

CO3

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

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

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Giventis International BV

ECITL Zaragoza Oct 24, 2014

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
- When will the EU legislate?

*World Economic Forum



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



“Collaborative Concepts for Co-Modality (CO³)” is a EU sponsored consortium to create a legal framework, a scientific body of knowledge, an educational package and a number of inspiring test implementations for horizontal collaboration and bundling in transport and logistics. The ultimate goal is to make the European logistics market more competitive and more sustainable.



NDL



DINALOG
Dutch Institute
for Advanced Logistics



D'AIPOLONIA
engineering consulting company

TRI = VIZOR
THE WORLD'S FIRST CROSS SUPPLY CHAIN ORCHESTRATOR®



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**KNEPPELHOUT
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Business Collaboration. Delivered

P&G



Cranfield
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TU/e

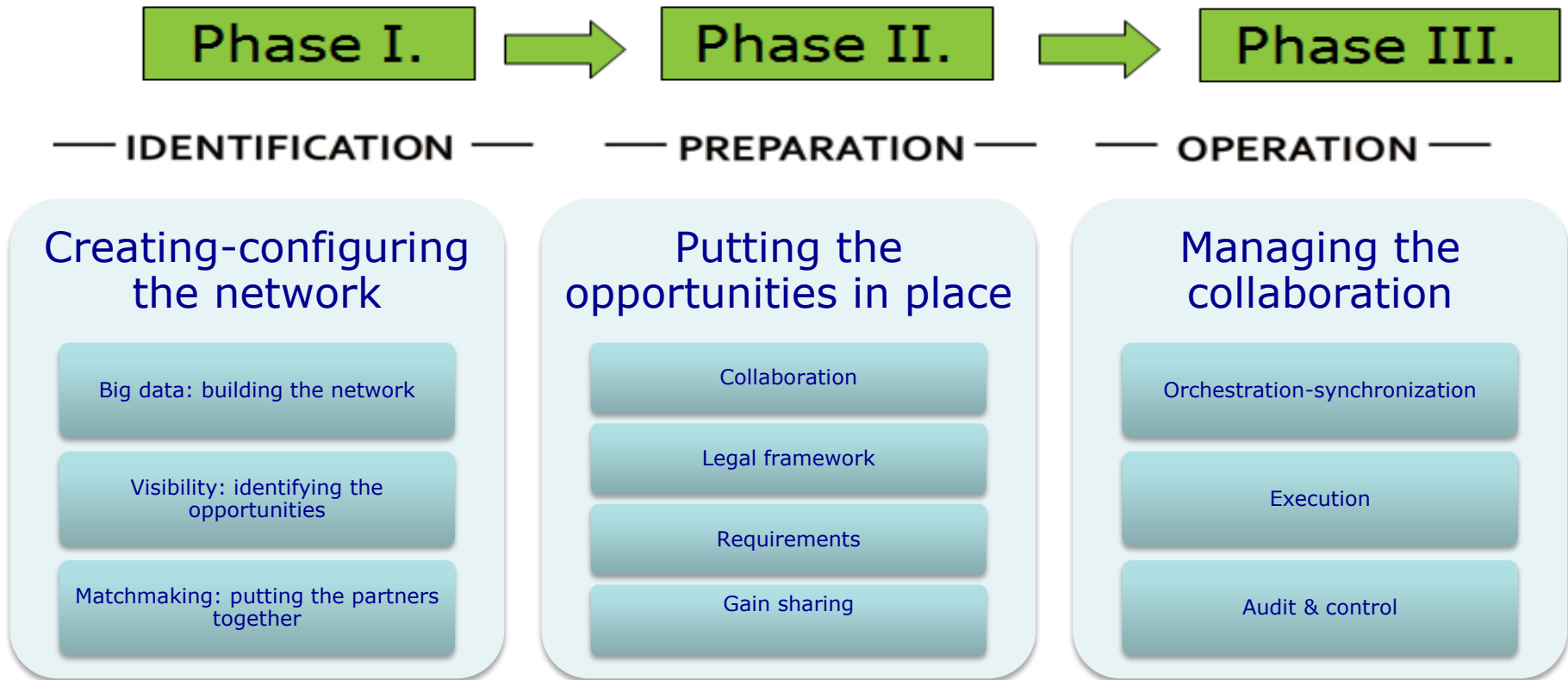
**Giventis
International**



HLIB Mission:

- Review and discuss CO³ milestones and results
- Provide valuable market feedback for development and success of CO³ project

CO3 methodology: the big picture



Overcoming the barriers: putting the pieces in place

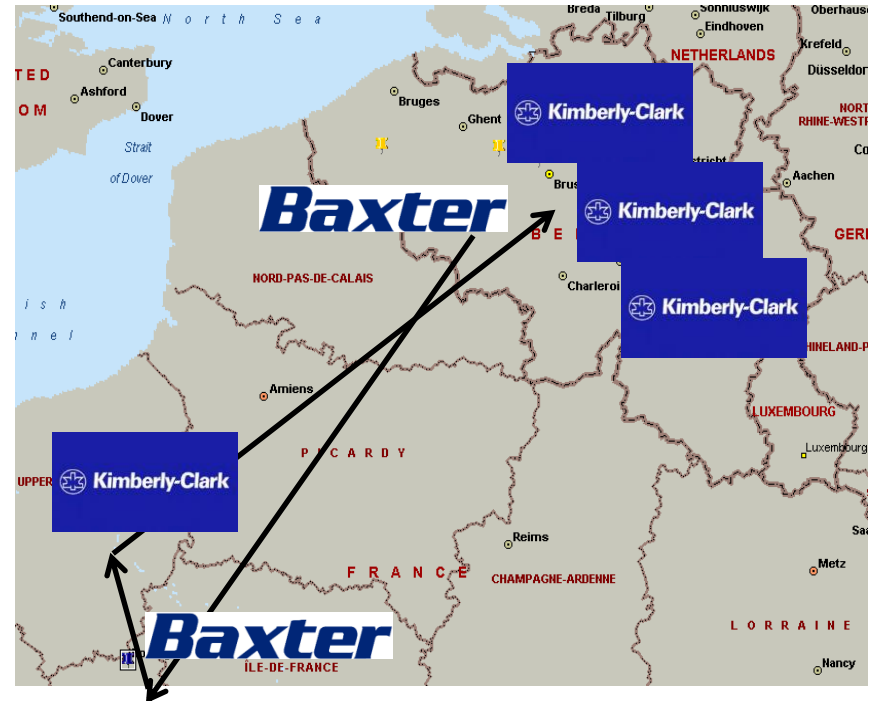
- Anti-trust compliant legal framework
- Acceptable gain sharing solutions
- Neutral trustee: facilitating the process
- ICT: Scaling the opportunities
- The logistics laboratory: developing the practical methodology, testing the tools, pulling it all together

