

**Analysis of Comments on NWS Policy on Environmental Information Services
Supporting Mobile Devices**
(Collected Jan 30 – March 15, 2012)

Background

On January 30, 2012, the National Weather Service (NWS) released for public comment a Proposed Policy on Mobile Weather Services, now titled “Provision of Environmental Information Services Supporting Mobile Devices.” The comment period was January 30 – March 15, 2012.

NWS sought comments on the proposed policy in fulfilling the requirements of the National Oceanic and Atmospheric Administration’s Policy on Partnerships in the Provision of Environmental Information. Public comments allow NWS to better understand the impacts of the proposed policy on other members of the environmental information enterprise (i.e., government, private sector, academia) and the general public.

NWS sought comments directly in several ways including issuance of an NWS Public Information Statement (also available to the public via webpage), announcement via mailing list of partners who participated in a June 2012 Forum on Wireless Weather Services, and announcement through an American Meteorological Society (AMS) listserv.

A total of ten comments were received. Comments were received from individuals in the private sector (5), military (2), academia (1), and NOAA/NWS (1). (One commenter was of unknown background.)

The policy under review provides process guidelines intended to ensure NWS develops environmental information services using mobile devices in a manner that adheres to appropriate U.S. Government policies and maximizes the effectiveness of the NWS in meeting its core mission.

Few of the comments specifically addressed whether they supported the policy itself. Most comments focused on whether or not NWS should be providing direct environmental information services to the public using mobile devices – in effect, the decisions that will be made in accordance with this policy. The range of these views was extremely wide – from believing NWS should be providing direct alerting using mobile devices for the general public to support the NWS public safety mission, to comments which assert NWS should only provide such services when they are not available from commercial sources or commercial sources could not easily provide them.

Grouping the comments into major categories results in the following:

Of the ten:

- 4 believe NWS should be providing weather services supporting mobile devices, for the general public
- 4 believe NWS should not be providing weather services supporting mobile devices (e.g., “apps”)
- 2 are either silent on the issue or agree that an appropriate decision process has been proposed to address the question.

Notes:

1. A listing of all comments is available in the Appendix.
2. Specific comments quoted throughout are referenced by number, referring to the sequence number in this list.
3. All comments received have been considered in developing the final policy.

Analysis of Comments

1. Comments in support of NWS direct provision of environmental information services serving mobile devices – Some commenters felt strongly that NWS should be providing direct environmental information services, for the general public, supporting mobile devices. Their reasons include:
 - a. **Public Safety** - NWS should be fulfilling this public safety function rather than the private sector:
 “Having the private sector control dissemination ensures that the people will be warned where/when/&how based on financial motivation - rather than public safety./ There is certainly a role for the private sector to enhance services even further from what we can do. But the basic level of public safety for all needs to be maintained by the NWS.” [Comment #1]
 - b. **Cost** - Public shouldn’t have to pay for services which its taxes support:
 “Why should I have to pay to find out the current temperature or get the latest radar animation on my mobile device? Haven't I already paid (in taxes) to provide these data through the NWS?” [Comment #4]
 - c. **Authoritative Source** – NWS is the primary trusted authoritative source of weather information:
 “While there are many private sector apps available for weather information, I turn to NWS/NOAA whenever possible for my updates.” [Comment #5]
 - d. **Product Latency** – Timeliness of mobile alerts:
 “The presumption that underpins this draft policy and NWS OI [*sic*] 1-10, that the private sector is or can do an adequate job of relaying warning and watch data as a secondary service is inherently faulty and jeopardizes the lives, property and livelihoods of the citizens of our nation. . . . Depending on the level of investment in communications technology, there can be considerable latency between the time a media provider or the developer of an I-Phone or Android Application relays urgent weather notifications to their subscribers” [Comment #3]

e. **Extension of existing NWS services using current technology:**

“As more people carry mobile devices during their away-from-home activities, the idea that the NWR was first developed for has not changed -- get the word out to people who have the radios. If the government thought this was an essential thing to do twenty years ago, why not now, but for the cellphones (aka, little radios that people carry in their pockets)?” [Comment #4]

Response: All of the above comments are focused on future decisions that will be made under this policy and express arguments that might influence future NWS decision makers to develop and offer direct environmental information services for the general public through mobile devices. Under the proposed policy, these (and other) arguments will have to be weighed against other policy and management factors to determine if they rise to the standard of a “compelling case” established in the final policy. These other factors include:

