Asia-Pacific
Economic Cooperation

Liner Shipping Competition Policy: Non-Ratemaking Agreements Study (Stages 2 & 3)

APEC Transport Working Group (TWG)

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Final Report, Project TPT 02/2007: Stages 2 & 3 – Evaluation and Policy Guidelines

Prepared by:

Steve Meyrick
Managing Director
Meyrick Consulting Group Pty Ltd
Level 2, 63A Market Street, Wollongong NSW 2500 Australia
TEL +61 2 4227 1484 FAX +61 2 4227 1515
Email: steve@meyrick.com.au

Meyrick Reference: 11162

For

APEC Secretariat
35 Heng Mui Keng Terrace Singapore 119616
Tel: (65) 68919 600 Fax: (65) 68919 690
Email: info@apec.org Website: www.apec.org

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Note: This report was prepared independently by the consulting firm of MEYRICK AND ASSOCIATES in accordance with the terms of a contract with the APEC Secretariat. The consultant has been advised that the Maritime Experts Group (MEG) at TPT/WG-31 in Lima in August of 2008 reviewed the draft final report submitted by the consultants and agreed to discuss it further at TPT/WG-32 scheduled for Singapore in July, 2009. It is the consultant's understanding that the MEG will then consider the proposed guidelines and decide on the next steps. In the meantime, the MEG does not endorse either the contents of the report nor the proposed guidelines.

EXECUTIVE SUMMARY

Evaluation of Non-ratemaking Agreements from a Theoretical Perspective

- Theoretical assessment on the impacts of non-ratemaking agreements is conducted in this study, in which three different market scenarios are utilised: newly developing or minor cargo demand markets; mature, flat or growing cargo demand markets; declining cargo demand and/or over-capacity markets. The impacts of solo vessel operations were compared with those of shared vessels under different market conditions. These are discussed under four aspects: speed of adaptation; vessel system economics; physical service performance; and service choice.
- Non-ratemaking agreements have the potential to provide important operating efficiencies. They can lead to increased efficiency and improved quality of services to customers by taking advantage of genuine economies of scale and coordinating sailing schedules. The users of shipping services offered by consortia can obtain a share of the benefits resulting from the improvements in productivity and service by means of cost reduction derived from high levels of capacity utilisation and better service quality stemming from improved vessels and equipment.
- There are elements in non-ratemaking agreements that could in principle be anti-competitive elements, such as the ability to influence the behaviour of agreement members and restrict competition from current or potential competitors; market concentration and market share; and the exchange of information on confidential contracts. If this potential is realised, it may have negative effect on the interests of the shippers.
- An anti-competitive situation in a non-ratemaking agreement would be one where a vessel operating group controlled a large share of trade capacity; one carrier was the sole provider of all the vessels; the non-vessel providing carriers were tied to the agreement with long notice periods, with exit penalties, and were not allowed to sell space to third parties without the vessel providing carrier's approval; and excessively long term (in excess of ten years) – no such situation with all these elements present has been found in the identified agreements of this Work.

Non-ratemaking Agreements in Practice

- Assessment of the conditions in several agreements (filed with FMC) has revealed that certain provisions could be implemented in an anti-competitive manner though, it should be noted that, these agreements are filed with and monitored by the Federal Maritime Commission. This is reflected in some clauses which may affect the behaviour of party members, such as the allocation of vessels, slots and equipments, membership and withdrawal, rights of voting and assignment, duration (term), termination and cancellation of the agreement. Some other clauses, such as the admittance of future membership and information exchange provisions, might have influence on the fair competition from current or potential competitors.

- Analysis of market development and the roles played by non-ratemaking agreements demonstrates that although liner operating agreements are extensively used by carriers to offer services involving large (economic) vessels, the individual market shares of carrier groupings (shared vessel operations) generally do not exceed 35% - 50%. These thresholds are generally considered to pose potential risk to competitive dominance in the market place.

Stakeholders' Consultation Feedback

- Governments interviewed during this study have acknowledged the positive roles of non-ratemaking agreements in achieving efficiency in the liner shipping system. On the eve of the abolition of liner conferences by the European Community, governments of several APEC economies have expressed their concern over the potential negative impact of this change on international shipping market, such as the potential of fluctuation of freight charge and degradation of transport services. They have also indicated their intention to undertake further studies on this change.
- In some APEC economies where little specific regulation on non-ratemaking agreement exists, there has been sign of attitude change with the Governments, in that Governments have started to take measures to strengthen the supervision of non-ratemaking agreements in their regulatory system.
- Stakeholders (from both carriers and shippers sides) of interviewed APEC economies are generally satisfied with the current regulatory and operational arrangements for non-ratemaking agreements. There is consensus between carriers and shippers on the contribution of non-ratemaking agreements in achieving operational economies and efficiencies, as well as providing global coverage for the liner shipping services.
- Given the fact that in a number of countries there is no specific regulatory regime for non-ratemaking agreements, some shippers have expressed the view that more appropriate and harmonized regulatory system should be established to further monitor non-ratemaking agreements, in order to ensure that carriers do not abuse their dominant position or eliminate fair competition.
- Some shippers also expressed concerns on how to ensure that a fair share of the benefits flowing from the improved efficiency as well as other benefits can be passed on to the shippers and other transport users. They expressed their wish to be better informed of changes to shipping services – such as the change of ship allocation, any significant increase in the frequency of sailings and calls in the service offered, and so on.

Proposed General Guidelines for Regulation

- **Proposed Guideline 1**:

Non-ratemaking agreements between ocean carriers should continue to be permitted as a positive form of supplier collaboration for efficiency-enhancement within APEC member economies' competition regulations.

A formal exemption from the relevant provisions of general competition law should be provided for non-ratemaking agreements in those APEC member economies where:

- Either, the provisions of general competition law prohibit the efficiency-enhancing behaviours that are typical of non-ratemaking agreements, or
- The provisions of general competition law give rise to uncertainty as to whether, in a particular instance, these behaviours are or are not legal.

- **Proposed Guideline 2:**

APEC member economies encourage the clear separation of ratemaking and non-ratemaking agreements.

In those economies in which the filing of agreements between shipping lines is required, this could be most easily achieved by changing the filing rules to require separate filing of these two types of agreement, even where the ratemaking and non-ratemaking agreements cover the same trade and involve the same parties.

- **Proposed Guideline 3:**

APEC member economies do not subject non-ratemaking agreements to a market share test based on a pre-defined threshold level.

- **Proposed Guideline 4:**

APEC member economies continue to allow ocean carriers to negotiate the duration of the non-ratemaking agreements.

- **Proposed Guideline 5:**

APEC member economies agree to collect information for all liner shipping non-ratemaking agreements that enjoy exemption from the application of general competition legislation – this means in practice the mandatory filing of agreements, on a confidential basis, with the relevant government regulatory authority.

APEC member economies maintain a common format for documentation of the main features of non-ratemaking agreements whereby the main features comprise:

- Parties to the agreement
- Nature and scope of the agreement
- Agreement duration (term), entry and exit provisions

- Operational capacities, providers and uses agreed to
- Voting / decision-making rules
- Selling of space to third-parties.

(Note: this list of main features should be considered an indicative minimum and could be expanded further).

APEC member economies agree to the regular exchange of the main features information documented in a common format. This information exchange could start as a first stage on a confidential basis between the relevant government regulatory authorities, and later, as a second stage, move to the public domain reporting of this information so as to harmonise the current reporting provisions of APEC member economies.

1. INTRODUCTION

1.1 Stages Two & Three – Evaluation of agreements and policy guidelines

This document covers Stages Two & Three of the study. For an introduction to the complete study, the reader is advised to refer to the Stage One Report – 'Information Gathering' (May 2008).

Stage Two of the study focuses on evaluating the liner non-ratemaking agreements and their content gathered in Stage One and supplementing this with further stakeholder consultation feedback. On the basis of these evaluations, Stage Three of the study focuses on the development of proposed general guidelines for the regulation of non-ratemaking agreements, so as to support the objective of a common APEC region policy position.

1.2 Methodology

The methodology in this study consisted of assessing both theoretical and actual market aspects of the roles and impacts of liner non-ratemaking agreements over the past, in today's situation and into the future. Essentially the evaluation of liner non-ratemaking agreements combines a high-level market approach to carrier competitive developments with a detailed review of the competitive aspects of the liner non-ratemaking agreements themselves.

1.3 Structure of the report

This report is divided into five main topic areas:

- A theoretical assessment of the impacts of non-ratemaking agreements
- Market developments and the roles played by non-ratemaking agreements
- Competition issues in non-ratemaking agreements
- Stakeholder consultations feedback
- Proposed general guidelines for regulation

The report is fully referenced to ensure that sources of information and opinions are clearly stated (i.e. as Meyrick and Associates or third parties).

2. THEORETICAL ASSESSMENT OF THE IMPACTS OF NON-RATEMAKING AGREEMENTS

This Chapter explores from a theoretical perspective the workings of the liner non-ratemaking agreements in different market situations, and presents a view as to the potential/possible impacts on the main parties involved – notably the carriers involved in the agreements, those external to the agreements, and shippers (exporters/importers).

2.1 Methodology

In order to identify and fully assess the potential impacts of liner operational agreements, three different market scenarios are utilised:

- Newly developing, or minor cargo demand markets
- Mature, flat or growing cargo demand markets
- Declining cargo demand and/or over-capacity markets.

As identified in Stage One of the study, the liner non-ratemaking agreements are best classified into four categories:

- Alliance (global/multi-trade)
- Vessel sharing
- Vessel space charters
- Vessel space swaps.

In terms of the relevant impacts of solo versus shared vessel operations under different market conditions, four key aspects are discussed:

- Speed of adaptation (flexibility, responsiveness to market changes)
- Vessel system economics (roundtrip slot utilisations, costs and freight rates)
- Physical service performance (sailing frequency, port coverage, reliability and transit times)
- Service choice (strategic risk).

A supplemental aspect concerns environmental impacts which are also relevant here. In general, shared vessel operations allow for the use of more technically-advanced, fewer but larger fuel efficient vessels. Also vessel utilisations in shared operations are typically higher than multiple, solo operations. All these features should have positive environmental impacts in terms of emissions.

2.2 Theoretical impacts for carriers and shippers

2.2.1 Newly developing, or minor cargo demand markets

In newly developing or minor cargo demand markets, there is insufficient cargo demand to economically justify the main carriers all operating their own services on the trade – the ships theoretically required may be too small (below a 250–300 TEU design threshold) or just not available on the charter market for long-haul (deep-sea) trades.

Unless the carriers cooperate in the form of vessel sharing, or space/slot charters, shippers at worst may not have access to overseas markets or typically will be reliant on a few possibly niche or multi-purpose carriers. For carriers wanting to offer global coverage to multi-national shippers, joint services allows carriers to provide a market presence under their own brand in an efficient, low cost way.

The unconstrained ability of carriers to share vessels lowers the hurdle to the development and growth of new containerised international trades. As trades build, there is the potential for carriers to move away from shared vessel operations to solo or less-partnered vessel services given the existence of flexible exit/entry terms in operating agreements. There are clear historical examples of new trades starting with small, shared vessels acting as regional feeders (e.g. South America, intra Asia, Black Sea, etc.) to be later replaced by direct-calling solo or less-partnered vessel services as the level of trade changes the vessel system economics.

TABLE 1: IMPACT ASSESSMENTS FOR NEWLY DEVELOPING OR MINOR CARGO DEMAND MARKETS

Assessment criteria:	Impacts of operating agreements in new/minor trades:
Speed of adaptation	More carriers can enter new markets more quickly at lower volume threshold levels (as low as 10 - 100 TEU per week with slot charters) when shared operations available. Carriers better able to react to and match emerging/growing demand.
Vessel system economics	Roundtrip vessel economics are improved (lower slot costs) when larger, direct-calling vessels are used with high utilisations as offered through shared operations. With competition and market adjustments, lower slot costs result in long-term lower freight rates.
Physical service performance	Fortnightly or weekly fixed-day sailing frequencies and greater port coverage can be more quickly obtained with shared operations; high reliability can be more quickly achieved with additional vessels afforded by shared operations; and a quicker transition to fast transit times afforded by shared direct-calling services as opposed to slower transhipment/feeder operations by common-carrier (third-party) operators.
Service choice	Choice of service is less of a concern, rather the existence of any direct service at low trade volume levels is the issue – shared operations provide a low threshold for commencing services in newly developing/minor markets.

In newly developing or minor trades, the advantages of liner operating agreements are clear with all parties (carriers and shippers) benefiting in terms of access to new markets and the use of cost effective vessel transport systems.

2.2.2 Mature, flat or growing cargo demand markets

In mature, flat or growing cargo demand markets (such as the key East - West, North - South, and intra regional trades), the dynamics are about carriers being able to, as precisely as possible, match forward cargo demand with increased route capacity at the least vessel system cost.

Vessel system economics dictates that it is cheaper to increase route capacity by substituting larger vessels on services than by adding extra services (strings of vessels). However, larger vessels require significant capital investments if new-builds are involved and deliveries are time-lagged by one to two years. Furthermore, the vessels being replaced are required to be cascaded on to other trades or used for secondary services on the same trade. All these features of increasing capacity to match growing demand at the lowest cost are positively supported by the ability of carriers to share vessel operations and space.

TABLE 2: IMPACT ASSESSMENTS FOR MATURE, FLAT OR GROWING CARGO DEMAND MARKETS

Assessment criteria:	Impacts of operating agreements in mature flat/growing trades:
Speed of adaptation	Carriers can more quickly respond to new vessel investments and obtain funding more easily when shared operations are available.
Vessel system economics	Shared operations promote the use of larger (more economic) vessels which provide the least system cost and result in long-term lower freight rates.
Physical service performance	Shared operations allow carriers to combine low-cost vessel systems with a wide range of direct port calls and the positive workings of reliability management disciplines (i.e. the carriers with low reliabilities / technically poor vessel performance are educated / pulled-up by the better performing carriers – something which would not or take longer to happen when all carriers are solo operators.
Service choice	On balance, shared operations do not appear to adversely affect service choice as the theoretical reduction in the number of alternative physical services is likely to be offset by higher average reliabilities than all solo operations.

In mature, flat/growing trades, the advantages of liner operating agreements appear to benefit all parties (carriers and shippers) particularly in terms of low-cost vessel space being increasingly made available in the market-place.

2.2.3 Declining cargo demand and/or over-capacity markets

In declining cargo demand or over-capacity markets (such is currently occurring in the Trans-Pacific and Europe/Asia trades), the focus is on re-aligning, as quickly and cheaply as possible, vessel route capacity with actual cargo demand so that average vessel utilisation rates remain high and system economics are maintained at low-cost levels (i.e. the larger, economic vessels can still be deployed if at all possible).

