

Airfreight



Cargo 2000 in Practice

KUEHNE+NAGEL





CARGO 2000 EXPLAINED

The Cargo 2000 initiative aims to standardise and optimise the door-to-door transport process, making it more efficient, visible and reliable.

..... Cargo 2000 has brought together many of the world's major airlines and freight forwarders, as well as handling agents, technology providers and hauliers, with the aim of implementing a new quality management system for the global air cargo industry. The objective is to develop and implement quality processes that facilitate the planning, monitoring and measurement of the door-to-door air cargo chain, thereby improving efficiency in the industry.

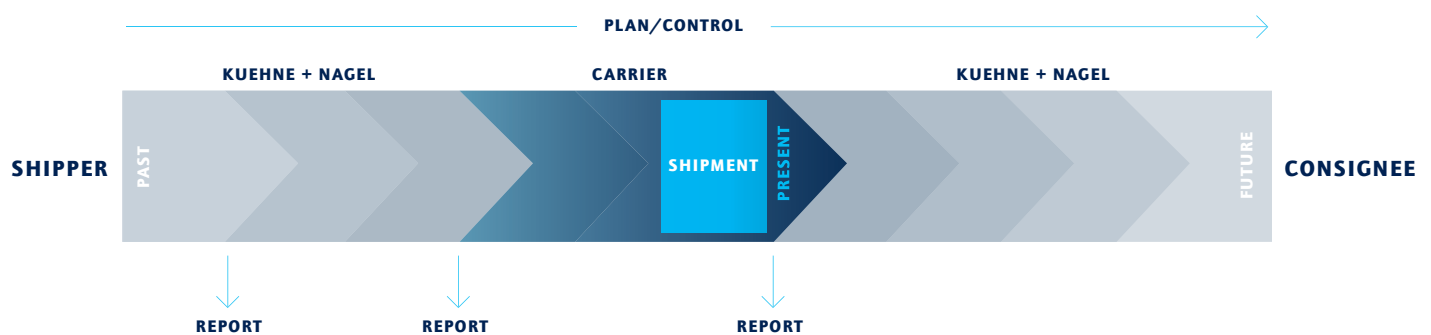
Cargo 2000 is the largest improvement initiative ever in the air cargo industry. It brings together over 35 of the world's leading airlines, forwarders and third parties involved in air-freight forwarding under the auspices of the International Air Transport Association (IATA). The objective is to create standard shipping process steps as well as interfaces for the exchange of shipment data between the parties, whereby door-to-door transport can be precisely planned and proactively monitored.

In the event of a delay occurring during the shipment cycle, an alert message is automatically issued. The forwarder and carrier are thus able to communicate with the customer and implement corrective measures in good time to ensure the cargo reaches its destination as originally planned, despite the delay.

Cargo 2000 also records performance data for every concluded shipment and operator. On the basis of standardised reporting procedures, customers can measure and directly compare the performance of individual forwarders and carriers.

Kuehne + Nagel is, at the moment, the only forwarder to be globally Cargo 2000 Phase 2 certified. Every shipment handled is planned and monitored according to these standards. We apply our Cargo 2000 philosophy and capabilities to the advantage of every customer, regardless of carrier or route. No other forwarder is currently able to offer a comparable level of service in the air cargo industry.

The three pillars of Cargo 2000 – plan, control, report





While common **time-definite** air cargo services will deliver a shipment within a given rigid time frame (e.g. 48 or 72 hours), Kuehne + Nagel's **time-defined** approach under Cargo 2000 Phase 2 calculates the exact time and date of delivery for each shipment individually, by taking into consideration the time it takes to perform relevant operations at handling stations throughout the transport cycle, as well as local public holidays, station opening hours and carrier-specific data.

Background of Cargo 2000

When it comes to airfreight, reliability is key. Customers depend on the timely delivery of their goods, for they also have delivery promises to their customers to keep.

In addition to reliability, customers demand:

- Visibility through real-time tracking and tracing
- Precise, time-defined delivery
- Transparent and competitive rates
- Clear responsibilities
- Consistent service levels worldwide

In the early 1990s, it was obvious that the air cargo industry was falling short in meeting these requirements. Furthermore, it appeared that the industry was failing to compete against integrators' reliable, time-definite transport services that were combined with good information integration and visibility capabilities.

To address this shortcoming, a group of leading airlines and forwarders agreed to redesign airfreight transport. This marked the foundation of the Cargo 2000 initiative.

