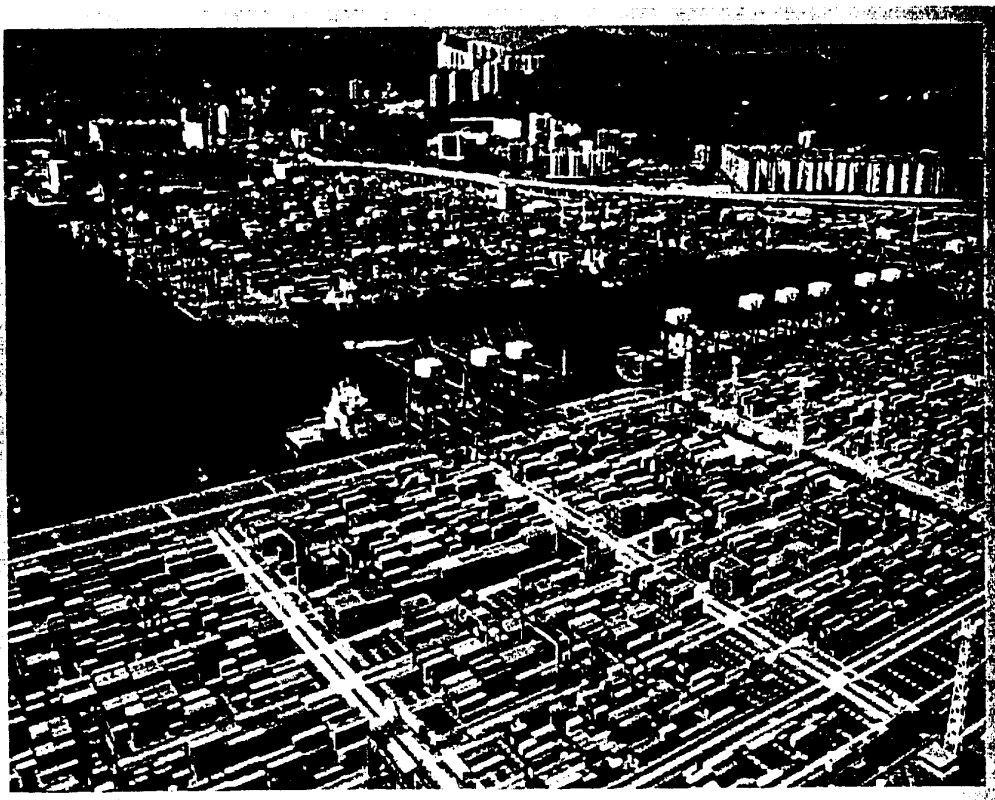


Hong Kong Port Cargo Forecasts 1997/98

香港港口貨運量預測 1997/98



Executive Summary

摘要



Port
Development
Board
Hong Kong
香港港口發展局

1. Introduction

- 1.1 The present Port Cargo Forecasts review is the fourth review after the Port and Airport Development Strategy (PADS study). The basic objective of the study is to review and update the port cargo forecasts prepared in 1995 in order to support the Government's policy "to match supply of port facilities with demand for their use".
- 1.2 The Port Cargo Forecasts is the main building block of the Port Development Strategy Review (PDSR). It supports the overall port planning process in Hong Kong by providing input into the PDSR. Coupled with an updated productivity levels in cargo handling, the updated port cargo forecasts will be translated into port facility requirements. The revised PDSR will then be converted into a revised Port Development Plan and Programme and in turn will be incorporated into the Territorial Development Strategy Review.

簡介

目前的港口貨運量預測檢討，是自港口及機場發展策略（策略研究）制訂以來的第四份檢討報告。研究的基本目的，是檢討和按最新情況修訂一九九五年編製的港口貨運量預測，以支持政府的政策——“令港口設施的供應與需求互相配合”。

港口貨運量預測是港口發展策略檢討的主要依據。該項預測為港口發展策略檢討提供資料，以支援香港整體的港口規劃工作。新修訂的港口貨運量預測，連同經修訂的貨物處理生產力水平，可用以確定港口設施的需求。港口發展策略檢討經修訂後，當局會據此修訂港口發展計劃，而檢討結果則會併入全港拓展策略檢討內。

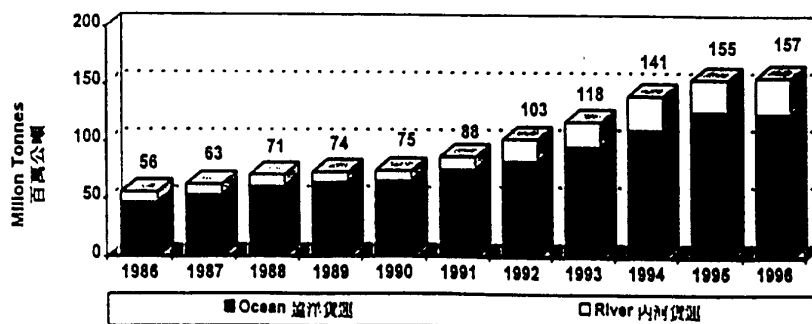
2. Historical Port Traffic Pattern

- 2.1 The volume of Hong Kong's total port traffic i.e. ocean and river traffic, recorded an average annual growth of 11% during 1986-1996. Ocean traffic grew at 10% per annum whilst river traffic grew at 14% per annum during the period. In 1996 some 157 million tonnes of cargo were handled in the port of Hong Kong, comprising 101 million tonnes of inward cargo and 56 million tonnes of outward cargo. About 80% (126 million tonnes) of the port traffic was handled by ocean-going vessels. The rest was handled by river vessels plying between Hong Kong and Pearl River ports, including Macau (Figure 1).

歷來的港口運輸模式

在一九八六年至一九九六年期間，本港的港口總運輸量，即遠洋貨運及內河貨運，每年平均增長 11%。在該段期間，遠洋貨運每年增長 10%，內河貨運的增長率則為每年 14%。一九九六年，本港港口共處理約 1.57 億公噸貨物，其中包括進口貨物 1.01 億公噸，出口貨物 5 600 萬公噸。遠洋輪船處理的貨物，約佔港口運輸量 80%（1.26 億公噸）。其餘貨物則由往來香港及珠江港口（包括澳門）的內河船隻處理（圖一）。

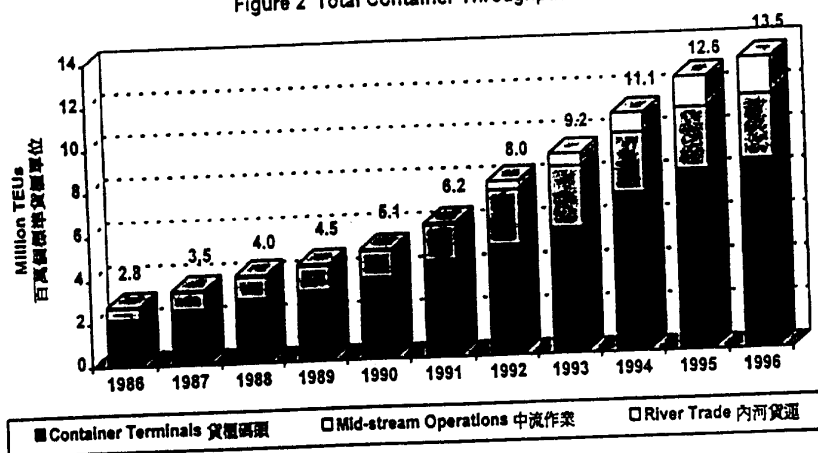
圖一 港口總運輸量
Figure 1 Total Port Traffic



2.2 Growth of Hong Kong's container traffic was much faster than the overall port traffic in the past 10 years. During 1986-1996, container throughput registered an average annual growth of 17%. In 1996, some 13.5 million TEUs of containers were handled in Hong Kong. About 64% of the containers was handled in the container terminals, 23% in the stream and the remaining 13% was handled by river trade vessels (Figure 2).

過去十年，香港貨櫃運輸的增長速度，遠較整體港口運輸量增長為快。在一九八六至一九九六年間，貨櫃吞吐量平均每年增長17%。一九九六年，香港處理了約1350萬個標準貨櫃單位，其中約64%的貨櫃經由貨櫃碼頭處理、23%經由中流作業處理，其餘13%則經由內河貨船處理（圖二）。

圖二 貨櫃總吞吐量
Figure 2 Total Container Throughput



3. Performance of the 1995 Study's Forecasts

3.1 Comparisons of the 1995 Study's forecasts on overall port traffic in general and container traffic in particular with the actual performance in 1996 are summarised in Figures 3 and 4. The actual growth of both ocean and river traffic in 1996 was lower than the forecasts in 1995.