- NWS is currently working closely with the Department of Homeland Security (DHS) and the Federal Emergency Management Association (FEMA) to support DHS/FEMAs development of a mobile alerting capability which will include provision of urgent NWS warnings. The public alerting service to be provided by DHS/FEMA is expected to provide timely alerting of urgent weather warnings. The effectiveness of this system will influence NWS choices in the delivery of other mobile weather services.
 - There are already a wide variety of mobile services provided by America’s Climate and Weather Industry, some are free and some are fee-based. NWS is working to make it easier for providers of these weather services to easily identify NOAA/NWS as the source of their weather information, thus helping to increase the level of comfort with these commercial services. It will be difficult to create a compelling case for NWS to provide direct mobile weather services that duplicate available features of commercial services.
 - In addition, NWS does currently provide its environmental information in forms tailored to display on mobile devices (e.g., mobile.weather.gov, which is in the process of being upgraded) and SMS messaging of weather alerts to our core partners.
2. Comments opposing NWS direct provision of environmental information services supporting mobile devices – Some commenters felt strongly that NWS should not be providing direct environmental information services for mobile devices. These comments are representative of this view:

“There are more than enough "Weather Apps" for mobile users out there. I don't think it would be cost-effective for the NWS to try and invent mobile weather apps given that there are so many good apps produced by the private sector for FREE.” [Comment #6]

“...rather than devoting efforts on “re-inventing the wheel” by building what will essentially be duplicate existing delivery vehicles, focus should be on improving the observation, forecasts and information services themselves. And in a time of tight budgets such as we find ourselves today, a laser-focus is even more essential. Devoting time, money and attention on direct mobile services ... is to take focus away from and put at risk the core, high-value mission of the NWS.” [Comment #8]

“Designing software such as mobile services and apps is a perpetual assignment as the company must keep up with new operating systems and mobile devices. Fulfilling this requirement will become a black hole of financing.” [Comment #10]

“We do not believe that NWS should develop or deploy any mobile weather service which would be in direct competition with equivalent services that currently are or could easily be provided by the weather industry.” [Comment #7]

Response: These comments were consistent with the general view of those commercial weather service providers who participated in the NWS Forum on Wireless Weather Services held in June 2011. The final policy reflects this concern by stating that one factor supporting direct provision of environmental information services serving mobile devices is “*Commercial or other government sources do not provide service, or provide a service that does not have features essential to NWS mission.*”

The policy avoids a blanket statement that NWS will not provide any service in direct competition with or which could be provided by commercial sources. NWS has moved past using this type of language which was included in our 1991 policy, in favor of current NOAA Partnership Policy which requires consideration of the views of all affected parties. For example, NWS might feel compelled to develop a service supporting mobile devices which is necessary to support its own or other government employees in the performance of their duties. However, the decision process instituted with this policy will ensure all factors are carefully considered before moving forward to implement such a service, including public comment/review on the specific service proposed to be implemented.

A decision to expend resources on a new service would need to be made in the context of mission-related benefits and overall resource needs of the agency. To clarify this, we have added the following text to Section 2 of the policy describing these NWS-provided direct services: “*To ensure responsible use of federal tax dollars, NWS must provide a compelling case for direct provision of environmental information services supporting mobile devices.*”

3. Other Comments from External Review Include:
 - a. NWS needs to consider other government sources of direct services, in addition to considering commercial Sources.

Response – Added this to Section 2.2 of the final document.

- b. The definition of NWS “core partners” should be expanded to include those members of the weather industry that provide services to the electronic media, but aren’t directly members of the media.

Response – Current definition indicates that contract agents of members of the electronic media who themselves have a need to interact with NWS would also be included in the definition.

- c. Any outreach/education by NWS about mobile environmental information services should provide a full and balanced approach, by providing information on those developed by the broader weather industry. NWS should not use outreach activities to promote any particular service, including those provided by NWS.

Response – Reworded this section to read: “educating the public about existing environmental information services supporting mobile devices, regardless of the source.”

- d. NWS should conduct full due diligence on whether a new service is needed before devoting resources to the development of those services.

Response – The policy allows prototyping (before an extensive decision analysis) so that NWS can gather the information it needs to support a carefully considered decision. NWSHQ staff will be aware of initiation of new prototyping efforts and will ensure that efforts at completing the decision analysis described in the policy document are being undertaken in parallel with these initial efforts. There are multiple decision points and opportunities for NWS management to intervene prior to moving forward with expenditure of considerable resources on the development of a new service.

- e. Add “representatives of America’s weather industry” and “NOAA’s Science Advisory Board’s Environmental Information Services Working Group (EISWG)” to the listing of entities that might be consulted before a decision on implementing a new service.

