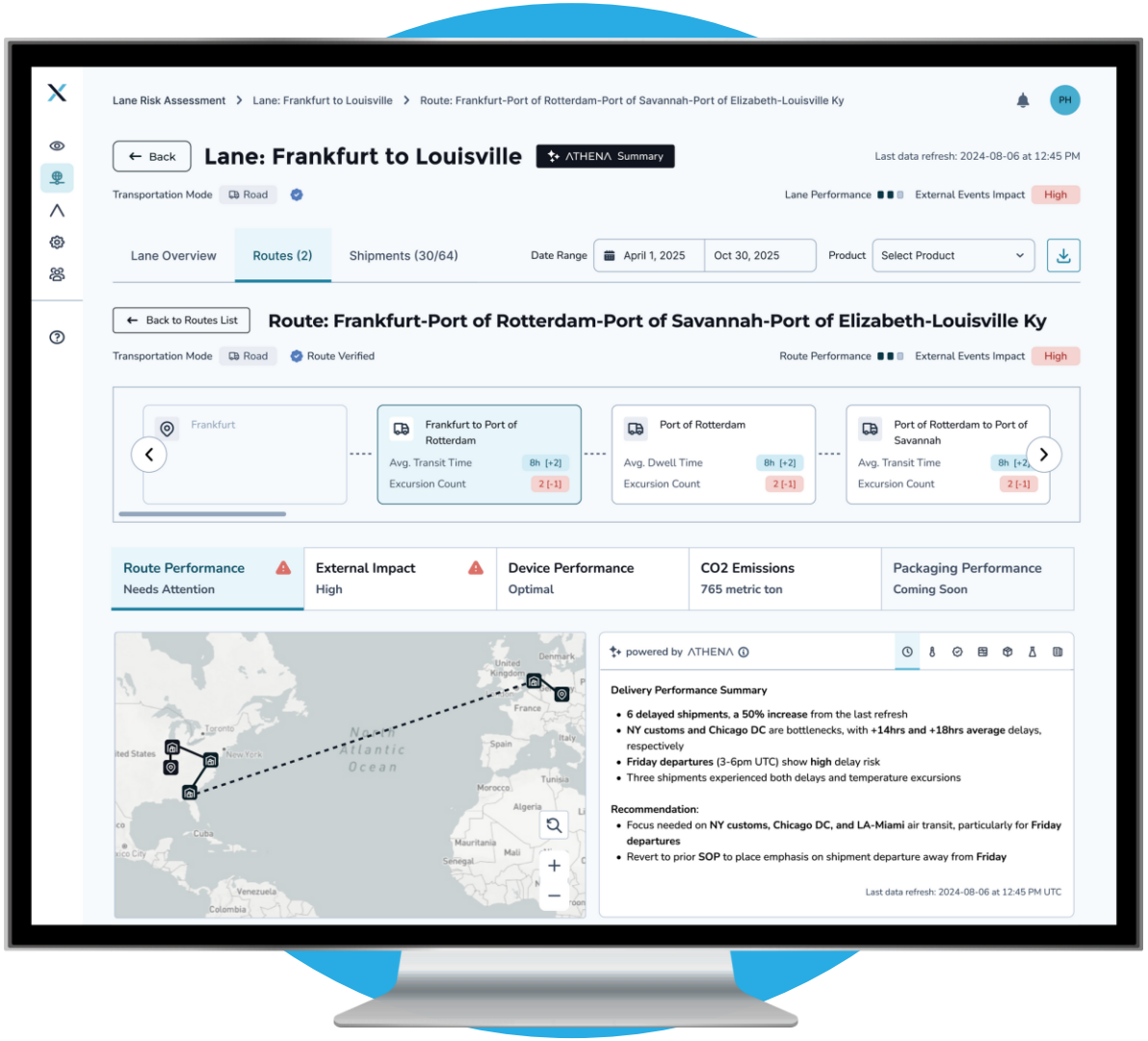


PAXAFE

Logistics Orchestration & Decision Intelligence Platform

Target Industries

Life Sciences, Produce, LSP / 3PL, Sensor, Retail (F&B)

Customer Pain Point

Managing transportation & logistics for temperature-sensitive products is hard and expensive. Each year, $800+ billion worth of perishable food, medicines, and consumer goods are wasted due to temperature management failures in transit & storage. Enterprises invest hundreds of billions annually in 3PL services, consulting, packaging, sensors and temperature control solutions aiming to reduce losses through improved visibility. Despite these growing investments into data loggers, TMS / visibility aggregators & IoT sensors, product loss ratios continue to rise while enterprises remain underwhelmed with a lack of actionable data.

