European Green Fast Lanes
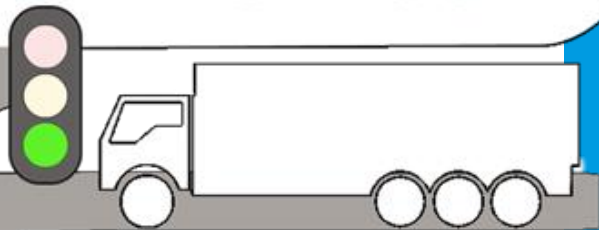
Progress Report

Pilot FRA/AMS

QUALITY IS CREATED TOGETHER
KWALITEIT MAKEN WE MET ELKAAR

Feb 2017

KLM CARGO

European Green Fast Lanes

Content

- Status report
  - ABCD
  - Rolling Planning
  - Sprint Planning
  - New truck schedule
  - LateShow / NoShow / GoShow Prinples

- Dashboards
  - Cargo IQ reports
  - Trucking performance
  - Late-Show / No-Show
  - High-Show

- Roll-out approach (in progress)

- Appendix
  - Rolling Backlog of Improvement elements
  - Acceptance Process
  - Trucking process
  - Executive Summary / Context
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EU Green Fastlanes
ABCD

Status Stream	Overall process:*	

Achievements

Generic
- **Sprint 4: Finished The new Trucking schedule is Operational**
- **Sprint 5: Live,   Compliance checker to be implemented**
- **   On boarding of Interns**
- AF colleagues visited FRA,
-     First implementation set has been decided upon
-     AF truckschedule under construction

Mainport

Cloud
- POC2 has been delivered, / **issue with Dynamic IP adresses is solved**
- **Compliance checker is available ap per mid February**

Benefits

Generic
- Increase over all quality / efficiency

Source Data
- Increase of loadfactor
- Green-data, omtimum documentation process

Remote Gateway
- Spread of Cargo delivery (eliminate rubbish-in)
- Acceptance according RFC

Trucking
- Reduced trucking complexity
- Reduce waiting times of trucks

Hub
- Green cargo in (on time and correct) reduce throughput time

Cloud
- Consistent – Real-time information

Concerns

Generic
- CCP solution too narrow for our customers?

Source Data
- E-capabilities customers

Remote Gateway
- Late show / Ops vs Commercial
- **Resources to implement the operational changes at FRA**
- The FRA quality has been established on a stable acceptable level **however the infrastructure and operational changes at FRA need to be secured permanently**.

Trucking
- Sales impact new trucking design

Hub

Cloud
- Timing
- Smart or Not // Overlap own development

Do next

Generic
- Monitor performance on a daily basis
- Prepare Sprint 5 and onboarding of interns to prepare roll-out
- Develop generic communication plan/strategy for MM's to support roll-out

Cloud
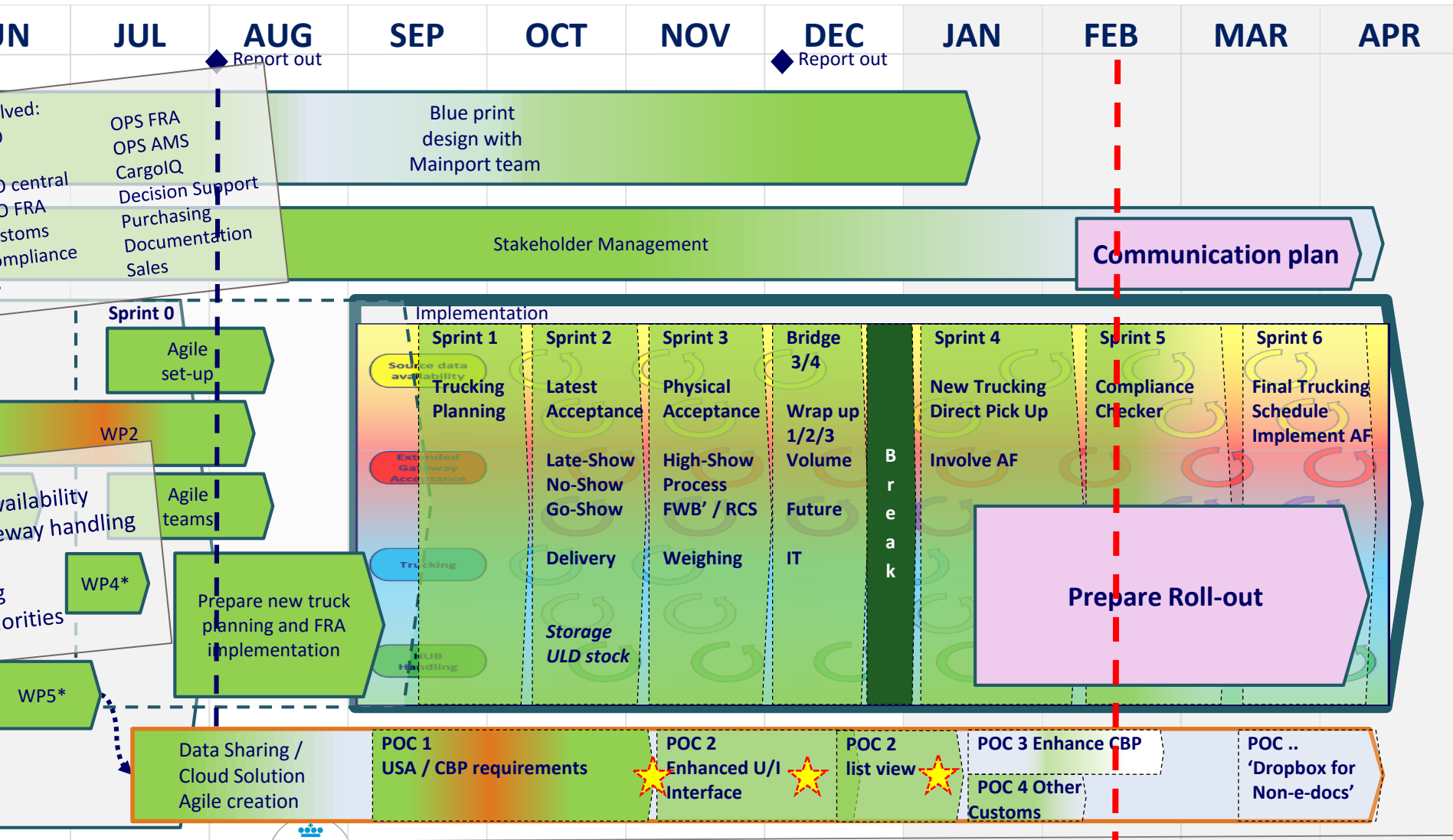- Other countries' customs compliance elements will be added

European Green Fast Lanes

KLM CARGO

3

*
- ● According planning
- ● Late vs planning, will be repaired
- ● Late vs planning; Escalation needed

EU Green Fast Lanes
Rolling Planning

Legend:
- ⭐ IT Involvement
- Completed
- In progress
- Planned
- Behind planning

JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR

◆ Report out (AUG) ◆ Report out (DEC)

Blue print design with Mainport team

Involved:
- OPS FRA
- OPS AMS
- CargoIQ
- Decision Support
- Purchasing
- Documentation
- Sales

... central
... FRA
...stoms
...mpliance

Stakeholder Management

Communication plan

Sprint 0

Agile set-up

WP2

...availability
...eway handling

...
...orities

Agile teams

WP4*

Prepare new truck planning and FRA implementation

WP5*

Implementation

Sprint 1	Sprint 2	Sprint 3	Bridge 3/4	Break	Sprint 4	Sprint 5	Sprint 6
Trucking Planning	Latest Acceptance	Physical Acceptance	Wrap up 1/2/3 Volume		New Trucking Direct Pick Up	Compliance Checker	Final Trucking Schedule Implement AF
	Late-Show No-Show Go-Show	High-Show Process FWB' / RCS	Future		Involve AF		
Delivery		Weighing	IT				
	Storage ULD stock						

Source data availability

Extended Gateway Acceptance

Trucking

HUB Handling

Prepare Roll-out

Data Sharing / Cloud Solution Agile creation

POC 1 USA / CBP requirements	POC 2 ⭐ Enhanced U/I Interface	POC 2 ⭐ list view ⭐	POC 3 Enhance CBP	POC .. 'Dropbox for Non-e-docs'
			POC 4 Other Customs	

