

# 6th European Conference on ICT for Transport Logistics

ICT for cooperative supply chain visibility within a port  
centric intermodal setting: The case of the Thessaloniki port-  
rail-dryport integration

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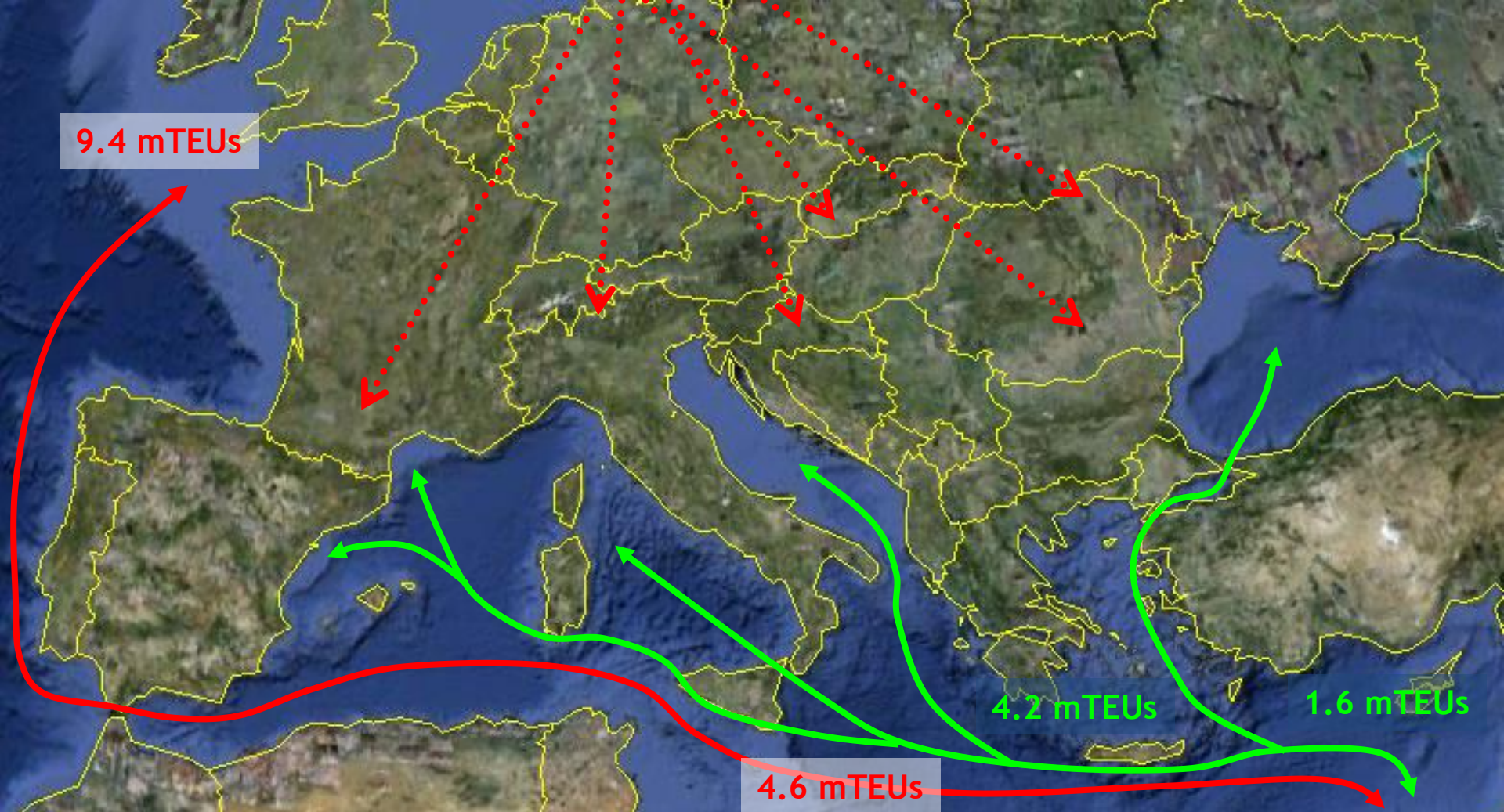
23 October 2013



