



The ins and outs of collaborating within a chain of trust

The New Standard for Import

Starting February 1st, 2025, Secure Import platform will become the standard for logistics service providers at Schiphol Mainport. This innovative platform makes the import process safer, more efficient, and sustainable. It is the culmination of intensive collaboration between IT developers Cargonaut and SmartLOXS, and the lion's share of Schiphol's cargo community. Guy Driebeek (SmartLOXS) and Hans van Roest (Cargonaut) will explain the inner workings of Secure Import and which aspects still need finalisation before launch.

Secure Import is being developed as an integral part of the Smart Cargo Mainport Program (SCMP). The focus of this joint initiative of all supply chain partners at Schiphol, lies on streamlining and digitising air cargo logistics processes. The program is supported by the national Digital Infrastructure Logistics (DIL) program of the Ministry of Infrastructure and Water Management, which promotes secure and modern ways of data sharing within the sector.

Towards a Secure Air Cargo Chain

"Secure Import originated from the need to prevent theft of valuable goods, such as iPhones and pharmaceuticals," Guy Driebeek says, director of SmartLOXS. "Security is the driving force behind the development of this system."

After the success of eLink, the digital pre-registration system for export, and there being multiple incidents involving criminal activity, security managers at Schiphol requested a similar procedure for their import shipments. Guy explains, "The air cargo sector is clearly susceptible to criminal endeavours, particularly due to information leaks from within the logistics chain. Many thefts occur because sensitive data about high-value goods falls into the wrong hands. That's why we strive for a system where only pre-authorized parties can access this data."

Cargonaut and SmartLOXS have therefore jointly developed a secure application that fully encompasses the import process within the digital domain. "Secure Import ensures that shipments can only be collected by

'To combat undermining, we want a system to which only authorised parties have access.'

the correct carriers and truckers. Herewith, all parties concerned know precisely who is coming to collect and at what specific time, leaving no opportunity for malicious actors using stolen reference numbers."

Secure Import's inner workings

The application facilitates a total secure and transparent air cargo chain, Hans van Roest explains, product manager at Cargonaut. "Every step within the Secure Import process institutes a 'trusted relationship,' ultimately leading to a Secure Key or QR code granting the trucker access to the designated cargo. If there is any discrepancy, the entire process is blocked."

Secure Import kicks in as soon as an aircraft is airborne. The airline informs Schiphol and the handler about all facets of the shipment in transit. The handler then determines which freight forwarder will process this shipment. Hans explains, "We call this 'nominating,' and it forms the first trusted relationship. Previously, this was done manually via paper documents (station declarations), but as of right now this process it is fully automated through Cargonaut's Automatic Nomination."



Guy Driebeek (SmartLOXS)

'With Secure Import, you have a clear insight into which trucker, with which truck, is collecting which shipment. Thus, leaving no opportunity whatsoever for malicious actors.'



After nomination, the freight forwarder appoints a trusted carrier to pick up the cargo, thus creating the second trusted relationship. The carrier then assigns a trucker, linking him to the cargo within the Secure Import app, and thus establishes the third trusted relationship. Based on all this data, the trucker receives a Secure Key or QR code granting him access to the shipment.

To finalise the transaction, the trucker arrives at the handler's warehouse with their ACN card and Secure Key/QR code. The handler can then confirm that all steps have been followed to the letter and that the correct person is collecting the shipment.

Security Through Validation

Secure Import's high level of security is derived from the strict separation of (IT) systems. Hans explains, "Cargonaut validates the cargo, while SmartLOXS manages the trucker and vehicle data. This allows us to securely share information, without parties gaining access to the each other's sensitive data. Even in the event of a system breach, the other party will remain unaffected."

In addition to the forementioned, there are multiple validation layers:

- ACN Card: A freight forwarder can only select a car-

rier that has been pre-registered as a trusted party. Only a trusted carrier can assign a trucker. Hans explains, "That trucker must hold a valid ACN card. This will guarantee that the company has been screened and all employee data, including a Certificate of Good Conduct (VOG), have been verified."



Hans van Roest (Cargonaut)

- Need-to-Know: Information is only shared with parties directly involved, ensuring they have access to the right data at the right time. The Secure Key or QR code becomes available if and only if it is actually needed.
- Personal Accounts: In the past, a Notification of Arrival (NOA) was often sent to the entire planning department of a freight forwarder or carrier. Hans explains, "But with such an email, anyone could retrieve the shipment. Herein lied significant risks, as these messages were easily forwarded, whether it was accidental or deliberate." Secure Import eliminates paper processes and emails altogether, working exclusively with personal accounts.

Reliability Through Traceability

Every step within the Secure Import process is fully traceable, which not only reduces the risk of misuse and human error, but also allows for clear oversight, Hans says. "With the aid of a user-friendly dashboard, you can see exactly who has viewed, read, or acted on specific information. This also allows users to analyze the aspects of the process that were successfully completed and identify any delays."

Additionally, the application's "ready-for-pickup" indicator shows whether the goods are ready for collection. Green checkmarks indicate that three decisive conditions have been met: the shipment has been automatically nominated, a pre-notification has gone out within

the Paperless Goods Tracking System (PGTS), and there are no handler blocks. Hans notes, "Besides Automatic Nomination, Secure Import is linked to PGTS, and from 2025 onwards, we'll expand with a connection to the Milkrun concepts."

