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THE PORT OF HONG KONG*



1. HISTORY

The reason of the success of “the Perfumed Harbour” is to be found in its history.

Standed on an excellent position on the sea and between east-Asia and west-Asia, Hong Kong was always a palmy port.

But it grew up economically after the opium wars, in fact with the British posses of the island, of the Kowloon peninsula and af-

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ter the establishment of the New Territories the importance of the Hong Kong's commerce was starting and was direct to arrive to the highest level.

The communist revolution of the year 1949 determined a new flow of Chinese people immigrating.

In that period Hong Kong became the empire of textile industry and financing. In the first years of the 80's the British and the Chinese met to decide the future of Hong Kong. For this reason the Special Administrative Region (SAR) of China was born and had to be the same for 50 years.

The promise would be of independence of the SAR from China government(one country, two system) but in fact it didn't happen. But except for politics that is a very dangerous matter, the Hong Kong trade and finance is left at the organization of the business-land.

2. HONG KONG CITY

Business is the aim of Hong Kong. Hong Kong is very westernised, full of culture, arts and characterized from the "feng shui" that is a discipline direct to balance the elements of the nature.

The religions are Buddhism and Taoism, the people from Hong Kong are used to go to the temple to ask favour for a conclusion of a business.

The languages are Cantonese and English but now Mandarin too. The taxes in Hong Kong are very low, the highest tax on the individual income is 16% and the tax on society income are no more than 17,5%.

The transport infrastructure is very efficient, people in HK are used to have a transport ricaricabile card. With this card you can pay all the means of transport and some taxi too.

In Hong Kong there is a very fast express train that connects the east of the land and the airport with the island (in only 28 minutes), there is a subway called Mass Transit Railway (MTR) divided in five lines, there are ferries that connect the Island to Kowloon, buses and taxis. All these means are very well organized, cheap and permit to cross all the zones in a few minutes.

The Central, that is the transport strategic point, is the heart of the city. All the means in Central are connected, and from that area you can easily walk to another through the buildings.

It is a city used to an easy and quick way of life; you can find everything from all the cultures but it is full of oriental tastes too. If you have money you can have whatever you want!

3. THE HONG KONG POLYTECHNIC UNIVERSITY¹

The Hong Kong Polytechnic University is set on the Kowloon peninsula between Hong Chong Rd and Cheong Wan Rd. It is a very well organized campus where you can find library, accommodation, sport fields, swimming pool, auditorium, amphitheatre, restaurants and bars.

On the Li Ka Shing Tower is setted the International Centre for Maritime Studies(ICMS), a World-class Centre for Maritime Studies, education, and Consultancy.

The Head and Chair Professor of Maritime Studies from the Department of Logistics is the Professor John J. Liu.

The Department of Logistics collects matters like economy, law, business and engineering that are strictly connected with logistic education. The Polytechnic University is organized to embrace all the transport matters.

Logistic is one of the main industries identified by the HKSAR government for accelerated development and substantial growth to support the local economy. Consequently, growth of logistic activities in this region will be enormous in the years ahead.

Managing logistics involves the effective management of materials, information, and finance in a network consisting of suppliers, manufactures, distributors, and customers.

The HK Polytechnic posses a whole spectrum of logistics: air and land transport, distribution management, information and

¹ From the rew "Logistic Research at the Hong Kong Polytechnic University" edited in Hong Kong

THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學

**International Centre for
Maritime Studies (ICMS)**
香港理大國際海事中心

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世界一流的航海研究、教育及諮詢中心

Maunsell Report (2003):
香港的競爭優勢在於其領先的航海管理和服務

THE HISTORICAL MISSION:
BUILD **POLYU** AS THE HONG KONG DESIGNATED
Maritime University

THE UNIQUE APPROACH:
APPLIED SCIENCE AND MANAGEMENT BASED
Maritime Studies

建立有香港特色的**海事大學**
開展以應用科學和管理為本的**海事研究**

wireless technology, logistics system design, maritime studies, materials handling, operations management, optimisation, production and inventory management, purchasing, quality management, RFID applications, scheduling, shipping, storage and packaging, supply chain management, transport economics and policy,

transport law, and warehousing. The logistics research team of the university consists of faculty members primarily from the following departments:

- Department of Applied Mathematics
- Department of Civil and structural Engineering
- Department of Land Surveying and Geo-Informatics
- Department of Logistics

It has the competence in various aspect of logistics research and collectively provides a total logistics solution as required by industry.

