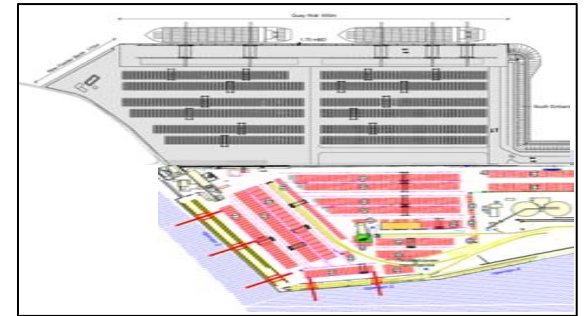
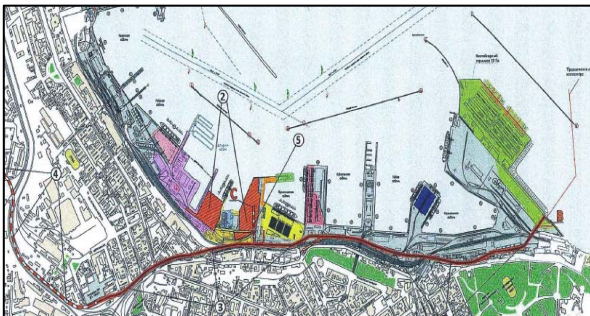


The Quarantine Mole Project – A New Dimension of Ukrainian Container Terminals

Klaus Schmöcker, President HPC Ukraina

Varna, October 11th, 2010



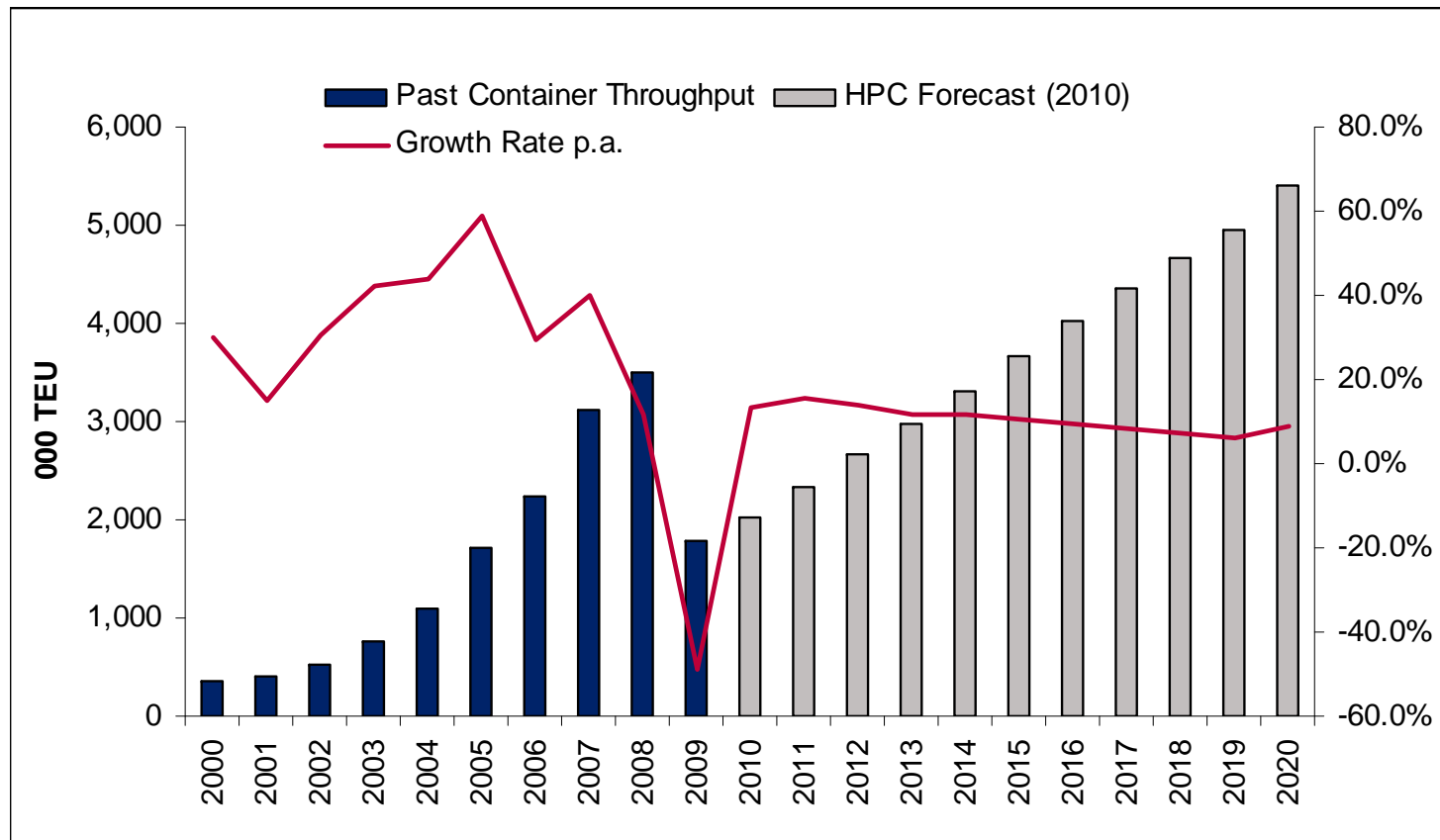
Recovery of Black Sea Countries after the Economic Crises

