



**LETTER OF AGREEMENT  
FOR OCEANIC AND ATMOSPHERIC RESEARCH TRANSITIONS  
TO NATIONAL WEATHER SERVICE OPERATIONS**



**SCOPE:**

This Letter of Agreement (LOA) between the National Oceanic and Atmospheric Administration's (NOAA) National Weather Service (NWS) and the Office of Oceanic and Atmospheric Research (OAR) defines the long term commitment to improve the transition of NWS-relevant research to operations (R2O).

Requirements for this agreement are defined in the NAO 216-105<sup>1</sup> directing the Line Office Transition Managers (LOTM) to: (1) manage the LO transition portfolio; (2) foster applicable LO transition projects through the NOAA Strategic Execution and Evaluation Process (SEE); (3) track and provide timely reports to LO leadership on the portfolio status; (4) ensure the development of appropriate transition plans and; (5) coordinate with other LOTMs, program managers, and SEE Goal teams when appropriate.

This LOA identifies the procedures to be followed by both NWS and OAR parties to ensure successful transitions of R&D projects. It identifies tasks to be performed annually. It does not address specific transition resource needs (including funding and/or human resources). Nor does it prescribe specific business rules to be followed. Transition resource agreements for individual projects may be defined by separate LOAs.

**CORE PREMISE:**

OAR and NWS participate in a push-pull dynamic with regard to R2O. By virtue of its scientific and technical expertise and through its base, programmed, or reimbursable projects, OAR may develop, prototype, and demonstrate new operational capabilities which it may advocate (push) to NWS (e.g. The Meteorological Data Assimilation Ingest System (MADIS)). Joint transition planning for these types of projects. By virtue of its understanding of forecasting operations and through identification of new requirements, NWS may advocate (pull) to OAR for new operational capabilities supported partially or completely by NWS funds as mutually agreed between OAR and NWS (e.g. the Integrated Hazard Information System (IHIS)). NWS assumes the burden of transition planning in these cases. For the "push" path, OAR is encouraged to engage NWS stakeholders early and often to ensure understanding of incubation project objectives. NWS in turn is encouraged to engage OAR stakeholders early and often to identify path-finding research which may lead to future operational capabilities. It is recognized that the high cost of transition is often an impediment to effective R2O. Therefore, OAR is expected to pursue efficiencies, exploit opportunities where current operations can inform decisions on which research to pursue (O2R), and leverage NWS investments in order to minimize transition costs. Finally, it is recognized that many transitions represent enhancements to existing NWS operational systems. These types of transitions generally do not require the development of separate transition plans beyond what NWS requires as a part of its normal requirements, development, testing and integration procedures.

## **POSITION:**

OAR and NWS agree to complete the annual tasks as identified in the Roles & Responsibilities section. This will achieve optimal alignment between the R&D portfolios of each LO and ensure efficient and timely transitions to operations.

## **ROLES & RESPONSIBILITIES:**

Each year OAR and NWS LOTMs are responsible for the completion, of the following tasks:

- Collect and make available R&D project-level execution data (i.e., R&D portfolio of all active transition projects) by the end of the 2<sup>nd</sup> quarter of the following fiscal year;
- Identify potential transition projects from OAR research into NWS operations
- Ensure R&D projects planned to transition into NWS operations, when appropriate, enter and proceed through the NWS Operations and Services Improvement Process (OSIP)<sup>2</sup> ;
- Participate in cross-LO “forums” to increase awareness on R&D activities between LOs;
- Ensure efficiencies are gained by the use of operational environments for research activities, where appropriate, in which new operational capabilities could reside (e.g., AWIPS);
- Ensure that for each transition project, business plans and transition plans (pursuant to NAO 216-105), written together or separately, with budgets identified and with linkages to the NOAA SEE process Implementation Plans are in place;
- Identify short-term operational needs as well as long-term stretch goals (NWS via S&T Roadmap, Strategic Plan, etc.);
- Identify enterprise solutions across NOAA linking LO goals and objectives together;
- Encourage the maximum use of existing testbeds and proving grounds and suggest research project managers brief the NOAA Testbed and Operational Proving Ground (OPG) Coordinating Committee for consideration for possible inclusion of transition projects in a testbed or OPG activity;
- Encourage the use of existing programs to fund the transition of unforeseen, but highly meritorious R&D projects that could not have been included in prior years’ SEE planning exercises;
- Through the NWS and OAR Chief Financial Officers, include joint research and transition milestones in the NOAA Annual Operating Plan;
- Through their respective transition focal points, provide data required for performance measures relating to transitions between NWS and OAR;
- Agree on funding structures (e.g., overhead costs) and funding distribution timetables;
- Agree on reporting structures and timetables;
- Standardize as much as possible progress reporting requirements, formats, and reporting frequency;
- Allow flexibility to modify plans, funding, and timetables by mutual agreement during a fiscal year as events warrant.

