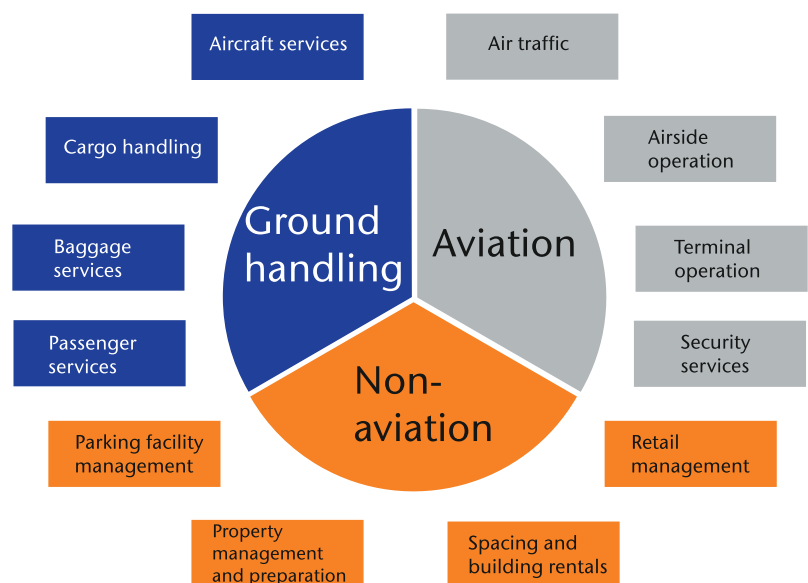


Integrated Airport Operations



Concepts of Integrated Airport Operations

An option for increasing the throughput is to optimize the airport operations. Nowadays operational improvements concentrate mostly on single solutions and consider short term planning. Stakeholders at the airports often do not realize the impact of their actions on other stakeholders. And quite often they do not know how other stakeholders react in a given situation. These uncertainties and complex interactions may have negative impact to the efficient use of stakeholder's resources. Fraport has been at the forefront of setting industry standards for Integrated Airport Operations throughout decades. This experience provides us with the necessary know-how and expertise to optimize your operational processes.



Airside Operations - Moving without traffic jam

Being one of the world's leading hub airports, Frankfurt Airport, the home airport of Fraport, faces challenges on a daily basis to maintain a proper, efficient and safe operation and to cope with the continuous growth of aviation traffic.



Despite the given constraints, i.e. night curfew for all arriving and departing flights as well as a limited development area, Fraport has achieved all requirements in the past and will further meet future challenges for Frankfurt Airport. This could only be accomplished by optimizing all airside related processes and procedures with the close cooperation of other involved stakeholders, e.g. airlines, ATMC, state authorities. Having gained vast experience within this specific airport field of reference, Fraport's experts are capable to optimize procedures and processes for

- Aircraft stand allocation (also in combination with gate and counter allocation)
- Airside supervision
- Ground movement control
- FOD & waste management



Terminal Operations - Display window of an airport

Terminal Management comprises the overall management of terminal facilities and passenger processes at an airport including following tasks:

- Gate and counter allocation
- Provision of safe and appropriate terminal facilities in accordance with applicable rules and regulations
- Responsibility for operating safety, efficiency and cleanliness of the terminal facilities, especially guaranteeing safety

- Passenger flow management
- Passenger Service, e.g. encompassing the Information Services, Lost & Found, Communication Center and the VIP Service
- Supplying departing and arriving passengers as well as meeters and greeters with current flight data at critical points of decision
- Coordination of Retail and Food & Beverage
- PRM's suitability

One of the most sensitive infrastructural facilities at an airport is the passenger terminal. It is of utmost importance not only to provide sufficient space and capacity for passengers, meeters and greeters, airlines and other stake holders, but also to have a sufficient and reliable organizational and functional structure to allow a continuous and unimpeded passenger handling.



A suboptimal structured and operating terminal not only has an impact on the overall performance of the airport's efficiency, reliability and punctuality but also might have a significant influence on the operator's financial balance sheet: Misrouted passengers, an unbalanced offer of amenities, e.g. shops and food & beverage locations, insufficient information services may result in dissatisfied customers and thus leading to a decrease in traffic and revenues. Fraport provides highly skilled and experienced experts for all related issues and thus providing customized answers for any questions regarding terminal operations

Safety and Security - It doesn't work without

Fraport with an in depth understanding of all safety and security related issues offers a wide spread of tailored solutions based on a profound knowledge and long-term experience from its home airport Frankfurt as well as from close cooperation with national and international authorities and organizations.

