

Air Cargo Management Solutions

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Air Cargo Management Solutions

Mercator is revolutionizing the way the world moves people and cargo. We build smart and powerful products that drive intelligence, predictability, and value into our customers' business.

SkyChain is a next-generation air cargo platform for airlines serious about providing on-time performance, world-class customer service, and increased profitability. Across the entire freight supply chain, SkyChain's open architecture is liberating customers from traditional legacy environments – giving them a newfound freedom to run their businesses with efficiency and profitability.



SkyChain Airline

As the role of technology in air cargo management shifts from being a driver of efficiency to an enabler of fundamental innovation and disruption, SkyChain Airline is helping carriers drive intelligence, predictability, and value across the supply chain to re-define the air cargo landscape.

The background of the slide features a blue-tinted image of a Finnair cargo aircraft. The word "FINNAIR" is written in a white, italicized, sans-serif font across the middle of the image.

FINNAIR

"We are very pleased to have Mercator as our partner in this important project. SkyChain will be an essential tool for us for years to come. The new system, alongside our investment in a new cargo terminal, will ensure we revolutionize Finnair's cargo capability for our customers and partners."

Janne Tarvainen,
VP Head of Cargo, Finnair Cargo

The need for faster transit times, greater reliability, and improved visibility in air cargo have never been greater. SkyChain Airline, Mercator's next-generation air cargo management solution, delivers an end-to-end digital view of the supply chain, while enabling you to make faster, smarter business decisions based on real-time information.

Customers increasingly expect a higher level of engagement and a seamless air cargo experience. Deliver a convenient, consistent, and customer-centric service by creating a digital conversation across a connected supply chain. Explore new ways to interpret data into information and insights, and in turn, significantly lower costs, heighten productivity, and boost your bottom line.

SkyChain Airline provides the scalability and industry-leading capabilities needed to manage your operations the way you want. Manage information and processes simultaneously and efficiently across your extended supply chain, freeing up more time for strategic priorities. Use the latest technologies to improve every facet of your operations, from sales and reservations to demand forecasting, capacity management, asset utilization, tracking and supply chain management, and customer service.



Key Benefits

- Maximized customer service levels with real-time visibility and insights across the supply chain
- Increased data quality by eliminating data entry errors and streamlining business processes
- Enhanced asset utilization through smart demand, supply, and capacity planning to optimize revenue



Revenue Planning

- Set tonnage and revenue targets
- Achieve forecast and demand planning
- Plan sales and monitor performance

Reservations, Capacity Control, and Capacity Management

- Segment flight capacity through a wide range of customizable parameters
- Reserve and allot space for different types of cargo
- Perform online checks for special cargo, embargoes good, loadability, and connection time discrepancies
- Monitor flights and gain a better view of possible operational disruptions
- View space availability and reserve via digital messaging channels
- Interface with passenger systems to determine cargo capacity gains
- Analyze and generate reports on pre and post flight revenue, yield, and load factor

Rate Management

- Perform automatic rating based on shipment details
- Maintain a hierarchy of tariff and other charges for various document types
- Enable upfront rating of shipments for better revenue control early in the life-cycle of shipments
- Save special prorate agreements and code share agreements
- Support ad-hoc or spot rate management
- Maintain Built Up Unit (BUP) tariff rates and charges (pivot, over pivot and overflow)
- Support multiple modes of payment in various currencies
- Deliver price quotations via messaging and e-channels



Revenue and Cost Management

- Define direct and indirect costs related to shipments
- Calculate revenues and costs automatically within the reservation process
- Prioritize shipments based on revenue
- Take long-term revenue management decisions by evaluating tariffs and allotments
- Support a pre-built interface that works with revenue optimization solutions
- Define spot and ad-hoc rates with workflows for better control

Air Waybill (AWB) Stock Control

- Maintain air waybill stock and monitor usage and current stock levels of electronic, as well as, manual documents
- Manage and control bulk-store stock at your airline office and other locations
- Perform stock blocking and blacklisting, with stock status updates
- Enable the cross utilization of stocks to maximize asset utilization and promotion
- Automatically send stock re-order alerts to ensure business continuity for sales agents
- Request stock from the airline in real-time
- Create a stock management hierarchy and define headquarters for controlling and selling locations



Route Selection and Optimization

- Set preferred routes for origin-destination pairs
- Build routes directly from flight schedules
- Maintain connection time information for stations
- Search for route availability based on various criteria
- Create bookings directly from route availability displays
- Provide route availability via messaging and digital channels

