**Comments from The Weather Company**

**Regarding**

**The National Weather Service Proposed Service Changes towards**

**Enhanced Impact-Based Decision Support Services for the Emergency Management Community Supporting Events/Incidents Impacting Safety of Life and Property**

**23 September 2013**

As a general matter, The Weather Company (TWC) encourages and supports the National Weather Service (NWS) in efforts to modernize and adapt its services portfolio to meet an evolving set of needs for the nation. It is critical that the NWS continuously explore new vehicles which can help serve its core mission. We remain proud partners of the NWS in helping to accomplish this mission and look forward to continuing to work together and with the overall Weather Enterprise towards building a weather-ready nation.

The core of the proposed Service Description (http://www.nws.noaa.gov/sp/idss_sdd_emc.pdf) is the creation of a new impact-based NWS services designed and tailored specifically for the Emergency Management community. The Emergency Management community (defined as emergency management practitioners, community leaders, and government officials who must collectively understand and assess the needs of their respective communities) is one of the constituents that the NWS has identified as a "core partner" singled out for special consideration in the NWS strategic roadmap. This community is an essential component of the national preparedness system mandated in Presidential Policy. The new services proposed by the NWS consist of (i) direct, interactive decision making support perhaps often as one-on-one weather consultation with decision makers, (ii) coordination support during high-impact events generally in the form of weather briefings to broader and extended members of this community, and (iii) the tailoring and provisioning of more routine weather and forecast products to meet the needs of this community.

TWC agrees with the NWS that the Emergency Management Community is a critical entity that helps ensure the safety and security of the nation in the face of threatening weather. We also agree that this community should be provided with the best possible weather information to enable optimal decision-making with regard to how our communities prepare for, respond to and rebound from weather. We agree that the NWS has the capability to create and deliver appropriate services for this nation. We further agree that ensuring that this community's weather needs are optimally met is and should remain a core mission of the NWS. Therefore, we generally agree and support the goals of the proposed NWS new services.

However, we have the following concerns with the proposed services as described, and strongly encourage the NWS to consider these concerns before implementation:

1. The policy assumes that all services will be provided exclusively by the NWS. There does not appear to be an allowance for the NWS engaging with, making use of, or otherwise relying on services and assistance from the broader Weather Enterprise in the creation and delivery of the services. In many ways, the weather industry already has created identical

and/or similar services that serve this and many other communities, and often does so in a manner that meets or exceeds the needs of the intended users. We believe that the NWS should consider how it can rely on these established services from private industry, or how it can engage with the private sector to create new services where existing services do not already exist, before it unilaterally creates new services to meet the need. We believe that doing so can result in services that are of higher quality, delivered more quickly, and at lower net cost to the nation. Further, in this time of significant budget constraints, it is imperative that the NWS consider new models for delivering on its core mission that do not require the creation of new government-created solutions, but rather rely on the broader community for the execution against that mission. Such an approach would be consistent with many of the themes called for in the recent National Academies "Second to None" report on modernizing the NWS. Further, taking such an approach would not necessarily preclude NWS weather from being the core message delivered to the community as we recognize that unified and consistent information delivered across all member of the community is fundamental to optimal emergency response. Rather, the private sector can and would make use of NWS information in provisioning of the services but would tailor or deliver the information in a manner way that optimizes its use by the decision makers.

2. The proposed services are directed at the Emergency Management Community but provide for these services to be delivered to a broader community of users in somewhat of an ad hoc manner. We believe that having unclear bounds on the dissemination and use of the proposed services can possibly open the door to further expansion of NWS services into industries and communities already served by the private sector. This can be seen as a slippery slope towards eroding the roles of the various sectors of the Weather Enterprise, an Enterprise that has given rise to this nation enjoying the world's best weather services. This would be a setback to the nation and inconsistent with the spirit of The Fair Weather Report that has guided the character of the Enterprise. We believe the NWS should (a) more explicitly define the bounds of these services and ensure that services are limited only to the intended community, (b) ensure that the Emergency Management Community is not enabled to distribute these services to communities and clients that otherwise receive similar services from the private sector and (c) explicitly state that the creation of these services is not intended and will not interfere with services that are or reasonably can be supplied by the private sector.

3. We believe that the core mission of the NWS is the creation of foundational weather information. We are concerned that a general NWS policy of creating new and/or expanded weather content and delivery services, of which the proposed services are an example, has the potential to erode the ability of the NWS to deliver world-class foundational datasets, particularly within the backdrop of shrinking federal budgets. While the costs of executing the proposed services are unclear, it is certain that those costs are not zero, and therefore must come at the expense of other NWS services. Hence, creation and execution of programs such as the proposed can indirectly lead to a reduction in the quality of the foundational data, and therefore undermine the ability of the NWS to deliver on its core mission for all users. Therefore, as in (1) above, we strongly encourage the NWS to consider alternative models for

serving this need, and in particular one that minimizes costs against the NWS budget while preserving its ability to create, deliver and modernize its established foundational weather products.

Again, we strongly support the NWS in recognizing the weather needs of the Emergency Management Community and seeking solutions to fulfill those needs. However, we believe that the proposed approach to create and deliver services to meet these needs may not be the most effective or efficient means to do so, and that alternative approaches which leverage the abilities of the private sector must be considered.

The Weather Company

Correspondence regarding these comments can be directed to Dr. Peter Neilley at [redacted]

Feedback on:

**National Weather Service (NWS) Service Description Document (SDD)**
**May 2013**
**Proposed Enhanced Impact-Based Decision Support Services for the Emergency Management Community Supporting Events/Incidents Impacting Safety of Life and Property**

Earth Networks strongly supports the Weather Ready Nation initiative and is both a partner of and advocate for NOAA and the National Weather Service. To this end, we believe that a greater emphasis on public-private partnerships for meeting the weather needs of our nation will facilitate a higher level of readiness by leveraging; the respective strengths of the weather community's sectors, existing partnerships and business relationships, as well as new technologies and capabilities that facilitate rapid transition of research to operations. For many years, the commercial weather industry has partnered with and delivered services to the emergency management community and all sectors of the US economy in support of their widely varying missions and business objectives These relationships have resulted in numerous benefits to the broader weather enterprise including the proliferation of mesonet observing stations and other capabilities that are subsequently utilized by the National Weather Service and others for enhanced situational awareness, improved flood forecasting, more data for numerical weather prediction assimilation, advancements in dispersion modeling and broadened research initiatives.

For this policy to be effective the NWS must take into account and respect the commercial weather enterprise relationships, solutions and services currently in-place and delivered to the emergency management community. As such, clear definitions and lines of communication must be identified and established relative to services provided and under what conditions so that investments in products and services can be properly made and sustained. For many years, the private sector has invested heavily in and developed extensive two-way relationships throughout the first responder community. Disruption of these associations and interdependencies could have profound effects on weather industry jobs and levels of support delivered to critical sectors of our economy and the general public. Additionally, given the ever more challenging federal fiscal environment it is necessary that the strengths and capabilities of all sectors be utilized most efficiently and effectively for this to be of maximum benefit to the country.

Earth Networks respectfully submits the following comments relative to the Service Description Document (SDD) for enhanced Impact-based Decision Support Services (IDSS) to the emergency management community.

## 1. Who Will be Supported

The SDD/IDSS describes core partners (and includes a reference to NWSI 1-1003) as:

*public safety officials who serve as employees or contract agents of a government agency at the federal, state, local, or tribal level and are charged with protecting the public from hazards that are influenced by weather or weather-related events. Other members of this community include: safety and emergency personnel, from universities or other large entities with large populations whose roles are functionally equivalent to the public safety officials.*

The document goes on to state that:

*IDSS for the emergency management community includes entities that may be engaged to resource any NRF-identified Emergency Support Functions (ESF)*[3].

Whereas ESF functions are listed as:

[3] *These emergency support functions, as defined by FEMA's National Response Framework, include transportation, communication, public works and engineering, firefighting, information and planning, logistics management, public health and medical services, search and rescue, oil and hazardous materials response, agriculture and natural resources, energy, public safety and security, long-term community recovery, and external affairs.*

Comments:

- This definition, particularly given the yellow highlighted areas effectively covers nearly every major sector of the US economy. How can the NWS commit to delivering tailored services to such a broad and diverse user base given limited funding?
- The commercial sector of the American Weather Enterprise has for many years maintained strong and deep relationships across the US economy based on a thorough understanding of respective user operations and sensitivities to widely varying weather phenomena. This has resulted in the creation of a robust market and many jobs that deliver products and services to industries with the capacity and willingness to pay for such support. This policy in its current form is a significant threat to that paradigm and requires further thought leadership and modification.

**2. Type of Support Provided:**

The SDD/IDSS contains the following statement:

*Type 1 – Direct, interactive, support for members of the emergency management community. This type of support requires a high level of interaction between the decision-maker and NWS staff, to ensure safety of lives and property and is the most resource intensive service for NWS. NWS will provide this support for all members of the emergency management community, as described above.*

*At times, NWS may be asked to provide services to additional entities that don't fall under the description of emergency management community, above, but whose capacity to operate immediately impacts public safety (e.g., hospital staff, public utilities). Within the context of the Incident Command System (e.g., an Emergency Operations Center), these services will be provided to all who are related to any of the defined ESFs that make up a community response to an event/incident where lives or property are at risk. Requests to NWS for direct services for these entities, outside the context of the Incident Command System (ICS) will be addressed in partnership with a cognizant member of the emergency management community (as described above).*

Comments:

- This further indicates that the NWS will provide direct support beyond the emergency management community to essentially all organizations across the US economy.

- With limited resources, how will the NWS prioritize which events and users will be supported and not deliver duplicative services already provided the commercial weather providers?
- As mentioned previously, the commercial sector of the American Weather Enterprise has for many years maintained strong and deep relationships across the US economy based on a thorough understanding of respective user operations and sensitivities to widely varying weather phenomena. This has resulted in the creation of a robust market and many jobs that deliver products and services to industries with the capacity and willingness to pay for such support. This policy in its current form is a significant threat to that paradigm and requires further thought leadership and modification.

**3. Type of Support Provided:**

Given the above universe of users covered by the SDD/IDSS, as well as the document's reference to the NWS's ongoing WRN Pilot Projects (http://weather.gov/com/weatherreadynation/files/WRN_Pilot_Projects_Final.pdf), significant additional concerns regarding the types of events and users the NWS will provide support to is introduced by the examples of events highlighted:

*Mardi Gras, Navy Week, and the Final Four Basketball Tournament (New Orleans, LA). In all these cases, large numbers of people were exposed to the elements, and ERS were able to provide timely and accurate information about weather threats to help ensure safety.*

Comments:

- To this end, is it envisioned then that the NWS will provide support to all entities when and where gatherings of large numbers of people are expected?
- Extrapolating from the above examples this could mean; all football games from the NFL down to the NCAA as well as high school and youth games…as well as all other professional, collegiate and youth sporting events across our nation where people gather literally every day of the week and at all times of the day.
- How will the NWS support this number of events which often occur simultaneously?
- How will the NWS provide the level of support currently provided by the commercial weather providers to such events including tailored forecasts and lightning proximity alerts for example for each venue?
- The commercial weather sector does this today and this policy will create confusion among all involved as well as potentially disrupt existing relationships and levels of support.
- Doing so will likely create a dependence on the NWS for such support of more routine (non-life threatening) conditions on a routine basis …something the NWS is neither resourced for nor tasked to do by Congress.
- Such support levels will negatively affect the existing relationship and lines of communications that the commercial weather service providers have developed with both EM organizations as well as end users.
- As stated previously, the commercial sector maintains strong and deep relationships across the US economy based on a thorough understanding of respective user operations and sensitivities to widely varying weather phenomena. This has resulted in the creation of a robust market and many jobs that deliver products and services to industries with the capacity and willingness to

pay for such support. This policy in its current form is a significant threat to that paradigm and requires further thought leadership and modification.

**4. Type of Support Provided:**

The SDD/IDSS contains the following statement:

*NWS aims to provide an equitable level of support to all such entities in the group described in Section B. However, local office management will have the discretion to evaluate resources to determine how to most effectively support multiple requests for support, especially during large-scale events with wide-spread impact.*

Comments:

- Without clearer definitions of whom and what types of activities (thresholds, etc.) will be supported the above offers the potential to create confusion among the both commercial weather industry providers and end-users/customers.
- The existing relationships for such support between commercial weather providers and end users is well established and backed by service level agreements…this policy will create confusion and uncertainty relative to who is providing what to whom and when.

**5. Type of Support Provided:**

The SDD/IDSS contains the following statement:

*NWS Impact-based Decision Support Services will be provided to support decision making by the emergency management community before, during, and after events and incidents which are caused by or impacted by conditions for which NWS provides information services.*

Comments:

- Per the above discussion relative to the number of potential customers and events that the NWS will be supporting and the above statement indicating services will be provided before, during and after events, how will the NWS resource the effort required to deliver services during these undefined time periods?
- Does this mean that the NWS will be delivering regular/routine support to specific venues that are tailored to customer needs for an indeterminate time leading up to, during and after events?
- Again, these tailored services are clearly in the domain of the commercial weather enterprise and such nebulous statements will result in confusion among the customers and service providers.

