

Response to the NRC Report
“Observing Weather and Climate
FROM THE GROUND UP
A Nationwide Network of Networks

George Frederick

Vaisala Inc.

**Chair, AMS Ad Hoc Committee on
the
Nationwide Network of Networks**

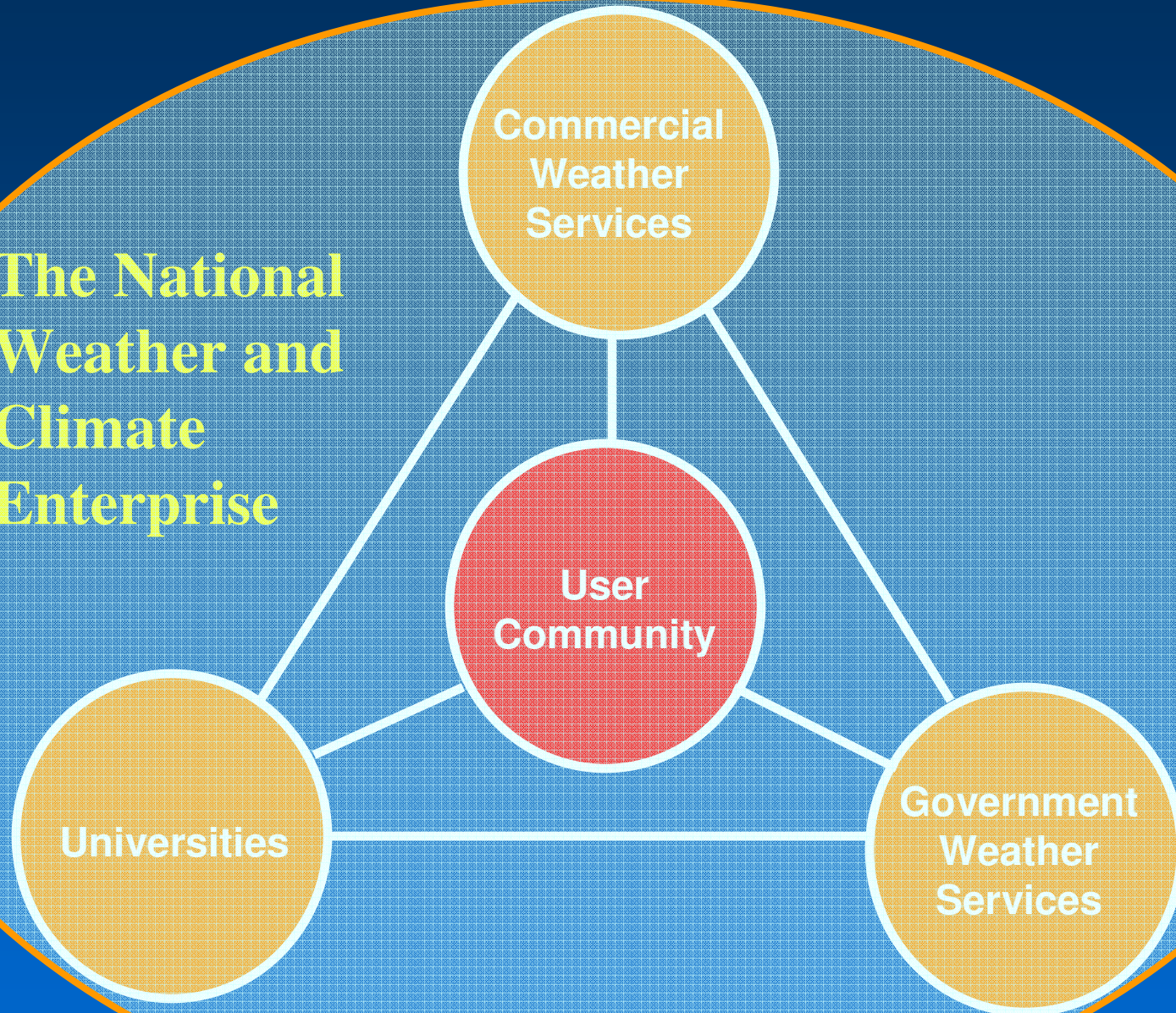
**Update
September 2009**



Terms of Reference

- Ad Hoc group with free and open discussion of the issues encouraged
- Committee resides under the Commissioner of the AMS Weather and Climate Enterprise Commission.
- Strategy development includes addressing potential business models, organizational structure and operating modes.
- A plan for a summit of stakeholders will be developed
- Other committees and/or working groups may be established to address specific aspects of the issue and to implement the strategy developed.
- Life of the working group indefinite but should be reviewed at least annually