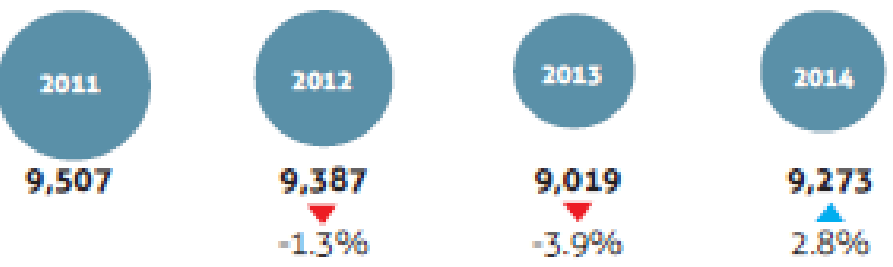
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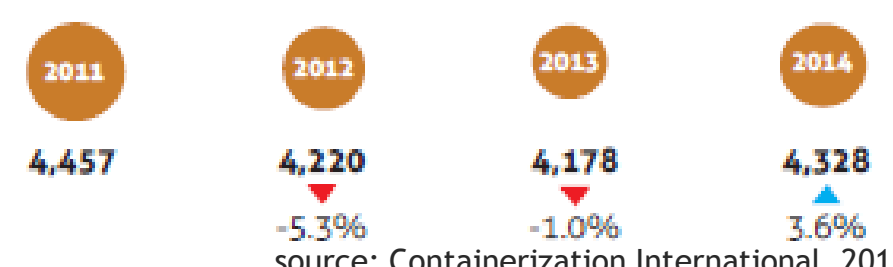




**Asia to North Europe ('000 teu)**  
Asia Includes northeast and southeast Asia



**Asia to Mediterranean ('000 teu)**  
Asia Includes northeast and southeast Asia



source: Containerization International, 2013

# Logistics Performance gaps ....

Country	LPI Rank	LPI Score	Customs	Infrastructure	International shipments	Logistics competence	Tracking & tracing	Timeliness
Singapore	1	4.13	4.10	4.15	3.99	4.07	4.07	4.39
Hong Kong, China	2	4.12	3.97	4.12	4.18	4.08	4.09	4.28
Finland	3	4.05	3.98	4.12	3.85	4.14	4.14	4.10
Germany	4	4.03	3.87	4.26	3.67	4.09	4.05	4.32
Netherlands	5	4.02	3.85	4.15	3.86	4.05	4.12	4.15
Denmark	6	4.02	3.93	4.07	3.70	4.14	4.10	4.21
Belgium	7	3.98	3.85	4.12	3.73	3.98	4.05	4.20
Japan	8	3.93	3.72	4.11	3.61	3.97	4.03	4.21
United States	9	3.93	3.67	4.14	3.56	3.96	4.11	4.21
United Kingdom	10	3.90	3.73	3.95	3.63	3.93	4.00	4.19
France	12	3.85	3.64	3.96	3.73	3.82	3.97	4.02
Spain	20	3.70	3.40	3.74	3.68	3.69	3.67	4.02
Italy	24	3.67	3.34	3.74	3.53	3.65	3.73	4.05
Slovenia	34	3.29	3.05	3.24	3.34	3.25	3.20	3.60
Cyprus	35	3.24	3.02	3.17	3.21	3.17	3.36	3.54
Greece	69	2.83	2.38	2.88	2.69	2.76	2.98	3.32

International LPI Global Ranking 2012 \*

(World Bank Logistics Performance Index, [ipisurvey.worldbank.org](http://ipisurvey.worldbank.org))



# The Thessaloniki Pilot: Current situation & ICT challenges



## Current ICT

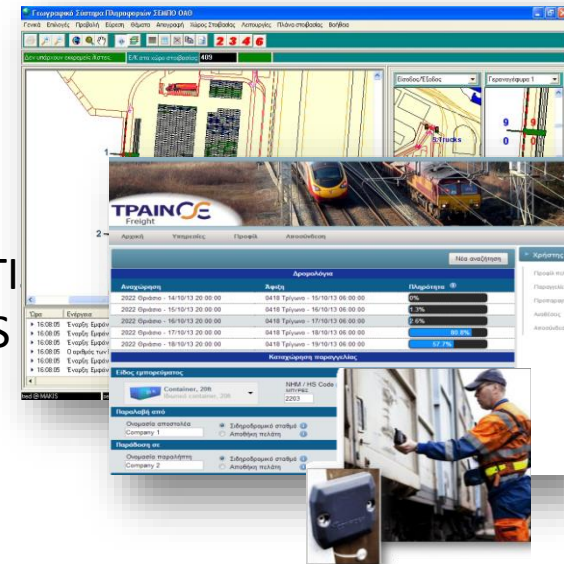
- Container Terminal MIS (FRETI)
- TRAINOSE Container D2D MIS
- RFID wagon tracking system