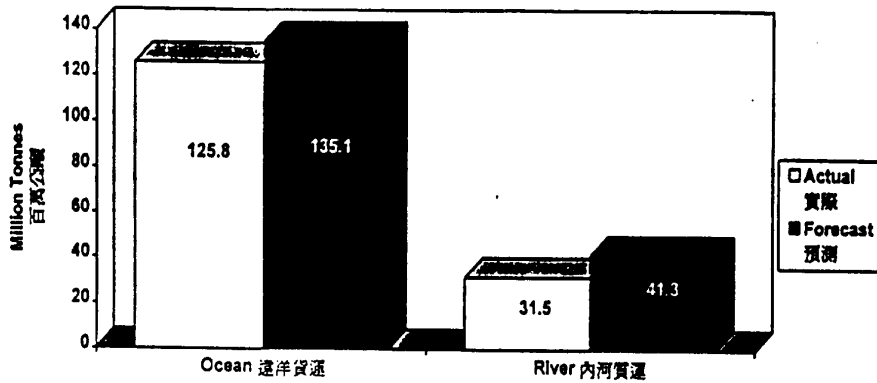
3.2 The discrepancies between the forecast and actual throughput were mainly due to the slowdown in economic growth in Mainland China in general and in Guangdong in particular in 1996. On the other hand, the over-estimation of river trade traffic, especially inward direct traffic, was mainly caused by the reduction in demand for sand and aggregates for reclamation purpose as major infrastructural development of the Airport Core Project in Hong Kong had gradually been completed.

一九九五年策略研究所作預測的表現

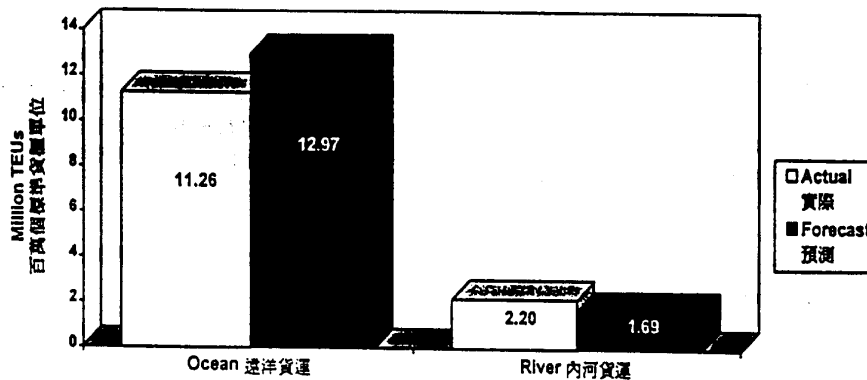
一九九五年研究所作的整體港口運輸量預測，特別是貨櫃運輸量預測，與一九九六年的實際表現比對，摘錄於圖三及四。一九九六年，遠洋貨運及內河貨運的實際增長率均低於一九九五年的預測。

實際吞吐量與預測不符，主要因為一九九六年中國內地普遍經濟增長放緩，尤以廣東為然。此外，香港機場核心工程這項大型基建發展項目漸次完成，對填海所用的泥沙和粒料需求隨之而下降，是造成內河貨運量（特別是直接進口貨運量）的預測較實際數字為高的主因。

圖三 一九九六年的港口運輸量：預測與實況比對
Figure 3 Forecast vs Actual Port Cargo Traffic for 1996



圖四 一九九六年的貨櫃吞吐量：預測與實況比對
Figure 4 Forecast vs Actual Container Throughput for 1996



4. Methodology

- 4.1 The structure and the internal consistency of the model adopted for the current study had been refined compared with those for the previous studies of the same series. In view of the rapid port development in Southern China, coupled with the anticipated opening of direct trade links between Mainland China and Taiwan, great emphasis was put on assessing, both qualitatively and quantitatively, the impact of such factors on the cargo flows of Hong Kong in the future. The model framework was enhanced by differentiating the direct shipment and transshipment cargo base and assessing cargo diversion and modal competition in each of these areas.

方法

與過去同系列的研究相比之下，目前研究所採用模式的結構和內部連貫性已有所改善。鑑於華南地區港口發展迅速，加上中國內地與台灣之間預期將開放直接通商，研究側重於從質和量兩方面去評估這些因素對香港未來貨運流量的影響。我們將這模式架構加以改良，將直接裝運與轉運貨物的基礎數字分開處理，並就這兩方面的貨運轉移和競爭形式作出評估。

4.2 The approach adopted in this study was a demand-led model, which did not take into account the supply side constraint. It projected the volume of cargo which will potentially flow in and out of Hong Kong so as to deduce the potential demand for port facilities.

這次研究採用了需求主導模式，並無計及供應方面的限制因素。研究就運抵本港及運離本港的潛在貨物量作出預測，從而推算對港口設施的潛在需求。

4.3 Separate models for container and bulk cargoes were developed. The forecasts were based on preliminary top-down and bottom-up projections made on statistical relationships between traffic volumes and economic variables. These variables were drawn from historical data with further refinements through a judgmental process, incorporating where appropriate information obtained from the Port Sector Profile Assessment.

我們分別為貨櫃貨物及散裝貨物研究訂出獨立的研究模式。進行預測的方法，是根據歷來數據求出運輸量與經濟變數的統計關係，從而作出由上而下及由下而上的初步推算，再通過一項判斷過程加以修訂，力求精確，並在適當時加上港口業概況評估所得資料。

4.4 For containerised cargo forecasting model, Hong Kong's container throughput was first analysed in terms of container trade originated from and destined for Guangdong, Hong Kong, rest of China, Taiwan and rest of the world. The next step was to split Hong Kong's cargo base into direct shipment cargo and transshipment cargo and to assess their growth patterns. It then looked into the rates of cargo diversion caused by the following factors:

就貨櫃裝運貨物預測模式而言，我們首先按廣東、香港、中國其他地區、台灣及世界其他地區作為貨櫃貿易的來源地和目的地來對香港貨櫃吞吐量進行分析。下一步就是把香港的貨物基礎數字劃分為直接裝運貨物和轉運貨物兩類別，以評估各別的增長模式，然後再研究下列因素所導致的貨運轉移比率：

- ❖ competitive cost benefits of using ports in Southern China;
- ❖ influences of players in the industry on cargo routing decision;
- ❖ direct shipping links between Mainland China and Taiwan;
- ❖ new port development in the region which offer cost benefits for transshipment cargo; and
- ❖ modal competition between river and road transport for the Guangdong cargo.

- ❖ 華南港口在成本效益方面所具的競爭力；
- ❖ 業內人士對貨物運送路線的抉擇所發揮的影響力；
- ❖ 中國內地與台灣直接航運連繫；
- ❖ 亞太區新發展港口在貨物轉運方面所提供的成本效益；及
- ❖ 就廣東貨物而言，內河運輸與陸路運輸模式之間存在的競爭。

5. Port Sector Profile

港口業概況

5.1 Introduction

簡介

5.1.1 In preparing the Port Cargo Forecasts, an analysis of the Port Sector Profile (PSP), which aimed at identifying the factors and tendencies that are likely to affect cargo generation and handling in

在制訂港口貨運量預測時，我們進行了有關港口業概況的分析，目的是找出對日後貨物增長及處理可能產生影響的因

the future, was conducted. The emphasis here is on structures and processes which are shaping economic changes at the global, regional and local levels. The PSP presents the underlying arguments and evidence for the forecasting model assumptions and growth scenarios, and specifically:

- ❖ presents the key issues that will affect port cargo throughput in Hong Kong; and
- ❖ describes the processes by which routing decisions are made.

5.1.2 The study approach involved three basic tasks:

- (i) reviewing existing secondary economic and port/freight transport related data so as to establish a historical perspective on future demand and supply;
- (ii) interviewing key stakeholders in order to identify the predominant issues and trends affecting container throughput at Hong Kong. More than 80 interviews were conducted with the key stakeholders summarised in Table 1. An important new addition to the 1997/98 Port Cargo Forecasts was a *more comprehensive coverage* of consignees and importers; and
- (iii) visiting various ports in the region, including Shenzhen ports, Pearl River Delta Ports, Xiamen, Shanghai, Dalian and Taiwan ports - this was another *new component* of the 1997/98 Port Cargo Forecasts.

5.2 The Macro-Economic Context

5.2.1 The forecast growth rates of trade in the main economies, generating traffic at the port of Hong Kong are summarised in Table 2 for 1997-2001. After 2001 the growth rates are expected to moderate progressively.

