

# **CO3**

# Delivering state-of-the-art methodology and tools for transport & logistics

# Transitioning from *laboratory* to the market.....

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# **The Big Picture**

According to recent EU sponsored studies, the total cost of road freight transport inefficiency is enormous: €160 billion in 2010

- 24% of goods vehicles in the EU are running empty\*
  - The average load fill for the remaining vehicles is 57%
  - Overall vehicle efficiency is 43%
  - Flow imbalances can explain only half of this loss
- Emissions from transport, particularly road transport, have been rising faster than the emissions from all other major sectors.
  - Transport accounts for 23% of total emissions in the EU
  - Road transport accountable for 71% of transport emissions.
  - Reducing empty kilometers by just 10% will mean a reduction of emissions of over 2 million tonnes

WWW.CO

t.eu

• When will the EU legislate?

\*World Economic Forum





# Between September 2011-2014, the European Commission actively promotes and supports horizontal collaboration





<u>"Co</u>llaborative <u>Co</u>ncepts for <u>Co</u>-Modality (CO<sup>3</sup>)" is a EU sponsored consortium to create a <u>legal framework</u>, a <u>scientific body of</u> <u>knowledge</u>, an <u>educational package</u> and a number of <u>inspiring test</u> <u>implementations</u> for <u>horizontal collaboration and bundling</u> in transport and logistics. The ultimate goal is to make the <u>European</u> <u>logistics market</u> more <u>competitive</u> and more <u>sustainable</u>.





# **CO3 Consortium**



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# High Level Industry Board (HLIB)

part of the WAL*MART family	CIS	Georgia Pacific	KUEHNE+NAGEL	NIKE	SOLVAY		
	_DHL_	Heinz	Logitech.	NOKIA	STEF-TFE		
BAIN & COMPANY	<b>DB</b> SCHENKER	Heineken	MARLO	PHILIPS	TESCO		
BARRY () CALLEBAUT	<b>ドELEMICA</b>	JAN DE RIJK LOGISTICS	MARS	P&G	Unilever		
BOSCH	ESTĒE LAUDER	Kimberly-Clark	MICHELIN	PTV GROUP the mind of movement	Wincanton		
CAMPARI	Europe Container Terminals	skraft foods	Nestie	Rockwell Automation	🜏 "Wolters Kluwer		

#### HLIB Mission:

- Review and discuss CO<sup>3</sup> milestones and results
- Provide valuable market feedback for development and success of CO<sup>3</sup> project





CO3 methodology: the big picture







- Anti-trust compliant legal framework
- Acceptable gain sharing solutions
- Neutral trustee: facilitating the process
- ICT: Scaling the opportunities
- The logistics laboratory: developing the practical methodology, testing the tools, pulling it all together

And rolling it out to the market.....





# A Case Study – Healthcare & FMCG Baxter and Kimberly-Clark

- Baxter (BXT) has stable daily FTL temperature controled movements from Belgium
- Kimberly-Clark (KC) has daily FTL deliveries from France to 6 destinations in Belgium
- BXT carrier was unable to find return loads and was incuring high empty running
- ELG-Web identified that BXT and KC loads balanced in both directions
- BXT temperature control trucks can be used as "ambient" by KC
- KC's 4PL is managing the trial



The trial has reduced >10% cost and CO2 savings with the potential of 250 round trip FTL's / year in a single lane group!





- CO3 has been developing and testing innovative concepts to organize sustainable freight flow bundling and FTL flow synchronization across multiple supply chains or logistics networks.
- Effective use of specialized information and communications technology (ICT) has been identified as a critical success factor in achieving *repeatable and scalable* success in horizontal collaboration as "line of site" has obvious limitations.
- Analysing freight flows for synergy and bundling potential is a specialized "Big Data" challenge addressed with ICT tools.





