

# e-Cargo Simulator

# **User Guide**



For details please contact: The SkyRadar Consortium www.SkyRadar.com info@skyradar.com January 10, 2018



### Imprint

The SkyRadar Consortium Imprint

The SkyRadar Consortium: www.SkyRadar.com info@skyradar.com

Scholten AERO E. Space Park, Bâtiment D 45 Allée des Ormes 06250 Mougins France

M - Engineering UG Am Schmachtenberg 11 58636 Iserlohn Germany

SkyRadar is not liable for any error or mistake in this document. Photos might not display the most recent release of the products.

Copyright : © 2012-2018 SkyRadar



# Table of contents

Imprint	2
Introduction	5
SkyRadar e-Cargo Features	5
Introduction to SkyRadar e-Cargo	6
Training Environment for various objectives	6
A Training Environment for IATA Based Regulations	7
A Procedural Training for Optimized Air Cargo Management	7
Why SkyRadar e-Cargo?	8
Understanding the Terminology	8
Document Definitions	9
Booking and planning shipments	10
Unit Load Devices	10
Definition of a ULD	10
Configuring a ULD	11
Cargo iQ Master Operating Plan	13
The importance of MOP	14
Navigating the e-Cargo Application	19
Receiving cargo at the forwarder	22
Transferring the cargo to the forwarder hub	23
Accessing the process view in the application	23
Preparing export shipments	25
Selecting the carrier	26
Completing a successful booking	29
Labeling your shipment	30



Creating the Airway bill	35
The Air Waybill	35
The Importance of the AWB	36
Definitions in the AWB	39
Filling out the AWB	42
Sending cargo and documents to the carrier	45
The Consignment Security Declaration	47
The Importance of the CSD	48
Definitions in the CSD	48
Filling out the CSD	51
Shipper's Declaration for Dangerous Goods	55
The Importance of SDG	55
Definitions in the SDG	57
Filling out the SDG	61



### Introduction

SkyRadar e-Cargo is a simulation application based on IATA e-CARGO and the air cargo industry transportation business process (Air Cargo Industry Master Plan) by the Air Cargo iQ Interest Group. Using this tool, you can track the movement of air cargo from the point of booking it with a freight forwarder as a consignor, and ensuring its arrival at the consignee.

This document is an easy-to-read guide to the SkyRadar e-Cargo simulation application. You will find regular assessment exercises, to test yourself, as you progress.

### SkyRadar e-Cargo Features

SkyRadar lets you simulate the following actions:

- 1. Booking a shipment with a freight forwarder
- 2. Selecting a carrier
- 3. Generating a waybill and other documents
- 4. Reaching the shipment to the carrier (airline)
- 5. Completing ground handling activities
- 6. Loading the shipment at the port of origin
- 7. Unloading the shipment at the destination
- 8. Transferring the shipment to the freight forwarder at the receiving end
- 9. Reaching the shipment to the consignee
- 10. Enabling a view of the customs activity within the application



## Introduction to SkyRadar e-Cargo

With the digitalization of records across the world, it is imperative to know how to efficiently use an air cargo application. Rather than being directly exposed to a live and dynamic server based application, where data can be seen by many users, the e-Cargo simulation tool helps you to understand how the real operations take place. The tool prepares the requisite audience to perform their tasks, corresponding to their roles.

It has been designed on the basis of IATA's sequence of rules and regulations going into the following three directions:

- Safety and Security
- Effectiveness Law
- Abidance and Crime Prevention

It provides an environment for technical and procedural training of aviation personnel.

#### Training Environment for various objectives

Operating an airport, in particular managing the cargo and value flows can be compared with regard to complexity - to a big-sized modern factory. It supplies just-in-sequence, in function of the dynamically changing availabilities of the aircraft.

But in deviation to a modern plant, it receives its cargo out-of-sequence, it needs to buffer the flows, provide storage with flexible potential of delivery. And it faces another challenge. A factory is supplied by accredited suppliers, often in mutual compliance to ISO 9000 or ISO 14000 procedures. The airport cannot pre-select its suppliers. Mutual trust is by definition impossible. In the contrary: the risk of terrorist attacks, wrong declaration of hazardous goods or smuggling of undeclared or blacklisted goods requires an a priori suspicion of malfeasance.



This laboratory provides a close-to-life but pedagogically optimized laboratory for aviation security

### A Training Environment for IATA Based Regulations

The system provides an optimized environment to practice the regulations and procedures for efficient and compliant air cargo management and security management.

### A Procedural Training for Optimized Air Cargo Management

Efficient airflow management needs to work seamlessly from supply to loading and from unloading to discharging. It embraces management skills, security competences and cargo handling expertise. Various professions from operations to university level are required to work hand in hand.

IATA offers regulations which evolve over the years. This training environment provides training environments for electronic cargo handling, Dangerous Goods Handling and Detection.

This training system implements IATA's e-Cargo process in a pedagogically optimized way. In particular and among others, it includes the e-AWB (Airway Bill) the e-CSD (Consignment Security Declaration), the Shipper's Declaration for Dangerous Goods (SDG) and the e-ACI (Advanced Cargo Information). The documents and communication are based (where released) on the IATA CARGO-XML message protocols and standards



# Why SkyRadar e-Cargo?

Since a decade, SkyRadar has been a pioneer in the supply and implementation of high-class training equipment for ICAO, IATA and EUROCONTROL related training and certification programs. The Germany-based manufacturer is known for its quality and precision. SkyRadar uses operational and industrial equipment, as deployed by Airports and ATC operators. SkyRadar provides solutions for essential technological systems in air flow, air traffic control, communications, navigation and surveillance.

SkyRadar's portfolio of training systems ranges from the IATA e-freight route network systems to ATSEP radar training systems and ATCO oriented 3D Tower / APP or en-route simulators.

### Understanding the Terminology

The following are the typical roles in the air cargo movement workflow:

- 1. Shipper (Consignor)
- 2. Origin Freight Forwarder
- 3. Origin GHA (Ground Handling Agents)
- 4. Customs Official (Export)
- 5. Origin Carrier
- 6. destination GHA
- 7. Customs Official (Import)
- 8. Destination Freight forwarder



#### **Document Definitions**

This document uses the following definitions:

- Cargo = the material or item that needs to be airlifted.
- Consignor = the person or organisation that has to send a cargo to another destination.
- Freight forwarder = the agent or company that arranges to pick up the cargo from the consignor (also known as the shipper) from the base location for onward transhipment.
- GHA = the ground handling agent. A ground handler ensures the safe loading, flight, unloading and all ground operations of a cargo. GHAs are associated with the operational efficiency and quality service delivery.
- Shipment = Freight + Information, also mentioned as freight.
- Information = Electronic Data or Paper relating to the freight.
- Carrier = Airline.
- Domain = Sphere of Influence/Control.
- Consignee = the person or company who is receiving the shipment from the consignor.
- Branch warehouse = the location where the freight forwarder stores all cargo that await transhipment and connection to the airline. A large city can have several branch warehouses.
- Hub warehouse = a large warehouse of a freight forwarder that houses all cargo to be loaded into a plane. A hub warehouse is typically located very near to a major airport for logistic reasons. Several branches comprise a hub.



### Booking and planning shipments

Every requirement will be initiated by a client/customer request. The workflow begins with the consignor, or the shipper. A shipper and a freight forwarder jointly gather the following information:

- 1. Origin and destination of the cargo and the nearest airports
- 2. Transhipment time
- 3. Cost of the transhipment
- 4. Documentation such as declaration, certificates etc.
- 5. Pick up arrangements

## **Unit Load Devices**

#### Definition of a ULD

A unit load device (ULD) is (usually) a metallic container used to load luggage, freight, and mail on wide-body aircraft and specific narrow-body aircraft. It allows a large quantity of cargo to be bundled into a single unit. Thus several shipments going to the same destination can be packed inside a ULD, and loaded inside an aircraft, saving a lot of time and effort. Each ULD has its own packing list (or manifest) so that its contents can be tracked.

Each airline has a unique ULD numbering system, as this link will show: https://docs.google.com/spreadsheets/d/1\_WNFotOtrcz5hrVFdJBpiQvh2eEeN5FDucUVI

#### a2VJkQ/edit#gid=0

Do explore this spreadsheet at length and familiarise yourself with the codes.



### Configuring a ULD

- Add the Unit Load Device Screen. It shall be filled out by the GHA.
- Refer the following ULD tag:

. .

