

# Impact of alliances for the European market

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**MDS Transmodal**

# Agenda

## Paper will cover:

- Recent changes in demand and supply
  - and cost and revenue structures that emerged
- Impact of industry consolidation and bunker costs
  - and the drive to reduce unit costs

## Charles Moret will cover:

- Implications for the port sector

# Analysis based upon

- Our World Cargo Database (WCD) that covers and forecasts trade at county x county x commodity by tonnes and TEU
- Our Global containership databank covering deployment of each lo-lo and ro-ro ship
- Our Financials model that estimates detailed costs and revenues at the ship/string level by operator, allocating cargo by ship deployment

# Model validation: Maersk's performance in 2013 versus model

## All Maersk services, 2013

	Maersk Annual Report 2013	Model (MDST) 2013
Demand (m TEU)	17.60	+2%
Capacity (m TEU)	2.63	-4%
Unit cost (\$/TEU)	1,300	-6%*
Average rate (\$/TEU)	1,337	-5%*
Bunker consumption (tonnes/TEU)	0.50	+1%
Average fuel price (US\$/tonne)	595	+5%

\*MDST excludes where line pays for inland haulage

- **Maersk most transparent of the lines in its reporting**
- **Therefore provides opportunity to validate model results**
- **Model within 5% of most key comparators**

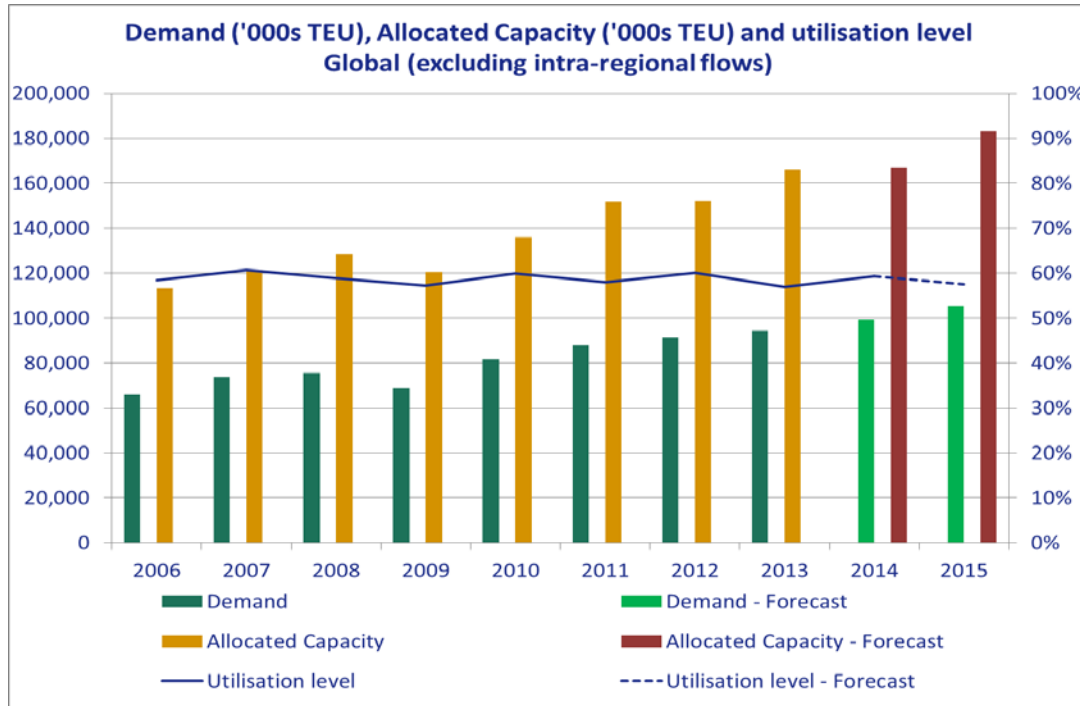
# Supply & Demand 2006 – 2013

## - a period of radical change

- **2006 – The penultimate year of an earlier age**
  - two years of the conference system left to run
  - bunkers @ \$346/tonne
  - mean ship capacity for East – Europe only 5,600 TEU
  - mean ship Far East to Europe speeds 20.2 knots
- **2013 – the first steady state growth in the post recession era**
  - return to substantial profits for efficient operators
  - for Far East – Europe ships 80% larger and 20% slower
  - bunker prices restabilising but still much higher
  - unit costs & rates more or less the same as in 2006

