

VECTOR

PORT AND TRANSPORT SOLUTIONS

**Marine
Terminals**



**Intermodal
Transport**



**Inland
Terminals**



**Bulk
Handling**



**Car
Handling**



**Health, Safety
& Environment**



Logistics



**Barge
Terminals**





Operating since 2003 **Vector Port and Transport Solutions (Vector PTS)** is offering a full range of consulting services to the **insurance and port and transport industry**.

It has gathered an extensive portfolio covering the commercial and technical management of **marine terminals** and **intermodal** facilities for **automotive, container, dry bulk, general cargo** and **heavy lift and steel handling**.

Our consultants have participated in a wide range of international projects in **Europe, Middle East, Africa, the Americas** and **Asia**, embracing all aspects of port and transport work, both as the prime consultant and in a supporting role to other specialists, including the **arbitration** and **insurance** sectors.

Vector PTS has helped **to plan, redesign and streamline** operations, providing safe, cost-effective facilities and management systems.

Vector PTS brings a **high level of expertise in management consulting** to both re-engineering and start-up projects:

- **Terminal efficiency projects** for conventional operations and semi automated operations.
- **Planning and supervision** of **handling equipment** design and development for container, ro-ro and automotive and intermodal facilities.

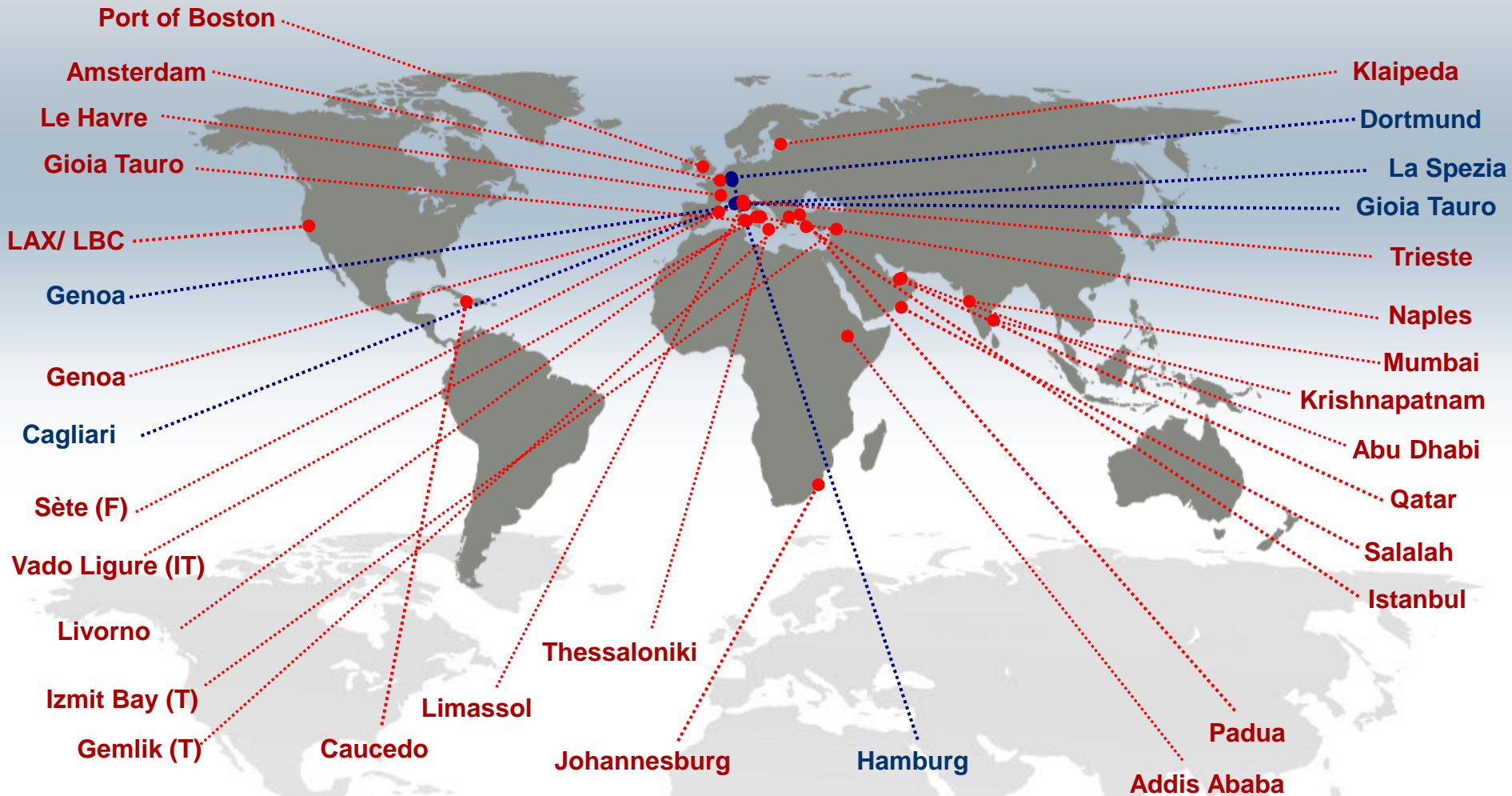
Services offered include **master plans** and **market studies** plus...