Carriers, faced with this situation, essentially have three options, which can be combined if necessary, to reduce over-capacity in a market:

- Replace vessels on a service with smaller ones
- Reduce the sailing frequency of a service
- Terminate a service and withdraw the vessels.

For each of the capacity reduction options, the released vessels have to be either:

- Re-deployed on other trade routes requiring additional or replacement tonnage (given other trades are more buoyant)
- Re-deployed on existing services by slowing-down vessels (increasing roundtrip times by one or more weeks) and adding one or more vessels to maintain weekly sailing frequencies (this has happened recently in many of the East - West trades but more as a reaction to increasing fuel prices)
- Returned early to owners if chartered-in (This is not always possible on long-term, bareboat charters)
- Laid-up (mothballed), sold (given a reasonable second-hand market) or scrapped (if at the end of a vessel's economic life).

The options of terminating services and reducing sailing frequency, without alternatives of shared operations, are problematic for carriers in terms of sales/marketing, global branding and maintaining revenue/market share. Such actions by carriers without access to shared operations have significant impacts on shippers in terms of a reduction of choice and physical connections between ports. Liner operating agreements are an important tool to avoid/alleviate the negative financial and operational impacts to both carriers and shippers.

In particular, a carrier who has a solo service is able to withdraw tonnage but still offer a non-vessel providing service by space chartering with other carriers or can scale-down operations by contributing tonnage to a joint service to obtain a share based on own vessel costs. The economics of space chartering versus joint vessel operations is dependent upon a number of factors – volume of business, operating cost-levels, market/port coverage priorities, etc.

Recent developments in the Trans-Pacific trade, with the top three global carriers Maersk Line, MSC and CMA-CGM rationalising and combining services, demonstrates the effective use of liner operating agreements to respond to a serious deterioration in the market supply - demand balance caused by a combination of increases in supply (large new-buildings being delivered) and a fall-off in cargo demand (US market going into recession and imports from Asia reducing).

TABLE 3: IMPACT ASSESSMENTS FOR DECLINING CARGO DEMAND OR OVER-CAPACITY MARKETS

Assessment criteria:	Impacts of operating agreements in declining/over-capacity trades:
Speed of adaptation	Carriers can more quickly respond as more operational options are available which allow a market presence to be maintained without or with limited tonnage.
Vessel system economics	Shared operations allow larger vessels to be used and average utilisations of the remaining shared services to be higher which promotes least cost system economics and the offering of space charters at reasonable cost levels for non-vessel contributing carriers.
Physical service performance	Shared operations allow a greater protection of existing service levels than solo operations, i.e. decreased service frequencies and increasing transit times are more likely to occur with solo operations than shared operations – with reduced service performance for shippers.
Service choice	If all operations are solo, then there is a greater chance that service choice and port coverage would be more limited (i.e. more services terminated) than with the existence of shared operations in times of declining markets and over-capacity.

Different levels and variants of service rationalisations (capacity reductions) are afforded by shared operations to the benefit of both carriers and shippers. Ultimately, if capacity has been reduced too sharply, it is still relatively simple for additional capacity to be introduced by competing carriers on the trade or new carriers moving into the trade – as such, the technical barriers to entering a trade are relatively low (vessels can be chartered and are relatively homogenous).

Without shared operations or the chartering/swapping of space on services, the downward parts of the shipping market cycles (i.e. annual periods of thin margin or loss-making rates) would most likely drive the need for further and wider carrier consolidation than is currently occurring – this would be the only choice open to carriers to maintain a long-term presence in the market. Such resulting carrier market concentrations, in the absence of shared operations, would raise its own set of issues for competition.

2.3 Potential system efficiency gains and impacts on costs and rates

The potential system efficiency gains of shared or joint vessel operations are best illustrated with the following example.

Three carriers each have 2,000 TEU per week market share of container demand in both directions of a trade. The distances and roundtrip times require a string of six vessels to maintain a weekly sailing frequency. There are two operating scenarios open to the carriers. Either each carrier operates on its own a six vessel service deploying 2,000 TEU ships or the three operate a joint service with six 6,000 TEU vessels whereby each carrier contributes two 6,000 TEU ships on its own account and receives a one third slot allocation (2,000 TEU share of space) on the weekly service.

Furthermore, by combining the port calls of the three carriers in to one service, some ports which were unique to one are now available for all, i.e. the port coverage of the three carriers is now expanded to the benefit of their clients (the shippers). In practice, extra port calls may require either quicker vessels (which in times of high fuel prices is very costly – as is currently the case) or an extra vessel to cover an additional seven days of roundtrip time. (Assuming of course that ports can handle 6000 teu ships)

One carrier, who has a relatively old, technically inefficient fleet of vessels, consistently has poor on-time arrival reliability when operating solo, but with new vessels contributed to a joint service and using the operational disciplines of the other partner carriers, it and its clients benefit from significantly improved schedule reliability and transit times offered by the joint service.

It may be the case that since the container volumes on the trade are growing each year, and rather than replacing the vessels in a few years, it will be necessary to order (build) or long-term charter even larger vessels for the joint service – say six 7,000 TEU ships. In the short-term, the 1,000 TEU per week of extra space available on the joint service can be offered to two other carriers – one slot chartering 500 TEU per week at an agreed (cost-price) rate, the other carrier swapping 500 TEU per week on its own service in another trade with the three carriers which do not operate a service in the other trade.

In this example, three solo services would require a total of 18 x 2,000 TEU ships costing the trade a total of around US$ 810 million in capital investments at current new-building prices. However, a joint service of 6 x 6,000 TEU ships would only cost a total of around US$ 640 million in capital investment. In addition to this, there are economies of size in terms of ship operating costs when comparing the roundtrip TEU slot cost of a 2,000 TEU vessel with a 6,000 TEU vessel – this is evidenced in the daily charter cost (which includes capital but excludes voyage expenses) of US$ 10 per TEU for a 2,000 TEU vessel and US$ 6 to 8 per TEU for a 6,000 TEU vessel.

Some long distance trades, such as the Europe/Asia trade, require seven to nine vessels per weekly service (vessel loop/string) whereby the investment levels and economies are even more pronounced.

The economies of scale of operating larger vessels in shared operations compared with multiple solo smaller vessel operations is able to lead to least transport system cost levels, which translate into long-run lower average ocean freight rates for shippers through carrier competition in what are typically cyclical markets.

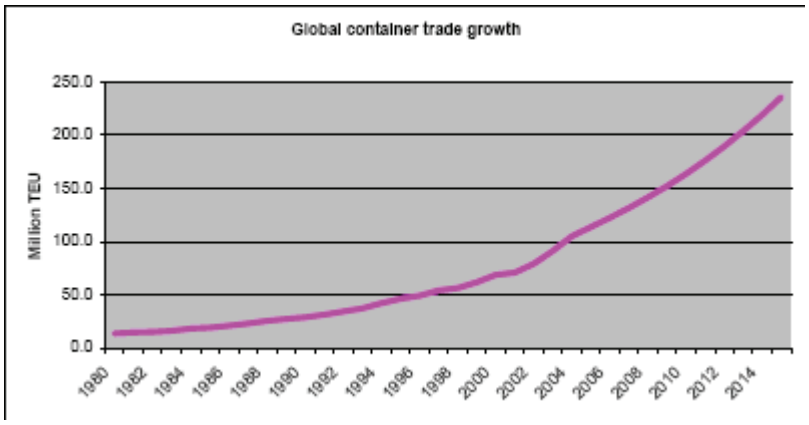
3. MARKET DEVELOPMENT AND THE ROLES PLAYED BY NON-RATEMAKING AGREEMENTS

3.1 Market developments

3.1.1 Container trade growth

World container trade growth has been explosive over a 25 year period (1980 to 2005) rising from a low 15 million TEU in the early 1980s to around 120 million TEU in 2005. It is currently estimated to be around 140-150 million TEU (2007). This development has been caused by a combination of the containerisation of general cargo, the liberalisation of world trade, increasing economic wealth, and the overseas manufacture of goods for developed (OECD) countries (i.e. production outsourcing). World container trade is forecast to continue growing at between 7% to 8% per year with a forecast of around 240 million TEU by 2015.

FIGURE 1: WORLD CONTAINER TRADE GROWTH, 1980–2015



Source: Various (OECD, UNCTAD, CI, Drewry) and Meyrick analyses

In terms of trade-lanes, in 2005, the East-West trades accounted for 54 million TEU, the Intra Regional trades (including Intra Asia) for 40 million TEU, and the North-South/South-South trades for 20 million TEU. These trade-lane group volumes are forecast to double by 2015.

The main trades themselves also present challenges in terms of directional imbalances – in 2005, the Trans-Pacific trade had an eastbound volume of 14 million TEU of loaded containers compared with a little over 4 million TEU westbound, and the Europe/Asia trade had a westbound volume of 10 million TEU of loaded containers compared with 6 million TEU eastbound (the level of imbalances on the two trades have since worsened).

This dramatic increase in world container trade, set against the complication of directional imbalances, has put tremendous pressure on container shipping lines (carriers) to continuously expand their investments in more and larger vessels in order to match demand and provide global coverage to shippers. For instance, in 2007, carriers provided 80 physically distinct container services (i.e. either solo or joint vessel strings/loops) on the Trans-Pacific trade, and almost 60 on the Europe/Asia trade.

3.1.2 Expansion of carrier fleets

The degree of expansion of carrier fleets can be appreciated by comparing the top ten individual carrier fleet capacities (total TEU slots) in 1991 with 2007. Maersk Line has increased from 220,000 TEU in 1991 to 1.6 million TEU in 2007, Mediterranean Shipping (MSC) from 30,000 TEU to 1.2 million TEU, and CMA-CGM from 66,000 TEU to 0.7 million TEU.

TABLE 4: TOP TEN CARRIER FLEET CAPACITY INCREASES, 1991 COMPARED WITH 2007

		Fleet TEU slots		
Line	Position	2007	1991	Growth Index
Maersk Line	1	1,638,898	220,000	7.45
Mediterranean Shipping Co (MSC)	2	1,200,668	30,000	40.02
CMA-CGM	3	694,239	66,000	10.52
Evergreen Line	4	620,610	131,000	4.74
Hapag-Lloyd	5	491,954	57,000	8.63
Cosco Container Lines	6	426,814	97,000	4.40
China Shipping Container Lines	7	418,858	-	na
APL (NOL)	8	399,896	100,000	4.00
Orient Overseas Container Line (OOCL)	9	351,542	-	na
NYK Line	10	331,083	107,000	3.09

Source: CI / Meyrick analyses

As of 2007, the world fleet of fully cellular containerships numbers over 4,100 vessels in service with a total slot capacity of 10 million TEU and there are an additional 1,300 vessels totalling 5.3 million TEU slot capacity on order.

TABLE 5: WORLD CONTAINERSHIP FLEET (FULLY CELLULAR), 2007

Size Class (Teu)	Existing Fleet		Ordered		Orders/Fleet (Teu)
	No of Ships	'000 Teu	No of Ships	'000 Teu	
< 500	438	136	13	3	2%
500-999	752	549	155	128	23%
1000-1499	611	722	170	202	28%
1500-1999	486	826	120	207	25%
2000-2499	302	692	21	46	7%
2500-2999	348	947	137	362	38%
3000-3999	317	1082	80	273	25%
4000-4999	354	1553	217	944	61%
5000-5999	239	1300	59	310	24%
6000-6999	114	740	121	788	160%
7000-7999	49	360	6	42	12%
8000-8999	93	767	95	798	104%

Size Class (Teu)	Existing Fleet		Ordered		Orders/Fleet (Teu)
9000-9999	36	336	38	355	106%
10000+	5	68	77	857	1260%
Total	**4,144**	**10,077**	**1,309**	**5,315**	**53%**

Source: CI / Meyrick.

Carriers have had to increase the ordering of more and bigger vessels over the years, particularly in the last four years.

FIGURE 2: CONTAINERSHIP ORDERBOOK (SHIP NUMBERS), 1996-2008

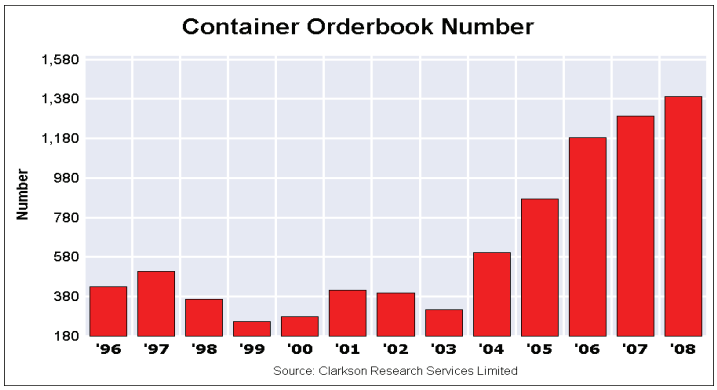
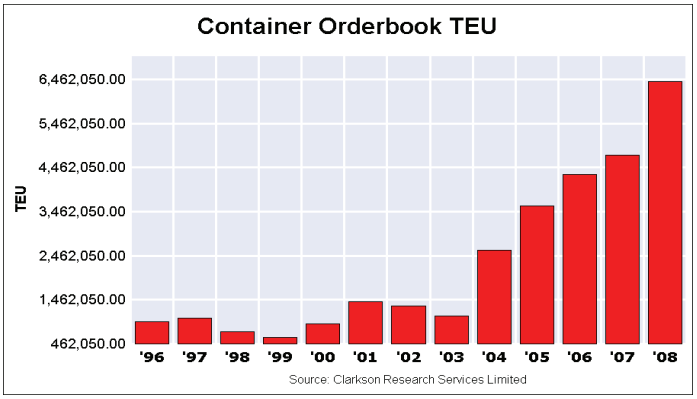
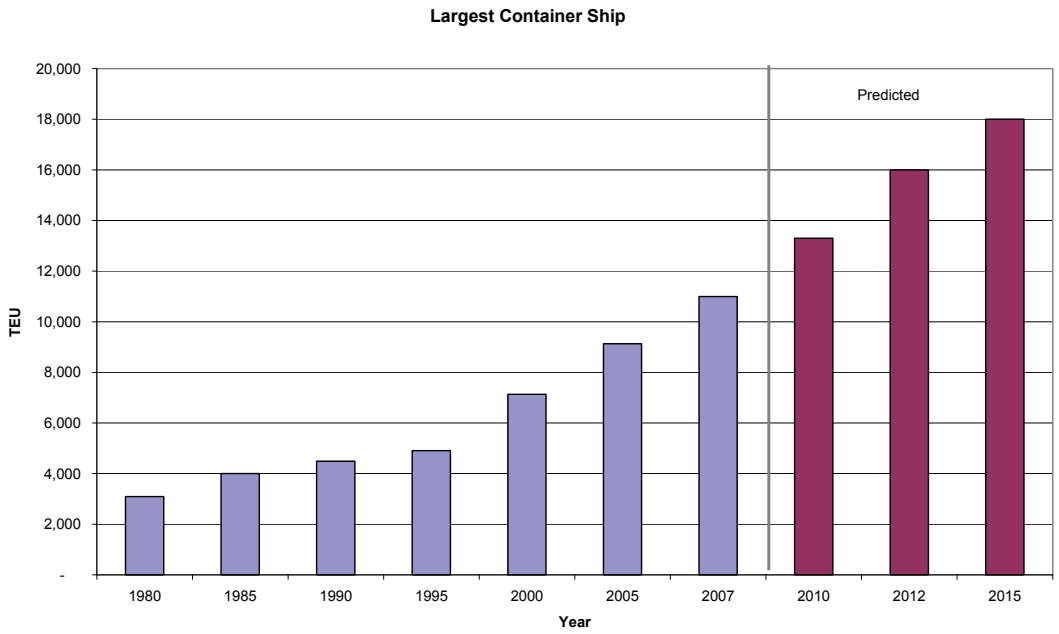


FIGURE 3: CONTAINERSHIP ORDERBOOK (TEU CAPACITY), 1996-2008



The trend in increasing ship size is clear when one considers that the largest containerships in 1980 were 3,000 TEU rising to 7,100 TEU in 2000, and over 11,000 TEU in 2007. There are currently ships on order of 13,100 TEU and the prediction is that the largest vessels may reach 18,000 TEU by 2015.

