



Port planning for the 21st Century – aspirations and innovations

Technical Seminar at ICE Friday 16th November 2012

16th November 2012 PIANC WG 158 Port Planning

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Port planning for the 21st Century Aspirations and innovations



This seminar aims to explore port planning principles being developed as part of the new PIANC International Working Group 158 and discuss the requirements for green ports and innovations in port marine and cargo planning and optimisation to address future demand for modern and efficient ports.

Presentation will be from:

- **Stephen Cork** - Technical Director HR Wallingford – on “PIANC WG 158”
- **Nigel Bodell** – Port of Dover – on “A port operators perspective”
- **Dimitrios Pachakis** from Royal Haskoning - DHV – on “Challenges in planning a 21st century Container Terminal”
- **Mike Garratt** – Director MDS Transmodal – on “A traffic forecasting and economics perspective on port planning”
- **Richard Marks** – Director of ICHCA International Ltd – on “Green Ports”
- **Richard Clarke** – Independent Maritime Consultant – on “Making your port plan future proof”

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Port Masterplanning – PIANC WG 158

PIANC Technical seminar

16th November 2012

Stephen Cork

PIANC Working Group 158 comprises members from UK, France, Italy, Germany, Spain, Netherlands, USA and Australia.

Its members include representatives from port owners and operators, port planning and engineering consultants, economists and maritime contractors

It was set up this year and has already met three times, in UK, Valencia, Rotterdam and meets again at the end of this month in Brussels.

The objective is to define state of the art guidance on best practice in Port Planning – to be published as a PIANC Report by the end of next year.

PIANC Working Group 158 will address:

- The challenges for existing ports
- The process of masterplanning
- Traffic projections and demand forecasting
- Port planning and zoning principles
- Hinterland links
- Legislative and stakeholder issues
- Institution Building



Challenges include:

- Physical limitations and constraints such as
 - Limited berth lengths
 - Inadequate cargo handling equipment
 - Limited back-up and storage areas
 - Poor hinterland connections
- Poor management and operations
 - Port Authority management
 - Customs control and operations
 - Concessionaires performance
- Institutional constraints
 - Public/private ownership
 - Concession agreements



Levels of Masterplanning

- Regional Planning
- National Planning
- Local area planning
- Port Planning and zoning

Port planning and zoning principles

- Strategic Planning
- Masterplanning
- Port Zoning
- Phasing
- Implementation



Capacity and productivity assessment of existing ports:

- Review of existing port facilities and infrastructure
- Operational Analysis
- Performance and Productivity
- Handling Rates
- Throughput and capacity
- Logistic chains and value added services
- Ports and Inland Transport links



Traffic forecasting guidance will address:

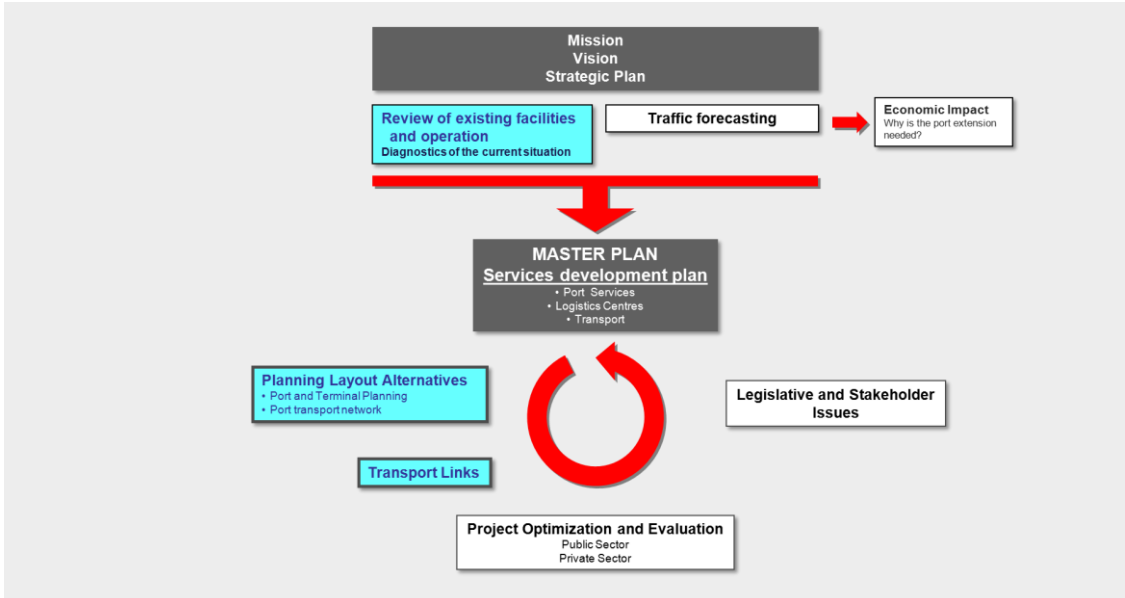
- National Economy
- Macro-Economic Studies
- Commodity/Sector Studies
- Foreign Trade
- Domestic Trade
- Transshipment/Transit Trades
- Competing ports and trading ports
- Shipping Developments and trends in vessel sizes



Project optimisation and evaluation will consider:

- Life cycle analysis
- Traffic and operational modelling
- Cost/Benefit Analysis
- Risk/Sensitivity Analyses
- Phasing and implementation strategy
- Management Plans
- Organisation Structure
- Manpower Development Plans





THANK YOU FOR YOUR ATTENTION

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