



Cooperative Logistics
for Sustainable Mobility of Goods
Frankfurt Airport

March 7th 2017



Agenda



- **Project Overview**
- **Preliminary Results**
- **Outlook**



COGISTICS

Pilotregion Frankfurt



Participants

DB Schenker, Fraport, HOLM, T-Systems

Project Goals

Acceleration of
Processes

Infrastructure
Improvements

Reduction of
CO2-Emissions

Waiting times and
bottlenecks

Energy-Conscious
Driving

Monitoring of
truck traffic
CargoCity North
and South

App
*“Low Carbon
Mobility
Management”*
(LCMM)



App LCMM Function



Acceleration

Aerodynamic Force

Slope

Surface Resistance

Standstill

View of Driver

Results

Car	GetTime	Distance	Angifert	Speed	Ranking	WTR	Time	Cost	
Distance	TimeUsed	Endblock	Endblock	Bruchteil				Total	
Total Menge: 375040h Total hour: 4233h 28min									
Trip: 1001 (user) - 00P - Delivery 13.10.2018-09:00 (W181205) (SL12826) - 1.143									
Distance	01.000h	Angifert	02.270,24h	CO2 Emission	5.080	Time Used	08.03%	Endblock	8.58
Actual	48.100%	Ranking	05210778	Ranking	0-98	FuelUsed	0-26%	Endblock	4.87
Actual	48.10%	Actual	4.21%	CO2Emission	22.89%	Actual	13.78%	Grade	11.02%
Actual	388.2%	Actual	08.17%	Actual	185.17%	Actual	18.73%	Actual	3.78%
Trip: 1001 (user) - 00P - Delivery 13.10.2018-09:00 (W181205) (SL12826) - 1.143									
Distance	04.000h	Angifert	0300,00h	CO2 Emission	1.080	Time Used	13.08%	Endblock	4.71
Actual	07.8000h	Ranking	25501078	Ranking	0-47	FuelUsed	0-36%	Endblock	3.75
Actual	23.28%	Actual	11.1%	CO2Emission	6.22%	Actual	23.26%	Grade	11.84%
Actual	038.8%	Actual	08.17%	Actual	14.11%	Actual	28.48%	Actual	0.81%
Trip: 1001 (user) - 00P - Delivery 13.10.2018-09:00 (W181205) (SL12826) - 1.143									
Distance	01.000h	Angifert	01.560,00h	CO2 Emission	4.060	Time Used	47.24%	Endblock	17.07
Actual	23.8700h	Ranking	08810778	Ranking	0-28	FuelUsed	0-26%	Endblock	6.48
Actual	48.02%	Actual	2.17%	CO2Emission	08.07%	Actual	10.06%	Grade	12.07%



Timeline Other Project Partners



	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
Test	[]								
Feedback Workshop		◇							
Adjustments			[]						
1. Phase – Without/with App				[Basis]	[Change]				
First Results							◇		
2. Phase – Without/with App							[Basis]	[Change]	
Final Results									◇