**6. Type of Support Provided:**

The SDD/IDSS contains the following statement:

*NWS recognizes that our partners in America's Weather Industry may also provide specialized weather support to the emergency management community. NWS personnel will work with the firms from America's Weather Industry chosen by members of the emergency management community to provide an appropriate level of decision support services to ensure the protection of life and property.*

Comments:

- This statement is rather superficial and not representative of the long history the commercial weather industry maintains for provision of highly tailor services to the many sectors of the US economy.
- The statement is also very open ended and will be a source of confusion for both the commercial weather industry attempting to market and deliver services as well as for end users who require highly tailored support for a large variety of situations with varying thresholds, including routine weather support. Specifically, how will the NWS coordinate with existing commercial sector weather providers and ensure that the NWS is not providing duplicative services to that of the private sector?

**7. Request for Type 1 Support**

The SDD/IDSS contains the following statement:

***Step 1- Current IDSS Customers***
*NWS offices have a long history of providing mission-critical decision support services to the emergency management community in their area of responsibility. These well-established IDSS relationships with existing members of the emergency management community should be documented by the NWS office providing the support, but do not require a new request to continue Type 1 IDSS service.*

Comments:

- These documented relationships should be made public so that the commercial weather providers are clearly informed relative to who is being serviced by the NWS and to what extent.
- This level of transparency is necessary to ensure the SDD/IDSS policy is being properly implemented and managed according to the provision laid out therein.

**AccuWeather, Inc., through Barry Lee Myers, its Chief Executive Officer, and on behalf of itself and its subsidiary and affiliated companies (including but not limited to companies commonly referred to as AccuWeather International, AccuWeather.com, AccuWeather Sales & Services, AccuWeather Enterprise Solutions, MWX, and LocatorCentric Companies – collectively "AccuWeather") hereby formally submits comments to the National Weather Service (NWS) Service Description Document (SDD) of May 2013, "Proposed Enhanced Impact-Based Decision Support Services for the Emergency Management Community Supporting Events/Incidents Impacting Safety of Life and Property ("SDD policy")**

**September 23, 2013.**

## Executive Summary

AccuWeather employs people in State College, PA; Wichita, KS; New York City, NY; and a number of other cities and states throughout the nation. It serves a number of American's often estimated in the 100-150 million range and hundreds of millions of others throughout the world. It is the leading weather company brand in the world.

It is estimated that in 2013 its weather apps and weather web and mobile sites will be accessible to most smart mobile devices in the world – measured at the billion level.

Its public and business services account for saving countless lives and extensive property values in the United States and around the globe.

The brand is known on every continent and has business arrangements with diverse government and science agencies such as the European Center for Medium Range Forecasting and the Chinese government meteorological agencies.

Directly it accounts for about 400 jobs and indirectly – from app builders and quality control professionals at major device builders and technologists at communications companies – for thousands of American jobs.

Cases of direct warning to local, state and federal government, to the public and business are legion – leading to the direct saving of lives in America and elsewhere.

For just two limited examples, AccuWeather was singled out in the congressional report following Hurricane Katrina for its superb job in providing early warning (AccuWeather predicted days in advance the flooding of the city) and other examples such as the emergency warning to a Caterpillar company manufacturing plant in Oxford, Mississippi that saved 88 lives.

Accordingly, AccuWeather is concerned that government policies support the vital partnership between (not just AccuWeather, but also other companies similarly situated) America's Weather Industry (AWI) and NOAA's NWS. This is essential to preserve and

grow American jobs and also to ensure that the joint private/public efforts are the force protecting the nation, not just NWS activities alone or in isolation.

The National Weather Service (NWS) Service Description Document (SDD) of May 2013, "Proposed Enhanced Impact-Based Decision Support Services for the Emergency Management Community Supporting Events/Incidents Impacting Safety of Life and Property [See http://weather.gov/sp/idss_sdd_emc.pdf ] raises substantial issues relative to the roles of the government and those of AWI as already established in other policies and programs and as needed to preserve and continue the growth referred to above. [See, for example, the policy regarding support of venues in contrast to the SDD proposal. http://www.nws.noaa.gov/directives/sym/pd01018006curr.pdf ].

Among the concerning issues are:

- This proposed policy would result in a serious degradation of the core services that the NWS currently provides, and at the most critical time of imminent danger, to the detriment of public safety and economic well-being of the nation referred to above;

- This proposed policy would lead to a lack of consistency and unequal treatment of various agencies, institutions, and even for-profit companies and could create sufficient confusion to actually decrease appropriate preparation and response to severe weather events;

- The proposed policy has a feel and flavor that only NWS can do what is needed in dealing with vulnerability to extreme weather-dependent impacts. Indeed the policy appears to break ground in new mission areas for the agency at a time of stretched resources and some difficulties providing foundational data sets, and is aimed at impacts and agencies, rather than better science, data and information distribution, and warnings.

- The proposed policy creates the concept of "interpretative services" yet this is not an area of core competency or skills and training of the agency, nor should it be." Shifting resources from enabling better science and warnings to social science areas such as "interpretative services" raises the issue of a need for a broader look at the purpose of the agency in general.

- This proposed policy results in significant undue expansion of the government into roles and jobs currently served by the weather industry. Much progress has been made in recent years in the relationship between NWS and AWI, to the ultimate benefit of the public safety and the economy of the nation. This proposed policy may result in a significant step away from the strong and helpful relationships developed in recent years between NWS, NOAA, and AWI and back to a time of division and lack of unity and mutual support. This is a consequence to be avoided. If implemented, this proposed policy, holds the

promise of bringing significant and substantial adverse consequences which we believe are unintended by the SDD's framers.

These and additional issues with this SDD are discussed below.

## Detailed Comments

### 1. Lack of Consistency with Established Weather Enterprise Policy Trends

This proposed policy represents expansion into areas currently served by AWI and which at the same time will degrade NWS and weather enterprise service to the nation as a whole.

This proposed policy goes in the opposite direction of what has been written into various policy directives, such as that on NWS Support for Special Events [See http://www.nws.noaa.gov/directives/sym/pd01018006curr.pdf ] and Weather-Ready Nation [See http://www.nws.noaa.gov/com/weatherreadynation/#.UhQ-BH-wVfs ].

In addition, the policy proposes that the NWS provide Impact-Based Decision Support Services to a large and expanding group of stakeholders within a very broadened view of the emergency management community (EMC), which is inconsistent with existing NWS policy with regard to the definition of an NWS "core partner" and "a member of the emergency management community" found within Appendix A of National Weather Service Instruction 01-1003 [See http://www.nws.noaa.gov/directives/sym/pd00110003curr.pdf].

In contrast to the proposed policy detailed in the SDD, those policies more fully recognized the role of AWI and the benefits that a vital partnership between the NWS and AWI brings.

The policy proposed in this SDD is contrary to the NWS Weather-Ready Nation Roadmap released this past April [See http://www.nws.noaa.gov/com/weatherreadynation/files/nws_wrn_roadmap_final_april17.pdf ], which notes the importance of "Achieving cost efficiencies by leveraging … public-private partnerships across the Weather Enterprise".

### 2. SDD will Distract from Core NWS Activities and Warnings.

In this resource-strained environment (and all resource bounded environments), providing the services detailed in the SDD would shift resources and distract the NWS from the foundational products and activities it provides through public warnings, degrading these services which are critical to both its mission and to the support it receives in fulfilling its mission with and through its AWI partners.

Given that NWS believes it does not have the resources and personnel to do that which is necessary for its mission (it and others claim there is no slack or "fat" in the system), it is difficult to understand on a resource basis alone, how to justify adding tailored,

industry specific and business specific, agency specific and local services. Additionally, such activities will adversely affect AWI and the private sector job creation engine it represents. [See, for example:

http://www.washingtonpost.com/blogs/capital-weather-gang/post/national-weather-service-cutting-back-on-hiring-spending/2013/03/15/ebd98174-8d9b-11e2-9f54-f3fdd70acad2_blog.html

http://www.wsav.com/story/21212332/national-weather-service-fears-budget-cuts

http://www.localmemphis.com/news/state/story/National-Weather-Service-Fears-Proposed-Budget/QaSyjT5lkEmpRD9ZZbjC1Q.cspx

http://www.examiner.com/article/president-obama-threatening-to-cut-the-budget-of-the-national-weather-service ]

It seems clear that in the current environment, which was strained for resources even before the "sequester" brought additional budgetary constraints, any addition of services by the NWS requires a corresponding cutback in other NWS or NOAA activities. This is especially true if NWS personnel provide direct and even dedicated embedded support for specific entities.

The NWS and the NWSEO have expressed major concerns about budget cuts and not having enough resources to deliver basic services and warnings, even before providing the new and expanded services this SDD foretells : [See: http://www.hngn.com/articles/3757/20130527/noaa-blames-budget-cut-government-poor-weather-forecasts.htm ]

For example, in July of 2006, St. Louis was hit by a derecho which caused the largest power outage in its history. A second storm occurred just four days later. These storms knocked out power to an estimated 950,000 homes and businesses in Missouri and Illinois [See: http://tdworld.com/vegetation-management/after-storms ].

This cost the utility companies involved an estimated $226 million, not to mention the economic blow to the area as a whole. The mayor of St. Louis reportedly publicly criticized the National Weather Service for the lack of public warning for the first (the bigger) of the storms. Yet, as the derecho approached, it has been reported that the NWS office took the time out to made three telephone calls to the St. Louis Cardinals, devoting precious resources to a for-profit business while storm warnings to the public at large were needed.

If this is true, and it certainly would become true under the proposed policy in a plethora of instances, then one can understand how such distraction would adversely impact the public by the NWS' providing special services. One can see what greater distraction could do in time of high impact weather. At the very moment attention is needed to warning the general public of high impact events, staff are called away to give

preferences for broadly defined members of the EMC in businesses and operations, most of which are private for-profit or non-profit crowd-attracting events.

If the policy proposed in the SDD is approved, it will lead to more situations where during major weather events critical core and warning functions of NWS are endangered; functions which are valuable to the entire weather enterprise and the public.

### 3. Discrimination Issues

The SDD would, by definition, provide for special services to some entities, while discriminating against other entities. Favoritism and decision-criteria become a fairness, legal, and liability issue of major proportion and possibly leading to issues which impugn the integrity of the agency.

We only need to look at the example of Superstorm Sandy, which affected so many counties, municipalities, states and other in the EMC. The NWS could not possibly provide an on-site meteorologist for each of these entities.

How would the NWS determine which agencies will receive an on-site meteorologist and which will not? Would Nassau County, NY and Atlantic County, NJ receive embedded meteorologists, but not Suffolk County, NY and Ocean County, NJ? Would ongoing private events also receive support?

### 4. Resource Competition and Depletion

The longer the weather-event duration, the greater the resource demand on a 24/7 basis. NWS weather offices will become strained for staffing of core products (like public forecasts and warnings) and begin to compete for personnel with the very entities to which embedded meteorologists have been dispatched or assigned. This condition would lead to re-call and reassignment of meteorologists as demand grows and as personnel shifts change and at the very height of the storm conditions in many instances when such disruption will be damaging.

### 5. The SDD Acknowledges the Discrimination and Resource Competition and Depletion Issue

The SDD clearly acknowledges these problems where it states:

> "The capacity of the NWS to provide support to the emergency response community depends upon the type of IDSS provided … NWS will provide this [Type 1] support for all members of the emergency community … Support may be provided either on-site (e.g., at an ICS command location) or remotely, depending on the nature of the event/incident and available resources. … NWS aims to provide an equitable level of support to all such entities …. However, local office management will have the discretion to evaluate resources …."

Stating the issue does not cure the problem.

### 6. Reliability and Endangerment

The above issues also create a compounded issue of reliability and related safety. For example, if an EMC member receives approval for Type 1 service, it will have to make planning choices. The best emergency plans have reliability as a central factor. So it will need to assume NWS support or no NWS support (there may also be more complex and compound plans based on periodic support or withdrawal of NWS support at inopportune times). There will be a lack of certainty whether it will either need to contract with a company from AWI or choose to forego such arrangements assuming NWS support. If the NWS expected support in the plan does not materialize in the way, at the time, or in the manner expected, the emergency manager will be left "bare" and unsupported, and with no weather industry support in place.

What will happen in a major severe weather event, when more Type 1 emergency managers than the NWS can adequately serve with on-site or custom services have designed their activities based upon receiving that support – a level of support that the NWS cannot possibly provide. Will the constraints on NWS support, after it has been promised, be the direct cause of additional deaths, injuries and property damage than would have occurred had the emergency manager not relied on NWS services that could not possibly be delivered?

Keep in mind that emergency managers, both in government and in the private sector routinely contract with AWI for support. They usually have plans based on practiced and tiered responses, they can customize the support they need, and the meteorologist(s) location and his or her related tools, and be prepared to operationalize a well-practiced plan on committed resources. Between a weather industry supplier and an emergency manager customer the NWS statement above: "Support *may* be provided . . . ." does not exist. Certainty is assured.

### 7. Possible Confusion Caused By Periodic NWS Intervention with Weather Industry Customers

In cases where an entity is supported by services from AWI and the NWS intervenes to supply the same or different services, conflicts may arise between the forecasts and counsel offered by the NWS and those provided by the AWI supplier. Although the SDD states that "NWS personnel will work with the firms from America's Weather Industry chosen by members of the emergency management community to provide an appropriate level of decision support services to ensure the protection of life and property," given that AWI's function is to provide customized services to individual entities, that it is staffed to handle this situation, and that it already has access to and in fact is the distributor for NWS forecasts, warnings, and other emergency bulletins, the

likelihood is that these conflicts will cause confusion and lack of appropriate action, rather than being of benefit.