Aim of the initiative

The overall objective of the Cargo 2000 interest group is to satisfy customer expectations. Based on detailed research, the group has re-engineered the transport process from shipper to consignee and designed a master operating plan (MOP), thereby considerably reducing the number of necessary process steps in the air cargo supply chain as well as defining standards for the exchange of data. The implementation of the MOP will guarantee industry-wide process stan-

dards and enhance the visibility and control of a shipment's movement along the transport chain.

Cargo 2000 mainstays

Cargo 2000 is about planning, controlling and reporting on air cargo shipments.

PLAN – Based on the standardisation of each process step from door to door, Cargo 2000 is able to precisely calculate the time at which certain events, known as milestones, will occur within the shipment cycle. The result of this automated procedure is a transport plan – the shipment's route map. The route map defines when the cargo is scheduled to arrive at the consignee's doorstep and represents a delivery promise to the customer.

CONTROL – Once a shipment is on its way, the fulfilment of each milestone is electronically monitored against the respective transit schedules in the route map. If one of these process steps is not completed as planned, the system triggers an alert, enabling the forwarder and carrier to implement corrective measures. This supervision of the shipment is ongoing until it is delivered at destination.

REPORT – It is important for customers to know how reliable their logistics partners actually are. Cargo 2000 includes standardised reports based on key performance indicators developed in cooperation with various Shippers Councils worldwide. These reports enable customers to compare the performance of forwarding providers across a standard set of parameters.



HOW DOES CARGO 2000 WORK?

Customers expect reliability. They expect their cargo to be delivered to the doorstep on time, precisely as promised by the forwarder. To this end, planning and control are essential.

The **route map** is a shipment's transport plan. Essentially, it is a list of process steps from door to door that features the "latest by" dates and times for the shipment to complete certain milestones. This plan is the basis of every delivery promise.

When it comes to keeping a delivery promise, planning and visibility are key. Without these there can be no control. And what is not under control cannot be measured.

This is where Cargo 2000 comes in. Its key objectives are to plan, control and ultimately report on each individual shipment.

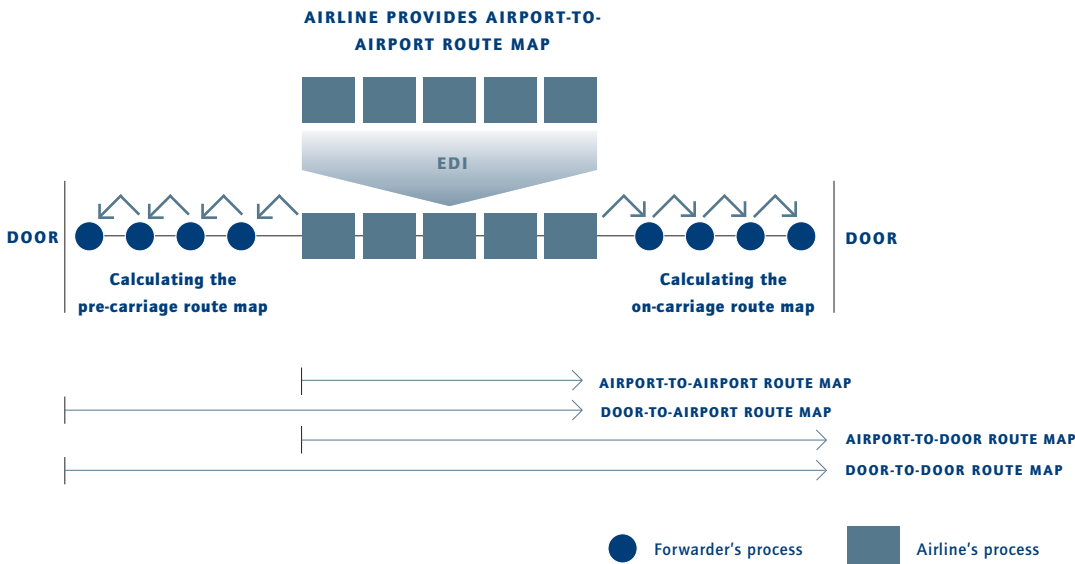
Planning - the basis of every delivery promise

In order to control a shipment's movement from door to door, detailed planning is required. Cargo 2000's members have developed the process framework necessary for the calculation

of each shipment cycle. Based on this framework, a route map is automatically issued for every shipment. The route map defines the "latest by" times for the fulfilment of the key process steps (milestones) along the transport chain. It is a time-defined delivery promise to the customer.