The latest research developments of this team include Transport, Maritime Logistic, Logistics Engineering and Information System, and Supply Chain Management and Operations.

Transport infrastructure development and logistics operations are inter-dependent and related to policy issues in the economic growth of any major metropolitan areas. The transport infrastructure development cannot be divorced from the need of logistics operations and improvements. Recent experiences in Hong Kong, such as the Guangzhou-Hong Kong-Macau Bridge and Western Corridor Link proposals put forward by the Government, indicate the policy decision on transport planning and system operations logistics require to be integrated.

As the development of Hong Kong as a primary logistic hub would inevitably involve the construction of extensive cross-boundary transport infrastructure and the improvement of cross-boundary transport systems. The government of HKSAR should work closely with the municipal governments on the Chinese mainland on focuses such as transport infrastructure planning, environmental protection, project phasing, transport management and logistics operation improvements. The setting up of the Sustainable Development Unit within the Office of Secretary for Administration will facilitate the implementation of the various initiatives, and it is anticipated that transport infrastructure planning and system operations logistics will be an important component of a sustainable development strategy for Hong Kong and the Pearl River Delta region.

Apart from the strategic infrastructure expansion due to the economic growth, attention has also been given to the development of Intelligent Transport System(ITS) in the Chinese mainland so as to improve the transport logistics there. Many cities have embarked on efforts to pursue ITS development, but this has proved that various ITS applications are emphasised in different cities with a view on the unique nature of the local transport system and the characteristics of the local environment. Recently, the HK Polytechnic University has invested HK\$ 8 million for development of new ITS technologies and is ready to apply these new technologies in practice.

The Logistic research has a lot of project:

- About Air Transport: it is direct to analyse the facilities in the HK International Airport.
- About Transport Logistics: it is focused on the threats and opportunities opened for transport/logistics Industries in Chongqing areas after the completion of the Three Georges on Yangtze River.
- About Intelligent Transport System: development of Multi-mode public transport query and guiding system for the whole of Hong Kong using web or mobile devices. Through either clicking on a map or textual input of both origin and destination, the route searching engine, based on the criteria of the least transfer modes, shortest time and/or least fare, would determine the optimum travelling route(s) in Hong Kong. The route(s) can be displayed in either textual or map based format. The development embraces the integrated technologies of Digital Mapping, Database Management, GIS and Web Mapping. Currently, prototype EASYGO has been in trial operation.
- Location-based Mobile Service (LBMS) System for Beijing Olympic: a location-based mobile service (LBMS) system in an integrated product of GPS, GIS and telecommunication technology. The objective of this project is to develop a LBMS related to Beijing Olympic Games 2008 with emphasis on the service of transportation and traffic

information system. The system should provide the following functions: search for information about objects at the remote locations; download maps for remote locations and mosaic the maps seamlessly. Design the optimum path remotely; locate the position of the user in realtime; receive dynamic traffic information and navigate the user; etc. The development is of significant social impact and commercial value. This project is founded by PolyU and National Geomatics Center of China.