There also is no protocol for NWS personnel to work with AWI suppliers in emergency situations and to train the NWS personnel on the processes, procedures, techniques and plans of the numerous AWI supplier(s). And at the very time of crisis, such attempt for the NWS personnel to intervene and understand what is going on would seem a distraction and the worst of all times to "work with the firms from America's Weather Industry . . . ."

**8. Failure of Transparency and Environment of Arbitrariness in the SDD policy**

There is no mechanism for transparency in the NWS actions or decisions. Under the SDD, the NWS will determine which entities qualify for the different levels of support and, in those cases where there is disagreement as to whether an entity qualifies; the NWS is also the sole arbiter. The environment for lack of consistency from one WFO to another and the possibility of favoritism and failure to meet the legal standard of not being "arbitrary, capricious and unreasonable" in making such determinations appears to loom large in these situations.

**9. Definition of the Emergency Management Community from a government service point of view Stretches Credulity.**

In the proposed policy, the EMC has been defined very broadly - far beyond federal, state, local and tribal Emergency Managers working directly for a government agency to include any entity with a FEMA National Response Framework Emergency Support Function, which could include for-profit business entities in transportation, communication, logistics management, energy, etc. - all verticals served by AWI and generally agreed to be outside the scope of NWS activities.

The entire proposed policy described in the SDD is broad and leaves much to the discretion and imagination of individual NWS offices. Type 1 NWS support under the terms of the SDD can be expanded without apparent limit ("…NWS may be asked to provide services to additional entities … whose capacity to operate immediately impacts public safety …"). Such local discretion is the problem area NWS came from in the past few decades, not one it wasn't to be going back to.

Type 2 participants, as defined in the SDD, could include any entity as long as someone at an EMA says it should be included.

There should be some other procedures in place that are less susceptible to favoritism and/or variable criteria. And, it also seems, at a minimum, there should be substantial and highly unique limits in the ability of business operations, whether profit or non-profit run, to qualify for this type of decision support.

Take for example just the one statement that NWS wants to support "universities and other large entities. . . ." There are thousands of colleges and universities in the country and over a hundred thousand school buildings. There are even more "large entities." What group(s) does NWS want to support and where does this definition go? Essentially a federal agency is stating it intends to intervene at the local government level, at the institution level, at the for-profit and non-profit level.

It seems to therefore also imply it will pick winners and losers in the game of vying for NWS services.

Such is unsustainable and inappropriate.

**10. Interpretative Services is a core competency of AWI**

The proposed policy creates the concept of "interpretative services" yet this is not an area of core competency or skills and training of the agency, nor should it be."

Interpretative services are skills relating to communication expertise and are a special development of AWI and the weather media in relating weather science to understanding and action. It also has to do with how to arrange for the communication and dispersion of an actionable message in an organization of 10 people, 100 people, a 1000 people or organizations that are just employees, a mix of employees and customers, a stadium full of people, etc. "Whispering down the lane" is one of many challenges in this communications and action oriented field.

Shifting resources from enabling better science and warnings to social science and organizational behavior areas such as "interpretative services" raises the issue of a need for a broader look at the purpose of the agency in general.

**11. Enabled Customized NWS Services Are Antithetical to Current Operating Understandings in the Weather Enterprise**

Section E regarding "Presentation Format" is troubling in that it assures that the NWS will provide information in custom formats as determined by each member of the emergency management community; may use new forms and formats of services and delivery mechanisms, and will be familiar with users' needs.

Custom products and especially those created on the fly create serious concerns regarding integrity, consistency, quality, understandability, usability and transparency and distribution.

It is unclear how all of these custom products will be made available in real time to the weather industry, the media, and non-favored entities, through established distribution channels in real time. This also is an aspect of transparency. For example if an

embedded meteorologist informs the New York City emergency management office of a flood inundation level of a certain height and later the inundations surpass that level, how will the AWI and the media know what was predicted in real time by the embedded meteorologist.

And there is a likelihood that at times the deployed NWS meteorologist would act as a “lone ranger”, rather than consistently following the message from the NWS office. This is an ever present danger.

The idea that an on-site meteorologist would make a different forecast that the official forecast, do it on the fly, and with limited consultation, and communicated in a similar loose way with little or no documentation goes against the whole concept of a procedure and policy manual on which NOAA and NWS is based.

And without such documentation we would have “secret” forecasts as the basis for life and death decisions.

These situations lead to an agency no speaking with a single voice.

Additionally, NWS manuals and policies have strict requirements in the use of words to avoid confusion. We need to look only to the command decision to stop calling Sandy a hurricane and the concern that caused to understand the confusion the could be caused by dozens of NWS embedded meteorologists in the field using imprecise words on site to advise in decision making.

The NWS offices are configured as command centers for uniform public distribution of critical warnings to the public in consistent formats and messaging under strict policies to government agencies.

The agency is not, and we believe, should not, attempt to reconfigure itself to a dispersed external agency configuration in a one-off, event-driven basis.

If the agency wants to change its structure from command center to dispersed, dispatched, meteorologists, then a much larger discussion seems in order relative to the concept of the agency itself, its needs, budgets, personnel, etc.

### 12. Overall Failure of the SDD to Properly Consider the Roles in the Weather Enterprise and Endanger Private Sector Jobs

Although AWI is mentioned in one section of the document, the complete role of America’s Weather Industry in providing decision support directly to emergency managers and the broader range of users defined in the document is not well or appropriately understood or articulated in the proposed policy, which causes a failure in understanding how to better assist these people in partnership with AWI.

Additionally, the SDD is overly broad and could therefore be used to justify custom forecasts and on-site NWS meteorologists for nearly any public event, gathering, institution or entity.

At a minimum, any NWS policy on the provision of these levels of service such as those envisioned in the SDD, should be limited to government EMAs and to extreme imminent, life-threatening events.

Another concern with the SDD is that it proposes increased competition from the NWS with taxpaying businesses and endangers jobs in the private sector.

The fact that large numbers of entities appear to be turning to the weather industry, even during weak economic times, indicates that AWI products and services are existent and robust in these area. Nevertheless, "free" subsidized government services has a considerable level of appeal to those who do not understand the roles of the AWI and the NWS, and as happened in Canada two decades ago, the AWI and the public and individual choice could be severely and negatively impacted.

The NWS and AWI have reached an understanding as to their respective roles, and this has led to each being able to support the other, to the benefit of the nation. This SDD seems to expand the NWS role well beyond the current demarcation, an expansion that does not seem justified by any change in circumstances and which the NWS would find difficult to carry out without adversely impacting its core services at times when they are most needed and without adversely impacting AWI and the EMA community it is trying to help..

Accordingly, for all the reasons detailed above, we are strongly opposed to the proposed policy presented in this SDD.

END

Wendy Levine - NOAA Federal <wendy.levine@noaa.gov>

# IDSS EMC

1 message

**Steve Root | WeatherBank, Inc.** [redacted] Mon, Sep 23, 2013 at 7:34 PM
To: nws.idss.comments@noaa.gov
[redacted]

To Whom it may Concern;

I believe this SDD raises substantial issues relative to the roles of the government and those of America's Weather Industry as already established in other policies and programs. Among the many concerning issues are:

- This proposed policy would result in a serious degradation of the core services that the National Weather Service (NWS) currently provides, and at the most critical time of imminent danger, to the detriment of public safety and economic well-being;
- This proposed policy would lead to a lack of consistency and unequal treatment of various agencies, institutions and even for-profit companies and could create sufficient confusion to actually decrease appropriate preparation and response to severe weather events;
- The proposed policy has a feel and flavor that only NWS can do what is needed in dealing with vulnerability to extreme weather-dependent impacts, and seems to break new mission areas for the agency at a time of stretched resources, and dealing with impacts and agencies, rather than better science and warnings.
- The proposed policy creates the concept of "interpretative services" yet there is little evidence that NWS has core competency or the skills and training related to "interpretative services." Shifting resources from enabling better science and warnings to social science areas raises the issue of a need for a broader look at the purpose of the agency in general.
- This proposed policy results in significant undue expansion of the government into roles currently served by the weather industry, which do include "interpretative services." Tremendous progress has been made in recent years in the relationship between the NWS and America's Weather Industry to the ultimate benefit of the public safety and the economy of the nation. This proposed policy may result in significant departure away from the strong and helpful relationships developed in recent years with AWI and back to a time of division and lack of unity and mutual support. This is a consequence to be avoided. If implemented, this proposed policy, holds the promise of bringing significant and substantial adverse consequences which we believe are unintended by the SDD's framers.

Attached please find comments relative to the above on behalf of the National Council of Industrial Meteorologists (NCIM).

Best,
Steve

---

Steven A. Root, CCM
***President***
***National Council of Industrial Meteorologists***

AMS Fellow Meteorologist
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[redacted]

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**2 attachments**

**Steven A. Root.vcf**
1K

**NWS-SDD-Policy-Comments-NCIM-092313.pdf**
350K

**An Association of Private Sector Meteorologists**

**National Council of Industrial Meteorologists, through Steven A. Root, CCM, its President, formally submits comments and objections to the proposed SDD policy.**
**September 23, 2013.**

---

## Executive Summary

The National Weather Service (NWS) Service Description Document (SDD) of May 2013, "Proposed Enhanced Impact-Based Decision Support Services for the Emergency Management Community Supporting Events/Incidents Impacting Safety of Life and Property [See http://weather.gov/sp/idss_sdd_emc.pdf ] raises substantial issues relative to the roles of the government and those of America's Weather Industry as already established in other policies and programs [See, for example, the policy regarding support of venues in contrast to the SDD proposal. http://www.nws.noaa.gov/directives/sym/pd01018006curr.pdf ].

Among the many concerning issues are:

- This proposed policy would result in a serious degradation of the core services that the National Weather Service (NWS) currently provides, and at the most critical time of imminent danger, to the detriment of public safety and economic well-being;

- This proposed policy would lead to a lack of consistency and unequal treatment of various agencies, institutions and even for-profit companies and could create sufficient confusion to actually decrease appropriate preparation and response to severe weather events;

- The proposed policy has a feel and flavor that only NWS can do what is needed in dealing with vulnerability to extreme weather-dependent impacts. Indeed the policy appears to break new mission areas for the agency at a time of stretched resources, and dealing with impacts and agencies, rather than better science and warnings.

- The proposed policy creates the concept of "interpretative services" yet there is little evidence that NWS has core competency or the skills and training related to "interpretative services." Shifting resources from enabling better science and warnings to social science areas raises the issue of a need for a broader look at the purpose of the agency in general.

- This proposed policy results in significant undue expansion of the government into roles currently served by the weather industry, which do include "interpretative services." Much progress has been made in recent years in the relationship between the National Weather Service (NWS) and America's Weather Industry (AWI), to the ultimate benefit of the public safety and the economy of the nation. This proposed policy may result in a significant step away from the strong and helpful relationships developed in recent years with AWI and back to a time of division and lack of unity and mutual support.

This is a consequence to be avoided. If implemented, this proposed policy, holds the promise of bringing significant and substantial adverse consequences which we believe are unintended by the SDD's framers.

These and additional issues with this SDD are discussed below.

## Detailed Comments

### 1. Lack of Consistency with Established Weather Enterprise Policy Trends

This proposed policy represents expansion into areas currently served by AWI and which at the same time will degrade NWS and weather enterprise service to the nation. This proposed policy goes in the opposite direction of what has been written into various policy directives, such as that on NWS Support for Special Events [See http://www.nws.noaa.gov/directives/sym/pd01018006curr.pdf ] and Weather-Ready Nation [See http://www.nws.noaa.gov/com/weatherreadynation/#.UhQ-BH-wVfs ].

In addition, the proposed policy proposes that the NWS provide Impact-Based Decision Support Services to a larger group of stakeholders within a very broadened view of the Emergency Management Community, which is inconsistent with existing NWS Policy with regard to the definition of an NWS "core partner" and "a member of the emergency management community" found within Appendix A of National Weather Service Instruction 01-1003 [See http://www.nws.noaa.gov/directives/sym/pd00110003curr.pdf].

In contrast to the proposed policy detailed in the SDD, those policies more fully recognized the role of America's Weather Industry and the benefits that a vital partnership between the NWS and AWI brings.

The policy proposed in this SDD is contrary to the NWS Weather-Ready Nation Roadmap released this past April [See http://www.nws.noaa.gov/com/weatherreadynation/files/nws_wrn_roadmap_final_april17.pdf ], which notes the importance of "Achieving cost efficiencies by leveraging … public-private partnership's across the Weather Enterprise".

### 2. SDD will Distract Further from Core Activities and Warnings.

In this resource-strained environment (and all resource bounded environments), providing the services detailed in the SDD would shift resources and distract the NWS from the foundational products and activities it provides through public warnings, degrading these services which are critical to both its mission and to the support it receives in fulfilling its mission through its AWI partners.