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New Trucking Principle (second step)

kind	#	LAT	DEP	ARR	CT	Conx interval		Remarks	1	2	3	4	5	6	7
	MP4010		2:00	10:00	8			MP Traffic only							
	MP4012		3:00	11:00	8			MP Traffic only							
OPS-BKG	8404		1:00	9:00				Same day connections Flight Optimization							
	8350	**-1 23:00**	**2:00**	**11:00**	**5-9**	**16:01**	**19:00**		X	X	X	X	X	X	X
	8354		3:00	11:00											
	8356	1:00	4:00	12:00	5-7	17:01	19:00								
	8358		5:00	13:00											
	8360	**3:00**	**6:00**	**14:00**	**5-10**	**19:01**	**23:59**		X	X	X	X	X	X	X
OPS-BKG	8370		10:00	18:00				LONG							
	8372		11:00	19:00											
	8374		12:00	20:00											
	8376		13:00	21:00											
	8378		14:00	22:00											
	MP4020		20:00	04:00	8			MP Traffic only							
OPS-BKG	8082		15:00	23:00				Next Day Departure **ONLY** Selective Loading Flight Optimization							
	8084		18:00	02:00*											
	8086		19:00	03.00*											
	8088	**17:00**	**20:00**	**04:00***	**5-7**	**9:01**	**13:00**		X	X	X	X	X	X	X
	8092		21:00	05.00*											
	8094	19:00	22:00	06.00*	5-7	11:01	13:00								
	8096		23:00	07.00*											
	8098	**21:00**	**23:59**	**08.00***	**5-8**	**13:01**	**16:00**		X	X	X	X	X	X	X

Late-Show / No-Show / Go-Show – principles

Late-Show:

FOH status message is triggered between LAT and DEP of truck/flight
- Green - recovery process.
- Red - rebooking process; all segments are cancelled, rebooking on 1st available flight with capacity <u>no scb/ec check</u>

No-Show:

Cargo is NOT on hand at DEP of truck/flight
All segments are cancelled, a new booking is required scb/ec check applicable. (complete booking/AWB to be cancelled in a later stage)

Go-Show:

No booking present, proceed after a confirmed booking is made.

Content

- Status report
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  - High-Show

- Roll-out approach *(work in progress)*

- Appendix
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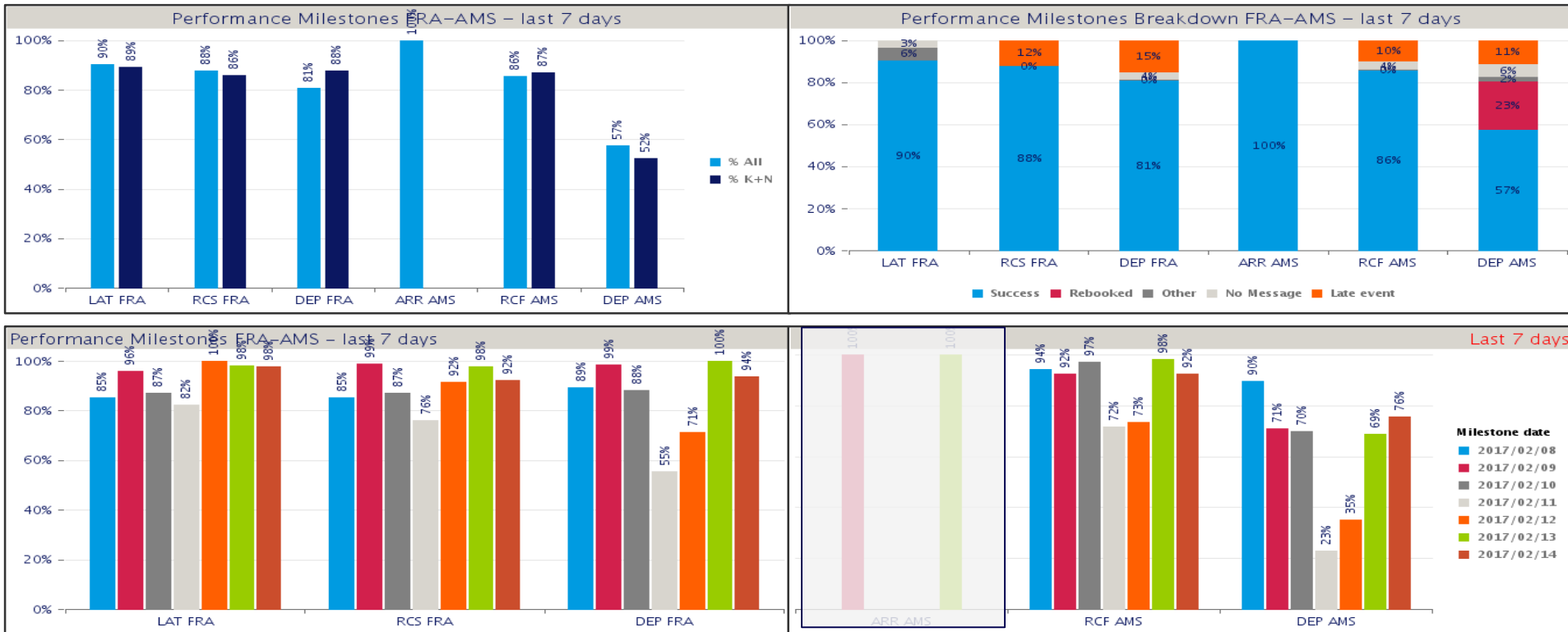# Quality Tracking on CargoIQ milestones (month)
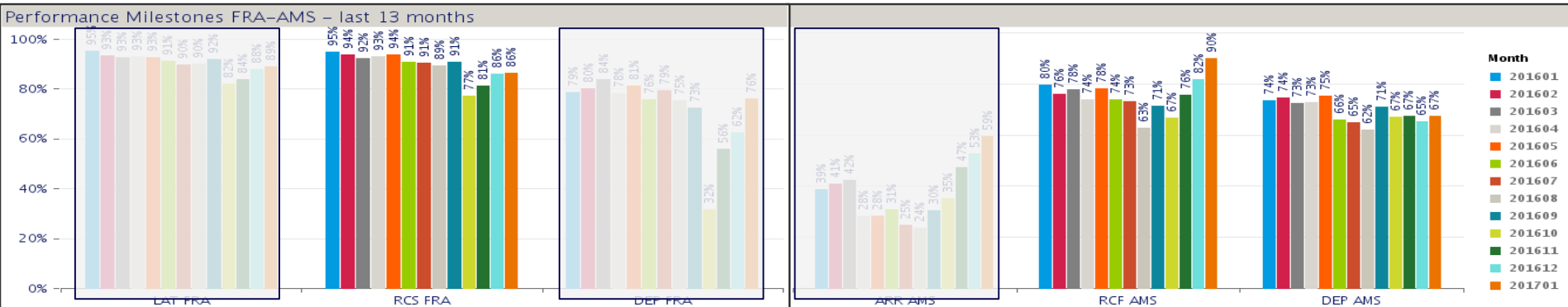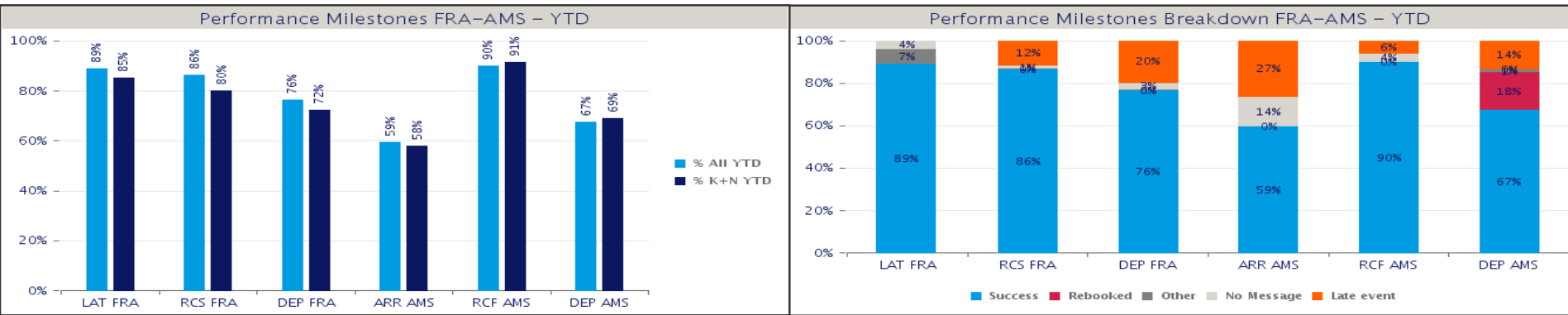
This slide shows the impact of the process changes in FRA. Since August the 'input' quality at the HUB (RCF AMS) increased month over month. The Performance drop ex FRA does no longer exist.
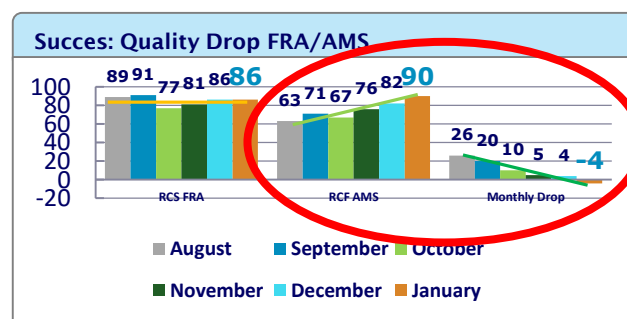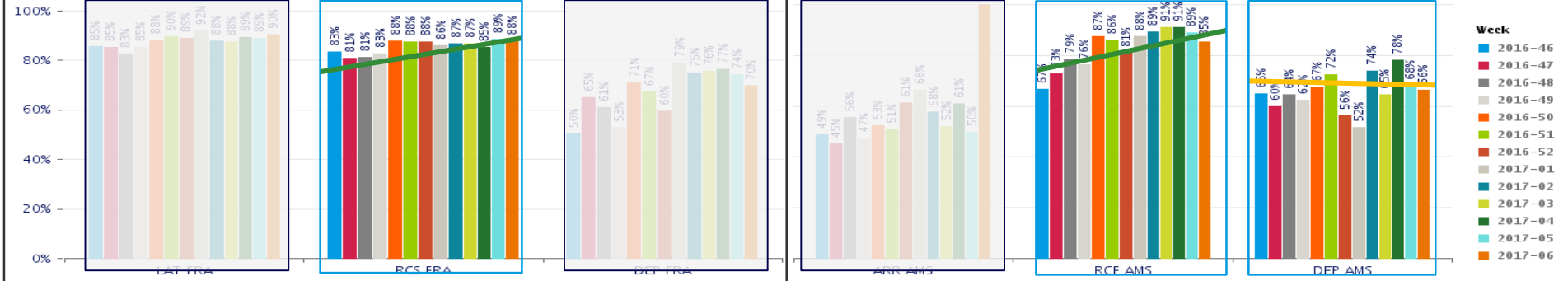
Dashboard daily overview
CargoIQ