# Demand v. Supply

## - global (excluding intra-regional flows)

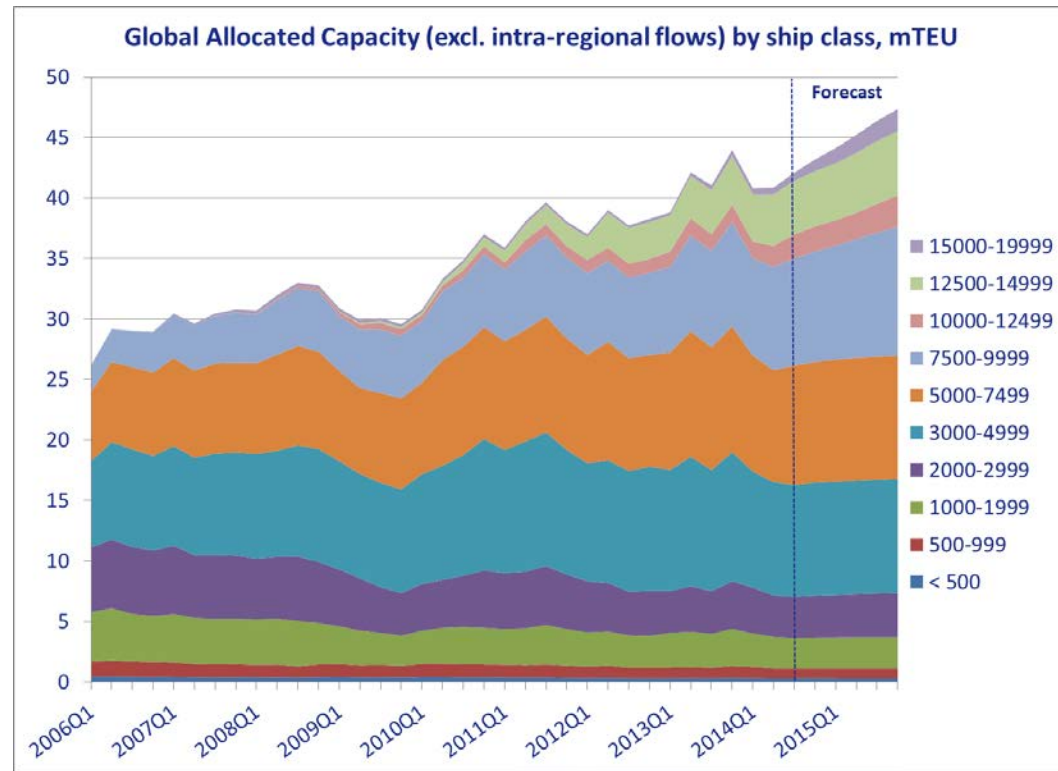


Year Quarter	Demand (TEU)	Allocated Capacity (TEU)	Utilisation level (%)
2012Q1	21,762,626	37,020,018	59%
2012Q2	23,392,298	39,006,680	60%
2012Q3	23,513,725	37,727,883	62%
2012Q4	22,619,031	38,273,147	59%
2013Q1	22,505,586	38,809,924	58%
2013Q2	23,690,890	42,110,958	56%
2013Q3	24,303,619	41,043,684	59%
2013Q4	23,882,555	43,955,422	54%
2014Q1	23,362,889	40,794,248	57%
2014Q2	25,072,039	40,858,269	61%
2014Q3	25,305,996	42,094,593	60%
2014Q4	25,413,669	43,170,142	59%
2015Q1	25,773,925	44,126,497	58%
2015Q2	26,390,112	45,216,414	58%
2015Q3	26,605,076	46,370,968	57%
2015Q4	26,560,659	47,336,381	56%

- Assuming no cut in the allocated capacity will be made, the utilisation level anticipated for the deep-sea services (excluding intra-regional flows) in the near future is in the region of 56%
  - adjustment to the overall capacity appear necessary to avoid further deterioration in the utilisation level as demand is expected to grow at a lower rate than supply