Response – Because there are numerous entities that might be valuable to consult, we’ve chose to keep the language generic. Section 5.5.1 now reads, “*The Deciding Official will make his/her decisions within 30 days of receiving the necessary input and may confer with others in NWS, NOAA, the Department of Commerce and elsewhere in reaching his/her decisions.*”

- 4. Internal Comments – In addition to the comments received from our external review period (summarized above), NWS also was required to address internal NWS comments in developing a final policy. The major changes to the final policy due to internal comments are summarized below:

- a. Policy document was renamed to “Provision of Environmental Information Supporting Mobile Devices.” This was done to clarify that NWS provides more than weather services and to clarify that we mean through use of mobile devices.
- b. Changed approval process from one major approval before development begins to a staged approval process. Most internal reviewers related that it was not practical to carry out a thorough analysis and approval on a

- “proposal” for development. Information learned from prototyping is needed to fully analyze the scope and impact of the efforts.
- c. Changed internal logistics of decision process with multiple NWS managers making a recommendation on decision to the Deciding Official. This change reflects the general approach taken in the policy by incorporating expertise from multiple sources within NWS to support decisions that are required to balance multiple policy and management factors.
 - d. Recognized need for facilitating collaborative development of mobile services in NWS.
 - e. Moved location of some content - Content from old Appendix B (Guidance on NWS Provision of Direct Mobile Weather Services Versus Indirect Support for External Services) was moved into body of the instruction. In addition, the list of management/policy factors to be analyzed in support of an implementation decision was generalized, with details provided in new Appendix B.
5. Both the original draft and final version of the policy incorporate perspectives of the participants (government, private sector, academia) in the June 2011 NWS Forum on Wireless Weather Services. These included:
- Standardization of NWS data/products is critical
 - Combination of (1) IPAWS/CMAS for government-sponsored weather alerts to general public and (2) mobile weather services available from commercial providers is a powerful combination in meeting the needs of the general public
 - There is general recognition that NWS does have a special interest in serving “core partners,” however –
 - More clarity regarding NWS definition of “core partner” is needed
 - NWS commitment to meet needs of core partners is understood, but should recognize that core partners also use commercially available services
 - Issues relating to assuring the quality of mobile weather services need to continue to be addressed:
 - Guaranteed delivery of alerts
 - Establishing qualifications of suppliers and identifying qualified suppliers

Conclusion

The majority of the changes to the proposed policy addressed the logistics of the internal NWS decision process on whether or not to pursue development and implementation of new environmental information services supporting mobile devices. NWS is cognizant of divergent perspectives regarding an appropriate approach for NWS provision of services supporting mobile devices – some strongly support an NWS-operated dissemination system to support public safety while others support commercially-provided systems. Because of the current efforts of DHS/FEMA to support this need and existing NWS support of these efforts, we have chosen not to make a policy-based statement requiring that NWS provide this type of service. We also are well aware of the plethora of existing services and will take this into account in any decision NWS makes on whether or not to implement a new service. With development of services supporting

mobile devices as one of the most rapidly changing areas of information technology, the final policy avoids creating rigid decisions based on today's understanding in preference for a policy that requires analysis of factors that should influence future decisions and which will be affected by development of future devices, systems, and services.

The final policy calls on NWS to continue to work with all members of the environmental information enterprise to help ensure high quality services are available to the public. This includes making NWS data easily accessible; working with the industry to communicate the level of service appropriate to support public safety; and making the public aware of existing services, regardless of the source.

As the policy document describes, we have put in place a procedure to carefully analyze the need for NWS to provide direct environmental information services supporting mobile services and our ability to provide these services.

Finally, to reinforce current NWS policies that support the NOAA Policy on Partnerships in the Provision of Environmental Information, any proposed new services will be made available for public comment/review prior to a decision to implement.

Appendix

External Comments on NWS Policy on Environmental Information Services Supporting Mobile Devices

(Collected Jan 30 – March 15, 2012)

