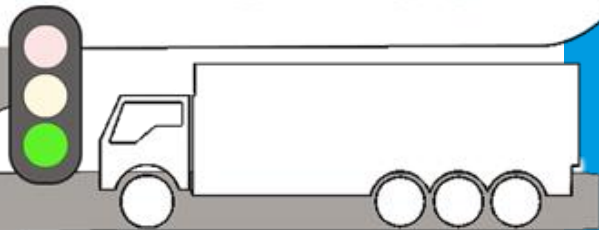




# European Green Fast Lanes



Progress  
Report

Pilot  
FRA/AMS

QUALITY IS CREATED TOGETHER  
KWALITEIT MAKEN WE MET ELKAAR

Jan 2017



KLM  
CARGO  
European  
Green Fast Lanes







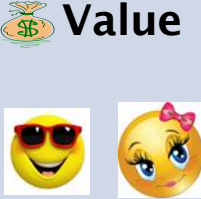
# Content

- **Status report**
  - EU Green Fastlanes Vision Board
  - ABCD
  - Sprint Planning
- **Dashboards**
  - Cargo IQ reports
  - Trucking performance
  - Late-Show / No-Show
  - High-Show
- **Appendix**
  - Rolling Backlog of Improvement elements
  - Rolling Planning
  - Acceptance Process
  - Late Show Process
  - Trucking process
  - Revised Trucking Schedule
  - Cargonaut Software
  - Executive Summary / Context

# EU Green Fastlanes Vision Board

Together we transport your cargo Fast and Easy



| <b>Themes</b><br>   | <b>Epics</b><br>  | <b>Target Groups</b><br>  | <b>Needs</b><br>   | <b>Product, System or Tool</b><br>             | <b>Value</b><br>   |
|---|--|--|---|---|---|
| <ul style="list-style-type: none"> <li>○ Source Data Availability (Booking vs FWB / M-HAWB correctness)</li> <li>○ Remote Gateway handling ('Latest acceptance' / Acceptance / Processing / Digitization)</li> <li>○ Optimum truck management 'Hot' 'Not' status (Ordering Planning / Check-in / Prioritizing)</li> <li>○ HUB Handling (Yard Management, for green cargo/ physical handling / documentation)</li> <li>○ Data Sharing / platform (interaction with Mainport team)</li> </ul> | <ol style="list-style-type: none"> <li>1. Redesign of trucking process ✓</li> <li>2. Implement the LAT milestone and FOH updates ✓</li> <li>3. Implement the designed acceptance process ✓</li> <li>4. Redesign CP role of FRA ✓</li> <li>5. Processing of physical cargo (planning) ✓</li> <li>6. Process the data into cloud environment</li> <li>7. Implement 'e-link' mechanism</li> <li>8. Enable truck Check-in mechanism</li> <li>9. Prioritize the truck-movements</li> <li>10. Optimize flight planning process</li> <li>11. Design physical flow</li> </ol> <p><b>Create feedback mechanism to Handlers and Forwarders</b></p> | <p><b>Users:</b></p> <ul style="list-style-type: none"> <li>• Kuehne+Nagel</li> <li>• Swissport</li> <li>• Jan de Rijk</li> <li>• KLM HUB</li> <li>• KLM FRA ✓ CSO/SALES/OPS</li> <li>• Customs</li> </ul> <ul style="list-style-type: none"> <li>• Forwarding industry</li> <li>• Other Truckers</li> </ul> <p><b>Mainport group</b></p> <ul style="list-style-type: none"> <li>• KLM Cargo</li> <li>• Schiphol Cargo</li> <li>• Cargonaut</li> </ul> <p><b>Consortium group</b></p> <ul style="list-style-type: none"> <li>• Kuehne+Nagel</li> <li>• Swissport</li> <li>• Jan de Rijk</li> </ul> | <p><b>Forwarder need:</b></p> <p>Fast: Later delivery<br/>Short Throughput</p> <p>Easy: Transparent<br/>Less Repair</p> <p><b>GHA need</b></p> <p>Fast: Consistent input<br/>Coordinated<br/>Less rubbish-in</p> <p>Easy: Checked data</p> <p><b>Trucker need</b></p> <p>Fast: Predictable time less waiting time</p> <p>Easy: Managing expectations</p> <p><b>KLM HUB need:</b></p> <p>Fast: Clean input<br/>Predictable flows<br/>Shorter</p> <p>Easy: Readily available data<br/>No rubbish in</p> <p><b>KLM Airline need:</b></p> <p>Fast: Shorter</p> <p>Easy: Transparent<br/>Less Repair</p> | <p>Upgraded transparent integral processes</p> <p>Data driven real time consistent Cloud environment</p> <p>Apps / based APIs</p> | <p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>• Less repair</li> <li>• Less waste</li> <li>• Increased quality</li> <li>• Higher volumes (footprint)</li> <li>• Eco friendly</li> <li>• Increased loadfactor</li> </ul> <p><b>Measurable</b></p> |

# EU Green Fastlanes ABCD

Status Stream

Overall process:\*



## Achievements

- Generic**
- **Sprint 4: Fomalize acceptance process Implement Trucking phase#2**
  - New trucking schedule (sheet6) prepared for implementation
  - Area OPS managers briefed on the project objectives
  - Station recovery performance Capgemini started with the assignment to prepare the roll-out as per April/May

### Mainport

- Cloud**
- POC2 has been delivered, / **issue with Dynamic IP addresses is solved**

## 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

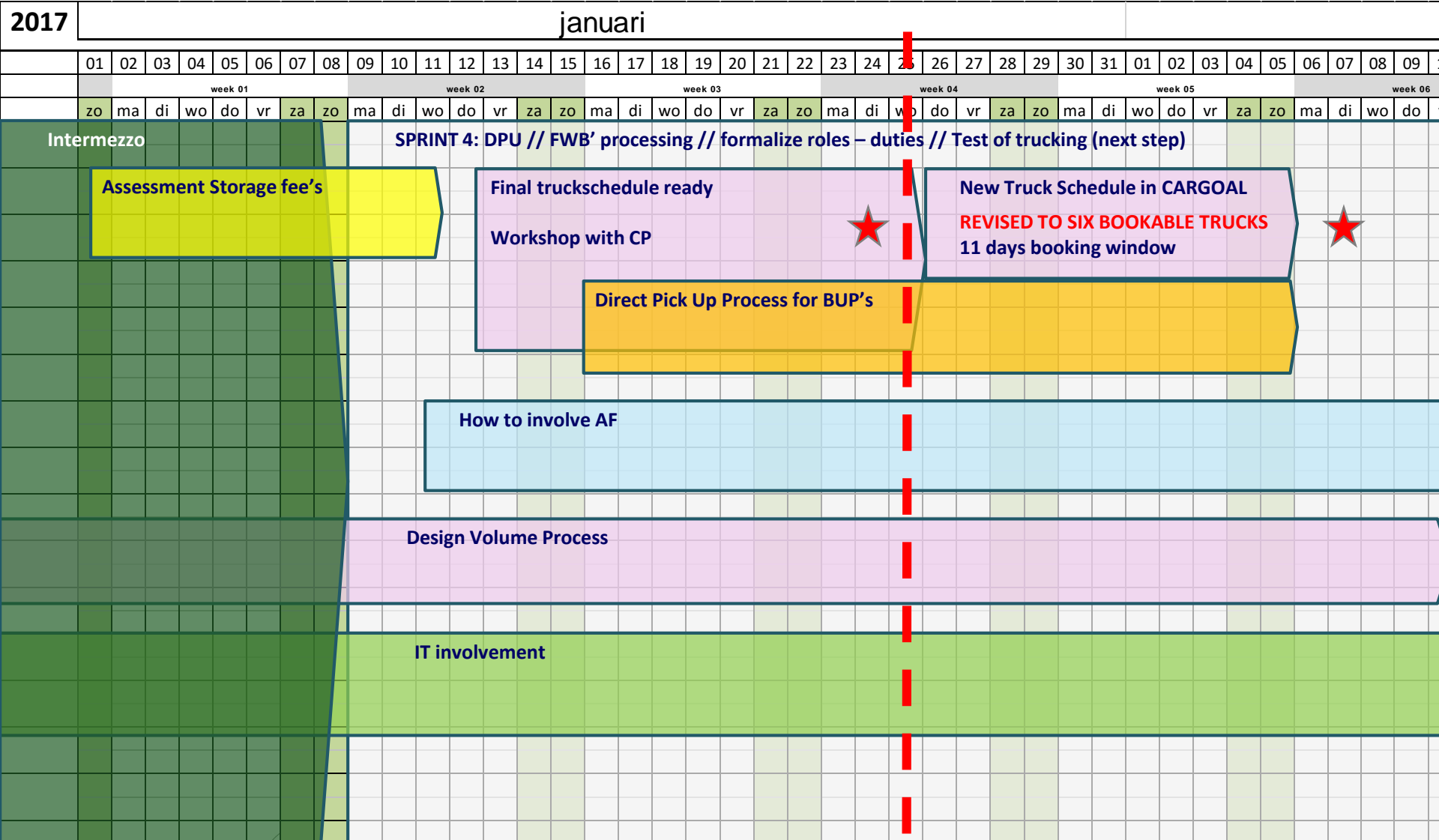
- Generic**
- CCP solution too narrow for our customers?
- Source Data**
- E-capabilities customers
- Remote Gateway**
- Late show / Ops vs Commercial
  - **Resources to implement the operational changes at FRA**
  - The FRA quality has been established on a stable acceptable level **however the infrastructure 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
  - Breakdown of storage fee's
  - **Follow up with AF AOD to generate joint approach**
  - Review / implement new truck schedule and impact on CP/SCS
  - Results of an Operational Business Review (currently taking place at SCS/FRA) need to be merged in the Station optimization plan.
- Cloud**
- Other countries' customs compliance elements will be added