# Supply - near future forecast (2014-2015)

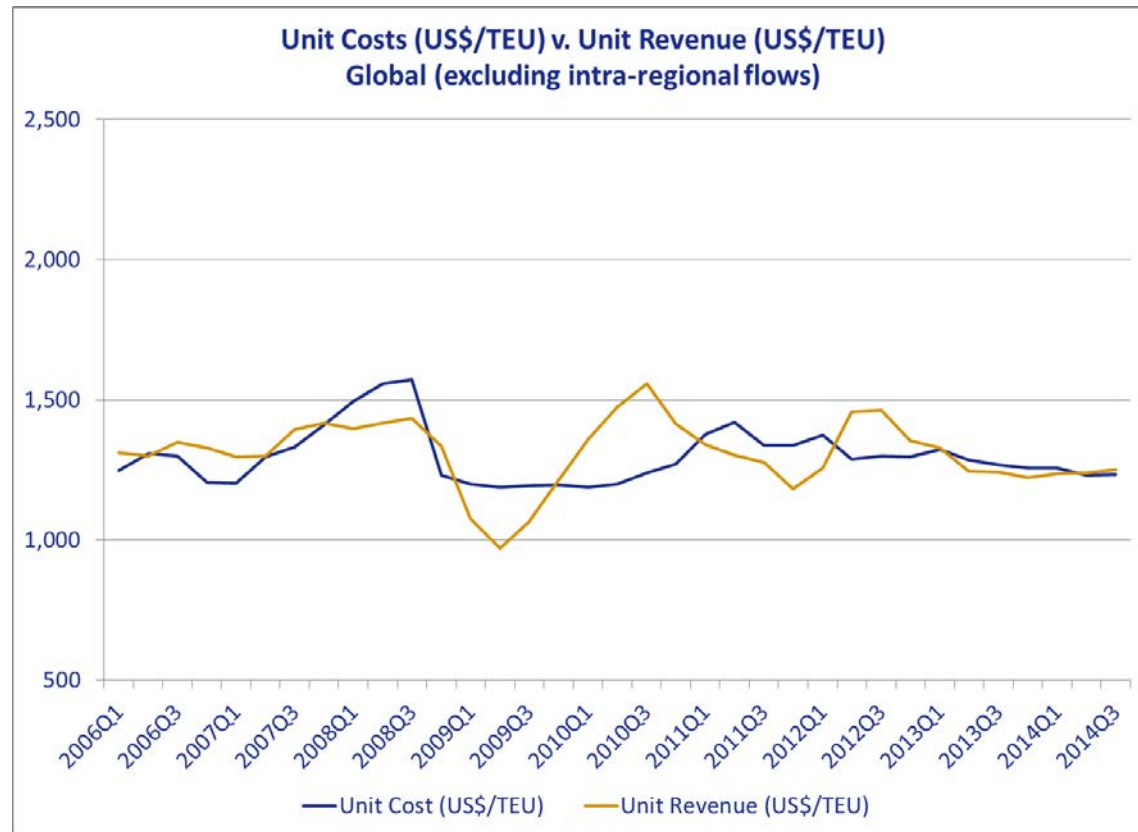
TEU Class	Extra TEU by 2015	Increase over 2014
15000-19999	462,327	113%
12500-14999	351,910	17%
10000-12499	165,800	23%
7500-9999	596,076	18%
5000-7499	62,400	2%
3000-4999	50,300	1%
2000-2999	86,936	6%
1000-1999	33,215	2%
500-999	646	0%
< 500	-1,266	-3%



- Overall capacity forecast to grow by c.12.5% between 2014Q3 and 2015Q4
  - for ships > 10,000 TEU increase is 478%
- But our forecast for demand growth only 5%
  - continuing excess demand can only reduce rates