Schedule Management

- Create, modify, delete, and reestablish seasonal and operational schedules
- Split schedules automatically
- Schedule maintenance through the automatic processing of SSM, ASM, and MVT messages
- Support OAL schedule loading from OAG interface
- Provide schedule information via messaging and e-channels

Key Features

- Integrate seamlessly with SkyChain Handler, SkyChain Claims, Nomad, and RAPID Cargo to streamline your cargo operations along the supply chain
- Benefit from an open architecture solution tailor made to the needs of your business
- Compose industry standard messages such as FWB/FSU/FHL as easily as a text message
- Apply the use of IATA CXML messages and ensure availability of e-freight initiatives to customers
- Improve service delivery with integrated queue framework supports workflow activation and performance-related metrics
- Adhere to regulations and manage shipment status with an integrated irregularity management framework and embargo framework
- Support door to door services to extend business networks and improve customer satisfaction
- Create a product one time, and use for segmenting capacity, creating product specific rates, and defining product embargoes
- Support post office mail with data capture, industry standard CARDIT and RESDIT messages
- Gain better visibility throughout the life-cycle of the shipments and ensure less claims

Additional modules are available to complement the features of SkyChain Airline.

- ⊕ Freightier charter and truck management module to maintain schedules, orders, generate invoices, and manage profits
- ⊕ Customer service portal for agents and service providers to enable bookings, AWB capture, price quotes, status updates, and track and trace operations
- ⊕ Customs module to abide by international reporting requirements including the US, UK, Canada and any customs regulator using the ASYCUDA format
- ⊕ Claims module that improves the claims management process, controls costs, automates and streamlines processes, and improves customer experience

Deployment Options

Hosted	On-Premise
	

SkyChain Handler

SkyChain Handler comprehensively manages all levels of ground handling processes related to storing, retrieving, and locating shipments or storage units. Improve your supply chain management while effectively monitoring and controlling all air cargo ground handling activities.

Innovative technology can transform ground handling operations by automating workflows, creating paperless processes, and providing the real-time visibility today's customers demand.

SkyChain Handler enables you to address your diverse cargo ground handling and warehousing needs to meet constantly changing requirements in a dynamic cargo environment.

With up-to-the-minute information delivered across your network by SkyChain Handler, you gain the transparency you need to proactively and accurately manage ground handling processes and optimize customer service levels.



Key Benefits

- Maximized profitability through real-time visibility across multiple origins, destinations, terminals, and warehouses
- Higher service levels and improved productivity through workflow automation
- Enhanced performance and lowered operating and communications costs that achieve compliant and paperless business processes



Export Cargo Acceptance

- Reserve shipments based on AWB stock reports from freight forwarders or handling agents
- Receive freight booking list (FBL) messages from airlines and generate booking lists
- Enable FSU-FOH shipment acceptance
- Option to mandate AWB completion prior to shipment acceptance
- Accept shipments through manual data capture or handheld devices
- Option to mandate special cargo checklists prior to warehouse acceptance
- Print invoices and perform export transactions for freight and other charges
- Process 'return-to-shipper' items at origin, based on the shipper requests
- Allow for acceptance and build-up process with mobility solution
- Print AWB and shipment barcode labels

Export Flight Handling

- Generate load plans, load lists, and flying lists
- Send single and multiple off-point freight flight manifest (FFM) messages
- Generate NOTOC notifications to the captain for DG, O&L, AVI and other notifiable cargo loads
- Enable freight status update (FSU) processing
- Send automated depart or arrive by truck details via STM (surface transport movement) messages
- Map and process multiple code share flights with MVT, STM, and FFM messages for code share flights
- Create pre-manifests detailing shipments within the warehouse for easy retrieval and build-up
- Automate shipment retrieval by sending messages to warehouse systems at time of pre-manifest
- Perform special cargo compatibility checks at the time of shipment loading to Unit Load Devices (ULDs)
- Produce Unit Weight Statements (UWS) to facilitate accurate load balancing

- Generate pre-UWS messages prior to and at flight close
- Send automated UWS and NOTOC information to Departure Control Systems (DCS)
- Generate and automatically send Freight Flight Manifests (FFM), Air Waybills (FWB), and House Airway Bills (FHL) (the equivalent Cargo-XML messages are also supported)
- Generate pre-alerts to onward stations to plan ramp transfers
- Benefit from a comprehensive set of features such as group handling, ULD re-assignments, and color coding for flight disruptions and cancellations
- Receive automated shipment status updates, based on Cargo-IMP (FSU) messages, across the life cycle of the shipment
- Auto-print AWBs at a hub or at a self-handled station for e-freight shipments
- Create bookings through incoming freight booked list (FBL) messages