Solution

PAXAFE is a logistics orchestration & decision intelligence platform that helps cold chain manufacturers and Logistics Service Providers (LSP) reduce monitoring & intervention costs [for IoT-enabled visibility], digitize & automate Lane Validation and Lane Risk Assessments (LRA), and incorporate prescriptive recommendation into the real-time visibility network.

Customer Benefit

Acting as the trust layer for temperature-controlled logistics networks whose mission is to drive towards zero waste in cold chain transportation, PAXAFE accelerates and improves logistics planning decisions (SOP, routing, packaging, carrier, mode of transport, IoT) while automating tactical monitoring of critical day to day shipments.

PAXAFE customers benefit from putting their cold chain operations on auto-pilot – accelerated and optimized decision-making & instant tradeoff analysis – powered by gen-AI -- without the costly dashboards, consultants and analysis paralysis

Leadership

Ilya Preston CEO, Ashok Seetharam CTO, Brian Shultz CRO

PA

You’re 4 steps from validating your first lane

Prerequisite Form

Product Details > Shipping Details > Additional Requirements > 3 Review Summary

Lane Name

BELGIUM - KENTUCKY, USA Edit

Product Information

Product Type: Semi-Finished, Finished

Product Name: Vaccine

Temperature Range

+ Add New

Frozen

-40 to -15 °C | 0h | Cumulative

Shipping Solution

+ Add New

SkyCell

1500C/CRT | 120h | Passive Pallet

Standard Requirements

Need Help?

For any questions, please contact us at support@paxafe.com

Previous | Save as Draft | Submit

Properties

Status: Prerequisite In Progress

Created By: Phillip

Contributor: Add Contributor

Forwarder/3PL: Add Forwarder/3PL

Shipping Details

Origin

Moderna Belgium
Oupeye, Belgium

Primary
John Smith
Contact for POD Moderna
+17865434565
johnsmith@modernaatx.com

Additional Facility: New Wade (Yusen): Rue Camille Hubert 24, Les Isnes (5032)

Destination

UPS Inc
5071 S Preston Hwy, Shepherdsville KY 40165

PA

Lanes (6)