| | Comment |
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| 1 | <p>Hello,</p> <p>The NWS needs to aggressively pursue providing mobile services to our nation. Mobile platforms are quickly supplanting webpages as the main way to get info to people. Also, they offer the flexibility of getting important info pushed to people, rather than having them visit a website to gather the info themselves. Not pursuing mobile services would be akin to not pursuing webpages in the 1990s/early 2000s.</p> <p>There are those who say the NWS should be a data provider for the private sector. This would be a big mistake. Whoever controls dissemination, has ultimate control over public safety. The private sector would determine by profit motive which information should go out, how it should go out, and how much people should pay to receive it. Having the NWS control dissemination ensures that everyone is entitled to advance warning for weather events. Having the private sector control dissemination ensures that the people will be warned where/when/&how based on financial motivation - rather than public safety. If the private sector controls dissemination, they can dictate to the NWS what to provide to their customers - since they have ultimate oversight as to what largely goes out.</p> <p>If the NWS is to fulfill it's WeatherReady mission to protect our entire population from weather threats, we need to be in the mobile platform sphere. There is certainly a role for the private sector to enhance services even further from what we can do. But the basic level of public safety for all needs to be maintained by the NWS.</p> <p><i>[name removed]</i> NWS Baltimore/Washington</p> |
| 2 | <p>We are interested in taking part in Mobile Weather Services. We propose to provide live weather briefings by phone with our staff of meteorologists at the ready to handle the incoming calls. We can also set up a way of the caller getting recorded forecasts for various cities or sections of the United States.</p> <p>If there is interest in this, we can provide a detailed proposal along with the cost.</p> <p>How would the prospective "weather provider" for Mobile Weather Services get paid? By the caller or the government?</p> <p>Thank you.</p> <p><i>[name removed]</i> The National Weather Station, LLC</p> |
| 3 | <p>Dear Sir and/or Ma'am:</p> <p>This email seeks to express concerns over the proposed draft of National Weather Service policy on Mobile Weather Services. As will be discussed below, the National Weather Service has a core responsibility to directly provide urgent weather bulletins to the general public via mobile technology. The presumption that underpins this draft policy and NWS OI 1-10, that the private sector is or can do an adequate job of relaying warning and watch data as a secondary service is inherently faulty and jeopardizes the lives, property and livelihoods of the citizens of our nation.</p> |

I have been a meteorologist for 28 years. I have worked in the commercial, government, flight, and academic sectors. I have just completed a ten-year stint as the Director, United States Air Force Center for Strategy and Technology, where, for the last decade, I ran the principle U.S. governmental organization responsible for examining the strategic implications of emerging technologies. I have a robust understanding of not only the products provided by the National Weather Service, but the communications backbone upon which they rest, and the backbone, vulnerabilities, and shortcomings upon which the civilian secondary providers, including media outlets, transmit their data.

When a warning is issued by the National Weather Service, it is able to be transmitted in several ways: Internet, direct message, NOAA Weather Radio, etc... In the ideal world, these messages would instantly be relayed through all secondary sources to their intended users. Unfortunately, this does not occur. Depending on the level of investment in communications technology, there can be considerable latency between the time a media provider or the developer of an I-Phone or Android Application relays urgent weather notifications to their subscribers. In both the April 2011 and recent January 2012 Alabama tornado outbreaks, I maintained subscriptions to two separate providers of relayed warning information: WSFA-TV, the largest television station in central Alabama, and "Weather Bug" -- an Android application currently used by more than 10 million subscribers. By rating, these are the two most highly rated secondary providers in my area. For both, latency averaged more than 20 minutes in each severe weather event. In the case of the record April 2011 outbreak, some weather bulletins were not relayed to my mobile device for more than 18 hours. In the most recent outbreak, two advisories reached my phone the next business day.

The causes of this latency can be myriad. Rapid issuance of multiple advisories can overwhelm the secondary provider's equipment causing backlogs to develop, or even worse, system crashes. Connections between computers within the facilities operated by these secondary providers can similarly be overwhelmed, or in the case of a hurried meteorologist inadvertently tripping on a cord, unplugged. Cell phone towers can be overwhelmed by the message traffic -- a problem compounded when multiple providers are all attempting to transmit the same information to multiple subscribers. Failures to properly maintain the computer systems within the business of the secondary provider can also cause warnings to be lost or mis-directed. In short, several additional steps are added to the process of warning dissemination, and there is much that can go wrong at each of them.

The National Weather Service should play the principle leadership role in mobile warning dissemination. This is no different than the use of the Emergency Broadcast System or radios in earlier times. Society today communicates differently, and as such, effective warning mechanisms must change with the advent of these new means of communication. Most of us are on the move and are not tethered to a weather radio all the time (and until these are built into our watches or cell phones, we won't be, either). As such, mobile devices are now the principle method of reaching the public you seek to warn. Allowing these warnings to be held up, held hostage, or lost by secondary providers is to abrogate your mission to serve the public and keep it safe. It is wholly unacceptable for the National Weather Service to act in this manner. Further, by abrogating your responsibilities to the public, the proliferation of the secondary providers of this information is now responsible for some of the data congestion that overwhelms the cell towers that relay this data. In essence, by failing to lead, the National Weather Service has precipitated a significant part of the latency problem.