FIGURE 4: LARGEST CONTAINER SHIP SIZES, 1980–2015

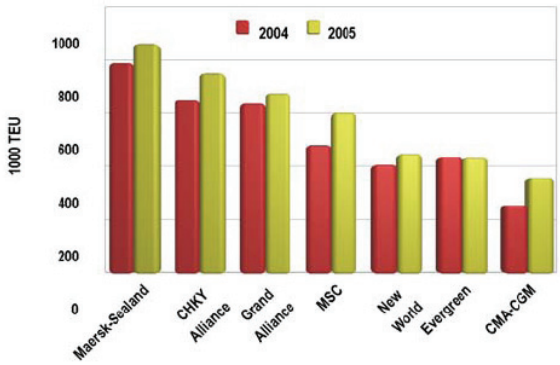


Source: CI / Meyrick analyses

These large, super-post Panamax vessels, cost around US$ 135 million for a 8,000 TEU vessel and reportedly around US$ 175 million for a 13,000 TEU vessel – levels of investment which require significant financing as solo operators (i.e. in excess of US$ 1 billion for a Europe/Asia weekly service).

In terms of the share of the world containership fleet capacity of the leading individual carriers compared with the three main global alliances, in 2005, the leading individual carriers were either exceeding (i.e. Maersk Line) or nearly matching the fleet capacities of the three main global alliances (i.e. the CHKY Alliance, the Grand Alliance, and the New World Alliance).

FIGURE 5: COMPARISON OF FLEET CAPACITIES OF THE MAIN ALLIANCES AND INDIVIDUAL CARRIERS, 2004/5



Source: SSMR-ISL / MDS-Transmodal

It can be argued that without the unconstrained operation of shared or joint services deploying increasingly larger more efficient vessels, carriers would have been unable to match the growth in the world container trade in terms of financing and operating solo operations (each one being a weekly service as demanded by shippers).

3.1.3 Carrier consolidation

A feature of the development of the world container market has been the gradual consolidation of carriers with two major acquisitions in the last five years adding to the trend (Maersk Line taking over P&O-Nedlloyd, and Hapag-Lloyd acquiring CP Ships). Although global fleet slot capacities shares do not fully reflect global container trade market shares, they do give a reasonably good indication of the competitive situation in the market-place.

TABLE 6: TREND IN CARRIER CONSOLIDATION, 1988–2007

	Fleet TEU		Share World
Year	Top 20	World	Top 20
1988	na	na	35%
1996	na	na	50%
1998	na	na	70%
2000	3,370,901	4,769,327	71%
2001	3,785,958	5,318,173	71%
2002	4,408,673	5,947,443	74%
2003	4,952,059	6,462,140	77%
2004	5,486,856	7,090,897	77%
2005	6,240,979	7,957,409	78%
2006	7,463,347	9,265,784	81%
2007	8,640,273	10,571,865	82%

Source: CI / Meyrick analyses

TABLE 7:CARRIER SHARES OF THE WORLD FULLY-CELLULAR CONTAINERSHIP FLEET, 2007

Carrier	Ranking	Capacity TEU	Number Ships	Share TEU	Cumulative Share
World Fleet at 1 Dec. 2007	0	10,571,865	4,242	-	-
Maersk Line	1	1,616,749	435	15.3%	15.3%
Mediterranean Shipping Co (MSC)	2	1,170,031	333	11.1%	26.4%
CMA CGM	3	671,507	212	6.4%	32.7%
Evergreen Line	4	614,724	174	5.8%	38.5%
Hapag-Lloyd	5	485,738	138	4.6%	43.1%
COSCO Container Lines	6	423,870	137	4.0%	47.1%
China Shipping Container Lines (CSCL)	7	394,915	95	3.7%	50.9%
APL (NOL)	8	389,294	110	3.7%	54.5%
Orient Overseas Container Line (OOCL)	9	351,402	82	3.3%	57.9%
NYK Line	10	329,257	85	3.1%	61.0%
Hanjin	11	326,730	75	3.1%	64.1%
Mitsui OSK Lines (MOL)	12	323,881	102	3.1%	67.1%
Kawasaki Kisen Kaisha Ltd	13	291,152	90	2.8%	69.9%
Yang Ming	14	267,319	81	2.5%	72.4%
Zim	15	235,418	80	2.2%	74.7%
Hamburg Sud	16	196,363	75	1.9%	76.5%
Hyundai Merchant Marine	17	187,413	43	1.8%	78.3%
Pacific International Lines (PIL)	18	136,967	70	1.3%	79.6%
Wan Hai Lines	19	118,616	71	1.1%	80.7%
CSAV	20	108,927	48	1.0%	81.7%

Source: CI / Meyrick analyses

The world's top twenty carriers now control over 80% of the world's delivered fully-cellular containership fleet. This collective market share increased significantly from below 50% in the early 1990s to around 70% at the end of the 1990s and has then gradually increased to its current position of 82%.

The leading carrier, Maersk Line, after absorbing the then number two carrier P&O-Nedlloyd in 2005/6, currently has a 15% capacity share of the world fleet and the top four carriers now collectively control almost 39% of the fleet capacity.

The individual capacity shares of the top twenty carriers vary from 1% to 15%, levels which can be considered relatively low in terms of market dominance or potential anti-competitive criteria (i.e. 30% - 50% market shares are typically considered thresholds by government regulatory competition authorities).

The current sudden downturn in the container shipping markets, brought about by lower than expected global growth and the delivery of a wave of new-buildings, is looking to trigger further consolidation of at least one major carrier (the German Tui Group has placed Hapag-Lloyd for sale with interest reportedly being shown by APL and Maersk Line).

If Hapag-Lloyd is acquired by Maersk Line then Maersk Line could have a potential (maximum) 20% capacity share (likely to be less due to fleet rationalisations) – alternatively if Hapag-Lloyd is acquired by APL (NOL) then APL will become the number three ranked carrier with a potential maximum share of 8%.

It can be argued that without the unconstrained possibility of carriers entering into joint operating agreements to share large efficient vessels, the only option available to carriers to stabilise markets, make operations more efficient, and secure investment funds for future growth, is by further increased consolidation, i.e. possibly with the top ten carriers having within a few years a 90+% market share and the leading three carriers each having shares possibly in excess of 25%.

Therefore, it can be considered that carrier operating agreements have a stabilising effect on carrier consolidation as the sharing of vessels provides an alternative approach to achieving operational efficiencies.

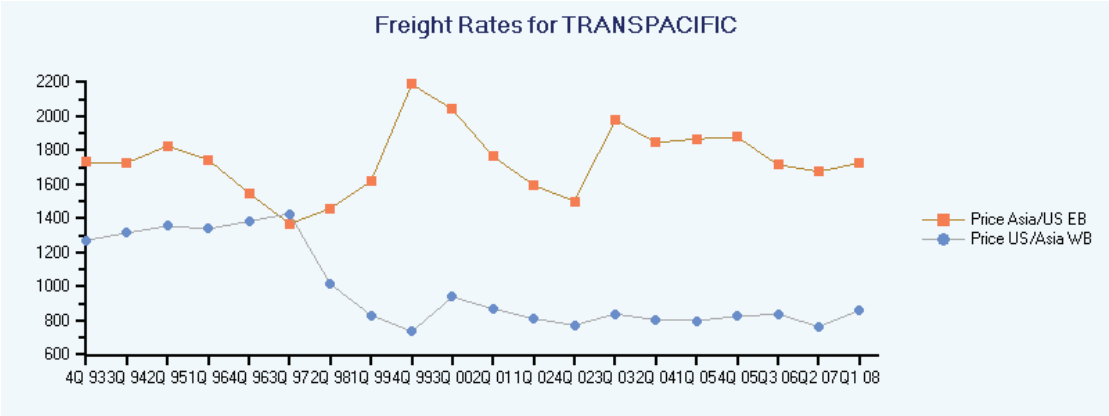
3.1.4 Freight rates and carrier earnings

The impacts of the supply-demand situation, pricing and regulatory mechanisms (conferences, etc.), carrier consolidations and operational efficiency measures (such as alliances and vessel sharing) in the global container shipping market can, to a significant degree, be gauged by developments in freight rates and carrier earnings.

Developments in the spot freight rates on the main East/West trades, over the period 1993 to present, show that there are distinct shipping cycles at that long-run average freight rates, in nominal terms, have been either relatively flat or have declined over the last 15 years, and in real terms have declined.

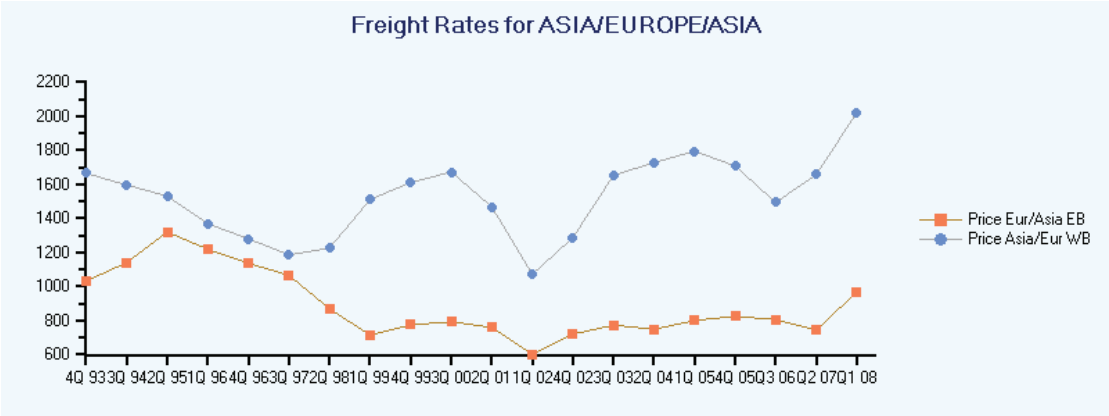
It should be noted that spot freight rates only make-up a part of the market with the majority of shipments negotiated as part of six-month or annual freight contracts concluded between shippers/forwarders and carriers. However, developments in the spot rates indicate the market pressures when freight contracts are re-negotiated.

FIGURE 6: DEVELOPMENT OF FREIGHT RATES ON THE TRANS-PACIFIC TRADE (US$/TEU), 1993-2008



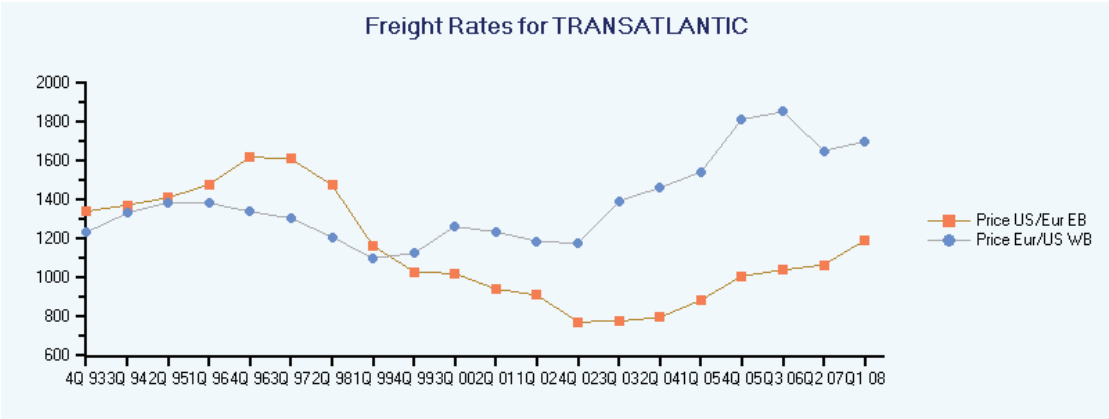
Source: Containerisation International (CI)

FIGURE 7: DEVELOPMENT OF FREIGHT RATES ON THE EUROPE-ASIA TRADE (US$/TEU), 1993-2008



Source: Containerisation International (CI)

FIGURE 8: DEVELOPMENT OF FREIGHT RATES ON THE TRANS-ATLANTIC TRADE (US$/TEU), 1993-2008



Source: Containerisation International (CI)

The freight rates shown are all-in, ie including CAFs and BAFs etc, plus THCs where gate/gate rates have been agreed, and inland haulage where CY/CY rates have been agreed. All rates are average rates of all commodities carried by major carriers. Rates to and from the US refer to the average for all three coasts. 2002 transatlantic and transpacific rates have been adjusted to cater for a change in the data-base since 1.1.2003. All rates going back to Q4 2002 have also been adjusted to take into account new carriers now contributing to this analysis.

In terms of earnings, carriers have typically been impacted by the cyclical nature of freight rates and are often faced with periods of reasonable earnings followed by losses. Rates of return on capital are relatively low for carriers when compared with other industrial sectors. The leading freight forwarders, who are typically non-asset owners, have been making consistently higher and more stable earnings than the leading carriers. The expectation is that carriers' earnings will be significantly eroded (if not loss-making) due to a 2008 downturn in the shipping market compounded by increasing (doubling of) fuel costs.

It would appear from analyzing these market developments that operational efficiency measures and least cost transport systems (large, fuel efficient vessels) are critical to maintaining the market presence of the top twenty carriers. Shippers appear to be also benefiting from long-run declining average freight rates (in real terms) which typically only represent around 2-3% of the value of the goods being shipped.