The daily data shows interesting new developments that might result from the new trucking schedule.
ARR AMS is not representative and might be a result of Smartloxs real-time interfacing.
DEP FRA Should become realistic as Cargo is only booked on Bookable RFS.
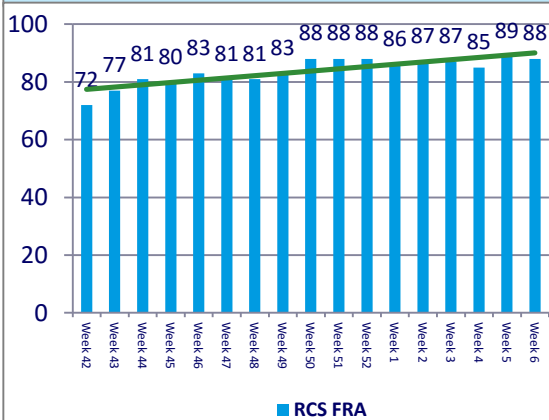**DEP AMS is unexpected high (not counting blessings yet)**

Quality Tracking on CargoIQ milestones (Week)
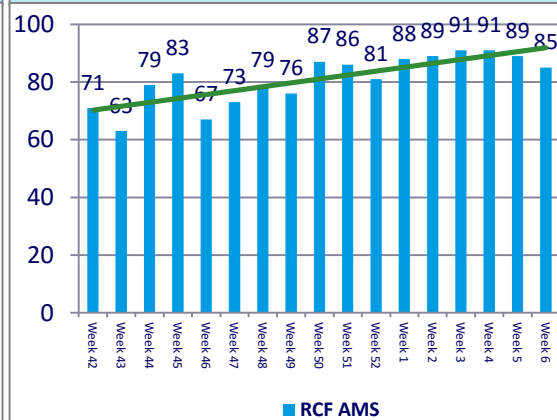## Including trendlines
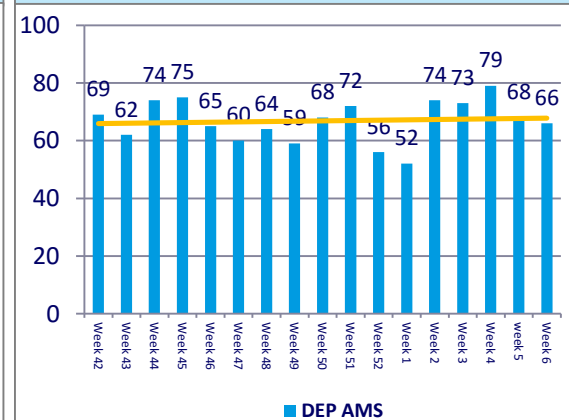
Dashboard Trucker On-Time Performance last week
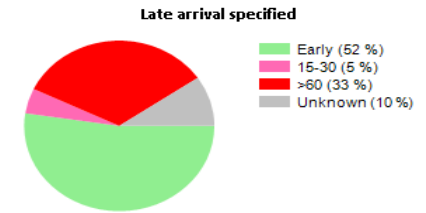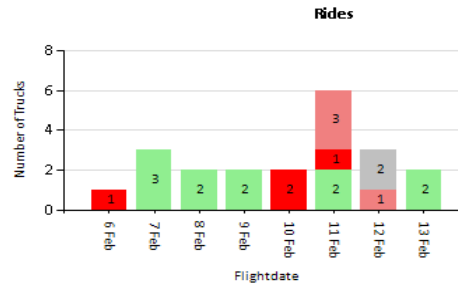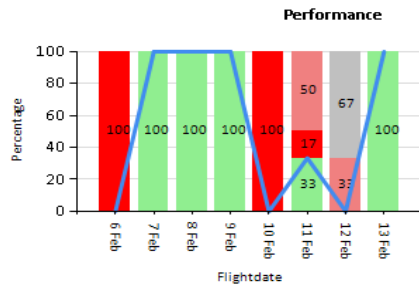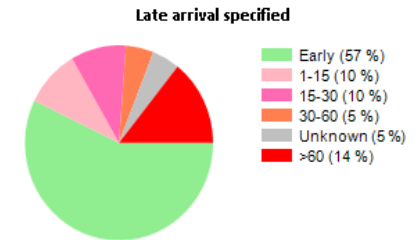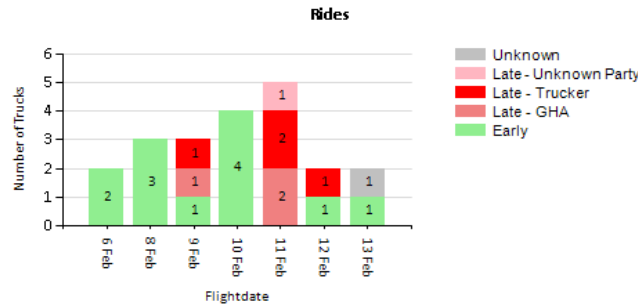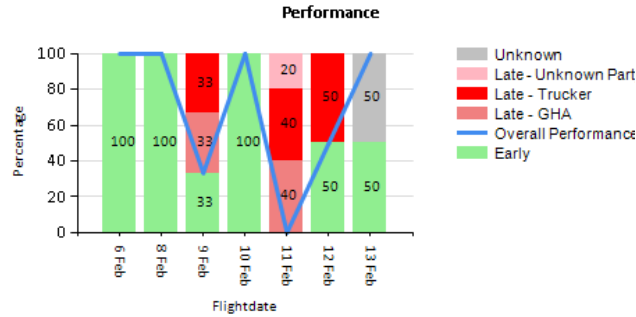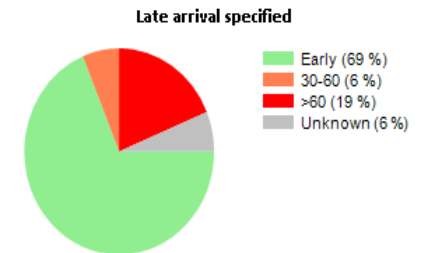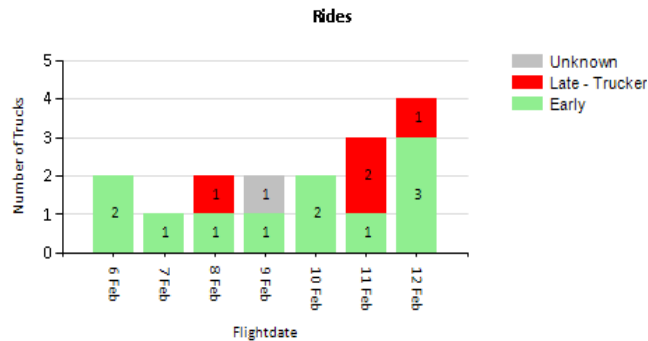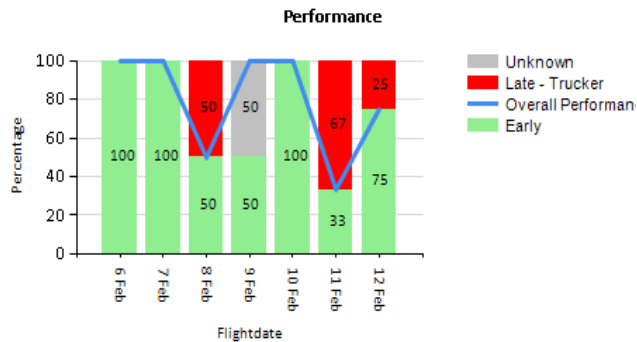
Content