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

A Case Study – Healthcare & FMCG

Baxter and Kimberly-Clark

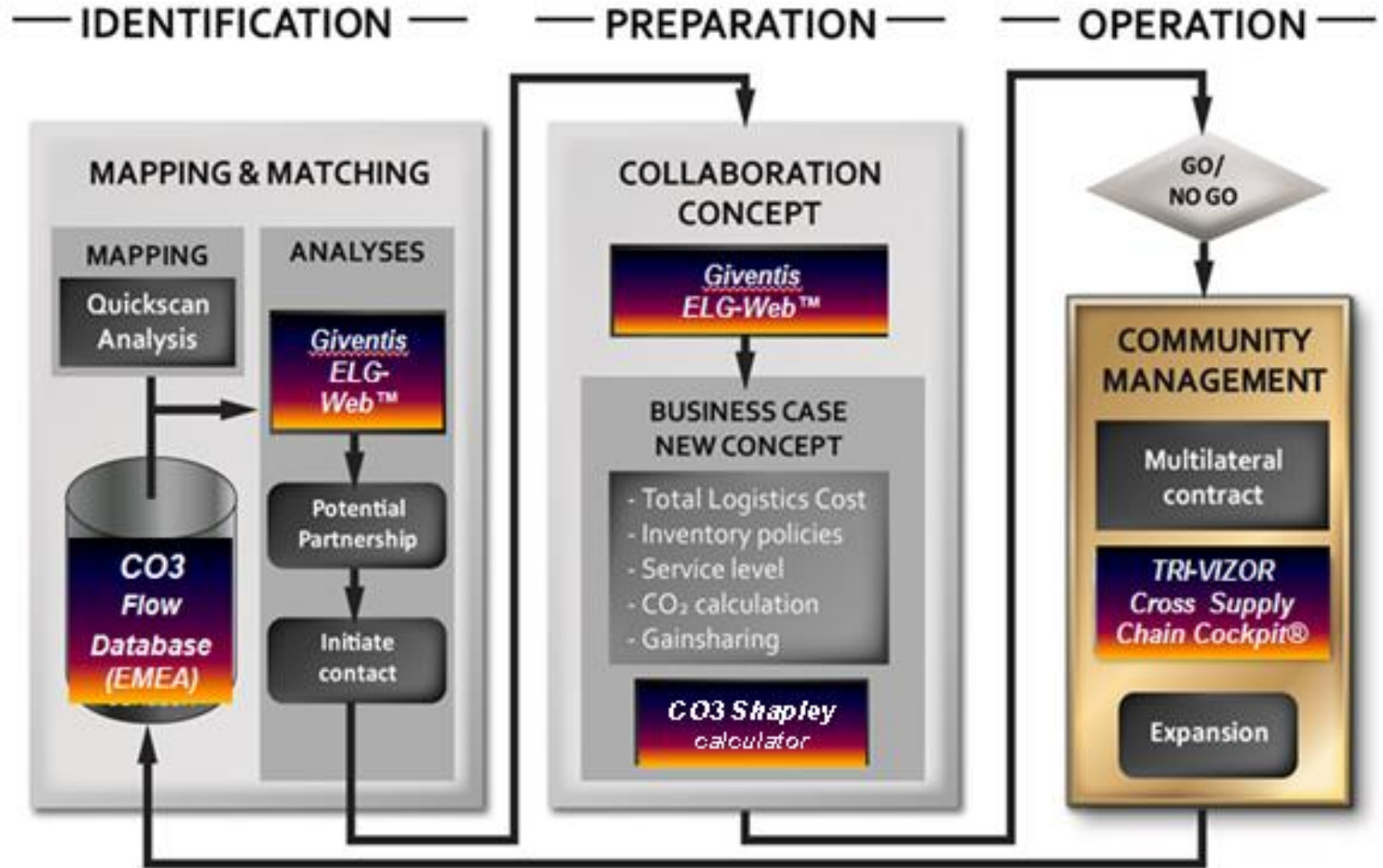
- Baxter (BXT) has stable daily FTL temperature controlled movements from Belgium
- Kimberly-Clark (KC) has daily FTL deliveries from France to 6 destinations in Belgium
- BXT carrier was unable to find return loads and was incurring high empty running
- ELG-Web identified that BXT and KC loads balanced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