- About Land Transport: analysis of Land Use Infrastructure for Port Development in Hong Kong. This project is funded by the Faculty of Construction and Land Use of PolyU. It addresses four questions: What is the existing strategy for port development? Why goods are handled through Hong Kong's cargo handling ports and mid-stream operations? What is the right mix of these operations in view of Hong Kong's port development that should be both economically sound and environmentally efficient? Does Hong Kong need to expand land use infrastructure for port development in the area of quay lengths and back up areas? If so, where to put them?
- And Land Use and Transport Infrastructure Integration between Hong Kong and Pearl River Delta Region.
- About Transport Management: area of Strategic Development (ADS)-destination Management and Tourist Transport. This project is to examine the aviation politicise and their implications on the tourist destination. It will identify the possible factors affecting the aviation politicise in Hong Kong, examine the costs and benefits of alternative aviation, and put up the best possible scenario of the aviation policies.

Hong Kong is a major ship owning and management centre. According to the Hong Kong Shipowners Association, the total tonnage of ships owned or managed by its members was around 61,6 million deadweight tonnes in December 2002. Hong Kong's port facilities are financed, built, owned and or operated by pri-

vate firms. It is the only major port not run by a port authority. An increasing number of countries are seeking to privatize their port operation and/or develop new ports to be run on a commercial basis. An exportable sea transport service from Hong Kong is thus the development and management of ports on the Chinese mainland and the wider region. Hong Kong port operators are already active in this field. Also, the growth of the Asian shipping market has changed the ownership of the global fleet of freighters and tankers. While Greek, Italian, Belgian, Danish, German, and Norwegian companies remain important and have many vessels in service on Pacific routes, Asian shipping lines now own 40 per cent of the world's fleet. With the recent recommendation of the Maunsell Report, the HK Government has reorganized the Port and Maritime Board in two councils: the Maritime Industry Council (MIC) and the Port Development Council (PDC). This is unequivocal evidence that the Government is giving proper recognition and due importance to the maritime and shipping industries, clearly signalling that Hong Kong's position as an international maritime hub should be enhanced.

To maintain and further develop the leading position alongside keen competition from neighbouring regions, the maritime research team at the Hong Kong Polytechnic University has been actively involved in research and consultancy services in container terminal operations, maritime law and policy, maritime safety, and shipping management.

Some projects are active:

- The impact of the Container Security Initiative(CSI) Pro- duces on Port Efficiency. CSI is a new requirement stipu- lated by US government to monitor container movements bound for the USA. Hong Kong is one of the forerunners in Asia to adopt this regulation. This project studies and analyze the effects in advance terminal cut-off time and extra operation costs imposed on local shippers/operators under CSI requirements.
- Legal Measures to Enhance Hong Kong's Position as a Shipping and Logistics Centre for China under WTO

rules. This project aims to provide suggestions to the Governments of the Chinese mainland and HKSAR on legal measures to improve Hong Kong logistics services to the Chinese mainland with the WTO regulatory framework. The research will also contribute to the development of knowledge of competition and market entrance in shipping and logistics sectors under WTO rules.

- Review of the Maritime Law of Mongolia. This project is requested by the International Maritime Organization (IMO) to provide technical assistance to the Government of Mongolia in reviewing its maritime policy and legislation, developing a framework of maritime policy and drafting its Maritime Code.
- Elimination of Legal Barriers in Logistics Management in China and Taiwan. This project aims to analyze the interrelate between logistics barriers and their legal environments in the Chinese mainland and Taiwan. It also formulates a blue print for legal reforms in line with the WTO regime and searches for convergence between the laws relating to logistics in the two district legal systems.
- An Integrated Interactive Maritime Risk Management System.
- Analysis of Mathematical Model of Maritime Search and Recure.
- Port and Airport Development Strategy (PADS) Study. This study is conducted for Wilbur Smith Associates Ltd. The aim is to forecast the demand for future port and airport facilities so as to determine the timing, extent and location of new port and airport facilities for matching the future demand.