Last data refresh: 2024-08-06 at 12:45 PM UTC

LANE NAME	STATUS
Belgium - Kentucky, USA	Prerequisite submitted

10 items per page

1

Belgium - Kentucky, USA

Add Lane Details

Upload Document

Add Lane Details Manually

Prerequisite submitted — Review by LSP — Ready for Assessr

Product

Type: Finished

Name: Vaccine

Temperature Requirements

Frozen: -35 to -15 °C | 120h | Cumulative

Temperature Monitoring

Sensitech | TempTale® GEO Ultra: Passive | 5 min | 60 min

Elpro | LIBERO Gx: Real-time | 5 min

Shipping Solution

SkyCell | 1500C: D-ACT | 120h

Other

Regulations: N/A

Security: N/A

Origin

Moderna Belgium

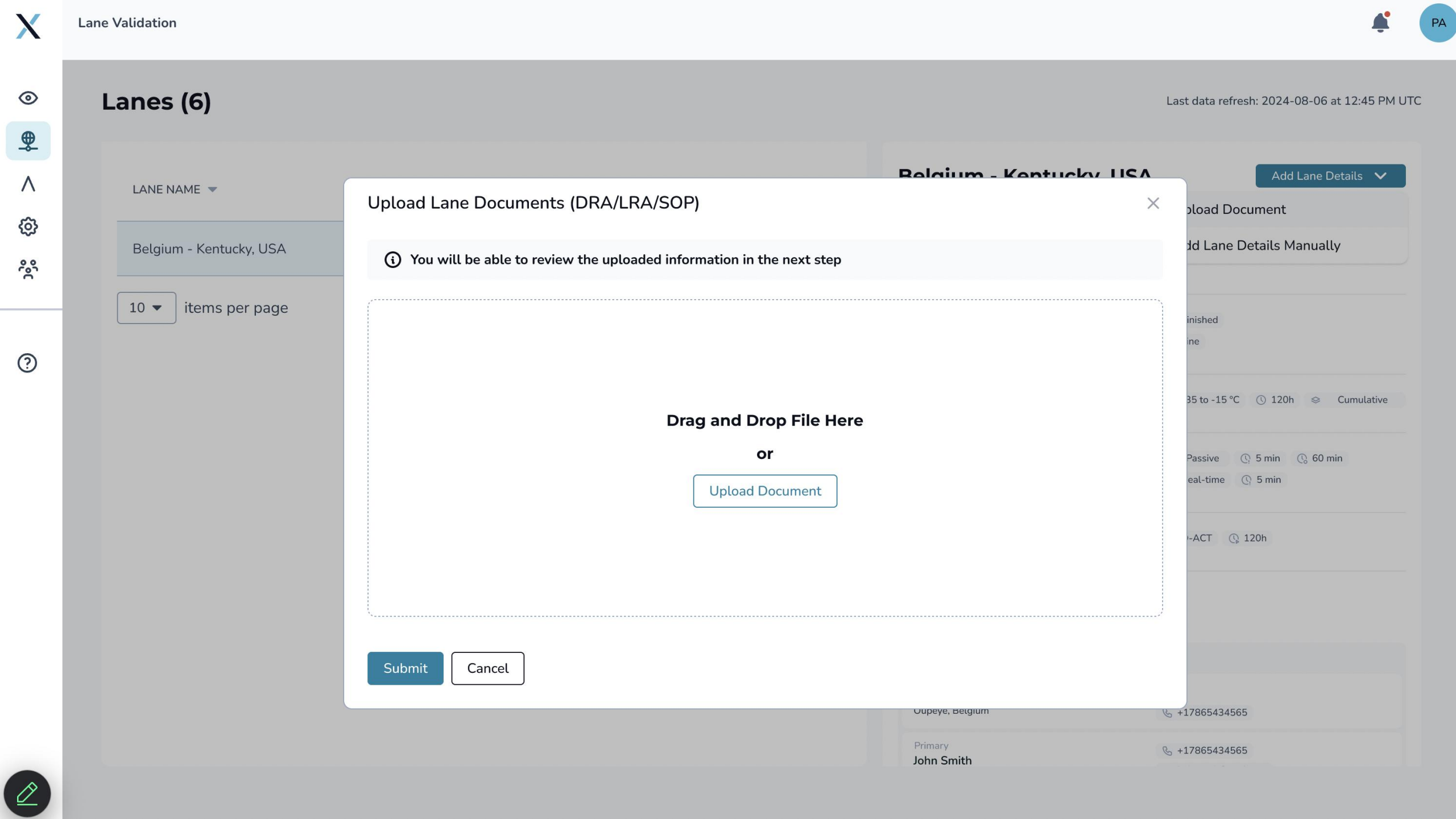
Oupeye, Belgium

+17865434565

Primary

John Smith

+17865434565


Lane Validation
PA
Lanes (6)
Last data refresh: 2024-08-06 at 12:45 PM UTC
LANE NAME
Belgium - Kentucky, USA
10
items per page
Add Lane Details
Upload Lane Documents (DRA/LRA/SOP)
You will be able to review the uploaded information in the next step
Drag and Drop File Here
or
Upload Document
Submit
Cancel
Primary
John Smith
+17865434565

Lane SOP | Routes | Risk Assessment | Lane Configuration

Submit DRA File

Air Mode

Add Leg

- Belgium
- Pre Carriage
- BRU
- Air Segment — Selected
- ORD
- Post Carriage
- Kentucky, USA