Import Flight Handling

- Receive and process Flight Manifests (FFM), Airway Bills (FWB) and House Airway Bills (FHL) to prepare for flight arrival
- Capture import shipments for arrival
- Manage inbound loads with ULD-specific views of the flight
- Create movement orders for ramps and warehouse transfers
- Generate Transfer Manifests (TRM) for OAL transfers
- Send automatic storage pre-arrival messages to warehouse systems to efficiently plan space
- Automate flight and shipment arrivals on receipt of flight (MVT) messages
- Communicate with breakdown units and shipment storage using handheld devices
- Finalize flights to automatically mark irregularities
- Send RESDIT messages for mail shipment status updates

Import Cargo Delivery

- Create and send cargo arrival notification messages
- Generate transfer plans for efficient import operations and next shipment location
- Nominate import brokers at the time of flight arrival or ULD breakdown
- Perform import transactions and produce invoices for freight and other charges at document delivery
- Generate delivery orders at master and house AWB levels
- Support full and part shipment delivery and produce document delivery orders and slips
- Maintain storage and handling charges
- Auto-generate delivery slip once House Air Waybill (HAWB) is checked-in to the warehouse
- Automatically invoice, cashier, and debit import terminal charges to nominated broker
- Capture Proof of Delivery (POD) slips to close shipment transactions
- Create irregularity reports (IRP) and notices of non-delivery to monitor shipments pending delivery
- Enable breakdown and delivery process with mobility solution



Warehouse Management

- Take advantage of a flexible and multi-dimensional warehouse setup
- Receive suggestions for optimal shipment storage location based on shipment properties at time of acceptance, breakdown, and re-location
- Plan and assign flight build-up to ground handling staff at a flight and shipment level
- Maintain warehouse storage unit inventories
- Store and retrieve shipments and units via handheld devices
- Interface with automated warehouse storage and retrieval systems
- Benefit from comprehensive warehouse enquiry features to track and trace shipments and locations
- Enable buildup, breakdown, and re-location processes with mobility solution

Key Features

- Benefit from an open architecture solution tailor made to the needs of your business
- Compose industry standard messages such as FWB/FSU/FHL as easily as a text message
- Improve service delivery with an integrated queue framework that supports workflow activation and performance-related metrics
- Adhere to regulations and manage shipment status with an integrated irregularity management framework and embargo framework
- Comply with IATA, AVI, and DG regulations
- Trace shipments, enable faster delivery, and reduce the incidence of errors
- Monitor real-time performance and allow cargo operators to proactively manage and rectify service level failures within different warehouse environments
- Accept additional cargo shipments closer to flight departure times to maximize revenue
- Modify processes swiftly and cost-effectively to enable users to react quickly to changes in market forces

Deployment Options

Hosted	On-Premise
	

SkyChain Claims

Benefit from an end-to-end integrated solution, SkyChain Claims, for the efficient management of air cargo claims across your network. The interactions between a claimant, airline outstations, and airline headquarters are automated into a simple workflow to reduce costs and streamline processes.



As competition continues to intensify in the air cargo industry, it becomes crucial to focus on enhancing the customer experience in order to acquire and retain customers, and gain market share from competitors. The key is to focus on improving operational efficiency in order to meet customers' evolving demands in the most cost-effective way.

SkyChain Claims enables you to work more efficiently and resolve cargo claims quickly and accurately. By offering convenient claims tools and communication capabilities, you can improve customer satisfaction, optimize resource utilization, and reduce claims settlement cycle times.

Utilize the latest technology that fully supports end-to-end cargo claims management and rapid claims resolution. SkyChain Claims can benefit your supply chain and your bottom line by providing a service that can significantly improve your claims processing speed - increasing the productivity of your claims staff - and enhance customer loyalty to improve business results.

Key Benefits

- Automated workflows that increase efficiency and deliver a higher level of customer service
- Centralized, real-time information and visibility for faster and more informed claims communications and decisions
- Reduced costs and complexities across the entire cargo claims process
- Improved response and retention rates by providing quicker and easier claims settlement

Claims Management

- Enable customers to raise web-based complaints, intents, or claims and submit documents with acknowledgement, automated status updates, and intuitive workflow processes through closure
- Automate the end-to-end claims process from intent to closure within pre-defined service levels
- Use inbuilt and customizable templates to generate claim related letters and offers
- Track intents and claims with workflow based approvals and dashboards
- Allow for the processing of customer complaints and filing of fines levied by regulatory authorities
- Facilitate service recovery and the calculation of compensation
- Generate a range of MIS reports that analyze key supply chain performance data and trends
- Allow for a transfer in the cases of interline, GHA, and GSA claims