- Port and transport **management consulting**, including design, capacity assessment, maximisation and start-up management, business process mapping, organisation, IT and due diligence audits
- **Implementation** and **assessment** of Terminal Operating Systems (change management)
- **Expert support** for shareholder agreements and JV negotiations, international arbitration (ports and terminals) plus insurance claims and dispute cases
- **Project and tender management...** plus others
- Expert support for **business interruption mitigation** (ports and terminals) plus **JV negotiations** and **shareholder agreements**.

Areas of Activities



Management roles
Consultancy services





Management expertise gained globally



Voltri Container Terminal Europe, Genoa, Italy



**Marine Terminal
Gateway
930 K Volume
RTG/ Reach Stacker**

Request: Operational, technical & engineering reorganisation

- Result:**
- Crane and shift productivity increase > 35%
 - Equipment productivity increase > 11%
 - Contract labour cost reduction > 10%
 - Cost reduction – running repair maintenance > 10%

Eurogate Technical Services

Europe, Hamburg, Bremerhaven, Wilhelmshaven



**Marine Terminals
Gateway
7.8 M TEU Volume
Straddle Carrier/ RMG**

Task: Technical & engineering services for group container terminals

- Facts:**
- 670 employees
 - 75 STS cranes & 400 straddle carriers
 - 16 RMG cranes
 - Turnover: @130 Mio Euro

Somarsid, Sosersid, ArcelorMittal Med France Europe, Fos sur Mer, France



**Ore, steel, project cargo
Gateway**

Task: Operational management dry bulk, steel, and heavy lift cargo terminals

- Facts:**
- 3 terminals 11 Mio tons/ year and 750 calls/ year
 - Iron ore, steel products and heavy lift/ project cargo

Medcenter Container Terminal Europe, Gioia Tauro, Italy



**Marine Terminal
Transshipment
2.3 M TEU Volume
Straddle Carrier Operation**

Request: Reorganisation of operations

- Result:**
- Implementation of world class standard
 - Crane and shift productivity increase > 13%
 - Terminal expansion and investment planning
 - Organisation enhancement from 600 K to 2.3 M TEU
 - Definition of an outstanding IT terminal monitoring system

Container Terminal Dortmund Europe, Dortmund, Germany



**Inland Terminal
Seaport Link
50 K TEU Volume
Rail Mounted Stacking Cranes**

Request: Company reorganisation

- Result:**
- Revenue increase > 2.5 times
 - Improvement of service quality
 - Implementation of rail shuttle service
 - Implementation of maintenance system



CONSULTANCY:

- ✓ ***Business Process Mapping***
- ✓ ***Design, Equipment and Capacity planning***
- ✓ ***Health checks & Technical Due Diligence***
- ✓ ***Tender processes & Technical specifications***
- ✓ ***Health, Safety Environment***
- ✓ ***Training***
- ✓ ***Legal and insurance work***
- ✓ ***Market studies***



Business Process Mapping



APM Terminals

Vado Ligure, Italy



**Marine Terminal Project
Gateway / Transhipment
750 K TEU Capacity
Semi-automated Operation**

Business Process Mapping for a semi- automated terminal

- Assessment of the existing map
- Contribution focused on specific regional industry insight

