



Wanted: ORAT Trial Tool



Briefing: Fraport Digital Factory Project ORAT Trial Tool

Problem/goal description and technology focus:

An ORAT-project (Operational Readiness and Airport Transfer) aims to ensure the operational readiness of a new terminal at the time of opening. It includes, among other things, a comprehensive training and familiarization program for all employees as well as an operational trial run. The goal is for a new facility to operate on opening day as if it had been in operation for years.

The operational trial run takes place in the five months leading up to the opening of a terminal, typically on Tuesdays and Thursdays. During the operational trial run, real airport operations are simulated together with all involved stakeholders, such as airlines, authorities, service providers, etc. The focus is on passenger processes. Up to 1000 trial passengers per day are used for this purpose. These passengers receive a ticket for a flight, simulating an actual journey, and then go through all process steps from baggage check-in, security check, boarding, etc.

The ORAT team is responsible for organizing the trial run and prepares all the necessary documents for execution and evaluation. Currently, the documents required for the trial run are largely created and maintained manually, which requires a significant amount of time and effort.

What we are looking for:

A technical solution for the creation, maintenance, and distribution of all trial run documents (Part 1), as well as for the evaluation of the actual trial run and the related reporting (Part 2).

Part 1 of the tool to be developed: Management of trial run scenarios

In the first step, it is about the management of the trial run scenarios. Input for this is provided, among other things, by documents developed by the ORAT team and the airlines, such as flight schedules, workload plans, passenger name lists, and event lists.

- **Trial Run Flight Schedule:** An Excel file that contains all flights for the trial run, including flight number, destination, flight times, aircraft type, and aircraft registration. The trial run flight schedule is created in consultation with the participating airlines and serves as the basis for the trial run. Flights from the trial run flight schedule are selected for each trial run day.
- **Workload Plan per Trial Run Day:** An Excel file with details on the number of intended trial passengers, the volume of flights to be handled, and the amount of baggage per trial run day.
- **Passenger Name List (PNL) per Flight:** Based on the trial run flight schedule, airlines create "Passenger Name Lists" in their systems for each flight so that a check-in process can be conducted for the listed passenger names. The PNL should already include Passenger Name Records for the respective passengers.

- **Event List:** An Excel file with a list of possible processes or events that can be tested during the operational trial run. This includes general passenger processes, such as check-in and security control, as well as special events for passengers (e.g., simulated medical emergencies, loss of identification documents) or general failure scenarios (e.g., power outages, failure of parts of the baggage handling system).

The tool should be able to access this input and ensure through an interactive query that the ORAT team can create different scenarios for each trial run day (selection of participating airlines and ground handlers per trial run day, resource allocation such as check-in counters, boarding gates, selection of special events based on the event list). The tool's task is to ensure that all events are tested.

The tool should also create a scenario document for each trial run day as well as individual tickets for trial passengers, including special events if relevant.

- **Scenario Document:** A script for a trial run day for all stakeholders involved in the trial run. It includes the flight schedule for the respective day, passenger and baggage volumes, events, list of participants, timelines, and planned logistics. The scenario document is created approximately one week in advance for each trial run day. It is distributed to all involved stakeholders and serves as information about the planned content for the respective day and the resources required.
- **Tickets:** Serve as action instructions for the trial passengers. Tickets are created for each trial run flight based on the "Passenger Name Lists." The tickets indicate the airline, flight destination, departure time, passenger name, and travel class. The tickets are distributed to the trial passengers on the trial run day and serve as instructions for the trial passenger to check in for a specific flight. These tickets may also include specific instructions for individual passengers regarding their roles, such as special events according to the aforementioned event list, e.g., "I checked in my heart medication and need it now."

Part 2 of the tool to be developed: Creation of the Trial Run Reporting

In the second step, it is about evaluating the respective trial run days. The focus here is on the systematic recording and automated evaluation of feedback from stakeholders and trial passengers. For the creation of the trial run reporting, the following data are particularly relevant and need to be recorded and processed by the ORAT team:

- **Quantitative Data per Trial Run Day:** Data from the control center systems, airlines, and other process participants, such as the number of actual trial passengers and baggage handled, process times at process points (e.g., security check), sorting accuracy in the baggage handling system, etc.
- **Qualitative Data per Trial Run Day:** Feedback from stakeholders and trial passengers. While stakeholder feedback is primarily collected through a debriefing session held after the trial run, trial passenger feedback is gathered through a questionnaire.

An automatically generated trial run report should be created from the various input sources, summarizing the respective trial run day and distributed as a report to the stakeholders at the end of each trial run day.

The feedback from trial passengers and stakeholders such as airlines, federal police, and service providers should be collected or recorded electronically and evaluated automatically (based on relevance and frequency of mentions). The results must be editable before distribution to handle non-relevant information.

Critical open points for the Open Points List (OPL) should also be automatically extracted. The OPL itself does not need to be created.

- **Trial Run Report:** A report for the trial run day that includes feedback from stakeholders, passengers, and open issues of the day (such as elevator defects, untrained staff, check-in workstation not connected), and possibly photos. The trial run report is created at the end of each trial run day and sent to all involved stakeholders. It contains critical points from the trial run day and serves as documentation for each trial run day.
- **Open Points List:** Open points from the trial run report are transferred to the overarching open points list after each trial run day for follow-up.

