



Lido/Flight

Efficient flight planning solution

The dispatch process is a fundamental part of any airline's flight operations. Place your operations on a solid basis – with Lido/Flight. Our market-leading flight planning solution provides dispatchers with a host of optimization options to reduce fuel consumption, the costs of each flight and flight times. Imagine fuel savings of up to 5%. Lido/Flight makes this possible. Read on and find out more.

The flight planning and dispatch solution Lido/Flight covers all aspects of flight planning as well as flight tracking procedures. It is known world-wide for its large spectrum of functionality and the high-quality aeronautical data on which all calculations are based.

Lido/Flight makes allowance for all valid aeronautical restrictions (e.g. NOTAMs, restricted airspaces, overflight permissions, flow restrictions, CRAM, etc.) while offering many additional unique optimization possibilities in the process of flight plan calculation.

Any operational flight plan can be generated either manually, fully automatically or at any other level of manual intervention within your flight planning process. Our solution offers even more flexibility: During flight plan calculation your dispatchers have the option of using various valuable optimization options, e.g. minimum fuel burn, minimum time or minimum cost – or even combine different options and achieve the optimum according to the airline's needs. With Lido/Flight you can choose the most efficient result for each of the options which is provided with each calculation. In addition, you can also select speed adaptations based on the optimum cost index.

By airline experts for airline experts

Our comprehensive flight planning solution is developed and maintained by trained aviation experts with many years of on-the-job experience. Pilots, performance experts and trained dispatchers will advise you during the analysis and optimization of your operational business processes. We are more than just an IT provider: we are your partner all the way from the implementation project to the actual deployment of Lido/Flight.

Benefits

- > **Operational cost savings**
- > **Full automation of the flight planning process**
- > **Tailored briefing packages**
- > **High quality aeronautical data with worldwide coverage**
- > **Easy integration within the IOCC Platform**

> Lido/FlightOps Suite

Powerful, high-availability IT systems are critical to ensure reliable and efficient flight operations. Our Lido/FlightOps Suite provides airlines with the necessary tools and innovative solutions, enabling them to optimize processes, save fuel, and reduce costs.



Lido/Flight offers the following flight planning and analysis functionality

Optimizations:

- Automatic airport suitability checks, requiring no manual intervention in a process that is traditionally the most labor intensive of dispatch tasks, according to valid restrictions and current weather conditions for departure, destination, alternate and ETOPS alternate airports
- Integrated take-off and landing performance calculation
- Well-engineered route optimization by minimum fuel burn, minimum time as well as minimum cost
- Optimum flight level profile, considering e.g. wind situation and ATC restrictions
- Environmental flight profile, minimizing CO₂ emissions
- Variable cost index calculation and optimal flight speed
- Manual up to fully automated ETOPS calculation, considering equal time and equal fuel policies as well as flexible settings for icing conditions
- Automatic consideration of all valid flight restrictions, e.g. TFR, NOTAMs, AIP regulations, overflight permissions or weather minima
- Different route selection criteria, e.g. pre-defined company routes, OTS, PACOTS, SAT and POL
- Most economic trajectory in free flight airspace

- Economical fueling and tankering
- Consideration of operational aircraft data (take-off, climb, cruise and descent, MEL, CDL, performance data etc.)
- Preflight reclearance option with just a few mouseclicks
- World wide access to briefing packages as well as the operational flight plan
- Diversified and efficient inflight assistance and monitoring

Analysis:

- Integration of strategic flight planning and post-analysis activities into day-to-day operations
- Post flight analysis also in form of management reports with reliable statistics
- Realistic and accurate pre-planning with statistical weather and pertinent navigational data

Interfaces:

- Integration of data flow between all related areas of flight operations: operations control, scheduling, weight & balance, crew management, flight watch and fuel purchasing systems
- Interface with the Central Flow Management Unit (CFMU)
- Air-to-Ground communication with datalink
- Preparation of the ATC Flight Plan including addressing
- Transmission of briefing packages including Weather and NOTAMS tailored to a flight event

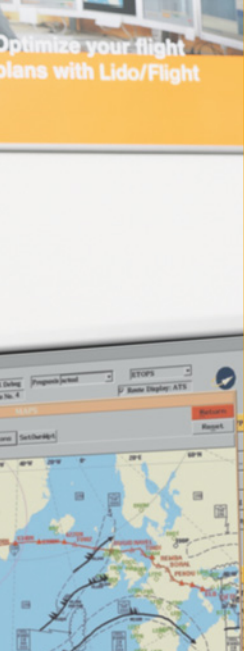


This solution is a component of the Integrated Operations Control Center Platform (IOCC).

It is the first fully-integrated IT platform able to control and monitor all aspects of airline operations, including schedule management, operations control, crew management, flight planning and weight & balance. Because of the synergies the IOCC Platform generates, it offers airlines much greater economic benefits than stand-alone systems. Learn more about our platform and visit us at www.IOCC.LHsystems.com.