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# ICT tools support the methodology



- Create Networks
- Configure Relationships
- Expose-create visibility
- Analyze opportunities
- COLLABORATE-propose/accept
- COLLABORATE-carrier/LSP
- COLLABORATE-legal, service requirements, financial/gain sharing

- Synchronize
- Optimize
- Orchestrate
- Manage exceptions
- Audit-track performance
- Reporting
- Invoicing





### How market sectors benefit



### Shippers

### Logistics Service Providers

### Retailers

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### Value proposition:

# *"smart visibility"* makes supply chain silos obsolete



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### Shippers

### **Optimising networks to leverage procurement benefits**

- Use smart visibility to identify round trips, continuous loops, backhauls, modal shifts and LTL bundling opportunities
- Continuously optimise lanes as networks change
- Collaborate with suppliers targeting backhaul and exworks freight
- Collaborate with trusted partners and grow your own network!







### Reduce costs & emissions.

- Test new client lanes against existing networks to understand the commercial opportunities: identify the "real" potential that adding this customer will bring you both
- Use *smart visibility* to identify backhaul and bundling opportunities across your customer networks. *Connecting these silos* will maximize sustainability and cost benefits.
- Use *smart visibility* to pool your assets with partners to reduce empty running and reduce carbon emissions.

# This could be a competitive game changer







Smart visibility: integrate supplier backhauls and LTL bundling/co-load opportunities to reduce emissions

- Improve the cost efficiency of SME suppliers by making collaborative LTL bundling/co-loading opportunities visible
- Use smart visibility to provide top-down visibility to all inbound and outbound lanes, resulting in new layers of collaboration opportunities.
- Use smart visibility to leverage FTL inbound movements by giving suppliers visibility to synchronization/re-load opportunities, further improving efficiencies.

Leveraging transport network visibility will deliver an disproportionate impact on corporate sustainability objectives





### ■ Proven technology has been deployed: ELG-Web™

#### Configure the network



#### High level lane details captured

### **Smart visibility**

	3-Web	тм											co	
	eoute Workflow	Bundle Workh		Published Routes	Carrier Quote									
All Routes	All Preposed Re	stes Analyzed I	toutes Cervier C	ffers Proposed	E Operational Rev	ates Operate	mal Routes	Revie Trips						
Belect for Analy	-	in Map					۲	Search By Ex	ampte: 🔍					
Lane A Origin	Lane A Destinal 1	6 of Empty Deadly	ed D. Lane A Boulpr	ni Lane B Equipm	Lane B Origin	Lane 8 Destinal	Lane B Dista	Total Distan	Status A	Status B	Route Type	Lane A Origin I	Lane A O	
Kunheim, FR	Brie Comte	16.26	187 RT38	RT38	Gien, FR 45	Duttlenheim	468.00	1150	Accepted	Accepted	8	FR.	Kunheim	
Kusheim, FR	Brie Comte	15.62	174 8738	RT38	Gien, FR 45	Hulbouse, E	465.00	1114	Opportunity	Opportunity	8	FR.	Kunheim	
Kunheim, FR	Brie Comte	17.30	232 RT38	Standart (mini	Saint Etiers	Strasbourg,	628.00	1335	Opportunity	Opportunity		FR.	Kunheim	
Kunheim, FR	Combs La VI	16.80	195 RT38	87.30	Gien, FR 45	Duttlenheim	488.00	1161	Opportunity	Opportunity	R	FIR.	Kunheim	
Kunheim, FR	Combs La VI	16.10	182 RT38	RT30	Gien, FR 45	Hulhouse, F	465.00	1125	Opportunity	Opportunity	8	FR	Kunheim	
Kunheim, FR	Comba La VI	17.40	233 RT38	Standart (mini	Saint Etierm	Straabourg,	628.00	1339	Opportunity	Opportunity	R	FR	Kunheim	
Kunheim, FR	Molasy Cram	16.00	184 RT38	RT30	Gien, FR 45	Duttlenheim	400.00	1144	Opportunity	Opportunity	R	FR	Kunheim	
Kunheim, FR	Molasy Cram	15.43	171 RT38	RT30	Gien, FR 45	Hulhouse, F	465.00	1108	Opportunity	Opportunity	R	FR	Kunheim	
Kunheim, FR	Moissy Cram	18.09	243 RT38	Standart (mini	Saint Etienn		628.00	1343	Opportunity	Opportunity	R	FR	Kunheim	
Kunheim, FR	Amiena, FR	14.70	207 RT38	Standart (mini	Saint Etienn	Straabourg,	628.00	1408	Opportunity	Opportunity	R	FR	Kunheim	
Kunheim, FR	Roye, FR 80	17.29	246 RT38		Saint Etienn	Strasbourg,	628.00	1424	Opportunity	Opportunity	R	FR.	Kunheim	
Kunheim, FR	Marolles-En	16.79	199 RT38	RT38	Gien, FR 45	Duttlenheim	499.00	1105	Opportunity	Opportunity	R	FR.	Kunheim	
Kunheim, FR	Marolles-En	16.19	186 RT38	RT38	Gien, FR 45	Hulbouse, F	465.00	1149	Opportunity	Opportunity	R	FR.	Kunheim	
Kunheim, FR	Marolles-En	17.27	235 RT38		Saint Etiers		628.00	1361	Opportunity	Opportunity		FIR.	Kunheim	
Saint Etiern		19.17	150 Standart (min		Gien, FR 45		327.00		Opportunity	Opportunity	8	FR	Saint Dia	
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	Ingre, FR-45	16.86	102 RT38	RT38	Gien, FR 45	Thuit Hebert	293.00		Opportunity	Opportunity	R	FR	Saint Etie	
	Deuzeville, F	19.17	158 RT38		Saint Etienn		339.00		Opportunity	Opportunity	R	FR	Gies	
	Beuzeville, F	17.97	147 RT38		Saint Etienn		344.00		Opportunity	Opportunity	R	FR	Gien	
	Beuzeville, F	19.01	125 RT38		Saint Etienn		242.00		Opportunity	Opportunity	R	FR	Gies	
Kunheim, FR		17.20	243 RT38		Saint Etienn		629.00		Opportunity	Opportunity	R	FR	Kunheim	
Kunheim, FR	Carpiquet, F	19.34	283 RT38	RT2R	Saint Etierm	Ludres, FR.S	473.00	1543	Opportunity	Opportunity	R	FR	Kunheim	