City Deep Rail Terminal Johannesburg, South Africa



**Inland Rail Terminal
400K TEU Capacity
Reach Stacker Operation**

Business process mapping

- Preparation for implementation of a new TOS (terminal operating system)
- Guidance on the TOS transition
- Description of required business and organisational changes
- 'Best Practice' business processes



Design, equipment and capacity planning



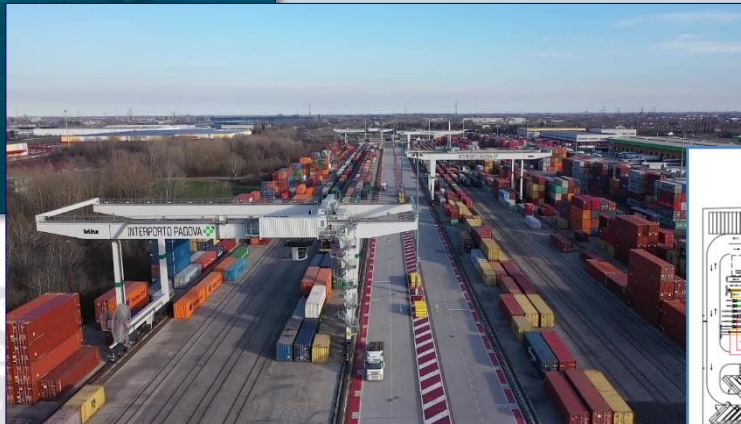


Evyapport Turkey

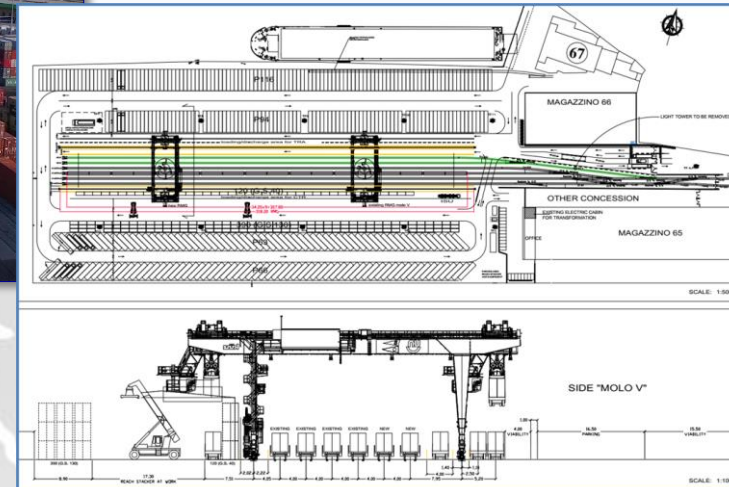


Container, RoRo and Intermodal facilities

Interporto Pado Italy



Samer Seaports & Terminals Italy



Kumport Turkey



**Marine Terminal Project
Gateway
1.5 M TEU Capacity
Reach Stacker/ RTG Operation**

Design, equipment & capacity planning

- Assessment of terminal capacity and machinery park (technical due diligence)
- Equipment specification & tender support



Health checks & Technical Due Diligence



Cyprus Port Authority Limassol, Cyprus



Multi-purpose terminal
- RoRo
- Passenger terminal
- Car handling

Buyers Due Diligence

- Privatisation of the Multi Purpose Terminal in Limassol
 - General cargo
 - RoRo
 - Car handling

Thessaloniki Port Authority Greece



Port Operation
- RoRo & Container
- General cargo
- Passenger terminal
- Agri & Mineral bulk

Buyers Due Diligence

- Privatisation of the port of Thessaloniki
 - General cargo & Container
 - RoRo & Steel products
 - Agri bulk & mineral bulk
 - Passenger and ferry terminal
 - Capex & Opex assessment
 - Capex & Opex modelling

Borusan Port Gemlik, Turkey



Marine Terminal Project
Multipurpose
Container/ steel/ ro-ro

Health check

- Organisation analysis
- Organisation proposal for operations
- KPIs

Port of Boston

Europe, UK



River port
General cargo
> 3 M tons volume

Assistance to UK Government Agency

- Handling equipment choices
- Capex & Opex assessment
- Procurement support (handling equipment, workboats)