3.2 Importance of agreements in the market

A review of the full container services on a number of key routes has been completed to assess the importance of operating agreements (shared vessel operations) in the market-places of the APEC region. The details of the various services (defined as distinct physical loops or strings of vessels) on the selected trade routes are contained in Appendixes II – IV.

3.2.1 Europe / Asia trade

A recent analysis completed by CI on the North Europe / Asia trade, showed that, as of January 2008, the individual market shares of the total service capacity were in the range 11% - 20% for the three main alliances and 8% - 20% for the two leading solo operating carriers. The smallest joint service, operated by PIL and Wan Hai, only had a 2% market share of total service capacity.

TABLE 8: COMPARISON OF ALLIANCE AND KEY SOLO OPERATOR MARKET SHARES IN THE N.EUROPE-ASIA TRADE

Carrier group:	Number of weekly services	Total number of vessels	Market share of vessel service capacity
CKYH alliance (1)	8	58	20%
Grand Alliance (2)	4	36	13%
New World Alliance (3)	4	34	11%
PIL / Wan Hai	1	8	1.8%
Maersk Line	*6*	*50*	*20%*
MSC	*3*	*33*	*8%*

Note: (1). Coscon, K Line, Yang Ming, and Hanjin. (2). OOCL, Hapag Lloyd, NYK, MISC. (3). MOL, APL, and Hyundai.

Collectively the three main alliances have a 44% share of the North Europe / Asia trade. Interestingly, deteriorating market conditions are forcing carriers and alliances to cut services, slow-steam vessels, and swap / slot charter between previously solo operating carriers (i.e. slot exchanges between Maersk Line and Evergreen Line).

3.2.2 Trans-Pacific trade

Analysis of the Trans-Pacific trade (details in Appendix II) reveals that around 90% of the services offered are in the form of alliances or joint (shared) operations. The major three alliances (CKYH / NWA / Grand Alliance) each have market shares which do not exceed 20% (i.e. 14% - 19%).

TABLE 9: COMPARISON OF TOTAL SOLO CARRIER AND ALLIANCE/JOINT MARKET SHARES, TRANS-PACIFIC TRADE

	Market share, in TEU	
	US East Coast	US West Coast
Individual carriers	6.7%	14.0%
Alliances / joint	93.3%	86.0%

TABLE 10: ALLIANCE/JOINT MARKET SHARES, TRANS-PACIFIC TRADE

Alliance / joint operations	Asia-USEC	Asia-USWC
CKYH	17.3%	19.2%
CMA/CSCL	10.4%	-
Evergreen/Maersk	8.7%	-
Grand Alliance	16.4%	14.5%
K Line/Yang Ming/Hanjin/UASC	9.8%	-
NWA	14.2%	17.9%
NWA/CMA/Evergreen	5.4%	-
Zim/Emirates	3.1%	-
CMA/MSC/USL/ANL	-	3.5%
COSCO/K line/Hanjin	-	4.8%
CSCL/ZIM/CMA/ANL	-	7.0%
Maersk/CMA/Safm/Evergreen/Wan Hai/MSC	-	5.3%
Wan Hai/PIL	-	1.8%
Zim/CSCL	-	4.0%
Maersk/Safm/MSC	-	6.9%

A recent downturn in the trade has resulted in services being terminated and the increased the use of shared operations / space exchange to keep operations efficient and cost effective.

3.2.3 Asia / South America West-coast trade

Analysis of the Asia / South America West-coast trade (details in Appendix III) reveals that around 60% of the services offered are in the form of joint (shared) operations. The major three joint operations each have market shares which do not exceed 26% (i.e. 13% - 26%).

TABLE 11: COMPARISON OF TOTAL SOLO CARRIER AND JOINT OPERATION MARKET SHARES, ASIA-SAMWC TRADE

	Market share, in TEU
	Asia-South AmericaWC
Individual carriers	41.6%
Alliances / joint	58.4%

TABLE 12: JOINT OPERATION MARKET SHARES, ASIA-SAMWC TRADE

Alliance / joint operations	Asia-SAWC
CCNI/Hamburg Süd	25.8%
MOL/K line	19.8%
Maruba/CMA/CLAN/CSCL	13.1%

3.2.4 Main Australia trades

Analysis of the main Australia trades (details in Appendix IV) reveals that joint operations are significantly used (including space charters). There are some trades (particularly to/from Asia) where joint operation carrier groups have market shares of around 30%. The Trans-Tasman appears higher but in reality this trade also has other deep sea services which serve this trade as a leg.

TABLE 13: JOINT OPERATION MARKET SHARES, MAIN AUSTRALIA TRADES

Alliance / joint operations	Asia, NE	Asia, SE	Europe	N America	NZ/Tasman
ANL, CSCL, OOCL	31.7%	-	-	-	-
Maersk, MSC	22.6%	-	-	-	-
Hamburg Sud, Hyundai, Hapag-Lloyd, SYIM	9.9%	-	-	-	-
K-Line, NOL, NYK, COSCO*, P&O-Swire	11.3%	-	-	-	-
APL, COSCO, Gold Star, PIL, K-Line, & others***	12.0%	-	-	-	-
Evergreen, Hanjin, Hapag-Lloyd	6.3%	-	-	-	-
MISC, MOL, OOCL, PIL, Hyundai, & others**	-	27.8%	-	-	-
ANL, APL, NYK, Djakarta Lloyd	-	17.0%	-	-	-
Italia, Hanjin, RCL, & others****	-	12.1%	-	-	-
Maersk, Hamburg Sud	-	21.3%	-	-	-
K-Line, Maersk, APL*,RCL*	-	5.0%	-	-	-
CMA-CGM, Delmas, DAL, ANL*	-	-	19.5%	-	-
MSC, ANL*	-	-	22.5%	-	64.0%
ANL, CMA-CGM, Hapag-Lloyd, Marfret	-	-	24.2%	-	-
Maersk, Hapag-Lloyd*, APL*	-	-	-	37.3%	-
Hamburg Sud, Hapag-Lloyd, Maersk	-	-	-	31.0%	-
US Lines, ANL*	-	-	-	18.4%	-

Note: Also includes carriers space-chartering on services.

3.2.5 Conclusions

It is evident from this review of some sample trades that liner operating agreements are extensively used by carriers to offer services involving large (economic) vessels and that the individual market shares of carrier groupings (shared vessel operations) generally do not exceed 35% - 50% share thresholds, which are considered by a number of regulatory competition authorities to present the potential for competitive dominance in the market-place.

Furthermore, it is interesting to note that in the New Zealand international deep-sea trades, the shippers and government authorities appear (publicly) not to be concerned by the 40% - 50% market share held by Maersk Line given the apparent benefits of the services offered by the carrier.

4. COMPETITION ISSUES IN NON-RATEMAKING AGREEMENTS

4.1 Theoretical anti-competitive elements in non-ratemaking agreements

Although the treatment of non-ratemaking agreements differs between the competition laws in different jurisdictions, in general, these agreements are regarded as more benign compared with conferences and discussion agreements whose main purpose is to set market rates or limit market capacity. Under the EU block exemption for consortia (Regulation 823/2000), all agreements with the object of promoting and facilitating joint operations of liner shipping services were exempted from the application of Article 81 of the EU Treaty. According to the Preamble to Regulation 823/2000,

> *Consortia ... generally help to improve the productivity and quality of available liner shipping services by reason of the rationalization they bring to the activities of member companies and through the economy of scale they allow in the operation of vessels and utilization of port facilities.*

The Regulation also notes that consortia help to promote technical and economic progress by facilitating and encouraging greater utilisation of containers and more efficient use of vessel capacity. However, the eroding power of liner conference, the changes of the liner shipping market and the growing prevalence and market share of non-rate making agreements has brought the possibility that such agreements may have certain degree of adverse competition implications.

The potential non-competitive elements of these agreements are mainly embedded in their ability to influence the behaviour of members, and to limit competition from current or potential competitors. These may be reflected in clauses on members' rights in cross-charter and sub-charter of excessive space and slots, the flexibility of withdrawal from the agreement, change of ownership, conditions on admittance of future members, exchange of business information, and so on.

Another point is the potential deficiency of alliance agreement in their ability of efficient management. Issues that are highlighted include (Nikin Mayur Vora 2005):

- Leadership, bureaucracy and lengthy decision-making processes
- Lack of commitment and company compatibility
- Core competences and opportunistic behaviour
- National and organisational cultural differences
- Lack of long-term investment

Apart from the theoretical anti-competitive elements in the agreements, market concentration may also be an issue with competition implications.

4.1.1 Potential anti-competitive elements in the agreements

Two issues in consortia agreement may have possibility to reduce competition: joint price fixing and a relatively high market share (Productivity Commission 2005, p. 90). In addition, our study finds that theoretically, there exist other elements in the operational agreements that might have negative impact on competition, for example:

- The operational agreements may forestall the competition between carriers that would otherwise operate individual services. In practice, a careful study is needed to see whether or not this reduced competition is outmatched by the benefits of cooperation. The scope of benefits should not be limited to those for carriers (parties to the agreement), but also the benefits passed on to the customers.
- Whether or not consortia agreements interfere with their individual liner parties' decision making in matters such as sales and marketing.
- Whether or not consortia agreements put restriction on member carriers' choice with non-parties, such as the flexibility to allocate their rights or delegate their duties, such as cross-charter and sub-charter.

As for alliances, the following arrangements in the agreement may have anti-competitive impact, both internally and externally:

- Restrictions on member carriers' use of third party carriers on specific routes without prior consent of the rest of the members
- Restrictions on withdrawal, which may include conditions on notice and penalties
- Restrictions on ownership changes during the agreement
- Restrictions on information exchange and procedures

An information exchange system entails an arrangement on the basis of which undertakings exchange information amongst themselves or supply it to a common agency responsible for centralising, compiling and processing it before returning it to the participants in the form and at the frequency agreed. It has been the common practice in many industries to gather, exchange and publish aggregate statistics and general market information. In many cases this published market information is a good means to increase market transparency and customer knowledge, and thus help to produce efficiencies. However, the exchange of commercially sensitive and individualised market data may have an impact on collusion (EC Guidelines 2008).

In the liner shipping industry, although information exchange has been more of a concern for liner conference and discussion agreements, it may also become a potential anti-competitive element in operational agreements, in particular in the alliance agreements. With the erosion of liner conferences, the strengthened monitoring mechanism of discussion agreements under many countries' regulatory systems for competition, the likely effects of information exchanges in operational agreements, both pro- and anti-competitive, have been drawing more and more attention.

The benefits arising from information exchange

The economic literature has identified a number of benefits arising from information exchanges. Firstly, it may help to facilitate investment decision in that it ensures that supply is able to respond to future demand. It may also help with better product positioning of inventories and reduce transport costs. Secondly, information exchange is regarded as a good channel for organisational learning. Thirdly, it is also considered important to help agreement members in determining entry and exit.

The potential anti-competitive elements of information exchanges

The potential harm of information exchange lies in the potential of collusion, in which the information being exchanged is used to reduce or eliminate competition and therefore facilitate the carriers to coordinate their behaviour. The consequence might be either higher prices, or the intentionally limited production or capacity.

Types of information being exchanged

In theory, any information related to the trade which affects a particular operational agreement may be exchanged between the carriers, which include information on capacity utilisation, market size and development, commodity development, market share by trade/region/port, supply and demand data by trade/commodity/region, and so on.

For operational agreements such as consortia, the type of operational information that is exchanged typically includes container size and type, container weight, stowage plans, port of loading/discharging and destination of the containers, short-term and long-term capacity planning and deployment of new ships, and so on.

ELAA proposals on information exchange

The importance of information to sustain efficient investments and operations in scheduled services has been argued by carriers. One of the representatives of the carriers, the European Liner Affairs Association (ELAA), has made proposals to the EU on the importance of information exchange within consortia. According to ELAA, members of a consortium need to exchange certain operational information so that they can ensure that their cooperation produces an effective and efficient product for the shipper. This information has to be exchanged between consortium members who swap slots and have to track the position of their containers on other lines' vessels.

Information exchange in the EC Guidelines 2008

The EC Guidelines on the application of Article 81 of the EC Treaty to maritime transport services (Brussels, 1 July 2008) sets out rules for information exchanges between competitors in liner shipping (Section 3.2). The Guidelines do not directly deal with the exchange of information between shipping lines which take part in liner consortia. This type of information exchange is permitted to the extent that they are ancillary to the joint operation of liner transport services and the other forms of co-operation covered by the block exemption in Regulation (EC) No 823/2000.

However, the recommendations in the Guidelines on the assessment of information exchange systems are useful reference in evaluating the anti-competitive elements of non-ratemaking agreements. The Guidelines, inter alia, state that:

It follows that the actual or potential effects of an information exchange must be considered on a case-by-case basis as the results of the assessment depend on a combination of factors, each specific to an individual case. The structure of the market where the exchange takes place, and the characteristics of the information exchange are two key elements that the Commission examines when assessing an information exchange. The assessment must consider the actual or potential effects of the information exchange compared to the competitive situation that would result in the absence of the information exchange agreement. To be caught by Article 81 (1) of the Treaty, the exchange must have an appreciable adverse impact on the parameters of competition.

The Guidelines elaborate on 'structure of the market' and 'characteristics of the information exchange' respectively.

For market structure, two issues should be considered:

- The level of concentration. Restrictive effects are more likely to happen in highly concentrated markets.
- The structure of supply and demand. Important elements include the number of competing operators and the symmetry and stability of their market shares and the existence of any structural links between competitors.

For the characteristics of the information exchanged, the Guidelines recommend that the following distinction should be made in judging whether or not the information exchange may have anti-competitive effects:

- Whether or not the information concerned is already in the public domain. In principle the exchange of information already in the public domain is not deemed as restrictive of competition. However, the transparency of the market is still important to guarantee the accessibility of the information.
- Whether the information concerned is individual or aggregated. The exchange of individual information has a bigger possibility to affect competition than the exchange of aggregated information.
- The age of the data and the period to which they relate. Exchange of historic information (more than one year old) is generally not regarded as having anti-competitive inclination. Exchange of recent data on volume and capacity is also unlikely to be restrictive of competition, as long as the data are aggregated. The exchange of future data, however, is likely to be problematic especially when it related to prices or output, which may reveal the commercial strategy an undertaking intends to adopt in the market. This may in turn reduce the rivalry between the parties to the exchange and therefore is restrictive of competition.
- The frequency of the exchange. The more frequently the data are exchanged, the more swiftly competitors can react.

- The way that data are released. The more the information is shared with customers, the less likely it is to be problematic. On the contrary, if market transparency is improved for the benefit of the carriers alone, it may not help to pass on the benefits of information exchange to the customers.