All parties that are involved in the transport of a shipment are equally involved in planning its route map. Cargo 2000 has established standard data interfaces so that the route maps of the carrier and the forwarder seamlessly combine.

The calculation of a route map





➤ The **milestone** is a significant process step in the course of a shipment's door-to-door movement, such as pick-up from the supplier or departure of the aircraft. All Cargo 2000 members apply the same milestone terminology. Each milestone is identified by industry-agreed status codes. The shipment's current status is thus always defined with reference to its most recently updated status code.

➤ Whenever a delay or irregularity during transport necessitates the modification of a route map, an **exception code** is entered into the system that identifies the cause and responsibility for the occurrence. Based on these exception codes, reports can be issued that help identify areas for improvement and compare operators' performance along the transport chain.

Control - proactive shipment monitoring ensures timely delivery

After the transport and delivery requirements have been agreed with the customer, and the route map calculated and issued accordingly, the actual shipment is then automatically monitored against this route map from origin to destination. With the completion of every milestone, both the carrier's as well as the forwarder's IT systems are updated.

Any deviation from the route map triggers an alarm. This facilitates proactive communication between the forwarder/carrier and shipper/consignee, allowing for corrective measures to be taken in order to bring the shipment back on schedule.

Should the extent of the delay mean a shipment cycle cannot be concluded as planned, a new delivery schedule is calculated and the route map adjusted accordingly for the remaining transport steps. At the same time, exception codes are entered into the system to record the causes and responsibilities for the delay.

Commonly used tracking and tracing solutions only list a shipment's past movements. The Cargo 2000 route map concept provides not only visibility of historic shipment data, but also illustrates this against the route map schedule and provides anticipated shipment information to destination.

Seq	Event Description	Ref	Date	Time	Seq	Seq Date
00 0000	Actual Pickup Date	PUP	02/02/2000	15:00	1	02/02/2000
00 0000	Consignment Arrived at Airline	ARR	02/02/2000	18:00	2	02/02/2000
00 0000	Expected Flight/Package	EXP	02/02/2000	17:00	3	02/02/2000
00 0000	Consignment Left Warehouse	CLW	02/02/2000	17:00	4	02/02/2000
00 0000	Arrived Carrier Export Air	ACA	02/02/2000	20:00	5	02/02/2000
00 0000	Consignment Shipped	SHI	02/02/2000	22:00	6	02/02/2000
00 0000	Consignment Arrived	ARR	02/02/2000	14:00	7	02/02/2000
00 0000	Carrier Depart Warehouse	CDW	02/02/2000	18:00	8	02/02/2000
00 0000	Arrived Destination	ARR	02/02/2000	08:00	9	02/02/2000
00 0000	Documents on hand at destination	DOH	04/02/2000	09:00	10	04/02/2000
00 0000	Consignment Dispatched to Customer	DCU	07/02/2000	09:00	11	07/02/2000
00 0000	Proof of Delivery	POD	07/02/2000	12:00	12	07/02/2000

Example of a route map issued by Kuehne + Nagel

Reporting - was that delivery promise kept?

At the end of the shipment process, it is important to establish whether or not the delivery promise was kept as well as the reasons behind a possible delay.

All Cargo 2000 members are accountable for monitoring their performance on the basis of standardised reporting procedures and agreed exception codes. This enables the production of month-end reports that list the most frequent causes and responsibilities for delays. For the first time in the airfreight industry, it is possible for customers to directly compare the performance of their Cargo 2000 enabled forwarders, carriers or logistics providers.

CARGO 2000 DEMONSTRATED

In order to illustrate how Cargo 2000 translates from theory into practice, we captured the door-to-door shipment of a Computed Tomography (CT) scanner from the Siemens Medical Solutions plant in Forchheim, Germany to the Renaissance Hospital in Groves, Texas, USA.

Working closely with the Cargo 2000 certified carrier KLM, Kuehne + Nagel planned the transport according to Siemens' requirements. The CT scanner had to arrive in Groves at the latest by midday on Monday, March 7th 2005, when Siemens technicians would be standing by for installation.

Based on this time frame, and applying Cargo 2000 process standards, Kuehne + Nagel issued the shipment's route map. This automatically calculated transport schedule included the latest pick-up time from the Siemens plant and specified all planned milestone transit times. These are listed on the following pages.