Logistics engineering deals with design, development, testing, implementation, control, operation, and maintenance of various systems involving the supply and distribution of goods and services and their associated information flow, with particular emphasis on the development of news system and the reengineering of existing system. The spectrum of logistics engineering

coves materials handling system, warehouse design, packaging and storage technology, forecasting, scheduling and optimization techniques, mobile and wireless applications, data mining and synchronization, workflow analysis, enterprise modelling and enterprise integration, artificial intelligence, and agent research. It also includes industrial application such as Enterprise Resource Planning (ERP), Point-of-Sales(POS) system, Just-in-Time(JIT), Vendor Management Inventory(VMI), Collaborative Product Commerce(CPC), Automatic Identification (AutoID), Radio-Frequency Identification(RFID), etc...

The Department of Industrial and System Engineering launched the first MSc in Industrial Logistics Systems in Hong Kong and has been active in undertaking logistics project with industry. The Department works closely with the Engineering Purchasing Department of Dragon Air in a supply chain logistics programme that manages the spare parts supply for its cargo. It is also working with Honeywell Consumer Products(HK) Ltd in the design and implementation of a smart warehouse, enterprise collaborative tool and Schick Asia Ltd in the use of mobile devices in VMI. As a joint project with Hong Kong Logistics Association, a total of \$ 2 million has been granted by the Trade and Industry Department to develop an Intelligent Logistic Optimizer for freight forwarders. In the area of education and training, it has secured a \$ 2 million LTDG from UGC that has partially been used to develop an enterprise game called SimEnterprise, which mimics the micro-world of supply chain activities. Various applications of RFID in supply chain management are being developed by the Department jointly with industry.

Some project are joined too.

- Develop of Operations Research Models for the Feasibility Study of Automated Passenger/Vehicle Clearance Projects.
- Physical Simulation of an Automated Storage/Retrieval System to Support Time and Process Optimization.
- Simulation Game for MPR/ERP.
- Customization of a web-based Enterprise Collaborative Tool for Production Logistics.

- The Design and Development of JAVA and XML ERP System.
 - An Intelligent Logistic Optimizer for SME Freight Forwarders.
 - Design and Development of a Knowledge Repository for Supply Chain Integrator Based on Dynamic Taxonomy.
 - A Virtual Warehouse System for Collaborative Logistics.
 - RFID Automatic Tacking System and e-Security in Health Care Products Against Counterfeit.
- ..etc

Operations management (OM) is concerned with the efficient and effective transformation of input into output in organizations. Supply chain management (SCM) emphasized that firms collaborate with their suppliers and customers as partners to ensure the timely and reliable flow of input and output to support operations and to meet customer demand. The critical issues of OM are productivity, quality, capacity, flexibility, speed, services, etc., while those SCM are relationship management, pursuing and supply, demand management, distribution, inventory management, etc. PolU is active in pursuing among others cutting-edge research (to understand), and doing consultancy (to help business to address), various OM/SCM issues related to the distribution management, purchasing and supply, quality management, scheduling, supply chain coordination, and supplier-customer relationship management.

With these projects:

- Design Analysis of Algorithms for Some Contemporary Scheduling Problems.
- Scheduling Problems of Reverse Logistics.
- Semi-online Scheduling on Parallel Processors
- Report on Overall Performance of Individual CFS Members and Their Facilities.
- An Empirical Study of the Impact of Quality and Marketing Alignment on Organizational Performance.
- Integrating Purchasing and Supply Chain Management Process in Chinese Restaurant Chain in Hong Kong.

- Supply Chain Management and Business Performance-An Empirical Study of Trading Service Companies in Hong Kong.
- Instruments and Methods for Evaluating the Supply Chain Performance in Trasport Logistics.

etc...

The INTERNATIONAL CENTER FOR MARITTIME STUDIES(ICMS) born after an enthusiastic HK\$ 100-MILLION found is called an Elite Home for Maritime research, education and consultancy.

ICMS current executive profile of research projects and initiatives is outlined as follows:

- Intelligent Maritime Rescue Simulator (Collaboration with Maritime Department HKSAR)
- Simulation outlook of economic feasibility for San-ya, Nanshan Port.
- Development of Marine Certification and Training Center: Complementary Education for Marine Officers and Professionals.