These factors may help to determine whether or not the information exchange in a particular agreement should be allowed or not. As the Guidelines point out, it should be noted that an exchange of information between carriers that restricts competition may nonetheless create efficiencies, such as better planning of investments and more efficient use of capacity. The key point is to what extent such efficiencies can be passed on to customers. This point will be further elaborated in the concluding part of this Chapter.

4.1.2 Market concentration

The liner shipping industry is more and more characterised by large-scale international companies which compete in the global economy, and which need to meet increasing customer demands or higher quality services, better performance measurements and reduced costs. Economic data have shown that market concentration is accelerating at an increasing pace, especially in niche markets where the global majors have purchased most of the small independent liner operators. The 2002 OECD report distinguished the trend of market concentration into absolute concentration (based on the size of the top operators) and relative concentration (based on the size of the top alliances), both of which have been increasing in the liner shipping industry (OECD 2002).

Until this moment the experience with market concentration has been largely positive. It has brought about restructuring of industries, substantial cost savings, increased profitability, and a wider range of services and product offerings which have been made available to customers at lower prices.

Considering globalisation of the world economy and the underlying economics of the container ship business, it is believed that the trend of market concentration in the liner shipping industry is inevitable. As a matter of fact, with the ending of liner shipping conferences in October 2008, this trend of concentration within operational agreements may become more intensified.

The issue is, when competitors work together, they may naturally try to seek ways to reduce competition between themselves by limiting the behaviour of members. Furthermore, the concern that exists is in how to ensure the benefits of cooperation/concentration can be passed on to customers in the form of lower prices or higher quality services.

Experience in other industry sectors shows that market concentration should be accompanied by the strengthening of competition policy. More regulatory work is needed in reviewing and monitoring the competition implications which arise from market concentration.

4.2 Assessment of actual agreements – typical clauses with competition implications

As studied above, in theory, some of the clauses in operational agreements may have the effect of reducing competition. These clauses typically cover issues on authority on vessel and excess space, termination and withdrawal, duration (term), voting, new entrants, sub-chartering to third parties information exchange, and so on. Although many of such clauses may affect competition both within and outside the agreement, some of them have more influence on the behaviour of the existing agreement members, while others' impact on the external competitors (current and potential) can be more explicit.

The following section conducts assessment on how these theoretical anti-competitive elements are reflected in the actual agreements. It is important to appreciate that the discussion below identifies language in agreements publicly filed with the FMC as examples and are not meant to indicate that they are applied in an anti-competitive manner. Further, the FMC monitors such agreements on an on-going basis for behaviour that violates the Shipping Act of 1984.

Clauses on vessels

The typical clause on vessels sets up Parties' agreement on:

- The specifications and maximum number of the vessels
- The scheduling and coordination of vessels
- Matters in conjunction with linehaul vessel operations
- Chartering of vessels
- Withdrawal, substitution or replacement of vessels

In particular, the requirements on maintenance of the number of vessels, substitution or replacement of vessels may have certain impact on the members' operational flexibility. For example, members are required to provide advance notice and agree upon other terms and conditions with respect to the withdrawal/substitution/replacement. However, in most agreements there is no specific period requirement on advance notice, which adds some uncertainty to this obligation. In addition, only a certain percentage of vessel string capacity is allowed to be changed at one time.

Subsection 1 (Vessels) of Article 5 (Agreement Authority) under the Grand Alliance Agreement II (filed with FMC) regulates that the parties are authorized to engage in the following activities:

> *(e) Coordinate and agree to provide advance notice and agree upon other terms and conditions with respect to a party's withdrawal of a vessel (s) or its introduction of substitute or replacement vessels or newbuildings in the Trade;*

Similarly, Article 5 (Vessels, port rotations and schedules) under the New World Alliance Agreement (filed with FMC) sets up the rules that:

2. (b) The Parties are authorized to change the number and/or size of vessels operated under this Agreement so as (i) to reduce the above-stated aggregate, annualized capacity figure by no more than 20 percent or (ii) to increase such capacity figure by no more than 40 percent; provided, however, that the Parties may reduce or increase such capacity by greater percentages on a temporary basis (fewer than 90 days) in response to operational or market conditions.

3. (a) Each Party has a prime responsibility for maintaining the number of ships provided by it under paragraph A. 2 of this Article 5. Any change to this number can only be made with the express prior unanimous agreement of all Parties, subject to Article 13. A. 3 (ii).

Clauses on excess space and slot allocation

The agreement on members' right to allocate excess space, either cross chartering or sub-chartering has impact on their timely operational decisions, both within the agreement and with customers and competitors. Under some agreements, sub-chartering arrangements of a more permanent and significant nature to non-party vessel operating common carriers need to have the unanimous consent of the other parties. This is the same with the case where a member needs to charter space from a non-party vessel operating common carriers (VOCC's). If the member wishes to undertake such an arrangement with non-parties on a more permanent and significant nature, this decision is subject to the unanimous consent of the other parties of the agreement.

Similar issues exist with clauses for slot allocations. For example, under the New World Alliance Agreement, Article 6 (Slot Allocations, Exchanges and Sales) stipulates parties' obligations concerning sales or sub-charters to third parties of slots on vessels covered by the agreement:

B. 1 (a) In the event that a Party has certain unused slots for any sailing on any voyage or portion thereof, and the other Parties have failed to exercise their first right of refusal to charter those slots within a certain time frame and according to procedures mutually agreed by the Parties, then those unused slots within a Party's entitlement may be sold or sub-chartered on an ad hoc basis (which shall mean not more than one voyage at any one time) to any third party Ocean Common Carrier, only after the other Parties have failed to exercise their above-mentioned first right of refusal.

(b) Slot sales or sub-charters, other than on an ad hoc basis pursuant to the preceding subparagraph (a), must be unanimously agreed, such agreement not to be unreasonably withheld, upon notice in advance by the Parties.

Where an operational agreement has many members, to reach a unanimous agreement might be time-consuming. This may pose problems for efficient decision-making processes.

Clauses on membership, duration (term), withdrawal and termination

The typical operational agreement has clauses on membership, duration (term), withdrawal and termination (cancellation). Some of such clauses also cover issues on readmission and expulsion.

Membership and withdrawal

Most of these clauses require that in the case of a change in the ownership or control of any party, written notice (typically within 6 months or 12 months) from the affected party should be given to terminate the agreement. Under some agreements, such termination is only effective to the affected party, therefore for other parties the agreement remains valid. In some cases prior to the termination for the affected party, the other parties must agree unanimously that such change (of ownership or control) may have material influence on the validity of the agreement. For example under the 'Membership and Withdrawal' clause of the Grand Alliance Agreement II (filed with FMC), Section C:

> *Notwithstanding any other provision of this Article 7, if at any time during the term of this AGREEMENT there shall be a change in the control or a material change in the ownership of any one party (the party so affected being referred to in this Article 7 C only as the Affected Party) and the other parties are unanimously of the opinion arrived at in good faith that such change is likely to materially prejudice the cohesion or viability of the services, then the other parties may unanimously within six months of the coming into effect of such change give not less than six month's notice in writing to the Affected Party terminating the period of the AGREEMENT in relation to the Affected Party.*

For those agreements with a specific expiration date for the initial term, the clause on withdrawal usually sets up a date (in most cases one year prior to the expiration date) before which, no withdrawal notice is permitted to be handed in. For example, paragraph 1 of Article 15 under the New World Alliance Agreement stipulates that:

> *This Agreement shall remain in effect through December 31, 2012 (the "Initial Term"). Any Party can withdraw from this Agreement by giving twelve (12) months notice to the other Parties; provided, however, that such notice cannot be given before December 31, 2011.*

For multi-member agreements, such as the alliance, how to achieve efficient decision-making is one of the major issues. In order to reach a unanimous agreement, a lengthy process of bargaining and negotiations is often unavoidable. This inevitably has negative impact on the effective operation of the agreement, which may affect both its competitiveness and service levels to the customers.

EC amendment on right of withdrawal

One modification on the right of withdrawal under EC regulation on consortia is worth noting. The EC Regulation 611/2005 amending Regulation 823/2000 has extended the time within which a member might withdraw from the consortium. Under Regulation 823/2000, a member may withdraw from the consortium without having to pay a financial penalty after an initial period of 18 months from the entry into force of the agreement. Under 611/2005, this period has been extended to 24 months. In addition, that initial period would apply where the parties to an existing agreement have agreed to make substantial new investment in the maritime transport services offered by the consortium. Such investment would be considered substantial when it constitutes at least half of the total investment made by the consortium members.

One of the benefits of this change lies in that it gives members extended flexibility to withdraw from an agreement. It also may encourage individual members to make investment into the services.

Termination

Unless terminated by operation of law, the termination usually requires mutual agreement (for two-party agreement) or unanimous vote (for multi-party agreement). In some agreements where there is no definite expiration date, there are clauses on expulsion, where parties may expel a party by majority vote. For example, Article 9 on the Duration and Termination clause under COSCON/KL/YMUK/HANJIN/SENATOR Worldwide Slot Allocation and Sailing Agreement (filed with FMC) stipulates that:

> *By a majority vote, the Parties may expel a Party at any time if such Party is in a condition of serious financial distress adversely affecting its financial viability or is substantially unable to perform its obligations under this Agreement.*

Clauses on voting and assignment

Voting generally requires unanimous agreement between all parties. For example, under the 'voting' clause of the COSCON/KL/YMUK/HANJIN/SENATOR Worldwide Slot Allocation and Sailing Agreement (filed with FMC),

> *All matters decided under this Agreement, including amendments hereto, shall be by unanimous vote of the Parties. The Parties may meet wherever they decide for the purpose of implementing this Agreement; however, actions in implementation of this Agreement may also be taken pursuant to telephone polls of the Parties. A quorum shall exist if the authorized representatives of all Parties are present in person or by telephone contact.*

The 'non-assignment' clause of the same agreement states that:

> *Except as provided in 13.2 or 16.2 no Party shall assign, transfer, subcontract, change, or otherwise dispose of any rights and duties in this Agreement to any person, firm, or corporation without the prior written consent of the other Parties.*
>
> *Nevertheless, the Slot Provider is authorized to release Slots on its owned service to the third Party without consent of the Slot Charterer. The Slot Charterer is authorized to release Slots to the third Party subject to prior written consent of the Slot Provider.*

Similarly, the space charter and sailing agreement between Atlantic Container Line and Hapag-Lloyd (filed with FMC) has voting clause which states:

> *Decisions under this Agreement shall be by mutual agreement of the Parties.*

In some cases, the voting clause of agreements where there are many members, such as some alliance agreements, only majority voting is required for routine operational matters. However, parties typically have no right of veto. In addition, the voting clause under such agreements usually have restriction to the member's voting rights, in that each party is only permitted to vote on those matters in those portions of the trade which it is involved in. For example Section A of Article 8 under the Grand Alliance Agreement II (filed with FMC) stipulates that:

> *Decisions on major issues concerning the membership of the Agreement, the scope of service provided hereunder, the employment of ships, pro-forma schedule patterns, allocation shares in a trade lane or financial settlement shall be reached by unanimous agreement of the parties; provided that a party's voting rights shall be limited to matters in those portions of the Trade in which it participates and that agreement on strategic membership decisions should not be unreasonably withheld. On routine operational matters, a simply majority shall decide the course of action, with each party having one vote and no right of veto. However, if any party believes that a decision on a routine operation matter will cause it material commercial hardship, then all parties will endeavour to find an equitable solution to such problem.*

Some agreements also set up limitation on a member's assignment of rights or delegation of obligations (including sublet slots). In most cases unanimous agreement of the member is required for such assignment or delegation.

Clauses on admittance of future membership

In most cases, the admittance of new members requires unanimous agreement of the parties.

The membership clause of the New World Alliance Agreement (filed with FMC) states that:

> *Participation in this Agreement is limited to the Parties originally subscribing hereto, except that additional Ocean Common Carriers offering regular service in the Agreement trades may be admitted by unanimous agreement of the Parties and by amendment of this Agreement pursuant to the Shipping Act, and subject to any other government filings or approvals, if required.*

In space charter agreements, the owners may exercise authority on the admittance of new entrants.

Clauses on information exchange

As discussed above, the exchange of market information has the potential for collusion and the abuse of market power. Some clauses on information exchange in the alliance agreements give the members very comprehensive authority to obtain, compile, maintain and exchange information. For example, under the 'Information Exchange' clause of the Grand Alliance Agreement II (filed with FMC):

In furtherance of the authority contained in this AGREEMENT, the parties are authorized to obtain, compile, maintain and exchange among themselves, information related to any aspect of operations in the Trade, including the parties' joint or individual operation therein, whether past, current or anticipated. Such information may include records, statistics, studies, compilations, projections, costs, cargo carryings, marketing and market share information, statistical data, and documents of any kind or nature, whether prepared by a party or parties, or obtained from outside sources relating to matters authorized by this Article 5. The parties are also authorized to agree upon confidentiality requirements.

It can be seen that this clause gives members the right to exchange information on sensitive issues such as anticipated, future information. Although the information does not contain price-fixing elements as in conference and discussion agreements, it may still have strong impact on competition-related issues such as market share.

4.3 Conclusion

The analysis of theoretical anti-competitive factors as well as the actual clauses in non-ratemaking agreements indicates that the pro- and anti-competitive effects is a complicated issue, which required careful and systematic study. We believe that the assessment of non-ratemaking agreement should include two steps.

The first step is to determine whether or not an agreement has:

- Anti-competitive objectives, or
- Actual or potential anti-competitive effects.

If either of these points is confirmed and the agreement is found to be restrictive of fair competition, then the second step is to evaluate:

- The pro-competitive benefits produced by that agreement, and
- The balance of pro-competitive and anti-competitive effects, i. e. whether or not either effect outweighs the other and becomes the prevailing effect of the agreement.

The four cumulative conditions set out in Article 81 (3) of the EC Treaty may be useful criteria for such assessment, which include:

Criterion 1: whether or not the agreement enhances efficiency gains

The first criterion requires that the restrictive agreement must contribute to improving the production or distribution of goods or to promoting technical or economic progress. Types of efficiency gains include:

- Cost efficiencies, which include: development of new production technologies, synergies, economies of scale, economies of scope, and planning of production, stock optimisation
- Qualitative efficiencies, which include: R & D agreements, licence agreements, agreements providing for joint production, and distribution agreements

- Other effects, such as stimulation of investment incentives by vertical agreements due to elimination of free-rider & hold-up-problems

Criterion 2: whether or not the customers get a fair share of the benefits

This criterion requires that consumers must receive a fair share of the efficiencies generated by the restrictive agreement. Although the concept of fair share may vary from case to case, it generally implies that the benefits passed on to the customers should at least be sufficient enough to compensate for any actual or potential likely negative impact.