	Bulgaria		Georgia		Romania		Russia		Ukraine	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
GDP [US\$ bn, PPP]	90	91	20.9	21.4	255.2	258.9	2,109.5	2,209	289.7	302.4
Real GDP growth p.a.	-5.0%	0.2%	-4%	2%	-7.1%	0.8%	-7.9%	4%	-15.1%	3.7%
GDP per Capita [US\$, PPP]	11,900	12,066	4,757	4,882	11,917	12,131	14,920	15,738	6,339	6,651
Container Throughput* [000' TEU]	140	141	182	198	594	688	356	408	511	613
Growth of Container Traffic*	-27%	0.01%	-28%	9%	-57%	16%	-17%	15%	-59%	20%

* Russian Container Throughput only consists of the Russian Black Sea Port Novorossiysk. 2010 figures are estimated based on HPCs own calculations.

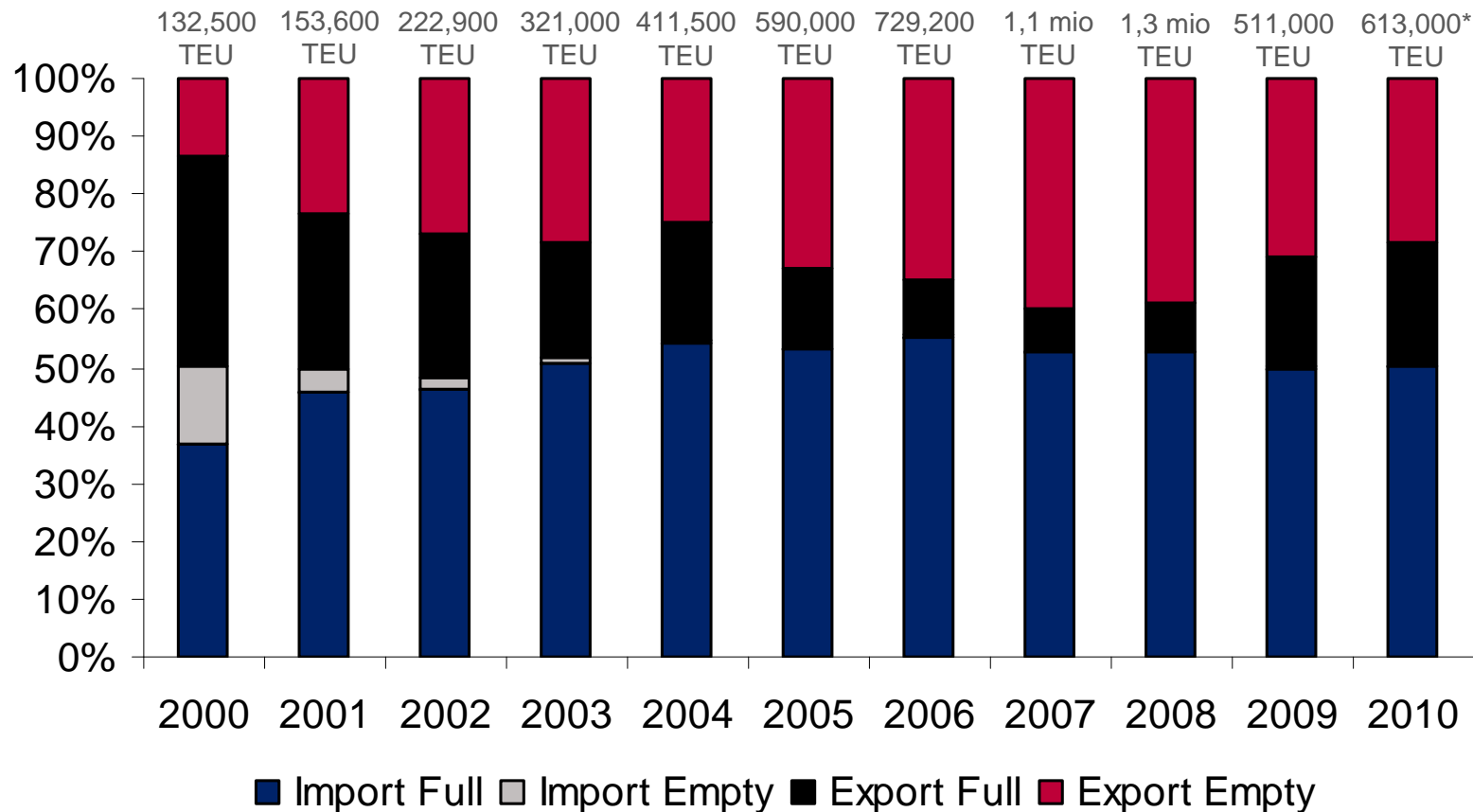
Source: IMF, CI-Online, HPC 2010.

Development of Container Handling Volume in the Black Sea Region



Source: CI-Online; Forecast is based on HPC's own calculation.

