

Statement of Intent between NOAA and the Bureau of Meteorology Digital Forecast Systems

Pursuant to the Memorandum of Agreement on Technical Cooperation in Meteorology, Oceanography and Hydrology (MOA) between the National Oceanic and Atmospheric Administration of the United States of America (NOAA) and the Australian Government Bureau of Meteorology (the Bureau) signed March 2006, NOAA and the Bureau agree to pursue cooperation related to the operational use of the Graphical Forecast Editor Suite (GFESuite) and development and applications of a US style National Digital Forecast Database (NDFD).

The research and development work to be jointly undertaken between NOAA and the Bureau, to bring the GFESuite to the point of implementation, is described in the document entitled "Implementing Arrangement #1 GFESuite Implementation by the Bureau of Meteorology, Australia" signed on 24 March, 2006. Under this arrangement NOAA through the Global Systems Division of the Earth System Research Laboratory will focus on the following tasks:

1. Development and adaption of the GFESuite systems for use within the Bureau
2. Review of Bureau developments and where appropriate assistance with the interface of the GFESuite with Bureau operational forecast systems
3. Scientific and technological development associated with the use of GFESuite by the Bureau
4. Training and transfer of expertise associated with meteorological and systems aspects of the GFESuite
5. On going support for the operational use of the GFESuite by the Bureau
6. Other areas as the parties may determine

A central mission of NOAA's National Weather Service (NWS) is to provide weather, hydrologic and climate forecasts along with warnings including information in the form of a range of products delivered through a national information database. The GFESuite is used today within the NWS forecasting process within regional and national forecast offices to provide a digital representation of weather elements and associated fields. It is the basis from which a range of services and products are delivered and provides information supporting the NDFD that can be used by government agencies, the commercial sector and the global community. The latter involves working with international partners to foster exchange of information technology and training to promote US policies and interests.

The transfer of experiences is expected to be of mutual benefit supporting US and Australian national goals in hydrology, weather and operational prediction and service delivery. NOAA, through the NWS, and the Bureau will pursue

cooperative activities related to science, technology relevant to weather services. These activities are of high priority for the Bureau and the NWS and are expected to lead to the signature of an Implementing Arrangement under the MOA. The activities will include but not limited to:

1. Information exchange on the NWS NDFD. This will include functional requirements, the system design, infrastructure support, training, product generation and delivery, and associated organizational responsibilities.
2. Sharing of NWS NDFD applications and software for evaluation with a view to adaptation and operational use by the Bureau e.g, Digital Weather Mark-up Language XML schema, NDFD software scripts, image (SuperImageGen, ImageGen) and text (pin-point text)generation
3. Information exchange and provision of advice relating to
 - a. Processes for the use and optimization of GFE techniques within the NWS offices
 - b. Exchange and use of a common support framework for GFESuite smart tools within the NWS and the Bureau
4. The development, use and exchange of training materials and associated mechanisms to enhance training techniques within Australia and the United States.
5. Exchange of information on NWS and Bureau verification procedures and experiences associated with optimization and evaluation of client /service impact
6. Cooperation on scientific and technical development associated with relevant objective guidance and grid initialization techniques employed in the GFESuite and NDFD,
7. Ongoing cooperation related to future development of GFE e.g., nowcasting, probabilistic guidance, as mutually advantageous
8. Visitor programs as deemed appropriate and participation in relevant workshop and familiarization activities within Australia and the United States.
9. Other activities as the parties mutually determine.

The above proposed arrangement will provide greater security and certainty in terms of the shared objectives and a measure of increased robustness and mutual support.

NWS is contributing expertise and technology which is currently in the public domain. This arrangement provides a basis for the Bureau to build expertise in this area through cooperation with the NWS.

FOR THE NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION OF
THE UNITED STATES OF AMERICA

FOR THE AUSTRALIAN
GOVERNMENT BUREAU OF
METEOROLOGY



Brig. Gen. D.L. Johnson, USAF (Ret.)



Dr Geoff Love

DATE: 24 March 2006

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PLACE: Melbourne

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