- **Status report**
  - EU Green Fastlanes Vision Board
  - ABCD
  - Sprint Planning

- **Dashboards**
  - Cargo IQ reports
  - Trucking performance
  - Late-Show / No-Show / High-Show (subject to be refined)

- **Roll-out approach (in progress)**

- **Appendix**
  - Rolling Backlog of Improvement elements
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While the 5 themes were grouped based on content, the rolling planning was developed based on a logical roll-out sequencing

	2016			2017			
sep	okt	nov	dec	jan	feb	mrt	apr

Source Data Availability
- Trucking Planning
- Latest Acceptance
- Physical Acceptance
- New Trucking Schedule Direct Pick Up
- Design roll-out plan

Gateway Acceptance
- Late-Show No-Show Go-Show Selective Loading Rules
- High-Show Process FWB'/RCS

Trucking
- Delivery
- Weighing

Hub Handling
- Storage ULD Stock

Sprint 1 | Sprint 2 | Sprint 3 | Sprint 4 | Sprint 5

Cloud Platform

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14

The roll-out per station can be divided into an initial onboarding stage, the actual roll-out and an ongoing communications and change stage

I.
Onboarding

II.
Roll-out

Monitoring points

III.
Communications & change

4w   4w

European
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15

The proposed roll-out plan distinguishes four core clusters of activities and a communication stream that need to be carried out at each station

Activity / Week	0	1	2	3	4	5	6	7	8
1. Set up key parameters		1.1 Define LAT, RCS, DEP per station		1.2 Implement LAT, RCS, DEP and new trucking schedule					
2. Implement acceptance processes		2.1 Assess current acceptance process		2.2 Late-show, No-show, Go-show, High Show processes		2.3 RCS / FWB'		Test and resolve issues	
3. Implement trucking processes		3.1 Assess current trucking process		3.2 Selective Loading Rules	3.3 Direct Pick-Up	3.4 Weighing and Measuring		Test and resolve issues	
4. Supporting activities		4.1 Set up KPI structure		4.2 Engage local commercial unit to change local conditions		4.3 Modify SLA with GHA			
	Onboarding ◆	Kick-off meeting ◆		Monitoring session 1 ◆		Monitoring session 2 ◆		Report-out ◆	
5. Communications and change		5a. Ensure ongoing communication with customers, GHA and Truckers 5b. Ensure ongoing communication with Hub operations & CCC							