Air Segment — Edit

Air Segment · 1h — ISO 9001 · CEIV · GDP · Unknown

Responsible Party: UPS

Contact: John Smith
+32 10 85 6584 · john.smith@modernaatx.c... · +4

Temperature Set Point: -20°C

Planned Flight Schedules [BRU - IAD] — Air France — Preferred Carrier

Air France AG 687609 Boeing 777 Passenger	BRU 17:00 CEST	24h 59min · Nonstop	ORD 00:40 AST +1	M T W T F S S
Air France AG 687609 Boeing 777 Passenger	BRU 17:00 CEST	24h 59min · Nonstop	ORD 00:40 AST +1	M T W T F S S

Instructions — Edit

- Freight to be recovered from designated warehouse area and transported to outbound aircraft. Aircraft Departs origin.
- Freight to be recovered from inbound aircraft and transported to airline's warehouse.

Properties

Status	Ready for Approval
Created By	Phillip
Contributor	Phillip
Forwarder/3PL	UPS
Preferred Route	BRU-ORD
Incoterms	DAP
Backup Route	25 routes
Primary Carrier	UPS

Lane Requirements

Product

Type	Semi-Finished · Finished
Name	Vaccine · API

Temperature Requirements

Chilled	2 to 8 °C	120h	Cumul...
CRT-A	18 to 25 °C	120h	Cum...
CRT-B	2 to 25 °C	120h	Cum...

Temperature Monitoring

Sensitech | TempTale® GEO X	Passive	5 min
Sensitech | TempTale® GEO U...	Real-time	5 min · 60 min

Shipping Solution

SkyCell | 1500C	D-ACT	120h

PA

← Back

Lane: Belgium - Kentucky, USA

Last data refresh: 2024-08-06 at 12:45 PM UTC

Lane SOP | Routes | Risk Assessment | Lane Configuration

Submit DRA File

Air Mode

Add Leg

- Belgium
- Pre Carriage
- BRU
- Air Segment
- ORD — Selected
- Post Carriage
- Kentucky, USA

Destination Airport

Edit

Tarmac & Loading — 1h — Unknown

Responsible Party: UPS

Contact: John Smith
+32 10 85 6584 | John.smith@modernaatx.c... +4

Tarmac Protection: Not Available

Instructions — Edit

Freight to be recovered from designated warehouse area and transported to outbound aircraft. Aircraft Departs origin.

Storage — 1h — ISO 9001 — CEIV — GDP — Unknown

Address

Chicago O'Hare International Airport, ORD

Active Temp. Monitoring
Battery Replacement
Re-ice Capabilities

Responsible Party: UPS

Contact: John Smith
+32 10 85 6584 | john.smith@modernaatx.c... +4

Storage Temperature: -35 to -15 °C

Instructions — Edit

Freight to be transferred and stored in designated location within the warehouse at destination carrier.

Properties

Status	Ready for Approval
Created By	Phillip
Contributor	Phillip
Forwarder/3PL	UPS
Preferred Route	BRU-ORD
Incoterms	DAP
Backup Route	25 routes
Primary Carrier	UPS

Lane Requirements

Product

Type	Semi-Finished, Finished
Name	Vaccine, API

Temperature Requirements

Chilled	2 to 8 °C	120h	Cumul...
CRT-A	18 to 25 °C	120h	Cum...
CRT-B	2 to 25 °C	120h	Cum...

Temperature Monitoring

Sensitech | TempTale® GEO X	Passive	5 min	
Sensitech | TempTale® GEO U...	Real-time	5 min	60 min

Shipping Solution

SkyCell | 1500C — D-ACT — 120h

← Back

Lane: Belgium - Kentucky, USA

Last data refresh: 2024-08-06 at 12:45 PM UTC

Lane SOP | Routes | Risk Assessment | Lane Configuration

Submit DRA File

Air Mode

Add Leg

- Belgium
- Pre Carriage
- BRU
- Air Segment
- ORD
- Post Carriage
- Kentucky, USA Selected

Destination

Edit

Delivery

Address

GlaxoSmithKline

GlaxoSmithKline, Marietta, USA

Responsible Party

UPS

Contact

John Smith

+32 10 85 6584 John.smith@modernaatx.com +4

Instructions

Edit

Upon delivery to consignee, import forwarder to obtain written POD.