Housed on HK PolyU Campus with Honourable Maritime Industry Representatives on ICMS Board:

Maritime Library and Information Resource Centre(MIRC).

Marine Certification and Training Centre(MCTC): Comprehensive state of-art maritime training and consulting services facilities.

Port Policy Evalutation (PPE).

Maritime Operations Thecnology (MOT)Lab.

Maritime Legal and Insurance Service (MLIS).

Virtual Marine World.

Maritime Certification and Trading Centre(MCTC) has the aim to conduct maritime education and training programmes leading to certify the competency and licences for deck officers including Class 3, Class 2 and Class 1(Master Mariner)in Hong Kong.The programme is officially recognized by the Marine Department, Government of HK Special Administrative Region(HKSAR) and strongly supported by shipowners and mariner associations in Hong Kong.

The Polytechnic University organizes Postgraduate Programmes in Logistic, offered by the Graduate School of Business. They are:

MSc: PgD in Global Supply Chain Management

MSC in International Shipping and Transport Logistics

MSC in Management

MSc in Quality Management

The education offered by the PolyU in the logistics matters is unbelievable complete.

The preparation offered is not only complete for the involved arguments but also for the persons whom it is directed.

Logistics is strictly connected with business, financing, engineering, law, computer facilities; it is therefore a fully complete subject extremely interesting nowadays.



VICTORIA HARBOUR²

Hong Kong during the Quing Empire was a fishing village. Until the British domination Hong Kong was out of the China interest. The British domination and the opium trade were the fortune of the “Perfumed Harbour”. In the last twenty years Hong Kong has become the most important port of the world.

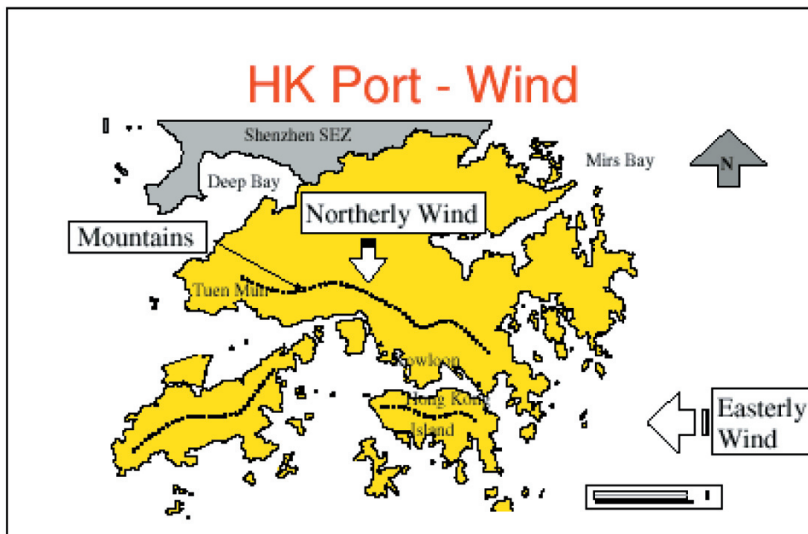
The lucky position permitted to HK harbour to become from a sheltered natural harbour towards a hub port to serve the region.

More than for the geographical position what is very important to analyse and to understand are the reason of the success of this port which are the wind, the flood tide, the ebb tide and the sea access.

In fact Hong Kong port is protected from Northerly Wind and from Easterly Wind from the chain mountains both in the land and in the islands.

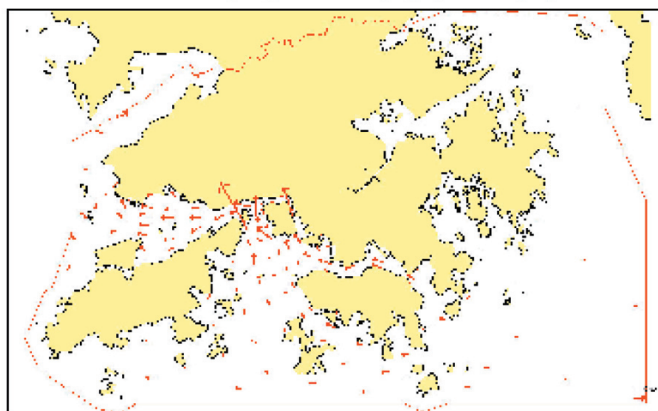
The flood and the ebb tide are favourable for the vessels.