Pass-on benefits to the customers may take the form of lowered price or the availability of new and improved products and services.

Criterion 3: whether or not the agreement is indispensable for achieving more efficiency

According to this criterion, the third decisive factor is to consider whether or not the restrictive agreement and individual restrictions make it possible to perform the activity in question more efficiently than would have been the case in the absence of the agreement or the restriction concerned. Once again, a two-step test is required to meet this condition:

- The restrictive agreement as such must be necessary in order to achieve the efficiencies
- The individual restrictions of competition that flow from the agreement must also be necessary for the attainment of the efficiencies.

In order to satisfy the test, it needs to establish that there are no other practicable and less restrictive means of achieving the efficiencies. A restriction is deemed to be indispensable if its absence would eliminate or significantly reduce the efficiencies that follow from the agreement or make it significantly less likely that they will materialise. The individual restrictions need to be assessed to see if they are reasonably necessary in order to produce the efficiencies.

Criterion 4: whether or not the agreement has the potential to eliminate competition

This criterion requires that the agreement not offer the parties concerned any possibility to eliminate competition in respect of a substantial part of the products or services concerned. This needs to be based on an analysis of the various sources of competition in the market, the level of competitive constraint that they impose on the parties to the agreement and the impact of the agreement on this competitive constraint.

5. STAKEHOLDER CONSULTATIONS FEEDBACK

In addition to what was presented in Stage One report, our field testing consultation work has brought back the following comments on non-ratemaking agreements, both from governments and industry (carriers and shippers).

Canada

Feedback from Canadian Federal Government Agencies on non-ratemaking agreement has already been presented in Stage One report.

The view of the Canadian liner shipping community (which is by definition international, i.e. since the recent acquisition of CP Ships/Canada Maritime by the German carrier Hapag-Lloyd, all carriers involved in the Canadian container trades are headquartered overseas) is that increased regulation of non-ratemaking agreements would likely result in increased industry consolidation which would mean less choice for shippers.

The use of non-ratemaking agreements between carriers results in:

- Efficiencies and economic benefits in the form of reduced costs
- Increased number of services with higher frequencies and hence more shipper choice
- Greater collective discipline in ensuring that service quality standards are met (higher average service reliability than if all separate individual carrier services).

Their viewpoint on non-ratemaking or operational agreements between liner shipping companies (carriers) is that they are perfectly acceptable if their focus and result is efficiency, particularly involving one-on-one agreements. Comparisons were drawn with other industries, such as the brewing of beer under licence by one brewer for another in a particular market whilst still competing in the same or other geographical markets. Another example concerned the agreement between retail banks to jointly use ATMs (cash dispensers) at non-own-bank locations, resulting in a wider coverage for the general public.

Shippers also believe that operating agreements between carriers can provide greater choice and a greater assurance of service coverage than if all carriers acted solo. By having carriers slot charter and swapping space on each other's services, shippers are provided with backups / alternatives in the event that a carrier ceases a service from a particular load port. The port of Halifax is quoted as a local example of the risks associated with the potential lack of choice if reliance is placed on a single carrier for shipments to certain overseas markets.

There is also a belief that carrier operating agreements, and more specifically alliances, may have different impacts in different market situations, i.e. in a strong, growing market versus a poor (over-tonnaged) market. In a growing market, on balance, the alliances are seen as beneficial in terms of marshalling enough assets to meet the demand and hence provide greater shipper choice. However, in a poor market, there is a feeling that 'sharing the pain' protects the most inefficient carriers which can distort the market mechanism, i.e. if all the carriers were acting solo then the most inefficient carriers would most likely be forced to leave the market.

The activity of carriers sharing demand information for the purposes of alliance planning and joint operations seems to be reasonable if it results in stability and efficiencies in the market. There are examples of other industries doing this to the benefit of their clients.

People's Republic of China

During the interview with MOC in Beijing, the Government expressed its view that since the non-ratemaking agreements are reached voluntarily between the carriers, there has not been particular regulation at the moment to monitor them, although they are requested to be filed with MOC. Furthermore, MOC has been unaware of any substantive negative effect of non-ratemaking agreements on competition.

At the time of our interview (July 2007), MOC did not foresee major change of the current regulation on liner shipping in near future. However, there has been indication that the Government is changing this attitude and will reinforce the regulation of non-ratemaking agreements. On 11th June 2008, Japan-China Shipping Policy Forum was held in Tokyo Japan, in which the governments of the two countries, MOC and MLIT have exchanged views on maritime policies. On the issue of non-ratemaking agreements, MOC expressed the following views:

- The relevant regulations on liner conference and consortia, which are established by the regulations of the People's Republic of China on International Maritime Transportation, will remain enacted when the Chinese Antitrust Law takes effect on 1st August 2008.
- The supervision on the activities of the liner conferences and liner consortia will be strengthened.

The interview with COSCO revealed the fact that many of the non-ratemaking agreements are based on casual cooperation between the carriers, therefore not each of them is filed with MOC. COSCO argued that non-ratemaking agreements between carriers are very important for them to provide reliable and diversified services to the customers. In a capital-intensive market such as liner shipping industry, cooperation between carriers is a crucial lifeline for the survival of small and medium competitors.

Japan

It is the viewpoint of MLIT that the prior consultation system before filing the agreements helps to maintain good communications between shippers and carriers on the agreements, therefore both parties are relatively satisfied with the situation. At the time of our interview (July 2007), the Government did not plan to have specific regulations or policies on non ratemaking agreements. In July 2008, MLIT advised us of their latest position on this issue.

> *The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) doesn't have any immediate plan to change the regulation on non-ratemaking agreements because the MLIT acknowledges that the current antimonopoly exemption policy on international shipping works adequately in Japan and that the antimonopoly exemption policy on international shipping has contributed to secure the stable international maritime transport in Japan.*

Therefore, the MLIT is apprehensive that the abolition of the antimonopoly exemption policy on international shipping would cause a certain impact on the current stable international maritime transport of Japan with the exorbitant fluctuation in fares, the deterioration of transport services and etc.

Furthermore, the MLIT is apprehensive that the abolition of the antimonopoly exemption policy on international shipping would accelerate the M&A by shipping companies and therefore gigantic shipping companies will monopolize the international maritime transport market, which accompanies the higher prices. Accounting these effects, the MLIT should consider carefully to abolishing the antimonopoly exemption policy on international shipping at present.

However, in the circumstances that EU will be making major changes on the regulation of liner shipping conferences from October of 2008, MLIT will study the impact on the market expertly with the point of view of securing the stable international maritime transport.

During the interview with Japanese industry representatives in July 2007, JSA and MOL expressed the view that the current system is essential for the carriers and beneficial for both carriers and shippers (e.g. maximisation of resources, cost reduction, services diversification and reliability). The MLIT holds periodical discussion and studies among the carriers, shippers and other stakeholders on the current system and its operation, together with the system of prior consultation between carriers and shippers prior to the filing of agreements, they help to ensure healthy growth of the industry and achieve balance between the interests of carriers and shippers. Therefore the carriers did not foresee the necessity for making any changes in the current system. They also expressed interest in the potential benefit of the proposed APEC guideline on liner shipping industry as a whole.

In July 2008, JSA passed on to us its latest opinion on the forthcoming elimination of liner shipping conference:

... the EU will repeal the exemption for liner conferences as of 18 Oct 2008, but the block exemption regulation for liner consortia (See attached regulation No 823/2000) is valid until 2010. Members of DG COMP mentioned in several meetings that consortia were working well, and that the regulation was expected to be extended with minor modifications to at least 2015. It means that no administration poses any question on the legitimacy of consortia and the JSA is in complete agreement on the situation.

... although the EU has chosen to end the block exemption for conferences in October 2008, all the other major trading countries such as the US, Australia, Singapore and Japan will retain the exemption systems for carrier agreements including conferences and discussion agreements.

Therefore, it can be said that the EU action on the conferences is the exception in the world, and the JSA continues to support the maintenance of administered immunity system for carrier agreements.

In September 2008, the Japan Shippers' Council (JSC) passed on to MLIT its latest opinion on operational agreements as follows:

"Japanese shippers acknowledge that operational-agreements have the potential to provide important operational efficiencies. On the other hand, they concern that the market would become monopoly or oligopoly taking into account that the top three global carriers; Maersk, MSC and CMA-CGM, started combining services in the Trans-Pacific trade from April 2008."

Republic of Korea

At the time of our interview (July 2007), MOMAF did not have plans to regulate non-ratemaking agreement. The Government believes the shippers' interests are well protected through the prior consultation system with carriers. In addition, shippers are eligible to disagree with the agreement during the prior consultation, and get MOMAF involved in the issue.

During the consultation, the carriers (Hanjin and Hyundai) argued that the current regulatory system of liner shipping agreements, including that of the non-ratemaking agreements, has achieved a win-win situation for both carriers and shippers. They pointed out that non-ratemaking agreements are particularly important for the survival of small- and medium-sized players in international liner shipping industry.

The Korean Shippers' Council, however, expressed its concerns over two issues:

- Concerns on the market concentration of major shipping lines, either in forms of alliance, merger or acquisition. The Shipper's Council wished to know how to minimize the negative impact of this trend on competition and on shippers.
- Concerns on the changes of ship allocation. According to the Shippers' Council, when the carriers change their ship allocation on vessels, space or equipment, in most cases they do not need to discuss or notify shippers.

The shippers also expressed their wish that before filing the agreements, more detailed discussion should be conducted between shippers and carriers. At the same time, if carriers want to make changes on issues such as ship allocation as mentioned above, they should consult with the shippers in advance.

6. PROPOSED GENERAL GUIDELINES FOR REGULATION

The following proposed general guidelines for regulating liner shipping non-ratemaking (operational) agreements in the APEC region have been formulated with two principle objectives in mind:

Objective 1:

Suitable regulation of liner shipping non-ratemaking (operational) agreements in the APEC region, which entails fostering competition in the region by promoting the positive aspects of liner shipping non-ratemaking (operational) agreements and addressing, if any, aspects of these agreements deemed to be non-competitive.

Objective 2:

Harmonisation, using a staged approach, of any divergence in existing APEC member economy regulatory practice on liner shipping competition regarding non-ratemaking (operational) agreements so as to support the further development of a common policy in the APEC region.

6.1 Proposed Guideline 1 – Supporting non-ratemaking agreements in regulation

There is general support for the proposition that non-rate-making agreements have the potential to provide important operating efficiencies. For example, the European Shippers Council, although it views rate-making agreement as undesirable, clearly acknowledges the role that non-rate-making agreements can make to the efficiency of the liner shipping system:

> *The ESC views consortia and alliances as the most acceptable and preferable form of co-operation between shipowners. Industries have increased efficiency and improved quality of services to their customers through certain forms of cooperation which do not include price fixing. It has always been ESC'.s view that consortia can potentially provide the opportunity for genuine economies of scale, enhanced efficiency and cost reduction.….ESC has always recognised that users of the shipping services offered by consortia can obtain a share of the benefits resulting from the improvements in productivity and service, by means of cost reduction derived from high levels of capacity utilisation and better service quality stemming from improved vessels and equipment. By pooling resources and collectively building the correct number of ships most suited to the trade in question. ….*
>
> *The other important form of cooperation between carriers are strategic alliances, which establish cooperation among a group of carriers over certain major trade routes, which can be described a global. The agreements cover a wide range of forms of operational co-operation, e.g. space chartering, slot charter and schedule/sailing arrangements and they aim at the integration of each participants services into one whole. …. Consortia, slot chartering agreements and strategic alliances all seek greater operational efficiency and cost reductions. (ESC 2004)*

The benefits that can, and generally do, flow from these agreements have also been explicitly acknowledged by the European Union Competition Directorate:

> *…. consortia generally bring benefits to shippers, provided that consortia are subject to effective competition. This favourable position is explained by the advantages brought about by consortia. In general they help to improve the productivity and quality of liner shipping services by rationalising the activities of the member companies and by bringing about economies of scale. (Mensching 2000)*

As we discussed in Stage One report and Chapter 5 of this study, our field testing consultation with APEC stakeholders has shown that the viewpoints that they expressed are largely consistent with this position.

However, competition policy is generally distrustful of collaborative agreement between competitors. The presumption on which this stance is based has its roots deep in the origins of economics as discipline; it dates back to Adam Smith's famous remark that 'People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices' (Smith 1976). Article 81(1) of the Consolidated Version of the Treaty establishing the European Community, for instance, contains a general prohibition of all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the common market, and in particular those which:

(a) directly or indirectly fix purchase or selling prices or any other trading conditions

(b) limit or control production, markets, technical development, or investment

(c) share markets or sources of supply

(d) apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage

(e) make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts

Bold text is used above to highlight provisions of the Treaty that would, in the absence of specific exemptions, bear on practices that are typically included in the non-ratemaking agreements that are the subject of this study.

Similar provisions are contained in the competition legislation of a number of APEC member economies. Section 34 of *Singapore Competition Act* 2004, which is modelled on Article 81(1) of the Treaty, also includes a general proscription of a range of agreements. Section 45 of the Australian *Trade Practices Act 1976* identifies, in broad terms, a number of forms of agreement between suppliers which, although they do not directly involve agreement on prices, may have, or be likely to have, the effect of substantially lessening competition.

These provisions mean that the default position of competition policy tends to be that collaborative agreements should be regarded as *prima facie* undesirable, and justified only in special circumstances. If these provisions were applied to the non-ratemaking agreements that are the subject of this report, then many of these agreements would be in breach of the law, or at least vulnerable to legal challenge.

Moreover, the provisions of general competition legislation are often imprecise. Whether particular agreements contravene them will depend on an assessment of the impact of the agreement on competition. It therefore may not be completely clear what is and what is not permitted in a specific context. As a result, in the absence of a clear general exemption, potential parties to an agreement may be unclear whether the agreement contravenes the legislation. In order to be confident that they are acting within the law, they would need to seek clearance from the competition authorities, or clarification from the courts, on a case-by-case basis. This would be wasteful, costly and slow.

Many jurisdictions therefore have specific legislation or regulations that exempt non-rate-making agreements in liner shipping from the application of certain aspects of general competition law. The way in which this is done varies widely: the particular mechanisms used in a cross-section of APEC economies were set out in detail in the Stage 1 report of this study. However, in all cases the effect is to reverse the default position; with the exemptions in place, the presumption is that non-ratemaking agreements are generally both lawful and in the public interest.

The advantage of this approach is clear. Cooperative agreements in shipping are common, and they can change rapidly as new parties are admitted to an agreement or existing parties leave it — or simply as market conditions change. On the other hand, the processes involved in resolving issues of whether a particular agreement does or does not have an anti-competitive effect can be expensive and lengthy: the notorious Trans-Atlantic Conference Agreement issue took nine year to resolve (European Court 2003). As, in most instances at least, non-rate-making agreements provide real cost and service quality benefits, the process by which they are formed, amended and annulled should be as quick and inexpensive as possible.