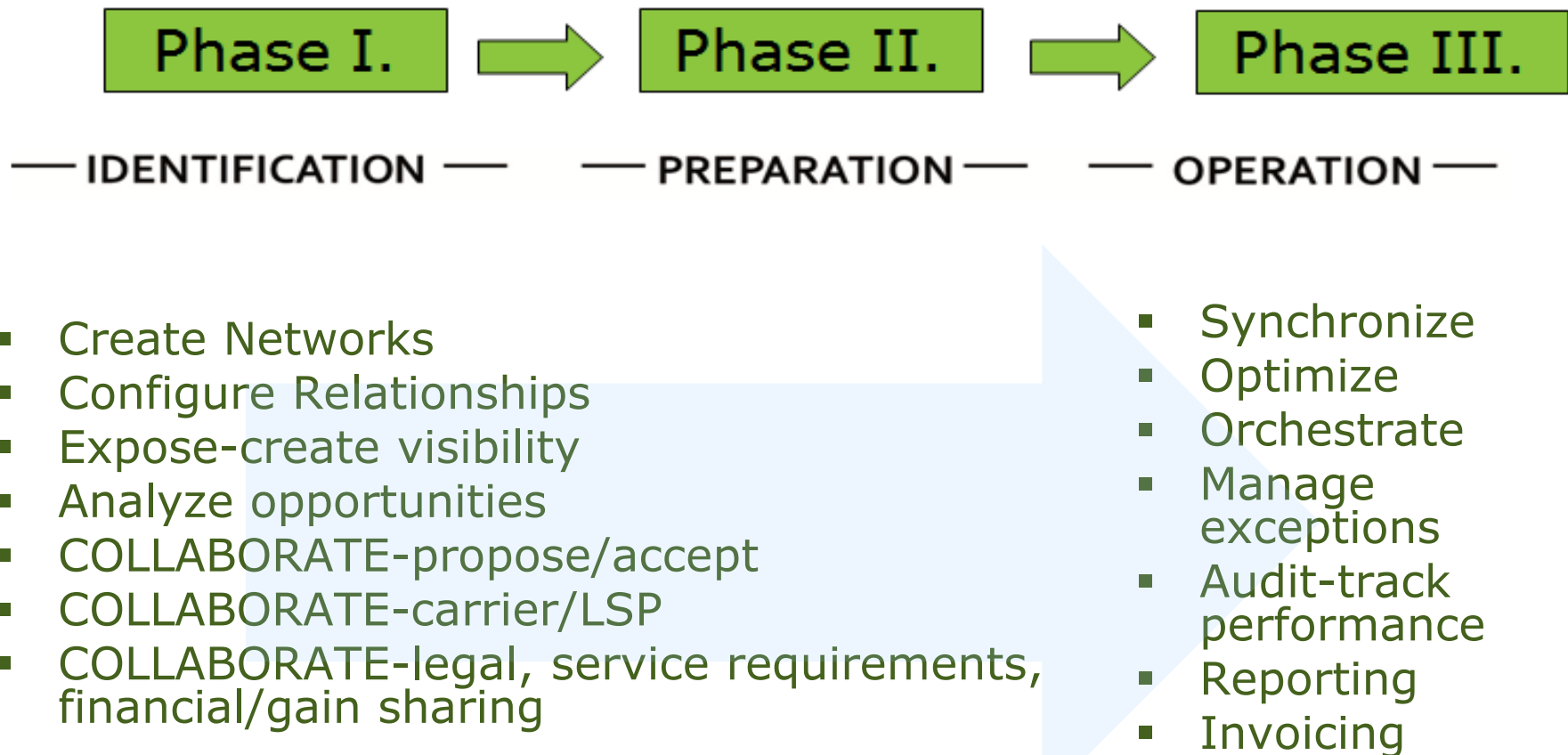
The trial has reduced >10% cost and CO₂ savings with the potential of 250 round trip FTL's / year in a single lane group!

- 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.