The excellent sea access are three: from the west and east of HK island and from the strait between the Lantau Island and the New Territories.

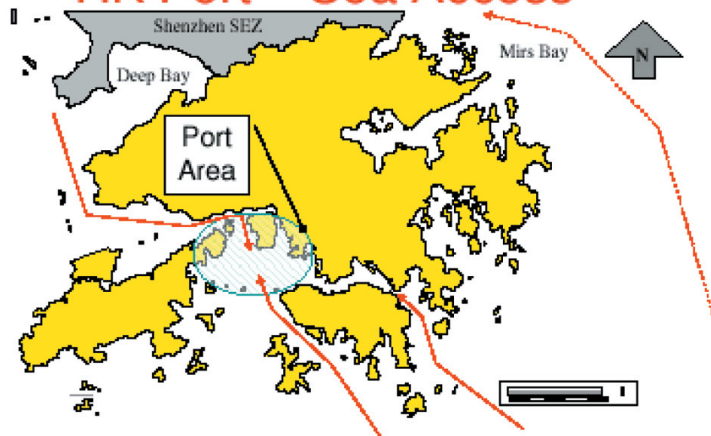


² With help :Dr T.L.YIP, “Hong Kong Port”, Polytechnic University Hong Kong

HK Port – Flood Tide



HK Port – Sea Access



In Hong Kong there is no Port Authority. The HK port is managed by several government departments (i.e. Marine Department, Customs & Excise Department, Department of Health, Hong Kong Police Force).

The Government Bureaux, Departments and Advisor Bodies are divided in:

Port Policy

Economic Development and Labour Bureau
Hong Kong Logistics Development Council
Hong Kong Maritime Industry Council
Hong Kong Port Development Council

Port Operation

Marine Department
Customs & Excise Department
Department of Health (Port Health)
Hong Kong Police Force (Marine)
Civil Engineering and Development Department
Immigration Department (Harbour Division)

All these bodies don't interfere in port trade and activities. In fact all the rules are made from the sector leaders. Hong Kong is a free port. Free ports are free zones that cover a larger physical area, typically an entire port city.

Free ports often combine the characteristics of free trade zone (FTZ), industrial free zones (IFZ), and enterprise zones (EZ). The Export Processing Zone, also called industrial free zones, are a relatively recent free trade zone innovation. While sharing the same fundamental characteristics of the free trade concept, the Export Processing Zone are explicitly designed to facilitate production of goods and services for export market, rather than simple transshipment activities.

China introduced the Special Economic Zone (SEZ) concept in 1979 as part of its "open door policy" which consciously used the SEZs as proving grounds for market-oriented economic reforms. Although patterned after the Export Processing Zones and free port concepts, SEZs feature several important differences:

- first, they cover a much larger territory than any EPZ and

most free ports, from 15 square Kilometres to 23,000 square kilometres,

- secondly, they allow a broad range of activities
- thirdly, they offer differential incentives among various projects.
- Lastly, strict controls are placed on sales of SES goods into the Chinese custom territory, even upon full payment of import duties and taxes.

The actual HK port situation is characterized from different harbours working different cargos:

- Container Terminals
- Mid-stream Sites
- River Trade Terminal
- Public Cargo Working Areas
- Buoys and Anchorages.

The Terminals are set in the Kwai Chung Container Basin. Kwai Chung Container Terminals is

- 285 hectares of land.
- 24 berths and 8,530 metres deep water frontage
- water deep of 15,5 m
- total handling capacity of the container terminals is over 18M TEUs per year.