Properties

Status	Ready for Approval
Created By	Phillip
Contributor	Phillip
Forwarder/3PL	UPS
Preferred Route	BRU-ORD
Incoterms	DAP
Backup Route	25 routes
Primary Carrier	UPS

Lane Requirements

Product

Type	Semi-Finished	Finished	
Name	Vaccine	API	

Temperature Requirements

Chilled	2 to 8 °C	120h	Cumul...
CRT-A	18 to 25 °C	120h	Cum...
CRT-B	2 to 25 °C	120h	Cum...

Temperature Monitoring

Sensitech | TempTale® GEO X	Passive	5 min	
Sensitech | TempTale® GEO U...	Real-time	5 min	60 min

Shipping Solution

SkyCell | 1500C	D-ACT	120h

PA

Lanes (6)

Last data refresh: 2024-08-06 at 12:45 PM UTC

LANE NAME	STATUS
Les Isnes, Belgium - Marietta, USA	Prerequisite submitted
Brussels, Belgium - Mexico City, Mexico	Review by LSP
Belgium - Kentucky, USA	Ready for Risk Assessment
Amsterdam, Netherlands - Louisville, USA	Ready for Approval
Louisville, USA - Ecuador	Approved
Gembloux - Mexico	Draft

10 items per page

1

Belgium - Kentucky, USA

Lane Details

Prerequisite submitted · Review by LSP · Ready for Risk Assessment · Ready for Approval · Approved

Product

Type: Finished
Name: Vaccine

Temperature Requirements

Frozen: -35 to -15 °C | 120h | Cumulative

Temperature Monitoring

Sensitech | TempTale® GEO Ultra: Passive | 5 min | 60 min
Elpro | LIBERO Gx: Real-time | 5 min

Shipping Solution

SkyCell | 1500C: D-ACT | 120h

Other

Regulations: N/A
Security: N/A

Origin

Moderna Belgium
Oupeye, Belgium
+17865434565

Primary
John Smith
+17865434565

PA

← Back

Lane: Belgium - Kentucky, USA

Last data refresh: 2024-08-06 at 12:45 PM UTC

Lane SOP | Routes | Risk Assessment | Lane Configuration

Save As | Approve

BRU-FRA-ORD — Preferred Route

Air Mode

Route Summary

- Belgium
- Pre Carriage
- BRU
- Air Segment
- ORD
- Post Carriage
- Kentucky, USA

Planned Duration

Total Transit Time	80h
SkyCell 1500C	120h
Va-Q-tainer Xlx	70h

Show More

Forwarder/3PL

Name: UPS

Packaging

SkyCell — 120h — D-ACT

SkyCell — 120h — D-ACT

+3

Carrier

Primary: UPS

Secondary: 2 carriers

Temp. Monitoring

Sensitech — Passive — 5 m

El Pro — Realtime — 5m — 60m

+2

Route Risk Summary

PAXAFE | PHARMA

35 Risk Summary Medium

Delivery	Temperature	Security	Quality	External
10	10	10	19	22

Properties

Status	Ready for Approval
Created By	Phillip
Contributor	Phillip
Forwarder/3PL	UPS
Preferred Route	BRU-ORD
Incoterms	DAP
Backup Route	25 routes
Primary Carrier	UPS

Lane Requirements

Product

Type	Semi-Finished	Finished
Name	Vaccine	API

Temperature Requirements

Chilled	2 to 8 °C	120h	Cumul...
CRT-A	18 to 25 °C	120h	Cum...
CRT-B	2 to 25 °C	120h	Cum...