5.2.2 In general the impact of global and regional economic developments on Hong Kong in the medium term (2001-2011) is expected to be slightly more positive than the predictions made in the 1995 Port Cargo Forecasts. The South China cargo base growth remains robust but the rate of growth is expected to moderate over the planning period. This sector is the key trade component

素及趨勢。這項分析特別著重於決定全球、亞太區及本地經濟轉變的架構及過程。港口業概況就預測模式的假設事項和增長方案提出基本論點和證據，特別是：

- ❖ 說明了影響香港港口貨物吞吐量的主要因素；及
- ❖ 描述了貨運路線的抉擇過程。

這項研究所採用的方法涉及三項基本工作：

- (i) 檢討現存有關經濟及港口／貨運的數據，以確立歷年的數據，從而展望未來供求情況。
- (ii) 訪問主要的業內人士，以確定對香港貨櫃吞吐量最具影響的因素和趨勢。我們進行了八十多個訪問，受訪的主要業內人士撮列於圖一。一九九七／九八年度香港港口貨運量預測中新增一項重要數據，就是對收貨人和進口商有更全面的覆蓋。
- (iii) 到亞太區各港口進行考察，其中包括深圳各港口、珠江三角洲各港口、廈門、上海、大連及台灣各港口——這是一九九七／九八年度香港港口貨運量增長預測的另一新增成份。

宏觀經濟形勢

表二是為香港港口帶來貨運量的各主要經濟地區在一九九七至二零零一年的貿易增長率預測概要。預計在二零零一年以後，增長速度將持續放緩。

大體上，以中期預測來說，二零零一至二零零一年，全球及亞太區經濟發展對香港的影響，預期會比一九九五年港口貨運量預測所估計的更稍為具有正面影響。華南的貨物基礎數字增長保持穩健，但預計在規劃期內，增長率將會放緩。廣東是推動香港貨櫃吞吐量增長的

driving the growth of Hong Kong container throughput. 主要貿易地區。

表一 受訪的主要業內人士
Table 1 Key Stakeholders Interviewed

Stakeholder 業內人士	Role 擔當角色	Study Coverage 研究範疇
Container shipping lines 貨櫃航運公司	Transport of container cargo - influence on routing and modal choices through service offer. 運送貨櫃裝運的貨物——通過提供服務而對路線和運輸模式的選擇發揮影響	Majority of major shipping lines calling at Hong Kong and Shenzhen ports 大部分以香港和深圳各港口為停靠港的主要航運公司
Consolidators/logistics services/forwarders 貨運公司／後勤服務代運人	Support functions/services to facilitate transport of goods - Can be a major influence on changing patterns of freight movements/ consolidation activities through partnerships with shippers/consignees 支援工作／服務，以方便運送貨物——透過與付運人及收貨人之間的伙伴關係，可對貨物運送／裝櫃工作的模式發揮重大影響。	Leading international players in South China - Representatives of locally based firms 華南地區的主要跨國經營公司——駐本地公司的代表
Shippers/manufacturers 付運人／製造商	Major influence on routing and modal choices 對運送路線和運輸模式的選擇有重大影響	Selected interviews with local players 與選定的本地經營商進行訪問
Consignees 收貨人	Growing influence on routing choices for outbound cargoes - cost/reliability trade-off 對離港貨物運送路線的選擇影響日增——從成本／可靠程度作出取捨	Selected interviews/survey of major international firms: North America, Europe, Asia 與選定的主要國際公司，包括北美、歐洲、亞洲的公司進行訪問／意見調查
Importers 進口商	Major influence on routing and modal choices for in-bound cargoes 對抵港貨物的運送路線和運輸模式的選擇有重大影響	Representatives of firms active in South China 在華南地區積極經營的公司的代表
Container terminal operators 貨櫃碼頭經營商	Provide container handling and stevedoring services - shape options for routing and modal choices through investment in port facilities 提供貨櫃處理和貨物裝卸服務——透過對港口設施的投資，影響運送路線和運輸模式的選擇	All the terminal operators in HK and Shenzhen 所有香港和深圳的碼頭經營商
Mid-stream operators 中流作業經營商	Provision of cargo handling services 提供貨物起卸服務	Leading mid-stream operators 主要中流作業經營商
River trade operators 內河貨運經營商	Shape modal choice options through service offer. 通過提供服務，從而影響運送路線和運輸模式的選擇	Leading river trade players - terminals and shipping 主要內河貨運經營商——碼頭經營商及航運公司
Mainland China and HKSAR Officials 中國內地和香港特別行政區政府官員	Influence regulatory environment shaping routing and modal choices 影響規管環境，從而影響運送路線和運輸模式的選擇	Ministry of Communications, Customs, Port Authorities and Government Departments 中國內地交通部、海關、港務局和政府各部門

表二 短期／中期貿易增長假設數字簡表
Table 2 Summary Short/Medium Term Trade Growth Assumptions

	Average Annual Growth Rate In 1997-2001 一九九七至二零零一年平均每年增長率	
	Exports 出口	Imports 進口
Guangdong 廣東	13.5	13.5
Hong Kong 香港	7.9	7.7
Mainland China 中國內地	11.9	12.4
Taiwan 台灣	8.0	8.1
Europe 歐洲	7.2	7.7
US 美國	7.0	7.2
World Trade 世界貿易	6.8	6.8

5.3 Determinants of Cargo Routing

決定貨運路線的因素

5.3.1 The main determinant of cargo routing in the *medium/long term* will be total transport costs. Shipping lines and their customers will see these costs from slightly different angles, but in the final analysis their costs are fundamentally similar. The main objective of the shipping lines is to find the least cost route and to provide reliable, high quality services on that route. If the shipping line does not do this, its competitors will, and it will lose market share. Similarly the main objective of the user will be to obtain the least cost route provided by the shipping line - with certain reservations.

中期／長期來說，貨運路線主要取決於運輸成本總額。航運公司及其客戶會從稍為不同的角度看待運輸成本問題，但最後的分析顯示，兩者的成本基本上相同。航運公司的主要目的是尋求成本最低的路線，以及能在該路線上提供可靠優質的服務；否則這些路線便會落入競爭對手手中，以致航運公司將喪失其市場佔有率。同樣，用家的主要目的，也是爭取航運公司提供成本最低的路線，但他們在這方面則有若干保留的地方。

5.3.2 Although these costs will *eventually* surface as the main determinant of the split of cargo between ports, *the switch will not be immediate*. There will be impediments to the process and it will also be subject to time lags. The main impediments to the flow of traffic to its least cost route are the facts that:

雖然這些成本最終會成為貨運量分散到各港口的主要因素，但這種轉變不會即時顯現。轉變過程中會出現一些障礙，而且時間上亦未必能配合。妨礙貨運轉移到最低成本路線的主要因素如下：

- ❖ some costs can only be achieved when volumes reach critical mass. This may take some time. The first stage is the attraction of initial weekly services; the second stage is to build up the frequencies of services; and the third stage is to attract a network of feeder services;
- ❖ costs are not always the same as charges imposed by shipping lines, ports and trucking companies. For example, the shipping lines impose "arbitrary" or outport charges at

- ❖ 運載的貨物必須達致一定的數量，才可以節省部分成本。這情況可能需要若干時日才可實現。頭一階段是吸引客戶使用初期提供每週一次的運貨服務。第二階段是增加服務次數，第三階段是建立接駁服務網絡；
- ❖ 成本未必與航運公司、港口和貨車公司的收費一致。舉例來說，航運公司在鹽田徵收“額外收費”或外港收費，在香港則收取貨

Yantian, and THCs at Hong Kong; and vendors sometimes "absorb" inland transport costs;

- ❖ non-cost factors, such as the absence of red tape, affect routing decisions; and
- ❖ the supply of port capacity outside Hong Kong may not meet the needs of unconstrained "demand".

5.3.3 The South China cargo base growth is expected to remain robust but the rate of growth is likely to be declined over the planning period. Shenzhen ports share of the South China cargo base (excluding Hong Kong) is expected to increase significantly from the present level of 5% to more than 50% by 2016.

- ❖ In cost terms, it is cheaper to use Shenzhen ports as compared to Hong Kong - trucking costs are the critical factor - but Hong Kong should maintain non-cost advantages in the short to medium term thus slowing the diversion of traffic;
- ❖ consignees are gaining a growing influence over routing choices for exports and are shifting to FOB (Mainland China) - cost savings are the driving decision-making factor;
- ❖ importers still favour Hong Kong but rationalisation of customs procedures and tariffs will encourage direct trade to Shenzhen ports;
- ❖ port development and operating costs remain lower in Shenzhen; and
- ❖ Shipping lines are gearing up with improved and cheaper services at Shenzhen ports - the arbitrary imposed by ANERA is expected to go in the future.