CO₃ methodology: the building blocks



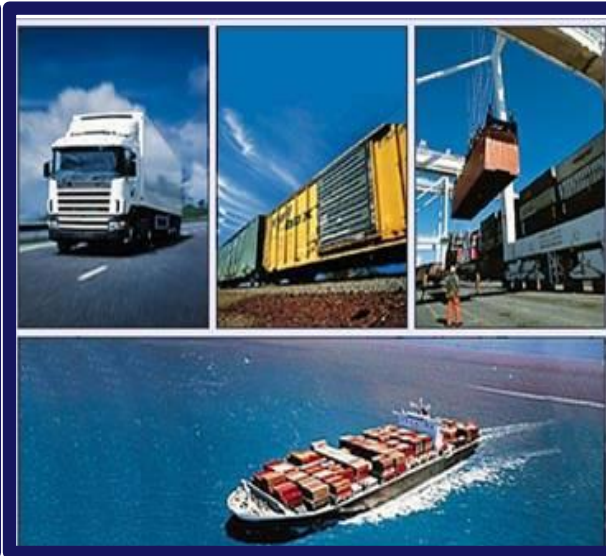
ICT tools support the methodology



How market sectors benefit



Shippers



Logistics Service
Providers



Retailers

***“smart visibility”* makes supply
chain silos obsolete**



Optimising networks to leverage procurement benefits

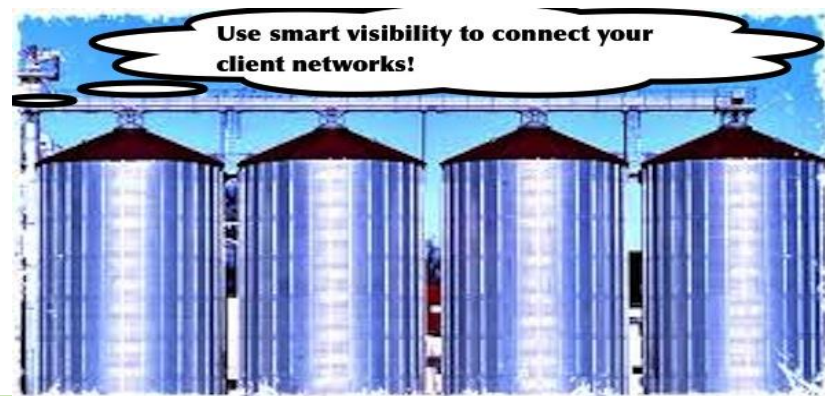
- Use *smart visibility* to identify round trips, continuous loops, backhauls, modal shifts and LTL bundling opportunities
- Continuously optimise lanes as networks change
- Collaborate with suppliers targeting backhaul and ex-works freight
- Collaborate with trusted partners and grow your own network!



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

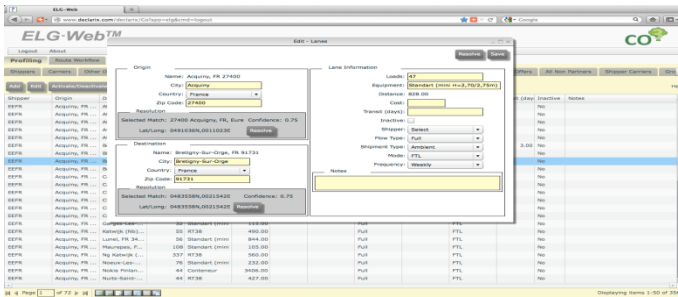


Smart visibility: integrate supplier backhauls and LTL bundling/co-load opportunities to reduce emissions

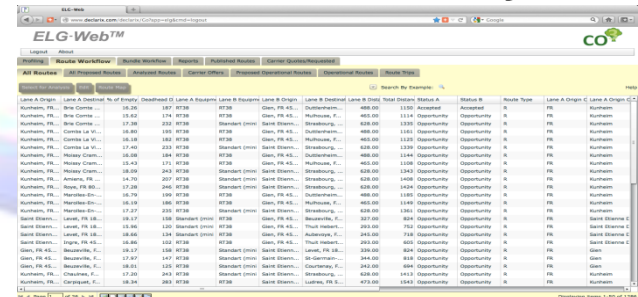
- Improve the cost efficiency of SME suppliers by making collaborative LTL bundling/co-loading opportunities visible
- Use *smart visibility* to provide top-down visibility to all inbound and outbound lanes, resulting in new layers of collaboration opportunities.
- Use *smart visibility* to leverage 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