Temperature Monitoring

Sensitech	TempTale® GEO X	Passive	5 min	
Sensitech	TempTale® GEO U...	Real-time	5 min	60 min

Shipping Solution

SkyCell	1500C	D-ACT	120h
SkyCell	2500C	D-ACT	120h

Lane Validation

PA

Lane SOP | Routes | Risk Assessment | Lane Configuration

Save As | Approve

BRU-FRA-ORD — Preferred Route

Air Mode

Route Summary

- Belgium
- Pre Carriage
- BRU
- Air Segment
- ORD
- Post Carriage
- Kentucky, USA

Forwarder/3PL

Name: UPS

Packaging

SkyCell — 120h — D-ACT

SkyCell — 120h — D-ACT

+3

Carrier

Primary: UPS

Secondary: 2 carriers

Temp. Monitoring

Sensitech — Passive — 5 m

El Pro — Realtime — 5m — 60m

+2

Route Risk Summary

PAXAFE | PHARMA

35 — Risk Summary — Medium

Delivery	Temperature	Security	Quality	External
10	10	10	19	22

Temperature Score

Temperature Monitoring	Container	Temp. Controlled Envi...	Ambient Temperature
Sensitech	SkyCell	15 to 25 °C	15 to 25 °C
Passive	120h — D-ACT	Passive	15 to 25 °C
5 m			

Properties

Status	Ready for Approval
Created By	Phillip
Contributor	Phillip
Forwarder/3PL	UPS
Preferred Route	BRU-ORD
Incoterms	DAP
Backup Route	25 routes
Primary Carrier	UPS

Lane Requirements

Product

Type	Semi-Finished	Finished
Name	Vaccine	API

Temperature Requirements

Chilled	2 to 8 °C	120h	Cumul...
CRT-A	18 to 25 °C	120h	Cum...
CRT-B	2 to 25 °C	120h	Cum...

Temperature Monitoring

Sensitech	TempTale® GEO X	Passive	5 min
Sensitech	TempTale® GEO U...	Real-time	5 min — 60 min

Shipping Solution

SkyCell	1500C	D-ACT — 120h
SkyCell	2500C	D-ACT — 120h

PA

Lane: Belgium - Kentucky, USA

← Back

Last data refresh: 2024-08-06 at 12:45 PM UTC

Lane SOP | Routes | Risk Assessment | Lane Configuration

Save As | Approve

BRU-FRA-ORD — Preferred Route

Air Mode

Route Summary

- Belgium
- Pre Carriage
- BRU
- Air Segment — Selected
- ORD
- Post Carriage
- Kentucky, USA

Planned Duration

Planned duration: 24 hrs

Total Transit Time: 120h

Packaging Thermal Life Impact

Skycell 1500C — 95h left

Skycell 1500C — 95h left

Show More

Air Segment — 1h

ISO 9001 | CEIV | GDP | Unknown

Responsible Party: UPS

Contact: John Smith — +32 10 85 6584 — john.smith@modernaatx.c... +4

Temperature Set Point: -20°C

Planned Flight Schedules [BRU - IAD] — Air France — Preferred Carrier

Air France AG 687609 Boeing 777 Passenger	BRU 17:00 CEST	24h 59min Nonstop	ORD 00:40 AST +1	M T W T F S S
Air France AG 687609 Boeing 777 Passenger	BRU 17:00 CEST	24h 59min Nonstop	ORD 00:40 AST +1	M T W T F S S

Properties

Status	Ready for Approval
Created By	Phillip
Contributor	Phillip
Forwarder/3PL	UPS
Preferred Route	BRU-ORD
Incoterms	DAP
Backup Route	25 routes
Primary Carrier	UPS

Lane Requirements

Product

Type	Semi-Finished, Finished
Name	Vaccine, API

Temperature Requirements

Chilled	2 to 8 °C	120h	Cumul...
CRT-A	18 to 25 °C	120h	Cum...
CRT-B	2 to 25 °C	120h	Cum...

Temperature Monitoring

Sensitech | TempTale® GEO X	Passive	5 min	
Sensitech | TempTale® GEO U...	Real-time	5 min	60 min

Shipping Solution

SkyCell | 1500C	D-ACT	120h

← Back

Lane: Belgium - Kentucky, USA

Last data refresh: 2024-08-06 at 12:45 PM UTC

Lane SOP | Routes | Risk Assessment | Lane Configuration

Possible Routes

Add Route

Route	Date created	Length	
BRU-ORD	2024-08-06 at 12:45 PM UTC	5 legs	2 carriers
BRU-AMS-ORD	2024-08-06 at 12:45 PM UTC	8 legs	2 carriers
BRU-LUX-EWR	2024-08-06 at 12:45 PM UTC	8 legs	2 carriers
BRU-EWR	2024-08-06 at 12:45 PM UTC	5 legs	2 carriers

Properties

Status	Ready for Approval
Created By	Phillip
Contributor	Phillip
Forwarder/3PL	UPS
Preferred Route	BRU-ORD
Incoterms	DAP
Backup Route	25 routes
Primary Carrier	UPS

Lane Requirements

Product

Type	Finished
Name	Vaccine

Temperature Requirements

Frozen | -35 to -15 °C | 120h | C...