I urge the National Weather Service to reject the proposed draft policy and re-write it in a fashion which places the National Weather Service in the principle leadership role of disseminating watch and warning information via mobile devices. Only by doing this can we reduce the congestion of our airways and reduce to a minimum the delays with which the public is warned. My life depends on it; your life depends on it; the safety of our society depends on it. Nothing less than leading in this area of new technology can be considered remotely acceptable.

Respectfully,

[name removed]

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| | <p>Professor, United States Air Force Research Institute Professor, The Air University</p> |
| <p>4</p> | <p>Thanks for giving me the opportunity to comment.</p> <p>My read on this is that the NWS will create mobile-centric (or "mobilized" versions) of their weather dissemination, displays, etc., for their "core partners" (the "Direct Mobile Weather Services") and leave everyone else (like the "general public") to subscribe to commercial or academic offerings (the "Indirect..."), who would be relaying this information from the NWS. I also assume that this issue is now on the table because of pressure from the commercial weather information providers. My comments are based on this interpretation.</p> <p>Why are you making the distinction between Mobile Weather Services and the NOAA Weather Radio? In my mind, the NWR is a "Direct" service -but it also covers the general public, and could also be interpreted as being in competition with commercial organizations (aside from the special radio receiver requirements, of course). While I might like the local TV weathercaster, I'm not sure I want to rely on him to issue a Tornado Warning to my cellphone, instead of getting this directly from the NWS. What if the TV station (or other "commercial provider") has a computer outage? Who is liable when I missed the NWS-issued warning because they had a computer hiccup?</p> <p>As more people carry mobile devices during their away-from-home activities, the idea that the NWR was first developed for has not changed -- get the word out to people who have the radios. How is this situation any different? While the NWR is excellent for alerting people, it is also very useful for every-day use, getting forecasts, climate data, etc. If the government thought this was an essential thing to do twenty years ago, why not now, but for the cellphones (aka, little radios that people carry in their pockets)? In fact, it makes more sense to me to start a transition to favor the mobile technology over the NWR.</p> <p>And most objectionable is that this "commercialization" would seem to mean I would have to PAY someone to get a warning on my cellphone or other mobile device? (I am aware of the upcoming tests of providing messages from cell towers to all phones...and I think this is a good idea as long as the FAR has been reduced enough so that people don't start opting out....)</p> <p>Along those lines, why should I have to pay to find out the current temperature or get the latest radar animation on my mobile device? Haven't I already paid (in taxes) to provide these data through the NWS? This is the same line of thinking as when Service A&C were replaced by NOAAPort, when only a few commercial entities would connect to the data stream and then "sell" the data to end users.</p> <p>Now, if the commercial providers want to add value to the data, that's fine. If I need this value-added product, I will be happy to pay for it. But a simple radar animation is not, in my opinion, a "value-added" product any more than the current temperature reading at the airport is...or a Tornado Warning.</p> <p>Thanks again for this opportunity.</p> <p>Regards, [name removed]</p> |
| <p>5</p> | <p>Sir/Ma'am-</p> <p>While there are many private sector apps available for weather information, I turn to NWS/NOAA whenever possible for my updates. To this extent I carry a weather radio with me whenever I travel CONUS. This is also my back up for times when Internet connectivity isn't possible. App availability for my Kindle Fire would be a much appreciated service.</p> <p>From a professional aspect our agency, like many others, is moving more and more into the wireless</p> |

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| | <p>world, in particular for those times we deploy personnel for natural disaster support. Again, a NWS app would provide excellent real-time, on-the-go accessibility. Thank you for your time.</p> <p>v/r</p> <p>[name removed] National Geospatial-Intelligence Agency Joint Operations Integration Office</p> |
| 6 | <p>Hello,</p> <p>I think the NWS should continue to focus on improving the warning products they issue and researching weather-related topics to improve the science of meteorology. The development and implementation of Dual-Pol Radar is a great example. The development and testing of enhanced severe/tornado warnings for selected NWS offices in central region is another good example.</p> <p>A quick search for "Weather Apps" on Yahoo results in 2,755. Searching Android Apps for "Weather" results in over 1,000.</p> <p>There are more than enough "Weather Apps" for mobile users out there. I don't think it would be cost-effective for the NWS to try and invent mobile weather apps given that there are so many good apps produced by the private sector for FREE.</p> <p>My comment would be a "NO" for the NWS to develop mobile weather apps.</p> <p>Thanks for listening.</p> <p>- [name removed]</p> |
| 7 | <p style="text-align: center;">Response to Draft Policy of the National Weather Service NWSI 01-1003 on Mobile Weather Services by The Weather Channel Companies[1] 15 March 2012</p> <p>General Comments:</p> <p>We applaud the National Weather Service (NWS) for recognizing the need to develop a specific policy regarding its development and enhancement of information services that are intended for use on mobile and wireless devices. In a time of shrinking discretionary federal spending, it is important to have clear and concise policy to guide decision making whenever significant resources of the federal government, NOAA and/or the NWS are considered. We are particularly pleased that the draft policy considers NOAA's existing Policy on Partnerships (NAO 216-112) superseding any new mobile weather services policy and that it further recognizes the important critical role that America's weather industry plays in the rapid delivery of NWS weather information to the Nation.</p> <p>However, we do not feel that the draft policy is sufficiently clear regarding how the NWS will decide whether or not to undertake the development and implementation of new mobile weather services. In particular, we believe that the policy should specifically state that the NWS will only develop new mobile weather services when it can be clearly shown that (a) there is a clear need for the service, (b) that the service is not being met by existing services provided by America's weather industry and (c) that America's weather industry is unwilling or unable to provide the needed services. <u>We do not believe that the NWS should develop or deploy any mobile weather service which would be in direct competition with equivalent services that currently are or could easily be provided by the weather industry. We believe the policy should directly and specifically support this position.</u></p> <p>The NWS mission to protect life and property and to enhance the national economy can only be fulfilled</p> |

