Aviation Weather (CT-AWX)
Program Manager: Kevin Johnston

Program Constraints

Different system (AWIPS/WARP/ NAWIPS) and their various capabilities at each organization make it very difficult to produce consistent and relevant weather information required by NAS decision makers. Decentralized production and development of aviation centric products and services internal to NOAA has historically limited reduction of socioeconomic inefficiencies. Products and services delivered by various sub elements of NOAA that are relied upon heavily by the Aviation Industry for operational use have not been addressed holistically.

Program Alternatives, Including Best Alternative

Alternative Name CT-AWX-4 Research to Operations Adjustment
Programmatic versus Non-Programmatic Alternative
Programmatic

Alternative Description
This option enables implementation of the robust capability of a complete AWIPS meteorological workstation inthe Center Weather Service Units (CWSU) to replace the legacy operational system. CWSU operations of today do not have the full capabilities and benefits of AWIPS. The FAA has requested NOAA to develop a strategy containing alternatives with strong potential to evolve into a bilateral planning effort that reduces the FAA contribution to manpower intensive weather operations. This alternative approach would require NOAA to incur substantial costs to fully implement AWIPS at CWSU locations.

Alternative Name CT-AWX-2 Digital Technology Adjustment
Programmatic versus Non-Programmatic Alternative
Programmatic

Alternative Description
This alternative provides a fiscally balanced approach to fielding new technology that could provide a level of effort reduction to current operations while still providing additional support for some of the highest priority gaps. The elements of this alternative include:
- Aviation Digital Database
- Support for Joint Planning Development Office (JPDO)
- Redistribute 1 FTE (NOAA corps billet)
- Restructure of FAA/CWSU/NOAA reimbursable agreement
- Reduction in total NOAA aviation workforce

Risks: Aviation Digital Database: Adding the vertical dimension to the aviation database is a cost risk. At the proposed level of funding, the delivery schedule of tangible work products is delayed and the level of coordination is reduced. Delaying the delivery schedule also increases technical risk. It requires open systems architecture that supports high-resolution gridded data enabling high-resolution graphical displays readily accessible to aviation operational users. This will require a well-defined and well-managed configuration management process that aligns with commercial aviation, FAA, NOAA, and other stakeholder needs. Even with these risks identified, the4-dimension database must be pursued. The benefits outweigh the risks.

Commercial Remote Sensing Licensing and Compliance Program (CT-CRS
Commerce and Transportation
Program Manager: Michael Hales

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Workforce Collaboration Tools

The CT-CRS program would greatly benefit from having access to SiperNet (classified email access). As there is classified information which is included in our regulatory decision making process, having access to such are source would be very helpful and improve efficiency and productivity. The program has worked within NESDIS and NOAA to determine how this access can be facilitated, and have been told such access is coming eventually, but it has yet to be implemented.

Geodesy (CT-GEO)
Commerce and Transportation
Program Manager: Dave Zilkoski

Alternative Name CT-GEO Fill Critical Research to Operations Gaps
Programmatic versus Non-Programmatic Alternative
Both
Alternative Description

$1.8 million in funding in each year from FY08 – FY12.

The Geodesy Program has research initiatives underway that cannot be transitioned from research to operations without additional funding. Many of these projects will benefit other NOAA Programs, IOOS activities and the private sector.

This alternative would fund several critical Research to Operations gaps, transitioning the following projects fromresearch to operations:

Details are as follows:$200K for SWaPS:

The Geodesy Program is currently developing and testing a Shallow Water Positioning System (SWaPS). Primarily for coral reef and sea grass monitoring and damage assessments, SWaPS provides precise (< 10cm)horizontal positions for visible underwater features. The recorded imagery is entered into a Geographic Information System, where data can be viewed, archived, and monitored for changes. This ability to monitor exactly the same area over a period of time is invaluable to coastal and restoration manager. This additional funding would move SWaPs from research to the operational phase, providing IOOS research and ocean modeling opportunities, including:
- Coral Reef Monitoring.
- Quantifying patterns of damage and recovery on shallow coastal habitats.
- The potential for surveying large areas rapidly without the need to deploy divers
- The ability to return to specific locations without establishing permanent tags or markers.
- The ability to survey an area remotely without specialized field personnel.
- Creation of data standards and formats enabling interoperability and integration with existing coral reef programs.

http://www.ngs.noaa.gov/News/SWAPS/Geodesy is currently in discussions with EC-COR about how SWaPS could further support coral reef activities.

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Enterprise Architecture
Resources Estimated cost:200 users X $440 = $88KThe Geodesy Program requires additional resources to acquire Enterprise Architecture Support:- data compilation and analysis to derive enterprise architecture models- computer and software support- additional personnel to code and administer the system

Workforce Collaboration Tools

Enhancements to Geodesy's Workforce collaboration tools being explored:- development of a Geodesy/NGS Management Information System for Workforce Planning.- better use of Project Management Software.

Marine Transportation Systems (CT-MTS)
Commerce and Transportation
Program Manager: Rich Edwing (NOS)

None

Marine Weather (CT-MWX)
Commerce and Transportation
Program Manager: Therese Pierce

IT Council

Workforce Collaboration Tools
- Ocean and marine atmospheric forecasts and analyses in gridded form.
- Smart Tools to manipulate gridded data.
- Web services to support NOAA's education on ocean and marine atmospheric activities and long term exhibits.
- Larger quotas on e-mail storage.
- Upgrades to existing products and patches.
- More licences for web page development and upgrades when available.
- For question #22, our workstations cost $4500 each and we are on a five year replacement cycle.

NOAA Emergency Response (CT-EMR)
Commerce and Transportation
Program Manager: David Kennedy (NOS)

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Workforce Collaboration Tools

NOAA's emergency incident response IT needs are often limited to the equipment available in the Incident Command Post (ICP). ICPs are frequently established in hotel conference rooms near the incident site and lack necessary minimum IT requirements. NOAA staff would benefit from enhanced network connectivity (to the web,and others in the ICP). NOAA's response community would benefit from a maintained ready-to-go IT kit that would include a network router, laptops with preinstalled wireless network cards, a color printer, fax machine, etc.

Surface Weather (CT-SWX)
Commerce and Transportation
Program Manager: Mike Campbell

None