

Synchro-NET

Synchro-Net Jornada IAT

Sevilla, 6 Marzo 16

DHL, CSSA



中国海运(西班牙)代理有限公司
CHINA SHIPPING (SPAIN) AGENCY, S.L.

HORIZON 2020



The EU Framework Programme for Research and Innovation

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1. INTRODUCTION

SYNCHRO-NET: Synchro-Modal supply chain eco-net

This project will demonstrate how a powerful and innovative **SYNCHRO-modal supply chain eco-NET** can identify and maximize the opportunities for smart steaming, using synchro-modality to ensure that service levels and economic factors are not compromised

- Duration: 42 months (Nov 2018)
- Funded by the European Commission
- We are the coordinator of 18 partners
- <http://www.synchronet.eu/>
- <https://www.linkedin.com/groups/8478281>
- https://twitter.com/Synchro_Net



CONSORTIUM PARTNERS



SYNCHRO-NET Coordinator:



KONGSBERG



2. OBJECTIVES



Increasing reliability
and service levels for
logistics users

5-10% reduction
inventory levels of
finished goods

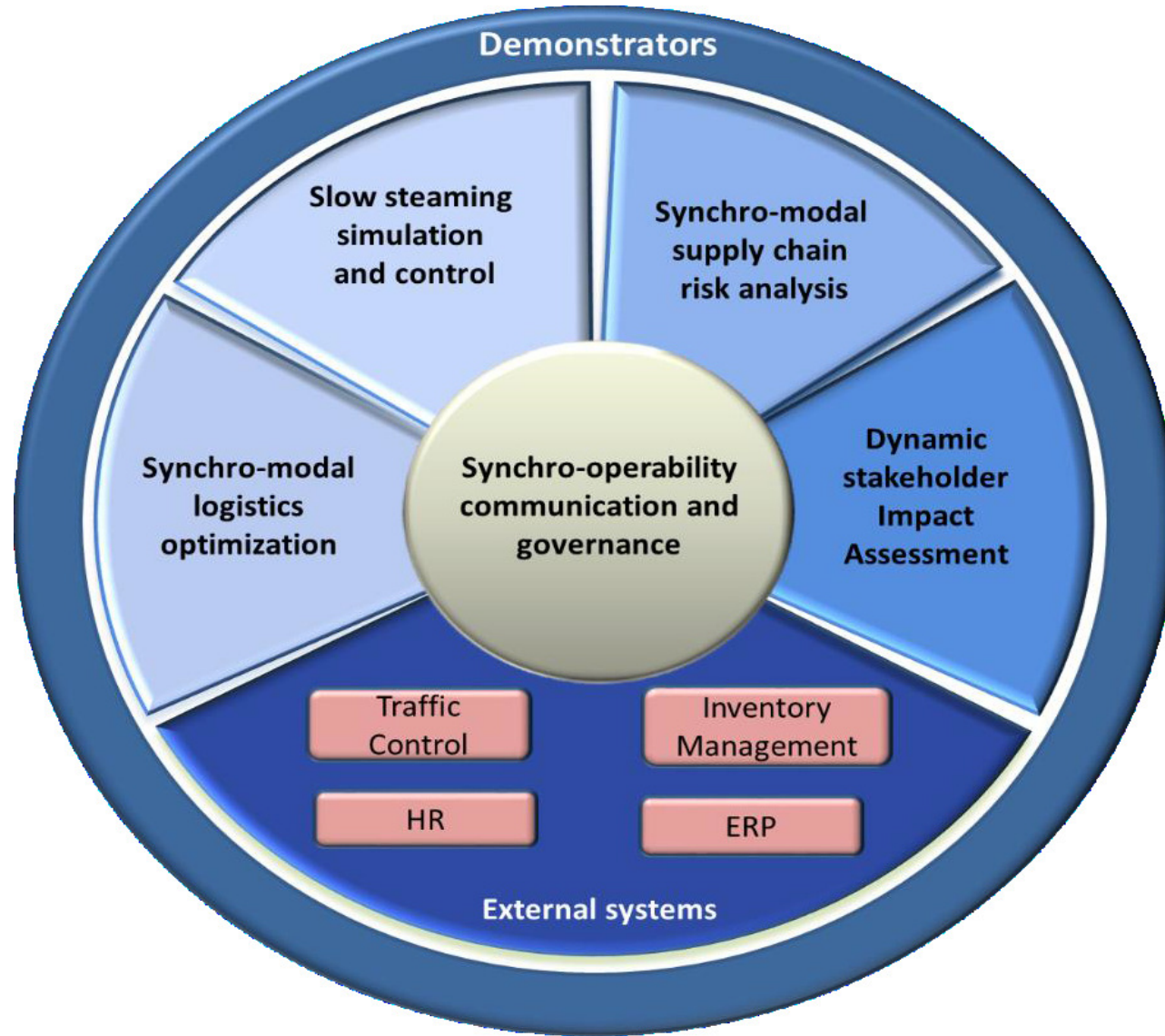
Guarantee cost-effective
robust solutions