Along the transport chain – via Nuremberg-Frankfurt-Amsterdam-Houston – Kuehne + Nagel had full visibility of the shipment's progress at all times. With every milestone completion, the shipment's status was automatically checked against its route map and Kuehne + Nagel's systems were updated accordingly.

Initially, everything went according to the route map and all milestones were fulfilled ahead of plan. However, when a snowstorm hit Amsterdam, and KLM had to off-load all freight from the scheduled flight to Houston, Cargo 2000 had the opportunity to really prove itself.

.....➤ With Cargo 2000, Kuehne + Nagel is not only capable of planning and monitoring a shipment from door to door, but can also fully report on every single milestone and ensure proactive exception handling.

Please open the page and have a look➤


CARGO 2000 PLANNED AND ACTUAL MILESTONES

ORIGINAL KUEHNE + NAGEL ROUTE MAP

Seq	Event Description	Ref	Date	Time	Stat	Stat Job
00	Release From Ship	PUP	02/03/2005	13:00	S	
00	Consignments Arrived at Re	REW	02/03/2005	15:00	S	
00	Special Flight/Trayage	FAW	02/03/2005	17:00	S	
00	Consignments Left Warehouse	000	02/03/2005	17:00	S	
00	Arrived Carrier Export Wa	000	02/03/2005	20:00	S	
00	Consignments Shipped	000	02/03/2005	20:00	S	
00	Consignments Arrived	000	02/03/2005	14:00	S	
00	Carrier Export's Warehouse	000	02/03/2005	20:00	S	
00	Arrival Next Flight/Trayage	000	02/03/2005	00:00	S	
00	Receipts on hand at 00:0	000	02/03/2005	00:00	S	
00	Consignments Shipped to 000	000	02/03/2005	00:00	S	
00	Proof of Delivery	000	02/03/2005	12:00	S	

Milestones
PLANNED
by the route map

ACTUAL
milestone
transits

→ 

→ Transport order

→ **ACTUAL:**
24.02.05 at 16:00



Kuehne + Nagel receives a transport order from Siemens Medical Solutions. A Computed Tomography (CT) scanner needs to be shipped from Forchheim/Germany for delivery in Groves, Texas on March 7th, 2005 at noon. A Kuehne + Nagel operator books the shipment with KLM. Based on this booking, KLM and Kuehne + Nagel create the route map. The operator is now able to tell Siemens the latest time that Kuehne + Nagel needs to pick up the CT scanner.

→ **PUP**



→ Pick-up from shipper
PLAN: 02.03.05 at 13:00

→ **ACTUAL:**
02.03.05 at 10:00



Siemens employees prepare the CT scanner for transport. Kuehne + Nagel delivers two empty KLM racks to the Siemens warehouse. Siemens warehouse employees load the shipment onto the racks.

→ **PUP**

A Kuehne + Nagel truck picks up the loaded rack and transports it to the Kuehne + Nagel warehouse in Nuremberg. The Kuehne + Nagel operator updates the system with the pick-up information.

→ **REW**



→ Receipt at forwarder warehouse
PLAN: 02.03.05 at 15:00

→ **ACTUAL:**
02.03.05 at 12:30



When the shipment arrives at Kuehne + Nagel's warehouse, the racks are unloaded from the truck.

→ **REW**

The shipment is weighed, measured and prepared for onward transport. The operator receives the original documents, confirms the receipt and updates the Kuehne + Nagel system accordingly.

KLM ROUTE MAP


Journey Summary						
Carrier:	Klm Royal Dutch Airlines			Forwarder:	Kuehne and Nagel	
Origin:	FRA - Frankfurt (DE)			Destination:	IAH - Houston - Int. (US)	
Total Pieces:	3			Total Weight:	4157.0Kg	
Status Detail (EDI)						
Stn.	Code	Event Time	Received Time	Type	OSI Other Details	
FRA	FWB	02 MAR 1700	02 MAR 1530	FSU		
FRA	RCS	02 MAR 2000	02 MAR 1937	FSU		
FRA	DEP	02 MAR 2200	02 MAR 2154	FSU		
AMS	RCF	03 MAR 0700A	03 MAR 0651A	FSU		
AMS	DEP	03 MAR 1130A		FSU		
IAH	ARR	03 MAR 1400		FSU		
IAH	RCF	03 MAR 1830		FSU		
IAH	NFD	03 MAR 2000		FSU		
IAH	AWD	04 MAR 0800A		FSU		
IAH	DLV	04 MAR 0930A		FSU		

