorological activities	CBS and Secretariat to pursue as high priority activities related to radio frequency allocations; Participation in WRC-03	Chair of the OPAG-ISS C/TEM	Ongoing June 2003	SG-RFC task
6.2.42	Radio frequencies for meteorological activities	To urge Members to ensure that their respective national Radiocommunication Authorities were fully aware of the impact of the relevant WRC-03 issues for meteorological operations and to seek their support for issues relevant to meteorology	C/TEM	done	CL Nov. 2002
6.2.47	Metadata standards	To pursue the development of the WMO metadata standard, and to involve, to the largest extent possible, members of other Commissions in assessing the proposal and in testing the standard by applying it to their data.	Chair of the OPAG-ISS X/WDM	2003	ET-IDM task
		President of CBS to address that important matter at a future meeting of presidents of technical commissions.	Acting President of CBS	Feb 2003	done
6.2.48	Guide on WWW Data Management	To review the content of the guide, to design it for electronic publication, and to establish a process to verify and update the references at an appropriate frequency.	Chair of the OPAG-ISS X/WDM	2003	Consultant
6.2.51	Monitoring the BUFR bulletins	To invite RTHs on the MTN to consider participating with high priority in the preparation of a pilot study and in preliminary tests for the monitoring of BUFR bulletins.	C/TEM X/WDM	May 2003	

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6.2.52	Monitoring data on 1 January	To further consider that issue with respect to all monitoring activities.	C/TEM	CBS XIII	
6.2.53	Operational trial on the WWW integrated monitoring	To analyse the results of the trial, and, in light of the outcome, consolidate and submit the procedures for the integrated monitoring to the Commission, at its next session.	C/TEM	CBS XIII	Workshop Toulouse, June 2003
6.2.63	Data representation and codes	(a) Templates to be on the WMO Web server and as an Attachment to Volume I.2 of the <i>Manual on Codes</i> . (b) New reporting practices linking observations with BUFR or CREX formats to be listed as an Attachment to Volume I.2 of the <i>Manual on Codes</i> .	SO/DPS	Ongoing	
6.2.65	Data representation and codes	To keep the focal points informed of the code changes recommended by the Expert Team	SO/DPS	Ongoing	
6.2.67	Use of XML format	To organise of a workshop on the use of XML in meteorology to elaborate further on requirements, problems and solutions and to develop standards for describing meteorological parameters and objects	SO/DPS	2003/2004	Depending on funding
6.2.71	Migration to table-driven code forms	To promote the development of a turn key software package in a PC-Windows environment to decode and encode BUFR data via the Internet	Chair of the OPAG-ISS SO/DPS	April 2003	Requirement to be submitted to EUMETNET
6.2.72,		Manufacturers to be included in the training, preferably in the form of a workshop to be held in 2003 at no cost to WMO.		2003 or 2004	Discussed with HMEI in Jan 2003
6.2.73		To carry out pilot projects beginning in 2003			
6.2.77		(a) The final version of the plan to be made available in the WMO Web server (b) To submit the migration plan, to Fourteenth Congress for consideration and approval.		February 2003	done

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6.2.86	Future WMO information system	(a) To develop into more details the comparison and mapping of the respective functions and responsibilities of FWIS and WWW centres	Chair of the OPAG-ISS, ITT-FWIS	2003	ITT-FWIS task
6.2.88		To urgently compile and consolidate the requirements from the relevant WMO Programmes	C/TEM X/WDM		
6.2.90		To organize the consultant(s) study; To inform Cg and EC of the outcome of CBS on the issue; and assist to outcome of study	D/WWW-B C/TEM	Feb. 2003 March 2003	done Incl. in Cg Doc 3.1.2 + planned ADD
6.3.4	Ensemble forecasting methodology and progress	To update the <i>Manual on the GDPS</i> to include EPS. Seek consultant to develop a new chapter in the <i>Guide on the GDPS</i> (WMO-No. 305.	C/DPS	2003	
6.3.6	EPS verification procedures	Include EPS verification procedures in the Manual on the GDPS	C/DPS	2003	
6.3.13	Use of forecasts and warnings in flood forecasting	Take part in WMO Action Programme on Flood forecasting/warning	DHWR, D/AREP, D/WWW-B, C/DPS	2003	Preparatory meeting for a workshop on flood forecasting being planned for April 2003
6.3.20	Emergency response activities and atmospheric transport products	To explore expansion of modelling applications and response procedures to non-nuclear incidents including potential incidents that a Member(s) may consider imminent and for which RMSC transport model output support is required.	Chair of the Co-ordination Group on ERA C/DPS	2003	2 <sup>nd</sup> half of 2003
6.3.21	Update to ERA procedures	Update ERA procedures in the Manual on the GDPS and WMO/TD-No 778	C/DPS	June 2003	
6.3.24 6.3.25 6.3.36	Seasonal to Internal forecasting	Availability of SI forecasts from global producing centres	C/DPS	2003	Workshop held 10-13 February 2003