ATION		DISPONIBILD AVAILIBILIT
NET (Kg) INGHT (Kg)		
GHT (Kg)		
X.		
DAT	VOL FLIGHT	POSITION SU POSITION O
FERTA	VOL FLIGHT	POSITION S POSITION ON
and second		CODE VOLUN VOLUME CO

**Note**: You must print the tag in A4.

The following fields will be auto populated through the eAWB

- Destination, Loaded at, Flight, Contents
- N° : choice menu which offers choice from <u>https://docs.google.com/spreadsheets/d/1EacNyu82ztx8a-Tt5wjn\_pNH4biMX6d5</u> <u>ylyFdbUKfqs/edit</u>



**Important**: The numbers are fixed as as they have been hard coded into the RFIDs. Provide the subsection that is available for the specific airline prescribed on the eAWB. In case you include an airline that is not specified, a few no-name ULDs have been added that are not associated to any airline, for greater flexibility.

- Fill out the position on A/C and Transfer position manually
- Fill out the observations manually. **Important:** In case of dangerous goods, the tool will provide hyperlinks to print the correct sticker for the hazard class (the PNGs need to be stored locally as internet connection might not be available in the training centers).
- Refer to the images and the hazard class from the following link: : <u>https://www.hazmattool.com/classes.php</u> (all subclasses from class 1-9 shall be included)

**Note:** It might be various links, when several hazardous classes are included in one ULD. The size of each dangerous good icon shall be 80mm x 80mm, as seen below:



Note: You need to store the images locally, as an internet connection might not be available.



### Cargo iQ Master Operating Plan

A description of the air cargo industry transportation business process

Cargo iQ is an IATA not-for-profit membership initiative, set up with an objective to create and implement quality standards for the worldwide air cargo industry.

The group comprises about 80 major airlines, freight forwarders, ground-handling agents, trucking companies and IT solution providers. On a recent estimate, 10 million A2A ( airport to airport) shipments and Six million D2D (Door to Door) shipments measured annually, while the annual data exceeds 110 million lines per year. The industry standard is endorsed by TIACA, the Airport Services Association (ASA), the Cool Chain Association (CCA), and ULD Care, a non profit Canadian organization whose scope encompasses any aircraft unit load device (ULD) activity.

Cargo iQ Members recognized the need to develop a Master Operating Plan (MOP) to support implementation of quality management processes and metrics, using standard approaches. The Cargo iQ members work together to define the processes behind the air transport of cargo to measure success and continuously improve the value of airfreight for customers.

In simple terms, the MOP records each shipment process from the shipper to the consignee that comprises 19 main processes and 78 sub-processes.

MOP describes the key processes and sub-processes involved in transporting air cargo from shipper to consignee in a systematic and harmonized manner.

The Industry MOP is a generic description of the air transportation process, intended to be used by the whole industry. The document provides the air cargo supply chain with



the first, industry-endorsed, standard description of the end-to-end process of transporting cargo by air with the objectives of:

- 1. Serving as the foundation for developing industry standards and best practices in areas such as e-freight, security, quality, and standardisation
- 2. Facilitating discussions with regulators
- 3. Simplifying communication with partners in the supply chain

IATA recommends to all participants in the supply chain to use the Industry MOP when defining internal processes and in discussions with business partners. The following document has already been adopted by leading industry organizations: http://www.iata.org/whatwedo/cargo/cargoiq/Documents/cargoiq-industry-mop.pdf

#### The importance of MOP

There have been several significant developments in the way cargo shipments are processed in recent years. The areas addressed for improvement include, for example, air security, electronic freight management, paperless workflow and global compatibility compatibility across various IT systems and country regulations.

The Cargo iQ management recognized the need to evolve a MOP in an up-to-date and user friendly format to navigate the processes listed therein. The complete process has been summed up in a graphical workflow that is easy to understand and implement. Users can easily and rapidly access and navigate the MOP format. It is natural to expect that any process is an evolution and the MOP thus incorporates an enhanced method to present and control future adjustments.

Additionally, the MOP is available for access by all participants in the air transport supply chain from shippers to consignees, as well as all service providers, involved in the actual transport of cargo and related activities.



The value of an Industry MOP however goes beyond this particular goal and this Industry MOP will provide all industry participants as well as air cargo representative organizations and associations with a common reference document useful for a number of activities, including:-

- Support to the development and implementation of new industry standards and practices, in areas such as quality management, paperless operation, security, customs compliance, special cargo transportation, and others.
- Support to discussions with regulators, when a description of the generic industry transportation process is required.
- Support to air cargo industry participants looking for a reference to improve their internal processes and/or developing common processes with supply chain partners.

The MOP guidelines recognize that the processes and sub-processes contained herein may not describe the exact processes applied by each air cargo participant in their own operations. It does represent, however, a good description of the process that the air cargo industry can aim towards, with a view to harmonizing procedures across stakeholders, improving overall quality, and responding to regulatory requirements.

It is anticipated that this MOP will continue to evolve over time as requirements and industry processes evolve.



A total of 19 main processes have been identified in this MOP, from shipper's door to consignee's door. These processes belong to one of five categories of activities as follows:

- 1. Origin Forwarder
- 2. Origin Carrier
- 3. Transport Carrier
- 4. Destination Carrier
- 5. Destination Forwarder

The following diagram illustrates the master workflow:





The Carrier part and the forwarder part screens capture the essence of the MOP:









# Navigating the e-Cargo Application

The following section explains the ways to go through the application. The section starts with the main screen:







**Note:** The GHAs are linked to the respective carrier. For example, **Ground Kings** is the GHA for KLM, **Quality Handling** for Lufthansa and **Your Handling Partners** for Air France. The system will automatically map the process accordingly.

In the role of a shipper, you will perform the following steps: Click **Shipper.** 

**The Ready to send a new shipment!** screen appears. You can see the shipment, that is being sent, for example, "small lamp shade" in the **What do you want to send** field. You can also select other items by clicking **Something else**.

Cargo	삼 Home	Q Search 👩 Shipper	App view	Process view	XML view
		Ready to send a new shipment! What do you want to send?	i		
		Some	ething else		
		Select a freight forwarder			
		Cargo Post			
		Save Shipping			
		World Transport			
		Send your request			



2. Select the freight forwarder, for example, "Cargo Post" and click Send your request.

### Receiving cargo at the forwarder

When you click Send your request, the system notifies the freight forwarder that a request for cargo collection has come in, as this screen shows:

Cargo	👫 Home	Q Search 🧿 Shipper	App view	Process view	XML view
		Ready to send a new shipment!	i		
		What do you want to send?		_	
		Rolls-Royce Silver Ghost So	omething else		
		Select a freight forwarder			
		Cargo Post			
		Save Shipping			
		World Transport			
		Send your request			

Cargo Post, the freight forwarder, will view this screen, to make arrangements for the pickup.



Soon after, the system updates the built-in processes and points to the new requests for pickup from the shipper ( customer),

### Transferring the cargo to the forwarder hub

The following screen appears:

Cargo 👫 Home 🔍 S	Search 🦛 Cargo Post	Rolls-Royce Silver Ghost - id: 4	App view	Process view	XML view				
Rrocess: 1.4 - Request capacity against forwarder or carrier inventories									
New requests from client 2	In branch warehouse 0 In hub warehouse 0	Ready to send to carrier 0 Received from GHA 0							
Received requ	uests from clients via pho	ne or web. Waiting for booking.							

Id	Name	Process No
3	Cobalt	1.4
4	Rolls-Royce Silver Ghost	1.4

The screen lists the various shipments that are waiting to be booked. At this stage, the process view helps you to better understand the workflow.

#### Accessing the process view in the application

Click **Process view** in the top right of your screen.

The process view a screen appears with the following information, in the folded mode:



Cargo 🖪 Home 🔾 Search 📧 Cargo Post

App view Process view XML view





- 1. Book & Plan Shipments
- 2. Pick up from Shipper
- 3. Receive freight at forwarder branch facility
- 4. Transfer to forwarder hub
- 5. Prepare export shipments
- 6. Transfer shipment to carrier domain
- 7. Receive shipment into carrier domain
- 8. Accept shipment as ready for carriage
- 9. Prepare freight for transport
- 10. Shipment to flight, load & depart
- 11. Distribute information
- 12. Arrive flight, unload & dispatch shipment to warehouse
- 13. Check-in shipment
- 14. Arrive shipment
- 15. Handover freight to forwarder
- 16. Arrive shipment at forwarder hub
- 17. Transfer shipment to forwarder branch facility
- 18. Load truck and produce run sheet
- 19. Deliver, obtain POD & conclude cycle

#### Preparing export shipments

Shipments going out of the country require special documentation. In general, these include:

- Bill of entry
- Commercial invoice
- Certificate of origin
- Airway bill



- Insurance certificate
- Letter of credit
- Shipment advice
- Technical literature, installation instructions or product manuals

The nature and number of documents differ from country to country, and subject to the laws of the land.