# EU Green Fastlanes Sprint Planning



# New Trucking Principle (second 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<br>Flight Optimization                                   |              |
|         | <b>8352</b> | <b>-1 23:00</b> | <b>2:00</b>  | <b>10:00</b>  | <b>5-7</b>  | <b>15:01</b>  |   | <b>17:00</b> |
|         | 8354        |                 | 3:00         | 11:00         |             |               |   |              |
|         | <b>8356</b> | <b>1:00</b>     | <b>4:00</b>  | <b>12:00</b>  | <b>5-7</b>  | <b>17:01</b>  |   | <b>19:00</b> |
|         | 8358        |                 | 5:00         | 13:00         |             |               |   |              |
|         | <b>8360</b> | <b>3:00</b>     | <b>6:00</b>  | <b>14:00</b>  | <b>5-10</b> | <b>19:01</b>  | <b>23:59</b>  |              |
| 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<br>Departure <b>ONLY</b><br>Selective Loading<br>Flight Optimization |              |
|         | 8086        |                 | 17:00        | 01:00*        |             |               |   |              |
|         | <b>8090</b> | <b>17:00</b>    | <b>20:00</b> | <b>04:00*</b> | <b>5-7</b>  | <b>9:01</b>   |   | <b>11:00</b> |
|         | 8092        |                 | 21:00        | 05:00*        |             |               |   |              |
|         | <b>8094</b> | <b>19:00</b>    | <b>22:00</b> | <b>06:00*</b> | <b>5-7</b>  | <b>11:01</b>  |   | <b>13:00</b> |
|         | 8096        |                 | 23:00        | 07:00*        |             |               |   |              |
|         | <b>8098</b> | <b>21:00</b>    | <b>23:59</b> | <b>08:00*</b> | <b>5-7</b>  | <b>13:01</b>  | <b>15:00</b>  |              |

# 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'...



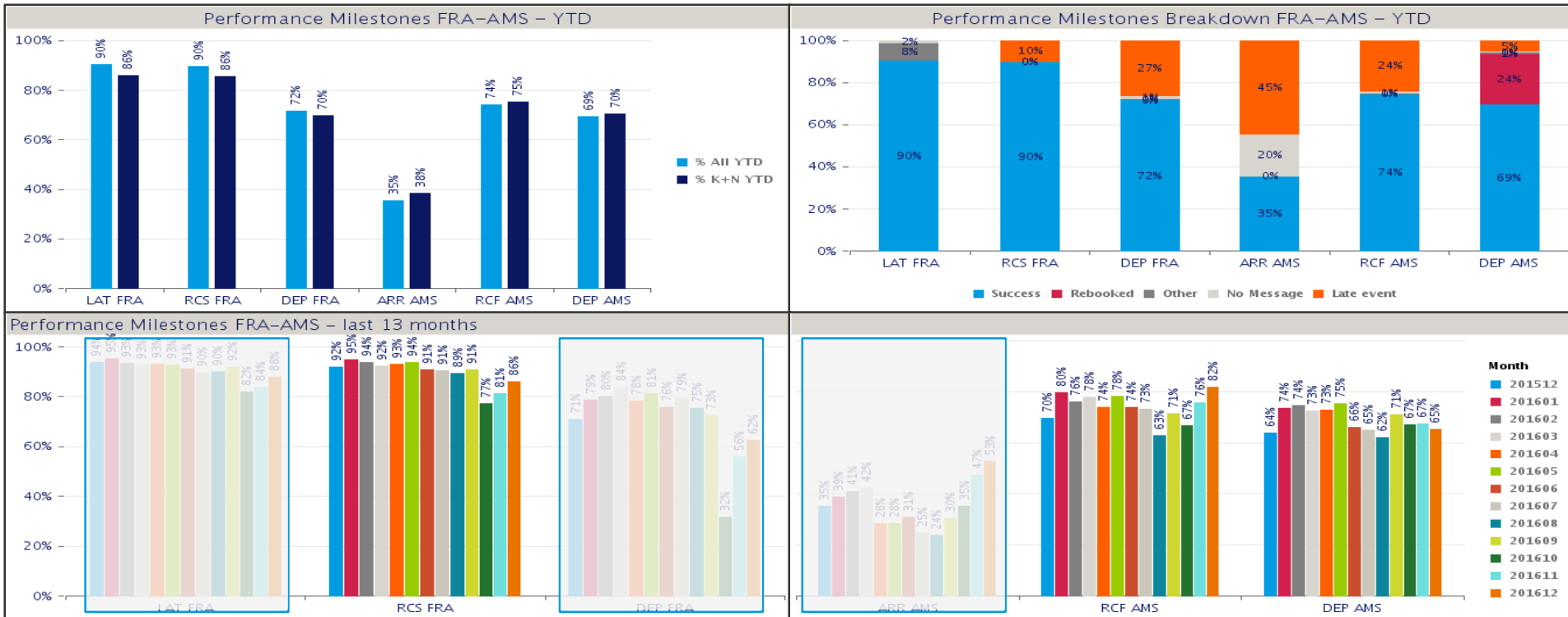
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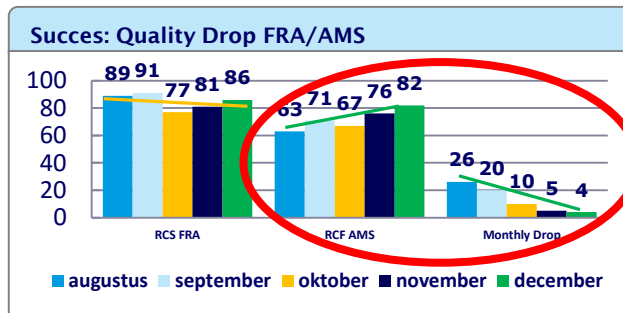




