***NATIONAL WEATHER SERVICE POLICY DIRECTIVE 80-8***
***APRIL 8, 2004***

***Science and Technology***

# *DEVELOPMENT FOR IMPROVING OPERATIONS AND SERVICES*

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**OPR:** W/OST3 (D. Jones) **Certified by:** W/OST (J. Hayes)
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***SUMMARY OF REVISIONS:*** None.

1. The National Oceanic Atmospheric Administration's National Weather Service (NWS) needs to conduct operational development of identified solutions in accordance with program plans and requirements in support of the NWS mission. This directive establishes the NWS policy for conducting operational development to support operations and services improvement.

2. This objective of this directive is to establish the organizational, management, and procedural framework to develop and integrate system solutions. Operational development plans and their associated products will be used to develop solutions and associated operational development evaluations, deployment, logistics, and support plans, and responsibility transfer plans.

3. This directive establishes the following authorities and responsibilities.

3.1 The Office of Science and Technology (W/OST) will establish national policies and procedures for operational development activities consistent with NWS policy directive 10-1, Operations and Services Improvement Process.

3.2 W/OST and the Office of Hydrologic Development (W/OHD) will:

a. Lead the coordinated effort to prioritize and conduct operational development of identified solutions.

b. Lead the effort to coordinate deployment, integrated logistics support, and responsibility transfer plans.

3.3 The Office of Operational Systems (W/OPS) and the Office of the Chief Information Officer (W/CIO) will:

a. Evaluate operational readiness for deployment.

b. Coordinate with W/OST or W/OHD, as appropriate, on integrated logistics, support plans, deployment plans, and responsibility transfer plans.

3.4 The Office of Climate, Water, Weather, and Services, W/OPS, W/CIO, National Centers for Environmental Prediction and the Regions will:

a. Coordinate with W/OST or W/OHD, as appropriate, on operational development evaluations, deployment plans, integrated logistics and support plans, and responsibility transfer plans.

b. Coordinate with W/OST or W/OHD, as appropriate, to evaluate input, prioritize efforts, define resources, and distribute information to appropriate parities.

4. Performance Measures:

4.1 Technical Performance. W/OST and W/OHD, as appropriate, will compare the technical performance to the planned technical performance as defined by the requirements for the operational development effort and address, if any, the variances.

4.2 Cost Performance. W/OST and W/OHD, as appropriate, will compare the actual cost to the planned cost for the operational development effort and address, if any, the variances.

4.3 Schedule Performance. W/OST and W/OHD as appropriate will compare the actual schedule to the planned schedule and address, if any, the variances.

5. This policy directive is supported by the references and glossary of terms listed in Attachment 1.

Signed by March 25, 2004
Brigadier General David L. Johnson, USAF (Ret.) Date
Assistant Administrator for Weather Services

**Attachment 1**

## REFERENCES AND GLOSSARY OF TERMS

### References

NWS Policy Directive 10-1, *Operations and Services Improvement Process*
NWS Policy Directive 80-1, *Acquisition Program Management*
NWS Policy Directive 80-4, *Systems Engineering*
NWS Policy Directive 80-6, *Research and Analysis for Improving Operations and Services*
NWS Policy Directive 30-1, *Systems Deployment, Maintenance, and Assessment*
S*ystems Engineering Fundamentals*, Department Acquisition University Press, January 2001

### Glossary

**Development.** Includes the activities required to evolve the system from customer needs to product or process solutions.

**System.** A system is an integrated composite of people, products, and processes that provide a capability to satisfy a stated need or objective.

**Systems Engineering.** Systems engineering is a standardized and disciplined management process for development of system solutions that provides a constant approach to system development in an environment of change and uncertainty. It also provides for simultaneous product and process development, as well as common basis for communication.

**Systems Engineering Management.** Systems engineering management is accomplished by integrating three major activities:

1. Development phasing that controls the design process and provides baselines that coordinate design efforts.

2. A systems engineering process that provides a structure for solving design problems and tracking requirements flow through the design effort.

3. Life cycle integration that involves customers in the design process and ensures that the system developed is viable throughout its life.