ADJUSTED KLM ROUTE MAP

Journey Summary						
Carrier:	Klm Royal Dutch Airlines			Forwarder:	Kuehne and Nagel	
Origin:	FRA - Frankfurt (DE)			Destination:	IAH - Houston - Int. (US)	
Total Pieces:	3			Total Weight:	4157.0Kg	
Status Detail (EDI)						
Stn.	Code	Event Time	Received Time	Type	OSI Other Details	
FRA	FWB	02 MAR 1700	02 MAR 1530	FSU		
FRA	RCS	02 MAR 2000	02 MAR 1937	FSU		
FRA	DEP	02 MAR 2200	02 MAR 2154	FSU		
AMS	RCF	03 MAR 0700A	03 MAR 0651A	FSU		
AMS	DEP	04 MAR 1111A	04 MAR 1151A	FSU		
IAH	ARR	04 MAR 1400	04 MAR 1403	FSU		
IAH	RCF	04 MAR 1830	04 MAR 1727	FSU		
IAH	NFD	04 MAR 2000	04 MAR 1835	FSU		
IAH	AWD	05 MAR 0800A	04 MAR 1900	FSU		
IAH	DLV	07 MAR 0930A	07 MAR 0845A	FSU		

THE SHIPMENT IS

→ **FWB**



→ **Issue AWB**
PLAN: 02.03.05 at 17:00

→ **ACTUAL:**
02.03.05 at 15:30



The operator issues the AWB. Printing the AWB automatically triggers the FWB message to be sent to KLM.

→ **FWB**
The shipment's labels are printed out and the responsible operator signs the AWB and compiles all necessary paperwork for transport.

→ **RCS**



→ **Receipt at airline warehouse**
PLAN: 02.03.05 at 20:00


→ **ACTUAL:**
02.03.05 at 19:37



The Kuehne + Nagel operator takes care of export customs clearance, and the shipment is transported to the KLM facility in Frankfurt. KLM updates its system upon receipt of the shipment at its warehouse, and Kuehne + Nagel is automatically informed.

→ **RCS**
The shipment is now under the physical responsibility of KLM.

→ **DEP (FRA)**



→ **Departure from Frankfurt**
PLAN: 02.03.05 at 22:00

→ **ACTUAL:**
02.03.05 at 21:54



KLM moves the shipment from Frankfurt to its hub in Amsterdam via the scheduled road feeder service.

→ **DEP (FRA)**

→ **ARR (AMS)**



→ **Arrival at Amsterdam**
PLAN: 03.03.05 at 7:00

→ **ACTUAL:**
03.03.05 at 6:51



The shipment arrives at the KLM warehouse at Schiphol Airport in Amsterdam, where it waits for the flight to Houston.

→ **ARR (AMS)**


ADJUSTED KUEHNE + NAGEL ROUTE MAP

Forwarder: Kuehne and Nagel	
Destination: IAH - Houston - Int. (US)	
Weight: 4157.0Kg	
Type	OSI Other Details
FSU	
FSU	
FSU	
FSU	
FSU	COCOF
FSU	
FSU	
FSU	
FSU	

Seq	Event Description	Act	Date	Time	Stat	OSI Code
04 0000	Shipment Created Book	PLN	02/03/2005	11:00	0,00	
04 0000	Shipment Arrived at Air Way	ARR	02/03/2005	03:00	2,00	
20 0000	Specialized Flight/Package	PLN	02/03/2005	17:00	0,00	
04 0000	Shipment Left Warehouse	DEP	02/03/2005	17:00	0,00	
40 0000	Arrives Carrier Export Air Way	ARR	02/03/2005	00:00	0,00	
04 0000	Shipment Shipped	SHI	02/03/2005	00:00	47,00	
04 0000	Shipment Arrived	ARR	04/03/2005	14:00	4,00	YACOF
70 0000	Carrier Depart Warehouse	DEP	04/03/2005	18:00	2,00	
04 0000	Arrival Next Flight/Carrier	ARR	04/03/2005	00:00	00,00	
04 0000	Shipment on board at Airport	ARR	04/03/2005	00:00	2,00	
100 0000	Shipment Suspended by OSI	OSI	04/03/2005	00:00	2,00	
110 0000	Proof of Delivery	POD	04/03/2005	12:00	0,00	