Given that NWS seems to believe it does not have the resources and personnel to do what it is already doing, it is difficult to understand on a resource base alone, how to justify adding these tailored, industry specific and

business specific, agency and local services. Additionally, such activities will adversely affect AWI and the private sector job creation engine it represents. [See, for example:

http://www.washingtonpost.com/blogs/capital-weather-gang/post/national-weather-service-cutting-back-on-hiring-spending/2013/03/15/ebd98174-8d9b-11e2-9f54-f3fdd70acad2_blog.html

http://www.wsav.com/story/21212332/national-weather-service-fears-budget-cuts

http://www.localmemphis.com/news/state/story/National-Weather-Service-Fears-Proposed-Budget/QaSyjT5lkEmpRD9ZZbjC1Q.cspx

http://www.examiner.com/article/president-obama-threatening-to-cut-the-budget-of-the-national-weather-service ]

It seems clear that in the current environment, which was strained for resources even before the sequester brought additional budgetary constraints, any addition of services by the NWS requires a corresponding cutback in other NWS activities. This is especially true if NWS personnel provide direct and even dedicated embedded support for specific entities.

The NWS and the NWSEO have expressed major concerns about budget cuts and not having enough resources to deliver basic services, even before providing the new and expanded services this SDD foretells : [See:

http://www.hngn.com/articles/3757/20130527/noaa-blames-budget-cut-government-poor-weather-forecasts.htm ]

For example, in July of 2006, St. Louis was hit by a derecho which caused the largest power outage in its history. A second storm occurred just four days later. These storms knocked out power to 950,000 homes and businesses in Missouri and Illinois [See: http://tdworld.com/vegetation-management/after-storms ].

This cost the utility $226 million, not to mention the economic blow to the area as a whole. The mayor of St. Louis publicly criticized the National Weather Service for the lack of public warning for the first (the bigger) of the storms. Yet, as the derecho approached, it has been reported that the NWS office made three telephone calls to the St. Louis Cardinals, devoting precious resources to a for-profit business rather than issuing storm warnings to the public at large. If this is true then one can understand how such distraction would adversely impact the public by the NWS' providing special services. Even if this is not the case, then one can see what greater distraction could do in time of high impact weather. At the very moment attention is needed to warning the general public of high impact events, staff are called away to give preferences for business and operations, most of which are private for-profit or non-profit crowd-attracting businesses.

If the policy proposed in the SDD is approved, it will lead to more situations where during major weather events critical core functions of NWS are endangered; functions which are valuable to the entire weather enterprise and the public.

**3. Discrimination Issues**

The SDD would, by definition, provide for envisioned services to some entities, while discriminating against other entities.

We only need to look at the example of Superstorm Sandy, which affected so many counties, municipalities, states and other EMAs. The NWS could not possibly provide an on-site meteorologist for each of these entities.

How would the NWS determine which agencies will receive an on-site meteorologist and which will not? Would Nassau County, NY and Atlantic County, NJ receive embedded meteorologists, but not Suffolk County, NY and Ocean County, NJ? Would ongoing private events also receive support?

**4. Resource Competition and Depletion**

The longer the event duration, the greater the resource demand on a 24/7 basis. NWS weather offices will become strained for staffing of public forecasts and warnings and begin to compete with the very entities to which embedded meteorologists have been dispatched or assigned. This condition would lead to re-call and reassignment as demand grows and as shifts change and at the very height of the storm conditions.

**5. The SDD Acknowledges the Discrimination and Resource Competition and Depletion Issue**

The SDD clearly acknowledges these problems where it states:

> "The capacity of the NWS to provide support to the emergency response community depends upon the type of IDSS provided … NWS will provide this [Type 1] support for all members of the emergency community … Support may be provided either on-site (e.g., at an ICS command location) or remotely, depending on the nature of the event/incident and available resources. … NWS aims to provide an equitable level of support to all such entities … However, local office management will have the discretion to evaluate resources …"

**6. Reliability and Endangerment**

The above issues also create a compounded issue of reliability and related safety. For example, if an EMA receives approval for Type 1 service, it will have to make planning choices. The best emergency plans have reliability as a central factor. So it will need to assume NWS support when needed or no NWS support (there may also be more complex and compound plans based on periodic support or withdrawal of NWS support at

inopportune times). With a lack of certainty it will then either need to contract with a company from AWI or may choose to forego such arrangements assuming NWS support. If the NWS expectation in the EMA's plan does not materialize in the way, at the time, or in the manner expected, the EMA will be left "bare" and unsupported, and with no weather industry support in place.

What will happen in a major severe weather event, when more Type 1 EMAs than the NWS can adequately serve with on-site or custom services have designed their activities based upon receiving that support – a level of support that the NWS cannot possibly provide. Will the constraints on NWS support, after it has been promised, be the direct cause of additional deaths, injuries and property damage than would have occurred had the EMAs not relied on NWS services that could not possibly be delivered.

Keep in mind, that EMA's both in government and in the private sector routinely contract with AWI for support. They usually have plans based on practiced and tiered responses, they can customize the support they need, and the meteorologist(s) location and tools, and be prepared to operationalize a well-practiced plan on committed resources. Between a weather industry supplier and an EMA customer the SDD statement above: "Support *may* be provided . . . ." does not exist.

**7. Possible Confusion Caused By Periodic NWS Intervention with Weather Industry Customers**

In cases where an entity supported by services from AWI and the NWS intervenes to supply services, conflicts will arise between the forecasts and counsel offered by the NWS and those provided by the AWI supplier. Although the SDD states that "NWS personnel will work with the firms from America's Weather Industry chosen by members of the emergency management community to provide an appropriate level of decision support services to ensure the protection of life and property," given that AWI's function is to provide customized services to individual entities, that it is staffed to handle this situation, and that it already has access to and in fact is the distributor for NWS forecasts, warnings and other emergency bulletins, the likelihood is that these conflicts will cause confusion and lack of appropriate action rather than being of benefit.

There also is no protocol for NWS personnel to work with AWI suppliers in emergency situations and to train the NWS personnel on the processes, procedures, techniques and plans of the AWI supplier(s). And at the very time of crisis, such attempt for the NWS personnel to understand what is going on would seem a distraction and the worst of all times to "work with the firms from America's Weather Industry . . . ."

**8. Failure of Transparency and Environment of Arbitrariness in the SDD policy**

There is no mechanism for transparency in the NWS actions or decisions. Under the SDD, the NWS will determine which entities qualify for the different levels of support and, in those cases where there is disagreement as to whether an entity qualifies; the NWS is also the sole arbiter. The environment for lack of consistency from one WFO to another and the possibility of favoritism and failure to meet the legal standard

of not being "arbitrary, capricious and unreasonable" in making such determinations appears to loom large in these situations.

**9. Definition of the Emergency Management Community Stretches Credulity.**

In the proposed policy, the emergency management community has been defined very broadly - far beyond federal, state, local and tribal Emergency Managers working directly for a government agency to include any entity with a FEMA National Response Framework Emergency Support Function, which could include for-profit business entities in transportation, communication, logistics management, energy, etc. -all verticals served by AWI and generally agreed to be outside the scope of NWS activities.

The entire proposed policy described in the SDD is extremely broad and leaves much to the discretion of individual NWS offices. Type 1 NWS support under the terms of the SDD ("…NWS may be asked to provide services to additional entities … whose capacity to operate immediately impacts public safety …").

Type 2 participants, as defined in the SDD, could include any entity as long as someone at an EMA says it should be included. There should be some other procedure in place that is less susceptible to favoritism and/or variable criteria. And, it also seems like, at a minimum, there should be substantial and highly unique limits in the ability of business operations, whether profit or non-profit run, to qualify for this type of decision support.

Take for example just the one statement that NWS wants to support "universities and other large entities. . . ." There are thousands of colleges and universities in the country and over a hundred thousand school buildings. What group does NWS want to support and where does this definition go? Essentially a federal agency is stating it intends to intervene at the local government level, at the institution level, at the for-profit and non-profit level. Such is unsustainable and inappropriate.

**10. Enabled Customized NWS Services Cuts Against The Current Operating Understandings in the Weather Enterprise**

Section E regarding "Presentation Format" is troubling in that it assures that the NWS will provide information in custom formats as determined by each EMA; may use new forms and formats of services and delivery mechanisms, and will be familiar with users' needs. At a minimum, the specific type of products should be more clearly defined in the SDD in order to prevent significant scope creep into other areas. Custom products and especially those created on the fly create serious concerns regarding integrity, consistency, quality, understandability, usability and transparency and distribution.

It is unclear how all of these custom products will be made available in real time to the weather industry and the media on established distribution channels. This also is an aspect of transparency. For example if an embedded meteorologist informs the New York City emergency management office of a flood inundation level

of a certain height and later the inundations surpasses that level, how will the AWI and the media know what was predicted in real time by the embedded meteorologist.

And the likelihood that at times the deployed NWS meteorologist would act as a "lone ranger", rather than consistently following the message from the NWS office, is ever present. The NWS offices are configured as command centers for uniform public distribution of critical warnings to the public in consistent formats and messaging. The agency is not, and we believe, should not attempt to reconfigure itself to a dispersed external agency configuration in a one off, event driven basis. If the agency wants to change its structure from command center to dispersed, dispatched, meteorologists, then a much larger discussion seems in order relative to the concept of the agency itself, its needs, budgets, personnel, etc.

**11. Overall Failure of the SDD to Properly Consider the established Roles in the Weather Enterprise and Endanger Private Sector Jobs**

Although AWI is mentioned in one section of the document, the complete role of America's Weather Industry in providing decision support directly to Emergency Managers and the broader range of users defined in the document is not well or appropriately understood or articulated in the proposed policy, which causes a failure in understanding how to better assist the EMA community in partnership with America's Weather Industry.

Additionally, the SDD is overly broad and could therefore be used to justify custom forecasts and on-site NWS meteorologists for nearly any public event or gathering. At a minimum, any NWS policy on the provision of custom levels of service such as those envisioned in the SDD, should be limited to government EMAs and to extreme imminent, life-threatening events.

Another concern with the SDD is that it proposes increased competition from the NWS with taxpaying businesses and endangers jobs in the private sector.

The fact that record numbers of entities are turning to the weather industry, even during weak economic times, indicates that AWI products and services are what is suitable here. Nevertheless, "free" has a considerable level of appeal to those who do not understand the roles of the AWI and the NWS, and as happened in Canada two decades ago, the AWI could be severely and negatively impacted.

The NWS and AWI have reached an understanding as to their respective roles, and this has led to each being able to support the other, to the benefit of everyone. This SDD seems to expand the NWS role well beyond the current demarcation, an expansion that does not seem justified by any change in circumstances and which the NWS would find difficult to carry out without adversely impacting its core services at times when they are most needed and without adversely impacting America's Weather Industry and the EMA community it is trying to help.

An Association of Private Sector Meteorologists

Accordingly, for all the reasons detailed above, we are strongly opposed to the proposed policy presented in this SDD.

END

Wendy Levine - NOAA Federal <wendy.levine@noaa.gov>

# IDSS EMC

1 message

**Steve Root | WeatherBank, Inc.** [redacted] Mon, Sep 23, 2013 at 7:39 PM
To: nws.idss.comments@noaa.gov
Cc: [redacted]

AWCIA | American Weather and Climate Industry Association

American Weather and Climate Industry Association

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Attached please find comments relative to the above on behalf of the American Weather And

Climate Industry Association (AWCIA).

Best,
Steve

Steven A. Root, CCM
***President***
***American Weather And Climate Industry Association (AWCIA)***
AMS Fellow Meteorologist
President & CEO
WeatherBank, Inc.
1015 Waterwood Parkway, Suite J
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[redacted]

**2 attachments**

**Steven A. Root.vcf**
1K

**NWS-SDD-Policy-Comments-AWCIA-092313.pdf**
332K

AWCIA | American Weather and Climate Industry Association

American Weather and Climate Industry Association

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http://www.washingtonpost.com/blogs/capital-weather-gang/post/national-weather-service-cutting-back-on-hiring-spending/2013/03/15/ebd98174-8d9b-11e2-9f54-f3fdd70acad2_blog.html

http://www.wsav.com/story/21212332/national-weather-service-fears-budget-cuts

http://www.localmemphis.com/news/state/story/National-Weather-Service-Fears-Proposed-Budget/QaSyjT5lkEmpRD9ZZbjC1Q.cspx

http://www.examiner.com/article/president-obama-threatening-to-cut-the-budget-of-the-national-weather-service ]

It seems clear that in the current environment, which was strained for resources even before the sequester brought additional budgetary constraints, any addition of services by the NWS requires a corresponding cutback in other NWS activities. This is especially true if NWS personnel provide direct and even dedicated embedded support for specific entities.

The NWS and the NWSEO have expressed major concerns about budget cuts and not having enough resources to deliver basic services, even before providing the new and expanded services this SDD foretells : [See:

http://www.hngn.com/articles/3757/20130527/noaa-blames-budget-cut-government-poor-weather-forecasts.htm ]

For example, in July of 2006, St. Louis was hit by a derecho which caused the largest power outage in its history. A second storm occurred just four days later. These storms knocked out power to 950,000 homes and businesses in Missouri and Illinois [See: http://tdworld.com/vegetation-management/after-storms ].

This cost the utility $226 million, not to mention the economic blow to the area as a whole. The mayor of St. Louis publicly criticized the National Weather Service for the lack of public warning for the first (the bigger) of the storms. Yet, as the derecho approached, it has been reported that the NWS office made three telephone calls to the St. Louis Cardinals, devoting precious resources to a for-profit business rather than issuing storm warnings to the public at large. If this is true then one can understand how such distraction would adversely impact the public by the NWS' providing special services. Even if this is not the case, then one can see what greater distraction could do in time of high impact weather. At the very moment attention is needed to warning the general public of high impact events, staff are called away to give preferences for business and operations, most of which are private for-profit or non-profit crowd-attracting businesses.