5.3.4 *The main competition for direct trade will be from Yantian;* however, supply chain managers confirmed that the switch to Yantian has been slower than expected. But most of these impediments to Yantian's competitiveness - the arbitraries, the red tape and the lack of critical

櫃港口處理收費；而賣方有時亦會“承擔”內陸運輸成本：

- ❖ 一些與成本無關的因素，例如沒有繁瑣手續，會影響到貨運路線的取捨；以及
- ❖ 香港以外的港口所提供處理能力未能滿足沒有限制的“需求”。

華南地區的貨物基礎數字增長預計保持穩健，但在規劃期內，增長率可能放緩。深圳港口（不包括香港）佔華南貨物基礎數字的比率預計會大幅上升，由現時的5%增至二零一六年的50%以上。

- ❖ 以成本計算，使用深圳港口較使用香港港口便宜，其中貨車運輸成本是關鍵因素；但以短期至中期來說，香港應保持成本以外的有利條件，以減慢貨運路線轉移的情況；
- ❖ 在選擇出口貨物運送路線方面，收貨人的影響力越來越大，並正逐漸轉用離岸價（中國內地）進行貨運——能夠節省成本是首要的決定因素；
- ❖ 進口商仍喜歡選用香港港口，但當內地海關手續和關稅變得較合理時，會有更多貨物運往深圳港口直接交易；
- ❖ 深圳的港口發展和經營成本將會保持較低水平；以及
- ❖ 航運公司現正作出準備，以配合深圳港口提供改良和較廉宜的服務，預計亞洲北美東行線運費協議所訂的“額外收費”日後將會取消。

直接貿易方面的最大競爭將會來自鹽田；不過，貨運經理證實，轉往鹽田進行直接貿易的趨勢較預期慢。不過，鹽田在競爭上受阻的大部分因素，例如額外收費、繁瑣手續，以及運貨量未足以降低成本等，最終應會被克服。

mass - should eventually be overcome.

5.3.5 Assuming that they are, will the cost advantages of Yantian lead to a flood of cargo away from Hong Kong? This question tended to be circumvented by interviewees. They emphasised that the constraint in the supply of berths outside Hong Kong will prevent a flood in the foreseeable future. The "trigger" approach used at Hong Kong is reportedly being used at Yantian. That is to say, new berths will not be built until existing capacity is full. In addition, terminal charges may fall in Hong Kong. So far, they have remained high, as there has been little need to compete. High traffic growth has kept occupancies generally quite high. When competition starts to bite, however, Hong Kong's terminal operators are likely to react as in other countries, by cutting prices to retain market share - and there are some indications that this process is starting. There should be scope for large reductions: although the costs of construction, development and labour are high at Hong Kong, the capital cost of the older berths have partly written off and the unusually high throughputs which are achieved should result in lower costs per container. Profit margins are generally believed to be high by international standards. This should allow prices to come down if competition intensifies.

5.3.6 **Transshipment**, which accounted for 28% of Kwai Chung throughput in 1996, appears to be vulnerable to competing ports, because of high handling cost. The port favoured by the lines to take over much of the transshipment, which is mainly for Chinese cargo, is Kaohsiung. Its costs are reported to be half of Hong Kong's.

5.3.7 But shipping lines have a general tendency to complain about port tariffs, while in practice they are often willing to pay for good services, and Hong Kong's services are excellent. Furthermore, it is not only the handling charges that are important: the fast turnarounds in themselves reduce operating costs. And while services at Taiwan ports are reasonably good, they are reported to be inferior to Hong Kong's. Furthermore, full liberalisation may take some time. A important source of cargo trade which is

假設鹽田所面對的障礙已克服，其在成本方面的優勢會否使原本經香港運送的貨物，大批轉移到鹽田呢？受訪者似乎不願正面回答這問題。他們強調現時在香港鄰近的新碼頭運作上仍面對不少困難，在可見的將來可防止貨物大量轉離香港。據說，鹽田港口當局的做法和香港的一樣，都是採用「觸法」機制，即是說，在現有的港口處理能力達到飽和時，才會加建停泊位。此外，香港貨櫃碼頭的收費也可能下降。由於香港的貨櫃碼頭一向甚少需要與其他地方同業競爭，故其收費至今仍然高昂。港口運輸量高速增長，使港口設施使用量普遍頗高。然而，當競爭的惡果開始出現時，香港的貨櫃碼頭經營者很可能會仿效其他國家同業的做法，藉減價來維持市場佔有率。有跡象顯示這過程正展開。雖然香港的建築、發展及勞工成本甚高，但很多碼頭是在早期興建下來，造價早已歸本，而香港的貨櫃吞吐量異常大，故每個貨櫃的處理成本較低；因此，各項收費亦應有大幅下調的餘地。一般認為，根據國際標準，貨櫃碼頭經營者賺取的利潤幅度已算可觀；若競爭漸趨激烈，收費應可調低。

一九九六年，轉口貨運量佔葵涌貨櫃碼頭貨物吞吐量 28%。由於本港的貨櫃港口收費偏高，轉口貨運業務很容易被競爭對手奪去。大部分轉口貨物，尤其是來自中國的貨物，將會轉移到其他港口，而船公司樂於使用的港口，就是高雄港。據說，高雄港的貨櫃處理成本只是香港的一半。

即使船公司一般都埋怨港口收費偏高，但實際上這些公司往往都樂意付出高價換取優質服務，而香港的港口服務是一流的。再者，貨物處理收費並非唯一重要因素，快捷的裝卸服務也足可減低運作成本。雖然台灣各港口的服務質素已屬良好，但據說仍遜於本港。此外，中台之間完全開放直接通商，可能需要若干時日方可。在短期至中期而言，香港最終會因中國與台灣直接通商而可能喪

likely to be lost in the short to medium terms is the trade between Mainland China and Taiwan. At present it has to be routed via a third country (or, in practice, Hong Kong) because of the ban on direct trade. This traffic is expected to be lost as soon as direct trade is restored - which is expected over the next few years. The trade accounts for about 1.1 million TEUs at present. It will almost certainly be diverted to east and north coast ports, and may even bypass Hong Kong in the south, going to Pearl River ports such as Guangzhou/Huangpu, Shekou, and Chiwan.

- 5.3.8 To conclude, the loss of direct trade to Yantian and other Shenzhen ports may be slower than expected previously, and the loss of transshipment to Kaohsiung and other ports should not be taken for granted. The one major trade likely to be lost relatively quickly would be the Mainland-Taiwan trade, if direct trade is permitted soon; but recent reports suggest that this may take several years.

5.4 Hong Kong Container Throughput Analysis

- 5.4.1 Hong Kong has been the busiest container port in the world in the past six years, just outpacing Singapore. Its rapid growth has been caused mainly by five separate sets of traffic:

- (i) **The Guangdong Cargo Base:** rapidly growing demand for the products of South China, in particular Guangdong;
- (ii) **Hong Kong:** steady growth in the economy of Hong Kong;
- (iii) **Transshipment Hub:** Hong Kong's position as a transshipment centre for (a) Mainland China provinces north of Guangdong, and (b) neighbouring countries;
- (iv) **Taiwan Link:** Hong Kong's position as an intermediate used for trade between the Mainland and Taiwan, direct trade having been forbidden since 1949; and
- (v) **River Trade:** increasing use of river barges rather than road haulage for inland transport.