Proposed Guideline 1:

Non-ratemaking agreements between ocean carriers should continue to be permitted as a positive form of supplier collaboration for efficiency-enhancement within APEC member economies competition regulations.

A formal exemption from the relevant provisions of general competition law should be provided for non-ratemaking agreements in those APEC member economies where:

- *Either, the provision of general competition law prohibits the efficiency-enhancing behaviours that are typical of non-ratemaking agreements, or*
- *The provisions of general competition law give rise to uncertainty as to whether, in a particular instance, these behaviours are or are not legal.*

6.2 Proposed Guideline 2 – Separation of rate-making and non-ratemaking agreements

The survey of agreements reported in the Stage 1 report has made it clear that the implied distinction between rate-making and non-ratemaking agreements that informs this study is not completely clear. Some agreements provide comprehensive coverage of both technical and pricing aspects of carrier collaboration; some are predominantly technical in character, but include some provisions that relate to specific elements of pricing (for example, THCs or surcharges).

Historically, the distinction between the two types of agreement has been of little practical importance. General exemptions for collective agreements amongst shipping liners have covered both sorts of agreements. However, this position began to change with the introduction by the European Union, in 1995, of a separate block exemption for consortia (Commission Regulation 870/95) that operated in parallel with the existing block exemption for conferences (Council Regulation 4056/86). While collective price-setting activity was permitted in agreements covered regulation 4056/86, it was prohibited under agreements covered by 611/2005 (the successor to 870/95). This established in the EU a distinction of legal consequence between the two types of agreement. With the subsequent decision of the EU to rescind Regulation 4056/86, which will take full effect in October 2008, the European Union will in future permit only non-ratemaking agreements; agreements that include provisions relating to prices will be prohibited.

None of the APEC economies contacted during this study appears to have any immediate intention of following in the footsteps of the European Union. Some, including Japan, have clearly indicated that they do not intend to do so. However, the EU decision will affect agreements that relate to services between APEC and the EU, and a clear distinction will in the future need to be made between rate-making and non-ratemaking agreements.

Additionally, pressure to remove the exemption currently provided for rate-making agreements continues in some APEC economies. In its 2005 report on the regulation of liner shipping in Australia, the Productivity Commission advocated the abolition of Part X of the Australian *Trade Practices Act 1976 (*Part X provides partial immunity to shipping conferences from other provisions of the Act). The Global Shippers Forum (in which APEC Economies are strongly represented by the Asian Shippers Council, the Canadian Industrial Transportation Association Japan Shippers' Council and the National Industrial Transportation League) continues to call for an end to the protection provided for collective rate-making by conferences and discussion agreements.

Finally, some APEC economies either do not yet have general competition legislation, or have not yet formally addressed the contradiction between this legislation and the collective rate-making activities of shipping lines. It is at least conceivable that these economies, when they do face this challenge, will turn to the EU model for guidance. This was recently the case in Singapore, where the adoption of the distinction made by the EU between conference (rate-making) and consortia (non-ratemaking) agreements was formally canvassed during the development of the Block Exemption Order that now covers liner shipping agreements.

The actions of the EU will effectively prohibit collective pricing activities on some important shipping routes involving APEC economies. Within the APEC region itself, the situation remains fluid, and it is prudent to contemplate the possibility that some APEC jurisdictions will follow the lead of the EU in the future. The EU has not prohibited technical cooperation agreements, and it is very unlikely that any APEC economy will do so. A clearer separation between the two types of agreements will allow those economies that wish to adopt different policies with regard to rate-making and non-ratemaking agreements to do so readily, and reduce the risk that, in so doing, they will unintentionally limit the scope or undermine the legality of technical cooperation agreements.

Proposed Guideline 2:

APEC member economies encourage the clear separation of ratemaking and non-ratemaking agreements.

In those economies in which the filing of agreements between shipping lines is required, this could be most easily achieved by changing the filing rules to require separate filing of these two types of agreement, even where the ratemaking and non-ratemaking agreements cover the same trade and involve the same parties.

6.3 Proposed Guideline 3 – Market share testing

The block exemption provided to consortia by the European Union applies only when the share of the market held by the consortium lies below 35%. Consortia with a market share of 50% may be granted a specific exemption by the Commission.

There is a fundamental dilemma with the European approach. It is in thin markets, where volumes are not large enough to sustain competing services of an economical scale, that the benefits from technical cooperation agreements are likely to yield the greatest benefit. But it is in precisely these markets that the market share limits imposed on consortia are most likely to be breached.

The intention behind the market share test is to ensure that no group of lines is able, by entering into a consortium agreement, to effectively control a market. However, it is not clear how real this supposed danger is. Provided lines retain their individual marketing identities, competition between the parties can still be effective even if they share vessels and other equipment, jointly plan the routes to be taken by services, or do most of the other things that non-ratemaking agreements typically do.

The main concern is that the parties to the non-ratemaking agreement will jointly plan to restrict capacity to below the level that is needed to meet the needs of the trade. But this is clearly a risky strategy for the parties to an agreement to adopt, as the availability of surplus trade will provide an incentive for new entrants to enter the trade, and for shippers to actively encourage them to do so.

A related concern is that an agreement that embraces parties with a dominant share of the market could encourage, and make effective, 'capacity set aside' provisions designed to artificially constrain supply at times when there is a temporary or unexpected slump in demand. However, this behaviour is at present permissible in most jurisdictions. And if it is considered to be undesirable, it is best dealt with directly by proscribing it in the regulations governing the acceptable content of agreements, rather than indirectly through a limitation on consortium market share.

While the benefits of imposing market share limits are dubious, the practical difficulties of the approach are obvious and real. The most fundamental issue is the difficulty of defining the relevant market. Is it defined as the flow of cargo between two ports? Or is it defined as the flow of cargo between two economies? Or is it defined as the flow of cargo between two trade regions? If the answer is the last of these alternatives, how is a region to be defined? Should Asia be regarded as one single region? Or should it be divided into East Asia, South Asia, and West Asia? Or perhaps East Asia itself consists of several regions — such as South East Asia, China, and North East Asia? The same ambiguity exists for North America — should it be a single region for market definition purposes, since many customers could be served over the Atlantic, Gulf and Pacific coasts, or should each of these coasts be regarded as a separate market? Or does the Pacific Coast itself comprise several distinct market — say, the Pacific southwest and the Pacific Northwest?

The lack of clear and unequivocal answers to these questions means that lines will, in many instances, not be able to plan their actions with complete confidence that they are acting within the law. This will create a disincentive to enter into agreements that would be clearly beneficial, impose significant and unnecessary administrative costs, and greatly increase the risk of disputes and litigation.

Few APEC jurisdictions currently apply a market share limit test in regulations legitimising non-ratemaking agreements. In this study, the only identified instance in which market share limits play a role is Block Exemption Order recently introduced in Singapore. However, this regulation uses a market share test only to assess whether a consortium needs to file an agreement with the Commerce Commission of Singapore, and whether it needs to comply with certain other requirements, none of which is very onerous. It is not a determinant of whether the exemption provided by the order applies to the agreement.

Proposed Guideline 3:

APEC member economies do not subject non-ratemaking agreements to a market share test based on a pre-defined threshold level.

6.4 Proposed Guideline 4 – Freedom in the negotiation of the duration of non-ratemaking agreements

The EU Regulation also imposes certain other restrictions on non-ratemaking (consortium) agreements. One of the most controversial of these is the requirement that the agreements allow parties to exit the agreement without penalty after a limited 'lock in' period. The preamble to Regulation 811/2000 states that:

> *The aim of the conditions should also be to prevent consortia from imposing restrictions on competition which are not indispensable to the attainment of the objectives justifying the grant of the exemption. To this end, consortium agreements should contain a provision enabling each shipping line party to the agreement to withdraw from the consortium provided that it gives reasonable notice. However, provision should be made for a longer notice period in the case of highly integrated and/or high-investment consortia in order to take account of the higher investments undertaken to set them up and the more extensive reorganisation entailed in the event of a member's leaving. It should also be stipulated that, where a consortium operates with a joint marketing structure, each member should have the right to engage in independent marketing activities provided that it gives reasonable notice. (EU 2000)*

In the text of the Regulation, the Commission defines the standard 'lock in' period as twenty-four months: that is, to qualify for the exemption, agreements must permit parties to the agreement to exit without penalty at six months notice after an initial period of eighteen months.

The rational for the Commission choice of twenty-four months as the generally acceptable 'lock in' period is not clear. It seems likely that the appropriate commitment period for a non-ratemaking agreement would depend on the nature of the agreement and the circumstances surrounding its negotiation. The Commission itself appears to recognise that defining a single period to cover all circumstances may not be appropriate, as it includes in the Regulation a provision for lock-in periods of up to thirty-six months under circumstances.

Shipping lines are generally opposed to the inclusion of a requirement that agreements allow for exit without penalty after a relatively short defined period. In its submission to the European Commission during the review of the 611/2005, the European Liner Affairs Association (ELAA) — which, despite the title of the Association, includes most of the major lines of APEC member economies — argued that:

> *The vessels presently being ordered and chartered back to shipping lines are in the range of 12,000 and 13,000 TEU and cost approximately USD170 million to build. These ships are all required to meet cargo demand in the fast-growing Asia-Europe trade that is expanding at an annualised rate of 15 - 20% or more. ...Given that shipping lines will charter these vessels from ship-owners on charters of 8-10 years, they will want to ensure that those vessels are committed to services for a duration which will ensure sufficient return on their investment in the long-term charters. (ELAA, 2008)*

More fundamentally, it is not clear that it is either necessary or desirable for a regulatory body to define the maximum duration of an agreement freely entered into by commercial parties. It is difficult to see why parties would bind themselves to an agreement for longer than is necessary to effect the commercial objectives of the agreement.

This point is also made by ELAA:

> *Consortia should not be tied to any particular duration or to any specific initial period, but lines should be able to negotiate these terms freely between themselves. This is a perfect example of a well functioning 'self-policing item'. The US system, for example (where there are no such restrictions on lock-in periods), seems to acknowledge this. If parties at the beginning cannot agree on terms acceptable to all of them, they will most likely not conclude the agreement or go for second best alternative. (ELAA 2008)*

Proposed Guideline 4:

APEC member economies continue to allow ocean carriers to negotiate the duration of the non-ratemaking agreements.

6.5 Proposed Guideline 5 – Collection and exchange of main information

Good policy requires good information. One of the insights from this study is that the quantity and quality of information held by APEC member economies on non-ratemaking agreements is extremely variable. In some cases, data are virtually non-existent. To a significant extent, it has therefore been necessary to develop the recommendations of this report on the basis of a first principles analysis, and using information and argument drawn from the European and the US experience.

This is clearly not ideal. Moreover, the effects of the US *Ocean Shipping Reform Act,* together with underlying commercial and structural developments in the industry, have seen the focus of shipowner collaboration move from traditional conference agreements to other forms of cooperation that deal primarily on non-rate issues. The decision of the EU to rescind council regulation 4056/86, and hence put an end to the conference system on the routes to and from Europe, will further accelerate this development. At present, there is no reason to regard the increasing emphasis on consortia, alliances, space chartering, slot-swapping and other forms of non-ratemaking agreement as a threat; indeed, most agreements of this type will, under most circumstances, yield economic benefits.

But the industry is evolving rapidly. To detect early any undesirable trends that may evolve — and to take prompt and effective action if they do — governments in the APEC economies require better information than they now have. Routine collection of data on the nature and key features of non-rate-making agreements that require exemption from general competition legislation, and the free exchange of this information between APEC economies, would help to fill this information gap.

Proposed Guideline 5:

APEC member economies agree to collect information for all liner shipping non-ratemaking agreements that enjoy exemption from the application of general competition legislation – this means in practice the mandatory filing of agreements, on a confidential basis, with the relevant government regulatory authority.

APEC member economies maintain a common format for documentation of the main features of non-ratemaking agreements whereby the main features could comprise:

- *Parties to the agreement*
- *Nature and scope of the agreement*
- *Agreement duration (term), entry and exit provisions*
- *Operational capacities, providers and uses agreed to*
- *Voting / decision-making rules*
- *Selling of space to third-parties.*

(Note: this list of main features should be considered an indicative minimum and could be expanded further).

APEC member economies agree to the regular exchange of the main features information documented in a common format. This information exchange could start as a first stage on a confidential basis between the relevant government regulatory authorities, and later, as a second stage, move to the public domain reporting of this information so as to harmonise the current reporting provisions of APEC member economies.

APPENDIX I – BIBLIOGRAPHY

Bank, R. K., A. W. Craig and E. J. Sheppard 2004, *Shifting Seas: A Survey of US and European Developments Affecting the Trans-Atlantic Trades,* Maritime Economics and Logistics, Vol 7 56-72.

Commission of the European Communities, 2008, *Guidelines on the application of Article 81 of the EC Treaty to maritime transport services*, SEC (2008) 2151 final, Brussels.

Court of Justice of the European Union (European Court) 2003, Press and Information Division, Press release No 78/03.

EUROPA 2008, Antitrust: *Guidelines on the application of competition rules in the maritime sector – frequently asked questions*, memo 08/460, 1 July.

European Commission 2000*, Commission Regulation (EC) No 823/2000 of 19 April 2000 on the application of Article 81(3) of the Treaty to certain categories of agreements, decisions and concerted practices between liner shipping companies (consortia).*

European Commission 2005, *Antitrust: Commission prolongs and amends block exemption for liner shipping consortia,* IP05/477, 25 April.

European Liner Affairs Association 2008, *Submission to the European Commission on its Review of Commission Regulation 611/2005 – the Liner Shipping Block Exemption.*

European Shippers Council (ESC) 2004, *What shippers require from liner shipping in the future and why*, Submission to the European Commission review of the regulation of liner shipping, September (downloaded from the website of the Commission http://ec.europa.eu 10 June 2008).

Federal Maritime Commission 2001, *The Ocean Shipping Reform Act of 1998*, Washington.

Global Shippers' Forum Meeting, 2007, *Joint Shippers' Declaration*, Singapore, downloaded from Asian Shippers Council website http://www.asianshippers.org 20 February 2008.

Marlow Peter, Nair Rawindaran, 2006, *Liner shipping and information exchange – a European perspective,* Elsevier, Marine Policy 30 (2006) pp. 681 -688 .

Mensching, Jean (Head of Unit, DG Competition Directorate) 2000, *Liner shipping: Examining the development and impact of European legislation,* speech at Containerisation International 3rd annual conference, London .