# Quality Tracking on CargoIQ milestones (month)

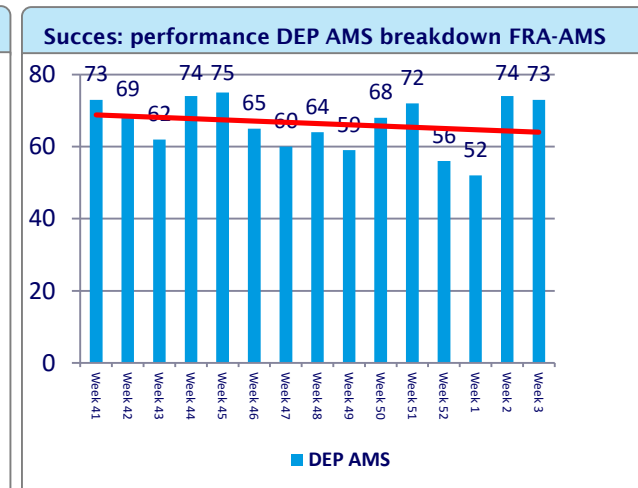
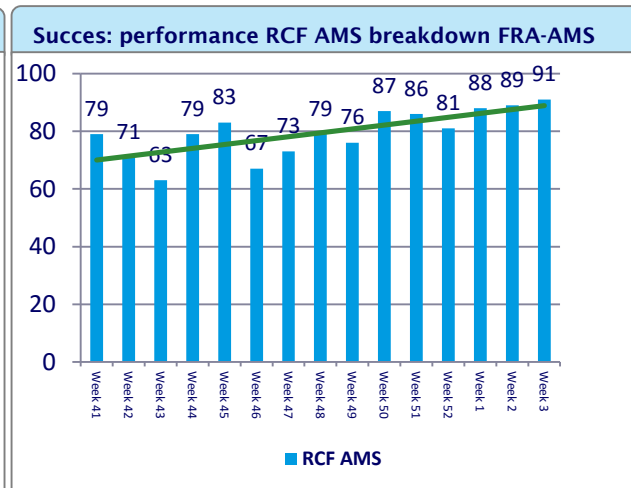
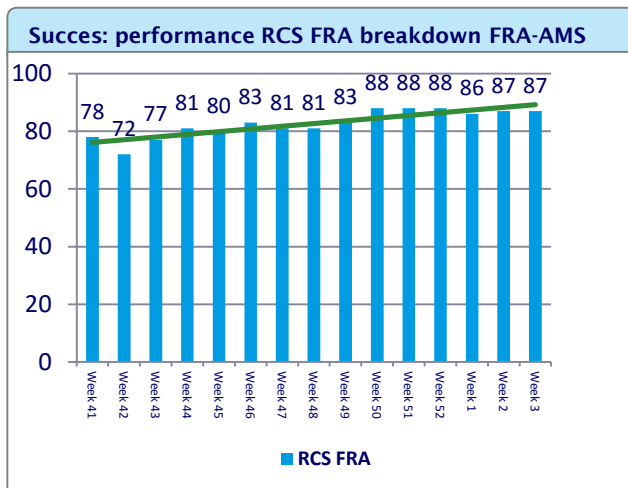


This slide shows the impact of the process changes in FRA. Since August the 'input' quality at the HUB (RCF AMS) increased month over month. The Performance drop ex FRA has been minimized to a few percent.



# Quality Tracking on CargoIQ milestones (Week)

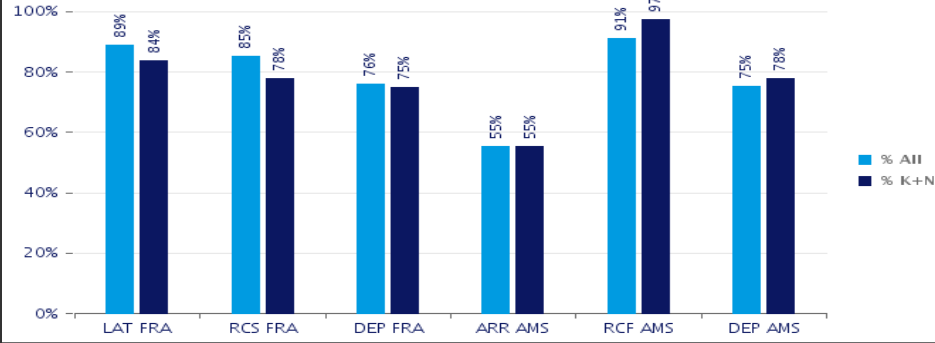
## Including trendlines



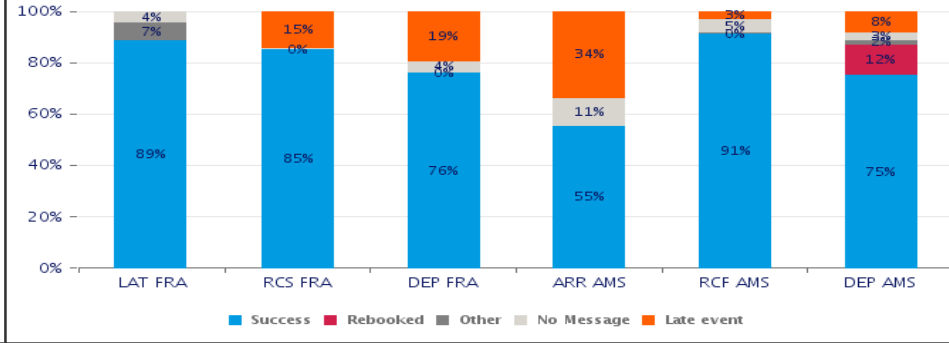
# Dashboard daily overview

## CargoIQ

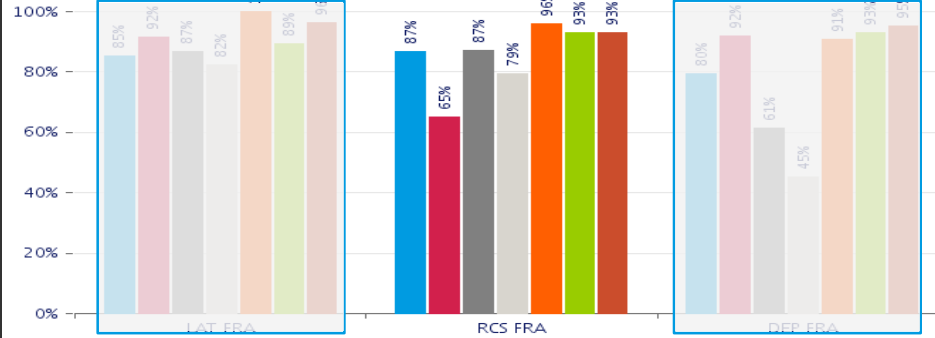
Performance Milestones FRA-AMS – last 7 days



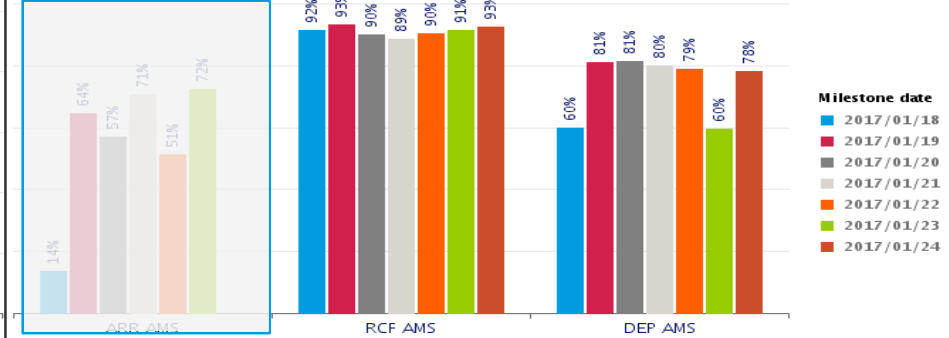
Performance Milestones Breakdown FRA-AMS – last 7 days



Performance Milestones FRA-AMS – last 7 days

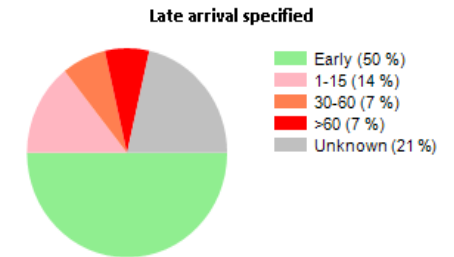
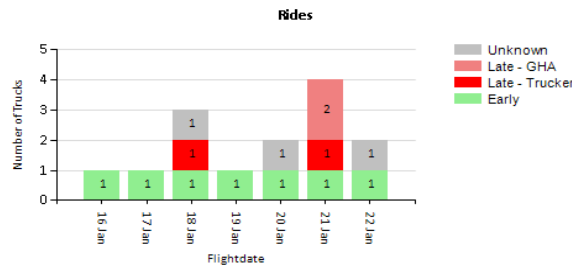
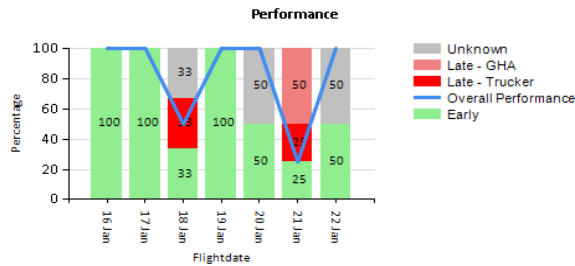