失一部份貨運貿易。目前，由於中台兩地禁止與對方直接通商，貨物須經第三個國家（實際上是經香港）轉運。一旦中台恢復直接通商，應該不需要經香港轉運——這種情況預料在未來數年內出現。目前這方面的貨物轉運量約為 110 萬個標準貨櫃單位。中台直接通商後，相信貨物必定會運往華東和華北的沿岸港口，甚至可能不經香港而輸往華南珠江港口如廣州或黃埔、蛇口及赤灣。

簡而言之，直接通商導致貨運轉移到鹽田及深圳其他港口的情况，可能會比早前所預期的較遲出現，而轉口貨運為高雄及其他港口取代的情况，也不是理所當然的。中台之間的轉運貿易是香港貨運貿易中主要的一環；如在短期內兩地開放直接通商，這項重大的貿易便會以較快的速度轉離本港；然而，最近有報告指出直接通商可能要待數年後才能實現。

香港貨櫃吞吐量分析

過去六年來，香港已超越新加坡，成為全球最繁忙的貨櫃港。貨櫃吞吐量急速增長，主要有賴以下五個分別自成一系的運輸貿易體系：

- (i) 廣東貨物基礎：對華南產品，尤其是廣東產品的需求急速上升；
- (ii) 香港：香港經濟穩步增長；
- (iii) 轉運中心：香港是(a)廣東省以北的中國省份及(b)鄰近國家的貨物轉運中心；
- (iv) 與台灣的聯繫：自一九四九年中台之間禁止直接通商以來，香港便一直是兩地貨運的中間經停港；以及
- (v) 內河貨運：更廣泛利用內河駁船而捨道路拖運方式作內陸運輸。

5.4.2 The breakdown of container traffic by main "generating" country or region is shown in Table 3:

按“帶來”運輸量的主要國家或地區分類的貨櫃運輸量列於表三。從表中數字可見：

表三 一九九六年香港貨櫃運輸量（以千個標準貨櫃單位計）
Table 3 Hong Kong Container Traffic - 1996 ('000 TEUs)

		Imports 入口	Exports 出口	Total 總數量	% Share 所佔百分率
Direct Services 直接貨運服(a)					
• Hong Kong 香港(b)		1,128	619	1,747	15
• Guangdong & South China 廣東及華南(c)		3,171	3,896	7,067	62
• Total Direct 總數		4,299	4,515	8,814	78
Transshipment 轉口貨運(d)	%				
Generated by 來源地：					
• Mainland China 中國	56				
• Taiwan 台灣	11				
• Other 其他	33				
• Total Transshipment 轉口總數	100	1,220	1,229	2,449	22
Total 總數量				11,263	100
Plus River Trade 加內河貨運量				2,197	
Total Port 港口總貨運量				13,460	

Notes 註： (a) Includes transit to/from Hong Kong. 包括輸入及輸出香港的過境貨物。
 (b) Estimated from trade statistics. 根據貨運量數字所作的估計。
 (c) By subtraction of HK retained imports and direct exports from total direct trade. 從直接貨運總數量減去香港的留銷入口貨物量及直接出口貨物量。
 (d) Excluding cargo in transit on through bill of lading. 不包括附有聯運提單的過境貨物。

(i) **Guangdong/South China** accounted for an estimated 63% of total container traffic, excluding river trade (57% of inward traffic and 68% of outward traffic) in 1996;

(i) 廣東／華南的貨櫃運輸量，在一九九六年佔貨櫃總運輸量（不包括內河貨運量）約 63%（進口運輸量的 57% 及出口運輸量的 68%）；

(ii) **Hong Kong's** own economy accounted for 15.5% of total container traffic (20% of inward traffic and 10% of outward traffic); and

(ii) 香港經濟體系本身的貨運量，佔貨櫃總運輸量的 15.5%（進口運輸量的 20% 及出口運輸量的 10%）；及

(iii) **transshipment** (ship to ship) accounted for 22%.

(iii) 轉口貨運量（從一艘船運至另一艘船）佔貨櫃總運輸量的 22%。

5.4.3 Within the sub-category of "**transshipment**" (ship to ship), China accounted for 56% of the movements in 1996; and Taiwan accounted for another 9% (the majority of Mainland-Taiwan trade is "direct" rather than transhipped). "Other" countries, including Japan, Korea and South East Asian countries accounted for the remaining

在“轉口貨運量”（船與船之間的貨運量）的分目之下，在一九九六年，中國的運輸量佔總運輸量 56%，而台灣則佔 9%（中台之間大部分貨運其實都是“直接”而非轉運的）。至於“其他”國家，包括日本、韓國及東南亞國家的貨運量，則佔餘下的 33%。表中所列的，只是位

33%. This breakdown covers only

countries at "this end" of the routes. At the "other end", the traffic is dominated by the US and Europe.

於“這邊”路線的國家。在“那邊”國家的貨運貿易，則以美國和歐洲佔主導地位。

5.5 The Container Cargo Forecasting Model

貨櫃裝運貨物數量預測模式

5.5.1 The main steps in preparing the container traffic forecasts are as follows:

制訂貨櫃運輸預測的主要程序如下：

- ❖ **Firstly**, the division of Hong Kong/Guangdong container traffic into
 - (i) direct services and transshipment; and
 - (ii) by country or province generating the traffic.
 - ❖ **Secondly**, the projection of the main trades in line with the growth rates forecast for exports and imports in the relevant economies. As shown, the main economies driving container growth are those of Guangdong, Hong Kong, Mainland China and Taiwan. The traffic growth is in all cases forecast on the basis of trade growth at "this end" of the route, rather than the "other end", which is dominated by the US and Europe. Effectively the growth rates for exports from "this end" already reflect the assumptions about import growth at the other end of each route.
 - ❖ **Thirdly**, the subtraction of cargo likely to be diverted to other ports. The main losses are likely to be:
 - (i) **The Taiwan Factor** - Trade between Mainland and Taiwan which has to be routed via a third country under current laws (in practice, Hong Kong handles the majority). It is assumed that between 80-90% of this trade will be lost to other Chinese ports when the authorities in Beijing and Taipei agree on full liberalisation of direct services between Taiwan and the Mainland. Current indications are that this will take several years.
 - (ii) **Transshipment traffic**, part of which is vulnerable to high tariffs in Hong Kong.
- ❖ 第一，將香港／廣東的貨櫃運輸分為
 - (i) 直接貨運與轉運；及
 - (ii) 按帶來運輸量的地區或省份劃分。
 - ❖ 第二，根據有關經濟地區進出口業增長預測而推算各項主要貿易。正如所示，推動貨櫃增長的主要經濟地區是香港、廣東、中國大陸及台灣。貨運的增長預測，全部都是根據「這邊」路線的貿易增長而制訂，並非基於以歐美為主的「那邊」路線的貿易增長而作出，「這邊」的出口增長率已有效地反映出每條路線「那邊」有關進口貨物的假設增長數字。
 - ❖ 第三，減去可能轉往其他港口的貨物數量。主要的損失可能是：
 - (i) 台灣因素－根據現行法例規定，中台的貿易必須經由第三個國家（實質上，香港處理了極大部分），但估計一旦北京與台北當局達成協議，完全開放中台直接通航時，本港在這方面的業務，估計會有 80%至 90%落入其他中國港口手中。現時跡象顯示這個情況仍須假以數年時間才會出現。
 - (ii) 轉口運輸－本港的部分轉運業務容易受到高運價的影響，但實

In practice, however, transshipment traffic has been increasing faster than direct services in recent years. It increased by 27% p.a. between 1992 and 1996; and although the growth rate slowed down in 1996, it was explicable by one major move (Cosco had consolidated a large part of its transshipment traffic at its new Kwai Chung container terminal when it opened in 1994-95, but returned part of it to Singapore in 1996). Despite this, the average growth in transshipment at Hong Kong remains high, and lack of alternative ports seems likely to limit losses in the short term. The main threat in the future will be from Taiwan - although Hong Kong's efficiency, critical mass, service frequencies, network coverage, reliability and commercial flexibility may offset Kaohsiung's cost advantages. Furthermore, Taiwan is not yet allowed to compete for the dominant Chinese transshipment trade, except at the ports of Xiamen and Fuzhou. The immediate loss of traffic to Xiamen and Fuzhou is likely to be less than 200,000 TEU, or about 8% of total transshipment traffic. The real threat to Hong Kong's transshipment trade will only emerge when Mainland-Taiwan transshipment links are fully liberalised.