# Unit Costs v. Unit Revenues

## - global (excluding intra-regional flows)

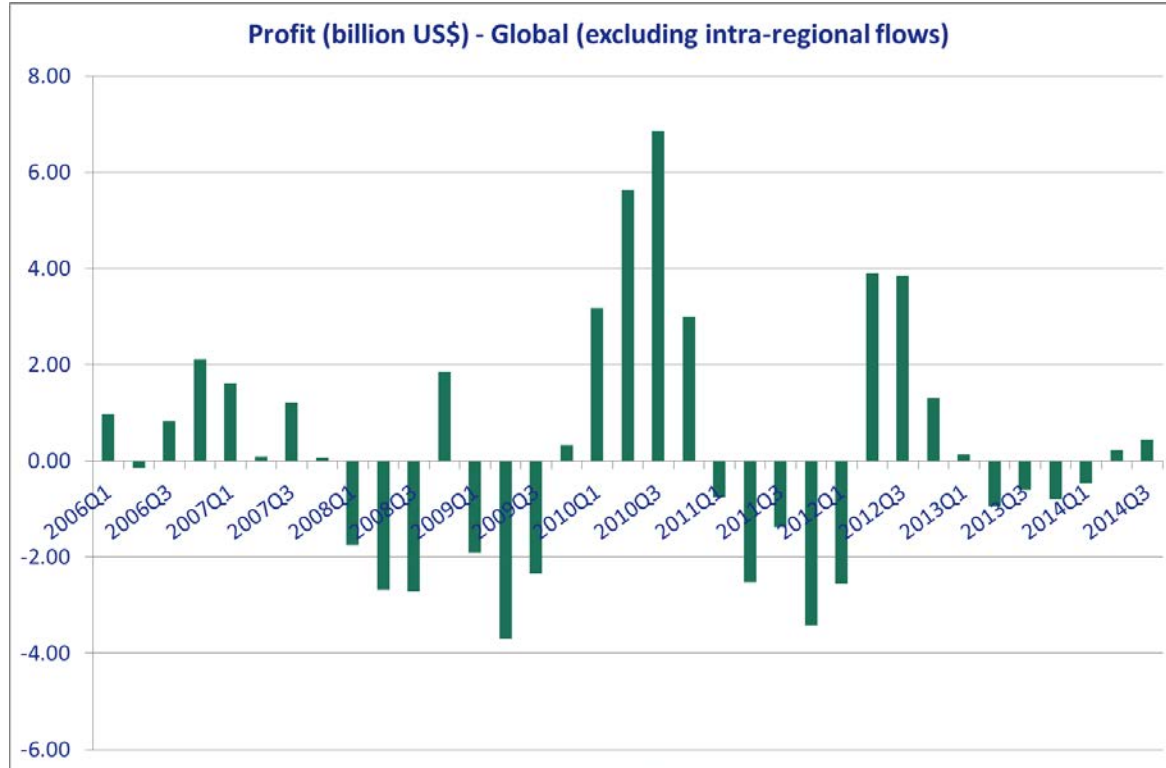


- Between 2012Q3 and 2014Q3 unit cost down by c.5%



# Profit

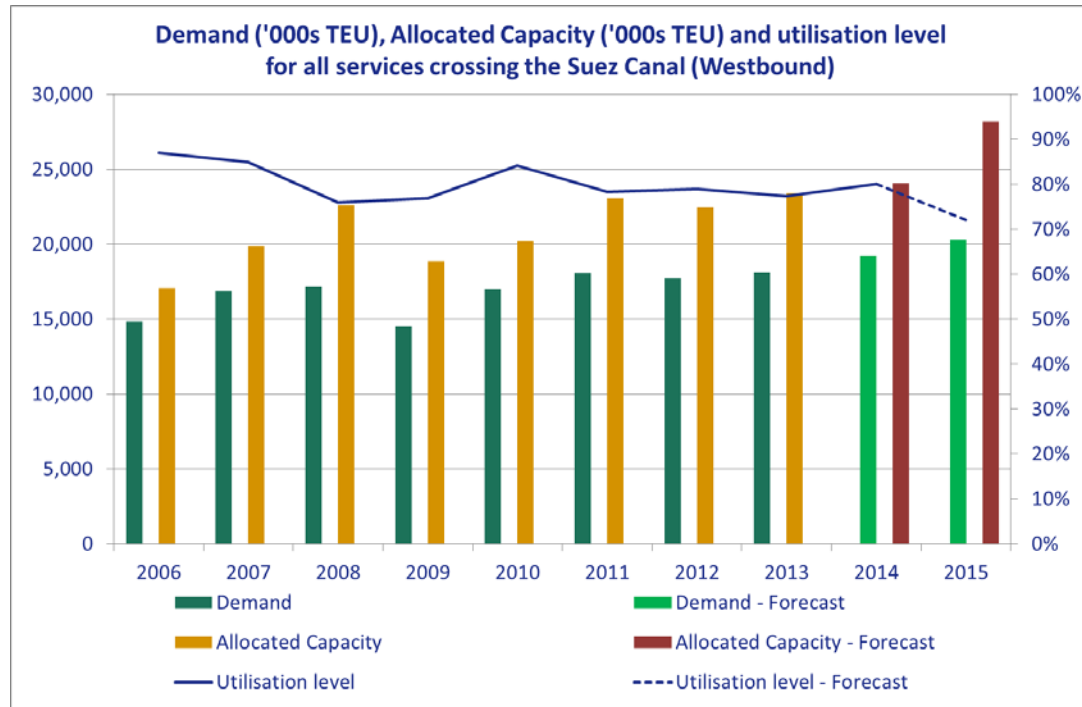
## - global (excluding intra-regional flows)



- Globally, fall in unit costs fail to match fall in revenues.
  - overall industry still not profitable
- Reduction in unit cost key toward more sustainable services