Preliminary Results February 2017

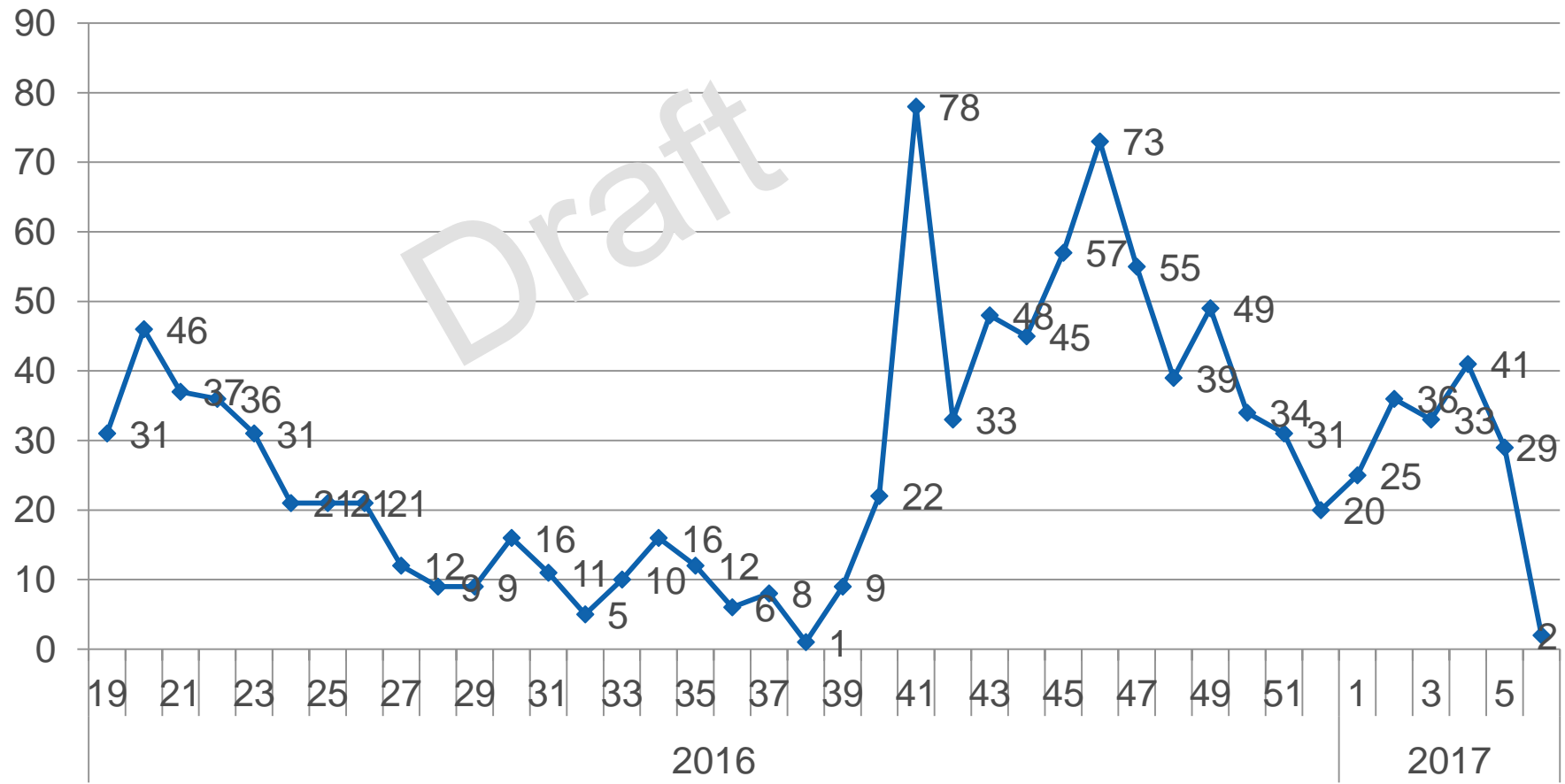
Distance:	129.681 km
Time:	4.135 H 16Min
Fuel Consumption:	28.908 ltr.
Velocity:	Ø 31,36 km/h
Average Consumption:	Ø 0,222916 cl/km Ø 22,3 ltr./100km
CO2:	Ø 0,5938 kg/km Ø 5,9 kg/100 km





Trips: 1118

(Distribution per each week)



Fuel Savings



GNSS calculation, Avg. Fuel liter/100 km

GNSS calculation, Avg. Fuel liter/100 km	
Project phase	
Total	30,567 (31,887)
Before	31,950 (32,632)
After	28,436 (30,737)
Deviation	<u>-10,998</u>

Draft



Outlook



- Final results after Schenker has finished as well
- Workshops with site partners how to reduce traffic jams at high-risk areas





Thank you for your attention!

