



PIANC

WG 135

Design Principles for Small and Medium Marine Container Terminals



PIANC

The World Association for
Waterborne Transport Infrastructure

“setting the course”



Agenda



- Royal Haskoning
- WG 135
 - Brief
 - Members
 - Meetings
 - Sections
 - Progress
 - Next Steps
- Questions



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Royal Haskoning

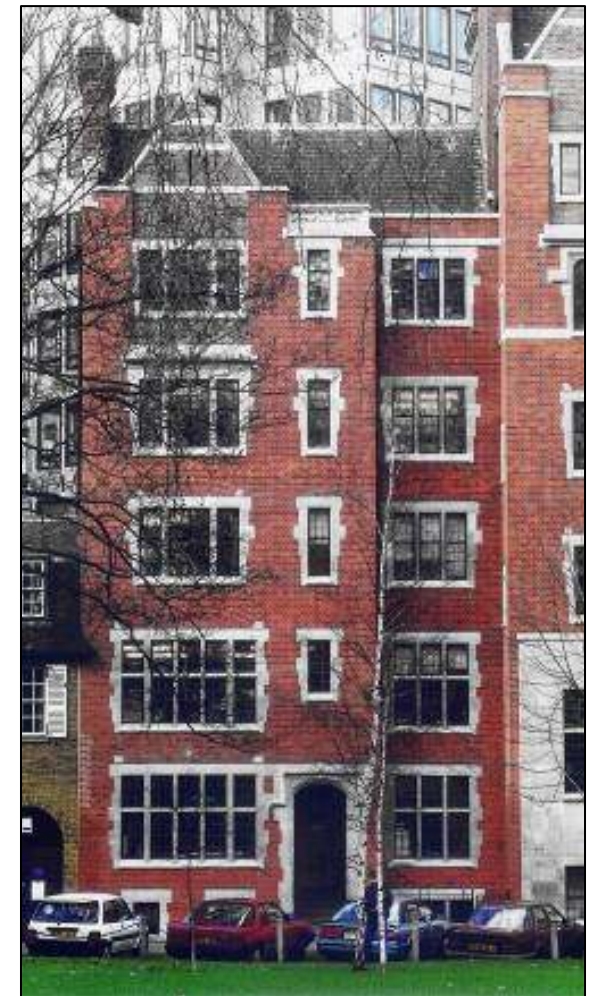


- Founded in 1881 in The Netherlands
 - Posford Duvivier integrated in early 2000's
- Worldwide consultancy with 3,900 staff
- Delivering services focused on the interaction between people and their environment
- Business Lines include:
 - Buildings
 - Industry & Energy
 - **Maritime & Waterways**
 - Planning & Transport
 - Water

Maritime & Waterways



- 400 staff worldwide undertaking around 250 port development projects per year
- London office has 27 Maritime & Waterways staff
- Current projects include:
 - New Doha Port, Qatar
 - OSX Shipyard, Brazil
 - Karachi Container Terminal, Pakistan
 - Oil Jetty, Eritrea



WG 135 - Brief



- Terms of Reference from MarCom
 - Need to 'update' WG MARCOM 9 (1987) - general cargo terminals
 - Incorporate recent logistical trends and new initiatives
 - Review relevant literature
 - Should have relevance to 'countries in transition'
- First meeting in London, March 2009
 - Dedicated to marine container terminals
 - Define Small Terminal as up to 200,000 TEU / year
 - Define Medium Terminal as up to 750,000 TEU / year
 - Publication as guideline to small / medium terminals as larger 'hub' terminals have in-house knowledge

WG 135 - Members



member	company
George Steele (GS) (chairman)	URS Scott Wilson
Birgitt Brinkmann (BB) (vice-chairman)	University of Lueneberg
Peter Quist (PQ) (secretary)	Witteveen+Bos consulting engineers/ Delft University of Technology
Mr. S. Cork (SC) (mentor from MarCom)	HR Wallingford
Simon Thomas (ST)	Port Development Consultancy
Dimitris Pachakis (DP)	Moffatt & Nichol
Lionel Kaniewski (LK)	Centre d'Etudes Techniques Maritimes et Fluviales
Peter Roome (PR)	Halcrow Group Ltd
Sigurdur Gretarsson (SAG)	Siglingastofnun (Icelandic Maritime Administration)
Anthony Callens (AC)	Port of Brussels
Carl Thoresen (CAT)	PortCat AS
Tobias Günzl (TG)	INROS Lackner AG
Steven Gray (SG)	Mofatt&Nichol
Lars Strehse (LS)	HHLA
Laurence Emsley (LE)	Tetra Tech EC Inc
Mark Hill (MH)	Royal Haskoning
Mr. M. Duval (MD)	Lyon Terminal S.A.
Xavier Gesé Aperte (XG)	Puertos del Estado

- Members from various professional backgrounds:
 - Consulting (mainly)
 - Academic
 - Client

- Members from various countries:
 - UK (x5)
 - Germany (x3)
 - France (x2)
 - USA (x2)
 - The Netherlands (x1)
 - Iceland (x1)
 - Belgium (x1)
 - Norway (x1)
 - Spain (x1)

WG 135 - Meetings



- March 2009, London
- June 2009, Reykjavik
- December 2009, Hamburg
- September 2010, Oslo
- May 2011, Marseille
- October 2011, Brussels

WG 135 - Sections (I)



1. Introduction (George Steele)

2. Port Planning Considerations (Peter Roome)

- Location of terminal
- Landside Access and Hinterland Connections
- Site Conditions
- Nautical Access (WG 49)

3. Terminal Planning (Simon Thomas)

- Operational Areas
- Terminal Handling Systems
- Space Requirements
- Buildings & Ancillary Facilities



WG 135 - Section (II)



4. Operational Management (Anthony Callens)

- Productivity / Targets
- Environmental Issues
- Security

5. Civil Works Design Aspects (Tobias Gunzl)

- Berth Structure
- Apron & Pavement
- Buildings & Ancillary Facilities
- Utilities

6. Maintenance (George Steele)

- Strategy & Responsibility

7. References & Further Reading



WG 135 - Progress



1. Introduction - written at end
2. Port Planning Considerations - substantially complete
3. Terminal Planning - substantially complete
4. Operational Management - substantially complete
5. Civil Works Design Aspects - 50% complete
6. Maintenance - substantially complete
7. References & Further Reading - written at end

WG 135 - Next Steps



- Finish drafting, where necessary
- Internal (WG) review of each section
- Next meeting in March 2012 (UK or Spain)
- Aim to submit to MarCom for review by middle of 2012





Questions?