

NOAA INTERNATIONAL SESSION ON
'GLOBAL CHALLENGES FACING NATIONAL
HYDROMETEOROLOGICAL SERVICES'

Hyatt Regency, San Antonio, Texas, January 12, 2007)

EMERGING ISSUES TO GLOBAL
CHALLENGES:
A REVIEW OF THE PAST FOUR YEARS

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EMERGING ISSUES TO GLOBAL CHALLENGES: A REVIEW OF THE PAST FOUR YEARS

- The 2003 Perspective: Emerging global issues that impact on the future of NMHSs
- The WMO Top Ten of 2001
- The issues considered in detail at Long Beach
- Some emerging issues in February 2003
- Major issues of the Fourteenth WMO Congress
- The challenges for meteorology in the 21st C.
- The global challenges for the next few years

THE 2003 PERSPECTIVE: EMERGING ISSUES THAT IMPACT ON THE FUTURE OF NMHSs

- Introduction
- Building blocks
 - Concept of the NMS/NHS
 - The WMO framework of cooperation
 - The convention of free exchange
 - The economic framework for service provision
- Developments of the 80s and 90s
- Current state of NMHSs around the world
 - National goals served by NMSs
 - National applications sectors
 - Major issues facing NMSs
- Major issues and their implications
 - Major issues identified by Members
 - Specific issues facing NMSs
 - Issues for more detailed analysis
 - Some other emerging issues
- Some thoughts on the way ahead

THE WMO TOP TEN OF 2001

- Modernization
- Provision of aeronautical services
- Capacity building
- Overall level of government funding
- Role of the NMS at the national level
- Data and product exchange
- Provision of weather services
- Relationship with the media
- Provision of climate services
- Commercialization

ISSUES CANVASSED IN DETAIL AT LONG BEACH

- Weather and climate prediction
- Partnerships with the private sector and the media
- Partnerships with academia
- Climate change
- The global water crisis

SOME EMERGING ISSUES IN FEBRUARY 2003

- Impacts of economic globalization
- Intellectual property
- International trust and security
- The culture of blame-seeking and litigation
- Pressures for quality certification
- Role and influence of WMO
- The free rider problem
- Pressures on the radio spectrum
- A more holistic view of earth science

MAJOR ISSUES OF THE FOURTEENTH CONGRESS

- Economic framework
- Role of NMHSs
- Quality management
- Technology transfer
- New technologies
- Integrated earth observation
- Water resource management
- The Climate Agenda
- Evolving role of WMO

THE CHALLENGES FOR METEOROLOGY IN THE 21ST CENTURY

- **Public Policy.** To re-establish a robust and widely accepted public policy framework for meteorological observation, research and service provision in a globalized, marketized and increasingly insecure world.
- **Systems.** To achieve widespread understanding within national governments and relevant international organisations of the absolute essentiality of continued investment in the basic national meteorological observing, communication and data processing systems and the mechanisms for ensuring their international coordination and inter-operability.
- **Science.** To maintain the dramatic progress made possible by the 'big science' initiatives of the second half of the C20th eg GARP and successor initiatives such as the WCRP.
- **Services.** To harness the science and systems and establish the institutional arrangements that will deliver the potential social benefits of meteorological and related services to all.
- **International Cooperation.** To maintain and strengthen the globally cooperative traditions of meteorology and ensure the WMO is enabled to continue as the model of international cooperation.

THE GLOBAL CHALLENGES FOR THE NEXT FEW YEARS

- Demonstrating the economic and social value of meteorological services
- Consolidating the national role and status of NMHSs
- Integration of earth observations and services at the national level
- Maintaining public funding of the basic national meteorological infrastructure
- Strengthening national climate observing networks under the framework of GCOS and greatly improving climate service provision at national/local level
- Enhancing the NMHSs contribution to natural disaster reduction through improved planning and warning systems
- Strengthening the scientific basis of weather and climate forecasting
- Translating scientific progress into improved weather and climate services
- Improving the contribution of hydrological services to flood mitigation and water resources management.

THE GREATEST CHALLENGE

- To ensure that meteorological and related science and services are effectively applied to the achievement of the Millennium Development Goals.