Last 7 days

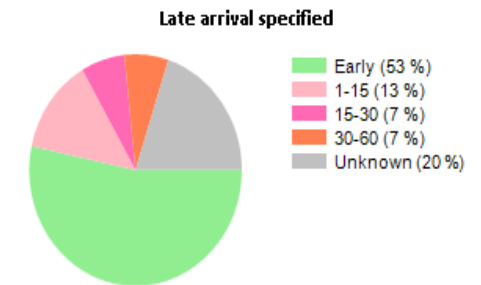
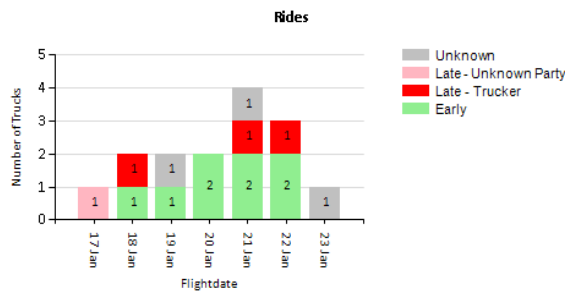
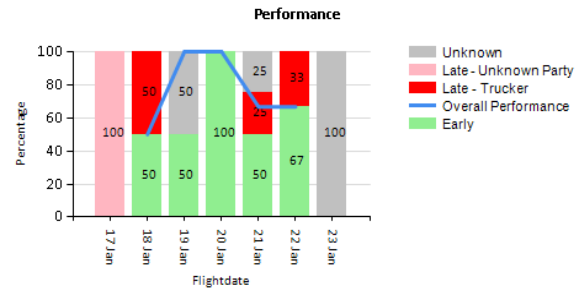


# Dashboard Trucker On-Time Performance last week

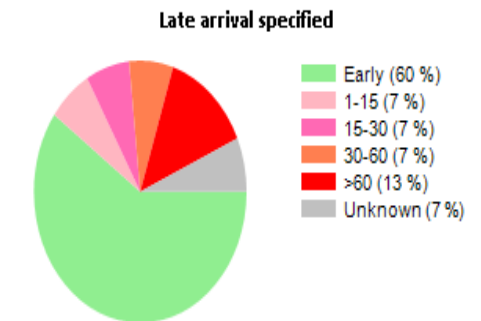
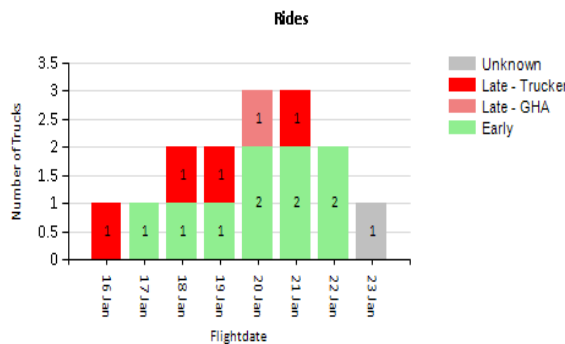
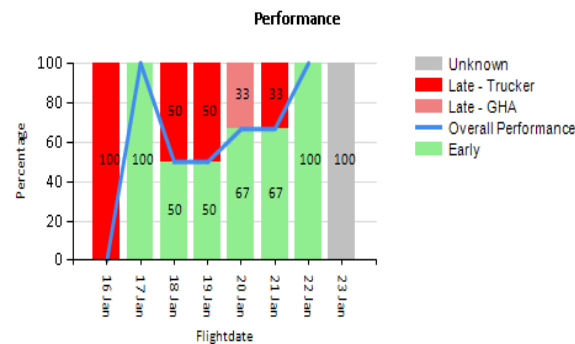
GEORGI



JAN DE RIJK



VAN SWIETEN



# Milestones details- Late show reports FRA

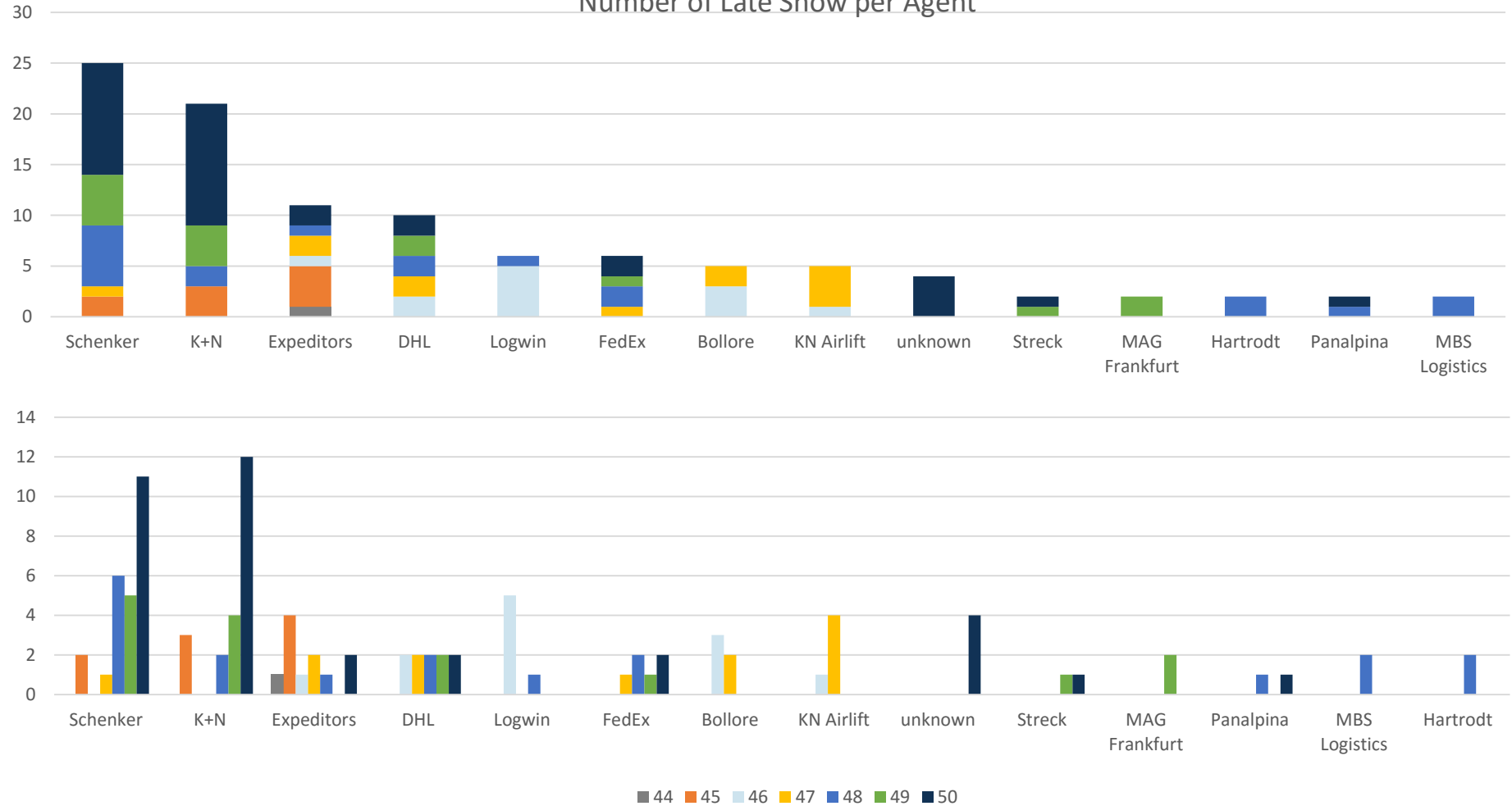
FRA – AMS 13/12/16 – 23/01/17

| Configuratie                                    | LAT  | RCS  | DEP  |
|---|------|------|------|
| Total <u>overview</u>                           | 5%   | 11%  | 60%  |
| DEP 100% <u>accomplished</u>                    | 2%   | 4%   | 0%   |
| DEP 100% <u>failed</u>                          | 7%   | 15%  | 100% |
| 57% DEP <u>Failed after on time LAT&amp;RCS</u> | 0%   | 0%   | 57%  |
| RCS <u>failed after LAT on time</u>             | 0%   | 100% | 84%  |
| Recovery after failed LAT                       | 100% | 0%   | 86%  |
| Recovery after failed <u>LAT and RCS</u>        | 100% | 100% | 83%  |