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| | <p>by having a vibrant, competitive commercial weather industry. America’s weather industry has invested millions of dollars in developing a rich, robust and diverse suite of mobile weather services to serve a wide range of needs of the Nation. These existing mobile weather services are critical in order for the NWS to meet its mission. The draft NWS policy must be strengthened to ensure future actions of the NWS do not threaten the NWS-Enterprise partnership that is so critical in meeting the mission of the NWS. Private industry has proven many times that it can develop weather services (such as mobile weather) that meet the nation’s needs significantly more effectively and efficiently than the NWS. Moving forward, the NWS should encourage and leverage private enterprise whenever and wherever possible to meet the weather needs of the nation.</p> <p>Specific Comments on the Text: In addition to the general comments, the following are comments on specific aspects of the draft policy:</p> <p>Sec. 2.1: The support of “Core Partners” should be expanded to include those members of the weather industry that provide services to the electronic media, but are not directly members of that media. Many media outlets provision their weather services through contracts with and/or services from third parties, and it is important that these third parties be part of the Core Partners definition.</p> <p>Sec. 2.4: Any outreach by the NWS to educate the public should provide a full and balanced approach on all mobile weather services that are available to the public, including those developed by the broader weather industry. The NWS should not use such outreach activities to support or advocate any particular mobile weather service that meets the specific need, including those that it has deployed itself.</p> <p>Sec. 3.1.1.2: The word “provided” should be replaced with “developed”. The NWS should conduct full due diligence on whether a new NWS mobile weather service is needed and justified (consistent with the general comments above) before devoting resources to the development of those services.</p> <p>Sec. 4.1: The word “the” is repeated.</p> <p>Sec 4.1.1: The CIO “should” (rather than “may”) consult existing experts in the field, <u>including representatives of America’s weather industry</u>, and NOAA’s Science Advisory Board’s Environmental Information Services Working Group (EISWG) before reaching a decision. Any decision of the CIO which is inconsistent with the advice or recommendations from these experts should be clearly rationalized in written statements from the CIO.</p> <p>[1] The Weather Channel Companies include The Weather Channel, WSI Corporation, Enterprise Electronics Corporation and a number of other holdings.</p> |
| 8 | <p>Comments of Earth Networks, Inc to the National Weather Service’s request for public comment regarding National Weather Service Instruction 01-1003 Mobile Weather Services</p> <p>Introduction Earth Networks, Inc. (EN) appreciates the opportunity to respond to the National Weather Service’s (NWS) request for public comment on its draft policy on mobile weather services (NWSI 01-1003). EN operates some of the world’s largest environmental observation networks including; an in-situ meteorological sensing network, a global total lightning detection network, a greenhouse gas monitoring network, and a high resolution camera network. Additionally, EN is currently in the process of deploying a boundary layer profiling network. Data from these networks are used by businesses, government agencies and millions of consumers every day. EN is also one of the leading developers and distributors of web and mobile applications (apps) in the world. Data from EN proprietary networks as well as information obtained from the NWS and other sources are fused into these platforms to provide decision makers and consumers alike access to comprehensive, real-time weather and environmental information.</p> <p>While it is certainly laudable for the NWS to embrace new technologies, and recognize the myriad ways that information is consumed today, we believe that it is important to distinguish between the NWS’s role in creating information services and industry’s role in distributing that information. In addition, it is critical</p> |

that the NWS fully understand the complexities associated with developing and supporting mobile weather services as well as the extent to which these services are already being delivered by industry today.