Tender processes and Technical specifications



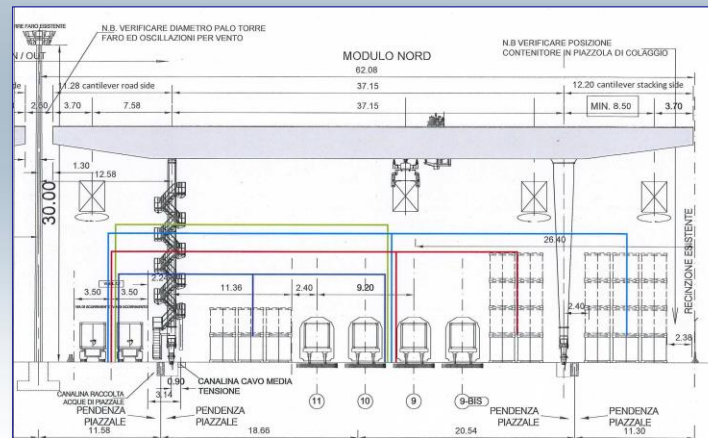
Tender processes & Technical specifications



Klaipedos Smelte Klaipeda, Lithuania



Interporto Padova Padua, Italy



Kumport Istanbul, Turkey



**Ship to Shore gantry cranes & Mobile Harbour cranes
RTGs and wheeled yard handling equipment
RMGs and Intermodal cranes**



Health, Safety & Environment Training



Port of Nouakchott (PANPA)

Africa, Nouakchott, Mauritania



SAFETY AND EFFICIENCY IN PORT OPERATION



Vector Port and Transport Solutions Ltd assists L'Institut de formation - Port of Marseilles Fos, France, Chamber of Commerce & Industry Aix Marseille Provence and Chamber of Commerce Agriculture & Industry Mauritania with Port of Nouakchott PANPA holding a course focussing on port organisation, work and health safety, environment.

The course is held in the Port of Nouakchott, Mauritania and part of the European Archipelago and Sequa GmbH project dealing with the professional formation of PANPA port workers.



ARCHIPELAGO

une initiative africaine et européenne
pour la formation professionnelle

L'institut
by Marseilles Fos



www.vectorpts.co.uk



Conventional cargo
Container
Dry bulk
Liquid bulk
3.5 M tons Volume

Training courses focussing on

- Port organisation and Work Health, Safety & Environment

Société Djiboutienne de Gestion du Terminal Vraquier, Djibouti



**Dry Bulk Marine Terminal
Grain & Fertilizer
2 M tons Volume**

Review of HSE procedures (Personnel and Equipment Flow)

- Review of existing procedures
- Recommendations to the **Safety Initiative Improvement plan**



Legal and insurance work





Support in negotiations of shareholder agreements and joint ventures.