Stage A: **Define the boundaries**

Stage B: **Make it happen**

Stage C: **Make it stick**

The roll-out will be evenly distributed across markets, to enabled focused support from the regional area managers
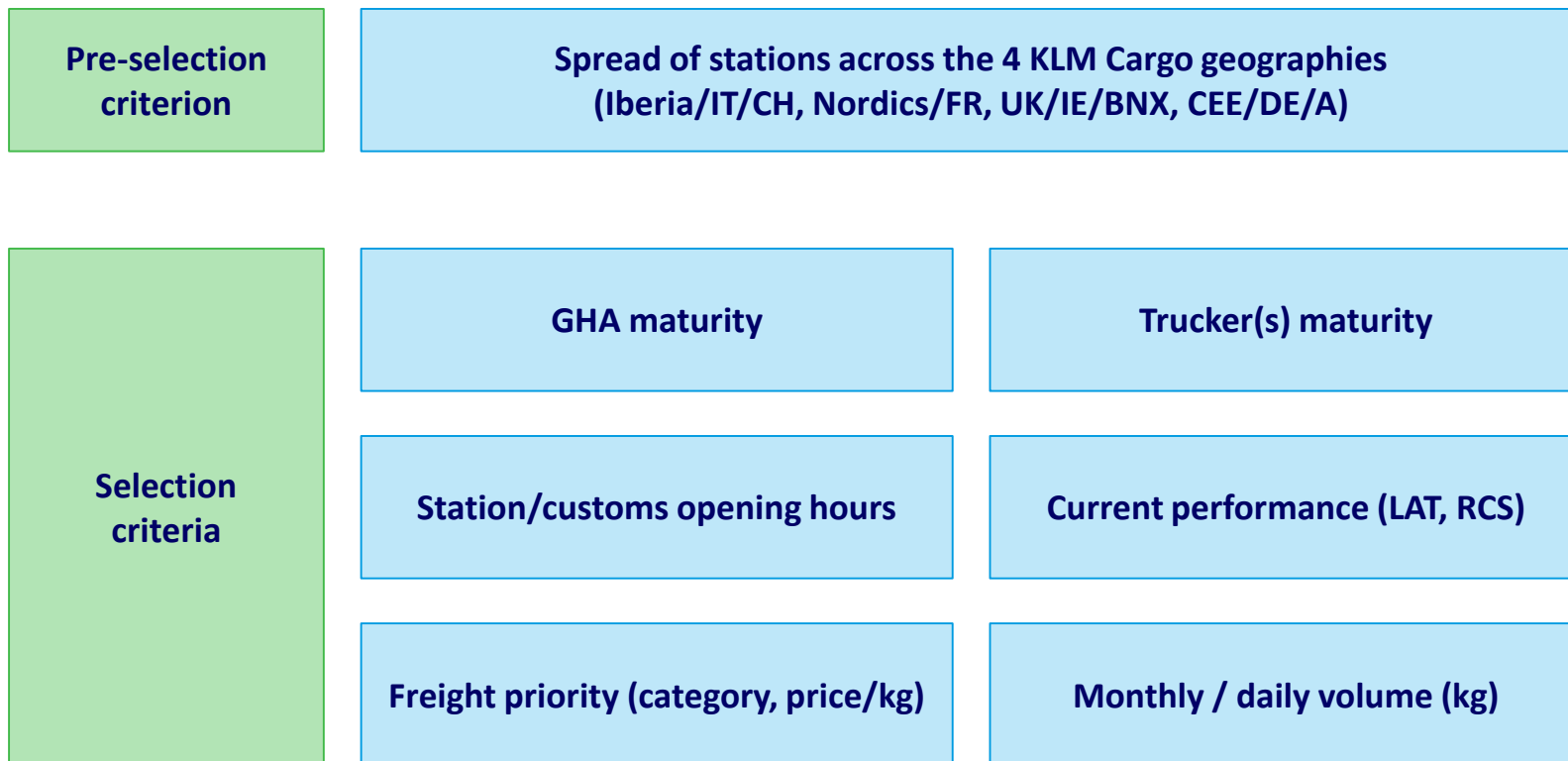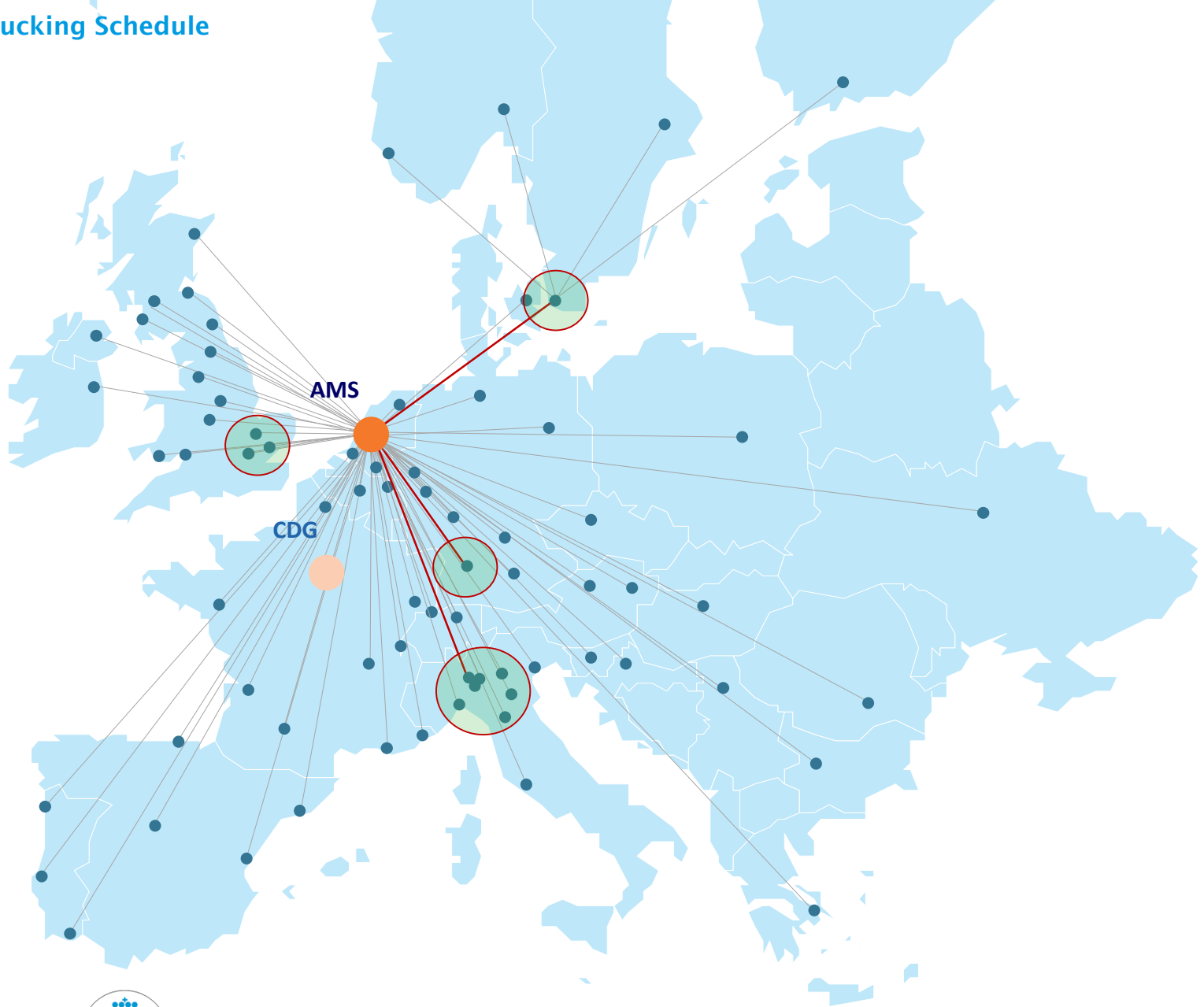
Pre-selection criterion	Spread of stations across the 4 KLM Cargo geographies (Iberia/IT/CH, Nordics/FR, UK/IE/BNX, CEE/DE/A)

Selection criteria	GHA maturity	Trucker(s) maturity
	Station/customs opening hours	Current performance (LAT, RCS)
	Freight priority (category, price/kg)	Monthly / daily volume (kg)