The coming sections will discuss the airway bill, an integral part of this simulation.

### Selecting the carrier

After booking the consignment, the freight forwarder will block an airline as the carrier. The choice of the carrier depends on a variety of factors. These include the destination point, the cost of the transhipment, the frequency of operations and good business relations.

Click **Shipper** highlighted on the top menu. You can also reach this screen by **Home> Shipper.** 

Click Cargo Post, who is the chosen freight forwarder here.

The Received requests from clients via phone or web. Waiting for booking screen appears, listing the items, or the cargo to be shipped through the freight forwarder, along with the state of the process. You can see a new request from a client at the top left of the screen. These items are numbered and you can see that there are three new requests.





Assuming that you are a freight forwarder, click any row. For example, green pillow, the first row. The Booking for: green pillow-id:1 appears, listing the carriers, or airlines that are registered to airfreight the shipment.

For example, select Lufthansa and click Select Airline.

The Booking for: green pillow - id: 1 screen appears, with the message that when the FDPS is ready, th flight schedule will appear.

The following screen shows the confirmation of the booking, in this case, a green pillow. The booking is confirmed, subject to the FDPS.



Cargo	者 Home 🛛 🔍 Se	arch 🦳 Cargo Post		Rolls-Royce Silver Ghost - id: 4		App view	Process view X
🚗 Pro	ocess: 1.4 - Request caj	pacity against forwarder or carri					
New reque	ests from client 🧿	In branch warehouse 💿	In hub warehouse 💿 Read	y to send to carrier 👩 Rec	eived from GHA 👩 🛛 Fl	oating Panel 💌	
	Boo	king foi	r: Rolls-F	Rovce Si	lver Gl	nost - i	d:
	4						
	Flight No	Origin	Destination	Departure	Arrival	Status	
	1022	Barcelona	Frankfurt	11:07:35	11:11:35	scheduled	
	1023	Frankfurt	Barcelona	11:12:10	11:16:10	scheduled	
	1024	Barcelona	Frankfurt	11:16:40	11:20:40	scheduled	
	1041	Frankfurt	Zurich	11:02:40	11:05:40	scheduled	
	1042	Zurich	Frankfurt	11:06:00	11:09:00	scheduled	
	1043	Frankfurt	Zurich	11:09:10	11:12:10	scheduled	
	1044	Zurich	Frankfurt	11:12:25	11:15:25	scheduled	
	Book Ba	ck					

A Flight Data Processing System (FDPS) is at the heart of any ATC (Air traffic Control) facility. Flight Data Processing (FDPS) works with flight plan data and conducts the flight during the flight execution with respects to its flight progress and airspace organization. Information distribution within the system is updated in real time, accompanied by events identified by the flight monitoring subsystem.



Cargo	삼 Home	<b>Q</b> Search 🛛 🛌	Cargo Post	Rolls-Ro	vyce Silver Ghost - id: 4		App view Pi	rocess view XMI	L view
<b>e</b> •	Process: 1.4 - Requ	est capacity against	forwarder or carrier invent	ories					
New requ	uests from client	2 In branch w	varehouse 👩 👘 In hub v	varehouse 👩 Ready to send	to carrier 💿 Received fr	om GHA 💿 Floating	g Panel 💌		
			6						
	Bo	okin	g for: F	Rolls-Ro	vce Silv	er Gho	ost - id	d:	
	4		0.0.0		) = = =				
	4								
	Flight	No	Origin	Destination	Departure	Arrival	Status		
	1022		Barcelona	Frankfurt	11:07:35	11:11:35	scheduled		
	1023		Frankfurt	Barcelona	11:12:10	11:16:10	scheduled		
	1024		Barcelona	Frankfurt	11:16:40	11:20:40	scheduled		
	1041		Frankfurt	Zurich	11:02:40	11:05:40	scheduled		
	1042		Zurich	Frankfurt	11:06:00	11:09:00	scheduled		
	1043		Frankfurt	Zurich	11:09:10	11:12:10	scheduled		
	1044		Zurich	Frankfurt	11:12:25	11:15:25	scheduled		
	Book	Back							

### Completing a successful booking

#### Click **Book.**

The screen re-appears with the green highlighted message that Booked successfully! as this screen shows:





Note: When you click Process view, you can see that the chart has moved to process 2.1.

#### Labeling your shipment

At this stage, the shipper should label the shipment and keep it ready for the freight forwarder to pick it up.

Click **Shipper** to get back to the **Ready to send a new shipment** screen. You can see a green message icon on the right of the screen. This is nothing but a message from the forwarder to the shipper to make sure that a label is attached to the cargo.

Click the message to view the following screen:



Cargo	番 Home	Q Search	O Shipper	Rolls-Royce Silver Ghost - id: 4	App view	Process view	XML view
Ø Pre	cess: 2.1 - Lab	eling Freight (by	rshipper)				
		Plea ship	ase attach a l oment	abel to your			
		Rolls-I	Royce Silver Ghost - 4				
					Generate label		
		Attach la	abel and ready your cargo for the forwarder				

Type the label serial number or click **Generate Label** to secure the number and click **Attach label and make it ready to collect by forwarder**.

You will get a notification screen that the forwarder's truck will collect the shipment as the screen shows:





Coming back to the application (App view) and in the flight forwarder's page, you can see that there is an entry in the branch warehouse of the freight forwarder. There are two kinds of warehouses, the branch and the hub. Several branches comprise a hub, for example, *The Champs-Elysées, Montparnasse, Les Halles and St. Germain-des-Pres* in the *Paris* hub of the freight forwarder.

In the freight forwarder's role, click **In branch warehouse**, where you can see three consignments. In this case, red chocolate, stylish mirror and orange pen.

Click the **red chocolate** row.



Cargo	👫 Home 🛛 🔍	Search 🐔 Cargo Post		Rolls-Royce Silver Ghost	- id: 4	App view	Process view	XML view
Pro	ocess: 3.5 - Create ship	oment record						
New requ	ests from client 🕕	In branch warehouse 🕕	In hub warehouse 🔘	Ready to send to carrier 👩	Received from GHA 👩			
Cargo	o receive	d at the bran	ch warehou	use. Create the	e shipment recor	d now!		
Id	Name				Process No			
4	Polls Pou	ce Silver Ghost			3.5			

#### The process is now at 3.5 as seen below:



The **Create shipment record** screen for: red chocolate-1 appears. In this screen you need to populate the following fields:

- 1. Shipper's name and address
- 2. Consignee's name and address
- 3. Weight
- 4. Volume
- 5. Approximate price

You can either type out the information or click **Generate all data**. The system will fetch all this information from the database. This is how the populated screen appears:



Cargo	삼 Home	<b>Q</b> Search	💪 Cargo Post		Rolls-Royce Silver Ghost	- id: 4	Å	pp view	Process view	XML view
Pro	ocess: 3.5 - Cre	ate shipment	record							
New requ	ests from clien	it 🚺 In	branch warehouse 🚺	In hub warehouse 👩	Ready to send to carrier 👩	Received from GHA 0	Floating Panel	3		
	Cre	ate sh	nipment <mark>r</mark> e	ecord for: Ro	olls-Royce Silv	ver Ghost - 4				
	<mark>S</mark> hipper	's Name and	Address							
									Q	
	Consign	ee's Name an	d Address							
									٩	
	Weight								50 (A)	
									Q	
	Volume									
									Q	
	Approxi	mate Price								
									Q	
	Creat	e and save shi	pment record					Gener	ate all data	

In this screen you need to populate the following fields:

- 1. Shipper's Name and Address
- 2. Consignee's Name and Address
- 3. Weight (of the consignment)
- 4. Volume (of the consignment)
- 5. Approximate price

You can either type out the information or click **Generate all data**. The system will fetch all this information from the database.

Click Create and save shipment record.