#### Identifying empty running



Reducing empty running





Proven technology has been deployed: Cross Supply Chain Cockpit™





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- Collaboration doesn't occur in a vacuum or spontaneously-The "Big Bang Theory" doesn't apply.
- Don't assume that the market will take care of itself, the higher the complexity the lower the visibility
- There is a gap in the market-currently, logistics service providers don't have the business models, tools-technology or skill sets to facilitate collaboration.





### The business opportunity

- A new entity, the "neutral trustee," will provide specific value creation across the entire logistics process, changing the way transport is sourced, baking collaboration into the transport procurement process, e.g. *doing it right the first time.*
- Proprietary disruptive technology is ready.
- Value creation and multiple revenue streams are linked to functions across the collaboration life cycle, from matchmaking to facilitation, procurement support and orchestration.
- First mover advantage and scalability are huge.
- The market has signaled its readiness......





## The neutral trustee: A new business for value creation



- IDENTIFICATION — PREPARATION — OPERATION —
- Create Networks
- Configure Relationships
- Expose-create visibility
- Analyze opportunities
- COLLABORATE-propose/accept
- COLLABORATE-carrier/LSP
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COVER Collaboration Concepts for Co-modalits upport the integrated service offering



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# The key players in a potential joint venture

- Giventis International uses business intelligence and sophisticated Web technology to optimise transport networks to reduce emissions and cost, offering an innovative approach for transport purchasing and decision-making. Giventis *ELG-Web*<sup>™</sup> is a cloud based, collaboration platform, focused on multi-scale transport matchmaking and procurement support. It enables users to improve transport efficiency by reducing empty running and increasing asset utilization. <u>www.giventis-elg.com</u>
- TRI-VIZOR is a spin-off company of the University of Antwerp. The company was founded in 2008 with the mission to become "the world's first cross supply chain orchestrator". As a neutral and pro-active enabler of logistics horizontal collaboration, TRI-VIZOR offers real-time solutions and services, including its Cross *Supply Chain Cockpit* to successfully create and manage synchronized logistics



# Thank you QUESTIONS ?

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