# Deviation Report – Late Show

## FRA - AMS

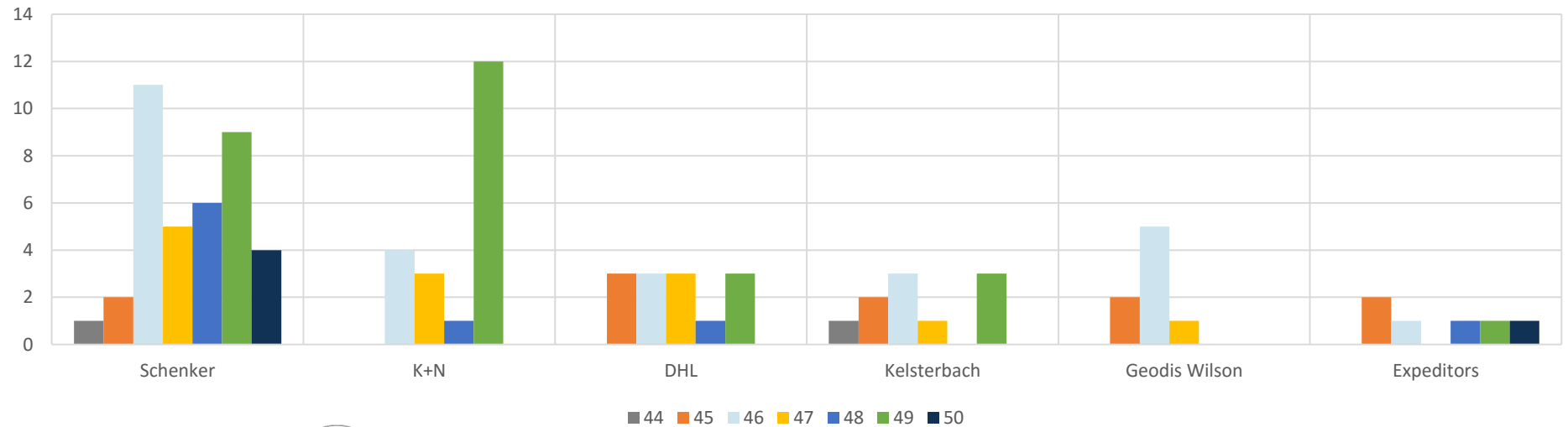
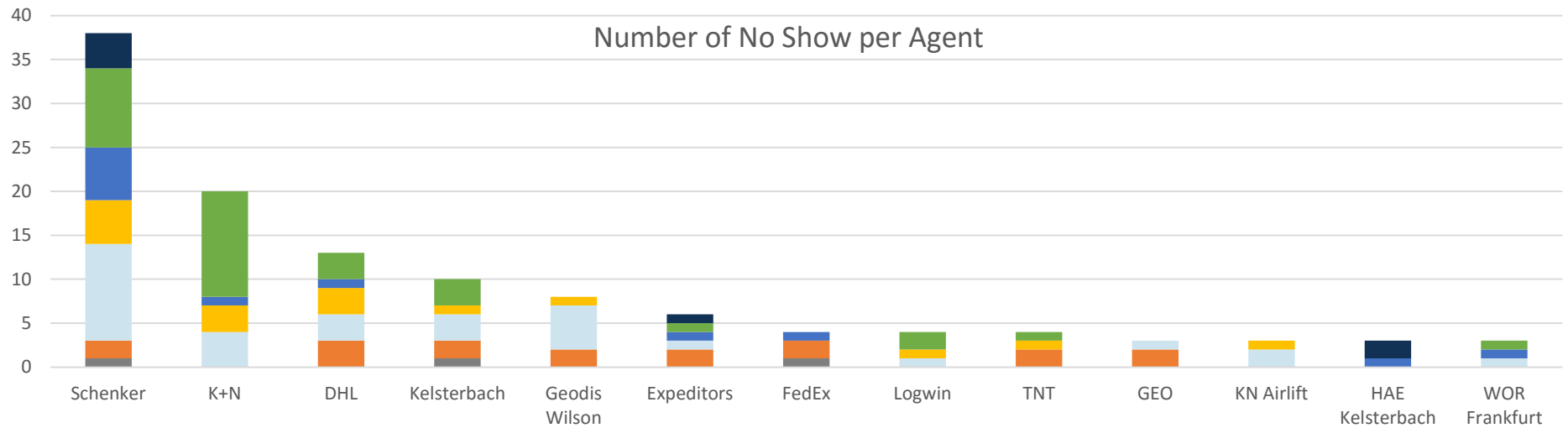
Number of Late Show per Agent



# Deviation Report – No Show

## FRA - AMS

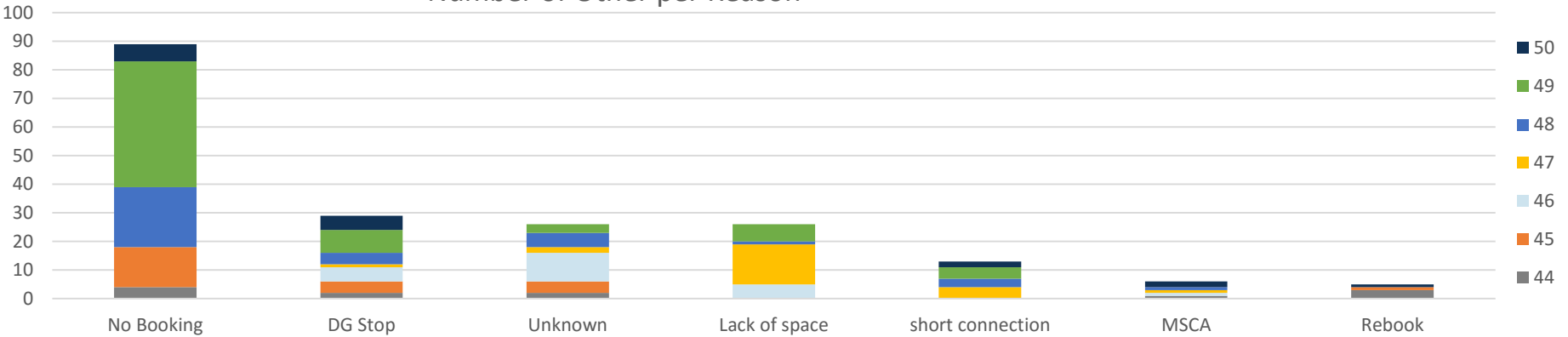
Number of No Show per Agent



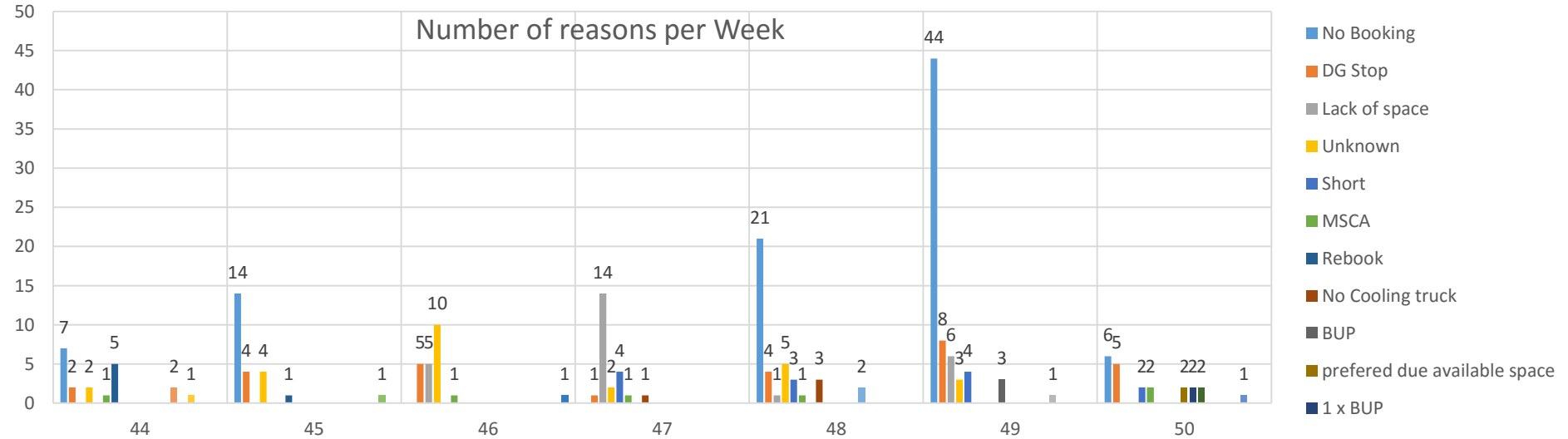
# Deviation Report – Other

## FRA - AMS

Number of Other per Reason



Number of reasons per Week





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  - Executive Summary / Context