The **Record Saved. Close this form** message appears.



### Creating the Airway bill

In process 5, Prepare export shipments, 5.4 is highlighted- Create a MAWB shipment record and consolidation manifest.

The shipment has now moved to the hub warehouse and the next step is to create an air waybill, as this screen shows:

Cargo 倄 Home 🔍 Se	earch 💁 Cargo Post	Rolls-Royce Silver Ghost - id: 4	App view	Process view	XML view	
Process: 5.4 - Create MAWB shipment record and consolidation manifest						
New requests from client 🕕	In branch warehouse 👩 In hub warehouse 🌘	Ready to send to carrier  Received from GHA				
Cargo received at the hub warehouse. Create the AWB now!						

Id	Name	Process No
4	Rolls-Royce Silver Ghost	5.4

## The Air Waybill

The air waybill is the most important document issued by a carrier either directly or through its authorized agent. It is a non-negotiable transport document that covers transport of cargo from airport to airport. By accepting a shipment, an IATA cargo agent is acting on behalf of the carrier whose air waybill is issued.

The air waybill is a contract- an agreement enforceable by law. However, for it to be a valid contract, the AWB has to be signed by the shipper or his agent and by the carrier or its authorized agent. Although the same individual or organisation may act on behalf of both the carrier and the shipper, the air waybill must be signed twice one each in the respective carrier and shipper boxes. Both signatures may be of the same person. This also implies that the air waybill should be issued immediately upon receipt of the goods and letter in instructions from the shipper.

**Note:** As long as the air waybill is neither dated nor signed twice, the goods do not fall within the terms of the conditions of contract and therefore the carrier will not accept any responsibility for the



goods. The validity of the air waybill and thus the contract of carriage expires upon delivery of the shipment to the consignee (or his authorized agent).

AWBS find their importance in making bookings, checking the status of delivery, and locating the position of the shipment, during its cycle.

Legitimate air waybills have eleven digit numbers.

The Electronic Air Waybill Resolution 672 (MeA) cancels the need for a paper AWB. There is therefore no longer a need to print, handle or archive the paper, largely simplifying the air cargo process. Thus there is no longer the need to print, handle or archive the paper AWB, simplifying the air cargo process and moving towards a 100% e-Cargo vision.

The increasing importance of the eAWB can be gauged by these two diverse information.

#### The Importance of the AWB

#### Consider the scenario in 2016:

- More than 50% of the global air trade relied on paper-based processes.
- A shipment could generate up to 30 paper documents and many of the processes, such as track and trace, still depended on human intervention.
- Each year, more than 7,800 tons of paper documents were processed, the equivalent of 80 Boeing 747 freighters filled with paper!

In contrast, consider the scenario in 2017:


TATA

## Status as of June 2017

In June 2017, the Air Cargo industry processed more than 2.3 million Air Waybills (AWBs)



The following diagram shows the IATA stipulated process that involves the shipper, the freight forwarder and the airline:

Freight		booking FFR	Pickup freight and prepare shipment for export	Transmit AWB data to carrier FWB	Receive	Perform	Accept	Prepare	Transmit AWB	Arrive flight,	Check-in	Hand over
Shipper	details	Plan shipment and confirm booking	Pickup freight and prepare shipment for	Transmit AWB data to carrier								

The below chart presents a simplified view of a paperless air cargo process using the main e-AWB messages

The back of an air waybill and its legal implications in fine print, as seen below:



#### WAYBILL CONTRACT-FOR-CARRIAGE TERMS

appending former. The set " industry for at service model, the primordial and reason X is contradiction in large the particle and polar activate model in  $\mathcal{O}$ 

38

(c) a second a superior of the Color of a second s second seco

- a below the bar of the set of spectra waters but at our a set water to a set of the bar of the set of the set
- the Corner fact, and takes a real to first configure, whitten for written or partnerships partners of all charges for the configure for its economics
- ega gonghoi ku soʻdaga, ku Atmasa Tawashini aki ku kantusi Tawatsar apold atagan is an ta belanan ut kaling to, akonega nigato ostar far tertaga ata paping o sugaramenti
- Ample's sames a complete a delte solline de Minutes Documentos en de Ministra Comostoro againe. Comos mais e solutionado ado de processione al forte o la aplace contentes el antiga los aplacentes adhe, aore-Region de comos de los contentes el fontes de Ministra y la genera sole de contentes de unitade, este content Region de comos de los contentes el fontes de Ministra y la genera sole de contentes de unitade, este contente de contentes de los contentes el fontes de Ministra y la genera sole de contentes de unitade, este contentes el de contentes de los contentes el fontes de los contentes el fontes de los contentes el de contentes de los de los

----

A Secondary of the second seco

#### ADDITIONAL U.S. DOMESTIC CONDITIONS OF CONTRACT

4 Any writer applies the Cartor Incode & Sectored Tax a more top and reports

- -
- A local processor is
- 8. Upone and how a period has at the orige for sentime and limits in a per dispesse, or task, reduct is one, and to be inserved at at spin period.
- Readlance of the concile that wild restrict in respond and extend in a

#### ADDITIONAL INTERNATIONAL CONDITIONE OF CONTRACT

ele el a contra libre fue de casaria el manifes, mente

- 1.57 Document of the other states of the state of the states of the stat 14
- Statement S, and the provides the "brane are the measurement to me.
   Statements to me.
   <l
- 8 Max contactors or furthering of static contraction or Contrac-ion transportations and in our potent where planet and and transportations and an approximate and interaction of an approximation approximate and interaction of the static contraction of the static contraction of the state of the static contraction of the state of the state of the state of the static contraction of the state of the state

### the second statement is second with the second statement of the second stateme

many of details then the landsquares in the state state years
defaults to be state that the state of the state of the state of the state state of the state of

- por cares tradinger gestel form out to other for the test of state of its gestellar, an artist, of her its gest an attached
- A start counts perform a sub-degrades and a procession in the two reages was be another building, these sharts a two real ment of the terms count of the sub-degrades and the term and the terms count of the sub-degrades. The term of the terms of the term of the sub-degrades are to the term of the term of the sub-degrades. The term of terms of the term of the sub-degrades are to the term of the term of the sub-degrades. The term of the term of the term of the sub-degrades are to the sub-degrades are to the term of the sub-degrades.

M. Recapits matters a taxonistic of large law activity is desired at all the cartesian.

SPENDED, Republics of the second test required is provide straps, specify there is a second test of the second straps of a second straps.

The following screen gets generated in the e-Cargo application:



Cargo	삼 Home	Q Sea	rch 💁 C	argo Post			Rolls-R	oyce Silver Ghos	t - id: 4	App vi	iew Process view	XML view
Proce	ess: 5.4 - Crea	ate MAWB	shipment reco	ord and consoli	dation manifest	LI S						
New reques	ts from client	t 🚺	In branch wa	rehouse 💿	In hub ware	house 🕕	Ready to sen	d to carrier 👩	Received from GHA 👩	Floating Panel 🗴		
	AWB (Master Air Waybill) for Rolls-Royce Si							lver Ghost				
	Air W	aybill Nur	nber		,							
	07	4-XXXXXXXXXX	OX.				۹					
	Shipp	per's Nam	e and Addres	s				Consignee's	Name and Address			
	Cro	ooks, Loni	e - 6610 Jacok	oi Mount - Milar	1	Schuster, Davion - 85575 Botsford Cresce				nt - Frankfurt		
	Carrie	er		Flight		Date		Airport of Departure		Airport of Destination		
	KL	M		<mark>1</mark> 022		11:07:35		Barcelona		Frankfurt		
	Decla	ared Value	for Carriage	Declared Val	ue for Customs							
	Hand	lling Infor	mation									
	No of Piece	f 9 <b>5</b>	Gross Weigh <mark>t</mark>	Rate Class Code	Commodity Item No.	Chargeable Weight	Rate/ Charge	Total	Nature and Quantity of Goods & Dimensions			
									Rolls-Royce Silver Ghost [	DIMS: 70x140x110(cm)	×	
	Ad	ld rating li	1e									
	110	in the first of the second sec										
	Save	Clos	e									

## Definitions in the AWB

Here are the fields in a AWB and their descriptions:

#	Field Name	Explanation
1	Air Waybill number	This will be a system generated 11 digit number.
2	Shipper's name and address	Name and address of the consignor or shipper.
3	Consignee's name and address	Name and address of the consignee or receiver of the shipment.