12-20% reduction
hinterland transport
costs

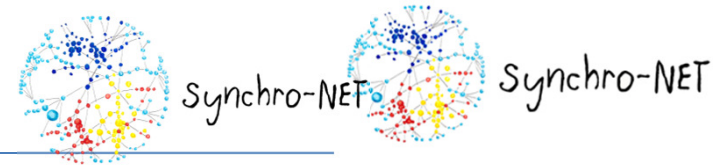
Reduce emissions and
costs of logistics
operations

25-30% increase
modal shift to rail
12-15% reduction in
truck kms

3. ECO-NET PLATFORM



4. DEMOSTRATORS



East-West Trade Lane Demonstrator

LOCATION: involving shipping of goods from the Far East to the ports of Valencia, Algeciras and Barcelona, subsequent movement by rail inland and final short truck movement (when necessary) to position the goods at their final destination or similar routes.

MAIN PARTNER: CSSA **DURATION:** 24 months



Regional Demonstrator

LOCATION: These pilot tests are concerned with validating and showcasing the selected SYNCHRO-NET outputs in Ireland particularly focused on the final European 'leg' into the Port of Cork

MAIN PARTNER: K+N **DURATION:** 24 months



Pan-European Demonstrator

LOCATION: These pilot tests are concerned with validating and showcasing the selected demonstration of SYNCHRO-NET toolsets/services including container movements in major European routes.

Athens (the tests will cover movements between several ports in Europe)

MAIN PARTNER: K+N **DURATION:** 24 months



East-West Demonstrator – Possible Use Case

- End-to-end supply chain:
 - CSSA : Long haul services
 - DHL : Hinterland services
 - e.g. Retailer/manufacturer import operation:
 - Far East -> Valencia or Algeciras
 - Valencia/Algeciras -> CDC warehouse by train or truck depending on urgency
 - CDC -> Retailer/manufacturer Stores
- SYNCHRO-NET models:
 - Strategic
 - Operational/real-time

East-West Demonstrator



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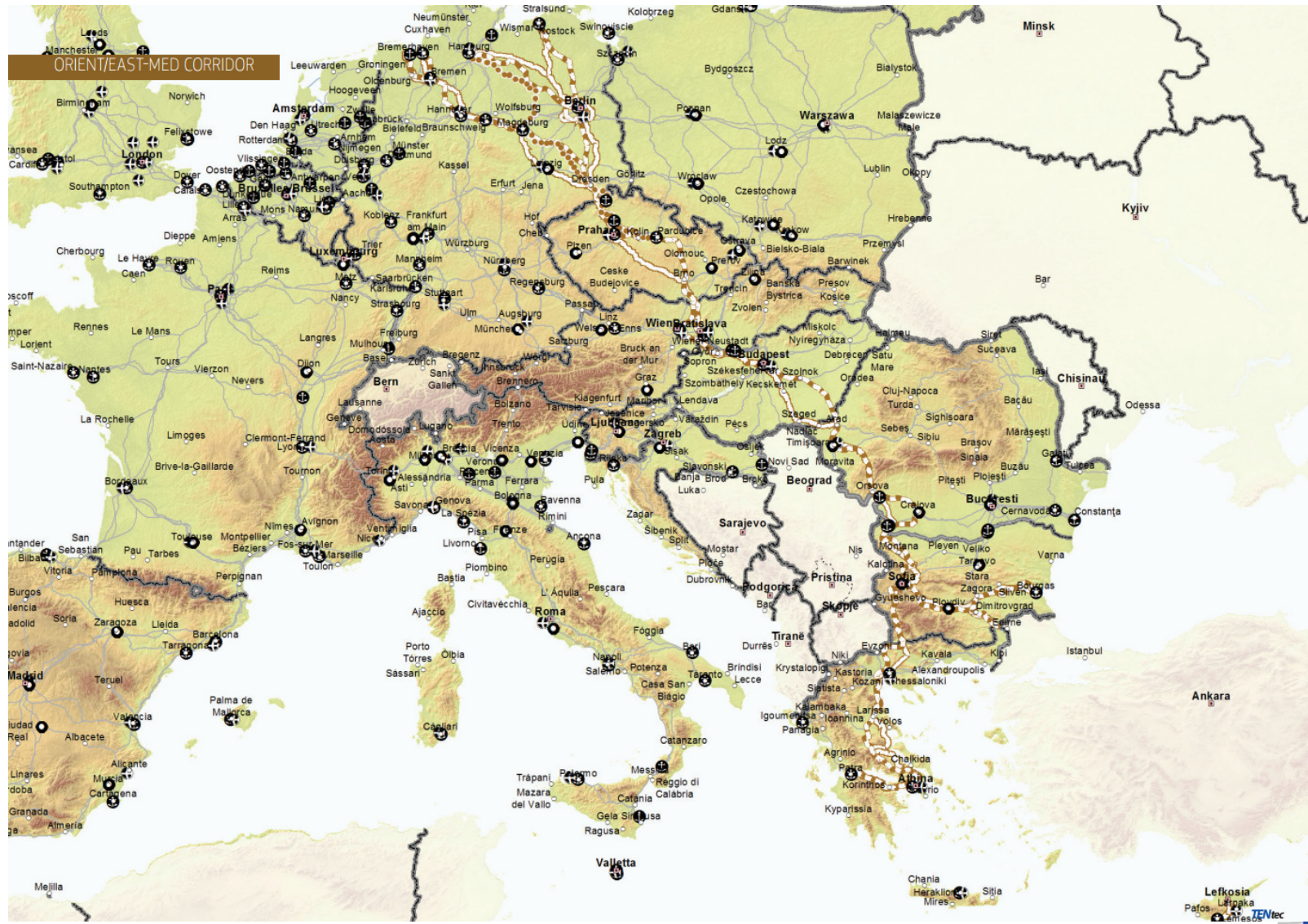