Configure the network



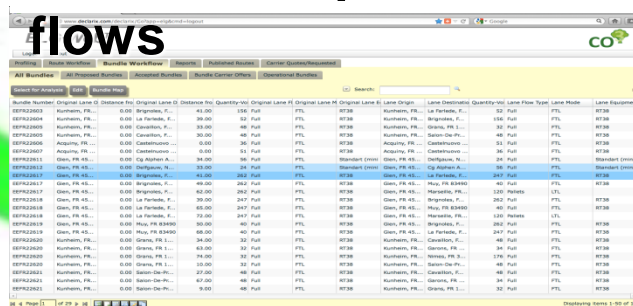
Smart visibility



High level lane details captured

Identifying empty running

Bundle compatible flows

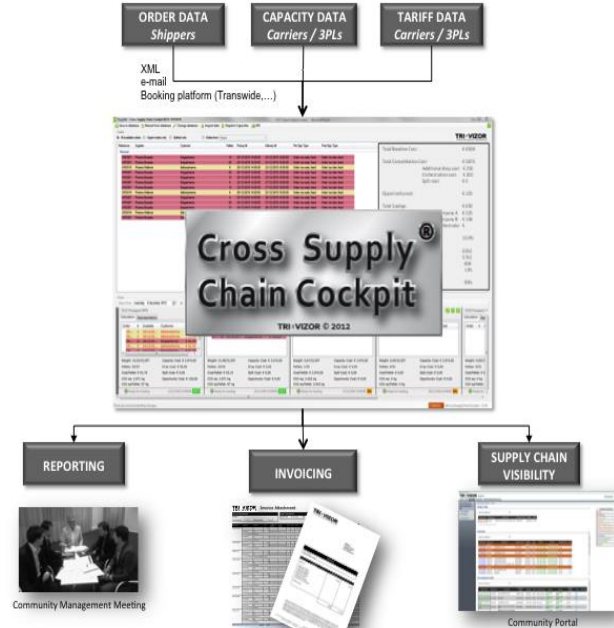
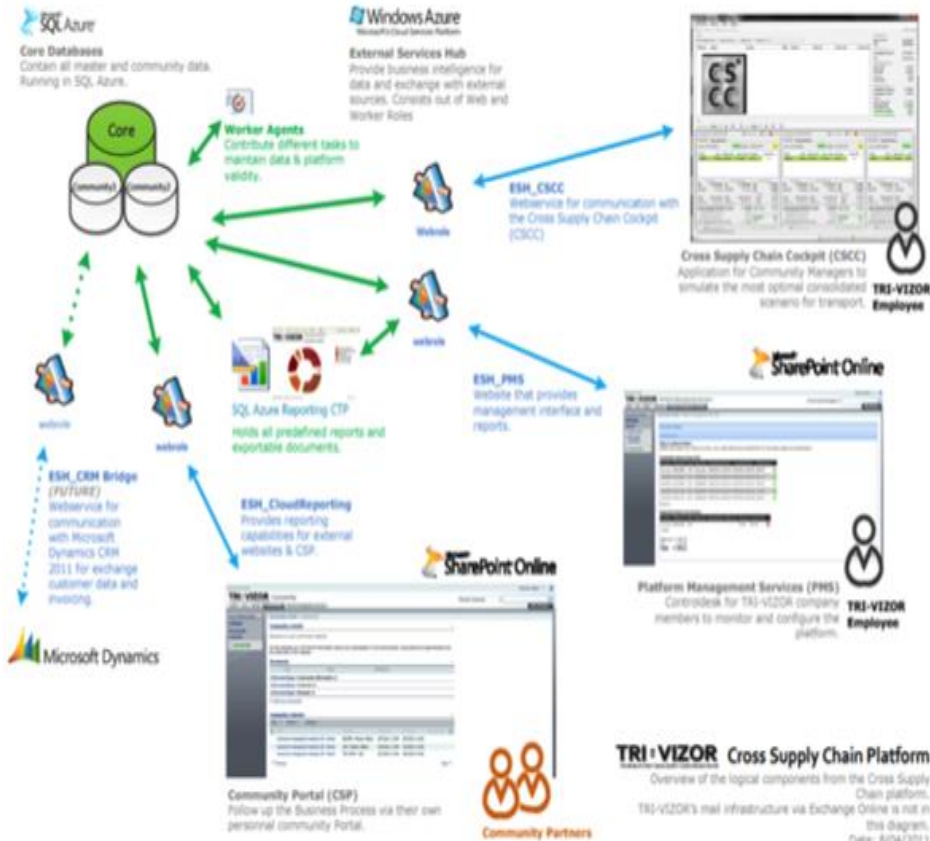


Reducing empty running



Collaboration
Concepts for
Co-modality

Proven technology has been deployed: Cross Supply Chain Cockpit™



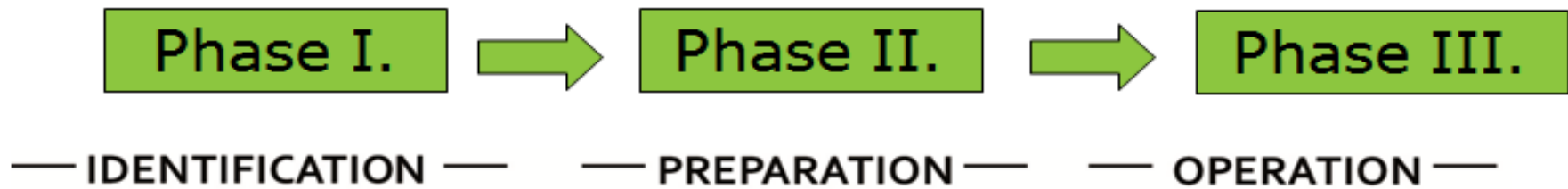
This project is financed by the
European Commission



- 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.