# Demand v. Supply

## - trade lanes crossing the Suez Canal WB

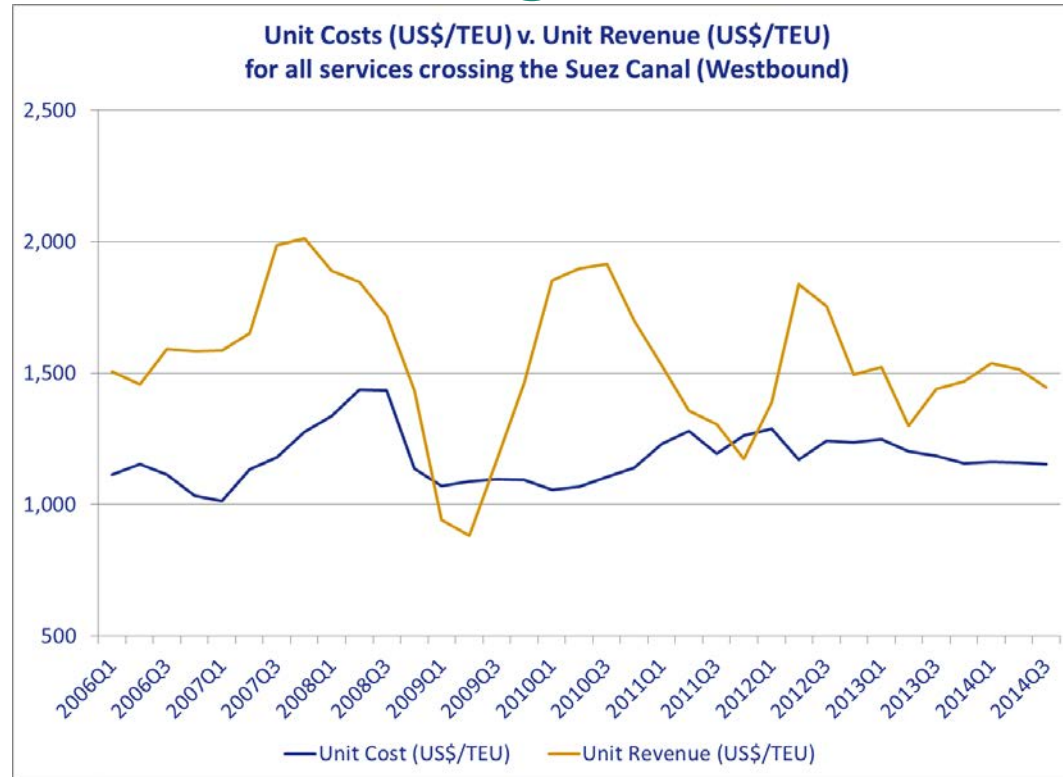


Year Quarter	Demand (TEU)	Allocated Capacity (TEU)	Utilisation level (%)
2012Q1	4,355,137	5,621,183	77%
2012Q2	4,600,381	5,482,255	84%
2012Q3	4,524,563	5,700,872	79%
2012Q4	4,236,094	5,657,670	75%
2013Q1	4,455,270	5,790,726	77%
2013Q2	4,477,132	5,900,483	76%
2013Q3	4,691,255	5,833,590	80%
2013Q4	4,488,317	5,896,473	76%
2014Q1	4,623,879	5,819,133	79%
2014Q2	4,902,167	5,938,528	83%
2014Q3	4,884,170	6,002,365	81%
2014Q4	4,849,037	6,291,117	77%
2015Q1	5,024,995	6,583,836	76%
2015Q2	5,099,723	6,904,446	74%
2015Q3	5,100,720	7,219,526	71%
2015Q4	5,053,332	7,471,903	68%

- Assuming no cut in the allocated capacity will be made, utilisation level anticipated for the routes crossing the Suez Canal on the westbound direction in the near future 74%
- adjustment to the overall capacity needed as demand is expected to grow at a lower rate than supply; however we do not expect utilisation to fall below 65%

# Unit Costs v. Unit Revenues

## - trade lanes crossing the Suez Canal WB



- Between 2012Q3 and 2014Q3:
  - Unit revenue down by 17.6%
  - Unit cost down by 7.3%

11 • Unit costs less volatile than unit revenue

# The Emerging Commercial Structure

- Global service suppliers
  - Four dominant consortia (2M, Ocean3, CKYHE-Green & G6)
- Little service differentiation
  - as containers increasingly routed via look-alike complex networks
  - emphasis on delivery date not absolute speed
  - each grouping able to make a “global service” offer
- Shipper concern with respect to reduced competition
  - But maybe opportunities for a more transparent/open book approach as regulators take greater interest
  - For ports the challenge of having far fewer effective customers

# Recent line behaviour: market concentration

	Present fleet (overall fleet)				Newbuilds (>3,000TEU)		Present + newbuilds	Future - as announced by shipping lines	
	No. owned	No. chartered	Total No. of ships	Mean ship capacity TEU	No. of ships	Mean ship capacity TEU		No. of ships	Mean ship capacity TEU
<b>2M Members</b>									
-Maersk	73	45	118	9,365	11	14,760	129		
-MSC	56	62	118	9,610	43	12,516	166		
<b>2M Members Total</b>	<b>129</b>	<b>107</b>	<b>236</b>	<b>9,487</b>	<b>54</b>	<b>12,973</b>	<b>290</b>	<b>185</b>	<b>11,279</b>
CKYHE-Green Alliance	135	106	241	7,683	53	12,062	294		
G6 Alliance	170	101	271	7,284	27	10,993	298		
Ocean 3	89	64	153	8,229	63	12,795	222	159	9,719
<b>All Alliances</b>	<b>523</b>	<b>378</b>	<b>901</b>	<b>8,171</b>	<b>197</b>	<b>12,206</b>			
Others	56	49	105	4,620	95	6,869			
<b>Total</b>	<b>579</b>	<b>427</b>	<b>1,006</b>	<b>7,762</b>	<b>292</b>	<b>10,600</b>			

## 2M members

## Ocean Three

Present fleet	236 + 54 on order = 290	153 + 63 on order = 226
Planned fleet	185	159
Vessels cut	105	67
Mean ship capacity	+18% to 11,279 TEU	+18% to 9,719 TEU

- Lines have clear interest in disposing of the smaller vessels
- In the expectation they will leave the market!

# Profit by class of ships (excl. intra regional)

## - largest three operators (global)

Top three shipping lines: Maersk + MSC + CMA-CGM accounting for 34% of the overall cargo – excl. intra-regional flows - moved in the first three quarters of 2014

### Allocated capacity (>3000 TEU)

TEU Class	2014 Q1-Q3	% change
3000-4999	6,859,840	-9%
5000-7499	9,738,179	4%
7500-9999	11,202,103	7%
10000-12499	2,252,986	-1%
12500-14999	5,743,989	0%
15000-19999	1,743,909	88%
<b>Grand Total</b>	<b>37,541,006</b>	<b>3%</b>

-2% (for 3000-7499)  
 +5% (for 7500-12499)  
 +13% (for 12500-19999)

