

| SMS Best Practice/Good Practice Submission | | | |
|---|------|--------------------------------------|---------------|
| State whether this is a Best or Good Practice: | | | |
| ANSP | DHMI | Date submission | of 04.07.2025 |
| Contact Details | | | |
| SoE Study Area | | CHANGE MANAGEMENT | |
| BP/GP title | | Managing a Major Operational Change | |
| In use since | | APRIL 2025 | |
| ANSPs using this practice (for BP specifically) | | | |
| Key Words | | The Case of Triple Runway Operations | |

Managing a Major Operational Change: The Case of Triple Runway Operations at Istanbul Airport

Implementing major operational changes in a high-stakes industry like aviation demands a structured and strategic approach. The launch of Triple Runway Operations (TRO) at Istanbul Airport on April 17, 2025, marks a significant milestone as the first implementation of its kind in Europe. The development, which impacts numerous stakeholders, required meticulous planning to ensure both safety and operational efficiency. The transition exemplifies key change management principles, including clear communication, proactive risk mitigation, and the integration of stakeholder feedback.

The Turkish Air Navigation Service Provider, DHMI, inaugurated TRO with the simultaneous take-off of three Turkish Airlines aircraft on independent runways. This milestone marks the beginning of Triple Runway Operations at Istanbul Airport, where simultaneous landings and take-offs will be conducted on three runways. The initiative enables the efficient use of airport infrastructure and supports effective dynamic capacity management minimizing delays while maximizing fuel savings and flight efficiency aligned with the airport's vision of serving 200 million passengers.

As there is currently no regulation published by the International Civil Aviation Organization specifically addressing the implementation of TRO, a comprehensive Safety Analysis was conducted to support its deployment in Türkiye. The study involved representatives from Eurocontrol, the Directorate General of Civil Aviation, Turkish Airlines, and DHMI. As part of the preparations, approximately 4,500 hours of training were delivered to 500 Air Traffic Controllers from key ATC units, including Yeşilköy Approach Control Unit and Istanbul Airport Tower Control Unit in Istanbul, and the Air Traffic Control Center in Ankara comprising 1,500 hours of theoretical and 3,000 hours of practical training.

Strategic Communication and Awareness

A core element of managing change is proactive and targeted communication. The commencement date of the new operations was announced well in advance, giving operators time to prepare. To maintain real-time awareness, information about the ongoing operations is continuously broadcast through air traffic information services. This ensures that all flight crews are kept up-to-date with the operational status, particularly at critical moments such as hand-off between sectors. This multi-channel communication strategy is designed to enhance situational awareness and operational readiness for all involved parties.

Stakeholder Training and Procedural Integration

Effective change requires more than just awareness. It demands active training and the integration of new procedures. With the implementation of Triple Runway Operations, dedicated Monitor Sectors were established, each responsible for overseeing a specific approach path and preventing aircraft deviations. To ensure immediate compliance, monitoring controllers are authorized to issue urgent instructions using frequency override capability. Pilots are expected to comply with these instructions, such as immediate turns or go-arounds, without delay. The simulation phase of the safety analysis, for simultaneous and independent landings and take-offs on three runways, took several months to prepare and was carried out at the EUROCONTROL Innovation Hub. Testing of the new procedures and training of the Air Traffic Controllers were carried out at the DHMI Training Facilities by means of the state-of-the-art Simulator named ATCtrSIM.

Risk Mitigation and Contingency Planning

Any major operational change introduces new risks. A robust change management plan must include clear risk mitigation strategies and contingency protocols. For TRO, this includes:

- **Dedicated Monitoring:** The new sectors are responsible for protecting the No Transgression Zone (NTZ), a critical safety corridor between runways.
- **Mandatory Altitude Compliance:** Pilots must adhere to specific altitude restrictions at designated waypoints to maintain safe vertical separation before establishing on the localizer.
- **Operational Suspension Criteria:** The new operations have explicit suspension criteria. The system will be halted in the event of a loss of radar surveillance, air-to-ground communication, ILS signals, or GPS on the departure path. This predefined protocol ensures that operations can be safely reverted under challenging circumstances, including adverse weather conditions.

Feedback and Continuous Improvement

A successful change is one that is continuously refined. To support ongoing improvement, a voluntary information sharing system has been established. Pilots and operators can use designated email addresses to provide feedback and share observations about the new operations. This informal reporting channel allows the operational unit to collect valuable data and insights, identify areas for refinement and adapt the procedures as needed. This feedback loop is a key driver of continuous improvement and adaptation in the post-implementation phase.

Conclusion

The implementation of Triple Runway Operations at Istanbul Airport exemplifies a well-managed change. By prioritizing clear communication, integrating new procedures through training, and implementing robust risk mitigation and feedback mechanisms, the operational unit has established a framework that not only supports the efficiency of the new system but also ensures the highest level of safety throughout the transition and beyond. This comprehensive approach serves as a valuable model for managing large-scale operational change in the aviation industry.



By submitting this document, your organisation is willing for the proposed Best or Good Practice to be shared with other ANSPs.

For Best Practices, this document should be sent together with the SoE in SMS questionnaire, to: soe_2025@eurocontrol.int by 15th July, 2025 at the latest.

Submissions for consideration as Good Practices may be sent by the above date. They may also be identified during the survey interview sessions with the assessment team, following which a Good Practice submission document will be requested.