Schedule and milestones:

- If interested, please contact us at digitalfactory@fraport.de with information about your company and a short outline of your solution (max. 5 slides) by September 19th, 2024
- Solution provider presentations (pitch) between October 17th and 24th, 2024
- Shortlisting of providers asked for a quote by October 25th, 2024
- Submission of quotes by November 4th, 2024, 8 am CEST
- Contracting and start of cooperation within 2-3 business days after quotes have been submitted
- End of project and final presentation by solution provider on January 17th, 2025

Acceptance criteria:

Requirements / characteristics / functionalities of the MVP

- Creation and maintenance of high-quality scenario documents and tickets (plus events) that cover all event types across all trial run days.
- Digitized collection of feedback from stakeholders and trial passengers and automated creation of an editable trial run report and items for the open points list.
- Ability to apply the trial run tool in future ORAT projects and in at least two languages (German and English).
- Capability for a high number of internal and external users to access the trial run tool simultaneously.

Optional functionalities of the tool:

- Ability to generate statistics for individual trial run days as well as the entire period (e.g., number of flights, baggage items, trial passengers, participating internal and external stakeholders, tested procedures) within the tool.

- Online access to trial run documents and results for stakeholders, e.g., in the form of a dashboard.
- Automated sending of tickets and special events information to trial passengers, e.g., to their mobile devices (for internal and external users).

List of KPIs the MVP will be validated against

1. Fulfillment of all the above-mentioned requirements for the tool.
2. Simple, self-explanatory operation of the tool for all users and easy addition of new elements (scenarios, events) as well as simple editing of the trial run report by the ORAT team.
3. Process times within the tool are shorter than the current manual steps.
4. Meeting optional criteria results in additional points.

These KPIs must be achieved by **January 17th, 2025** or verifiably achievable.

Requirements concerning data:

Collection and Processing of Personal Data

- Since the system will capture personal data (name, contact details), data security within the EU is mandatory if a cloud-based solution is chosen.

Collection and Processing of Non-Personal Data

- The trial run planning captures and processes not only personal data but also data related to trial run schedules.

List of standards and norms the solution must comply with:

- GDPR: The system must comply with the General Data Protection Regulation (GDPR) to ensure the protection of personal data and privacy of individuals within the EU.
- IT Security Act: The system must adhere to the IT Security Act (IT-Sicherheitsgesetz) to ensure the security and integrity of IT systems, particularly those critical to infrastructure and essential services.

Priority questions to be answered during a possible pitch:

- How do you technically address our problem statement?
- How can the ORAT team create new scenarios?
- How can the ORAT team add new events, etc., to the tool?
- How do you ensure that all events from the event list are tested?
- How are the feedback responses from stakeholders and passengers collected and evaluated?
- Which of the optional components can you already provide?
- How can the trial run tool be adapted to other projects?
- What is the pricing model for using the tool?

Evaluation criteria:

Should you be invited to pitch, you will be evaluated according to the following criteria:

1. Customer reference: Customer references in the aviation industry (airports, airlines) or in similar industries, not older than 3 years (*simple scoring*)
2. Effectiveness: Can this technology solve the problem? (*triple scoring*)
3. Maturity of the solution: Existing product or new development? (*triple scoring*)
4. Efficiency: How well can the technology solve the problem (KPI achievement, MVP scope)? (*triple scoring*)
5. User Interface: User-friendly, clear interface – the following criteria will be assessed: graphics, design, clarity and intuitive user interface, practicability (*triple scoring*)
6. Data collection and storage: Where is the data stored (e.g. on-premise/cloud)? (*simple scoring*)
7. Data sharing: Possibility of data sharing (data flows into data lake or similar, APIs etc.?) (*simple scoring*)
8. Access: Is there a user concept, can different users be assigned different access rights etc. (*simple scoring*)
9. Primary scope of rollout: Use of additional areas, scalability (FRA) (*simple scoring*)
10. Other possible applications, e.g. in other airport areas or for different use cases (*simple scoring*)
11. Use in the Fraport Group: Use for subsidiaries (*simple scoring*)
12. GDPR compliance / compliant with German law (*simple scoring*)
13. Visualization: Were a demo/photos/videos shown? (*simple scoring*)
14. Presentation style: Convincing presentation and reaction to questions (*simple scoring*)
15. Price indication: Was a first indication provided, info about pricing model? (*simple scoring*)
16. Speed of implementation: Describe timeline, prove feasibility (*simple scoring*)

Please keep the evaluation criteria in mind for your presentation and be responsive to the demanded content. Should you not be able to address all points in your pitch due to time restrictions, please make sure to include all information in the presentation you send us afterwards.

Based on the aforementioned criteria, Fraport will select suitable providers for a shortlist and ask for a cost proposal.

Should you not be able to offer us the whole solution and wish to work with a partner, please provide information about the partner and your previous experience. Please keep in mind that Fraport will commission one contractor only. Your partner needs to be commissioned as a subcontractor on behalf and for account of you as the contractor. Should you be shortlisted and asked to submit a cost proposal, Fraport will only accept a comprehensive offer.

Further hints and instructions

You will have 30 minutes to pitch your solution idea to us. Please plan for 15-20 minutes of presentation at maximum, so that we have time for questions. You may present in German or English language and we would appreciate to receive your presentation slides afterwards (please send us a version that we are allowed to distribute internally for information purposes).