- (iii) **Yantian** - Traffic lost to the port of Yantian, which offers lower total transport costs than Hong Kong. These cost advantages have, so far, been offset by operational difficulties, particularly with customs; and although there have been some improvements it is unlikely that the gap between Hong Kong and Yantian will be fully closed in the foreseeable future. Furthermore, Hong Kong's service levels and reliability are of a very high standard, and consignees are often willing to pay more for such services, especially where total transport costs are only a small percentage of the value of the goods in the container. Nevertheless, Yantian's throughput is increasing fast and pressure from cost-

際上轉口運輸在近年來持續增長，速度較直接貨運為快。在一九九二至一九九六年間，每年的增長幅度為 27%。雖然一九九六年內的增長率放緩，但這是由於一次主要的調動所致（中邊一國際貨櫃碼頭有限公司在新葵涌貨櫃碼頭於一九九四至九五年間開始投入運作時，將頗大部分的轉口運輸統集在該碼頭處理，不過在一九九六年時，則將部分貨運轉往新加坡）。即使這樣，香港轉口運輸的平均增長幅度仍然高企，而短期內，由於缺乏其他港口的競爭，本港的損失亦有限。不過，即使香港處事有效率，貨運量大，服務頻率高，網絡覆蓋廣，可靠性高及商業彈性充分，也許可以抵銷高雄市在成本方面所佔的優勢，但長遠來說，主要威脅仍來自台灣。另外，除了在廈門及福州兩處港口外，台灣仍未獲准競逐其他主要中國轉運貿易。目前廈門與福州取去的運輸量，可能是少於 20 萬個標準貨櫃單位，或是整體轉口貨運量的 8% 左右。香港轉運貿易的真正威脅只會在全面開放中台間的轉運連繫後始告出現。

- (iii) 鹽田港 - 鹽田港取去的運輸量，該港口提供較香港為低的整體運輸費用。迄今，這些成本優勢已為運作上，尤其是與海關方面所遇到的困難所抵銷，而即使情況迅速獲得改善，但鹽田與香港之間的差距，在可見的未來，仍不可能完全消弭。此外，香港的服務水平和可靠程度甚高，因而收貨人往往寧願多付費用以取得這類服務，尤其當運輸費用總額僅佔貨箱貨物價值的一個細小百分比時為然。儘管這樣，鹽田的貨櫃吞吐量正在快速增長，加上成本意識濃厚的收貨人力求轉移至鹽田港付運，的確會使這種轉移路線的情形持續下

conscious consignees to shift to Yantian will ensure that the diversion continues. The pace of diversion will be affected by capacity growth and service improvement in Yantian comparing to Hong Kong port operators' ability to control cost and reduce land transportation costs.

- (iv) **Other South China Ports** - Traffic lost to other ports in Guangdong, especially Shekou, Chiwan and in the future Dachen on the western side of Shenzhen, is also a factor affecting Hong Kong's position. Recent trends and physical limitations (especially the limited water depths in the Tonggu Channel at 13.5 m) suggest that these other Guangdong ports will attract much less traffic than Yantian. Furthermore, new ports will find it hard to compete with highly efficient existing operators such as HPH, P&O and the existing Hong Kong port operators.
- (v) **Rail** - Rail transport's share of Hong Kong's container traffic is negligible at present. In 1996 only 6,000 TEUs entered or left Hong Kong by rail. Furthermore, there has been little growth in the last three years. Neither the KCRC nor the Chinese railways have any significant success in attracting container traffic. In fact, KCRC's involvement in freight transport of any type is limited. The main development affecting KCRC's prospects for handling containers in recent years has been the completion in 1996 of the Jing Jiu Railway linking Beijing and Hong Kong. Gaps in the line within Hong Kong, however, probably rule out its use for transporting significant numbers of containers to the port. There has been a plan to build a link between the existing line and the port via the Western Corridor Railways; but it has been postponed several times. And although there is now a new proposal for a link between the Eastern Railway and Kwai Chung, it is unlikely to be completed before 2004 at the earliest.

去。速度的快慢，一方面端視鹽田港在提高港口處理和服務質素方面的進展情況；另一方面則要視乎香港的港口經營商能否有效控制成本和降低陸路貨運的成本。

- (iv) 其他華南港口－廣東省其他港口取去的貨運量，尤其是深圳西面的蛇口港，赤灣港及未來的大鰲，亦是影響香港地位的一個因素。近期的趨勢與地形的限制（特別是銅鼓航道 13.5 米的水深限制）顯示廣東省這些其他港口對貨運的吸納能力，較鹽田港為弱。此外，新的港口亦會發覺難以與具有高度效率的現有經營者，例如和記、鐵行，以及現時香港經營港口業務的人士進行競爭。
- (v) 鐵路－鐵路運輸在香港貨櫃運輸中所佔比率，目前是微不足道。一九九六年內，經鐵路進入或運離香港的貨量，只有 6 000 個標準貨櫃單位。同時，過去三年內的增長亦不顯著。不論是九廣鐵路公司或是中國鐵路當局，在爭取貨櫃運輸方面，並無任何重大成就。事實上，九廣鐵路公司對任何種類貨運的介入程度有限。這幾年間，能影響九廣鐵路公司日後在處理貨櫃業務上的主要發展，是連接北京與香港兩地，於一九九六年通車的京九鐵路。但可惜香港境內的鐵路路線缺乏貫通，可能因而無法將龐大數目的貨櫃直運港口。當局本有計劃興建鐵路連線，將現有路線經由西部走廊鐵路與港口連接起來，但這項計劃卻數度擱置。雖然，現時已有一項新的建議，將東面鐵路與葵涌連接，不過，這計劃最早亦要到二零零四年以後才可能竣工。

❖ **Finally**, addition of the river trade cargo traffic to project the overall container throughput of Hong Kong. Transport of containers by river increased rapidly between 1992 and 1996. Its average growth in that period was 42% p.a. The growth, however, appears to have slowed down in 1997. This may be explained by a resurgence of competition from trucking. Costs of road haulage for typical journeys from Guangdong to Hong Kong are reported to have fallen from HK\$6,000 to about HK\$4,000 per 40' container in the last two years. River transport now accounts for 31% of container movements between Guangdong and Hong Kong. This represents a significant increase from 5% in 1992. River transport is best suited to target cargo on the west side of Guangdong, which limits it to about 45% of the total. Furthermore, river transport would be unlikely to approach this ceiling, for two reasons: first, part of the cargo on the west side of Guangdong would have to make a road journey to the river port and this would add to costs; and, secondly, high value container cargo usually moves by road, which offers high speed, control, flexibility and absence of the need to wait for a service. On this basis, river trade's share of the inland transport for Hong Kong's ocean container traffic is forecast to rise steadily to around one third; before falling again in later years when additional cross border road infrastructure will be developed.

❖ 最後，我們加入有關內河貨運量的資料，以推算本港整體的貨櫃吞吐量、內河貨櫃運輸量在一九九二至一九九六年間銳增，平均每年增長 42%。不過，增長率在一九九七年似乎已經放緩，這可能是由於貨車運輸業的競爭重現所致。據報在過去兩年，普通一程由廣東至香港的拖運費由每個 40 呎長貨櫃 6,000 港元下跌至 4,000 港元左右。內河運輸現佔來往廣東及香港之間的貨櫃運輸 31%，比一九九二年大幅增加 5%。內河運輸最適宜運載廣東西部的貨物，但這些貨物不會超過總數約 45%。此外，內河運輸不可能達到這個上限，原因有兩個：第一，廣東西部的貨物，部分須先由陸路運往內河港口，導致成本增加；及，第二：價值高昂的貨櫃貨物通常由陸路運送，陸路運輸不但速度快、易於控制、具靈活性，且毋須等候。在這個基礎上，在香港遠洋貨櫃運輸的內陸運輸環節中，內河運輸所佔比率預計會穩步上升三份一左右，但在較後年間，當其他的跨境道路基建落成後會再次回落。

5.5.2 The future development of Hong Kong's port will mostly depend on the relative strength of cargo base growth and the propensity of cargo diversion to other ports. Considerable growth in cargo volumes over the next 20 years is expected, albeit at slower rates than have been experienced in the past.

香港港口的未來發展，主要取決於貨物基礎的相對增長實力及貨物是否趨於轉往其他港口。預期在未來 20 年，貨運量將有可觀的增長，不過，速度較過往緩慢。

5.5.3 Hong Kong port is expected to become more and more focused on handling the already dominant South China cargoes. Cargoes transhipped between ocean going vessels will be increasingly diverted.

預期香港港口將更專注處理現時已佔主導位置的華南貨物。經遠洋輪船轉運的貨物，將漸多轉往他處。

5.6 Key Issues for Port Cargo Growth South China/Hong Kong Cargo Base

港口貨運增長的重要問題 華南／香港貨物基礎

5.6.1 Overall growth of the South China (Hong Kong and Guangdong) cargo base will drive

在規劃期內，華南（香港及廣東省）貨

development of Hong Kong's port over the planning period. It is expected that strong growth of the South China cargo base will continue into the future but the rate of growth is expected to moderate.

Diversion to South China Ports

- 5.6.2 The development of new ports in South China coupled with improving level of services will increase routing options for shippers over the course of the planning period. The strong growth of the overall cargo base will however provide many opportunities for the various ports in the region to expand, including Hong Kong.

Diversion of Mainland-Taiwan Cargoes routed through Hong Kong

- 5.6.3 It is expected that about 80-90% of the trade between Taiwan and Mainland China which is currently routed via Hong Kong will be lost to other Chinese ports when the authorities in Beijing and Taipei agree on full liberalisation of direct services between Taiwan and the Mainland. Current indications are that this will take several years.