### Financial performances (>3000 TEU)

TEU Class	Profit				% change over 2013	
	2013 Q1-Q3 (m\$)	2014 Q1-Q3 (m\$)	Diff. (m\$)	% contribution to total profit growth	Unit costs	Unit revenue
3000-4999	641	149	-491.4	-156.3%	3%	-4%
5000-7499	266	331	64.7	20.6%	-5%	-4%
7500-9999	50	264	214.4	68.2%	-4%	-1%
10000-12499	26	98	71.7	22.8%	-2%	2%
12500-14999	-118	217	335.2	106.6%	-4%	4%
15000-19999	-17	103	119.8	38.1%	-4%	5%
<b>Grand Total</b>	<b>847</b>	<b>1,161</b>	<b>314.5</b>	<b>100.0%</b>	<b>-3%</b>	<b>-2%</b>

- Improvement in overall profitability despite reduction in unit revenue
  - reduction in unit costs achieved through scale economies main driver
- Globally clear that growth highest in larger ship groups where profits are growing more rapidly

# Profit by class (global), excl. intra regional - whole industry

## Allocated capacity (>3000 TEU)

TEU Class	2014Q1-Q3	% change
3000-4999	28,175,654	-8%
5000-7499	28,672,168	-5%
7500-9999	25,444,029	11%
10000-12499	5,086,686	24%
12500-14999	12,584,265	24%
15000-19999	1,743,909	88%
<b>Grand Total</b>	<b>101,706,711</b>	<b>3%</b>

Summary of % change:

- 3000-4999 and 5000-7499: -7%
- 7500-9999, 10000-12499, and 12500-14999: +13%
- 15000-19999 and Grand Total: +30%

## Financial performances (>3000 TEU)

TEU Class	Profit				% change over 2013	
	2013 Q1-Q3 (m\$)	2014 Q1-Q3 (m\$)	Diff. (m\$)	% contribution to total profit growth	Unit costs	Unit revenue
3000-4999	780	176	-604.2	-28.1%	-3%	-5%
5000-7499	-158	419	577.4	26.9%	-4%	-2%
7500-9999	-367	694	1,060.3	49.3%	-5%	1%
10000-12499	-14	164	178.6	8.3%	-2%	3%
12500-14999	-155	662	817.1	38.0%	-5%	3%
15000-19999	-17	103	119.8	5.6%	-4%	5%
<b>Grand Total</b>	<b>69</b>	<b>2,218</b>	<b>2,149.0</b>	<b>100.0%</b>	<b>-4%</b>	<b>-1%</b>

- Improvement in overall profitability driven by ships bigger than 7,500teu
  - during the first 3 quarters of 2014, ships > 10,000 TEU moved 33% more cargo than the volume carried during the same period last year
- Profit generated by ships smaller than 5,000teu down by c.160%
  - during first 3 quarters of 2014, these ships moved 6% less cargo than the volume carried during the same period last year

# Impact of ECA in Europe and North America





# Impact of SECA v. improving handling rates

## - Far East-North Europe

- Lines need to switch to gas oil within Sulphur Emission Control Areas
  - raising costs
  - lines already warning of +\$15 to +\$25 increases/TEU

Vessels:	11 x 12,355 TEU (weekly)
Loaded TEU/ round trip*:	16,061 TEU
Port calls:	11
Round voyage:	22,065 miles (1,626 in SECA)

	<u>Impact of SECA</u>	versus	<u>Savings from double handling speed</u>
Speed:	17.4 knots (@ 80 TEU/hour)		14.6 knots (@ 160 TEU/hour)
Bunkers/day:	137 tonnes		81 tonnes
SECA cost penalty:	\$146,576		Saving \$1,090,747
<u>Penalty/loaded TEU:</u>	<u>\$9</u>		<u>Saving/loaded TEU \$68</u>

- improved port productivity can be more significant to costs than SECA
- in practice even faster handling at half the ports saves \$34/TEU

\* Load factor=80% and imbalance factor=1.6

# Impact of SECA and improved handling rates

## - North Atlantic

- For the North Atlantic, lines already warning of +\$40 to +\$65 increases/TEU

Vessels:	5 x 5,767 TEU (weekly)
Loaded TEU/roundtrip*:	8,458 TEU
Port calls:	7
Round voyage:	8,575 miles (2,693 in SECA)