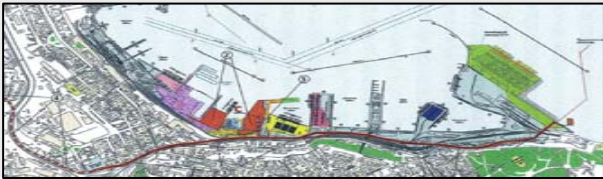

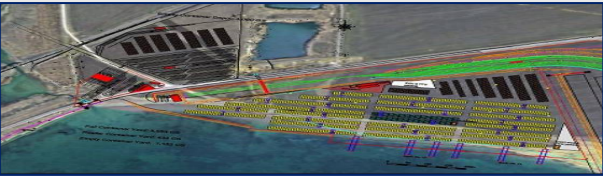
Import/Export Split of Cargo - Ukraine



Source: HPC Ukraina. It is assumed that the Import/Export split at HPC Ukraina serves as an indicator for the overall Ukrainian container throughput distribution.

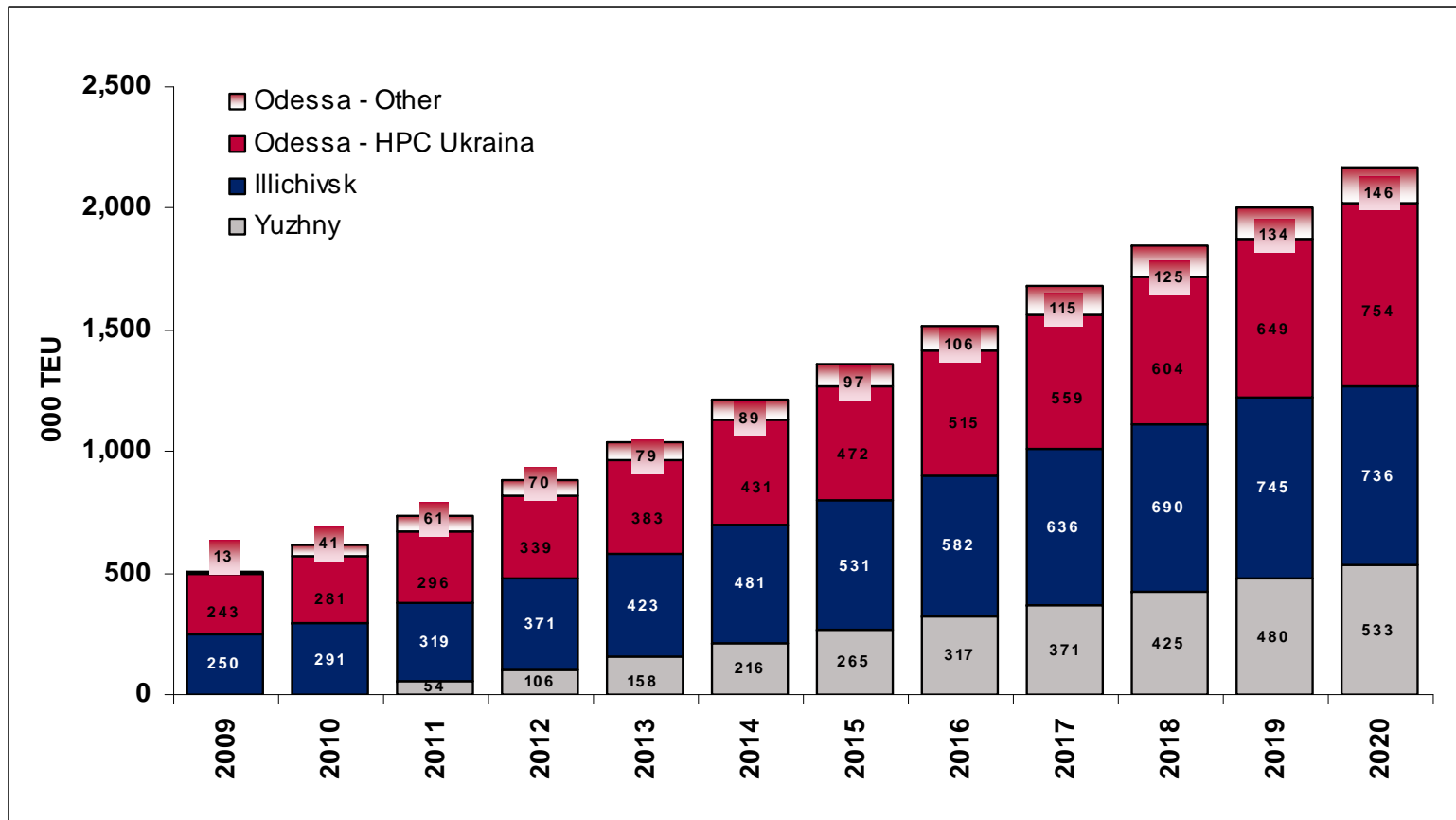
*Estimated by HPC.