4	Carrier	Designated airline, such as Lufthansa.
5	Flight	Flight number, for example, LH 130 to Stuttgart, where LH stands for Lufthansa.
6	Date	Date of the signing of the waybill by the shipper
7	Airport of departure	Vienna airport, for example.
8	Airport of destination	Frankfurt airport, for example.
9	Declared Value for Carriage	Value of a shipment as declared by its shipper to serve as the basis for computing freight charges, and for limiting the carrier's liability for damage, loss, or delay. It usually reflects the cost price of the shipment, and is normally lower than the declared value for customs.
10	Declared Value for Customs	Value of a shipment as declared by its shipper to serve as the basis for computation of duties and taxes. It usually reflects the selling or the replacement price of the shipment, and is equal to or higher than the declared value for carriage.
11	Handling Information	Special instructions or notes like "Hold for Pick up at the airport", "Shipper Certification Attached" "Handle with Care", "Perishable" etc.
12	Number of Pieces	The units of a packaging, for example, "3" grand pianos.
13	Gross Weight	The weight of the material plus its container, for example, a guitar with its carrying case. This does not include the tare weight of aircraft pallets, or containers. However, the gross weight includes the weight of packaging material, like wooden skids.
14	Rate Class Code	Tariff level (Rate Class): air freight for a total of 6 different types of code, which is M (Minimum, minimum freight), C (Specific Commodity Rates, special tariffs), S



		(Surcharge, higher than the general cargo the level of tariff goods tariffs), R (Reduced, below the level of general cargo freight cargo freight), N (Normal, 45 kg of goods for the general cargo tariffs), Q (Quantity, 45 kg of goods tariffs for general cargo).
15	Commodity Item Number	Any number assigned to a shipment, such as "9 UN1845" for Carbon Dioxide.
16	Chargeable Weight	Actual weight or the dimensional weight, whichever is greater.
17	Rate/Charge	Rate per unit, such as for a litre, kilogram or pound.
18	Total Rate	Total rate of the shipment, that includes charges and surcharges, as applicable.
19	Nature and Quantity of Goods & Dimensions	The description of a shipment, such as "Carbon dioxide, solid, 9 UN1845, 2 X 25 kg."
20	Signature of Shipper or Agent	Signature of the consignor or an agent.
21	Signature of Issuing Carrier	Signature of the airline authority or its agent.



#### Filling out the AWB

Here are these fields that are to be populated in the AWB:

- 1. Air Waybill number: The system will generate the 11 digit air waybill number.
- 2. **Shipper's name and address**: Enter the name, address, city, postal code, country and telephone number of the shipper.
- 3. **Consignee's name and address**: Enter the name, address, city, postal code, country and telephone number of the consignee.
- 4. Carrier: Enter the three letter code for the airline, for example, KLM
- 5. **Flight**: Enter the flight number, for example, KL0932.
- 6. **Date**: Enter the date of the flight.
- 7. Airport of departure: Enter the three letter city code, for example, VIE, for Vienna.
- 8. **Airport of destination**: Enter the three letter city code, for example, FRA for Frankfurt.
- Declared Value for Carriage: Enter the declared value for carriage as specified by the shipper. For example, 39,000 euros for a Rolls Royce Silver Shadow 2017 edition. If there is no value, enter NVD (NO VALUE).
- Declared Value for Customs: Enter a value for customs purposes as declared by the shipper as applicable. For example, 40,000 euros for a Rolls Royce Silver Shadow 2017 edition. Otherwise, leave the field blank.
- 11. **Handling Information**: Enter handling remarks, special instructions, identifying marks and numbers which appear on the consignment, method of packing, attachments, or instructions.
- 12. **Number of Pieces**: Indicate the number of pieces. Where there is more than one entry, enter the total number of pieces in the bottom row.
- 13. **Gross Weight**: Enter the actual gross weight of the pieces. When a ULD is used, indicate the actual tare weight as an additional line entry. Where there is more



than one entry, enter the total gross weight of the shipment in the bottom row. For example, 4100.56 kilos. (Gross is net+tare. Tare is the weight of the container, or packing).

- 14. **Rate Class Code**: Enter the tariff level (rate class) under any of these six codes, as applicable:
  - **M**:Minimum freight
  - **C**:SCR (Specific Commodity Rates)
  - **S**:Surcharge on the shipment. This is higher than the general cargo tariff.
  - **R**:Reduced tariff, which is lesser than the general cargo tariff.
  - **N**:Normal, for example 45 kilos or under.
  - **Q**:Quantity, for example, 45 kilos or above

**Important:** Consult the carrier's agent for more information on rate class code.

- Commodity Item Number: Enter the commodity item number, for example, "9 UN1845" for Carbon Dioxide.
- 16. **Chargeable Weight**: Enter the actual weight or the dimensional weight, whichever is greater. For example, 124.5 kilos.
- 17. **Rate/Charge**: Enter the rate per unit, such as or a litre, kilogram or pound, for example, 0.5 euros per litre.
- 18. **Total Rate**: Enter the total rate of the shipment, that includes charges and surcharges, as applicable. For example, 2330 euros.
- 19. Nature and Quantity of Goods & Dimensions: Enter the description of a shipment, such as "Carbon dioxide, solid, 9 UN1845, 2 X 25 kg."
- 20. **Signature of Shipper or Agent**: Get the signature and stamp of the shipper or agent.
- 21. **Signature of Issuing Carrier:** Get the signature and stamp of the concerned airline authority.



**Note**: **Click Add rating line**, to add relevant information to the air waybill. More rows will appear, as seen below:

**Click Save > Submit > Close,** to get the final AWB, also called Master Air Waybill (MAWB) as seen here:

Cargo	삼 Hom	ie <b>Q</b>	Search	Ground Kings	AWB			Rolls-Royce	e Silver Ghost - id: 4		App view	Process view	XML view
🕘 Pro	ocess: 16.3	- Check sh	ipment details	against expecte	ed (after breakdo	wn)							
Received	from forwa	irder 👩	Collect to	load 👩 U	nload flight 👩	Customs	release status	0 Han	ndover to forwarder 💿 🛛 Fl	loating Panel 💌			
		۸ <i>۱</i> ۸		N A		۸· ۱	Λ.Ι	1 •1					
	AWB (Master Air Waybill) for Rolls-Royce												
	(	Silv	/er	Ghc	ost								
		211	v Ci	0110									
	A	ir Waybill 074-4964	Number				Q						
	s	hipper's N	lame and Add	ress				Consignee	's Name and Address				
		Crooks, L	onie - 6610 Ja	cobi Mount - Mil	an			Schuster, Davion - 85575 Botsford Crescent - Frankfurt					
	C	arrier		Flight		Date		Airport of Departure Airport of Dest			tion		
		KLM		1022		11:07:35		Barcelona		Frankfurt			
	D	eclared Va arriage	alue for	Declared Va Customs	lue for								
	н	andling In	formation										
	P	o of ieces	Gross Weight	Rate Class Code	Commodity Item No.	Chargeable Weight	Rate/ Charge	Total	Nature and Quantity of Goods & Dimensions				
		1	5T	100	101000	5T	10,0008	10000	Rolls-Royce Silver Ghost	DIMS: 70x140x110(cr	m)		



### Sending cargo and documents to the carrier

You can also see that the consignment has moved to the "Ready to send to carrier" phase. In the process view, in process 6, Transfer shipment to carrier domain, the phase has moved to 6.3 - Transmit forwarder information to carrier.

Cargo	👫 Ilome 🝳 Search 👝 Cargo Post 🗋 AWB	Rolls-Royce Silver	Ghost - id: 4	App view	Process view	XML view
Ø Proc	ess: 6.3 - Transmit forwarder information to carrier					
New reques	sts from client 🚺 In branch warehouse 👩 in hub wa	rehouse (0) Ready to send to carrier (1)	Received from GHA (0)			
Cargo	and documents are read	y for the carrier.				
🔲 Id	Name		Process No			
4	Rolls-Royce Silver Ghost		6.3			

Select the Rolls-Royce Silver Ghost row, to complete the process.





You are now ready to create the SDG and the CSD documents, as seen below:

You can attach the CSD or SDG document to the shipment. CSD stands for Consignment Security Declaration).