NOW UNDER THE PHYSICAL RESPONSIBILITY OF KLM

→ **DEP (AMS)**




→ **Departure from Amsterdam**
PLAN: 03.03.05 at 11:30

→ **ACTUAL:**
04.03.05 at 11:51



→ **ARR (IAH)**

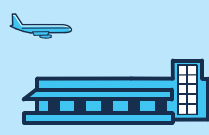


→ **Arrival at Houston**
PLAN (adjusted):
04.03.05 at 14:00

→ **ACTUAL:**
04.03.05 at 14:03



→ **RCF**




→ **Receipt at airline warehouse**
PLAN (adjusted):
04.03.05 at 18:30

→ **ACTUAL:**
04.03.05 at 17:27



→ **NFD**



→ **Notification to forwarder**
PLAN (adjusted):
04.03.05 at 20:00

→ **ACTUAL:**
04.03.05 at 18:35



Due to severe weather conditions in Amsterdam the shipment does not depart as planned. Accordingly, the route map does not receive a DEP status update and automatically sends out an alert. Kuehne + Nagel reacts immediately and contacts the shipper. KLM re-books the shipment onto the next day's flight and both route maps are updated. Exception codes are entered into the system. The shipment leaves Amsterdam on March 4th.

→ **DEP (AMS)**

Kuehne + Nagel can start pre-customs clearing as soon as KLM advises that the shipment is on board and the plane has taken off from Amsterdam.

→ **ARR (IAH)**

The shipment is unloaded from the plane and transported to the KLM warehouse at Houston International Airport.

Both KLM and Kuehne + Nagel make all necessary preparations to secure the on-time delivery of the shipment. Upon arrival of the shipment at the KLM import warehouse, KLM informs Kuehne + Nagel that it has received the cargo.

→ **RCF**

After KLM has completed the documentation and prenotification of customs clearance, it informs Kuehne + Nagel that the shipment is available for Kuehne + Nagel's disposal.

→ **NFD**

This is the last status update that KLM provides the route map with. From now on status updates are once again made by Kuehne + Nagel operators.

→ **AWD / ATB**



→ **Forwarder receives documents
PLAN (adjusted):
07.03.05 at 8:00**

→ **ACTUAL:
04.03.05 at 19:00**



Kuehne + Nagel picks up the original shipment documents from KLM. The Kuehne + Nagel operator checks all documentation, finalises customs clearance and is able to confirm to Siemens that the delivery of the shipment will be on time.

→ **AWD/ATB**

→ **DLV / OFD**



→ **Dispatch to consignee
PLAN (adjusted):
07.03.05 at 9:30**

→ **ACTUAL:
07.03.05 at 8:45**



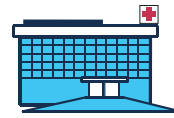
Kuehne + Nagel picks up the shipment from the KLM warehouse and stores it at the Kuehne + Nagel warehouse over the week-end.

→ **DLV**

The scheduled truck picks up the shipment at the Kuehne + Nagel warehouse, confirms the receipt and dispatches the CT scanner to Groves, Texas.

→ **OFD**

→ **POD**



→ **Delivery at consignee
PLAN (adjusted):
07.03.05 at 12:00**

→ **ACTUAL:
07.03.05 at 11:07**



The shipment reaches the Renaissance Hospital. The Siemens technicians check all parts of the CT scanner. The responsible Siemens person signs the papers and confirms the receipt of the scanner.

→ **POD**

The shipment was delivered on time and stayed within the originally planned route map, thanks to the immediate action of KLM and Kuehne + Nagel and the full visibility of the shipment's progress via Cargo 2000.

Cargo 2000 enables us to act immediately on changes that occur during the shipping process and to guarantee significantly increased service levels.

Due to the bad weather, the "Departure Amsterdam" milestone elapsed without the shipment completing the checkpoint as planned. This automatically triggered an alert informing Kuehne + Nagel that the CT scanner was not on the flight to Houston. The company immediately contacted the shipper to jointly evaluate possible alternatives. Siemens requested that Kuehne + Nagel keep its delivery promise as the technicians standing by in Groves on Monday would not be available the following day. KLM, who had also been alerted by the system, secured cargo space on the next day's flight.

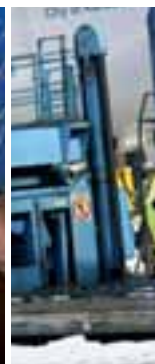
When re-booking the shipment, KLM updated the airport-to-airport route map, and Kuehne + Nagel updated the door-to-door route

map accordingly. Both parties posted their exception codes to the system, reporting the responsibilities and reasons for the delay in Amsterdam.

