SYNCHRO-NET

Synchro-modal Supply Chain Eco-Net

**Funding:** European (Horizon 2020)
**Duration:** May 2015 - Oct 2018
**Status:** Complete
**Total project cost:** €7,569,195
**EU contribution:** €7,301,195

**Call for proposal:** H2020-MG-2014_TwoStages
CORDIS RCN : 193399

**Objectives:**

SYNCHRO-NET will demonstrate how a powerful and innovative SYNCHRO-modal supply chain eco-NET can catalyse the uptake of the slow steaming concept and synchro-modality, guaranteeing cost-effective robust solutions that de-stress the supply chain to reduce emissions and costs for logistics operations while simultaneously increasing reliability and service levels for logistics users.

The core of the SYNCHRO-NET solution will be an integrated optimisation and simulation eco-net, incorporating: real-time synchro-modal logistics optimisation (e-Freight-enabled); slow steaming ship simulation & control systems; synchro-modal risk/benefit analysis statistical modelling; dynamic stakeholder impact assessment solution; and a synchro-operability communications and governance architecture.

Perhaps the most important output of SYNCHRO-NET will be the demonstration that slow steaming, coupled with synchro-modal logistics optimisation delivers amazing benefits to all stakeholders in the supply chain: massive reduction in emissions for shipping and land-based transport due to modal shift to greener modes AND optimised planning processes leading to reduced empty kms for trucks and fewer wasted repositioning movements.

This will lead to lower costs for ALL stakeholders – shipping companies and logistics operators will benefit from massive reduction in fuel usage, faster turnaround times in ports & terminals and increased resource utilisation/efficiency. Customers and end users will have greater control of their supply chain, leading to more reliable replenishment activity and therefore reduced safety stocks and expensive warehousing. Authorities and governmental organisations will benefit from a smoother, more controlled flow of goods through busy terminals, and reduction of congestion on major roads, thus maximising the utilisation of current infrastructure and making the resourcing of vital activities such as import/export control, policing and border security less costly.

**Parent Programmes:**
H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport

**Institute type:** Public institution
**Institute name:** European Commission

**Funding type:** Public (EU)

**Lead Organisation:**

| Dhl Exel Supply Chain Spain Sl |
**Address:**
Calle Rumania 1 C.t. Coslada
28821 Madrid
Spain

**EU Contribution:** €951,562

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**Partner Organisations:**

**Centre De Recherche Pour L'architecture Et L'industrie Nautiques**

**Address:**
Rue Senac De Meilhan 52
17000 La Rochelle
France

**EU Contribution:** €247,320

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**Mjc2 Limited**

**Address:**
Wellington Business Park, Dukes Ride
Crowthorne
RG45 6LS
United Kingdom

**Organisation Website:**
http://www.mjc2.com

**EU Contribution:** €803,750

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**Cross-Border Research Association**

**Address:**
Route De La Chocolatiere 26
1026 Echandens
Switzerland

**EU Contribution:** €0

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**Software Ag**

**Address:**
UHLANDSTRASSE 12
64297 DARMSTADT
Germany

**EU Contribution:** €399,125

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**Fraunhofer Gesellschaft Zur Foerderung Der Angewandten Forschung E.v.**

**Address:**
HANSASTRASSE 27C
80686 MUNCHEN
Germany

**Organisation Website:**
http://www.fraunhofer.de

**EU Contribution:** €587,500

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| K67Y 954  
| DUBLIN  
| Ireland  
| **EU Contribution:** €184,946 |

| Address: | China Shipping (Spain) Agency SI  
| Avenida Drassanes Floor 8 6-8  
| 8001 Barcelona  
| Spain  
| **EU Contribution:** €652,554 |

**Technologies:**

- Freight transport technologies
- Collaborative logistics ecosystem

**Development phase:** Research/Invention

**STRIA Roadmaps:** Network and traffic management systems

**Transport mode:** Multimodal transport

**Transport sectors:** Freight transport

**Transport policies:** Other specified

**Geo-spatial type:** Other