Components of the IOCC Platform:

- IOCC/Sched
- IOCC/Ops
- IOCC/Crew
- IOCC/Flight
Lido/Flight
- IOCC/Load



Lido Aeronautical Database

The comprehensive functionality of Lido/Flight relies on our Lido Aeronautical Database. It comprises all aeronautical data of non-proprietary nature with worldwide coverage. Our database comprises data of a non-proprietary nature according to ICAO Annex 3 and 15.

We are here for our customers:

Lufthansa Systems provides an online 24/7 data service for the Lido/Flight system. This includes our replication processes for delivering new and updated data to our customers continuously.

Our optimizations consider all following data:

- Static AIS Data/Basic Aeronautical Data from official state publications as published in national AIPs or other legal sources (SUP, AIC, NFDD, DAH, ...) such as
 - Static AIS Data/Airport Data
 - Aerodrome Curfew Information
 - Airspaces (FIR/UIR, Restricted Airspace, Special Use Airspace etc.)
 - ATC Addresses (AFTN and/or SITA if applicable)
 - En-route Obstacles as per AIP, NOTAM or any other official source
 - IATA Currency Exchange Rates
 - NAV Aids
 - NAV (ATC) Charges
 - Runway Data & Runway Facilities
 - Segments (Airways, DCTs, NARs, NERs etc.)
 - State Minima
 - Terminal Procedures (SIDs & STARs)
 - Waypoints
- Dynamic AIS Data/NOTAM (International Class I, Domestic, Military)
- SNOWTAM
- Traffic Flow Restrictions
- Organized Track Systems
- Meteorological Data such as:
 - Scheduled OPMET Data (Airport Weather Data)
 - Non-Scheduled OPMET Data
 - UAD – Upper Air Data
 - Statistical Weather UAD
 - Significant Weather Forecasts in BUFR code form
 - Significant Weather Forecasts in chart form
 - Satellite Images
- Terrain and Obstacle Data based on the following sources:
 - Shuttle Radar Topography Mission (SRTM)
 - Digital Terrain Elevation Data (DTED) from NIMA
 - Vector Map Level 0 (VMAPO™) from NIMA
 - DEM for Australia, Japan, New Zealand, Brazil and Greenland
- Aircraft Performance Data

You have the choice

As each airline operates differently, you can choose from a variety of modules and increase your cost savings and efficiency.

InteractiveFlightPlanning (IFPL)

With this core module of Lido/Flight your airline receives a professional interactive flight planning functionality that covers all relevant aspects and many optimization options. To continually keep the routing up-to-date all flight relevant data is transmitted to the InflightMonitor, which informs the dispatcher of all external influences affecting the flight. Part of the IFPL is also the FreeFlight functionality which is primary applicable in free flight airspaces. It plans the most efficient trajectory for each flight based on the current weather and airspace situation.

BusinessProcessManagement

Adjust planning figures of your flights with results from the statistical analysis. This tool provides you with the essential advantage over most other flight planning systems. ATC charges and analyzed contingency fuel will be traceable in respective management reports. It also allows your dispatch department to perform strategic planning according to your airline's strategy. Different routings can be built, altered and analyzed by simulating several aircraft simultaneously.

IntegratedPerformance

Lido/Flight offers integrated performance functionality for take-off as well as landing. This will improve your dispatchers' workflow and raise awareness of relevant weight or runway limitations at a very early stage. Calculating the optimum thrust just before take-off reduces the stress on the engine and increases its on-wing time. The landing functionality allows your dispatcher to calculate the maximum allowed landing weight for the destination and the alternatives for the chosen aircraft and its specific configuration.

Briefing

Generating the electronic briefing packages automatically enables pilots to promptly receive the customized information they need for their next flights anywhere in the world and at any time. All they need is a computer and a web browser. Your pilots may also access operational and ATC flight plans, fuel summaries, weather charts, satellite pictures, NOTAMS and other information via the internet.

AOS

The Airline Operation Support (AOS) module is designed to fully automate the complex flight planning process. Taking into account legal regulations, airlines can either partially or fully automate their processes for calculating and optimizing flight plans as well as distributing briefing pack-

ages to pilots. Time consuming tasks such as checking suitable airports, NOTAMS and weather, optimizing routes as well as distributing flight plans will be accomplished in the background.

TFR

Automating your flight planning process with our TFR module opens up a host of new route options, leading to additional fuel savings of up to 2 percent. Our TFR module considers partly restricted airways and therefore enhances the bundle of possible routings. This results in even a larger pool of possible routings that can be used for calculating an optimal flight plan. Your final routing will be the most effective combination of available airway segments, taking all ATC regulations into account. Even on short notice.

ETOPS

ETOPS flights have become the predominant type of transatlantic operation. Lido/Flight automatically optimizes these flights according to the ETOPS safety regulations and the individual certificate of an airline. Our solution checks NOTAMS, runway availability, operating hours of the airport and local weather. The dispatcher is able to see immediately whether it is possible to operate this flight as planned or whether he has to select additional alternate airports.