100% Pre-Notification

If everything checks out, the trip is automatically pre-notified within the system, replacing the current manual eRegistration process for each visitor. This information is then shared with SmartLOXS, allowing the handler at the gate to immediately verify whether the trucker is duly registered for this Secure Import pickup. Hans explains, "In this manner we prevent unauthorized individuals from entering the premises. A chain is only as strong as its weakest link, and the gate is only as secure as its largest gap." That's why 100% pre-notification will become mandatory, without exceptions.

The Risks of Organized Crime

Theft within the air cargo sector goes beyond the scope of loss of goods, as Guy emphasises. "People are pressured by organised crime, sometimes even

'At the gate a non-registered trucker is immediately picked out. In this manner we prevent unauthorized individuals from entering the premises.'

"The safer, the better for everyone"

Erik Nagel, CEO @ R. Nagel Transport:

"For us as a transport company, 24/7 access to the right data is essential. This is especially significant because we also operate outside normal office hours. Without this data, I can't send a truck and/or pick up cargo. By means of Secure Import, the right people get the necessary data at the right time. No more use of unsafe emails – everything flows directly through a secure portal. You know exactly which trucker is operating which vehicle. Only at final destination, does everything come together, and you know what is being collected. That's what makes the cargo chain a secure one. The safer, the better for everyone.

But safety should definitely not come at the expense of efficiency. We don't send freight by air to do things slowly! The more security measures you have, the longer it takes to get a hold of your cargo. Sure, sometimes you need to add something last-minute, but if it hasn't been registered, that will be impossible. Where do you draw the line? Is 'last-minute' truly the very last minute, or is one hour in advance sufficient? If it's an hour, I think you've found a good balance between speed and security."





'A chain is only as strong as its weakest link, and the gate is only as secure as its largest gap.'

Hans explains, "Companies can continue using their trusted systems, which not only improves both the UX and UI experience, but is often a security prerequisite. Through API integration, data exchange occurs seamlessly without requiring separate logins to portals, and thus mandatory pre-notifications can be integrated directly into their own software environment. To this end, Cargonaut provides the necessary technical integrations."

From Testing to Implementation

Secure Import currently resides in the testing phase, but as of February 1st of 2025, the official implementation will have been completed. Hans explains, "This means that every shipment must now be pre-notified and linked to both the trucker and the truck, before it can be collected. For now, the verification occurs only at the handler's gate; digital transfer within the warehouse will be implemented in phase 2."



Technically seen, everything is ready, Guy confirms. "But chain partners need time to test the system and adapt their internal processes. Navigating the complexity of communication and staff training will be an

'Navigating the complexity of communication and staff training will be an interesting challenge.'

interesting challenge, as many companies will need to make changes to their respective workflows. Traditionally, much of the communication at Schiphol is done via ad hoc messages and calls, which may be efficient for one party but certainly not for the entire chain. The new process requires more planning and coordination, which will ultimately benefit everyone."

"The biggest change actually started a year and a half ago with the installment of mandatory pre-registration via eRegistration or eLink," he continues. "For Secure Import we're now doing the same, with the difference being that we're also adding specific security requirements to gradually build a safer chain."

A Collective Effort for a Secure Future

Implementing Secure Import is a joint effort by the entire freight community. "Whether you're a handler, freight forwarder, or carrier, everyone needs to adapt to the new system," say the IT developers. "And, of course, we will support each other during this transition."

accompanied with genuine threats to their families. This affects not only the safety of employees but also undermines their company. Trust erodes, colleagues are starting to suspect each other, and the work environment therefore becomes toxic and grim."

"While often dismissed as an insurance issue, the consequences are far-reaching. Think of lengthy lawsuits, liabilities, and various additional costs, all while the goods have vanished. Companies dealing with this form of crime can find themselves tied up in legal battles for years to come. By means of Secure Import, we're creating a controlled process, so you can clearly see who worked with whom and where the chain was compromised."

Technical Integrations

Cargonaut is developing APIs that make data available in real-time through direct integrations with the systems of handlers and freight forwarders. This increases both efficiency and user-friendliness.

'The main goal of Secure Import is to secure the entire air cargo chain and make it compliant.'



"A major improvement"

Said el Hadouchi, Security Manager at Menzies Aviation:

"As a handling agent, we do everything within our powers to ensure that the cargo reaches its rightful owner and, thusly, the correct carrier. With the aid of Secure Import, we create barriers for anyone who has not been authorised to access the shipment. Therefore, increasing security and contributing to the robust airport we are all working towards.

In order to do our job well, we need the right information from everyone. Pre-registration by the transport company will be pivotal to this endeavour. In doing so, we will know in advance which company is coming to collect the cargo, and with which vehicle. We can verify this data on the spot. Paperwork is an outdated and risky form of air cargo communication. Within the digital era, you really want to steer clear of this.

Secure Import is a must for the cargo community. Which is why we at Menzies have taken the lead in testing the system. For us, this will be a major improvement."