## Missing links - criticalities

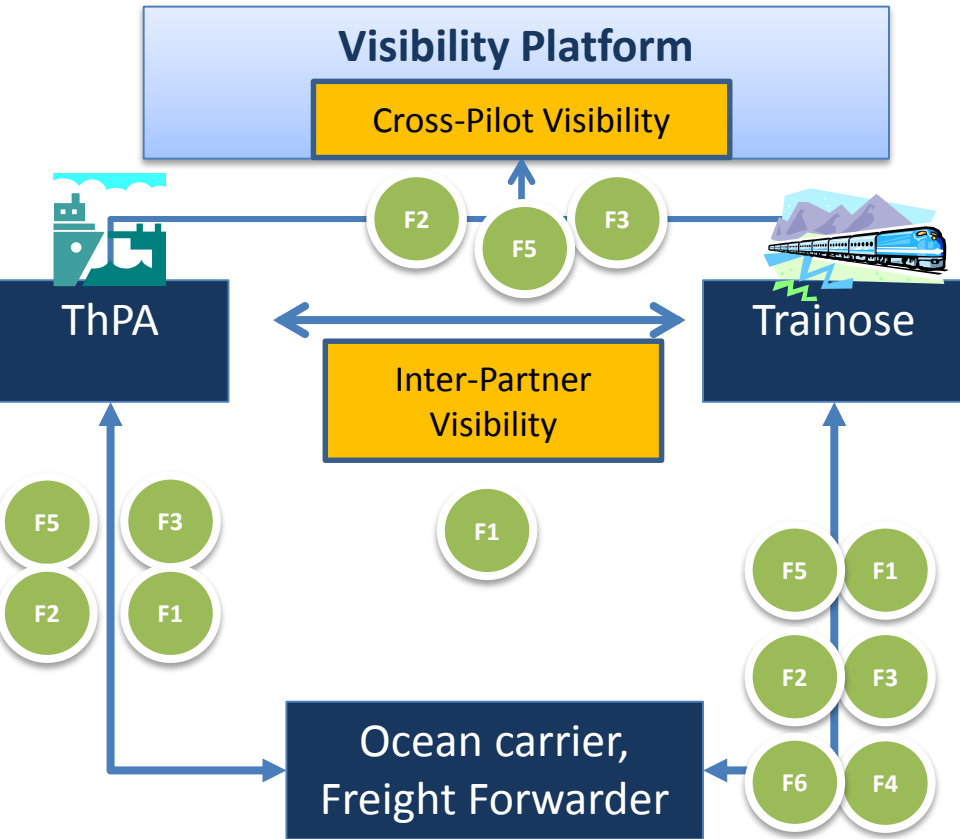
- Limited visibility (Container)
- Non existing visibility (bulk)
- Non existing Rail availability inquiring /booking system
- NO systems integration (one stop shop solution)

## ICT challenge

- Port-Rail- Dryport Visibility Platform
- Improved SC interoperability
- Rail capacity booking mechanism



# ICT for cooperative SC visibility- The FUTUREMED solution



## **F1: Cargo handling orders/instructions**

Booking, Loading Plan, Storage location  
Confirmation on wagon loading/unloading start/end

## **F2: Transport means status (availability, ETA etc.)**

Ship Arrival Notification (bulk)  
Rail Arrival Notification  
Wagon availability control  
Wagon/ capacity Reservation/ booking (full wagon or a capacity based reservation)

## **F3: Cargo status**

Wagon Loading/ unloading  
Entry/ exit to port  
Cross Border Terminals  
Cargo monitoring, status report ('damage' report)  
Cargo/wagon arrival/ departure confirmation  
ET of wagon/ cargo arrival

## **F4: Pricing/Invoicing**

## **F5: Handling operations (internal)**

Internal movements , Container handling in yard (optimised according to train pre-arrival)

# Conclusions

- ❑ A trade supply chain is only as strong as its weakest link
- ❑ Port – Rail integration for competitive Mediterranean Port - centric Supply Chains
- ❑ Focus on soft, value adding Solutions
- ❑ Cooperative ICT solutions can decrease the perceived complexity for intermodal transport and subsequently its sub-exploitation
- ❑ The pilot challenge:
  - ✓ to integrate the currently fragmented visibility along the port-rail-dryport
  - ✓ to provide value in a real business setting by integrating and extending existing ICT systems through standardised information exchange mechanisms
  - ✓ to identify transferable solutions (eg rail capacity booking mechanism, optimal container yard management for rail operations) suitable for similar MED port environments



# Thank you



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