If the policy proposed in the SDD is approved, it will lead to more situations where during major weather events critical core functions of NWS are endangered; functions which are valuable to the entire weather enterprise and the public.

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The SDD would, by definition, provide for envisioned services to some entities, while discriminating against other entities.

We only need to look at the example of Superstorm Sandy, which affected so many counties, municipalities, states and other EMAs. The NWS could not possibly provide an on-site meteorologist for each of these entities.

How would the NWS determine which agencies will receive an on-site meteorologist and which will not? Would Nassau County, NY and Atlantic County, NJ receive embedded meteorologists, but not Suffolk County, NY and Ocean County, NJ? Would ongoing private events also receive support?

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The longer the event duration, the greater the resource demand on a 24/7 basis. NWS weather offices will become strained for staffing of public forecasts and warnings and begin to compete with the very entities to which embedded meteorologists have been dispatched or assigned. This condition would lead to re-call and reassignment as demand grows and as shifts change and at the very height of the storm conditions.

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The SDD clearly acknowledges these problems where it states:

> "The capacity of the NWS to provide support to the emergency response community depends upon the type of IDSS provided … NWS will provide this [Type 1] support for all members of the emergency community … Support may be provided either on-site (e.g., at an ICS command location) or remotely, depending on the nature of the event/incident and available resources. … NWS aims to provide an equitable level of support to all such entities … However, local office management will have the discretion to evaluate resources …"

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The above issues also create a compounded issue of reliability and related safety. For example, if an EMA receives approval for Type 1 service, it will have to make planning choices. The best emergency plans have reliability as a central factor. So it will need to assume NWS support when needed or no NWS support (there may also be more complex and compound plans based on periodic support or withdrawal of NWS support at inopportune times). With a lack of certainty it will then either need to contract with a company from AWI or may choose to forego such arrangements assuming NWS support. If the NWS expectation in the EMA's plan does not materialize in the way, at the time, or in the manner expected, the EMA will be left "bare" and unsupported, and with no weather industry support in place.

What will happen in a major severe weather event, when more Type 1 EMAs than the NWS can adequately serve with on-site or custom services have designed their activities based upon receiving that support – a level of support that the NWS cannot possibly provide. Will the constraints on NWS support, after it has been promised, be the direct cause of additional deaths, injuries and property damage than would have occurred had the EMAs not relied on NWS services that could not possibly be delivered.

Keep in mind, that EMA's both in government and in the private sector routinely contract with AWI for support. They usually have plans based on practiced and tiered responses, they can customize the support they need, and the meteorologist(s) location and tools, and be prepared to operationalize a well-practiced plan on committed resources. Between a weather industry supplier and an EMA customer the SDD statement above: "Support *may* be provided . . . ." does not exist.

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In cases where an entity supported by services from AWI and the NWS intervenes to supply services, conflicts will arise between the forecasts and counsel offered by the NWS and those provided by the AWI supplier. Although the SDD states that "NWS personnel will work with the firms from America's Weather Industry chosen by members of the emergency management community to provide an appropriate level of decision support services to ensure the protection of life and property," given that AWI's function is to provide customized services to individual entities, that it is staffed to handle this situation, and that it already has access to and in fact is the distributor for NWS forecasts, warnings and other emergency bulletins, the likelihood is that these conflicts will cause confusion and lack of appropriate action rather than being of benefit.

There also is no protocol for NWS personnel to work with AWI suppliers in emergency situations and to train the NWS personnel on the processes, procedures, techniques and plans of the AWI supplier(s). And at the very time of crisis, such attempt for the NWS personnel to understand what is going on would seem a distraction and the worst of all times to "work with the firms from America's Weather Industry . . . ."

**8. Failure of Transparency and Environment of Arbitrariness in the SDD policy**

There is no mechanism for transparency in the NWS actions or decisions. Under the SDD, the NWS will determine which entities qualify for the different levels of support and, in those cases where there is disagreement as to whether an entity qualifies; the NWS is also the sole arbiter. The environment for lack of consistency from one WFO to another and the possibility of favoritism and failure to meet the legal standard of not being "arbitrary, capricious and unreasonable" in making such determinations appears to loom large in these situations.

**9. Definition of the Emergency Management Community Stretches Credulity.**

In the proposed policy, the emergency management community has been defined very broadly - far beyond federal, state, local and tribal Emergency Managers working directly for a government agency to include any entity with a FEMA National Response Framework Emergency Support Function, which could include for-profit business entities in transportation, communication, logistics management, energy, etc. -all verticals served by AWI and generally agreed to be outside the scope of NWS activities.

The entire proposed policy described in the SDD is extremely broad and leaves much to the discretion of individual NWS offices. Type 1 NWS support under the terms of the SDD ("…NWS may be asked to provide services to additional entities … whose capacity to operate immediately impacts public safety …").

Type 2 participants, as defined in the SDD, could include any entity as long as someone at an EMA says it should be included. There should be some other procedure in place that is less susceptible to favoritism and/or variable criteria. And, it also seems like, at a minimum, there should be substantial and highly unique limits in the ability of business operations, whether profit or non-profit run, to qualify for this type of decision support.

Take for example just the one statement that NWS wants to support "universities and other large entities. . . ." There are thousands of colleges and universities in the country and over a hundred thousand school buildings. What group does NWS want to support and where does this definition go? Essentially a federal agency is stating it intends to intervene at the local government level, at the institution level, at the for-profit and non-profit level. Such is unsustainable and inappropriate.

**10. Enabled Customized NWS Services Cuts Against The Current Operating Understandings in the Weather Enterprise**

Section E regarding "Presentation Format" is troubling in that it assures that the NWS will provide information in custom formats as determined by each EMA; may use new forms and formats of services and delivery mechanisms, and will be familiar with users' needs. At a minimum, the specific type of products should be more clearly defined in the SDD in order to prevent significant scope creep into other areas. Custom products and especially those created on the fly create serious concerns regarding integrity, consistency, quality, understandability, usability and transparency and distribution.

It is unclear how all of these custom products will be made available in real time to the weather industry and the media on established distribution channels. This also is an aspect of transparency. For example if an embedded meteorologist informs the New York City emergency management office of a flood inundation level of a certain height and later the inundations surpasses that level, how will the AWI and the media know what was predicted in real time by the embedded meteorologist.

And the likelihood that at times the deployed NWS meteorologist would act as a "lone ranger", rather than consistently following the message from the NWS office, is ever present. The NWS offices are configured as command centers for uniform public distribution of critical warnings to the public in consistent formats and

messaging. The agency is not, and we believe, should not attempt to reconfigure itself to a dispersed external agency configuration in a one off, event driven basis. If the agency wants to change its structure from command center to dispersed, dispatched, meteorologists, then a much larger discussion seems in order relative to the concept of the agency itself, its needs, budgets, personnel, etc.

**11. Overall Failure of the SDD to Properly Consider the established Roles in the Weather Enterprise and Endanger Private Sector Jobs**

Although AWI is mentioned in one section of the document, the complete role of America's Weather Industry in providing decision support directly to Emergency Managers and the broader range of users defined in the document is not well or appropriately understood or articulated in the proposed policy, which causes a failure in understanding how to better assist the EMA community in partnership with America's Weather Industry.

Additionally, the SDD is overly broad and could therefore be used to justify custom forecasts and on-site NWS meteorologists for nearly any public event or gathering. At a minimum, any NWS policy on the provision of custom levels of service such as those envisioned in the SDD, should be limited to government EMAs and to extreme imminent, life-threatening events.

Another concern with the SDD is that it proposes increased competition from the NWS with taxpaying businesses and endangers jobs in the private sector.

The fact that record numbers of entities are turning to the weather industry, even during weak economic times, indicates that AWI products and services are what is suitable here. Nevertheless, "free" has a considerable level of appeal to those who do not understand the roles of the AWI and the NWS, and as happened in Canada two decades ago, the AWI could be severely and negatively impacted.

The NWS and AWI have reached an understanding as to their respective roles, and this has led to each being able to support the other, to the benefit of everyone. This SDD seems to expand the NWS role well beyond the current demarcation, an expansion that does not seem justified by any change in circumstances and which the NWS would find difficult to carry out without adversely impacting its core services at times when they are most needed and without adversely impacting America's Weather Industry and the EMA community it is trying to help.

Accordingly, for all the reasons detailed above, we are strongly opposed to the proposed policy presented in this SDD.

END

Wendy Levine - NOAA Federal <wendy.levine@noaa.gov>

# IDSS EMC

1 message

**Steve Root | WeatherBank, Inc.** [redacted] Mon, Sep 23, 2013 at 7:42 PM
To: nws.idss.comments@noaa.gov
Cc: [redacted]

To Whom it may Concern;

I believe this SDD raises substantial issues relative to the roles of the government and those of America's Weather Industry as already established in other policies and programs. Among the many concerning issues are:

- This proposed policy would result in a serious degradation of the core services that the National Weather Service (NWS) currently provides, and at the most critical time of imminent danger, to the detriment of public safety and economic well-being;
- This proposed policy would lead to a lack of consistency and unequal treatment of various agencies, institutions and even for-profit companies and could create sufficient confusion to actually decrease appropriate preparation and response to severe weather events;
- The proposed policy has a feel and flavor that only NWS can do what is needed in dealing with vulnerability to extreme weather-dependent impacts, and seems to break new mission areas for the agency at a time of stretched resources, and dealing with impacts and agencies, rather than better science and warnings.
- The proposed policy creates the concept of "interpretative services" yet there is little evidence that NWS has core competency or the skills and training related to "interpretative services." Shifting resources from enabling better science and warnings to social science areas raises the issue of a need for a broader look at the purpose of the agency in general.
- This proposed policy results in significant undue expansion of the government into roles currently served by the weather industry, which do include "interpretative services." Tremendous progress has been made in recent years in the relationship between the NWS and America's Weather Industry to the ultimate benefit of the public safety and the economy of the nation. This proposed policy may result in significant departure away from the strong and helpful relationships developed in recent years with AWI and back to a time of division and lack of unity and mutual support. This is a consequence to be avoided. If implemented, this proposed policy, holds the promise of bringing significant and substantial adverse consequences which we believe are unintended by the SDD's framers.

Attached please find comments relative to the above on behalf of WeatherBank, Inc., a private entity founded in 1972, serving many Fortune 500 companies in Energy and Retail across North America.

Best,
Steve

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Steven A. Root, CCM
AMS Fellow Meteorologist
President & CEO

WeatherBank, Inc.
1015 Waterwood Parkway, Suite J
Edmond, OK 73034
[redacted]

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**NWS-SDD-Policy-Comments-WBI-092313.pdf**
343K

# WeatherBank, Inc.

**WeatherBank, Inc., through Steven A. Root, CCM, its President and CEO, formally submits comments and objections to the proposed SDD policy.**
**September 23, 2013.**

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## Executive Summary

The National Weather Service (NWS) Service Description Document (SDD) of May 2013, "Proposed Enhanced Impact-Based Decision Support Services for the Emergency Management Community Supporting Events/Incidents Impacting Safety of Life and Property [See http://weather.gov/sp/idss_sdd_emc.pdf ] raises substantial issues relative to the roles of the government and those of America's Weather Industry as already established in other policies and programs [See, for example, the policy regarding support of venues in contrast to the SDD proposal. http://www.nws.noaa.gov/directives/sym/pd01018006curr.pdf ].

Among the many concerning issues are:

- This proposed policy would result in a serious degradation of the core services that the National Weather Service (NWS) currently provides, and at the most critical time of imminent danger, to the detriment of public safety and economic well-being;

- This proposed policy would lead to a lack of consistency and unequal treatment of various agencies, institutions and even for-profit companies and could create sufficient confusion to actually decrease appropriate preparation and response to severe weather events;

- The proposed policy has a feel and flavor that only NWS can do what is needed in dealing with vulnerability to extreme weather-dependent impacts. Indeed the policy appears to break new mission areas for the agency at a time of stretched resources, and dealing with impacts and agencies, rather than better science and warnings.

- The proposed policy creates the concept of "interpretative services" yet there is little evidence that NWS has core competency or the skills and training related to "interpretative services." Shifting resources from enabling better science and warnings to social science areas raises the issue of a need for a broader look at the purpose of the agency in general.

- This proposed policy results in significant undue expansion of the government into roles currently served by the weather industry, which do include "interpretative services." Much progress has been made in recent years in the relationship between the National Weather Service (NWS) and America's Weather Industry (AWI), to the ultimate benefit of the public safety and the economy of the nation. This proposed policy may result in a significant step away from the strong and helpful relationships developed in recent years with AWI and back to a time of division and lack of unity and mutual support. This is a consequence to be avoided. If implemented, this proposed policy, holds the promise of

bringing significant and substantial adverse consequences which we believe are unintended by the SDD's framers.

These and additional issues with this SDD are discussed below.

## Detailed Comments

1. **Lack of Consistency with Established Weather Enterprise Policy Trends**

This proposed policy represents expansion into areas currently served by AWI and which at the same time will degrade NWS and weather enterprise service to the nation. This proposed policy goes in the opposite direction of what has been written into various policy directives, such as that on NWS Support for Special Events [See http://www.nws.noaa.gov/directives/sym/pd01018006curr.pdf ] and Weather-Ready Nation [See http://www.nws.noaa.gov/com/weatherreadynation/#.UhQ-BH-wVfs ].