- EMC distribution from Cork (Ireland) to customers in many countries in Europe:
 - Combined truck/ship operations
 - Service level vs cost vs environment
- End-to-end supply chain:
 - EMC Cork Factory => K+N Consolidation Centre
 - Truck/ship from Cork to e.g. Frankfurt Service Centre
 - Frankfurt => EMC customer by truck

Pan-European Demonstrator – Possible Use Case

- K+N Central Europe => Greece
 - Origins Germany & France
 - Truck to rail terminal
 - Rail e.g. Lambach (Austria) => Sindos (Greece)
 - Truck to final customer
- Increased utilisation of rail
- (Utilisation of TEN-T investments e.g. Orient East Med Corridor)

Pan-European Demonstrator – Possible Use Case



- Ability to calculate/offer a range of options for the customer QUICKLY
- Reduce emissions (& costs) - “Smart steaming”
- Reduce missed opportunities to use rail movements caused by supply chain complexity
- Ability to update plan dynamically as the operation changes => SERVICE
- Explore new shipping routes/lanes e.g. across Mediterranean

Business Cases & Demonstrators



China Shipping (Spain) Agency is a global container liner service provider involved in Synchro-Net, **leading WP6 Demonstrator.**

1. Objectives of Demonstrator:

- WP6 is aimed at organizing full scale business case demonstrators based solutions in order to evaluate:
 - Feasibility,
 - Sustainability,
 - Practicability,
 - And benefits of Synchro-Net

2. Procedure:

- Obtaining commercially sensitive international cargo/freight related data
- Handling it, exchanging it, including it into collaborative business models and control-sharing

3. Purpose:

- Enhanced collaboration,
- De-stressing and optimising the relevant supply chains

4. Methodology

- Through the Analysis of 3 business cases. In the case of CSSA and DHL East-West Demonstrator.

Business Cases & Demonstrators: East-West Demonstrator



Transport Management Procedure Import/Export:

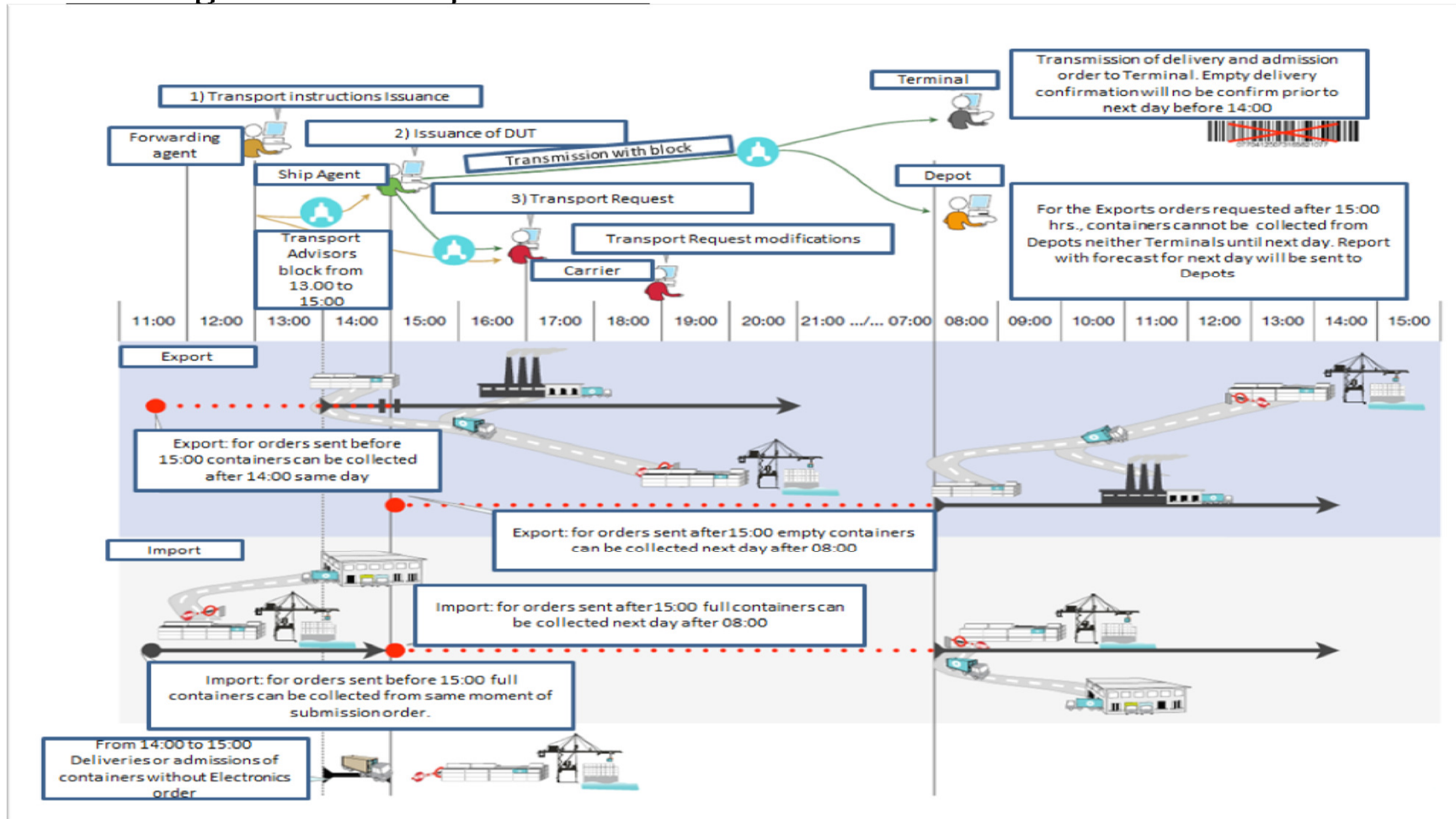
Challenges: General understanding of Import/Export CSSA procedure within the context of Synchro-Net Project.

- Procedure (Import/Export):
 - a) China Shipping (CSSA) receives Transport Request by e-mail.
 - b) CSSA Transport Operator inserts Transport Instructions in valenciaportpcs.net Application (www.valenciaportpcs.net) before 14:00 pm. This procedure is called “Closing Time”.
 - c) Ship Agent receives Transport Instructions and submit the DUT (Customs Declaration)
 - d) Transport Request it is send to Carrier and Full/Empty container can be collected/deliver next day.

Business Cases & Demonstrators: East-West Demonstrator



- “Closing time” Chart procedure:



5. BENEFITS FOR STAKEHOLDERS:

- 20-25% **reduction in fuel costs & emissions** for ships (over and above existing slow steaming savings)
- 25-30% **increase in modal shift to rail**, with resulting 12-15% reduction in truck kms
- 5-10% **reduction in finished goods inventory** holdings for importers and manufacturers
- 12-20% overall **reduction** in hinterland transport **costs**
- Many other quantifiable benefits
- **Increased resilience, security and flexibility** along the entire supply chain
- **Increased safety and quality** of life for employees in the synchro-modal logistics chain
- A profound and lasting **benefit in terms of global supply chain sustainability**

5. STAKEHOLDERS ROUNDTABLE



SYNCHRONET will do the roundtable :

- 3 times during the project
- will assist around 20 people



The member of this group will be invite from all the partners. The topics of this roundtable will be:

- ✓ Challenges
- ✓ Modules or tools are developed
- ✓ Smart/ slow steaming
- ✓ Their needs

5. CONCLUSIONS

SYNCHRO-NET will enable stakeholders in the supply chain to:

- **Influence the development** of tools to meet stakeholder business needs
- **Identify improvement opportunities by quickly analyzing** and calculating the impacts and benefits of slow/smart steaming and synchro-modality on the whole supply chain



- **Easily implement** the preferred slow steaming strategy and corresponding synchro-modal operations to actually achieve the projected benefits
- **Facilitate dissemination** of the SYNCHRO-NET approach and results

THANK YOU VERY MUCH



KUEHNE+NAGEL



SYCO



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EMC²



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HYDROCEAN



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