We have provided sound, confidential advice to several clients amongst them

- **COSCO, Italy**
- **APM Terminals** and
- **Turkish clients**



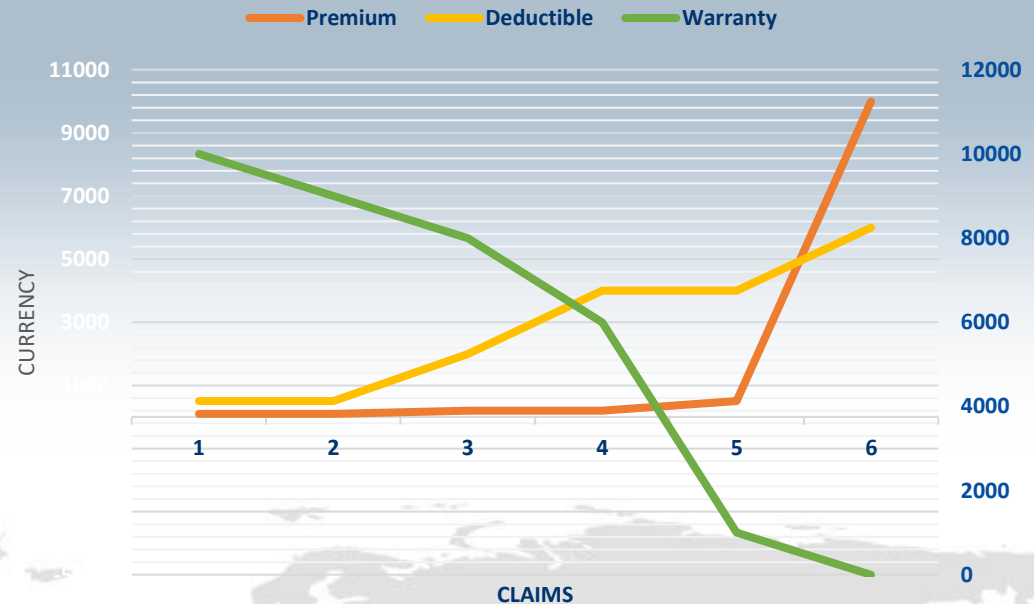


Support in reorganization and claims reduction

A negative claims trend triggers:

- Higher premium
- Higher deductibles
- Loss of warranties
- Loss of cover
- No insurance no business

Avoid the avoidable

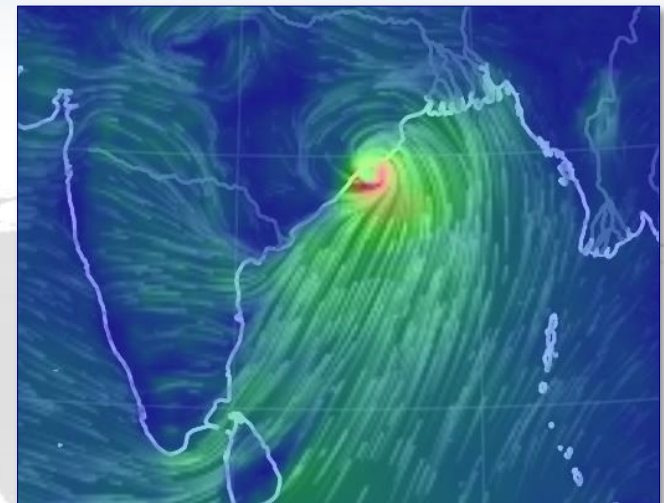


Disputes, claims and mitigation

With our operational and technical expertise in ports and terminals operation we assist in

- **Business Interruption mitigation**
- **Technical claims assessment**
- **Experts Witness and Expert Opinion**

English law firms *Hill Dickinson*, *Holman Fenwick Willan*, *Mills & Co* and *Reynolds Porter Chamberlain* and insurers as *Gard*, *Maersk Line*, *The London P&I Club*, and *RSA*, are our clients.

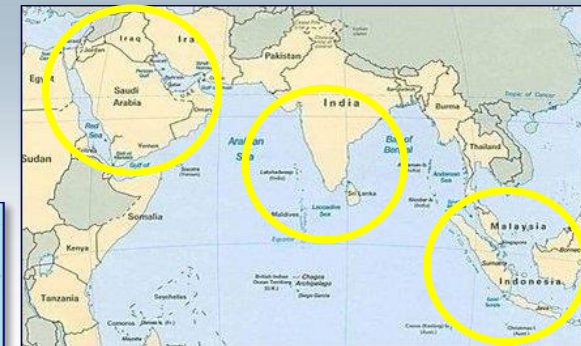




Mitigation of Business Interruption claims

Central & South America

- Allison Ship to Shore cranes
- Port organisation
- Impact on operation
- Loss of revenue/ profit
- Evaluation of applied procedures
- Levels of structure utilization



MEA India Asia

- Allison Ship to Shore cranes Cyclone landfall
- Impact on operation
- Loss of revenue/ profit
- Evaluation of applied procedures
- Peer reviews

Europe

- Allison Ship to Shore cranes
- Impact on operation
- Merits of various repair locations