In addition, the proposed policy proposes that the NWS provide Impact-Based Decision Support Services to a larger group of stakeholders within a very broadened view of the Emergency Management Community, which is inconsistent with existing NWS Policy with regard to the definition of an NWS "core partner" and "a member of the emergency management community" found within Appendix A of National Weather Service Instruction 01-1003 [See http://www.nws.noaa.gov/directives/sym/pd00110003curr.pdf].

In contrast to the proposed policy detailed in the SDD, those policies more fully recognized the role of America's Weather Industry and the benefits that a vital partnership between the NWS and AWI brings.

The policy proposed in this SDD is contrary to the NWS Weather-Ready Nation Roadmap released this past April [See http://www.nws.noaa.gov/com/weatherreadynation/files/nws_wrn_roadmap_final_april17.pdf ], which notes the importance of "Achieving cost efficiencies by leveraging … public-private partnership's across the Weather Enterprise".

2. **SDD will Distract Further from Core Activities and Warnings.**

In this resource-strained environment (and all resource bounded environments), providing the services detailed in the SDD would shift resources and distract the NWS from the foundational products and activities it provides through public warnings, degrading these services which are critical to both its mission and to the support it receives in fulfilling its mission through its AWI partners.

Given that NWS seems to believe it does not have the resources and personnel to do what it is already doing, it is difficult to understand on a resource base alone, how to justify adding these tailored, industry specific and business specific, agency and local services. Additionally, such activities will adversely affect AWI and the private sector job creation engine it represents. [See, for example:

http://www.washingtonpost.com/blogs/capital-weather-gang/post/national-weather-service-cutting-back-on-hiring-spending/2013/03/15/ebd98174-8d9b-11e2-9f54-f3fdd70acad2_blog.html

http://www.wsav.com/story/21212332/national-weather-service-fears-budget-cuts

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It seems clear that in the current environment, which was strained for resources even before the sequester brought additional budgetary constraints, any addition of services by the NWS requires a corresponding cutback in other NWS activities. This is especially true if NWS personnel provide direct and even dedicated embedded support for specific entities.

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And the likelihood that at times the deployed NWS meteorologist would act as a "lone ranger", rather than consistently following the message from the NWS office, is ever present. The NWS offices are configured as command centers for uniform public distribution of critical warnings to the public in consistent formats and messaging. The agency is not, and we believe, should not attempt to reconfigure itself to a dispersed external agency configuration in a one off, event driven basis. If the agency wants to change its structure from command center to dispersed, dispatched, meteorologists, then a much larger discussion seems in order relative to the concept of the agency itself, its needs, budgets, personnel, etc.

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Accordingly, for all the reasons detailed above, we are strongly opposed to the proposed policy presented in this SDD.

END

Wendy Levine - NOAA Federal <wendy.levine@noaa.gov>

# IDSS Comment

1 message

**Rob Gilman** [redacted] Mon, Sep 16, 2013 at 11:47 AM
To: nws.idss.comments@noaa.gov

September 16, 2013

[redacted]

[redacted]

To whom it may concern:

Regarding the proposed enhanced impact-based decision support services (IDSS) for the emergency management community supporting events/incidents impacting safety
of life and property. Please consider the following comment before implementing IDSS.

The business of consulting on snow and ice operations across southern New England could be hurt by the proposed policy.

Our records show that each winter season has on the order of 20-30 events requiring plowing or road treatment. Our business alone provides service to 150 cities, towns, universities and other clients in the form of alerts, forecasts, detailed Storm Warnings and Certified Weather Statements of snowfall accumulation. Professional meteorologists are on call before, during and after each event for consultation on local impact.

Forecasts and alerts improve efficiency of operations and increase safety. These town specific reports also prevent wasting resources and help to reduce pollution when no freezing is expected by eliminating unnecessary chemical treatment to roadways.

City and town departments subscribing to this local, southern New England weather service maintain updated contacts with the service provider at least on an annual basis.

National Weather Service warnings and relevant advisories are provided to these clients, with the additional on call availability of our meteorologists.

It would seem that developing lists of municipal departments in our business area, as currently proposed by this policy, by the local National Weather Service office could be detrimental to our business. While it would also unintentionally reduce the level of service currently provided to the local highway agencies responsible for the most efficient routine snow and ice

operations.

Could we suggest that the departments included in IDSS be restricted to Emergency Management offices as referred to in the policy statement? Departments of Public Works and local Highway Departments could be told to continue to rely on local, private weather services where reliable, long-standing business relationships have been developed in those communities.

Robert Gilman, Owner
Bill Gile, Owner
Precision Weather Forecasting

**Comments from StormCenter Communications**

**Comments for Proposed Enhanced Impact-Based Decision Support Services for the Emergency Management Community**

As trusted partners among federal and state government agencies in the areas of weather, climate, hazard response and emergency management, StormCenter Communications, Inc. is responding to the call for comments on the Impact Based Decision Support Services (IDSS) National Weather Service (NWS) Description Document (SDD), as derived from many years of accumulated knowledge and experience connecting entities of the NWS with FEMA and State Emergency Management maintaining a focus on data sharing, utilization of technology, and subject matter expertise for enhanced decision making. Additionally, StormCenter has a NASA SBIR contract where innovative technologies for real time geospatial data collaboration using off-the-shelf interactive map viewers and geobrowsers has been developed. Our innovations have been deemed to be of profound value to the Federal government by the SBIR program and we are being encouraged to reach out to all agencies. This response focuses on the areas in which StormCenter Communications, Inc. felt our expertise was valuable. The structure of this response maps directly to *the Key Concepts of the NWS WRN Roadmap.*

**Services**

The fairly recent seeking of social scientific expertise to adapt NWS products and information to be the most digestible and inspire action is very important work. The focus on the wording of alerts and mapping colors, as well as personalized interaction with customers is highly valued. The caveat to this focus is neglecting the importance of data formatting and innovative technologies to deliver this service most effectively and seamlessly. In our work with partnering agencies as well as through the review of the Irene, Sandy and Derecho Assessments, the need for the NWS to position themselves in line with core partners sharing the responsibility of delivering DSS, such as FEMA, DHS and State Emergency Management, has been uncovered. These agencies perform under similar workflows and utilize the same geospatial mapping tools and innovative technology to collaborate and share data important to rapid decision making and are often frustrated integrating weather information from the NWS into their process. It is appropriate for the NWS to be working toward reaching this alignment by adopting the processes as laid out in the NIMS framework. Adopting this process will improve organizational response time and identification of roles and responsibilities. However, alignment technically and operational execution of this IDSS delivery process is not clearly defined.

There is a strong desire for geospatial data, and the ability to consolidate that data with the customer's own on a common operating platform to discuss and make decisions. Where this SDD states, "NWS is also committed to using whatever technologies and display formats are necessary to communicate critical weather information to emergency management personnel," it is not clear what is in place to account for the desired data formats and user interface nor the process through which the NWS will collect this information from emergency management and other customers. There is a new era of "Big Data" coming for the NWS. Where it is stated that the NWS will be dedicated to disseminating this unprecedented amount of technical information, the process through which this data will be shared is

not present. A NWS Common Operating Picture (COP) as a one-stop repository is certainly needed, but it is not valuable to drown emergency managers in too much information that is not needed or relevant to the hazard, or have them change from their EM COP (with all their assets, resource tracking and vulnerabilities) to a separate, unlinked COP for weather hazards. Choosing the RIGHT data to put in the SAME picture at the SAME time to improve situational awareness is key to IDSS. If the data is irrelevant or unaccompanied by subject matter expertise, it will be deemed a disruption to the workflow of partnering agencies rather than an asset.

It is commendable that the NWS is establishing a commitment to providing many different types of remote support where appropriate. The NWS is recognizing the critical need to take the time to hear the needs of the emergency management community and not just push availability of text, images and voice. But success depends on the discovery of the existing workflows, platforms and data formats customers are already manipulating to make decisions, and to fuse the most relevant NWS products into those geospatial platforms thus aligning the NWS with its partners rather than offering a disruption to the decision process. Having the data readily available for customers to retrieve is good, but the desire for this data to be updated more often – especially during the approach of a weather event – is not covered in the current standard formats and issuance schedule. The Emergency Management Briefing Pages that many WFOs are adopting attempts to put all of this information in a central location. However, it would be ideal to have all of this information in one geospatial mapping environment instead of spread across many web sites and mapping tools/viewers and in many different data formats. These briefing pages should be updated as needed with data, imagery and annotation by WFOs providing rapid updates when conditions warrant without requiring the organization nor time it takes to conduct a formal briefing. They should be customized for the WFO CWAs and serve as one-stop-shopping for emergency management and other NWS customers.

**Workforce Evolution**

During times when direct, interactive support for members of the emergency management community is critical, a high level of interaction may be required from the NWS to communicate impacts on a local scale. The NWS's answer to this need is to provide a trained Emergency Response Specialist to be on site when possible. This is a high risk commitment considering limited staffing resources and limited travel budget. StormCenter has established that this level of direct support can be achieved remotely through live collaborative environments using teleconferencing technologies while simultaneously utilizing a mapping technology to visualize, share, and annotate hazard-related datasets through exchanged leadership of the common operating picture and subject matter expertise. Enhanced, timely decision making thus occurs subsequently eliminating the need for the NWS to supply ERSs on-site to every core partner.

Other hazards may require a broadcast approach of providing situational awareness to a larger number of customers through one briefing. The larger the incident, the more vast the request for information despite the reduced availability of NWS staff for individual response. It is during these events that communication skills and tools are essential. This should be achieved using a simple web-based geospatial technology which is accessible and easy to use by emergency management from within the EOC and those using mobile devices in the field. Ideally, every stakeholder would be able to observe this briefing live and simultaneously with detailed expertise from the NWS briefer through annotation and

verbal explanation. Then subsequently stakeholders are able save/archive the shared data sets for repurposing and fusion with their own datasets, maximizing the effectiveness of NWS data in the decision making process while eliminating the need for multiple mapping platforms, operating pictures, data formats, mapping projections and additional experts for data ingest, formatting and expertise.

**Science and Technology**

NWS forecasters have been using gridded forecasting techniques for many years. The AWIPS environment has enhanced and facilitated this process enabling forecasters to generate more accurate and timely forecasts and to better assess the potential for high-impact events. However, communicating this information to customers effectively remains a challenge. The need exists for technologies that can leverage the high-resolution data and information generated within the AWIPS Forecaster Decision Support Environment (FDSE) into a geobrowser or interactive map viewer accessible to customers in order to increase situational awareness of potential threats and rapidly-changing weather conditions. This type of external collaboration can only be achieved through the fusion of new innovative technologies that function within the WFO workflow rather than cause disruption.

The utilization of a collaborative internet-based geobrowser or map viewer would enable the NWS to manipulate data sets from partnering agencies and observing systems combining them with those generated by the NWS to convey comprehensive situational awareness and increase efficiency in the emergency management decision-making process. In our research, we have determined that most emergency managers and other NWS customers do not have access to high broadband capability nor the computing power or time to embrace complicated software and training. But these customers are able to access a web page with ease. Providing NWS situational awareness through a web browser with mapped data information that is easily comprehendible and downloadable for the responder is a streamlined approach to delivering IDSS in an agile, cost-effective dissemination process. Geospatial environments such as these allow the combination of data and information from NCEP Centers, WFOs, and other partners key to a particular threat or hazard into one common picture.

**Business**

Being sustainable means less paper. Over the years we have traveled to many FEMA offices, NCEP Centers, and State Emergency Management Offices and are often overwhelmed at the amount of printouts and paper required currently for comprehensive situational awareness. Countless maps and Power Points and JPEG or GIF images spread out in order to make a decision is not efficient. In an age where PCs are portable, Thin Clients are agile, and mobile devices are more utilized, the need for a geospatial Common Operating Picture has emerged eliminating the cumbersome print outs of multiple maps and information. FEMA crews now use mobile laptops, tablets and mobile devices to collect and respond to hazards in the field. The NWS could increase the value of their data by fusing their information dissemination into these devices and workflows. This remote support also eliminates the need for deployment of ERSs, which is proving to not be a sustainable service for delivering IDSS.

**The Way Forward**

StormCenter Communication has dedicated its business to enhancing NOAA's ability to effectively deliver data, information and services to the emergency management community through a feedback loop consisting of building innovation and tailoring it to the customer's needs, workflows, and technical capabilities. We have now developed a suite of products of which the NWS can take advantage and implement. The following statements below specifically describe the abilities and products that can be provided to the NWS by StormCenter, for reference and more information.

**StormCenter takes the current state-of-the-art into a new paradigm**

Current state-of-the-art geospatial collaboration technologies are mostly limited to the archiving, sharing and individual user display of geo-information via web portals or using screen-sharing technologies (such as Microsoft Live Meeting or GoToMeeting). Current geospatial data sharing efforts are often referred to as collaborative in nature, even though there is no actual real-time collaboration occurring: Users accessing the geospatial datasets from different computers need to manually display or retrieve the datasets individually on each computer to have access to them and to combine them with their own datasets.

**StormCenter makes real-time geospatial collaboration possible**

As each user connects to a collaboration with their own desktop or web map viewer, all the functions performed on the presenter's map viewer are executed across all the collaboration participants' map viewers. We can effectively creating a true geospatial Collaborative Common Operating Picture (C-COP). Presentation slides, streaming video, images and other multimedia files can be exchanged in real time as well.