AMS

CDG

KLM
CARGO

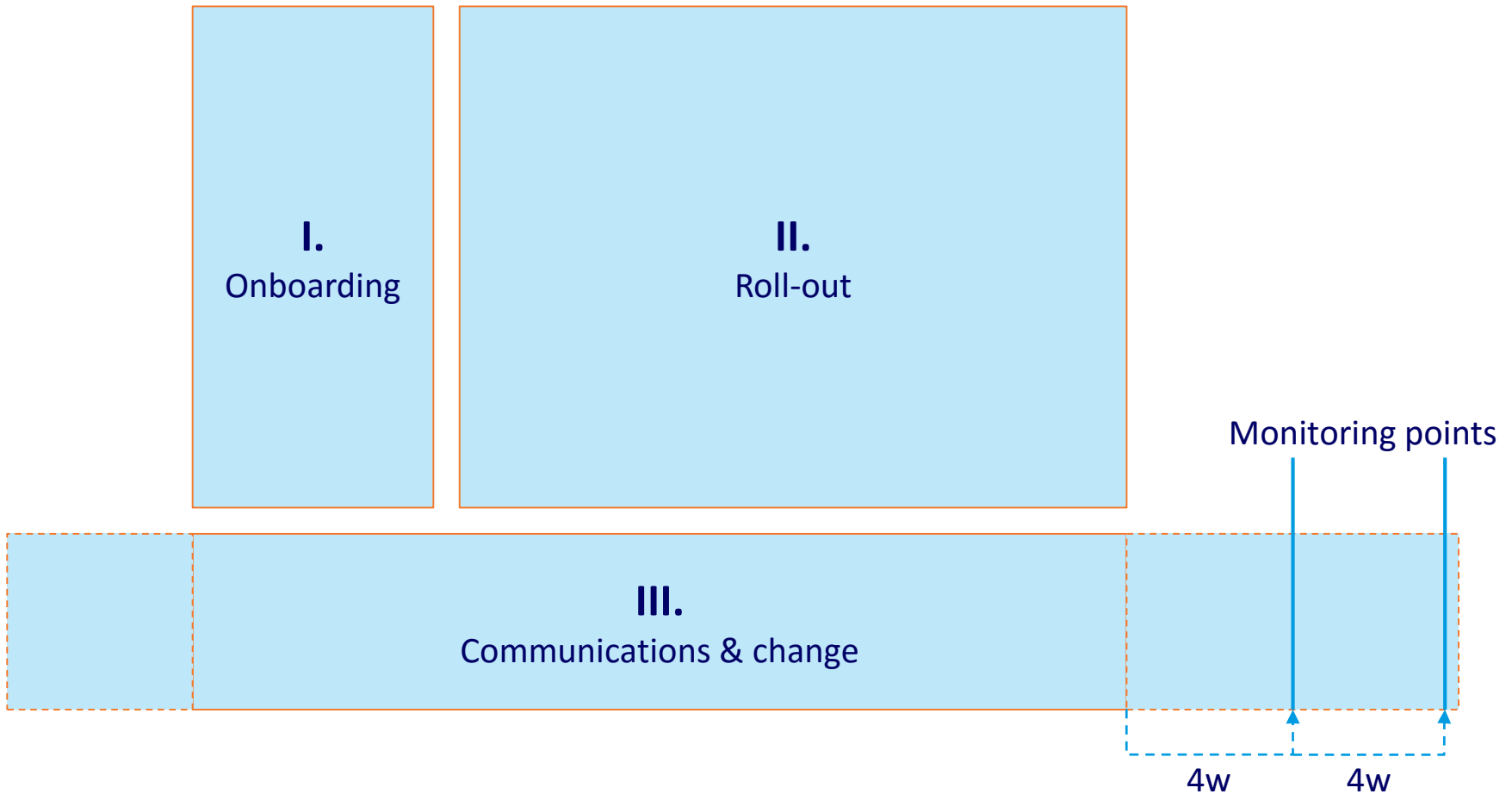European
Green Fast Lanes

KLM
CARGO

18

Content

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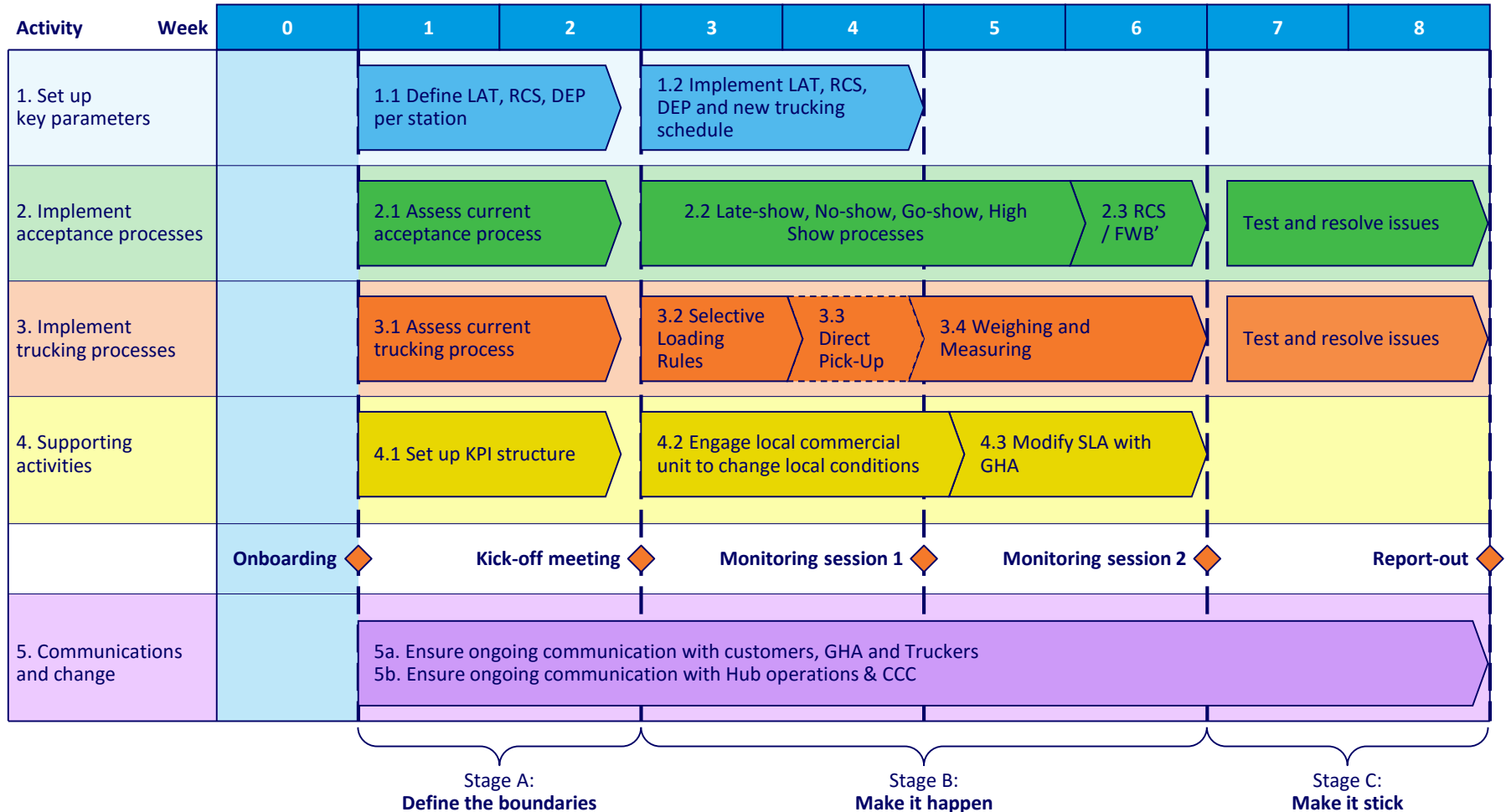 - Executive Summary / Context
  - Vision Board

Backlog of improvement elements

1. Start with redesign of trucking process to '*Dual*'' option (bigger stations/only ops trucks on smaller)
2. Implement the LAT milestone (3 Hrs), FOH status updates and Late-Show process
3. **Finalize business rules for acceptance**
4. **Implement the designed acceptance process**
5. Consider gateway principle for FRA (Trucks ex Poland)
6. Centralize CP role of FRA
7. Process the physical cargo according planning and respect co-load- and selective loading rules
8. Process the data into the cloud environment
9. STM and FFM will trigger 'Cargo status is final and on the way' data is ready for processing at HUB'
10. Enable truck Check-in mechanism as to link driver to the load and steer on arrival time
11. Prioritize the truck-movements based on the connection time and cargo on board
12. Redesign flight planning process related to new connection times T/M/Loose (revised to 4 hrs)
13. Design physical flow at HUB for T/M/Loose

Optimize IT structure 'Reservations Only' set up with GHA's

1. **Constantly improve booking reliability and data quality of H/MAWB**

- **Implement detailed feedback loop in case of errors/mishaps or improvement elements**

Bold = in progress
Italic = added / revised

SPRINT 1
SPRINT 2
SPRINT 3

Deviations during Acceptance

BKD → **FOH … LAT** → **RCS** → (after RCS)

Customer sends FWB (AWB data)

FHL

FWB

FWB #2

Document & Cargo Check versus FWB/FHL

Cargo Acceptance

System updated based on Shipment documentation

System updated based on Shipment actuals

Systems are updated with FWB = AWB data

Customer

Happy Flow: Cargo and FWB Match

FWB'
FHL'

FWB' is always channeled to the customer HAWB/FHL update required

Flow A: Cargo within Silver rule Priority is protected

Flow B: Cargo beyond Silver rule Priority is changed

Change Message **With a different status** Triggered by GHA to all parties.

For Self Filing destinations shipment will be stopped

SLA: GHA updates FWB, FWB' and RCS replaces the initial contract with the customer (communication in cloud) (FHL for pieces only)

FOH is sent to customer with actual data (#pcs, arrival time, **NOT** weight, volume) FLOW C request new BKD & new AWB from the Customer

Flow C Shipment is stopped New booking is required

Commercial intervention required
- SHC / product conflict
- FWB/FHL correctness on commodity / consignee / shipper

Actual vs FWB check by Operations
(Actual/FWB') vs Booking check in commercial systems

Physical Acceptance Process Green/Yellow/Orange flow

Truck Arrival / Driver Reports → **FOH … LAT** → **RCS** → (after RCS)