Show More

Version 1.0

Version History

Created By	Phillip

Lane SOP | Routes | Risk Assessment | Lane Configuration

Air Mode

Route Summary

- Belgium
- Pre Carriage
- BRU
- Air Segment
- ORD
- Post Carriage
- Kentucky, USA

4 carriers | 2 carriers | 2 carriers | 2 carriers

BRU-ORD

Carriers: UPS, Air France

Route Assessment Details

PAXAFE | PHARMA

What is the lane total duration?

Answer	Is higher that 100% of total duration
Likehood	Low
Mitigation Actions	N/A

RIV 1

What is the transportation grade used ?

Answer	Pharmagrade
Likehood	Low
Mitigation Actions	N/A

RIV 3

Is lane associated to a preferred airline company ?

Answer	Yes
Likehood	Low
Mitigation Actions	N/A

RIV 3

Properties

Status	Ready for Approval
Created By	Phillip
Contributor	Phillip
Forwarder/3PL	UPS
Preferred Route	BRU-ORD
Incoterms	DAP
Backup Route	25 routes
Primary Carrier	UPS

Lane Requirements

Product

Type	Semi-Finished, Finished
Name	Vaccine, API

Temperature Requirements

Chilled	2 to 8 °C	120h	Cumul...
CRT-A	18 to 25 °C	120h	Cum...
CRT-B	2 to 25 °C	120h	Cum...

Temperature Monitoring

Sensitech | TempTale® GEO X	Passive	5 min	
Sensitech | TempTale® GEO U...	Real-time	5 min	60 min

Shipping Solution

SkyCell | 1500C	D-ACT	120h

PA

← Back

Lane: Belgium - Kentucky, USA

Last data refresh: 2024-08-06 at 12:45 PM UTC

Lane SOP | Routes | Risk Assessment | Lane Configuration

Save As | Approve

BRU-FRA-ORD — Preferred Route

Air Mode

Route Summary

- Belgium
- Pre Carriage
- BRU
- Air Segment
- ORD
- Post Carriage
- Kentucky, USA

Route Summary

Planned Duration

Total Transit Time	80h
SkyCell 1500C	120h
Va-Q-tainer Xlx	70h

Show More

Expand All | Collapse All

Origin

Controlled | 1h

Pickup Location 1h — Controlled

Address

Moderna Belgium
Oupeye, Belgium

Responsible Party: UPS

Contact: John Smith
+32 10 85 6584 | john.smith@modernaatx.c... +4

Temperature Set Point: -20°C

Instructions

Vehicle arrives at shipper location. Driver verifies that freight pieces correspond with shipment details, parcel IDs and ensures correct temperature setting of the pick-up truck. Freight is loaded into the vehicle ensuring freight is secured to avoid damage. Truck departs shipper location to export forwarder warehouse.

Other

Regulations	N/A
Security	N/A

Origin

DHL Global Forwarding IAD
Rue Camille Hubert ,22. 5032, Belgium, Gembloux (Les Isnes)
+17865434565

Primary
BE BRU GSK
Contact for POD Glaxo
+17865434565
bebrugsk@mail.com

Destination

DHL Global Forwarding IAD
Rue Camille Hubert ,22. 5032, Belgium, Gembloux (Les Isnes)
+17865434565

Primary
BE BRU GSK
Contact for POD Glaxo
+17865434565
bebrugsk@mail.com

Show Less

Version 1.0

Version History

Created By	Phillip
Contributor	Phillip
Date created	2024-08-06 at 12:45 PM UTC
Date submitted	2024-08-06 at 12:45 PM UTC

PA

Lanes (4)

Origin: Select Origin

Destination: Select Destination

Search Lane...