With the update of the route map, an alert was automatically sent to the respective KLM and Kuehne + Nagel import departments in Houston, who arranged for special customs clearance procedures. Given that the original route map had taken the weekend between arrival in Houston and final delivery to the consignee into account, this proactive exception handling successfully brought the shipment back on schedule. As a result, Kuehne + Nagel delivered the CT scanner to the hospital on Monday morning as promised.

"Consistent and reliable transportation service is paramount to the Siemens group of companies. Disasters such as plant shutdowns and disappointed customers can be avoided by knowing that a critical part will not make the needed delivery time. Therefore, it is important to have an automated system to proactively manage exceptions, when they occur. Kuehne + Nagel's leadership within the Cargo 2000 framework provides an advantage to Siemens. This is one reason Kuehne + Nagel is a preferred import broker and freight forwarder for Siemens in the U.S."

**Mike Brewer - Director Corporate Transportation
Siemens North America**



THE THREE PHASES OF IMPLEMENTATION

Due to the complexity of the Cargo 2000 programme, its implementation is divided into three stages.

Freight forwarders are able to consolidate consignments from several shippers to the same destination airport and dispatch them together using an air waybill (AWB) issued by the carrier. This is the so-called **master air waybill (MAWB)**. The freight forwarder in turn issues to each shipper his own AWB, known as a **house air waybill (HAWB)**.

Phase 1:

Phase 1 focuses on the carrier planning and monitoring a shipment's airport-to-airport cycle at a master air waybill (MAWB) level, and automatically updates the forwarder.

Phase 2:

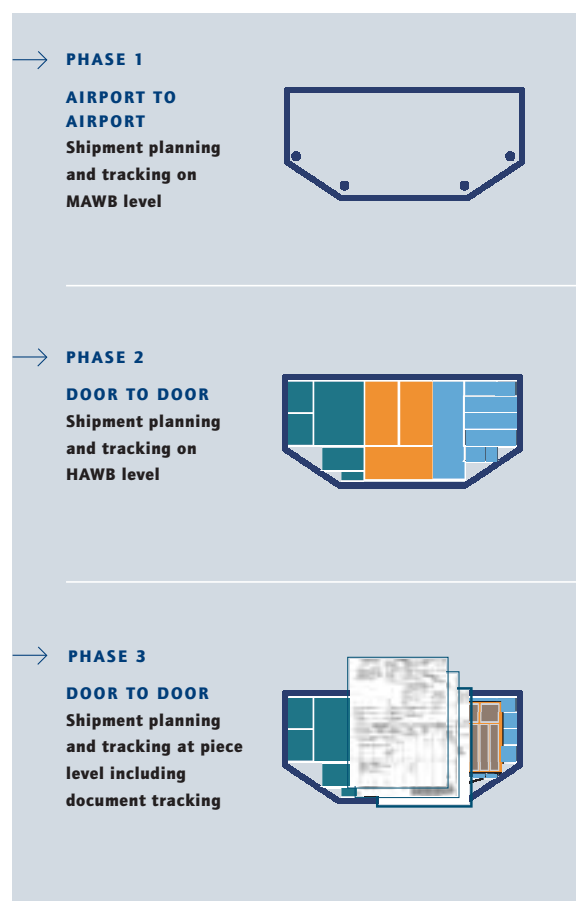
Phase 2 enables the forwarder to play a proactive role, planning and interactively monitoring a shipment's door-to-door movement at a house air waybill (HAWB) level.

Phase 3:

Phase 3 involves the real-time management of the door-to-door transport process at piece level including document tracking.

While Phase 1 enhanced visibility purely on the airport-to-airport segment, with Phase 2 the customer really begins to experience the immense benefits Cargo 2000 has to offer. The ultimate aim of the initiative is to provide full planning and monitoring of shipments at piece level plus document tracking.

As a globally Cargo 2000 Phase 2 certified airfreight forwarder, Kuehne + Nagel is able to ensure the highest possible levels of transport reliability currently available.





CUSTOMER BENEFITS OF CARGO 2000

Standardised processes, increased visibility and proactive monitoring combine to deliver significant benefits.