The National Weather and Climate Enterprise



Members of the AMS Ad Hoc Committee on the Nationwide Network of Networks

- **Government**

- NOAA/NWS (Don Berchhoff)
- NOAA/OAR (Steve Fine)
- FHWA (Paul Pisano)
- OFCM (Sam Williamson)
- EPA (Rich Scheffe)
- AASC (Ken Crawford)

- **Private Sector**

- Vaisala (Walt Dabberdt)
- AWS (Bob Marshall)
- Accuweather (Joel Myers)
- DTN (Jim Block)

- **Academia**

- OU (Fred Carr)
- Utah (John Horel)
- NCAR (Rit Carbone)
- NC State (Len Pietrafesa)

- **AMS**

- WCEC (George Frederick)--Chair
- HQ (Gary Rasmussen)

- **Others (ex Officio)**

- Pam Emch (BEED Chair)
- Veronica Johnson (BEC Chair)
- Tim Spangler (BEP Chair)
- Joe Friday (WCEC Commissioner)

Proposed Organizational Structure of the Nationwide Network of Networks Community Activity



Volunteers for Focused Working Groups

- Jim Giraytys, Private Consultant—Organization, Architecture
- Jonathon Potter, Accuweather--Observations and Data Quality
- Bob Hammar, Climatronics--Sensors and Observations
- Tony Lupo, U. of MO—Data and standards
- Maria Pirone, Harris—Organization, Architecture
- Bill Callahan, AWS—Obs & Data Quality
- Jerold Brotzge, OU—Metadata/Testbeds
- Brent Shaw, WDT—NWP, Metsats, Architecture
- Garry Schaefer, DA/RWWC—Obs, Metadata, standards
- Joe Friday, OU—IP, Proprietary Data Procedures
- John Lasley, SAIC, Measurements and Observations
- John Horel, Utah, Architecture and Metadata
- Bob Pasken, SLU, Regional networks

Architecture WG

- Working Group
 - Chair
 - Members
- Tasks
 - Overall NoN Architecture Options
 - Data Collection/Communication
 - Network Catalog
 - Database and archive issues
 - Real-time access procedures
 - Online data availability
 - Network Security
 - Quality Control
 - Proprietary Data handling

Metadata Policy WG

- Working Group
 - Chair
 - Members
- Tasks
 - Metadata Template
 - Standards Recommended for
 - Surface Data Networks
 - Subsurface Data Networks
 - Upper Air Data Networks
 - Ocean, Marine, Coastal Data Networks

Organization/Business Models WG

- Working Group
 - Chair
 - Members
- Tasks
 - NoN Management Structure
 - Concept of Operations
 - Charter
 - Business Model Options
 - Develop Business Model options
 - Pilot Tests of selected Business Models
 - Establish Proprietary Data Procedure options

R&D/Testbeds WG

- Working Group
 - Chair
 - Members
- Tasks
 - NoN R&D Needs
 - Testbed design/architecture

Measurements and Infrastructure WG

- Working Group
 - Chair
 - Members
- Tasks
 - Identify current capability
 - Identify requirements
 - Identify Gaps between current capability and requirements
 - Lower troposphere (boundary layer)
 - Atmospheric pollutants
 - Soil Moisture and Subsurface temperatures
 - Scanning remote sensors
 - Metsats
 - Road weather
 - Ocean, Marine, Coastal
 - Recommend path forward

Human Dimension WG

- Working Group
 - Chair
 - Members
- Tasks
 - Design methods for assessment and quantification of the economic value of NoN data to users
 - Develop methods to communicate this information to Congress, Government agencies and the public
 - Identify Training and Outreach opportunities for current and new NoN users
 - Identify ways to broaden uses of data beyond traditional weather and climate users

Venues & Outreach

- **Venues** for the topic discussions have a variety of formats-
 - **Workshops**
 - **Special Symposia**
 - **Conference Sessions**
 - **Web casts**
- **Outreach** activities to help identify user needs and promote the capabilities of the meteorological community include-
 - **Sponsoring corporate fora**
 - **Promoting support & services to weather sensitive industries**
 - **Advertising at tradeshow**
 - **Fostering favorable policies & procedures**
- Establishing a more **prominent web presence** for internal communication within the community on topics of interest, outcome of workshops, and other Commission activities.

Ongoing & Future Activities

- Current/Recent—
 - First WG Meeting—PPP Forum, April 2009
 - Second WG Meeting—Telecon, June 2009
 - Summer Community Meeting—August 2009
- Future
 - Form Working Groups—Fall 2009
 - Telecons—Fall 2009
 - Town Hall Meeting—Annual Meeting Atlanta, January 2010
 - Telecons/Webex—Spring 2010
 - PPP Forum—April 2010
 - Summer Community Meeting—Summer 2010
 - “Summit”--?????

Discussion

Feel free to contact me at any time at:

George Frederick

george.frederick@vaisala.com

falconsultants@aol.com

Phone 512-864-1784

Mobile 512-656-9411