Competition

	Throughput (TEU 2008 vs. 2009)	Quay	STS	Capacity p.a.	Max. depth	Projects
Odessa 	573.300 255.500	~785 m (HPC and BKP)	7	~700,000 TEU	currently 10.7 m / max. 12.5 m	Quarantine Mole and expansion of BKP
Illichivsk 	680.300 255.600	~1000 m	7	~700,000 TEU	13 m	Expansion up to an annual throughput capacity of ~2 million TEU with a depth of 15 m
Yuzhny / TIS 	-	~420 m	3	~300,000 TEU	14 m	Expansion up to an annual throughput capacity of ~2 million TEU with a depth of 15.5 m

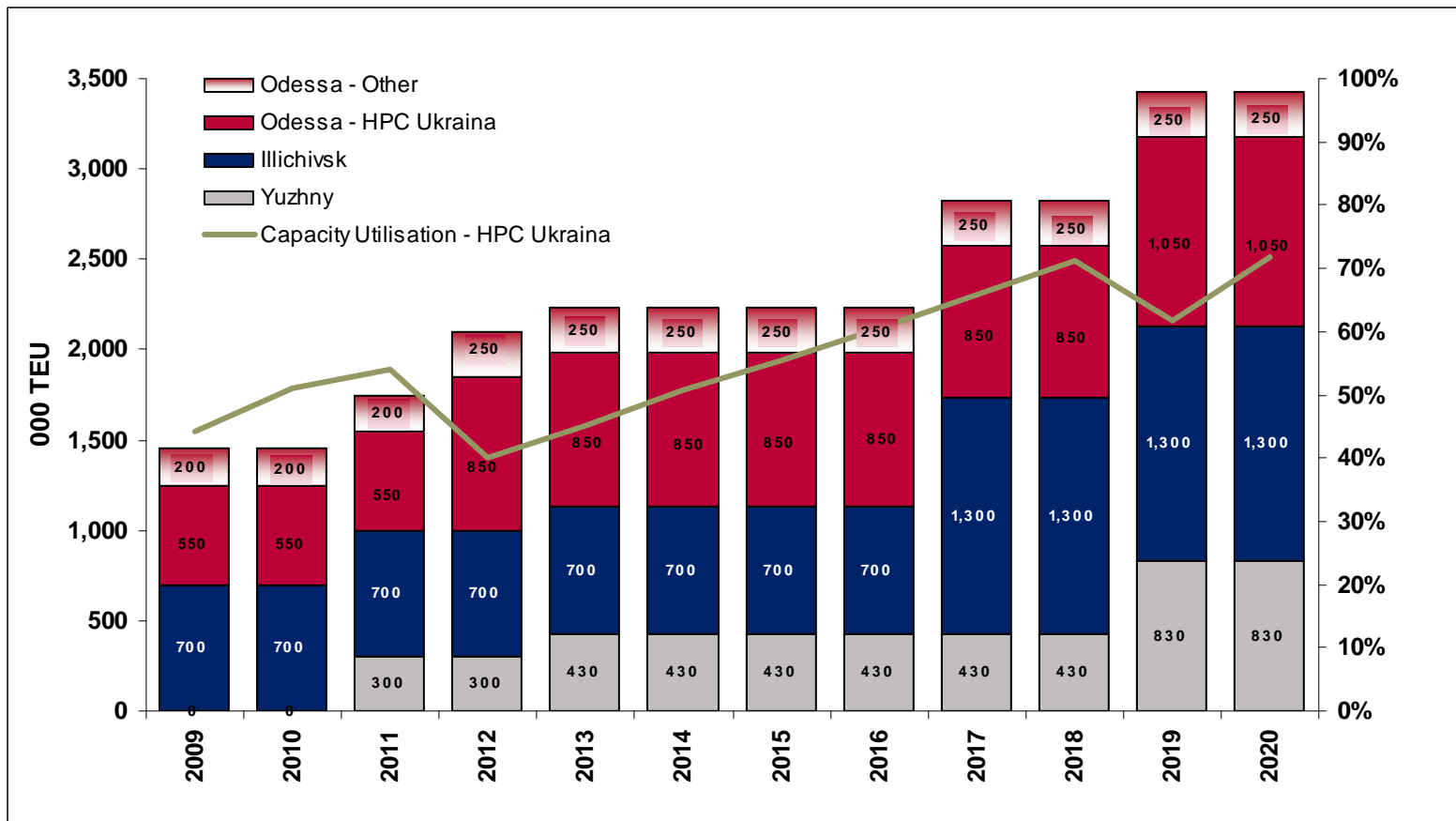
Source: Terminal websites; CI-Online; Interviews.