Lead presenter functions can be passed on to any of the other participants in the collaboration at any time, allowing them to build upon the collaborative COP, which is already on their desktop or web browser window. What truly distinguishes this technology from any other geospatial collaboration method used today is that since the collaboration is built upon the map viewer on each user's desktop, and there are no screen switches or changes to the basemap as new datasets or annotations are added, the participants never lose their situational awareness.

Additionally, as users hand over lead functions, new presenters can add and therefore fuse their own geospatial datasets without losing those datasets and annotations that have been shared so far during the collaboration by other presenters. At the end of each collaboration session each user has the full set of original datasets shared and annotations created during the collaboration on their personal map viewer still active on their computer.

These functions are especially important when dealing with decision makers who frequently are non-GIS experts. As an example, a decision maker wishes to visualize his own assets on a map, like his firefighter engine positions, combined with external expertise and other relevant datasets, like a NASA scientist showing satellite derived wildfire hotspots.

All participants retrieve the datasets shared during a collaboration directly from the data publisher or "trusted source", reducing the latency and increasing the reliability of the datasets shared. Locally saved datasets can be shared in real time too.

**StormCenter adds collaborative capabilities to customers' current mapping platforms and workflows**

StormCenter recognizes the value of special functions or unique capabilities that are needed in organizational applications and workflows that may already exist. StormCenter is ready to work with the client to make its current geospatial assets and mapping systems fully collaborative without disrupting workflows. This can be accomplished using the client's same or, if desired, more modern or different map viewer technologies and even multiple versions while always protecting organizational investments (mapping functions, infrastructure and basemap layers, data feeds, etc.).

# Comments on the NWS Service Description Document Regarding IDSS

Kevin R. Petty, Ph.D.
Chief Science Officer, Vaisala
8/23/2013

Thank you for the opportunity to review and comment on the document titled "National Weather Service (NWS) Service Description Document (SDD): Proposed Enhanced Impact-Based Decision Support Services for the Emergency Management Community Supporting Events/Incidents Impacting Safety of Life and Property" dated May 2013.

The document represents the NWS's continued dedication to improving its way of working, with a focus on addressing its core mission – the protection of life and property. The document also signifies a considerable and arguably unprecedented step in the National Weather Service's efforts. This step includes the delivery of actionable, targeted information to a specific end-user group. The proposal, as it is currently outlined, potentially goes well beyond the kinds of services that have been traditionally provided by the NWS. As such, it does have significant implications on the weather enterprise, particularly the American weather business component of the enterprise.

**General comments:**

- At a high level, the document leaves substantial room for interpretation, which leaves the reader without a complete picture of exactly what the NWS is attempting to accomplish and how it is going to go about attaining its goal.
- American weather businesses have customers and clients that cut across multiple domains, including the emergency management community. How does the NWS safeguard against encroaching on the space that is currently occupied by private sector companies? It appears that the NWS is proposing similar types of decision support services to those currently being delivered by the private sector.
- Impact-based Decision Support Services (IDSS), as defined by the NWS, is somewhat vague. The current definition states, "NWS' provision of relevant information and interpretative services to enable core partners' decisions when weather, water, or climate has a direct impact on the protection of lives and livelihoods." However, it is unclear what this entails. Does it include 24/7 service where individuals and organizations can directly interact with the NWS? Does it include the development of decision support systems that synthesize data and information to provide guidance and recommendations to specific end users? Does it include the development of applications for mobile devices? Does it include the development of value-added products that are designed to address the needs and requirements of a specific end user group (i.e., the emergency management community)?

**Specific Comments:**

**Statement (from WRN reference): "shift from product-focused service to interpretation and consultation" ("*NWS must go beyond the production of accurate forecasts and timely warnings and enable users to exploit our information to plan and take preventative actions through IDSS")***

Comment: It would be helpful for the weather enterprise to fully understand what this actually means. Maybe this could be done with the use of a number of example cases. These cases could be used to help the NWS provide more clarity on what would be done by the NWS and what would be done by others in the weather enterprise, particularly as it relates to IDSS. As it stands, this suggests that the NWS would be doing some of the same things the private sector is doing.

**Statement: "… To this end, NOAA's National Weather Service (NWS) is enhancing decision support services, improving technology to track and forecast storms, and expanding its dissemination efforts to achieve far-reaching national preparedness. This enhanced, multi-disciplinary approach will empower emergency management, first responders, government officials, businesses, and ultimately the public to make fast, smart decisions…"**

Comment: While this document is primarily focused on the emergency management community, this statement (as well as other statements in the document) clearly leaves the door open for future decision support services that target multiple communities, communities that make up key market segments being addressed by American weather businesses. Again, this appears to directly conflict with private sector aspirations, as well as NOAA's aspirations (e.g., fostering a better public/private sector partnership).

**Statement: "NWS recognizes that our partners in America's Weather Industry may also provide specialized weather support to the emergency management community. NWS personnel will work with the firms from America's Weather Industry chosen by members of the emergency management community to provide an appropriate level of decision support services to ensure the protection of life and property."**

Comment: It is good to see that the NWS recognizes the potential overlap with the private sector. The process by which the NWS works with the weather industry needs to be better defined. It is easy to make this statement, but the execution of this collaboration will present a number of challenges. For example, how to work together to provide common situational awareness for emergency management personnel when there may be a divergence in the thinking surrounding a high impact event (i.e., difference of opinion between NWS and the weather industry partner concerning an event or a difference in recommended approaches for mitigation)

This also raises the question regarding why the emergency management community would go to the private sector when they could get some level of support for free. Although not intentional, this does create a level a competition with the weather industry partners.

**Statement: "However, through ongoing prototype activities, many other offices across NWS are exploring new ways of providing decision support services. This SDD describes how NWS will incorporate best practices from these prototype activities into our support for the emergency management community across NWS."**

Comment: This statement highlights an aspect of operations that the NWS may want to address so that more clarity on NWS operations can be provided to all stakeholders. The text mentions that many offices are exploring providing decision support services. The activities at the offices do not appear to be focused on emergency management, as this statement suggests. The ad hoc nature of these activities brings about an ancillary set of concerns and challenges that extend beyond the scope of the IDSS document.

Questions are raised regarding whether there is adequate guidance and tracking of the specific activities at various NWS offices. If offices are carrying out these activities without a prescribed and agreed upon set of guidelines, it may be possible that the offices are engaging in activities that further encroach on those of the American weather industry. Moreover, if this is the case, significant inefficiency can quickly arise out of such a situation, with resources being used in tasks that don't fully support the overall mission of the NWS.

**Statement: "NWS Impact-based Decision Support Services will be provided to support decision making by the emergency management community before, during, and after events and incidents which are caused by or impacted by conditions for which NWS provides information services."**

Comment: In theory, this type of activity is already taking place (i.e., support before, during and after events). It might be helpful to more clearly articulate what is happening today as opposed to what is expected in the future under the IDSS concept.

**Statement: "NWS may be asked to provide services to additional entities that don't fall under the description of emergency management community, above, but whose capacity to operate immediately impacts public safety (e.g., hospital staff, public utilities)."**

Comment: As previously noted, this kind of statement leaves the door open to the provisioning of decision support services to just about any entity, including those that are currently being served by the private sector. This will create a number of difficulties associated with the stated NWS goal of encouraging and growing public/private partnerships.

**Statement: "However, local office management will have the discretion to evaluate resources to determine how to most effectively support multiple requests for support, especially during large-scale events with wide-spread impact."**

Comment: This type of approach will lead to a situation where there is no standardization of practices across the NWS offices, resulting in ad hoc services and procedures. In addition, this leads to increased ambiguity when it comes to determining who is doing what and whether there is alignment with what has been agreed and communicated as a part of the overall program.

**Statement: "NWS offices have a long history of providing mission-critical decision support services to the emergency management community in their area of responsibility. <u>These well-established IDSS relationships with existing members of the emergency management community should be documented by the NWS office providing the support, but do not require a new request to continue Type 1 IDSS service."</u>**

Comment: This is a very good idea! Would it be possible to share this information with the rest of the weather enterprise? Both the private sector and academic community would benefit from knowing more about these relationships and may be positioned to provide the NWS with input and support that could help refine and enhance the relationships.

Wendy Levine - NOAA Federal <wendy.levine@noaa.gov>

# Comment on NWS Proposed Enhanced Impact-Based Decision Support Services for the Emergency Management Community

1 message

[redacted] Fri, Aug 23, 2013 at 9:36 PM
To: nws.idss.comments@noaa.gov, [redacted]

Below is a comment on the proposed SSD:

Comment: The National Weather appears to be expanding the DHS NRF definition of "the emergency management community" by adding under the NWS definition of core partners, "other members of this community include: safety and emergency personnel, from universities or other large entities with populations whose roles are functionally equivalent to the public safety of officials." This expansion has no defined limits, especially with the statement, "other large entities." The NWS should clearly define "other large entities" and allow public comment on the specific use cases. Is there a distinction between public and private entities? Revenue generating versus non-revenue generating? Non-profit or for profit? For example, is it appropriate for the federal government to provide specific , tailored and customized decision support services to any for-profit entity, or should these entities budget for and procure private weather services? The case for the NWS supporting federal, state, local and tribal entities is strong since single authoritative weather information is critical for an effective National Response Framework…single lines of authority for interoperability and command and control. But when NRF response framework authorities are not depended upon to provide security and safety for large entities with large populations (what is the size of a large population), especially in the circumstance where the large entity is privately run or generates revenue from services, should the taxpayer pay for that service? One can argue that the private weather enterprise should be providing those services and the weather service should be focusing its limited budget and resources on putting out the best warning possible, including a focus on reducing false alarms rates, and provide the best decision support in the interest of general public security and safety through the NRF framework.

Thank you for the opportunity to comment.

Don Berchoff

# Technical Data Sheet

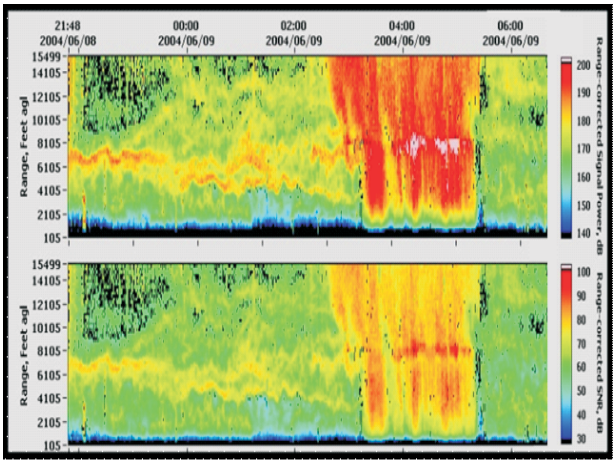
# RAPTOR XBS-BL
## Boundary Layer Radar Wind Profilers

RAPTOR
RADAR WIND PROFILERS

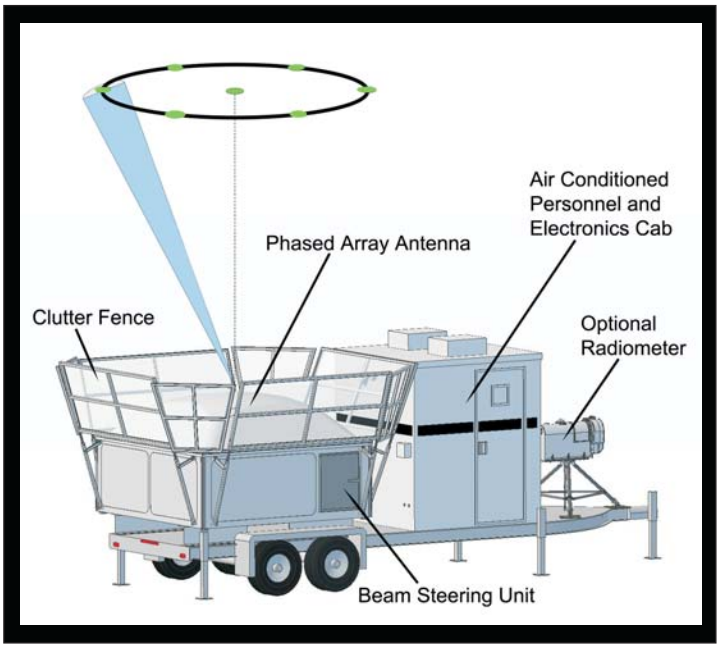
DeTect's RAPTOR XBS-BL represents a revolutionary, unique design in Radar Wind Profiler technology offering a high performance, digital system in a compact, portable design that is simple and quick to set up.

| | |
|---|---|
| **System:** | RAPTOR XBS-BL Radar Wind Profiler |
| **Applications:** | Real-time operational support for weather forecasting, aviation operations, and other applications demanding high quality meteorological data products |
| **Tx Frequency:** | 915 MHz or 1290 MHz nominal, or custom |
| **Antenna:** | Approximately 2.4 m (8') diameter phased array |
| **Beam Steering:** | 6-beam oblique and 1-vertical |
| **Peak Power:** | 800 W or 1400 W options |
| **Height Resolution:** | User selectable from 75 to 500 m |
| **Range:** | ~3 km in clear air, ~5 km in precipitation |
| **AC Power:** | < 1500 Watts |
| **Accuracy:** | < 1 m/s; <10° for wind speeds > 5 m/s; <15° for wind speeds ⩽ 5 m/s |
| **Network/ Remote Access:** | Network, cellular, serial available |
| **PC OS:** | Windows 7 Enterprise, Red Hat Linux, CentOS Linux |
| **Option:** | Integrated radiometer for boundary layer therodymic profiling, e.g. radiosonde replacement |

*Specifications are subject to change without notice.*




*Display of range corrected radar returned power (top) and Signal to Noise Ratio (bottom). Image shows turbulent layers and clouds. The melting-layer is evident during the rain storm as an area of enhanced reflectivity or "bright band".*




*XBS-BL trailer-mount unit showing components and options available. Data collected at seven points above antenna; six oblique beams can be used for VAD processing.*

DeTect
APPLIED RADAR TECHNOLOGIES
117 S. Sunset Suite L, Longmont, Colorado 80501 USA Tel. 303-848-8090 Web: www.detect-inc.com

RAPTOR™
RADAR WIND PROFILERS

# TECHNICAL DATA SHEET
# RAPTOR XBS-BL

The **DeTect RAPTOR line of Radar Wind Profilers** provides unattended, real-time operational support for weather forecasting and aviation, aerospace, military, research, and other applications demanding high-quality meteorological data products. Our modular, scalable RAPTOR systems are engineered and constructed to high standards incorporating commercial off-the-shelf (COTS) components, reducing costs of ownership and enabling technology insertion and upgrade opportunities.