# 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

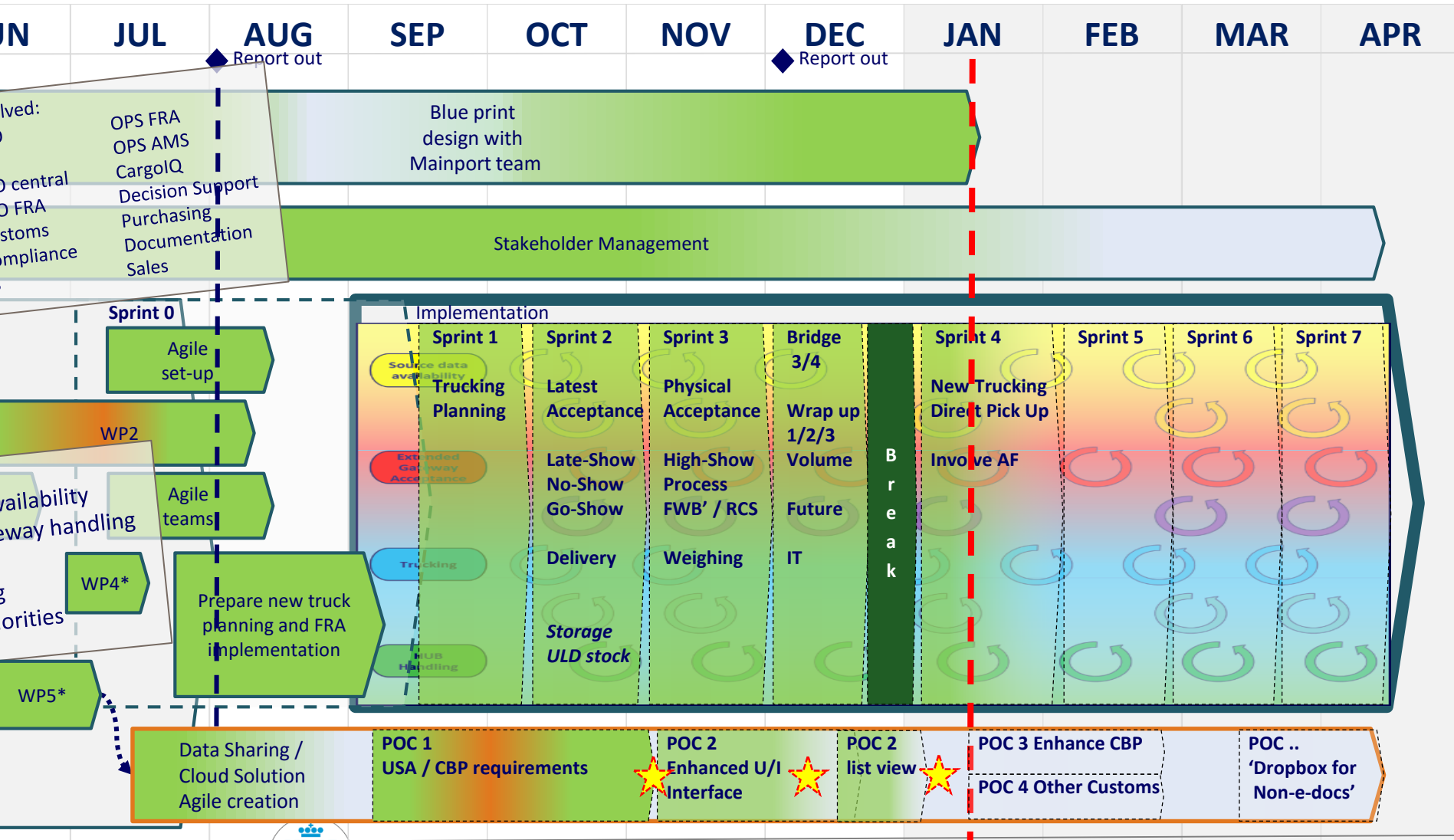
1. **Constantly improve booking reliability and data quality of H/M AWB**
  - **Implement detailed feedback loop in case of errors/mishaps or improvement elements**



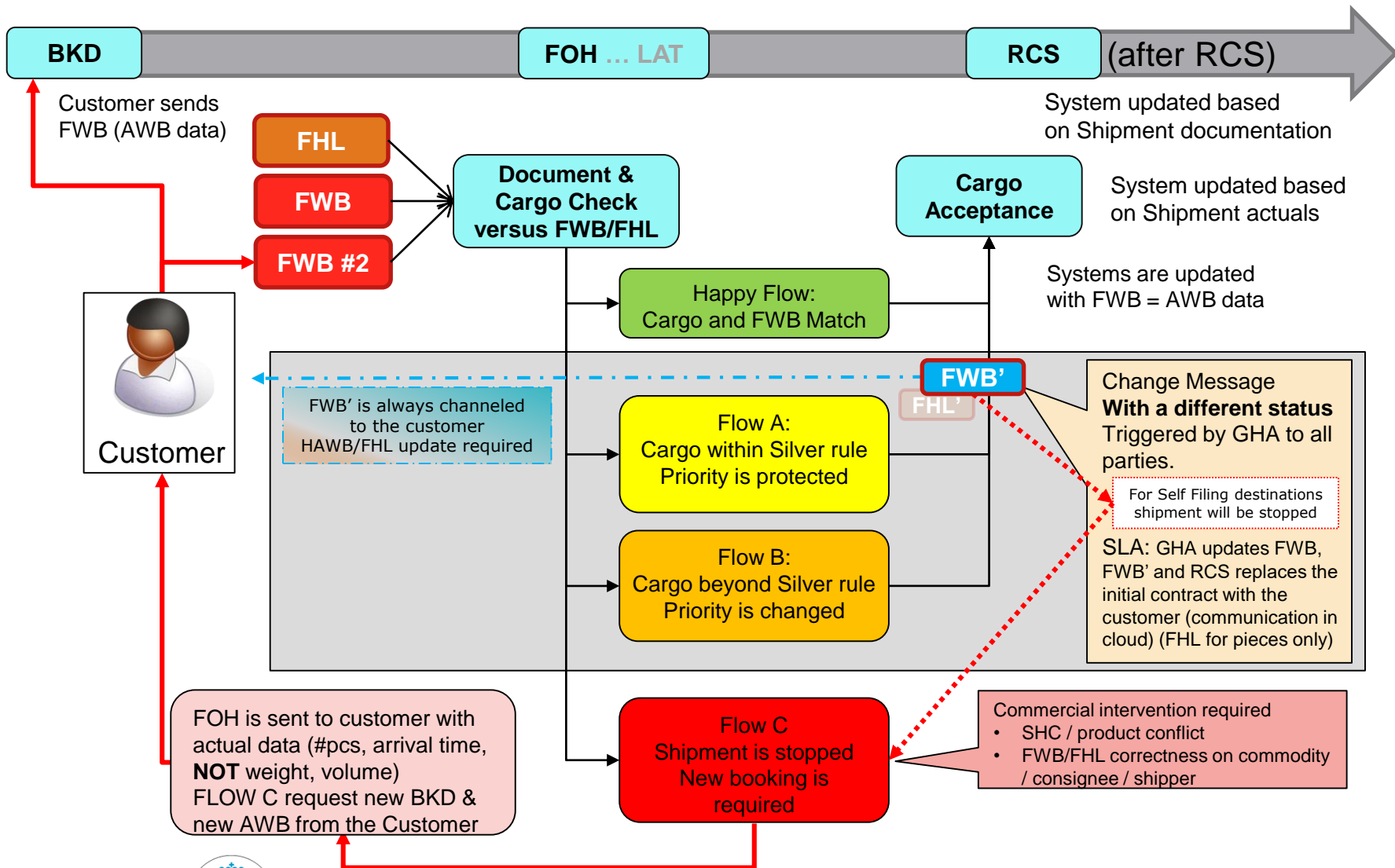
**Bold = in progress**  
*Italic = added / revised*