Core Capabilities versus Distribution

As stated on NOAA's web site, building a Weather-Ready Nation starts with "...moving new science and technology into weather service operations that will improve forecasts, increase lead time and ultimately increase weather-readiness." It follows then that the NWS's top priority should be ensuring that efforts and resources, both human and capital, are focused on enhancing core capabilities for generating more accurate forecasts and severe weather warnings with enhanced lead times. These capabilities are critical to safeguarding life and property and enhancing the nation's economy, which are primary components of the NWS mission.

Delivery or distribution of those forecasts and warnings is not currently nor has been in the past a bottleneck. Rather, industry has been meeting this need efficiently and effectively throughout the modern history of the weather services. Today, there are a plethora of communications channels including thousands of mobile weather applications available that deliver critical weather information including forecasts, watches and warnings to businesses and consumers every day. Over the years, via partnerships with industry the NWS has been able to rapidly and cost effectively exploit emerging technologies including newsprint, radio, television, cellular communications and the internet to rapidly communicate weather information to a broad and diverse set of users. These users include; local, state and government organizations such as police and emergency management, as well as all other corners of society such as broadcast media, manufacturing, energy production and dissemination, education as well as the general public to name a few. To this end, rather than devoting efforts on "re-inventing the wheel" by building what will essentially be duplicate existing delivery vehicles, focus should be on improving the observation, forecasts and information services themselves. And in a time of tight budgets such as we find ourselves today, a laser-focus is even more essential. Devoting time, money and attention on direct mobile services (i.e., "...those for which NWS provides content to each user's specific mobile device and controls its presentation on that device") is to take focus away from and put at risk the core, high-value mission of the NWS.

Existing Capabilities

The provisioning and tailoring of web and in particular mobile applications carry with it major complexities than cannot be underestimated. Extensive resources are required to develop, qualify, port and maintain the vast and ever growing number of mobile platform manufacturers, operating systems and communications carriers. Supporting such a broad, evolving matrix is an extremely slippery slope that, unless managed very closely in a highly flexible and adaptable environment can rapidly overwhelm and consume the resources of an organization.

Fortunately, there exists today a great deal of capability and expertise within industry that is supporting a very diverse and robust mobile weather services market. In fact, there are over 1,170 weather apps in the Apple iOS store and more than 3,747 weather apps in the Android marketplace. Many of these applications are rich with content and capability and thus meet the needs of a broad cross section of users ranging from the professional decision maker to the general consumer. Some apps can be obtained for nominal one-time fees while others are free for download. As such, there are neither unmet needs in app availability nor in communications of critical weather information.

Tradeoffs and Decisions

The NWS professes a position that it must continually evaluate new technologies and strategies for meeting its mission. This is perfectly understandable as it is not unlike tradeoffs that business must similarly make. Over the years, the NWS has undertaken such evaluations and made decisions to terminate or not get involved in the provision of various products, services and even market areas already served by the private sector so as to not duplicate efforts. Specific examples include local and national television programming as well as agricultural services. Given the extreme complexities associated with developing and supporting mobile weather services, leveraging industry's existing capabilities rather than creating its own is another opportunity that the NWS should take advantage of.