RAPTOR systems use a modern digital radar design to ensure high reliability and low operating cost. Our digital receiver system and advanced signal processing result in superior data products at high temporal resolution suitable for operational applications.

A Radio Acoustic Sounding System (RASS) can be added to provide vertical profiles of virtual temperature. Depending on atmospheric conditions, RASS can provide up to 1.5 km agl.

The **RAPTOR XBS-BL** is nominally a 915 MHz or 1290 MHz radar for boundary-layer wind profiling. The system has a weatherproofed phased array antenna, server-class PC for radar control and signal processing, and a software package that includes:

- **BIRCH** radar control software generates time series, spectra, moments products, displays, and data archive.
- **ASPEN** advanced signal detection processing and data display software with time/height continuity analysis, multi-peak discrimination, QC algorithms, many product displays, and data archive.

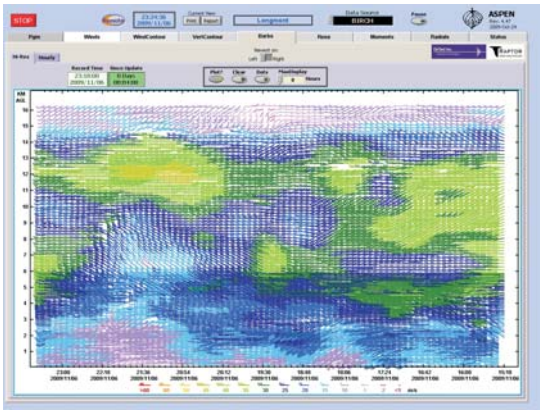
Other components of the RAPTOR XBS-BL include:

- Intermediate Frequency Conditioner (IFC) (acts as analog front-end for digital receiver)
- Transmit/Receive Switch
- High Power Final Amplifier
- Profiler Health Monitor (PHM) (Optional)
- Radar Power Supply (RPS)
- Surge/lightning protection on antenna RF and control cables
- All required cables

RAPTOR systems include warranty on parts and labor for:

- Internet and telephone technical support
- Data QA/QC checking
- RAPTOR software upgrades

RAPTOR systems can be configured to comply with country or project-specific operating requirements. Customizable options include but are not limited to: total system power, operational frequency, computer operating system, RASS, and AC operating voltage.



*Displays of ASPEN wind barbs screen (upper), and BIRCH profiler monitoring screen (lower).*

DeTect APPLIED RADAR TECHNOLOGIES
117 S. Sunset Suite L, Longmont, Colorado 80501

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Wendy Levine - NOAA Federal <wendy.levine@noaa.gov>

# Comment on NWS Proposed Enhanced Impact-Based Decision Support Services for the Emergency Management Community

1 message

[redacted] Fri, Aug 23, 2013 at 9:36 PM
To: nws.idss.comments@noaa.gov, [redacted]

Below is a comment on the proposed SSD:

Comment: The National Weather appears to be expanding the DHS NRF definition of "the emergency management community" by adding under the NWS definition of core partners, "other members of this community include: safety and emergency personnel, from universities or other large entities with populations whose roles are functionally equivalent to the public safety of officials." This expansion has no defined limits, especially with the statement, "other large entities." The NWS should clearly define "other large entities" and allow public comment on the specific use cases. Is there a distinction between public and private entities? Revenue generating versus non-revenue generating? Non-profit or for profit? For example, is it appropriate for the federal government to provide specific , tailored and customized decision support services to any for-profit entity, or should these entities budget for and procure private weather services? The case for the NWS supporting federal, state, local and tribal entities is strong since single authoritative weather information is critical for an effective National Response Framework…single lines of authority for interoperability and command and control. But when NRF response framework authorities are not depended upon to provide security and safety for large entities with large populations (what is the size of a large population), especially in the circumstance where the large entity is privately run or generates revenue from services, should the taxpayer pay for that service? One can argue that the private weather enterprise should be providing those services and the weather service should be focusing its limited budget and resources on putting out the best warning possible, including a focus on reducing false alarms rates, and provide the best decision support in the interest of general public security and safety through the NRF framework.

Thank you for the opportunity to comment.

Don Berchoff

Wendy Levine - NOAA Federal <wendy.levine@noaa.gov>

# RE: Feedback on IDSS SDD

1 message

[redacted] [redacted]Aug 12, 2013 at 5:12 PM
To: nws.idss.comments@noaa.gov

After conferring with a couple of EM savvy colleagues in the field (and folding in their comments), I have a few additional comments to provide:

1. From Section A (page 1), 'Service description':

**"This enhanced, multi-disciplinary approach will empower emergency management…"**

The current wording implies that we will empower emergency management professionals, when we do not have the authority to do that. I believe we are trying to say that our enhanced IDSS strategy will better aid emergency managers to perform their missions, so suggest either replace "empower" with "aid", or rework the sentence to better make that point.

--

2. From B (page 2), 'Who will be supported':

**"IDSS for the emergency management community includes entities that may be engaged to resource any NRF-identified Emergency Support Functions (ESF)…"**

This statement may be a little too absolute, because nearly anyone (including private and cooperative entities, volunteer organizations, SMEs, etc.) can be engaged to resource an ESF. Many of these entities have ECOs (Emergency Coordinating Officers) directly assigned to emergency management EOCs. For example, Walmart is part of an ESF at one or more state EOCs, which implies that we should be providing type 1 or type 2 IDSS support to Walmart. If so, that is not evident from the description of core partners in this section.

--

3. From Section C (page 2), 'Type of support':

**"Type 1 – Direct, interactive, support for members of the emergency management community.**

**This type of support requires a high level of interaction …"**

Does this necessarily mean in person, or can Type 1 support be provided remotely? If it also includes remotely (i.e., briefings), remote support was specifically mentioned in the Type 2 section, so this may lead to confusion if not clarified. If there are any other delineating factors to distinguish Type 1 support from Type 2, suggest including those as well. In addition, perhaps a table of attributes from all 3 types could be included, which would ensure all factors are addressed for all 3 types, and it would be very easy for a user to scan to see the difference.

--

4. From Section C (page 2), 'Type of support':

"At times, NWS may be asked to provide services to additional entities that don't fall under the description of emergency management community, above, but whose capacity to operate immediately impacts public safety (e.g., hospital staff, public utilities). **Within the context of the Incident Command System (e.g., an Emergency Operations Center), these services will be provided to all who are related to any of the defined ESFs that make up a community response to an event/incident where lives or property are at risk. Requests to NWS for direct services for these entities, outside the context of the Incident Command System (ICS)** will be addressed in partnership with a cognizant member of the emergency management community …"

Since ICS is the organization structure of emergency management, it doesn't flow well in the context of this sentence. A cleaner way of stating the sentence is "*Within the context of an Emergency Operations Center, these services will be provided in an event/incident where lives…*". In addition, I have been told that it is redundant to mention ESFs or ICS, since both are part and parcel, in one form or another, of most every EOC in the U.S. (per the current National Incident Management System (NIMS), and even predating NIMS). Additionally, EOCs are not always operating in an ICS mode (see * below), such as for events, and may be looking for support in planning, preparedness, or mitigation. Since this would be from the same EOC personnel as during an event, is there a distinction to be made here that we support a municipal, county, or state EOCs differently depending on what stage of an event/planning process in which they happen to be engaged? Given this context, the last sentence, ("**Requests to NWS for direct services for these entities, outside the context of the Incident Command System (ICS) will be addressed in partnership with a cognizant member of the emergency management community")** also may need to be clarified.

- - Note: EOCs use a variation of ICS which combines ESFs and the ICS structure. There is a separate FEMA course on EOC Operations outside of the ICS training suit. A Field Command Post would be a more pure form of ICS.

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5. From Section C (page 3), 'Type of support':

**"Type 2 IDSS participants may be expanded beyond the emergency management community itself as needed for specific events (e.g., hospital staff, public utilities)…"**

Hospital staff and public utilities are already part of the emergency management community (through a variety of mechanisms). Additionally, private utilities and cooperative utilities are also part the emergency management community (they most likely all would have representation inside an EOC). Therefore, this would not be considered an expansion by these and other members of the EM community.

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6. From Section C (page 3), 'Type of support':

**"NWS recognizes that our partners in America's Weather Industry …"**

Why is 'America's Weather Industry' in capitalized? Unless this is some formal designation of which I'm unaware, I would suggest not capitalizing given all the other formal, recognized terms and organizations.

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7. From Section D (page 3), 'Request for Type 1 Support':

**"Each NWS office will maintain a <u>record</u> of organizations afforded Type 1 decision support services for the emergency management community."**

**"These well-established IDSS relationships with existing members of the emergency management community should be <u>documented</u> by the NWS office providing the support, …"**

What type and depth of documentation is necessary? For example, if a WFO provides service to Washington County EOC, does each participating entity during emergency operations need to be documented (each ESF, etc.), or is a simple station log entry sufficient?

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8. From Section E (page 4), 'Presentation Format':

**"NWS personnel providing IDSS will be subject matter experts in the relevant conditions being addressed, be familiar with users' needs and all relevant NWS product content and interpretation, <u>and will coordinate with other NWS offices and National Centers</u> to ensure a consistent NWS message."**

This needs to have "as needed", or "when necessary" inserted in sentence. The sentence as written could imply that coordination is required in every instance, which is not the case. Unless changed, this would imply that the on-site forecaster would not have the discretion to make that determination.

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9. From Section E (page 4), 'Presentation Format':

**"Support may be provided either on-site (e.g., at an ICS command location…"**

Emergency Operations Center or Field Command Post may be a better fit – 'ICS command location' is too amorphous since it refers to the organizational structure, not the organization itself. Also, according to my WCM colleagues, there is not any official entity associated with "ICS command location".

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10. From Section F (page 5), 'Change in service':

**"NWS is developing an impacts catalog to better understand and document key critical thresholds important to core partners…"**

Critical thresholds may be too ambiguous. Suggest changing from "critical thresholds" to "decision thresholds", which is the term used in the field and with EMs.

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11. From Section F (page 5), 'Change in service':

**"We are also developing highly trained Emergency Response Specialists…"**

My understanding is that this is being done in the pilot projects, and not at all the field offices. If so, this should be clarified. In addition, the term "Emergency Response Specialist" is generic and is not indicative of the capability offered by NWS. "Emergency Response Meteorologist", or "Emergency Preparedness Meteorologist" (which is a better term and has more distinction in emergency management), would be better terms. There are several flavors of "emergency response specialists" in existence, and they have little to do with meteorology. Finally, the use of "Emergency Response Specialists" would seem to infer expertise in emergency management, which could be misleading.

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12. From Section G (page 5), 'Emergency Conditions':

Who defines what is an immediate threat? I understand every example can't be addressed, but if there is a question on whether something is an immediate threat or just a late request, it would be helpful to mention who makes the decision.

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Thanks for the opportunity to provide comments. Regards,

[redacted]

[redacted]

[redacted]

[redacted]

NOAA/National Weather Service

Office phone: [redacted]

Email: [redacted]

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**From:** [redacted] NOAA Federal [[redacted]
**Sent:** Friday, August 09, 2013 12:23 PM
**To:** 'nws.idss.comments@noaa.gov'
**Subject:** Feedback on IDSS SDD

Thanks for the opportunity to review. While I may provide more comments later, I have two initial comments:

First, there are a few places where it is acknowledged that NWS has a long history of supporting the Emergency Management community, but there is not a clear description of what is new or changing. To make it clear to our existing customers/partners, as well as potential new ones, I suggest a more clear and thorough description in section A ("Service Description") of what is new or changing in our offering of support.

Secondly, regarding section D, "Request for Type 1 Support", this seems incomplete since the document does not address requests for Type 2 or Type 3 Support. Suggest restructuring this section as "Requests for Support", where common procedures are outline up front and details unique to each type are covered in separate sub-sections.

Regards,

[redacted]

[redacted]

[redacted]

[redacted]

NOAA/National Weather Service

[redacted]

[redacted]