Decline of Regional Transshipment

- 5.6.4 Over the planning period, the importance of ocean transshipment trade should decline as trade is diverted. The factors driving the diversion process are relative costs. There are cheaper places to tranship, and more sensible routing options for cargo further away. The improved provision of trade and port services in other parts of the Mainland and expected normalisation of trade relations between the Mainland and Taiwan will lead to high levels of diversion of these cargoes away from Hong Kong. However, this cargo sector is relatively less valuable to Hong Kong and its diversion should not inflict serious damage to the economy of the Territory.

River Transport

- 5.6.5 Transport of containers by river increased rapidly between 1992 and 1996. Its average growth in that period was 42% p.a. The growth, however, appears to have slowed down in 1997. Future growth of river trade will depend mainly on the growth of the Guangdong economy. The pool of

物基礎的整體增長，將帶動香港港口的發展。預期華南貨物基礎未來的增長持續強勁，但增長率將放緩。

貨運轉移華南地區港口

在規劃期內，華南新港口發展及服務水平提高，使付運人有更多的運送路線選擇。不過，整體貨物基礎的強勁增長，將為亞太區內各個港口（包括香港）帶來不少擴展機會。

途經香港的內地－台灣貨物轉移到其他地方

當北京與台灣當局達成協議，全面開放內地與台灣的直通服務後，預期目前中國內地與台灣之間，途經香港的貨運，會有大約 80% 至 90% 轉移到中國其他港口。目前的情況顯示，這個過程需時數年。

亞太區轉運減少

在規劃期內，由於貨運轉移，遠洋轉運的重要性會下降。相對成本是促使貨運轉移的因素。目前不乏成本較低的地方可進行轉運，也不乏較為理想的運送路線選擇，把貨物運往更遠地方。中國其他地方的貿易及港口服務有所改善，以及預料中國與台灣的貿易關係正常化，將導致大部分這類貨物不再經香港轉運。不過，這類貨運對香港的價值相對較低，所以其轉移不會對本港經濟造成十分嚴重的損害。

內河運輸

一九九二至一九九六年間，內河貨櫃運輸量迅速增加，平均增長率為每年 42%。不過，到了一九九七年，增長似乎已經放緩。內河貿易日後的增長主要取決於廣東經濟的增長。使用內河運輸的貨物，即廣東的出口及入口貨物，比香港

cargo using river transport i.e. Guangdong's exports and imports, is increasing faster than total container traffic at Hong Kong.

Mid-stream Cargo Traffic

5.6.6 Recent evidence suggests that there is flexibility in the choice between the container terminals and mid-stream services but the container terminals are frequently the preferred option for most container handling if tariff differentials are acceptable. The mid-stream is exposed to a number of disadvantages of varying degrees which if combined will put downward pressure on mid-stream volumes:

- ❖ Taiwan trade impact will likely have a disproportional impact on the mid-stream;
- ❖ loss of the mid-stream client base to direct calls at Mainland ports;
- ❖ if tariffs at the container terminals continue to fall in real terms then the container terminals may also become more attractive to users at the margin (notwithstanding comparable reductions in mid-stream services); and related to the above,
- ❖ major expansions in container terminal capacity, through productivity increases and new terminal development, are also anticipated to potentially lower tariffs and ease access to terminals.

5.6.7 On balance, it is anticipated that mid-stream growth will be less than the port as a whole and thus future split between the container terminals and mid-stream is likely to shift in favour of the container terminals.

5.6.8 Taken into account all the above factors, the distribution of cargoes handled by Hong Kong port, analysed by shipment and market type is summarised in Figure 5. It is clear that Hong Kong will become more focused on handling direct shipment cargo from the already dominant South China market. Its relative importance will increase gradually from 63% of total ocean container throughput in 1996 to 76% in 2016. It is the *direct shipment from the South China cargo base* that drives the growth of Hong Kong port.

的總貨櫃運輸量的增長為快。

中流貨運

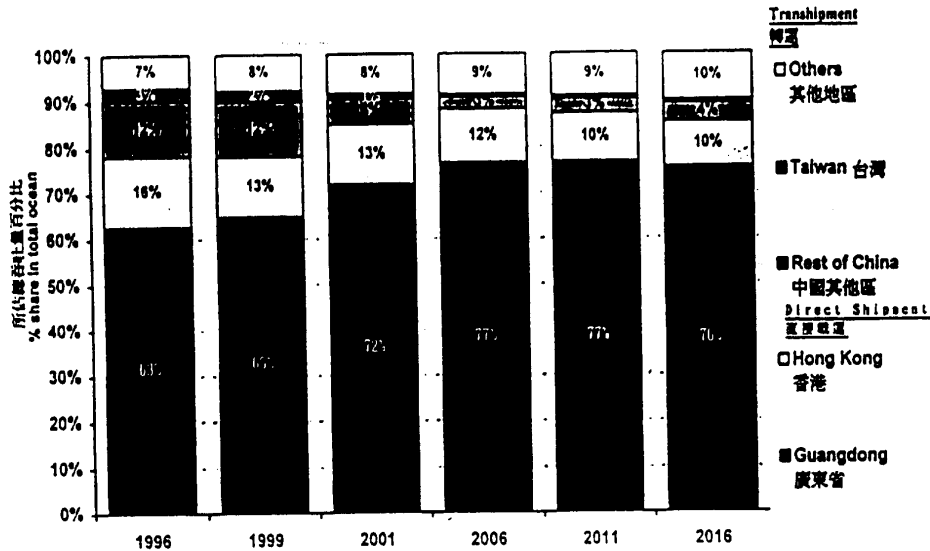
近年有跡象顯示，業內人士可靈活選擇使用貨櫃碼頭或中流作業方式運貨，但假若運價的差距可以接受，大部分的貨櫃處理工作均會選擇在貨櫃碼頭進行。此外，中流作業正面對若干變數，假如這些變數起整合作用，便會對中流貨運量構成下降的壓力：

- ❖ 台灣貿易帶來的沖擊可能對中流作業貨運造成巨大的影響；
- ❖ 中流作業客戶基礎流失，這些客戶會改為直接停靠內地港口；
- ❖ 倘若貨櫃碼頭的運價，以實質計算，持續下降，則貨櫃碼頭亦可能較能吸引正處考慮邊緣的使用者（儘管中流作業服務亦相應減少）；以及就有關上述各點而言，
- ❖ 貨櫃碼頭處理能力，透過提高生產力及興建新碼頭而大幅增長，預料亦有可能降低運價及使碼頭更方便使用。

整體來說，預料中流作業貨運的增長較港口整體的增長少，日後貨櫃碼頭及中流作業的貨運分配，對貨櫃碼頭較為有利。

考慮到上述所有因素，按貨運及市場類別分析的香港港口處理貨物分布情況，載於圖五。圖中清楚顯示香港地區將更專注處理來自現時已佔主導地位的華南市場的直接載運貨物，其相對重要性將會逐漸增加，由一九九六年佔貨櫃港口的總吞吐量的 63%，增加至二零一六年的 76%，帶動香港港口發展的，正是來自華南貨物基礎的直接貨運。

圖五 一九九六年至二零一六年各主要地區對香港港口吞吐量的相對重要性
Figure 5 Relative Importance of Major Regions to Hong Kong Port Throughput 1996-2016



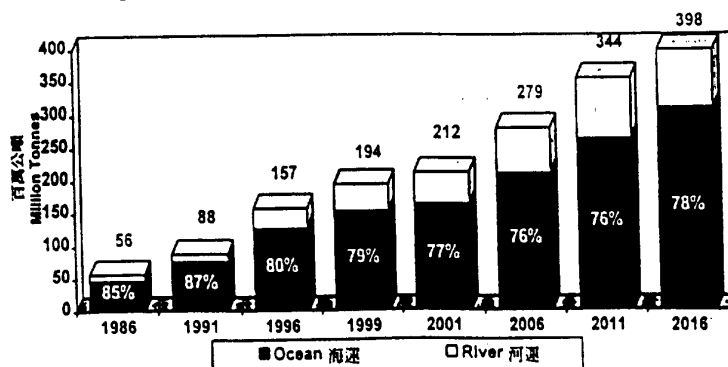
6 Port Traffic Projections

6.1 Hong Kong's port cargo forecasts are prepared for the benchmark years of 1999, 2001, 2006, 2011 and 2016 with breakdowns by cargo type and shipment type. The main forecasts are summarised in Figure 6. Overall port traffic is projected to increase at 4.7% per annum from 1996 to 2016 when total tonnage will reach 398 million tonnes. By 2016, 78% (309 million tonnes) of the cargo will be carried by ocean-going vessels and the remainder (89 million tonnes) by river vessels, as compared with the corresponding share of 80% in 1996.