**Click CSD** to create the Consignment Security Declaration (CSD) **click SDG** to create the Shipper's Declaration for Dangerous Goods (SDG) template, as seen here:



Cargo 🎢 Home 🝳 Search 👝 Cargo Post 🗋 AWB Rolls-Royce Silver Shadow - id: 10 App view	Process view X	ML view
Process: 6.3 - Transmit forwarder information to carrier		
New requests from client 💿 In branch warehouse 💿 In hub warehouse 💿 Ready to send to carrier 😦 Received from GHA 💿 Floating Panel 🕿		
CSD (Consignment Security Declaration)		
Air Waybill No		
074-16018015		
Regulated entity category (RA, KC or AO) and identifier Unique consignment identifier		
Contents of consignment		
Rolls-Royce Silver Shadow		
Origin Destination		
Barcelona Frankfurt		
Security status Received from (codes) Screening method (codes) Grounds for Exemption (codes	;)	
Security status issued by Security status issued on		
Regulated entity category (RA, KC or AO) and Identifier		
Additional security information		

## The Consignment Security Declaration

The Consignment Security Declaration (CSD) provides regulators with an audit trail of how, when and by whom cargo has been secured along the supply chain.

Its objective is to meet ICAO requirements, ensuring that each consignment received by an aircraft operator or a regulated agent comes with documentation, either on the e-air waybill or on a separate declaration.



#### The Importance of the CSD

To avoid a plethora of different security declarations, IATA developed a standard CSD in cooperation with the industry and regulators.

The Consignment Security Declaration (CSD) provides security information relating to consignments of air cargo and mail as they move along the supply chain. This enables entities handling cargo and mail to ensure that the proper level of security is maintained or applied.

#### Definitions in the CSD

#	Field Name	Description
1	Regulated entity category (RA, KC or AO) and identifier	The Regulated Agent (RA), Known Consignor (KC) or Aircraft Operator (AO) who originally issued the security status, identified by the category (RA, KC or AO) and its unique identifier.
2	Unique consignment identifier	The identification of the consignment. This may be an air waybill in the "nnn nnnnnnn" format, a house bill or a mail consignment identifier.
3	Contents of consignment	The goods description, for example, a Rolls Royce Silver Ghost automobile.
4	Origin	The origin location of the consignment. This is the IATA three letter airport or city code.
5	Destination	The destination location of the consignment. This is the IATA three letter airport or city code.

Here are the fields in a standard CSD template, with their descriptions.



6	Transfer/Transit points	The identification of an enroute stopping point where cargo may be transferred to another aircraft or remain on board the same aircraft, if known to the issuer, (the IATA three -letter airport or city code). Otherwise this entry may be blank.
7	Security Status	<ul> <li>The coded identification of the security status assigned to the consignment, to indicate whether the consignment is secure for: <ol> <li>Passenger, all cargo and all - mail aircraft (some regions use the code "SPX")</li> <li>All -cargo and all -mail aircraft only (some regions use the code SCO)</li> </ol> </li> <li>OR <ol> <li>Passenger, all - cargo and all - mail aircraft, in accordance with high -risk requirements (some regions use the code, SHR).</li> </ol> </li> </ul>
8	Received from (codes)	The coded identification of the category (Regulated Agent, Known Consignor, or Aircraft Operator) that tendered the consignment. If no other reason, i.e. "screening method" or "grounds for exemption" is indicated and the consolidation box is not ticked, then this entry cannot be blank.
9	Screening Method (codes)	The coded identification of the screening methods (ICAO codes are under development) used by the Regulated Agent, Known Consignor, or Aircraft Operator when securing the consignment. If no other reason, i.e. "received from" or "grounds for exemptions" is indicated and the consolidation box is not ticked, then this entry cannot be blank. In some cases a single screening method may not be sufficient to inspect all types of consignments,



	therefore more than one screening methods may be listed.
Grounds for Exemption (codes)	The coded identification (ICAO codes are under development) indicating why a consignment is exempted from screening as defined in State National Civil Aviation Security Programmes. If no other reason, i.e. "received from" or "screening method" is indicated and the consolidation box is not ticked, then this entry cannot be blank.
Other Screening Method(s)	If the code entered in the Screening Method (codes) field indicates that any other means were applied, then enter text specifying the other means used.
Security status issued by	If the consolidation box is not ticked then the individual of the Regulated Agent, Known Consignor, or Aircraft Operator who issued the security status must be identified by name or employee number.
Security status issued on	If the consolidation box is not ticked, then the exact date and time when the security status was issued by Regulated Agent, Known Consignor, or Aircraft Operator employee, must be indicated.
Regulated entity category (RA, KC or AO) and Identifier	The identifier of any Regulated Agent (RA) , Known Consignor, (KC) or Aircraft Operator (AO) that accepts custody of the cargo and accepts the security status. This entry will confirm that the cargo has remained secure and will follow any other entries for other Regulated Agent (RA) , Known
	Grounds for Exemption (codes) Other Screening Method(s) Security status issued by Security status issued on Regulated entity category (RA, KC or AO) and Identifier



		have also accepted the original security status.
15	Additional security information	Any additional Security information that may be required by an ICAO Member State, for example, any national regulation applicable to the responsibilities in the event of a false declaration, or any applicable emergency amendment. A signature of the responsible person initially issuing a hardcopy Consignment Security Declaration in the first field, must be inserted when the supply chain is paper based.

#### Filling out the CSD

Here are these fields that are to be populated in the CSD:

- Regulated entity category (RA, KC or AO) and identifier: Enter the unique entity code for RA, KC or AO, as applicable. (RA = Regulated Agent, KC= Known Consignor, and AO= Aircraft Operator.)
- 2. **Unique consignment identifier**: Enter the identification of the consignment. This may be an air waybill (format is nnn nnnnnnn), a house bill or a mail consignment identifier. But in a majority of cases, it is the air waybill.
- Contents of consignment: Enter the consignment details, for example, 1 Rolls Royce Silver Shadow. Cobalt blue.
- 4. **Origin**: Enter the IATA three letter airport code, from where the consignment has originated, for example, VIE for Vienna.
- 5. **Destination**: Enter the destination IATA three letter airport code, for example, FRA for Frankfurt.
- 6. **Transfer/Transit points**: Enter the three letter transit airport code, if any. For example, MUN, (Munich) if the flight is VIE-MUN-FRA.



- 7. Security Status: Enter any of these three codes, as applicable:
  - i. SPX, if it is a regular passenger, cargo and mail aircraft.
  - ii. SCO, if it is an all cargo and all mail aircraft.
  - iii. SHR, if it is a high risk requirement all cargo and all mail aircraft.
- Received from (codes): Enter the code from whom received, for example, RA, KC or AO. (RA = Regulated Agent, KC= Known Consignor, and AO= Aircraft Operator.)
   Note: If the fields, "Grounds for Exemption" and "Other Screening Method" are not filled, then you cannot leave the "Received from" field blank.
- Screening Method (codes): This entry identifies codes assigned to the application of screening methods and technologies that are used to prevent act of unlawful interference. Enter any or more of these IATA specified codes, as applicable:
  - **PHS**-Physical Inspection and/or hand search
  - VCK-Visual check
  - **XRY**-Xray equipment
  - **EDS**-Explosive detection system
  - **RES**-Remote explosive scent tracing explosive detection dogs
  - **FRD**-Free running explosive detection dogs
  - **VPT**-Vapor trace
  - **PRT**-Particle trace
  - **MDE**-Metal Detection Equipment
  - **AOM**-Subjected to any other means. You must complete this entry by using free text that specifies what other mean was used to secure the shipment. For example, the use of a hand held scanner.
- 10. **Grounds for Exemption (codes)**: Enter free text, if there is exemption, for example, *"free shipment of study material to under-privileged children in Germany."*
- 11. **Other Screening Method(s)**: Enter free text, if you encounter any screening situation, not covered under point 11, i.e, Screening Method (codes). For example,



the shipment "is too large for a scanner and was thus manually scanned and physically checked."

- 12. Security status issued by: Enter the employee code of the RA, KC or AO.
- 13. Security status issued on: Enter the date of creating the CSD.
- 14. Regulated entity category (RA, KC or AO) and Identifier: Enter the identifier that takes custody of the cargo and accepts the security status originally issued by the RA, KO or AO. For example, this can be the employee code of a security official, accepting responsibility for the security of the shipment.
- 15. Additional security information: Enter any additional security information that may be required by an ICAO Member State, for example, a national regulation, applicable to the responsibilities in the event of a false declaration, or any applicable emergency amendment. For example, the attachment of SAD (Single Administrative Document) required for custom purposes into the European Union.