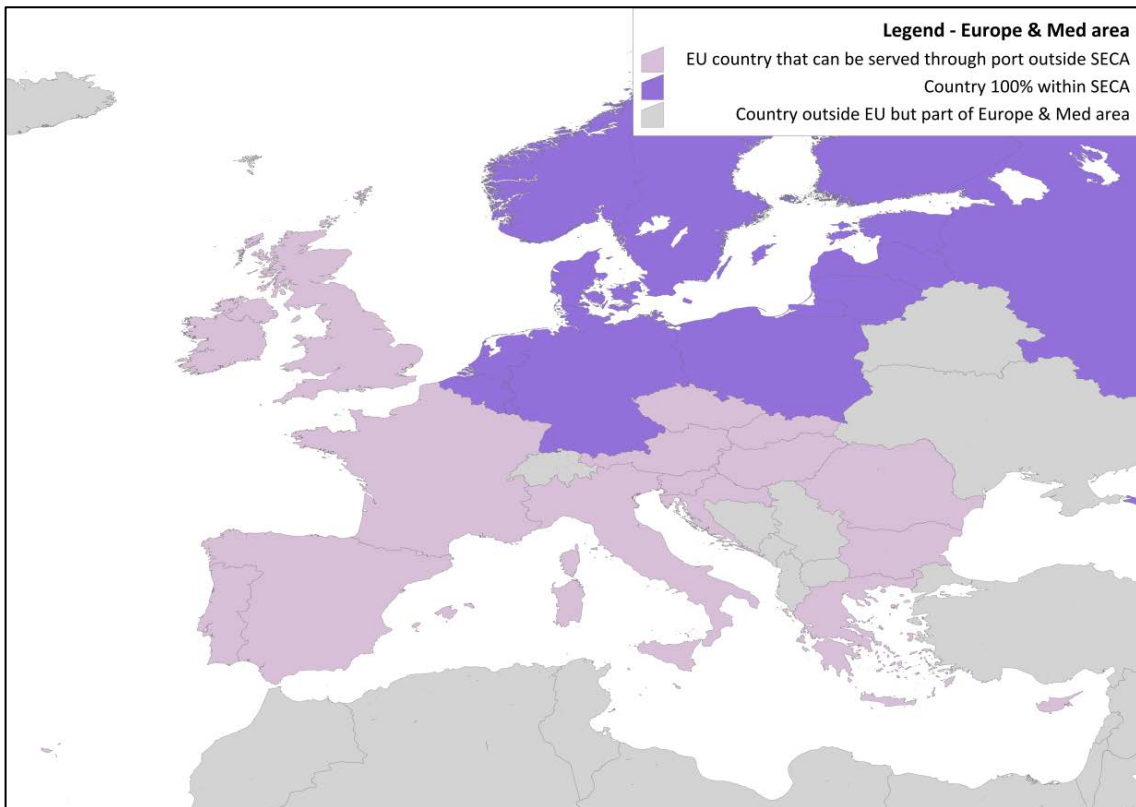
	<u>Impact of SECA</u>	versus	<u>Savings from double handling speed</u>
Speed:	18.0 knots (@ 60 TEU/hour)		13.6 knots (@ 120 TEU/hour)
Bunkers/day:	103 tonnes		46 tonnes
SECA cost penalty:	\$176,819		Saving \$381,458
	<u>Penalty/loaded TEU: \$21</u>		<u>Saving/loaded TEU \$45</u>

- improved port productivity can be more significant to costs than SECA
- in practice even faster handling at half the ports saves \$22/TEU
- vigorous debate anticipated between shippers and lines!

\* Load factor=80% and imbalance factor=1.2

# But impact of SECA on port choice also important:

## - SECA and “Not SECA” Europe/Med countries



- leading 4 European container ports lie in SECA zone
- but 53% of total unitised deepsea traffic from/to the EU estimated to be destined/generated for countries outside SECA
- and 70% taking into account countries outside EU
- shipping lines are already intensifying their presences in Southern European ports
  - e.g. 2M launching 10 Asia-Med services and 12 Asia-N Europe services (some of which stop in Med ports)
  - will SECA reinforce a shift towards Mediterranean ports?
- Will North Sea and Channel Ports retain hegemony when other gateways are available

# Worked example:

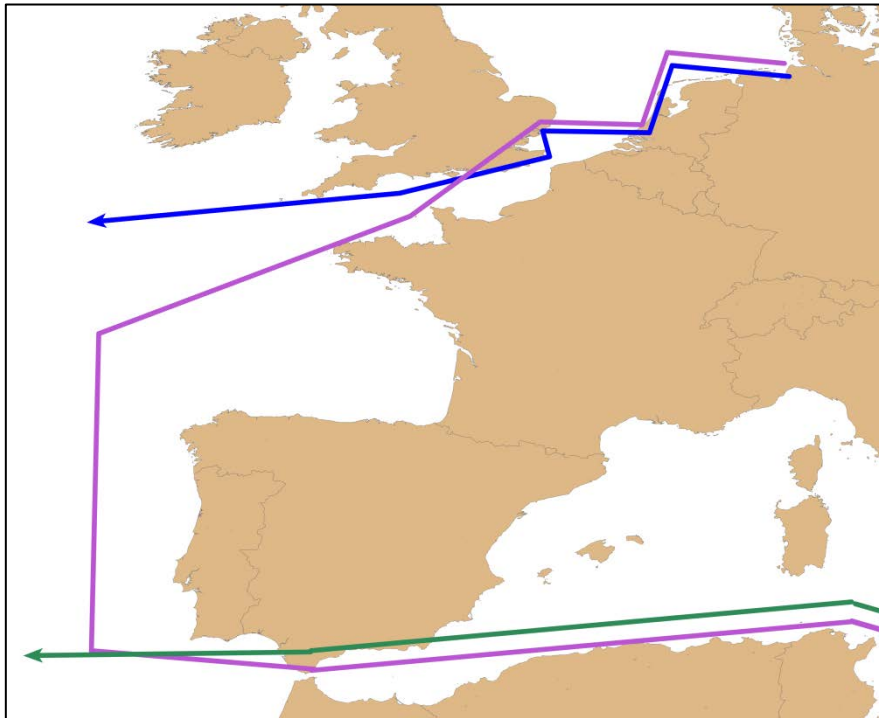
## serving UK & France from Atlantic not North Sea (1)