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6.3.34	Verification system for long-range forecasts	Include verification system for long range forecasts in the Manual on the GDPS  Further update the verification system in the light of experience	C/DPS  ET on VS for long range forecasts	June 2003  Ongoing	
6.3.38	Use of GRIB 2 for EPS and long range forecasts	OPAG on ISS to monitor use of GRIB 2 and remedy deficiencies or omissions	ET /DRC SO/DPS	Ongoing	
6.3.43	Update of procedures for quality control	Update quality monitoring procedures in the Manual on the GDPS	C/DPS	June 2003	
6.3.44	Training activities	Development of preparatory meeting and related workshop on EPS  Co-sponsorship of ECMWF training course on use of products	C/DPS  C/DPS	2003  October 2003	Depending on funding Proposal sent
6.3.45	Development of guidance for training on DPFS	Develop a capacity training policy using approaches similar to those of satellite activities	C/DPS	2003-2004	consultant
6.3.46	Training in NWP and ATM	Organization of training workshops on NWP and ATM	C/DPS, SO/DPS	2004	
6.3.47	Work programme	Develop further the work programmes of ETs on Infrastructure, Verification of LRF , EPS the ERA Co-ordination Group and possibly Nowcasting activities	Chair of OPAG on DPFS , C/DPS	2003	
6.4.7	Use of official and consistent information by the media	Continue to work on reinforcing the authority of NMSs as the official source of information, in particular the warnings of severe weather.	C/PWS	During 2003-2004	



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6.4.8	Training seminars and workshops on improving presentation and communication skills of forecasters	The PWS Programme to continue to organise such training events	C/PWS	During 2003-2004	
6.4.11	Improvement of the PWS	The OPAG/PWS Programme to continue to develop material on quality management practices in the delivery of PWS	C/PWS and relevant OPAG teams	2004	
6.4.16	Improving the capacity of NMSs to provide users and the public with high quality warning products	Forecasters to receive specific training	C/PWS	As part of PWS training events in 2003-2004	
6.4.19	Olympic games	Prepare draft guidelines for weather support to Olympic games for submission to the International Olympic Committee	Chair of the OPAG/PWS C/PWS	2004	
6.4.22 6.4.27	Pilot Web sites	Language issues to be studied	C/PWS	2004	
6.4.29	PWS Guidance materials	To strive to translate the guidance materials and post them on the Web	C/PWS	..	Done; all Published Guidelines are posted on the Web  Translations will be done when funding available
6.4.32	Links with WWRP	Chair of the OPAG-PWS to maintain close links with WWRP	Chair of the OPAG-PWS	Ongoing	
6.4.36	Technical Conference on PWS	to organize a technical conference on Public Weather Services to be held in conjunction with next session of CBS	Chair of the OPAG-PWS C/PWS	2004	

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7.2.3	Working Group on Antarctic Meteorology	To inform Cg, EC and the bureau of the views of CBS on the issue	D/WWW-B	May 2003	done
7.2.5	Renaming CBS	the CBS Management Group to further study the issue and develop a proposal for consideration by the next session of the Commission	CBS Management Group	2004	To be discussed at the June meeting
7.2.6	Renaming GDPS programme	To recommend to Fourteenth Congress that the GDPS programme be named the GDPFS programme.	D/WWW-B	May 2003	Done
7.2.7	Sixth WMO Long-term Plan	To update the Sixth WMO Long-term Plan	D/WWW-B	May 2003	Done
8.2	Terms of reference and tasks of the Expert Teams and Rapporteurs of each OPAG	(a) each OPAG chairperson to ensure that the specific tasks be adequately addressed.  (b) The Management Group to keep under review the work programme and make arrangements, as necessary, upon proposals of OPAG chairpersons	Chairs of OPAG CBS Management Group	June 2003	June meeting
8.3	Total Quality Management	Management Group to make necessary arrangements, including within the OPAGs, for efficiently carrying out the tasks that would stem from the relevant decisions and directives of Congress	CBS Management Group	September 2003	To be discussed at the June meeting taking into account pertinent Cg decisions
10.1.2	WMO server	To post on the WMO server the content of the Manual on Codes and the Manual on the GTS	C/TEM, SO/DPS	March 2003	
10.2.1 Rec. 10.2/1	Broadening the function of and RSMC	Recommend to EC update functions of RSMC Offenbach in the Manual on GDPS to include provision of U-V Index	C/DPS	June 2003	done

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10.1.4 10.1.6 10.1.7 10.1.8 10.1.9	WMO Publication Nos. 9 and 47	<p>(a) The expanded introductory and explanatory texts related to <i>Weather Reporting</i> and the <i>International List of Selected, Supplementary and Auxiliary Ships</i> to be made be made available in English, French, Spanish and Russian.</p> <p>(b) To delete Volume B from the list of WMO Mandatory Publications and to distribute the WWW Technical Progress Report on the GDPS on a CD-ROM instead of a paper format.</p> <p>(c) To urge all MTN centres to implement the new database procedures for the maintenance of their own parts of Volume C1.</p> <p>(d) To invite Members to include the lists of bulletins transmitted through distribution systems in their routing catalogues and to continue providing updates on data distribution systems as well as a summary of the transmission programmes in electronic format, to be then included in Volume C2.</p> <p>(e) To consider the development of interactive on-line access services to all components of the OIS with the highest priority within the framework of the development of the OIS.</p>	C/DPS, C/TEM	May 2003	Document for Cg??