

Operational Readiness and Airport Transition (ORAT)



Operational Readiness and Airport Transition (ORAT) is a series of processes where checks and balances are put in place to identify and mitigate risks in a project before operational impacts can occur. It's also a process for assessing lifecycle costs and when brought on early in the program, can lead to avoiding costly change orders both during construction and after operations commence.

An **ORAT Implementation Plan** defines the roadmap for how ORAT will be executed for specific projects. There are several components to an ORAT program. When ORAT is engaged and the level of engagement influences the benefits discussed below.

The typical scope of work for an ORAT program that is engaged from the start of a project during the Planning stage through opening and operation would include the following activities:

ORAT Implementation Plan

Stakeholder Engagement Plan

Stakeholder engagement is the first activity of an ORAT program. Developing a stakeholder engagement plan along with a communication plan is critical to the successful delivery of ORAT. The intent of a stakeholder engagement plan is to create effective and positive relationships with the various stakeholders through the appropriate management of their expectations and agreed upon objectives. It also ensures stakeholder concerns are addressed by understanding their respective operations (i.e. how they do business) and the dependencies that exist on their respective operations.

Operational Concept, Design Integration, and Standard Operating Procedures

During the planning phase, a Concept of Operations is developed to detail how each new facility will function based on input from the stakeholders. This Concept of Operations is necessary to capture what

the stakeholders require to perform their respective operations, not only existing, but also how they see their operations evolving, utilizing new technologies and future industry trends. The concepts are an opportunity for developing or improving Key Performance Indicators (KPIs) for how facilities and operations are conducted and managed. The defined concepts are carried into the design criteria for the new facilities. They are also used as the starting point for development of operating procedures, incorporated into functional trials and used as the basis for operations.

Risk and Issue Identification, Mitigation, and Contingency Planning

Project-specific issues, risks, and corresponding mitigation strategies are identified, vetted, documented via stakeholder working groups and tracked throughout the life of the project. In certain cases, contingency plans are developed, particularly for critical systems and operational processes.

Familiarization, Induction, and Training (FIT) Plan

Facility projects introduce hundreds, if not thousands, of new building components, technologies and processes, all requiring a level of familiarization, induction and/or training. One of the goals of ORAT is to ensure that all stakeholders are "fit" to operate competently and efficiently in the new environment. ORAT develops a FIT Plan which ensures that contractual standards for training are met, and that all who need training receive it. The O&M training requirements are identified prior to execution of the RFPs/contracts by engaging the maintenance, technology and operations departments of the airport during the design phase to understand their requirements for numbers of staff by functional area to be trained. The FIT Plan schedules training to minimize the impact upon productivity and maximize knowledge retention.

Testing and Commissioning Assurance

One of the stumbling blocks common to failed airport implementations is the lack of adequate testing and remediation prior to opening. While responsibility for the technical testing and commissioning of equipment and systems typically falls to vendors, the ORAT team will ensure that key stakeholders are engaged by witnessing and learning from the testing and commissioning activities. ORAT aligns the training and trials schedules with the testing and commissioning schedule because many of the operational trials are dependent on many of the systems, equipment and facilities being ready. Commissioning should be completed prior to conducting trials.

Integrated Operational Trials

ORAT will conduct basic and full-scale, integrated operational trials. The purpose of conducting operational Trials is to ensure that all facilities, systems and equipment are operationally ready; the processes are defined, and the staff are knowledgeable and capable to operate efficiently in the new environment. These “dress rehearsals” are designed to identify areas of improvement in time to implement remediation measures prior to opening.

It's recommended that there be at least a 4- month window between substantial completion of a new terminal or other facility and opening day to effectively conduct trials and provide a level of assurance that the new facility is ready for operation. A shorter trial period could endanger successful openings because the functional interaction of new processes, new systems and new facilities cannot be proven sufficiently.

Transition Plan

Planning for occupancy of new facilities requires significant advanced planning and superior logistics management. ORAT identifies mobilization and move activities to be conducted before opening, during opening (defined as the move immediately preceding opening day) and post opening, with a view toward minimizing risks in every way possible. ORAT also identifies and vets opening scenarios with corresponding risks, mitigation strategies and required phased and/or parallel operations.

In many scenarios, the Airport provides in-house staff to manage the transition activities, or they jointly work with the ORAT team on the transition. It's important to note though that transition planning should begin as early as a year prior to opening because there are a number of logistical activities

that need to occur. Information gathering cannot be postponed without accepting a level of risk that may negatively impact the transition and opening.

ORAT will detail stakeholder support to be provided before, during and after opening. Vendors on-call, supplemental staffing, help desk numbers etc will be included. Additionally, a command and control center will be staffed by key stakeholder representatives during initial operations and will act as a central dispatch for resolving issues as they arise.

ORAT Master Schedule

Each project should have its own **ORAT Master Schedule** which infuses ORAT activities into key project elements, identifies dependencies within and across projects, and facilitates resource planning and conflict resolution for the entire project (and CIP) lifecycle.

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