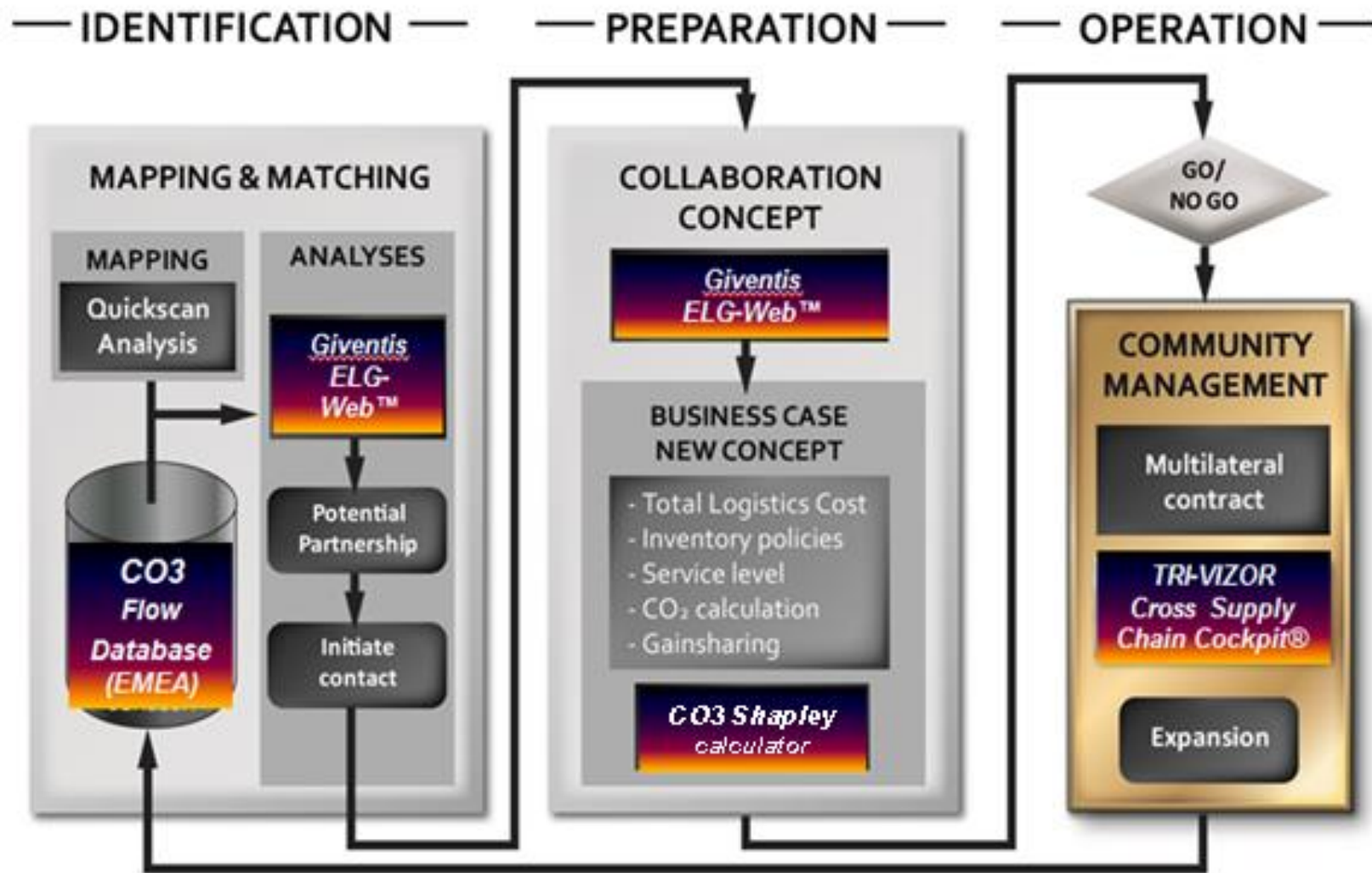
- A new entity, the “neutral trustee,” will provide specific value creation across the entire logistics process, changing the way transport is sourced, baking collaboration into the transport procurement process, e.g. *doing it right the first time*.
- Proprietary disruptive technology is ready.
- Value 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



- 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

support the integrated service offering



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*™ 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. www.giventis-elg.com
- 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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