Customers, whose shipments are planned and monitored from origin to destination under Cargo 2000 Phase 2, are able to enjoy numerous advantages:

- **Better supply chain planning** thanks to a reliable, time-defined route map based on facts (station opening hours, local public holidays, etc)
- **Accurate transport monitoring** through standardised milestone checks – from door to door, airport to airport, door to airport, or airport to door
- **Total shipment control** by means of round-the-clock shipment/route map matching and automated exception alerting
- **Enhanced visibility and security** facilitated by standardised data exchange interfaces between Kuehne + Nagel and the carrier, ensuring shipment status updates at every milestone

- **Customer-orientated exception handling** through proactive communication and early planning of corrective measures based on real-time exception alerting
- **Clear responsibilities and accountabilities** throughout the shipment cycle
- **Improved service levels** for the customer's customer thanks to reliable delivery schedules and transparent, accurate shipment information

These benefits are unique in the industry. By opting for the Cargo 2000 Phase 2 certified logistics provider Kuehne + Nagel, customers can rest assured that their cargo is looked after in the best possible way.

KUEHNE + NAGEL – A LEADING MEMBER OF CARGO 2000

Dedicated to driving improvement within the air cargo industry, Kuehne + Nagel is committed to Cargo 2000.

More than 35 companies are partners in the Cargo 2000 programme. Kuehne + Nagel is a founding member of the initiative, and in September 2002 was the first logistics company whose systems were certified to Phase 2 of the initiative. A year later, following the global roll-out, the company became the first logistics provider awarded worldwide Cargo 2000 Phase 2 certification.

Leveraging its global network of offices and standardised IT systems, Kuehne + Nagel is the only logistics provider today capable of actively planning and monitoring every airfreight shipment. Regardless of whether the carrier or trade lane used is Cargo 2000 certified or not.

This is an ability that significantly enhances the value of Kuehne + Nagel's airfreight operations for customers worldwide.



KUEHNE + NAGEL'S CARGO 2000 SOLUTION

Kuehne + Nagel is able to plan and monitor more than 90,000 different door-to-door and over 1.8 million possible door-to-airport routes.

➤ **Station profiles** contain information on the duration it takes to complete certain process steps, such as pick-up operations or import customs clearance. They also list local public holidays, operating hours and carrier-specific data. In combination with the respective carrier schedules, these station profiles provide the basis for the calculation of every Kuehne + Nagel route map.

➤ **KN Login** is an internet-based application that allows customers to view and monitor transit status and other details regarding the transport of their shipments. Different user levels ensure that customers may even link KN Login to their own IT systems.

Kuehne + Nagel's globally standardised IT platform played a key role in achieving Cargo 2000 Phase 2 certification. Whilst other companies have to rely on the shared technology of external providers, Kuehne + Nagel is able to leverage the substantial investments it has made in its own technology.

When implementing Cargo 2000, individual profiles were set up for every Kuehne + Nagel station, describing the duration of on-site handling operations, such as customs clearance processes or loading procedures. In addition, these station profiles include local public holidays, opening hours, etc. Kuehne + Nagel manages and continually updates over 300 of these profiles, thereby providing the foundation for the calculation of every route map.

By combining this information with the departure and arrival schedules of selected carriers, all process steps, from shipper to handling stations to the consignee's doorstep, can be aggregated and the route map automatically calculated.

The route map is then transferred to Kuehne + Nagel's monitoring and alerting system. If in the course of transport a shipment fails to fulfil one of its milestones as scheduled, the parties and stations handling the cargo are automatically alerted. This enables Kuehne + Nagel to immediately react to delays, proactively inform the customer and take agreed corrective action to bring the shipment back on schedule.

If necessary, the route map is re-calculated and exception codes, reporting on the causes and responsibilities for the delay, are entered into the system. Based on this information, month-end reports are created that help Cargo 2000 members pinpoint and eliminate possible recurring sources of error.

In the near future, Kuehne + Nagel is going to post its performance reports on KN Login, the company's internet-based tracking and alerting system, thereby allowing customers to monitor Kuehne + Nagel's performance for every shipment it handles.



RESULTS

Kuehne + Nagel is committed to driving innovation in the air cargo industry.

Ever-increasing customer requirements regarding reliable transport solutions and high levels of visibility are being met by the introduction of Cargo 2000 standards and processes.

Following its successful implementation of Cargo 2000 Phase 2, Kuehne + Nagel is able to offer customers remarkable benefits. The company plans and monitors each airfreight shipment moved anywhere across its global

network from door to door. It consistently applies the same standards and service levels worldwide. These capabilities, together with proactive information flows and automated alerting in the event of en-route delays, mark a new era in air cargo forwarding.

For more information on Kuehne + Nagel's airfreight services please contact one of our local customer service or sales representatives, or visit our website at www.kuehne-nagel.com



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