MARKET STUDIES

Forecasting and predictions

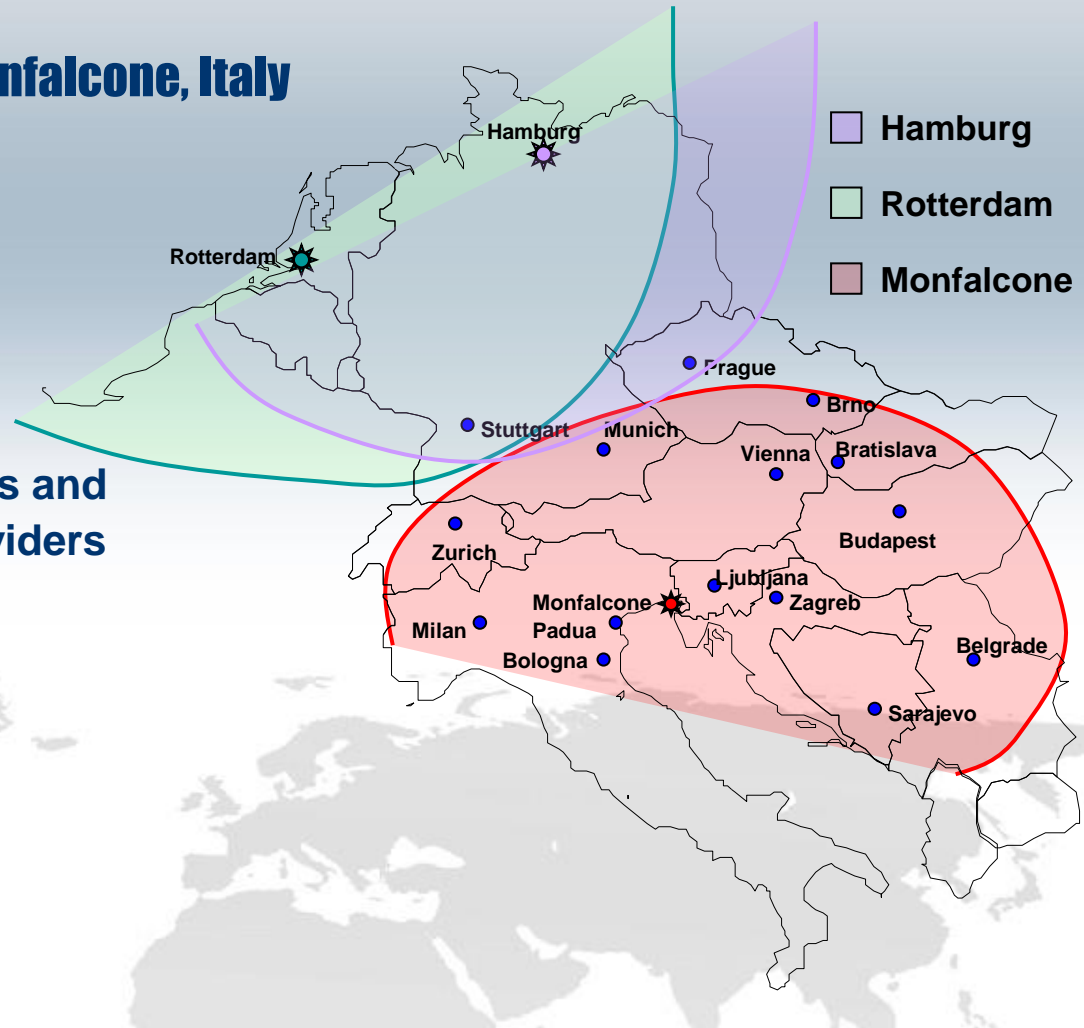




Container Terminal Project Monfalcone, Italy

Automated yard operation
Market study for a 3.4m TEU
container terminal project

Assessment of catchment areas and
competing ports and logic providers





Turkish ports grow on amid competition from Black Sea ports?

Black Sea

11.2 M TEU / 14,000 TEU

Main **Black Sea** ports address
14,000 TEU vessels.