港口運輸量預測

我們為一九九六、二零零一、二零零六、二零一一年及二零一六年的基準年份作出港口貨運量預測，並按貨物類別及運載類別列出分項數字。各項主要的預測摘錄於圖六。由一九九六年至二零一六年，整體港口運輸量預計每年會增長4.7%，總運輸量將達3.98億公噸。到二零一六年，78% (3.09億公噸) 貨物將由遠洋輪船運載，其餘(8900萬公噸)則由內河船隻運載，而一九九六年的相對比率則為80%。

圖六 香港整體港口貨運量以往及預測趨勢
Figure 6 Past and Projected Trend of Hong Kong Overall Port Traffic



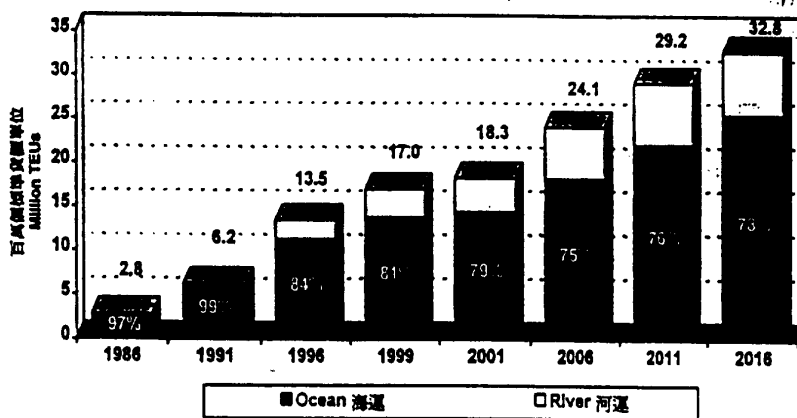
6.2 Hong Kong's total container throughput will amount to 24 million TEUs in 2006 and 33 million TEUs in 2016. It represents a projected average annual growth rate of 6.0% and 3.1% respectively during the first and second decades of the planning period, up from 13.46 million TEUs in 1996. The forecast growth pattern is presented in Figure 7.

香港的貨櫃總吞吐量在二零零六年將達 2 400 萬個標準貨櫃單位，到二零一六年則達 3 300 萬個標準貨櫃單位。這些數字表示在規劃期內，預測首十年和次十年內的每年平均增長率分別為 6.0% 及 3.1%，較一九九六年的 1 346 萬個標準貨櫃單位有所增加。預測增長模式載於圖七。

6.3 It is projected that the volume of containers carried by ocean-going vessels will reach 26 million TEUs by 2016 while 7 million TEUs will be handled by river trading vessels. This also reflects a steady increase in share of river containers from 16% in 1996 to 22% in 2016.

預計到了二零一六年，由遠洋輪船運載的貨櫃數量將達 2 600 萬個標準貨櫃單位，而由內河商船處理的則達 700 萬個標準貨櫃單位。這些數字反映出經內河運載的貨櫃所佔比率穩步上升，由一九九六年的 16% 增至二零一六年的 22%。

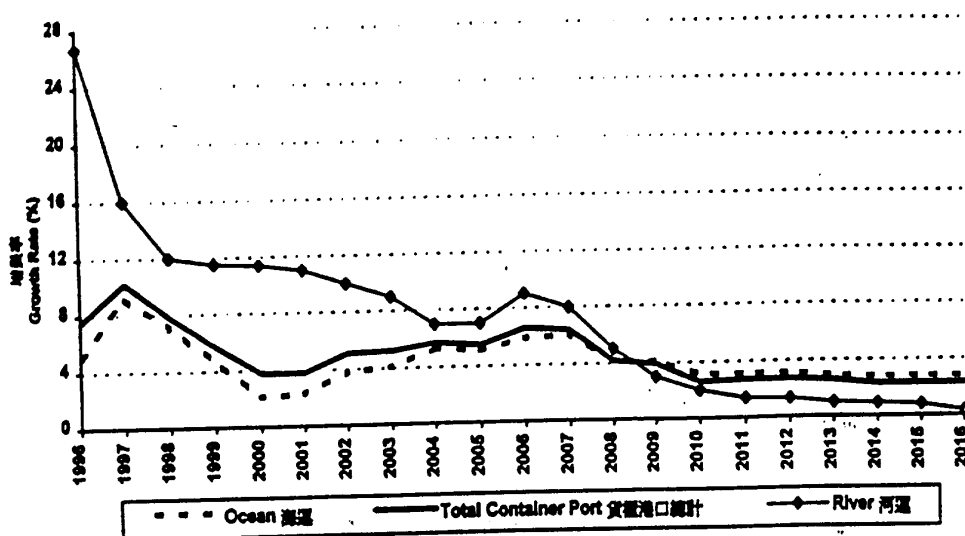
圖七 香港貨櫃運輸量以往及預測趨勢
Figure 7 Past and Projected Trend of Hong Kong Container Traffic



6.4 River trade container throughput is forecast to expand at a much faster rate than its ocean counterpart in the planning period up to 2008 but fall short of the ocean throughput in the period between 2009-2016. This is mainly due to the planning of addition of new cross border road infrastructure in around 2008 and the increasing diversion of the Guangdong cargo base to Shenzhen ports. The growth rates of river and ocean container throughput are summarised in Figure 8.

內河貨櫃運輸吞吐量的增長方面，預測在直至二零零八年的規劃期內，將遠較遠洋貨櫃運輸吞吐量的增長為迅速，但在二零零九年至二零一六年期間，則會落後於遠洋貨櫃運輸吞吐量的增長率。這主要是由於新規劃的跨境道路基建將於二零零八年左右增設，而且廣東的基礎貨物也逐漸轉移往深圳的港口。內河及遠洋貨櫃運輸吞吐量增長率攝錄於圖八。

圖八 香港貨櫃吞吐量的預測增長率
Figure 8 Projected Growth Rate of Hong Kong Container Throughput



7 Implications of the Current Asian Currency Turmoils on the Forecasts

近期亞洲金融風暴對預測的影響

7.1 The recent currency turmoils and economic instability affecting East and South-East Asia is creating uncertainty in relation to freight transport and more specifically port development in South China. This results in short term uncertainty about the rate of growth of overall container throughput over the next 1-2 years. There may be some downward pressure on throughputs in particular in the intra-Asia trade route. However, the evidence on the more important Europe and North America trades is unclear. The latter depends on a more important issue -- the impact of the recent turmoils on the spatial distribution of economic activity and investment flows with the Asian region. Related to this is the complex question of how the various governments and markets respond to the current crisis and the "success" of these response.

近期影響東亞和東南亞的金融風暴和經濟不穩，令貨運業以及具體來說令華南的港口發展，呈現前景不明朗的局面。因此，短期而言，未來一兩年整體貨櫃吞吐量的增長率亦不明朗。吞吐量可能會出現下調的壓力，而亞洲區內貿易路線所承受的壓力尤其沉重。不過，對於較為重要的歐洲和北美洲貿易，現時情況仍有欠明確，後者取決於一個較為重要的因素，即近期金融風暴對亞洲區內經濟活動分布情況和流動投資的影響。與此有關的是各個政府和市場面對目前的危機如何作出回應，以及這些回應措施的“成效”如何，這是一個複雜的問題。

7.2 In general, it is still too early to assess the impacts of current economic instability in Asia. The main objective of the study is to examine the long term trend of the rate of cargo growth to guide port development planning. The short term instability will be monitored closely and the forecast trend will be updated when more information available. For this purpose, Section 6 provides a

大體來說，要評估近期亞洲經濟不穩定的影響，目前仍未是適當的時機。是項研究的目的，主要是探討貨物增長率的長遠走勢，以便策劃港口發展時能有所依循。我們會密切留意短暫的不穩定情況，當取得更多資料後，便會制訂最新

base case of the pattern of container throughput growth in Hong Kong on the best information available to date, with the high and low case scenarios detailed in Chapter 6 of the report providing guides as to the potential impacts of major changes to growth rates.

的走勢預測。為此，我們已根據現有的最新資料，在第六節擬定了本港貨櫃吞吐量增長模式的基本方案；而高增長率和低增長率方案的內容，則詳列於報告的第六章，如增長率因出現重大轉變而須評估可能產生的影響時，這些方案便可提供指引。