Security Check
ID / Agent / SPX etc

Data or document check versus FWB/FHL

FWB
FHL
FBL

Data / documentary Process

Physical Process

Freight check. Unload Truck, register # pieces and trigger FOH
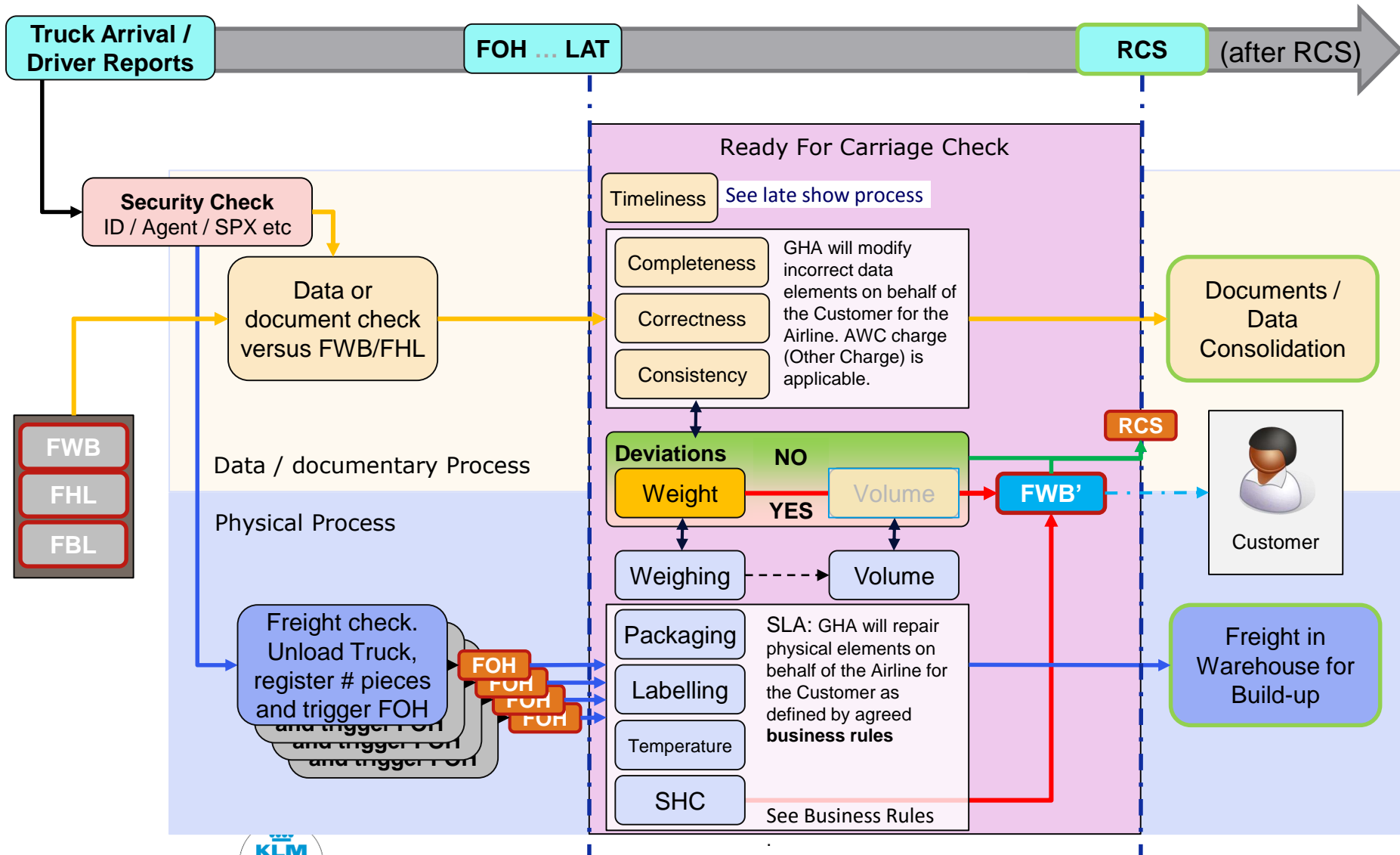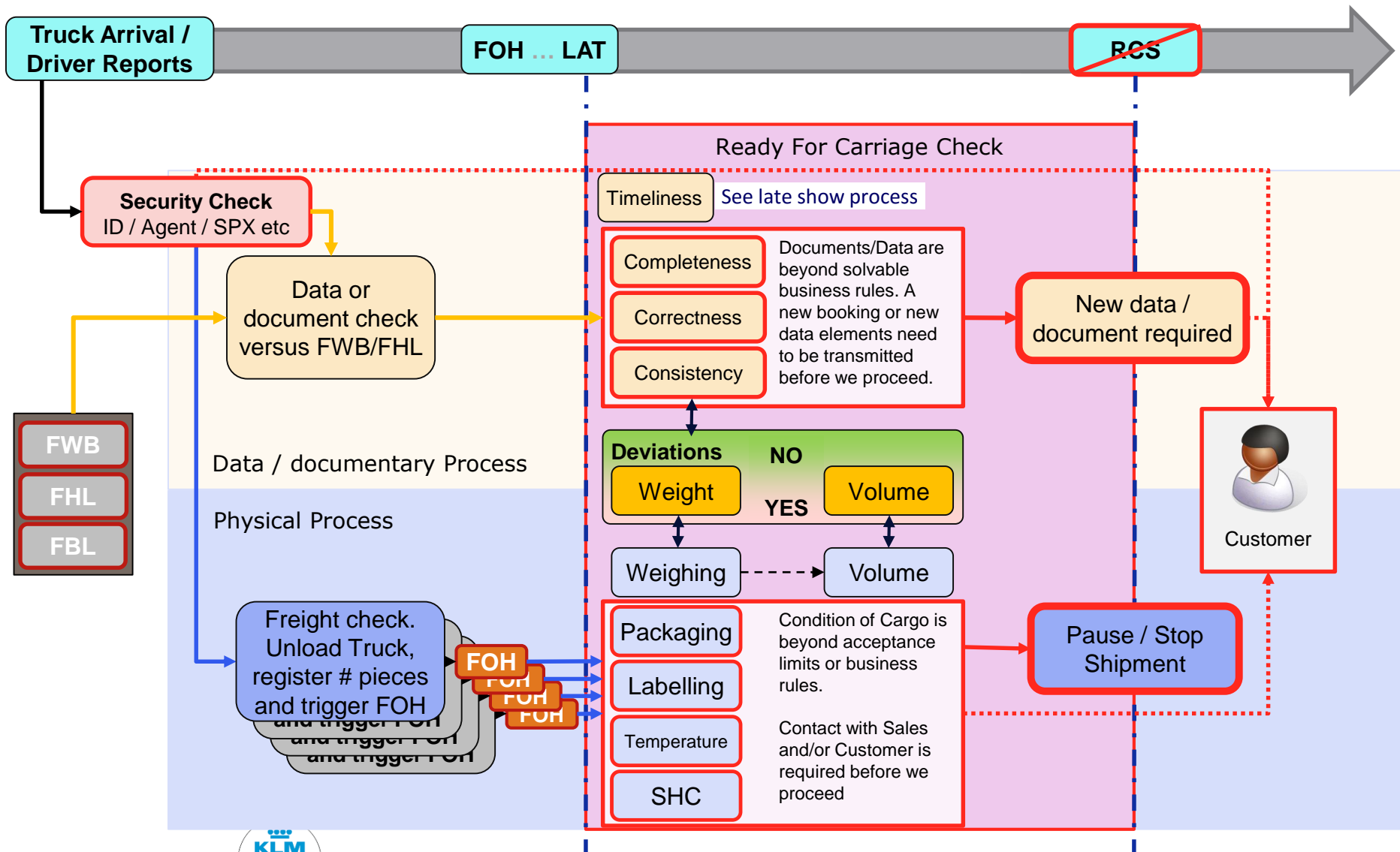
FOH
FOH
FOH
FOH

Ready For Carriage Check

Timeliness — See late show process

Completeness
Correctness
Consistency

GHA will modify incorrect data elements on behalf of the Customer for the Airline. AWC charge (Other Charge) is applicable.

Deviations   NO
Weight   Volume   FWB'
YES

Weighing ----> Volume

Packaging
Labelling
Temperature
SHC

SLA: GHA will repair physical elements on behalf of the Airline for the Customer as defined by agreed **business rules**

See Business Rules.

RCS

Documents / Data Consolidation

Customer

Freight in Warehouse for Build-up

- - - ▶ Information only

Physical Acceptance Process Red flow

Truck Arrival / Driver Reports

FOH … LAT

~~**RCS**~~

Security Check
ID / Agent / SPX etc

Data or document check versus FWB/FHL

FWB

FHL

FBL

Data / documentary Process

Physical Process

Freight check. Unload Truck, register # pieces and trigger FOH

FOH

Ready For Carriage Check

Timeliness — See late show process

Completeness

Correctness

Consistency

Documents/Data are beyond solvable business rules. A new booking or new data elements need to be transmitted before we proceed.

New data / document required

Deviations — NO

Weight — Volume

YES

Weighing - - - → Volume

Packaging

Labelling

Temperature

SHC

Condition of Cargo is beyond acceptance limits or business rules.

