INTEGRATED LOGISTICS HUB

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Leveraging a broad base of expertise in postal and express courier automation – established over more than 40 years in the sector working with major logistics operators worldwide – Leonardo’s proposition encompasses tailored and multifaceted solutions which ensure effectiveness, reliability and control of Logistics Hub operations at every stage of the lifecycle.

As operations and behaviors of postal and courier services are increasingly akin to logistics operators, distribution hubs for mail and parcels can be considered as logistics nodes, playing a significant role in the production and movement of goods and mail around the world.

The increased consumer demands on delivery performances and the overall processes complexity are driving the need for better integration between physical and digital flows of goods and information. This has become a critical enabler in the efficient management and coordination of all resources involved in the process (human, transport, sorting systems, IT), in order to optimize costs and synergies across the entire logistics chain.

Leonardo’s bundled Integrated Logistics Hub platform incorporates systems for the effective handling and sorting of parcels, packages and mail: operational and governance IT systems, consulting and after sales service and logistics devices. Our approach considers the entire lifecycle, from project design, to deployment and customer support activities. Thanks to a comprehensive understanding of the processes, we provide multi-functional integrated solutions based on leading-edge proven technologies, in order to satisfy increased requirements of mail and parcel Integrated Logistics Hubs.

Thanks to the capabilities acquired during more than 40 years in postal and courier automation, Leonardo is the ideal partner for Postal, Logistic Operators and Express Courier:

- One of the only system integrator and solution provider capable of developing proprietary sorting technologies for any item format, from small letters and flats to packets and large parcels
- World leader in high technology systems and solutions tailored to specific customer business and operational requirements
- Ability to manage physical and digital streams in parallel thanks to comprehensive understanding of processes
- Proven reputation as turn-key supplier to post and courier operators worldwide, with a distinctive record of successful and timely installations in challenging environments
- Customer-centric approach, from project and process design to customer service support
- Proactive maintenance approach based on in-site and remote customer support.
Leonardo has developed a range of systems and solutions for fully automated logistics hubs, aimed at improving our customers’ operational processes.

We deliver a bundled platform that includes:
• Consultancy services for logistics processes and performance analysis, re-engineering and optimization, customization, new procedures, processes and technical upgrade definitions
• Operational systems for coding, sorting, tracking and tracing, operational support, automatic shipment documents fulfillment, to guarantee efficient execution of a hub’s logistics operations

As a system integrator and solution provider, Leonardo’s approach enables the Company to deploy the turn-key logistics hub as an integrated project, managing both inbound and outbound processes (mail and parcel acceptance, sorting, transport, delivery) and information processes (multi-channel user access, process control, track and trace) in parallel.
MAIL & PARCEL SORTING

As a unique system integrator for the postal and parcel logistics industry, capable of designing and supplying automated handling systems for any format items, Leonardo offers a complete range of sorters: letters, flats, packets and parcels.

The Multisorting Suite is a family of innovative and low maintenance cross-belt sorters for packets (MPKS – Multisorting Packets System) and parcels (MPHS – Multisorting Parcel Handling System), ideal for ensuring optimum handling of all articles, including irregular or fragile objects, and providing scalable speed in a configurable layout.

The compact Multisize Vertical Sorter - MVS - based on an innovative-concept Vertical Loop, and especially indicated for low and medium throughput applications.

The Flat Sorter named “Compact Flat Sorting Machine – CFSM - ” is based on automatic singulator and vertical carousel carriage technology, and represents the best trade-off among investment cost, performance and handled items, which range from letters to small packets, from newspapers and brochures to magazines or items with any wrapping surface. It is the most compact flat sorting system in the market.

The Letter Sorter named “BIPIANO” is a two-tier stacker configuration, ergonomic and “easy to operate” machine, based on combined friction and air suction singulator and pinch belt transport technologies, which are ideal for ensuring the maximum speed at nearly zero damage rate to sort and sequence large volume of letter size items.

CODING

The Integrated Coding Services (ICS) is an integrated IT platform aiming at real time, online and scheduled services for mail and parcels image processing & barcodes recognition, addresses interpretation (automatic and video coded), sorting data transfer. ICS has been designed to adapt to and interface with existing logistics operators’ environments by standard CEN interfaces. Within inverse hybrid or mailroom processes, ICS may also support forms recognition, document registration procedures and data capture for enrichment, recording and indexing on grey level or color images. Thanks to its configuration flexibility and scalability, ICS features can be dedicated to single equipment, shared to address single logistics hub’s operations up to cover an entire network in a highly distributed operational environment.
LOGISTIC SUPPORT

The Logistics Automation System (LAS) is the operational backbone of postal production. It acquires data from various field devices (such as sorting machines, scanners, workstations, PDAs), automates the production activities and traces both single and aggregated items (trays/boxes, roll containers/pallets).

IT GOVERNANCE SYSTEMS

Leonardo’s IT governance supports the development of logistics operators by integrating business processes and implementing comprehensive process monitoring and control.

The company offers a suite of systems and operational dashboards to manage information, product flows, and anomalies across the hub’s logistics and production processes, from arrival to the departure.

We recognize that it is becoming increasingly important for postal and courier operators to be able to respond efficiently to consumer demands, across growing, global complex logistics chains, whilst maintaining a focus on process, planning and control, and addressing synergic relationships with after sales and customer support activities.

The Logistics Control Room is a complete and integrated environment for the monitoring, governance and control of the plant, addressing mail processing, logistics, transports and safety and security issues.

The Production and Logistics Support System (PLS) is an innovative IT system supporting posts and couriers operations plans, monitoring and controlling production at a logistics hub level. Sorting equipment is useless without well designed sorting plans, which make the mail flow through the plant and the network.

Thanks to the Sorting Address Management (SAM) it is easy to design sortplans which optimize the number of processing phases needed to achieve the sorting targets, thus cutting costs and reducing lead-time. Moreover, SAM provides an environment for the configuration of all the systems in the plant and a repository and distribution tool for the coding directories.

The Diagnostic Support System is an integrated IT platform for capturing operational alarms from automated sorting devices which address operation correction, correlating events.

The Tracking & Tracking System (T&T) features a suite of software solutions to provide full mail visibility over the whole network.
CUSTOMER SUPPORT SERVICES

Our approach to logistics hub platform set-up and roll-out phases and customer support activities are critical for the execution of operational and governance processes. Leonardo guarantees on-site service and plant managers with international expertise and the duty to proactively support the hub’s technical management and evolution.

Leonardo’s capabilities include maintenance outsourcing and on-site management of emerging critical factors by specialized professional teams. Customer support for Leonardo means:

• Remote technical support and logistic support engineering, for ordinary and special on-demand intervention actions and upgrading/service improvement proposals
• Maintenance technical training
• On-site technical assistance for preventive maintenance programs execution, performance monitoring & quality control, problem determination & solving
• Spares management, supply and repair.