Container Traffic Forecast Ukraine



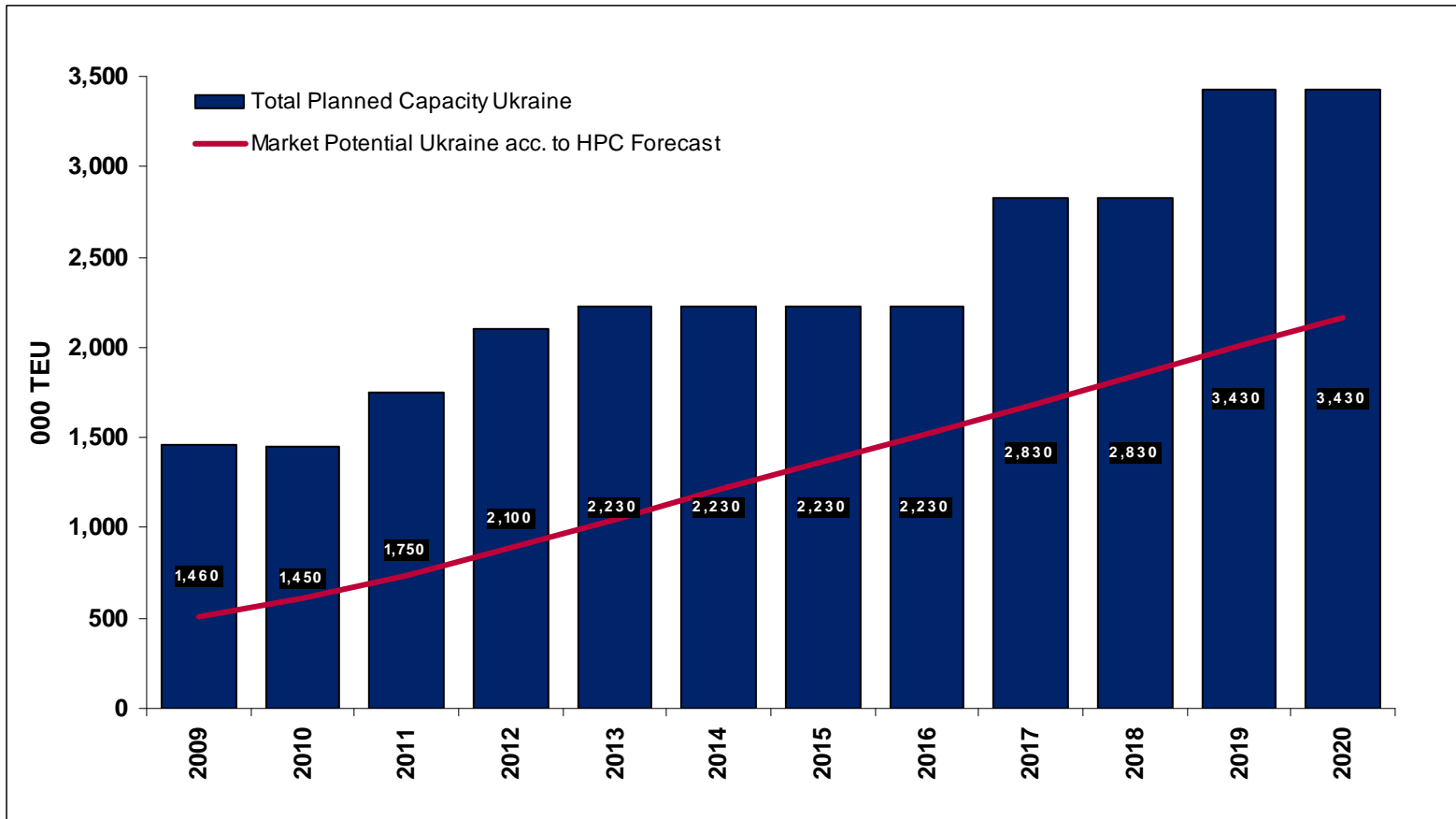
Source: HPC 2010.

Container Throughput Capacity Forecast Ukraine



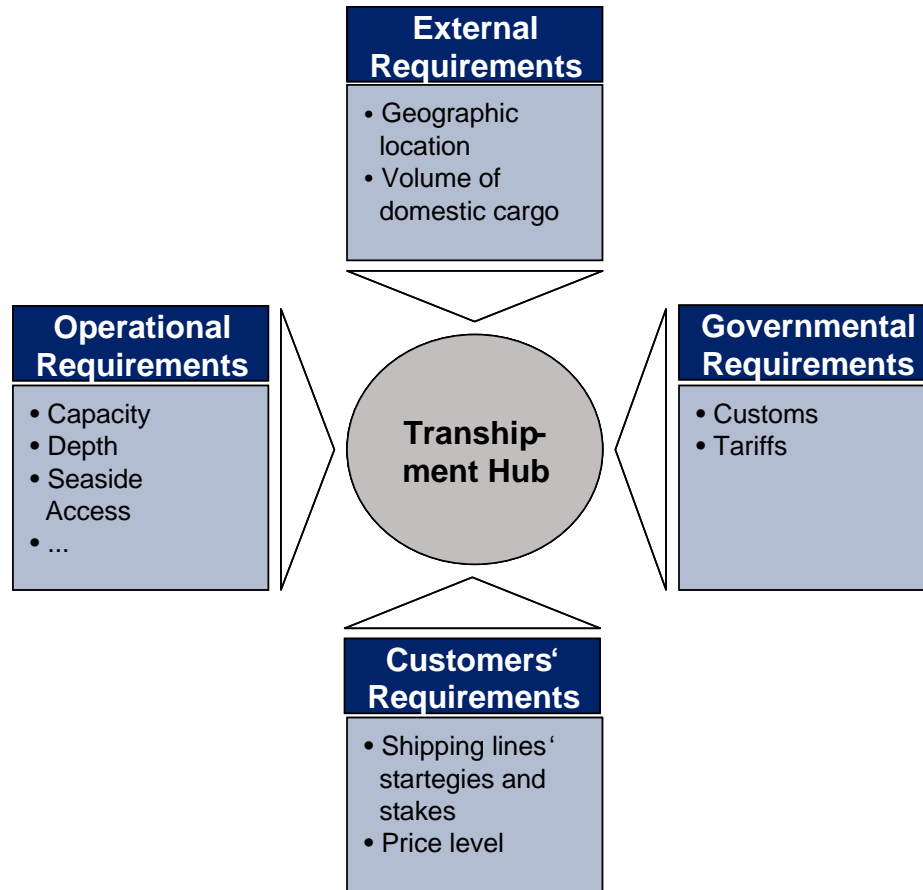
Source: Terminal websites; HPC 2010.