Odessa Illichivsk Taman

Marmara Sea

Next capacity
13.6 M TEU / 16,000 TEU

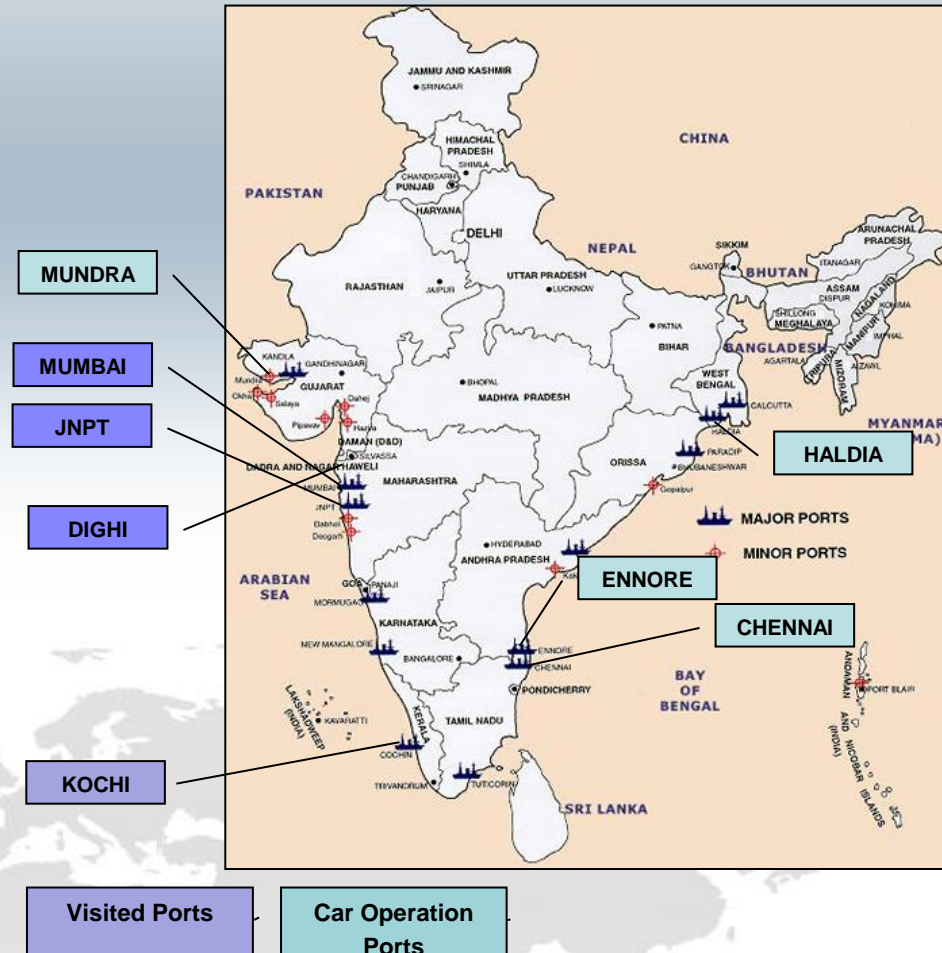
The **Marmara Sea** is developing a powerful
transshipment hub system allowing 16,000 TEU
vessel operation.

Marmara capacity will double by 2015 (13.6 M TEU)



Bi-modal transport study Mumbai

Kochi Range, India Port and transport assessment for car transportation on India's west coast
Annual volume 750,000 cars.





- ✓ APM Terminals, France/ Italy
- ✓ Borusan Lojistik, Turkey
- ✓ COSCO Europe, Italy
- ✓ Ethiopian Maritime Affairs Authority*
- ✓ Environment Agency, UK
- ✓ Drewry Shipping Consultants
- ✓ Eyvapport, Turkey
- ✓ Rivalta Terminal Europa, Italy
- ✓ Hapag Lloyd, Italy
- ✓ Hill Dickinson, UK
- ✓ Holman Fenwick Willan LLP, UK
- ✓ Hydro, Norway
- ✓ Interporto Bologna, Italy
- ✓ Interporto Padova , Italy
- ✓ Klaipedos Smelte, Lithuania
- ✓ Kumport, Turkey
- ✓ London P&I Club, UK



- ✓ Lorenzini & C., Italy
- ✓ Limak, Turkey
- ✓ Mills & Co, UK
- ✓ Mercurio Group, Italy
- ✓ Orsero Group, Italy
- ✓ Port Authority Gioia Tauro, Italy *
- ✓ P&O Ports, Dubai
- ✓ PricewaterhouseCoopers LLP, USA
- ✓ Qatalum, Qatar
- ✓ Ramboll, UK
- ✓ Reynolds Porter Chamberlain, UK
- ✓ Royal Haskoning DHV*, NL
- ✓ TBA, The Netherlands
- ✓ The Standard Club, UK
- ✓ Transnet, South Africa *
- ✓ UniCredit Logistics
- ✓ World Bank *





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