This is how the fully populated CSD template will look like:

Cargo 🛛 👫 Ho	ome 🔍 Sea	irch 🛛 🐔 Cargo Post	С↑ А₩В	Rolls-Royce Silver Sh	adow - id: 10	Арр	view Pro	cess view	XML view	
Process: 6.3	- Transmit forw	varder information to carr	ier							
New requests from	client 🗿	In branch warehouse	In hub warehouse 0	Ready to se	nd to carrier 🧿	Received from GHA 0	Floating Panel 💌			
С	SD (Co	onsignmer	nt Security De	eclarat	tion)					
Ai	r Waybill No									
	074-16018015									
Re	egulated entity	category (RA, KC or AO)	and identifier		Unique consignm	ent identifier				
	RA				123456789					
Co	ontents of cons	ignment								
	Rolls-Royce Sil	ver Shadow								
Or	rigin				Destination					
	Barcelona				Frankfurt					
Se	curity status		Received from (codes)		Screening metho	d (codes)	Grounds for Exemption	n (codes)		
	Cleared		01001		X567Y		00			
Se	curity status is	ssued by			Security status is	sued on				
	ABC				Oct 11, 2017					
Re	egulated entity	category (RA, KC or AO)	and Identifier							
	RA									
Ad	Iditional securi	ity information								
	ALL DOCUMEN	TS VALIDATED								
	Save Clos									
	Clos									



# Shipper's Declaration for Dangerous Goods

Before you can ship dangerous goods, you need to properly complete the required transport documents: the air waybill and the Shipper's Declaration for Dangerous Goods.

#### The Importance of SDG

The main purpose of the Dangerous Goods Declaration (DGD) is for the shipper to provide critical information to the aircraft operator or carrier in a format that is consistent throughout the transportation industry. This standard is part of the International Air Transport Association (IATA) Dangerous Goods Regulations (DGR).

Section 8 of the IATA DGR begins with the statement: "A Shipper's Declaration must be completed by the shipper for each consignment of dangerous goods."

There are nine materials that have a low risk and are excepted from this requirement. These are:

- 1. UN 3164 articles, pressurized, hydraulic
- 2. UN 3164 articles, pressurized, pneumatic
- 3. UN 3373 biological substance, Category B
- 4. UN 1845 Carbon dioxide, solid (dry ice) when used as a refrigerant for other than dangerous goods
- 5. Dangerous goods in excepted quantities
- 6. UN 3245, Genetically modified organisms and genetically modified microorganisms
- Lithium ion or lithium metal cells or batteries meeting the provisions of Section II of Packing Instructions 965–970
- 8. UN 2807, Magnetized material



9. Radioactive material, excepted packages.

For each consignment of dangerous goods as defined and regulated by the DGR (Dangerous Goods Regulations), you, as the shipper must:

- Use only the correct form in the correct manner.
- Ensure the information is accurate, easy to identify, legible and durable.
- Ensure that the shipment has been prepared in accordance with the DGR.

**Click SDG** to generate a blank SDG template, as seen here:

Cargo 🕋 Home 🔍 Search	h 🗠 Cargo Post 🎦 AWB 📘	CSD	Rolls-Royce Silver Shado	w - id: 10	App view	Process view	XML view
Process: 6.3 - Transmit forwar	der information to carrier						
New requests from client 👩 Ir	branch warehouse 👩 🛛 In hub war	ehouse 👩 Ready to ser	nd to carrier 🧿 Received	from GHA 👩 Floating P	anel 💌		
SDG (Sh shipper Crist, Daryl - 829	ipper's Declarati Kulas Plaza - Milan	on for Dang	erous Goods Air Waybill No 074-16018015	5)			
Consignee			Airport of departure	Airport of de	stination		
Walker, Peggie - 8	8165 Vladimir Pine - Frankfurt		Barcelona	Frankfurt			
UN or ID Prop	er shipping name Class or di	Packing gr Quantity and	type of packaging	Packing instruction	Authorization		
Additional Handlin	g Information						
Save Close							



### Definitions in the SDG

Here are the fields in a standard SDG template, with their descriptions:

#	Field Name	Description
1	Shipper	Full name and address of the shipper.
2	Air Waybill number	The number of the Air Waybill to which the declaration form will be attached. This number can be left blank and completed by the shipper's agent or airline.
3	Consignee	Full name and address of consignee.
4	Transport Details	Specifies if there are aircraft limitations. The shipper indicates if the consignment complies with the limitations for passenger and cargo aircraft, or if the consignment is limited to cargo aircraft only. Passenger aircraft limits are more restrictive. The shipper must strike out the box that does not apply.
5	Airport of Departure	The full name of the airport or city of departure. The three-letter airport code is not acceptable. This information can be left blank and completed by the agent or airline.



6	Airport of Destination	The full name of the airport or city of destination. The three-letter airport code is not acceptable. This information can be left blank and completed by the agent or airline.
7	Shipment Type	Non-Radioactive/Radioactive. The shipper must strike out the box that does not apply.
8	UN or ID	UN or ID number from Column A in Section 4.2 of the DG list. All entries begin with UN with one exception, which applies to consumer commodities, which is ID 8000.
9	Proper shipping name	Proper shipping name found in Column B of Section 4.2 of the DG list. Some entries may require the shipper to add the technical name of the product in parenthesis after the proper shipping name. This requirement is indicated by a star.
10	Class or division	Class or division of material followed by any possible subsidiary risk from Column C of Section 4.2.
11	Packaging group	There are three packing groups that indicate the degree of danger and are indicated in Roman numerals I, II or III. Not all goods have packing groups.
12	Quantity and type of packaging	Total number of packages of the same type and content and then the type of packaging. You can enter the name of the packaging used or enter the UN codes for the type of



		packaging and the material of construction. There are no requirements to indicate the number of inner packages.
13	Packing instruction	The applicable packing instruction. When shipping dangerous goods by air, there are a variety of packing requirements. These are specified in Section 5 of the DGR.
		Each entry in the list may have three choices with specific packing instructions to follow. These packaging instructions all have three numbers and start with the class number. They are: limited quantities (which start with the letter Y), passenger and cargo aircraft, and cargo aircraft only. Though the list in DGR Section 4.2 provides the maximum package net weight or volumes, it is important that the shipper consult these packing instruction details in Section 5 since they will provide the specific requirements depending on the packaging selected or permitted.
14	Authorization	Certain entries can only be transported by air based on special provisions usually mandated by competent authorities. These special provisions include quantity limitations, packaging requirements, aircraft type, and any other relevant information. The special provision number that includes a prefix of the



		letter A must be entered here.
15	Additional Handling Information	Any specific handling information relevant to the consignment.
		The emergency response telephone number for shipments to, through or from the U.S. must be entered here. The telephone number is not required for limited quantities.
		For infectious substances, the name and telephone number of a responsible person must be included.
		For self-reactive substances and organic peroxides, the shipper must indicate that the packages containing these substances must be protected from direct sunlight and stored away from all heat sources in a well-ventilated area.
16	Declaration	A standard declaration that describes compliance with all HAZMAT(hazardous materials) regulations.
17	Name of Signatory	<ul> <li>The name of the person signing, which is mandatory and must be printed. The person's title is optional.</li> <li>The place of signing the DGD is also optional and may be left blank.</li> <li>The date can be written out in full or in any of the following formats—DD/MM/YYYY,</li> </ul>



		DD.YY.YYYY, or DD/MMM/YYYY.
18	WARNING	A statutory warning appears in all Shippers Declaration For Dangerous Goods forms. No action is required by the user.

#### Filling out the SDG

Here are the fields to be populated in the SDG:

- 1. **Shipper**: Enter the full name and address of the shipper.
- 2. Air Waybill number: The system will generate the airway bill.
- 3. **Consignee**: Enter the full name and address of consignee.
- 4. Transport Details: Specify if there are aircraft limitations, such as the "the consignment complies with the limitations for passenger and cargo aircraft, or if the consignment is limited to cargo aircraft only." Strike out the box that does not apply.
- 5. **Airport of Departure**: Enter the full name of the airport or city of departure. The three-letter airport code is not acceptable. This information can be left blank and completed by the agent or airline.
- Airport of Destination: Enter the full name of the airport or city of destination. The three-letter airport code is not acceptable. This information can be left blank and completed by the agent or airline.
- 7. **Shipment Type**: Specify if the shipment is non-radioactive or radioactive. Strike out the box that does not apply.
- UN or ID: Specify the UN or ID number from Column A in Section 4.2 of the DG (Dangerous Goods) list, that records over 4,000 Dangerous Goods. Note that all entries begin with UN with one exception, which applies to consumer



commodities, which is ID 8000.