# EU Green Fastlanes Rolling Planning

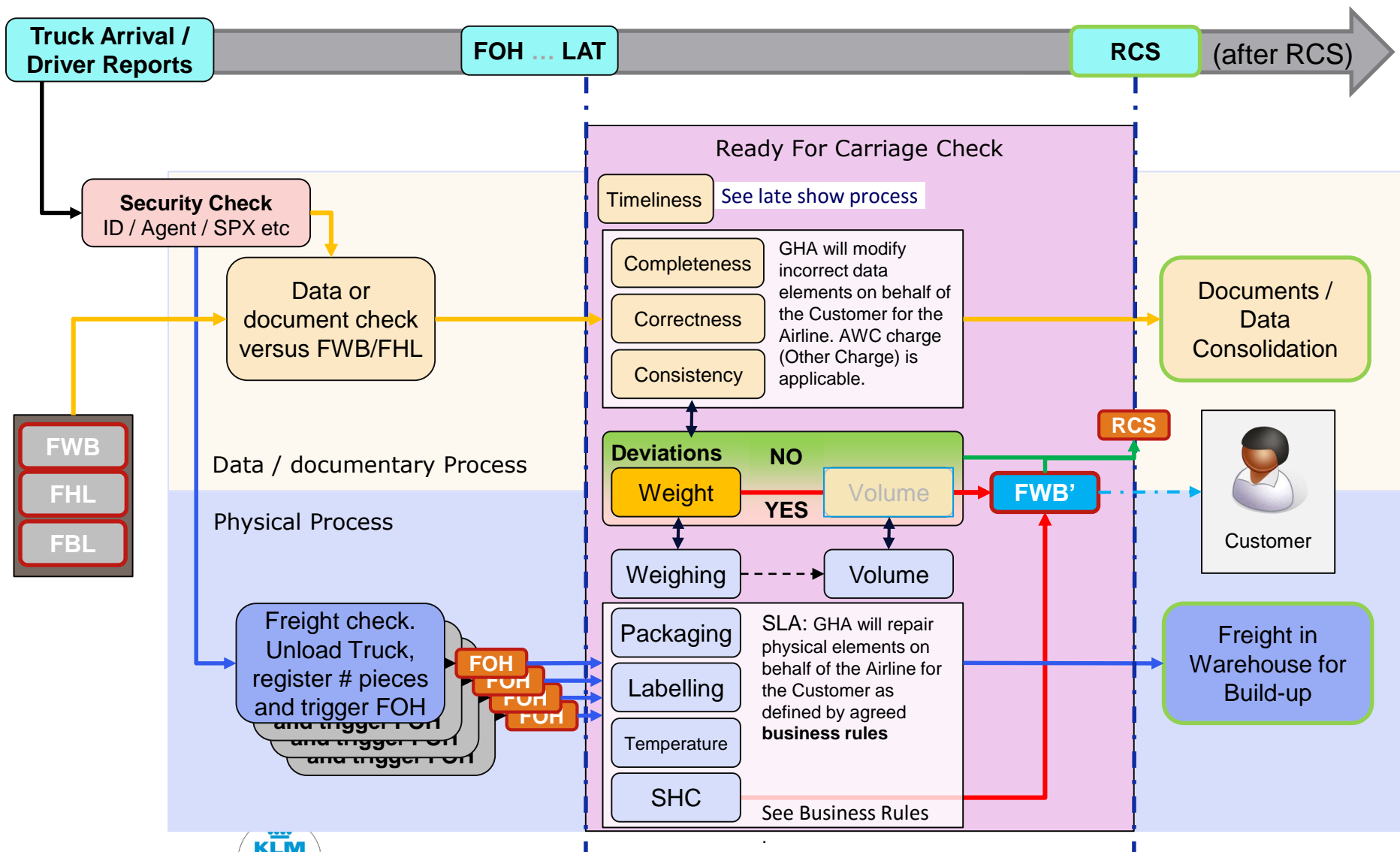


# Deviations during Acceptance

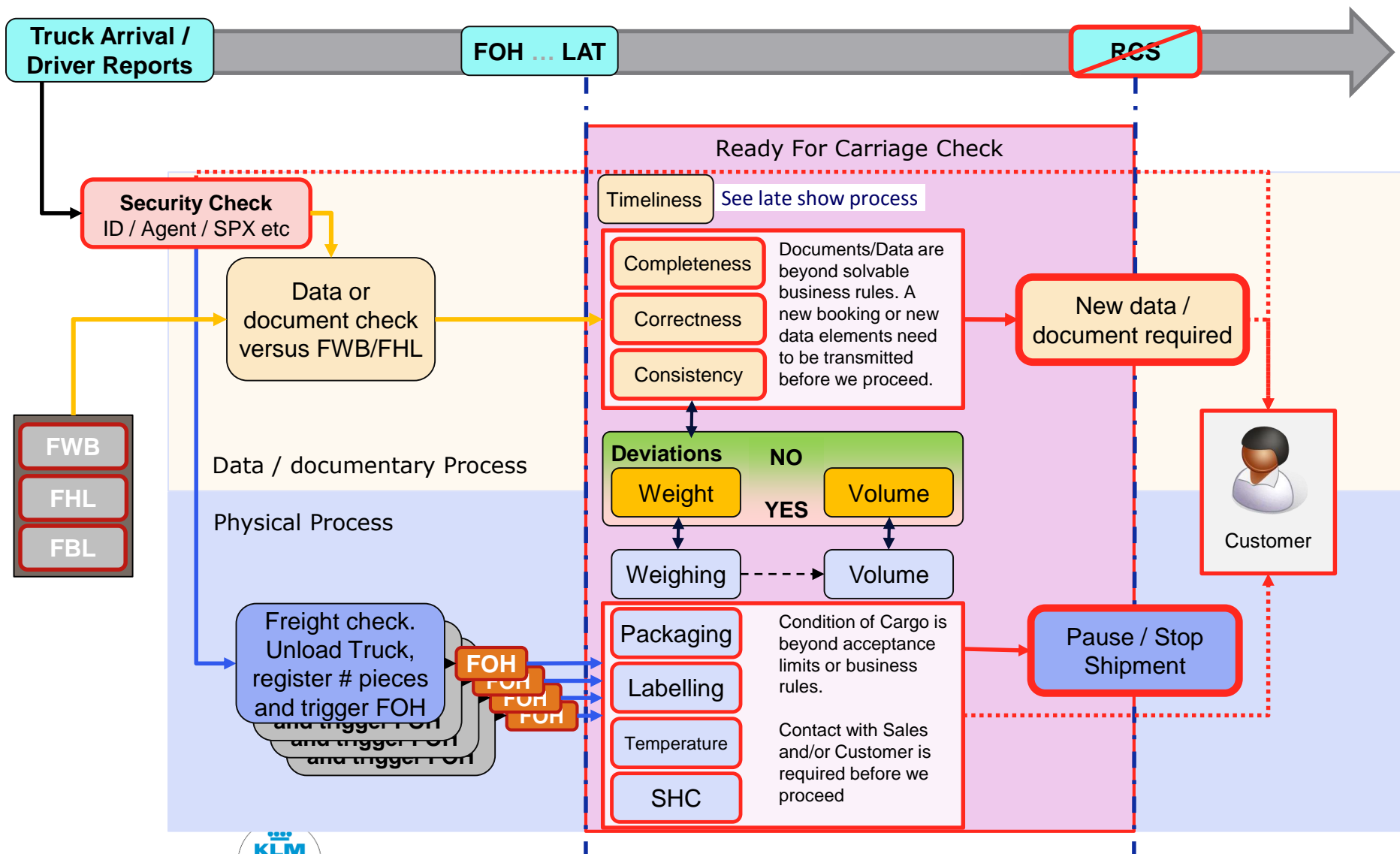


Actual vs FWB check by Operations  
(Actual/FWB') vs Booking check in commercial systems