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| | <p>As mentioned previously, industry has a long track record of working collaboratively with the NWS and is both well entrenched and equipped to continue effective distribution of weather information through the mobile/cellular medium. Industry is also well positioned to meet the content and user interface needs of mobile platform end users. Relying on industry to address this market is akin to the long standing reliance on broadcasting and cable operators to similarly disseminate critical weather information. Just as it would be an imprudent use of government resources to launch a weather cable channel, it would be similarly imprudent for the government to get involved with developing and supporting mobile apps, particularly given the robust state of the industry, governmental funding pressures and the pressing needs for other higher priority atmospheric observing, forecasting and warning capabilities that face the NWS.</p> <p>By relying on industry to continue fulfilling this market need, the government will avert careless expenditure of precious resources on duplicative services. Further, the government will reap substantial benefits by taking advantage of the world leading mobile weather products and services that a robust industry will continue to innovative and deliver. Additionally, in this manner the NWS will have the ability to stay focused on its core mission requirements by applying its resources toward more pressing core needs. Doing so will also strengthen the Weather and Climate Enterprise's public/private partnership and further establish a truly Weather-Ready Nation.</p> |
| 9 | <p>To Whom It May Concern,</p> <p>Weather Decision Technologies appreciates the opportunity to provide input regarding The National Weather Services' draft policy on mobile weather services. As stated in the policy draft, mobile devices are quickly changing the way people obtain critical information including weather information. For this reason, the NWS is rightfully exploring what its role should be with regard to the dissemination of information via mobile solutions.</p> <p>Members of WDT evaluated the draft policy and found that it does an excellent job of building a decision framework for determining the role of the NWS. The decision factors explicitly detailed in Appendix B appropriately base a decision on eight factors including the NWS mission statement, and the requirement that the NWS needs to be fiscally responsible with taxpayer money.</p> <p>Appendix B could also benefit from one additional key decision input. WDT believes the NWS should avoid duplicating the efforts of other agencies within the government. As a result, WDT recommends that the following criteria be added to the criteria in Appendix B:</p> <p>"Government sources do not already provide the same service, or provide an equivalent service."</p> <p>WDT believes this recommendation is aligned with the NWS mission and the other criteria listed in Appendix B, and this additional criteria would benefit the NWS by providing greater focus. As a result, the NWS would be able to apply itself in areas of greatest need and greatest benefit to the public, with the added benefit of being good stewards of taxpayer money.</p> <p>Thank you again for the opportunity to comment on the draft policy.</p> <p>Sincerely,</p> <p>[name removed] Weather Decision Technologies</p> |
| 10 | <p>To whom it may concern:</p> <p>Weather or Not, Inc. has been the private forecasting leader in KS and MO for 26 years. Currently, we sell a wireless alerting system which does NOT compete with the NWS. Therefore, free data and info disseminated in any format does NOT compete with Us.</p> <p>The mission of the NWS is best served when NOAA and NWS dollars focus on researching and</p> |

analyzing the best methods to most accurately and quickly warn people about impending severe weather threats. The NWS should not attempt to try to become a software developer. Following are several reasons why we seriously hope that the NWS will resist the temptation to be distracted creating a new, unnecessary business model which will not improve that current warning dissemination services hence not better serve the NWS mission. Following are some of our reasons for our position:

FREE alerts are already available and can be to all Americans through texting, email and social media.

Designing software such as mobile services and apps is a perpetual assignment as the company must keep up with new operating systems and mobile devices. Fulfilling this requirement will become a black hole of financing. Either the NWS will be forced to divert money from it's warning development or give up not long after creating a few mobile service products that don't do anything more than what's currently available for FREE.

The duplicative nature of such a proposal will seriously threaten the NWS argument that they are doing something that private industry cannot do. As soon as the NWS spends government dollars on what private industry is already doing for FREE and doing it well and extensively, it creates the argument for private industry that they are already doing what the NWS does, hence, private industry should manage their mission and save the government budget.

Why would the NWS even consider opening that door? If a govt. agency spends money to create a new division or group to create what already exists for free and is easily available to the public, they will offer a clear cut example of govt. over reaching without improving warning. That argument has been squelched recently. Let's keep it that way.

There will be new technologies coming along faster than NWS can possibly keep up with. That's a challenge for the Googles and apples of the world, not a govt. agency.

As an employer, I know it's tempting to utilize this new work force that is so comfortable with emerging technologies. However, because someone can write some code for their meteorology class does not mean that they are qualified to create a software division which will be required to properly enter the market of providing mobile services.

With DHS and FEMA introducing the extrememly poorly designed CMAS, there will be serious challenges PR wise for NWS because we all know that your people will have to politely defend something that's going to be misunderstood, aggravating and over warning.

The speedy turnaround required for innovation is not an option for any bureaucracy.

The 2013 proposed federal budget cuts NWS ITOs by 80%. This is counterintuitive to creating IT requirements that are already being met for FREE by private industry.

The NWS saves lives and has performed remarkably, especially, in 2011, the most diastrous severe weather season ever. By focussing on a mission of researching weather threats, providing uniform data, educating the public through WFO outreach, encouraging partnerships with emergency managers and first responders. NWS has wisely spent time and money on reviews of both the Joplin and Tuscaloosa tragedies to learn how people react to warnings. This is the responsible use of government dollars to assist its citizens in keeping themselves safe.

All successful businesses know that they must stick to their core competencies. The NWS success has been created by realizing that it is a science agency not a mobile software agency.

In conclusion, Weather or Not, Inc. supports the excellent work that the NWS does in the field of meteorology. We strongly urge the NWS to keep their funds concentrated on what they do best and to avoid the temptation to enter into an area that will create redundancy and waste ever diminishing

government dollars.

I thank you for your time and attention. Please feel free to call me anytime with questions or comments.

Yours for a safer atmosphere,

[name removed]

Weather or Not, Inc.