Mid-Stream Sites are structured in this way:

- loading and unloading of ocean and river cargoes from barges to trucks/lorries and vice versa
- 11 different locations
- land area of 27,5 hectares
- water frontage of 3,197 metres
- under long-term or short-term tenancies.

River Trade Terminal:

- consolidation of containers, break bulk and bulk cargo shipped between the Hong Kong port and ports in the Pearl River Delta.
- near Pillar Point in Tuen Mun
- operated by a private company (River Trade Terminal Company Ltd.)
- some 65 hectares of land and 3,000 metres of quay.

Public Cargo handling Areas:

- short-term allocation of berths and waterfront working areas for the purpose of handling general cargo transferred from lorries to barges and vice versa
- situated at 8 different locations
- total quay length of some 7,020 metres
- managed by the Marine Department of HKSARG.

Very important for the HK trade are the Buoys and Anchorages that are sited between Kowloon peninsula and Lantanau Island, in front of terminal area.

That zone is perfectly protect by the mountains of the New Territories, of the Islands of Hong Kong and of Lantau.

The principal anchorages are Western Anchorages and Kellett Bank Anchorage. Buoys and Anchorages in HK port are structured:

- government Mooring Buyos serving ocean-going vessels calling on the Hong Kong Port
- 11 such anchorages with 3,090 hectares
 - 1,473 hectares (deep water)
 - 1,617 hectares (shallow water)
- total of 3,3M TEUs of containers and 17,5 tonnes of non-containerised cargo handled.

Hong Kong port has a great service for passengers transport too: the ferry connect Kowloon to Hong Kong Island, there are three lines but the most important and most used is that from Tsim Sha Tsui to Central (seven minutes). Further more, for longer trip there are: Macau Ferry Terminal that is set on Sheung Wan and connects HK to Macau (one hour); China Ferry Terminal that is set on Kowloon and connects HK to China mainland.

There are two Typhoon Shelters for private boats and they are: Yaumatei Typhoon Shelter and Aberdeen Typhoon Shelter.

In particulare the Leisure-Tourism Harbour can be divided:

Cruise Terminals

Continuous Waterfront Promenade

Marinas/Private Moorings

Yacht/Canoe Races

activity is reason of certainty. One big investment in port activity is recovered in few years.

The actual Port Financers are:

- International Finance Corporation, the World Bank
- Asian Development Bank
- ICBC, Industrial and Commercial Bank of China
- Deutsche Bank
- Citibank
- DnB Norway

What must be clear is that China rebirth created a now develop of Chinese ports. In fact next to the famous Hong Kong site, many new Chinese trading facilities are rising.

China Merchants:

- Hong Kong, Shenzhen, Xiamen, Ningbo, Tianjin and Qingdao- 12M TEUs of containers and 36M tons of bulk and general cargos annually
- Fujian Province-a Class I trading port with a total 13 km for thirty 10,000-DWT deepwater berths.

Locations:

Bohai-Quingadao, Tianjin Wuzhou

Yantze River-Shanghai, Ningbo Daxie

Xiamen Bay- Zhangzhou, Fujian

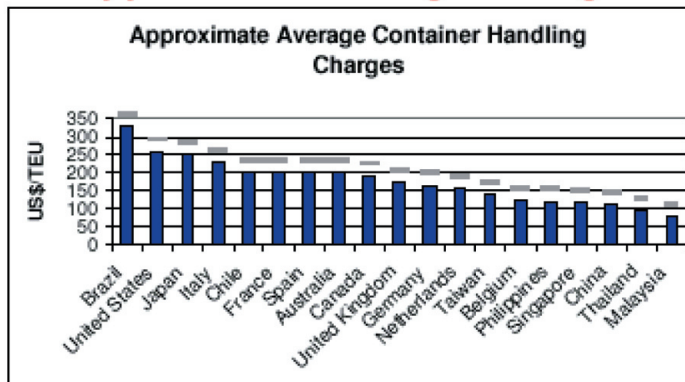
Pearl River Delta-Chiwan, Shenzhen, Shekou, Hong Kong (Modern Terminals)