Container Throughput in Ukrainian Ports Capacity vs. Domestic Demand



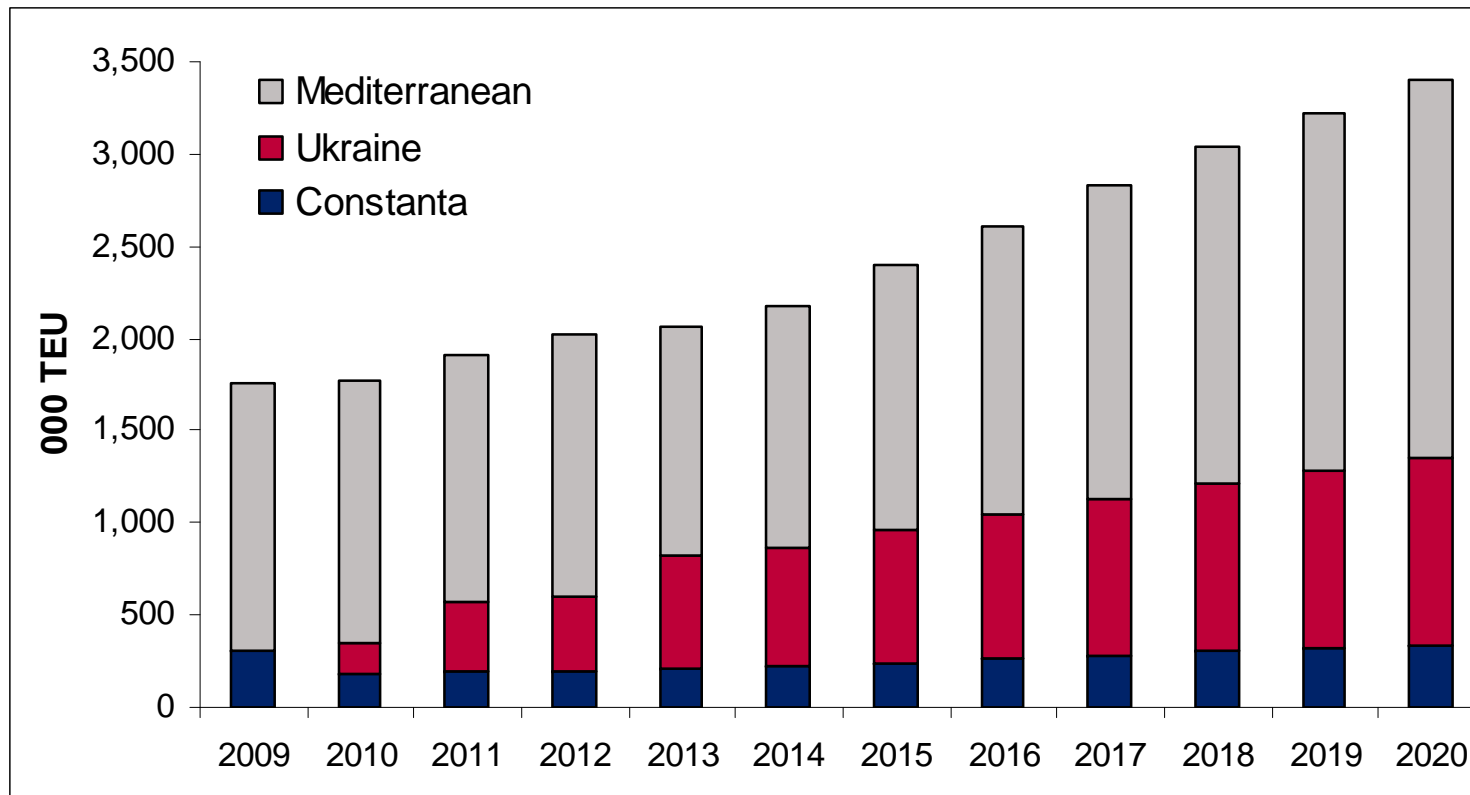
Source: HPC 2010.

Requirements for Container Transshipment



Source: HPC 2010.

Black Sea Transshipment Market Potential



Source: HPC 2010.