OAR/Office of Policy, Planning and Evaluation:

- Reviews new OAR Cooperative Research and Development Agreements (CRADAs) and other related agreements annually to ensure that they do not unnecessarily encumber the transition of science and technology to NWS operations or conflict with this agreement;

- Maintains a focal point for R2O to provide a liaison and facilitation between programs and laboratories and NWS;
- Assists NWS Office of Science and Technology in prioritizing transition projects by providing a complete list of OAR projects and their associated maturity;
- Ensures that NWS Office of Science and Technology is informed when OAR laboratories or programs plan on using NWS Weather Forecast Offices for testing and that there is mutual agreement to do so;
- Provides information to OAR AA when he/she considers terminating OAR-funded projects that have been running experimentally in OAR but have no feasible path to transition;
- Support NWS and OAR groups as they make transition decisions.

**NWS/Office of Science and Technology:**

- For NWS “pull” transition projects, assures that candidate OAR laboratories and/or programs are considered the “first choice for science” by NWS;
- Provides a “first contact” person (NWS transition focal point) for OAR scientists to bring new research projects with possible transition potential (the “push” path) early in the process for a decision on next steps in working with the NWS, including an initial presentation to the Research and Innovation Transition Team (RITT) mentioned below;
- Even prior to “official” acceptance of a project by LOTMs and the development of business and transition plans, NWS transition focal point identifies an NWS transition project manager to work closely with the OAR project manager for coordination;
- Solicits technical advice from OAR subject matter experts on sources of “best value” for NOAA for “pull” projects planned by the NWS;

**ROLE OF NOAA COOPERATIVE INSTITUTES:**

This agreement recognizes that along with the NOAA scientific and technical expertise represented by NOAA federal employees, a significant amount also resides with LO-affiliated Cooperative Institutes (CI) non-federal employees. Accordingly, CI employees can be a critical resource for some transitions of weather products from research to operations, and should be funded for this purpose when and where appropriate. This funding would be limited in scope, and would allow CI employees to participate fully in R2O activities where the CI employee played a role in development of the system at the research level, and has expertise that will contribute to a successful transition. New CI employees would not generally be hired for R2O work, unless a significant skill gap exists that must be bridged for a successful operational transition. CI employees would continue to work at their assigned facility (i.e. the facility in which they did the research that is being transitioned) unless NOAA determines and documents that there is a specific need for a temporary relocation in support of the R2O activity.

NWS may also fund new research at any NOAA CI, either through the existing CI management structure, or directly through the CI Award Amendment process, so long as that new research is consistent with the agreed upon Research Themes for the given CI. At the time such research is proposed, NWS and OAR will determine whether collocation in a NOAA facility by the CI is appropriate and necessary, and OAR and NWS will negotiate support for the NOAA facility in which the CI personnel will be placed. OAR may, if a significant expansion in the number of employees is anticipated at a given NOAA facility, request that NWS contribute directly to the

overhead costs of housing the CI employees, and OAR may deny such housing if it would adversely impact the ongoing functions of the NOAA lab.

**BACKGROUND INFORMATION:**

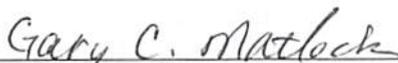
- The NWS OST Research and Innovation Transition Team (RITT) supports the NWS LOTM and assists working teams in facilitating transition of research projects into NWS operations
  - Manages RITT Forum
  - Creates collaborative opportunities between OAR research activities and identifying pathways into NWS operations (and vice versa)
- Roles and responsibilities of the Integrated Work Team (IWT) of those transition projects entering OSIP include:
  - NWS personnel will be identified as the IWT Lead and will have the responsibility to pass through OSIP gates successfully
  - OAR (and other LO participants) on the IWT will provide technical input into OSIP documentation
  - OAR (and other LOs on the IWT) will have full voting rights at OSIP gates

**FOOTNOTES:**

<sup>1</sup> NOAA Administrative Order (NAO) 216-105 “*Transition of Research to Application Policy*”

<sup>2</sup> www.osip.weather.gov (note: NOAA LDAD user name and password needed)

As agreed to on 5/15/12 by the Line Office Transition Mangers for OAR and NWS:  
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