Product: All Products

ORIGIN	DESTINATION	PERFORMANCE	EXTERNAL IMPACT
Belgium	Kentucky, USA	■□□	High
Belgium	Japan	■□□	No Events
Belgium	Taiwan	■□□	No Events
Belgium	Kentucky, USA...	■■■	High

15 items per page

Belgium to Taiwan

Lane Details

Transp. Mode	Multimode
Routes	4
Shipment Count	40
Delayed Shipment Count	4
Shipment Count with Excursions	5

Show More

powered by ΛTHENΛ

Delivery Performance

Last data refresh: 2024-11-09 at 12:00 AM UTC

Recommendation

- Upload Standard Operating Procedures (SOPs) and Distribution Risk Assessments (DRAs) into platform for more accurate recommendations
- Investigate Belgium-Brussels Airport (BRU)-Dubai Airport (DXB)-Taiwan route as a low confidence route that had **12 excursion pings**
- Explore modifying shipment departure times to mornings or earlier in the day (before **3 PM**)

External Events (6)

EVENT TYPE	HIGH
Geopolitical (1)	H --
Weather (5)	H 1 eve

External Events Feed

High — Weather • starting: Today
Extreme Cold Watch iss
Wilmington OH

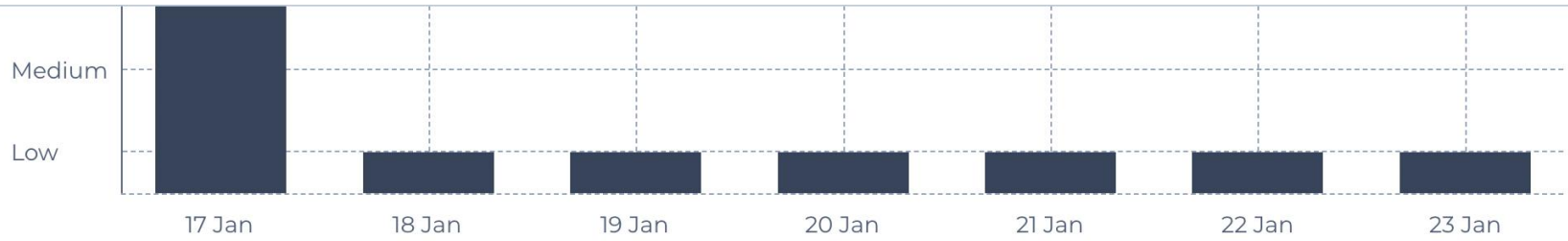
Medium — Weather • starting: Today
Winter Storm Watch iss
Upton NY

Medium — Weather • starting: Today
Winter Storm Watch iss
Upton NY

Weather • starting: Today

Weather Event Details: Extreme Cold Watch

Event Severity High Last data refresh: Today by 22:08



WEATHER FORECAST

17 Jan	18 Jan	19 Jan	20 Jan	21 Jan	22 Jan
H 8.89°C	H 5.56°C	H -3.33°C	H -9.44°C	H -3.89°C	H -3.33°C
L 4.44°C	L -4.44°C	L -13.89°C	L -11.67°C	L -12.78°C	L -6.11°C
Wind Avg. Speed: 8km/h	Wind Avg. Speed: 8km/h	Wind Avg. Speed: 8km/h	Wind Avg. Speed: 7km/h	Wind Avg. Speed: 7km/h	Wind Avg. Speed: 5km/h
Precipitation: Rain (0h)	Precipitation: Rain (0.3h)	Precipitation: Rain (0h)	Precipitation: Rain (0h)	Precipitation: Rain (0h)	Precipitation: Rain (0h)

Routes Impacted (1) Other Lanes Impacted (0)

High Belgium-Brussels Airport (BRU)-Kentucky, USA

Impacted Waypoints/Segments: 1 | Review

ium to Brussels Airport
nt Impact No Events

Brussels Airport (BRU)
External Event Impact No Events

Brussels Airport (BRU) to Kentucky, USA
External Event Impact High