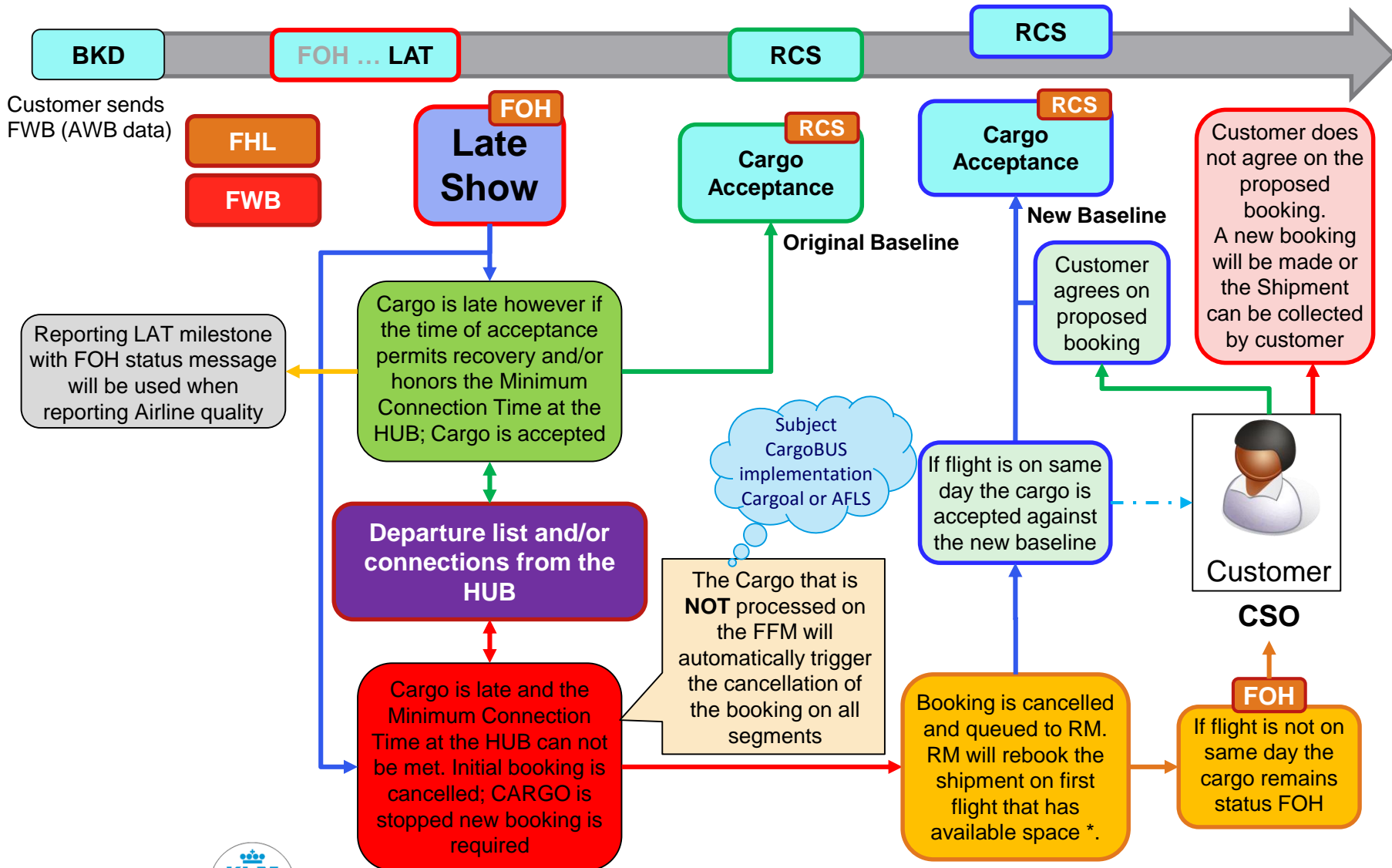
# Physical Acceptance Process Green/Yellow/Orange flow



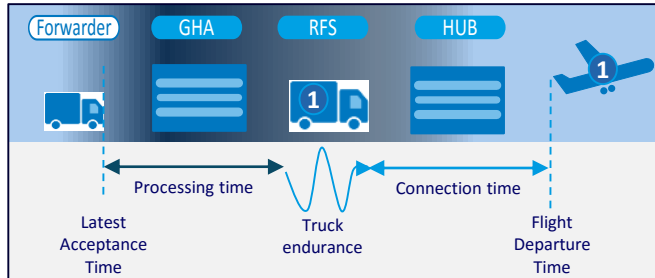
# Physical Acceptance Process **Red flow**



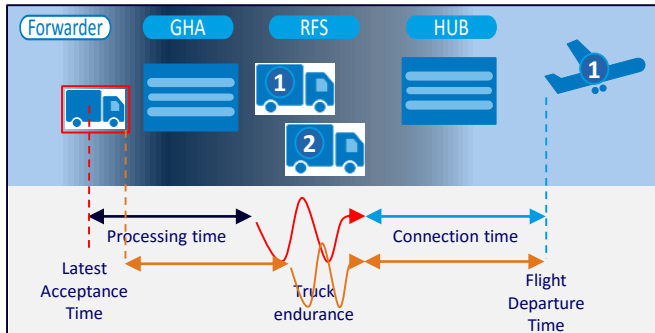
# Late Show Process



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



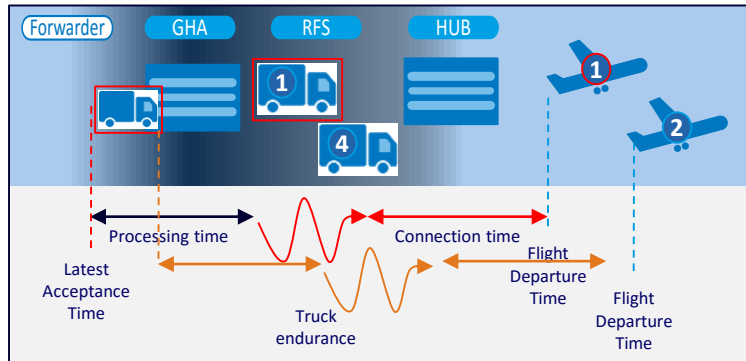
Ideal process



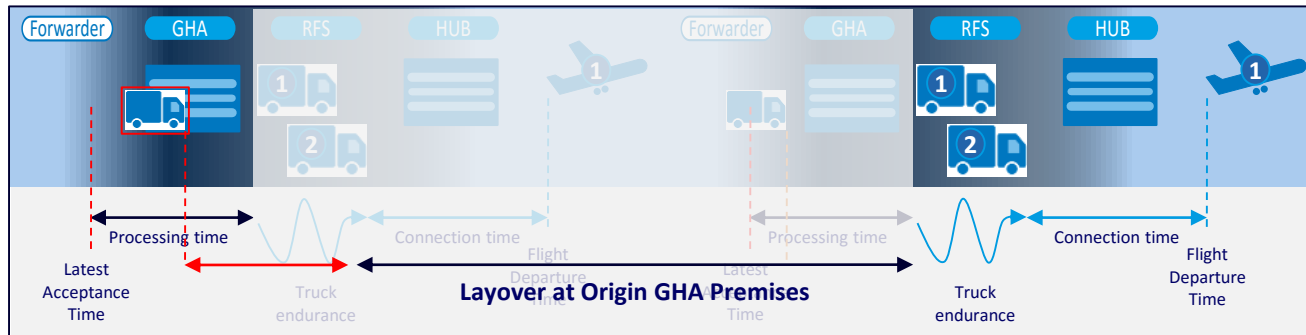
Green process;  
Recovery at Outstation or on  
Minimum Connection time is possible



# 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 revised timings

| Truck  | #    | LAT   | DEP   | ARR   | CT         | Conx interval |       | Remark   |
|--------|------|-------|-------|-------|------------|---------------|-------|--|
| MP BKG | 8354 | 12:00 | 16:00 | 23:30 | 12         | 11:30         |       | MP Traffic only  |
| BKG 1  | 8088 | 17:00 | 20:00 | 04:30 | 5-12       | 09:30         | 16:30 | Next Day<br>Departure <b>ONLY</b><br>SLR!!<br>Flight<br>Optimization |
|        | 8090 | 17:00 | 20:00 | 04:00 |            | 09:00         | 13:30 |  |
|        | 8092 | 17:00 | 21:00 | 05:00 |            | 10:00         | 14:30 |  |
|        | 8094 | 17:00 | 22:00 | 06:00 |            | 11:00         | 15:30 |  |
|        | 8096 | 17:00 | 23:00 | 07:00 |            | 12:00         |       |  |
|        | 8096 | 17:00 | 23:59 | 08:00 |            | 13:00         | 16:30 |  |
| BKG 2  | 8350 | 23:00 | 02:00 | 12:30 | 4 and more | 16:30         |       | SLR!!<br>Truck<br>optimization                                       |
|        | 8352 | 23:00 | 02:00 | 10:00 | 7          | 16:30         |       |  |
|        | 8356 | 23:00 | 03:00 | 11:00 | 6          | 16:30         |       |  |
|        | 8358 | 23:00 | 04:00 | 12:00 | 5          | 16:30         |       |  |
|        | 8360 | 23:00 | 05:00 | 13:00 | 5          | 17:30         |       | long connections   |
|        | 8362 | 23:00 | 11:00 | 18:30 |            |               |       |  |
|        | ...  | ...   | 12:00 | 19:30 |            |               |       |  |
|        | ...  | ...   | ...   | ...   |            |               |       |  |

First step: 2 booking trucks

**Revised and decided as per CargoBUS conflict**

Direct Pick-Up process to be implemented as soon as possible



# 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)

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| <ul style="list-style-type: none"><li>• 'Advanced acceptance' process modified and implemented</li><li>• Shorter (at least 2 hours) itinerary for shipments in general</li><li>• less 'physical' touching points</li><li>• less rework and repair</li><li>• All according LEAN concepts First Time Right / Just In Time.</li><li>• Increase of booking reliability</li></ul> | } <ul style="list-style-type: none"><li>• Increased quality</li><li>• Drive for efficiency / productivity</li><li>• Higher volumes (same footprint)</li><li>• Eco friendly (less CO2)</li><li>• Increased loadfactor</li></ul> |
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**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**