Quarantine Mole Container Terminal

Overview



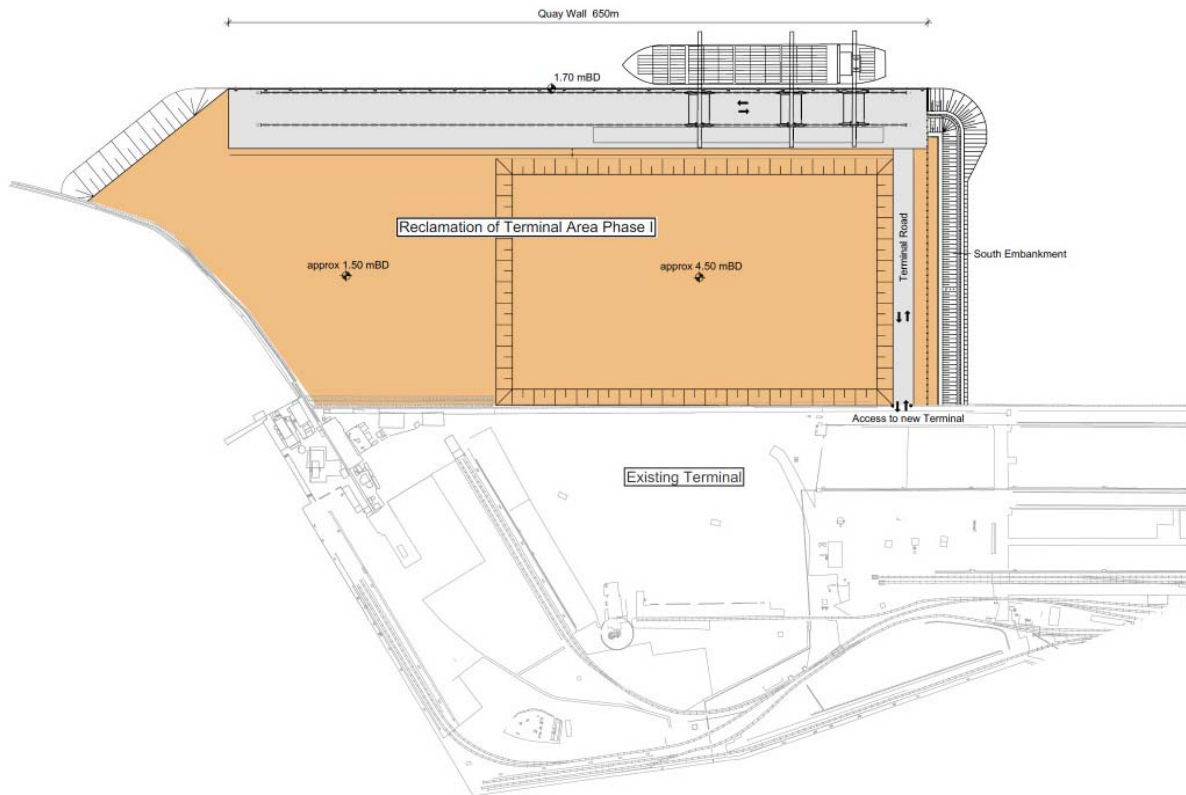
Quarantine Mole – Initial Plans

	Phase 1	Phase 2	Phase 3
Start of operations	2012	according to demand	according to demand
Berths	1	2	2*
STS	3	5	5
RTGs	0	7	14



* + maybe 1 feeder berth (170m length)

Development of QM - Phase 1



- Start of operations 2012

Port of Odessa:

- Breakwater and quay wall (650m)
- Dredging (-16 m)

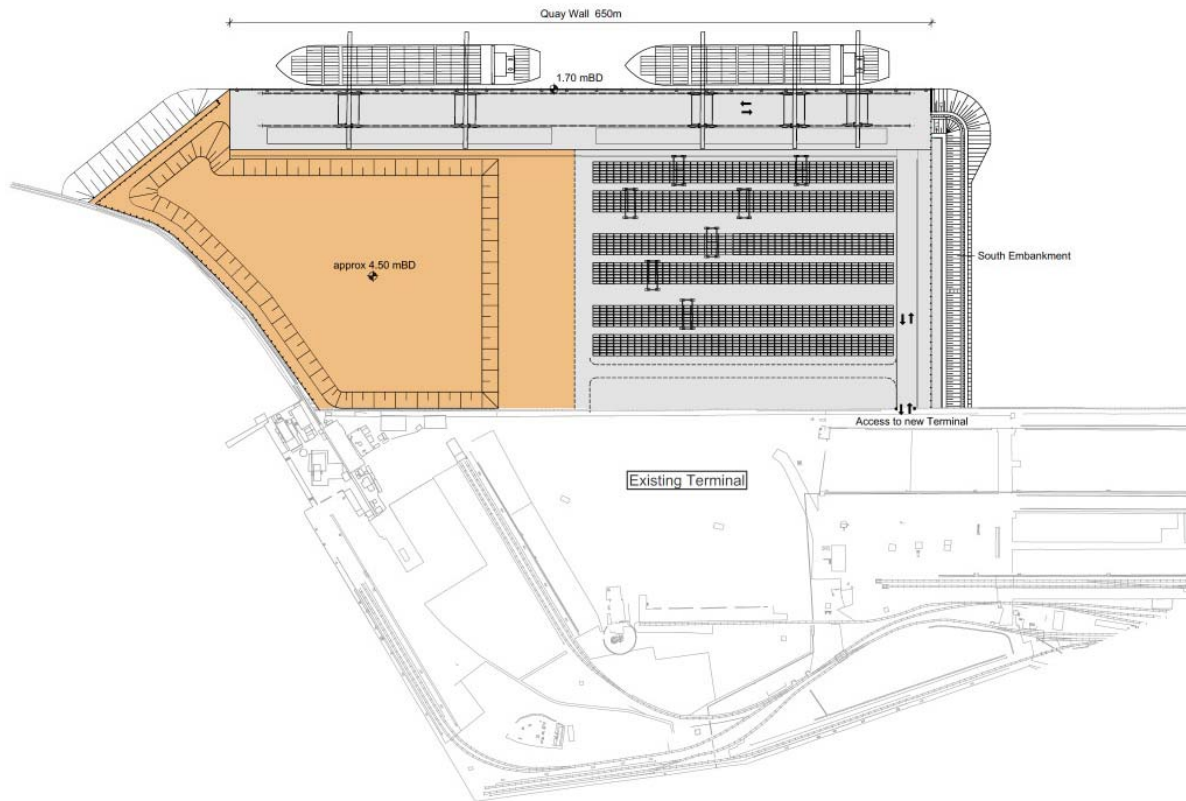
HPC Ukraina:

- Access dam to berths
- Pavement of quay and access roads
- Reclamation and compaction of 50% of terminal area
- + 3 STS cranes for QM

Utilisation of existing OCT:

- Yard (empty yard / reefer)
- Rail
- Buildings
- Truck/Trailer
- Administration
- Workshop
- Staff

Development of QM - Phase 2



- Start of operations according to demand

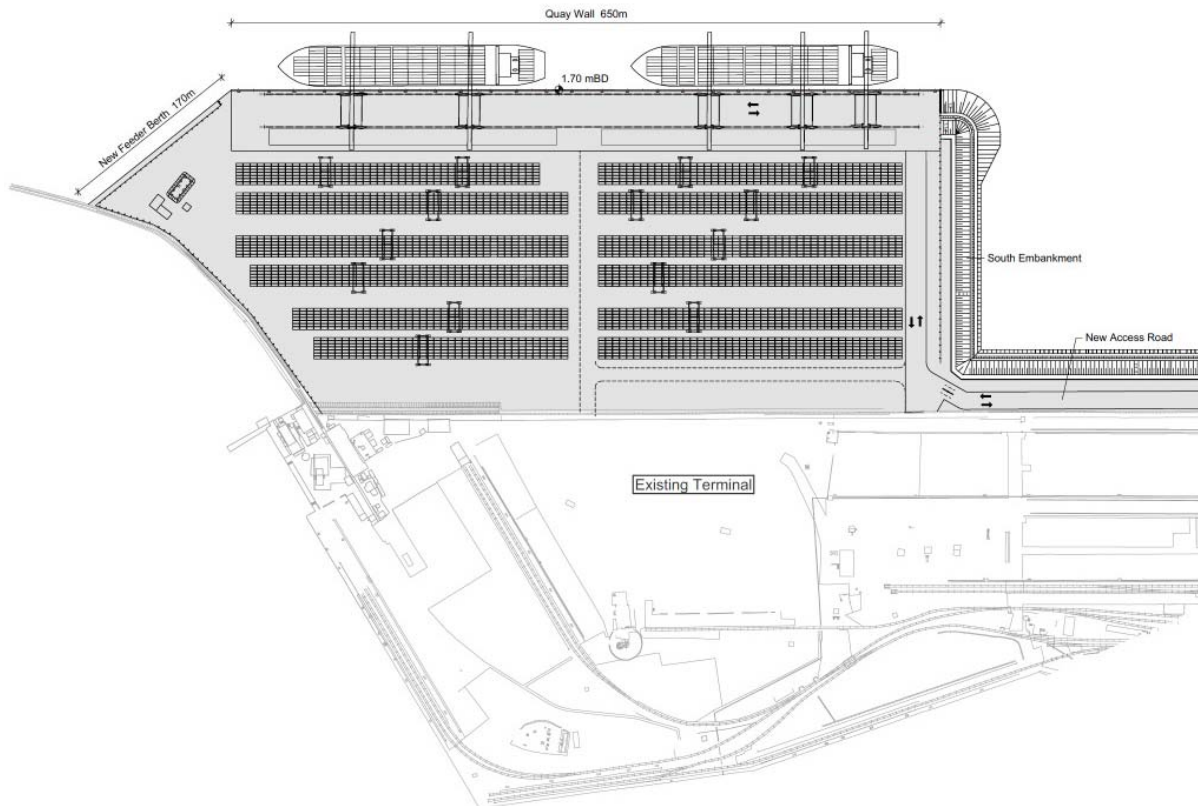
HPC Ukraina:

- Pavement of compacted area
- Compaction of the remaining 50% of the terminal area
- + 2 STS for QM
- + 7 RTGs for QM

Utilisation of existing OCT:

- Yard (empty yard / reefer)
- Rail
- Buildings
- Truck/Trailer
- Administration
- Workshop
- Staff

Development of QM - Phase 3



- Start of operations according to demand

HPC Ukraina:

- Pavement of total area
- Optional:
 - Feeder berth (170m)
 - New access road
- + 7 RTGs for QM

Utilisation of existing OCT:

- Yard (empty yard / reefer)
- Rail
- Buildings
- Truck/Trailer
- Administration
- Workshop
- Staff

Quarantine Mole...

...will be the first terminal in the Ukraine offering a sufficient possibility for container transshipment; Odessa will be able to substitute Constanta as transshipment hub.

...will be able to receive all commercial viable container vessels passing the Bosphorus.

...will achieve a future productivity of up to 150 moves per hour.