(https://www.unece.org/fileadmin/DAM/trans/danger/publi/unrec/English/part3.pdf)

- 9. **Proper shipping name**: Specify the proper shipping name found in Column B of Section 4.2 of the DG list. For example, AMMONIUM PICRATE dry or wetted with less than 10% water, by mass. Note that some entries may require you to add the technical name of the product in parenthesis after the proper shipping name. This requirement is indicated by a star.
- 10. **Class or division**: Enter the class or division as specified in column 3 of section 4.2 of the DG list. For example, "1.1D" for the above mentioned example of a shipment of ammonium.
- 11. **Packaging group**: Enter the packing group as per column 6 of the DG list. In most cases, the DG list does not specify the UN packing group. Then you may leave the field blank.
- 12. **Quantity and type of packaging**: Enter the quantity and type of packaging. For example, 125 kilos of ammonium picrate in 25 kg glass jars.
- Packing instruction: Enter the packaging instruction as specified in column 8 of the DG list. For example, "P112(a) (b) or (c)" for a shipment of ammonia, as mentioned in the earlier points.
- 14. Authorization: Get or attach the required authorization to ship the consignment by air. In the European Union, EASA (European Aviation Safety Agency) is one such body (<u>https://www.easa.europa.eu/</u>), like the DOT (Department of Telecommunication) in the US.
- 15. Additional Handling Information: Enter any specific handling information relevant to the consignment, such as the emergency response telephone number for shipments, for large quantities, or high value items, or dangerous goods, such as ammunition cartridges. Or "*explosive material*. Store away from sunlight." Or Infectious substance for laboratory testing. Do not open."



- 16. **Declaration**: This will be printed in the SDG in its standard global format.
- 17. **Name of Signatory**: Enter the name of the person actually signing the shipper's declaration.
- 18. **WARNING**: This is a statutory warning that appears in the SDG, by default. You do not have to fill out any information.

Here is a filled out SDG form.

Cargo 🕋 Home (	<b>Q</b> Search	车 Cargo Post	AWB CSD	Rolls-Royce Silver Shadow - id: 10	App view	Process view	XML view
Process: 6.3 - Transn	nit forwarde	r information to carrie	er				
New requests from client	o In b	ranch warehouse 👩	In hub warehouse 👩	Ready to send to carrier <b>2</b> Received from GHA <b>0</b>	Floating Panel 💌		

#### SDG (Shipper's Declaration for Dangerous Goods)

Shipper					Air Waybill No				
Crist, Dar	ryl - 829 Kulas Plaza - Milan				074- <mark>1</mark> 6018015				
Consignee					Airport of departure		Airport of o	lestination	
Walker, P	eggie - 8165 Vladimir Pine - Fra	nkfurt			Barcelona		Frankfur	t	
UN or ID	Proper shipping name	Class or di	Packing gr	Quantity and	type of packaging	Packing instr	uction	Authorization	
XYZ123	Rolls Royce Silver Shad	A	cat Z	1 STANDAR	RD	FACTORY S	TANDARD	Authorized by ABC	
Additional I	Handling Information								
HANDLE	WITH CARE								
Save	Close								

You are now in process 6.3, as seen here:





#### Check the Rolls-Royce Silver Ghost row and click Send selected shipments.

Go to **Home > Ground Kings** (GHA of KLM), to get the following screen:



**Click** the **Rolls-Royce Silver Ghost** row in the **Received from forwarder** tab, to get the following screen:



Cargo 1	🕈 Home 🛛 🔍 Se	earch	Ground Ki	ngs 🗋	AWB			Rolls	-Royce Silver G	host - id: 4		App view	Process view	XML view
Proce	ess: 7.1 - Channel for	rwarder i	nformation to G	HA where a	pplicable									
Received from	m forwarder 🕦	Collec	t to load 👩	Unload fl	light 🚺	Custom	s release stat	us 이	Handover to	forwarder 👩	Floating Panel 💌			
	Rolls-R	Royc	ce Silve	er Gh	ost -	4								
	Air Waybill No							074-4	49642143					
	Flight							KLM	1022					
	From							Baro	elona					
	То							Fran	kfurt					
	1. Rolls-Royce S	Silver Gho	ost DIMS: 70x140	x110(cm)										
	2.													
	Accept Cargo	Rej	ject Cargo											

As the GHA, you have the option to either accept the cargo, or reject it, if need be.

When you click **Accept Cargo**, you will get the **Accepted! Close this panel** tab. **Click this tab**, to get the Rolls-Royce Silver Ghost row in the Collect to load Pane.

You are now in process 9.4, as seen here:





**Note:** A shipment can also get rejected, for various reasons. In such a case, the rejected item will be archived, for reference. You can view the list of rejected shipments by using



**Click Collect to Load** pane, to get the following screen:

Cargo 者 Home 🝳 :	Search Ground Ki	ngs 📑 AWD	Roll	s-Royce Silver Ghost - id: 4	App view	Process view	XML view
Process: 9.4 - Collect fre	ight and unitize as planne	ed					
Received from forwarder 👩	Collect to load 🚺	Unload flight 👩	Customs release status 💿	Handover to forwarder 👩			
			1 1 1	1. Li I.			

Select shipments to send them to hold area, parking and to load flight

Id	Name	Process No
4	Rolls-Royce Silver Ghost	9.4
Send selected shipmer	its to hold area to load	

Click the Send selected shipments to hold area to load tab, to reach the following screen:

You are in process 13.1, as seen here:



Click the Unload flight pane, to view the following screen:



Cargo 👫 Home 🝳 Search Ground Kings	App view	Process view	XML view				
Received from forwarder (a) Collect to load (a) Unload flight (a) Customs release status (b) Handover to forwarder (b)							
Unload flight and accept received shipments							
Part New Press							

	Id	Name	Process No
	4	Rolls-Royce Silver Ghost	13.1
F	Receive selected shipme	ents in warehouse	

# Check the Rolls-Royce Silver Ghost row and click Receive selected shipments in

warehouse, to get the following screen:



You have now reached 15.1 in the process, as seen here:



Click the Customs release status pane, to get the following screen:





**Check** the **Rolls-Royce Silver Ghost** row and click **Verify selected shipments,** to get the following screen in the Handover to forwarder pane:

Cargo 🕋 Home 🔍 S	earch Ground King	55 🗋 AWD	Roll	s-Royce Silver Ghost - id: 4	App view	Process view	XML view		
Process: 15.3 - Handover freight to forwarder									
Received from forwarder 👩	Collect to load 👩	Unload flight 👩	Customs release status 💿	Handover to forwarder 1					
Verify customs status									
🔲 Id	Name		Proc	sess No					
Verify selected shipments									

You are now at process 15.3, as seen here:



Click the Handover to forwarder pane, to get the following screen:







Check the **Rolls-Royce Silver Ghost** row and click **Handover selected shipments and** collect receipt.

The shipment has moved from the freight forwarder and the origin GHA to Customs.

Go to Home > Customs, to view the following screen:

Cargo	😭 Home	<b>Q</b> Search	🛃 Customs			Rolls-Royce Silver Ghost - id: 4		App view	Process view	XML view
Process: 16.3 - Check shipment details against expected (after breakdown)										
Imports	Export	s 🚺								
Select shipments to view attached documents										
Id		Nam	10			Process No				

You have now reached 16.3 in the process, as seen here:





Go to **Home > Freight Forwarder** to view the following screen:



Click **Send selected shipments to consignee** to reach the following screen:



This is the view from the carrier's phase of the cycle:

Cargo 🕋 Home	Q Se	arch 🛛 😹	ち KLM	AWB	Rolls-Royce Silver Ghost - id: 4	App view	Process view	XML view
Process: 19.3 - Discrepancy reports produced and resolved								
1021 0 (Frankfurt-Barcelona)   11:02:35	0	Id		Name		Process No		
		4		Rolls-Royce Silver Ghost		19.3		
1022 (Barcelona-Frankfurt) 11:07:35	0							

You have now reached 19.3 in the process and the end of the shipment cycle.







End of e-Cargo user Guide