Key Features

- Benefit from an open architecture solution tailor made to the needs of your business
- Compose industry standard messages such as FWB/FSU/FHL as easily as a text message
- Improve service delivery with integrated queue framework supports workflow activation and performance-related metrics
- Adhere to regulations and manage shipment status with an integrated irregularity management framework and embargo framework
- Improve customer service through a dedicated module that increases transparency and responsiveness
- Digitize document intensive processes with paperless electronic documents and EDI
- Reduce payouts with tighter control and management of claims
- Make proactive decisions with incorporated dashboards and miscellaneous reports
- Manage ancillary aftersales services including claims, service recovery, complaints and fines

Deployment Options

Hosted



On-Premise



Nomad ULD Management

Nomad ULD Management, a complete solution for ground handlers and airlines, provides the tools you need to solve the complex logistical puzzle of handling thousands of ULDs across your network. As a result, the costs of managing ULD stocks are dramatically reduced, efficiency is boosted, and you stay firmly in control of ULD stock.

Managing ULD inventories is a significant challenge for carriers with stringent regulations for handling and maintenance. Making sure the right ULDs are exactly where they're needed at the right time is essential for

your cargo operations. Nomad ULD Management provides you with flexibility and end-to-end visibility to stay in total control of your stock, cutting down on time spent monitoring and locating your ULDs.

Nomad ULD Management increases the efficiency of your operations with maximized ULD usage, real-time movement transparency within your network, reconciliation to reduce imbalance of stock, custom alerts and reporting tools, and automated processes that reduce manual interventions.



Key Benefits

- Reduced costs through efficient control and utilization of ULDs to minimize the need for capital investment
- Enhanced real-time visibility into ULD stock level details, location information, and movements including across any station within your global airline network
- Improved interline functionality to manage loaning, borrowing, and ownership transfer of ULDs between airlines and other agents

Inventory and Stock Control

- Manage inventory, billing, and stock while reducing capital investment on additional ULD purchases
- Enjoy a comprehensive overview of the status of all ULDs at various locations in and around the airport
- Define minimum and maximum ULD stock levels for each network station
- Constantly monitor stock levels, highlighting situations where stock exceeds allowable deviations and sends messages to relevant locations
- Generate stock check messages (SCMs) after a physical stock take to compare records and update ULD stock at stations
- Enable the swift reconciliation of ULD stocks

Movement Control

- Enhance the transparency and accuracy of ULD movements
- Enable improved overview on movement imbalances
- Track and generate status information for ULDs across airline networks
- Create and process all movement messages in IATA standard formats and UCM messages

Transfer Control

- Manage loans, borrowing, and ownership transfer of ULDs between airlines
- Protect revenue leakage on loaned ULDs to other airlines or customers
- Minimize demurrage costs on loaned ULDs from other airlines
- Define appropriate billing parameters and control billing documentation for transferred ULDs
- Generate and process all LUC messages in IATA standard formats

Maintenance Control

- Increase control on ULD maintenance costs
- Support decision making based on Beyond Economical Repair (BER)
- Record details of incurred costs for ULD repairs
- Monitor relative performance of ULD manufacturers and repairers

Reconciliation, Custom Alerts and Reports

- Parse incoming airline messages and add to error queues for any format discrepancies
- Reconcile movement and stock check errors and perform adjustments to correct station stock
- Generate alerts for stock deviation at stations and for inconsistencies in stock checks or idle ULDs
- Receive in-depth management information reports and statistics

Key Features

- Track and manage a complete inventory of airline ULDs more effectively
- Increase the utilization of ULD stocks and minimize losses and stock imbalances throughout airline networks
- Track ULDs across the airline network and provide up-to-date information to all stakeholders
- Monitor and track ULD stocks loaned to other entities to ensure their timely return
- Streamline communications by sending airline messages in IATA standard formats
- Process operational IATA messages automatically (UCM, LUC, and SCM) to reduce manual interventions

Deployment Options

Hosted	On-Premise
	



Mercator is a leading provider of software platforms and product-led solutions to the global travel, transportation, and logistics industry. Mercator helps move the world in the safest, fastest, and smartest ways possible. Every day, over 3 million passenger journeys and 70,000 tons of cargo are processed with Mercator products, enabling us to analyze large streams of data and deliver actionable insights that drive value for our customers. For more information about Mercator, please visit www.mercator.com

Where can I get more information?

To find out how our teams can help you, please e-mail info@mercator.com