Contact with Sales and/or Customer is required before we proceed

Pause / Stop Shipment

Customer

Late Show Process

BKD

FOH ... LAT

RCS

RCS

Customer sends FWB (AWB data)

FHL

FWB

FOH
Late Show

RCS
Cargo Acceptance

Original Baseline

RCS
Cargo Acceptance

New Baseline

Customer does not agree on the proposed booking. A new booking will be made or the Shipment can be collected by customer

Reporting LAT milestone with FOH status message will be used when reporting Airline quality

Cargo is late however if the time of acceptance permits recovery and/or honors the Minimum Connection Time at the HUB; Cargo is accepted

Customer agrees on proposed booking

Subject CargoBUS implementation Cargoal or AFLS

Departure list and/or connections from the HUB

If flight is on same day the cargo is accepted against the new baseline

Customer

CSO

The Cargo that is **NOT** processed on the FFM will automatically trigger the cancellation of the booking on all segments

Cargo is late and the Minimum Connection Time at the HUB can not be met. Initial booking is cancelled; CARGO is stopped new booking is required

Booking is cancelled and queued to RM. RM will rebook the shipment on first flight that has available space *.

FOH
If flight is not on same day the cargo remains status FOH

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– · – · ▶ Information only

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* The additional SCB/EC check can be considered in a later stage
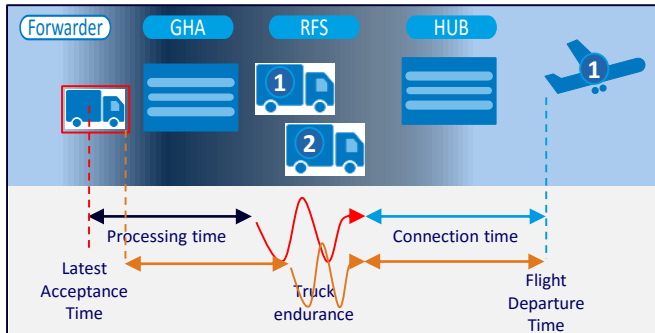
Manage Expectations Late-Show

- Current non-sustainable process
  - RM-SIN has been changed to RM-AMS/CDG
  - Cancellation of segments by SCS in Cargoal
  - Disremark and Queueing in Cargoal

- Principles
  - RM will not allow others to book without EC/SCB check
  - GHA's will operate in own systems (Reservations Only set-up)
  - ~~Process need to be embedded in AFLS and not in Legacy~~

- Options (CCC support?)

- ~~Requirements for 'automated' process written -> CR for Cargobus~~

- Discuss 'principle' with AF AOD for assessment on:
  - AF systems (pelican / AFLS?)
  - Roles & Responsibilities

- Change-Management to GHA's and organization is 'significant'…

As to ensure Cargo will fly on the booked flight; LAT will be introduced GREEN Process
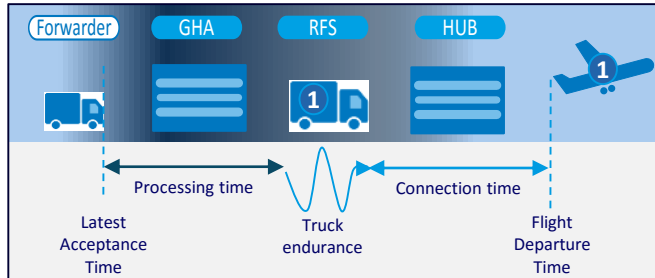
Ideal process

Green process;
Recovery at Outstation or on
Minimum Connection time is possible

As to ensure Cargo will fly on the booked flight; LAT will be introduced RED process

Red process with flight on same day possibility

Red Process
Shipment is late and misses same truck and same day connection at the HUB.
Cargo will be rebooked and layover at origin until next days-truck departure.
In case of commercial discussion, ample time to manage or cancel the shipment

New Trucking Principle (final step)

kind	#	LAT	DEP	ARR	CT	Conx interval		Remarks
	MP8344		2:00	10:00	8			MP Traffic only
	MP8346		3:00	11:00	8			
OPS-BKG	8348		1:00	9:00				Same day connections Flight Optimization
	8352	**-1 23:00**	**2:00**	**10:00**	**5-7**	**15:01**	**17:00**	
	8354		3:00	11:00				
	8356	**1:00**	**4:00**	**12:00**	**5-7**	**17:01**	**19:00**	
	8358		5:00	13:00				
	8360	**3:00**	**6:00**	**14:00**	**5-10**	**19:01**	**23:59**	
OPS-BKG	8370	7:00	10:00	18:00				LONG
	8372	8:00	11:00	19:00				
	8374	9:00	12:00	20:00				
	8376	10:00	13:00	21:00				
	8378	11:00	14:00	22:00				
	MP8350	18:00	21:00	5:00	8			MP Traffic only
OPS-BKG	8084		16:00	23:59				Next Day Departure **ONLY** Selective Loading Flight Optimization
	8086		17:00	01.00*				
	8090	**17:00**	**20:00**	**04:00***	**5-7**	**9:01**	**11:00**	
	8092		21:00	05.00*				
	8094	**19:00**	**22:00**	**06.00***	**5-7**	**11:01**	**13:00**	
	8096		23:00	07.00*				
	8098	**21:00**	**23:59**	**08.00***	**5-7**	**13:01**	**15:00**	

Executive Summary / Context

Redesign of the Origin-to-HUB Cargo Value Chain
Part of Schiphol 'Smart Mainport Program'
Supported (co-financed) by Topsector Logistiek

Why: 80% of export cargo handled in KLM warehouses at Schiphol comes from 81 EU stations
The flown-as-planned quality need to be improved

What: An 'Operational Proof of Concept' on trade-lane Frankfurt/Amsterdam (before April '17)

• 'Advanced acceptance' process modified and implemented • Shorter (at least 2 hours) itinerary for shipments in general • less 'physical' touching points • less rework and repair • All according LEAN concepts First Time Right / Just In Time. • Increase of booking reliability	• Increased quality • Drive for efficiency / productivity • Higher volumes (same footprint) • Eco friendly (less CO_2) • Increased loadfactor

How: A 'Consortium' approach with leading and innovative Business Partners plus Authorities

1. European Green Fast Lanes: Agile redesign of the physical cargo process
2. E-acceptance project: building front-ends for users
3. Mainport/Cargonaut: Development of an Industry-Data-Cloud platform *(back-end)*
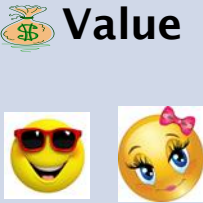
> **Upgraded transparent integral business processes**
> **Data driven real time consistent Cloud environment**
> **Apps / based on API's**

EU Green Fastlanes Vision Board

Together we transport your cargo Fast and Easy

Themes	Epics	Target Groups	Needs	Product, System or Tool	💲 Value

Themes

- Source Data Availability (Booking vs FWB / M-HAWB correctness)
- Remote Gateway handling ('Latest acceptance'/ Acceptance / / Processing / Digitization)
- Optimum truck management 'Hot' 'Not' status (Ordering Planning / Check-in / Prioritizing)
- HUB Handling (Yard Management, for green cargo/ physical handling / documentation)
- Data Sharing / platform (interaction with Mainport team)

Epics

1. Redesign of trucking process ✓
2. Implement the LAT milestone and FOH updates ✓
3. Implement the designed acceptance process ✓
4. Redesign CP role of FRA
5. Processing of physical cargo (planning) ✓
6. Process the data into cloud environment
7. Implement 'e-link' mechanism
8. Enable truck Check-in mechanism
9. Prioritize the truck-movements
10. Optimize flight planning process
11. Design physical flow

Create feedback mechanism to Handlers and Forwarders

Target Groups

Users:
- Kuehne+Nagel
- Swissport
- Jan de Rijk
- KLM HUB
- KLM FRA
  - ✓ CSO/SALES/OPS
- Customs

- Forwarding industry
- Other Truckers

Mainport group
- KLM Cargo
- Schiphol Cargo
- Cargonaut

Consortium group
- Kuehne+Nagel
- Swissport
- Jan de Rijk

Needs

Forwarder need:
Fast: Later delivery Short Throughput
Easy: Transparent Less Repair

GHA need
Fast: Consistent input Coordinated Less rubbish-in
Easy: Checked data

Trucker need
Fast: Predictable time less waiting time
Easy: Managing expectations

KLM HUB need:
Fast: Clean input Predictable flows Shorter
Easy: Readily available data No rubbish in

KLM Airline need:
Fast: Shorter
Easy: Transparent Less Repair

Product, System or Tool

Upgraded transparent integral processes

Data driven real time consistent Cloud environment

Apps / based APIs

Value

Benefits:
- Less repair
- Less waste
- Increased quality
- Higher volumes footprint)
- Eco friendly
- Increased loadfactor

Measurable