The vast competencies of Fraport comprise of:

- Airport Security
- Aviation Security (e.g. Passenger, Baggage, Cargo)
- Airport Rescue & Fire Fighting
- Aircraft Recovery
- Medical Services (Emergency Medical Services and Airport Clinic)
- Occupational Health & Safety



Landside Operations - Short walk way from air travel Crisis Management - Be prepared!

The worldwide growing level of motorization creates new challenges, e.g. having sufficient access and connectivity potentials at and around the airport. Whether travelling to and from the airport by car, coach or public transport, it is essential for every airport to allow passengers and other guests an easy access, short passages between the terminal and the public areas. This all has to be aligned with a potential traffic growth of the airport. Frankfurt Airport has been one of the first airports worldwide introducing the intermodal connectivity concept, having all involved transport systems in close proximity, e.g. parking, public transport (coaches and trains) and the airport terminals. This makes Fraport one of the world's most experienced experts in regard to landside operations, featuring vast know-how in

- Parking systems
- Intermodal traffic connectivity
- Forecourt traffic management
- Airport road system



For every airport operator crisis management is a critical organizational function. Failure can result in serious harm to stakeholders, financial losses for the airport, or damages to the credibility and reputation of the entire company. Therefore a crisis management should aim to be well prepared, to ensure a rapid action to any scenario, to have defined lines of communication to all parties involved and to provide rules for crisis termination. Additionally it is of utmost importance for the airport to maintain or resume the operation as much as possible, to minimize the commercial and economical impact and to ensure the continuous work of those parties not involved in a crisis. Within the last decades Fraport as owner and operator of Frankfurt Airport has developed and implemented a detailed framework of procedures describing possible crisis scenarios and the methods of resolution. This framework has been elaborated not only with other airport stakeholders but also with urban administration as well as governmental authorities.

To complete the preparation, regular training courses are provided and tests are conducted to proof the effectiveness of the crisis management team and the installed centers.

Fraport through its experts is able to assist and provide solutions for following topics:

- Establishing an Emergency Response and Crisis Management Center
- Establishing an Emergency Information Center
- Provide psychological attendance

Airport Operations Center - The brain of airport operations

The core element of the Integrated Airport Operations system is the AOC. The implementation of an Airport Operations Center (AOC) can support the airport operator in optimizing the airport's resources, whether they are of infrastructural nature or human and equipment assignment, whether they are terminal, airside or landside related. With an AOC a common platform is given to various airport departments and other stakeholders, enabling them to jointly organize and coordinate their activities under the full situational awareness of impacts of joint decisions on their own and others' operational plans. The AOC can be either a centralized physical command and control room or a distributed solution, connecting stakeholder representatives by existing and new means of supporting tools for arbitrated collaborative decision making. The positive effects and impacts on the overall airport operations are:

- increased efficiency and productivity
- pro-active reaction on upcoming bottleneck situations and restrictions
- better decision making by stakeholders based on increased situational awareness
- better understanding and the alignment of stakeholder decisions to achieve an airport wide optimum of operations
- increasing predictability and enhancing operational stability for all stakeholders, taking into account
- different modes of airport operations, e.g. environmental friendly, maximum throughput
- enhanced predictability of the traffic flow at the airport.



Ground Handling - Conditions on ground form the success for airlines in the sky



With over 50 years of experience in ground handling, Fraport is able to cater to the individual wishes of airlines and to ensure a high-quality standard in ground handling. In Frankfurt alone, a workforce of more than 7,100 works for over 100 national and international airlines in the ground handling and the central ground handling infrastructure sectors as well as other ground handling affiliated businesses. This, together with other involved Fraport departments enables Frankfurt Airport to still guarantee a minimum connecting time of 45 minutes within different terminals, within different airlines. In accordance with the IATA 810 regulation, Fraport's consultants are able to assist in the preparation of procedures, optimizing processes and creating new services for following scope of duties:

- Passenger handling
- Ramp handling
- Cargo/ mail handling
- Baggage handling (including the functional planning for baggage handling systems)
- Aircraft De-icing

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