Meyrick and Associates 2001, *Report of Facilitation of International Shipping Project*, vol 1, report prepared for APEC, downloaded from APEC website http://www.apec-tptwg.org.tw 16 July 2008

Midoro, R. & Pitto, A. 2000 *A Critical Evaluation of Strategic Alliances in Liner Shipping*, Journal of Maritime Policy and Management, Vol. 27, No. 1

Ministry of Land Infrastructure and Transport, Japan 1999, The Amendment of the Marine Transportation Law by the Law for the Adjustment of the Immunity System from the Anti-Monopoly Law, from MLIT website http://www.mlit.go.jp 1 June 2008.

Nikin Mayur Vora 2005, *An explanatory Study on the Advantages and Disadvantages of Liner Shipping Strategic Alliances*, University of Plymouth, the UK.

OECD 2002, *Competition Policy in Liner Shipping*, DSTI/DOT (2002)2, Paris.

OECD 2006, *Regulatory Issues in International Maritime Transport*, downloaded at OECD website http://www.oecd.org/dataoecd/0/63/2065436.pdf 12 July 2008.

Productivity Commission 2005, *Review of Part X of the Trade Practices Act 1974: International Liner Cargo Shipping, Productivity Commission Inquiry Report*, Canberra.

Smith, Adam 1976, *The Wealth of Nations,* ed. R.H. Campbell, A.S. Skinner and W.B. Todd Oxford: Clarendon Press..

APPENDIX II – OVERVIEW TRANS-PACIFIC SERVICES

Source: CI / American Shipper / various vessel databases / Meyrick analyses – 2008.

Port range	Carrier group	Service	Number of vessels	Capacity in TEUs	Average vessel capacity	Frequency	Yearly capacity	Market share of total capacity	Comments
USEC	CKYH	AWE1	7	28,168	4,024	weekly	418,496	4.3%	
USEC	CKYH	AWE2	6	23,770	3,962	weekly	412,013	4.2%	
USEC	CKYH	AWE3	8	34,598	4,325	weekly	449,774	4.6%	
USEC	CKYH	AWE4	8	32,112	4,014	weekly	417,456	4.3%	
USEC	CMA/CSCL	PEX 3	7	37,228	5,318	weekly	553,102	5.6%	
USEC	CMA/CSCL/ANL	PEX1 AAE1	9	40,426	4,492	weekly	467,145	4.8%	
USEC	Evergreen	AUE	8	33,832	4,229	weekly	439,816	4.5%	
USEC	Evergreen/Maersk	NUE	12	50,604	4,217	weekly	414,674	4.2%	
USEC	Grand Alliance	NCE	8	38,709	4,839	weekly	503,217	5.1%	
USEC	Grand Alliance	SCE	7	34,446	4,921	weekly	511,769	5.2%	
USEC	Grand Alliance	AEX	9	51,192	5,688	weekly	591,552	6.0%	
USEC	Grand Alliance	PAX	13	61,707	4,747	weekly	570,756	5.8%	
USEC	Hanjin/Yang Ming	CAX	5	21,500	4,300	weekly	570,756	5.8%	
USEC	K Line/Yang Ming/Hanjin/UASC	SINA	9	33,486	3,721	weekly	386,949	3.9%	
USEC	Maersk/Safm	TA3/TP7	12	56,297	4,691	weekly	414,674	4.2%	
USEC	Maersk/Safm	TP3	8	35,913	4,489	weekly	466,869	4.8%	
USEC	NWA	APX	11	49,850	4,532	weekly	414,674	4.2%	
USEC	NWA	NYX	8	38,479	4,810	weekly	500,227	5.1%	
USEC	NWA	ESX	7	32,040	4,577	weekly	476,023	4.9%	
USEC	NWA/CMA/Evergreen	SZX	8	40,584	5,073	weekly	527,592	5.4%	
USEC	Zim/Emirates	AGX	8	23,590	2,949	weekly	306,670	3.1%	
Subtotal USEC	**Total services US East Coast**						**9,814,205**		
USWC	CKYH	PSW2	5	27,728	5,546	weekly	576,742	2.4%	
USWC	CKYH	PSW4	5	27,728	5,546	weekly	576,742	2.4%	

Port range	Carrier group	Service	Number of vessels	Capacity in TEUs	Average vessel capacity	Frequency	Yearly capacity	Market share of total capacity	Comments
USWC	CKYH	CEN	5	29,986	5,997	weekly	623,709	2.6%	
USWC	CKYH	PSW1	5	27,880	5,576	weekly	579,904	2.4%	
USWC	CKYH	PSW3	5	18,355	3,671	weekly	381,784	1.6%	
USWC	CKYH	PSX	5	37,275	7,455	weekly	775,320	3.2%	
USWC	CKYH	PNS	5	27,467	5,493	weekly	571,314	2.4%	
USWC	CKYH	PNW-KL	5	28,008	5,602	weekly	582,566	2.4%	
USWC	CKYH	PNN	5	27,467	5,493	weekly	571,314	2.4%	
USWC	CMA/MSC/USL/ANL	Pearl River	5	40,937	8,187	weekly	851,490	3.5%	
USWC	Cosco/Hanjin	SEA	5	28,288	5,658	weekly	588,390	2.4%	
USWC	Cosco/K line/Hanjin	MAP	6	32,760	5,460	weekly	567,840	2.3%	
USWC	CSCL/ZIM	ZCS	14	69,346	4,953	weekly	570,756	2.4%	Round the world service
USWC	CSCL/ZIM	AAC	5	28,400	5,680	weekly	590,720	2.4%	
USWC	CSCL/ZIM/CMA/ANL	ANW1	4	20,937	5,234	weekly	544,362	2.2%	
USWC	Evergreen	CPS	4	26,020	6,505	weekly	676,520	2.8%	
USWC	Evergreen	HTW	4	26,020	6,505	weekly	676,520	2.8%	
USWC	Evergreen	CPN	5	14,340	2,868	weekly	298,272	1.2%	
USWC	Evergreen	UAM	12	66,672	5,556	weekly	577,824	2.4%	
USWC	Grand Alliance	CCX	5	26,526	5,305	weekly	551,741	2.3%	
USWC	Grand Alliance	JCX	5	14,527	2,905	weekly	302,162	1.2%	
USWC	Grand Alliance	SCX	6	36,810	6,135	weekly	638,040	2.6%	
USWC	Grand Alliance	NWX	5	28,020	5,604	weekly	582,816	2.4%	
USWC	Grand Alliance	PNX	6	34,478	5,746	weekly	597,619	2.5%	
USWC	Grand Alliance	SSX	5	40,315	8,063	weekly	838,552	3.5%	
USWC	Maersk/CMA/Safm/Evergreen/Wan Hai/MSC	NOE	4	32,361	8,090	weekly	841,386	3.5%	
USWC	Maersk/CMA/Safm/MSC	TP5	5	21,460	4,292	weekly	446,368	1.8%	
USWC	Maersk/Safm	TP6/AE6	13	85,800	6,600	weekly	686,400	2.8%	Round the world service
USWC	Maersk/Safm	TP1/PEX	5	14,120	2,824	weekly	293,696	1.2%	
USWC	MSC	Transpac	8	38,501	4,813	weekly	500,513	2.1%	

Port range	Carrier group	Service	Number of vessels	Capacity in TEUs	Average vessel capacity	Frequency	Yearly capacity	Market share of total capacity	Comments
USWC	NWA	PCX	2	9,400	4,700	weekly	488,800	2.0%	
USWC	NWA	PCE	5	25,540	5,108	weekly	531,232	2.2%	
USWC	NWA	PRE	5	28,028	5,606	weekly	582,982	2.4%	
USWC	NWA	PS3	4	13,925	3,481	weekly	362,050	1.5%	
USWC	NWA	PSX	4	23,678	5,920	weekly	615,628	2.5%	
USWC	NWA	PSW	5	27,884	5,577	weekly	579,987	2.4%	
USWC	NWA	PNW	5	32,395	6,479	weekly	673,816	2.8%	
USWC	NWA	PS1	7	33,657	4,808	weekly	500,047	2.1%	
USWC	Wan Hai/PIL	CTP	5	21,250	4,250	weekly	442,000	1.8%	
USWC	Westwood	Service 1	6	11,360	1,893	twice mthly	98,453	0.4%	
USWC	Westwood	Service 2	2	3,891	1,946	twice mthly	101,166	0.4%	
USWC	Yang Ming/Hanjin	PSW5	5	9,025	1,805	weekly	187,720	0.8%	
USWC	Zim/CSCL	AMP	12	43,785	3,649	weekly	379,470	1.6%	
USWC	Zim/CSCL	AAS	9	50,970	5,663	weekly	588,987	2.4%	
USWC	Maersk/Safm/MSC	TP9/FM1	6	39,864	6,644	8 days	690,976	2.8%	
Subtotal USWC	**Total services US West Coast**						**24,284,696**		

APPENDIX III – OVERVIEW ASIA – SOUTH AMERICA WESTCOAST SERVICES

Source: CI / American Shipper / various vessel databases / Meyrick analyses – 2008.

Port range	Shipping line	Service	Number of vessels	Capacity in TEUs	Average vessel capacity, TEU	Frequency	Yearly capacity, TEU	Market share of total capacity, TEU	Comments
SAWC	CCNI/Hamburg Süd	ASPA 1	9	24,247	2,694	weekly	280,188	13.4%	
SAWC	CSAV	ANDEX	10	27,919	2,792	weekly	290,358	13.9%	
SAWC	Maruba/CMA/CLAN/CSCL	CLANSA-ACSA	8	21,003	2,625	weekly	273,039	13.1%	
SAWC	MOL/K line	WL2	6	9,400	1,567	weekly	162,933	7.8%	
SAWC	NYK	LEX	9	22,456	2,495	weekly	259,492	12.4%	
SAWC	CCNI/Hamburg Süd	ASPA 2	8	19,926	2,491	weekly	259,038	12.4%	
SAWC	MOL/K line	WL1	7	16,927	2,418	weekly	251,487	12.0%	
SAWC	MSC	Andes Express	7	21,250	3,036	weekly	315,714	15.1%	

APPENDIX IV – OVERVIEW AUSTRALIA SERVICES

Source: CI / Lloyds DCN / various vessel databases / Meyrick analyses – 2008.

Trade	Service	Carrier group	Frequency	No. ships	Avg. ship size (TEU)	Yearly Capacity, TEU	Market Share
Asia, NE	AANA	ANL, CSCL, OOCL	Weekly	5	4,250	442,000	16.0%
Asia, NE	AAUS	Hamburg Sud, Hyundai, Hapag-Lloyd, SYIM	Weekly	5	2,625	273,000	9.9%
Asia, NE	ACE	ANL, CSCL, OOCL	Weekly	5	4,171	433,784	15.7%
Asia, NE	AU1	Maersk, MSC	Weekly	5	3,460	359,840	13.0%
Asia, NE	AU2	K-Line, NOL, NYK, Cosco*, P&O-Swire	Weekly	5	3,002	312,208	11.3%
Asia, NE	NE Asia	STX Pan Ocean	Weekly	5	1,647	171,246	6.2%
Asia, NE	CAS	APL, Cosco, Gold Star, PIL, K-Line, & others***	Weekly	5	3,194	332,176	12.0%
Asia, NE	NCA	Evergreen, Hanjin, Hapag-Lloyd	Weekly	5	1,664	173,056	6.3%
Asia, NE	Panada	MSC, Maersk, Safmarine*	Weekly	5	2,529	263,016	9.5%
Subtotal Asia, NE						**2,760,326**	
Asia, SE	AAA	MISC, MOL, OOCL, PIL, Hyundai*	Weekly	4	2,901	301,704	15.0%
Asia, SE	AAB	MISC, MOL, OOCL, PIL, Hyundai, & others**	Weekly	4	2,461	255,944	12.7%
Asia, SE	AAX	ANL, APL, NYK, Djakarta Lloyd	Weekly	4	3,276	340,704	17.0%
Asia, SE	FAX	ANL	Weekly	2	1,110	115,440	5.8%
Asia, SE	ASA	Italia, Hanjin, RCL, & others****	Weekly	4	2,327	242,008	12.1%
Asia, SE	AU3/WA	Maersk, Hamburg Sud	Weekly	4	4,113	427,752	21.3%
Asia, SE	Capricorn	MSC	Weekly	6	2,149	223,496	11.1%
Asia, SE	WASCO-shuttle	K-Line, Maersk, APL*,RCL*	Weekly	2	966	100,464	5.0%
Subtotal Asia, SE						**2,007,512**	
Eur/Other	NEMO	CMA-CGM, Delmas, DAL, ANL*	Weekly	11	2,786	289,772	19.5%
Europe	Europe-ANZ	MSC, ANL*	Weekly	13	3,208	333,632	22.5%
Europe	RTW Panama	ANL, CMA-CGM, Hapag-Lloyd, Marfret	Fortnightly	7	2,185	113,620	7.7%
Europe	ANS	Hapag-Lloyd	Weekly	11	2,316	240,883	16.2%
Europe	RTW Suez	ANL, CMA-CGM, Hapag-Lloyd	Weekly	12	2,352	244,608	16.5%
Europe	Trident	Hamburg Sud	Weekly	12	2,500	260,000	17.5%
Subtotal Europe						**1,482,515**	
N America	Oceania	Maersk, Hapag-Lloyd*, APL*	Weekly	9	2,436	253,344	37.3%
N America	PANZ-PNW	Hamburg Sud, Hapag-Lloyd, Maersk	Weekly	6	2,021	210,184	31.0%
N America	PANZ-PSW	Hamburg Sud, Hapag-Lloyd, Maersk	Fortnightly	5	1,740	90,480	13.3%
NAm/Asia	ANZL	US Lines, ANL*	Weekly	8	1,199	124,696	18.4%

Trade	Service	Carrier group	Frequency	No. ships	Avg. ship size (TEU)	Yearly Capacity, TEU	Market Share
Subtotal N America						**678,704**	
NZ (Tasman)	Butterfly	MSC, ANL####	Weekly	2	1,118	116,272	28.2%
NZ (Tasman)	Kiwi-Tranztas	MSC, ANL	Weekly	2	1,417	147,316	35.8%
NZ (Tasman)	Trans Tasman	Maersk	Weekly	3	1,011	105,109	25.5%
NZ (Tasman)	KIX	Gold Star Line###	Fortnightly	1	830	43,160	10.5%
Subtotal NZ/Tasman						**411,857**	

Notes:

(*) Slot-charter

*** MOL, NYK, P&O Swire, & Zim as slot-charters

**** Evergreen, Gold Star, K-Line & Zim as slot-charters

To be upgraded to Weekly in April 2007

As of May 2007 (March '07-May '07 Fornightly)

** Cosco & Yang Ming as slot-charters

####ANL as slot charter