### Before

Far East - N Europe

N Europe - N America

Far East - Med - North America



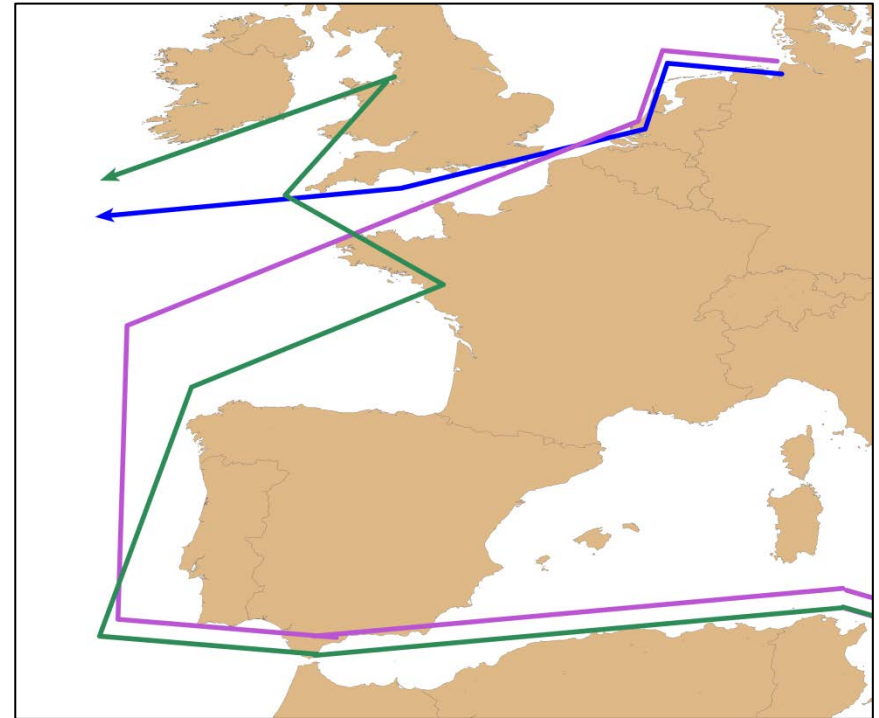
### After

Far East - N Europe

N Europe - N America

Far East - Med - **NW European port** -

North America



- Our cost analysis shows post SECA such strategies cost effective
  - network costs marginally cheaper

# The immediate future:

## -initial plans by 2M and Ocean3 reflect existing port relationships

Weekly port calls

	2M		Ocean Three		Together	
	Current	Proposed	Current	Proposed	Current	Proposed
Rotterdam	10	8	4	8	14	16
Port Said	7	6	9	5	16	11
Felixstowe	9	7	1	4	10	11
Le Havre	5	6	4	4	9	10
Antwerp	5	7	1	1	6	8
Bremerhaven	8	8	-	-	8	8
Valencia	5	6	2	2	7	8
Hamburg	2	2	4	6	6	8
Gioia Tauro	5	7	-	-	5	7
La Spezia	5	5	2	1	7	6
Algeciras	2	6	1	-	3	6
Barcelona	3	5	2	1	5	6
Marsaxlokk	4	2	5	4	9	6
Ambarli	3	3	3	2	6	5
Sines	4	4	-	-	4	4
<b>Above 15</b>	<b>77</b>	<b>82</b>	<b>38</b>	<b>38</b>	<b>115</b>	<b>120</b>
All others	33	28	26	22	59	50
<b>Total calls</b>	<b>110</b>	<b>110</b>	<b>64</b>	<b>60</b>	<b>174</b>	<b>170</b>
Total ports of call	36	36	27	27	35	36

- overall little change in number of calls and ports served
- more calls at the 15 leading ports
- 15% of calls lost at smaller ports
- Initially major ports secure because few can accommodate all the members of a competing alliance
- but scope to adjust over time through incremental change

# Towards a Stable Future

- consolidation of the liner industry welcomed if economies of scale can be improved in a stable environment
- but emerging structure implies limited competition
  - while not a monopolistic 'conference' system transparency crucial to retain confidence between lines and shippers
- rapid growth in mean ship capacity was the inevitable consequence of end of the conference system and higher bunker costs
- pressure to cut costs may lead to a drift towards 'non SECA' ports and the Mediterranean....port productivity increasingly important to retain competitiveness
- relationship between ports and lines will inevitably change due to drastic reduction in the number of independent lines

# Thank you

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