The growing in the rest of China is fascinating because the develop is exponential. The New World Infrastructure Ltd, a group of terminal operators, formerly known as Pacific Ports Company Ltd. It is a subsidy of NWS Holding Ltd. It has six projects in Mainland China and the most notably are located in Xiamen and Tianjin. Handling capacity is of 4,62 million TEUs per year. The port investors principally connected with Hong Kong are generally Chinese, but it's interesting that there are some Arabics, especially from Dubai. Almost all the great worldwide ports are characterized by the same groups at the power.

The study made by the Polychlinic is based on three model one is the throughput(which forecasts container throughput) the Operational model(which simulates the operations and development of

the terminal against throughput) and the Financial model (which contacts P&L and Balance Sheets on an annual basis of valuation period). And with these model they can provide a financial value. By these valuations they made a report about the world situation and from this emerged that Italy at the fourth place after Brazil, US and Japan for the most expensive in costs componed with containers and facilities. The cheapest are Malaysia, Thailand and China. The operations in Italy are more then the duple of the Chinese one.

Typical Handling Charges



Source: World Bank

THE PORT STRUCTURE

Hong Kong now is officially Chinese but whit a special status. In particular at the “port level” there is no official links with SAR in particular or China in general. The real controller and Ras of the port are the most important operators. There are also no private groups controlling the site, we can call “public” those that have power in the port matter: they are several government depart-

ments, I described them before, that have, in short, functions of order and safety.

The structure of Hong Kong port is completely different from ours, it is like talking about something different. In fact there is no need to focus an aim on navigation, the only aim of the port and of the operators is business and growth.

All the port facilities as electric plants, garbage collecting, passengers and railroad facilities are operated by the privates. Privates don't have the property of their working areas but they have a concession to use them.

To obtain this concession there is no competition, it is free, limited only by the material availability.

There are no characteristics requested to ask a concession and there are no limits of number.

The free competition and the capacity to give a good product at optimum price are the only real natural reasons of selection.

The port facilities tariffs are agreed among the service providers (the private sector). You can have more information on the real entity consulting site www.haffa.com.hk.

There are no requirements, generally, about the workers except for Mainland Chinese. A local work permit will be issued.

The port operators needs to have a local registration(i.e. Companies Registry). To understand the port facilities distribution we can analyze the plan:

Table : Port Facilities (2003)

Container Terminals		River Trade Terminal	
Terminals	9	Terminals	1
Berths	20	Berths	60
Quay cranes	74	Quay cranes	30
Quay length	6,454 m	Quay length	3,000 m
Area	240 ha	Area	65 ha
Terminal operators	4		

Mooring buoys		Anchorage	
Owned by the government		Number	19
A Class	19	Area	3,808 ha
B Class	10		
Privately owned	2,050		
Public Cargo Working Areas		Typhoon Shelters	
Number	8	Number	14
Area	31 ha	Area	423 ha
Licensable berth length	7,020 m		
Ferry Terminals			
Owned by the government	2		
Privately owned	2		

The areas are defined by the government (Lands Department). There is a difference between general facilities and piloting and tugging: in fact to provide these activities, pilots need pilot licenses, and tug masters need local master licenses. Piloting, tugging, mooring and boat using activities are provided by the private sector.

In Hong Kong port there are no specific requirement for the companies interested in these activity, but there are some personal qualifications that needed. These personal qualifications are given by the Marine department.

The piloting in Hong Kong is offered by one single private company. Pilotage is compulsory in Hong Kong and all the vessels over 3,000 gross register tones (GRT) must have a pilot on-board when navigating in the port. Vessels over 1,000 GRT wick are carrying dangerous goods are also required to carry a pilot. The pilotage service is available 24 hours a day. Is possible to find the tariffs on www.mardep.gov.hk/en/pub_services/fees.html.

All the cargo handling services are provided by the private sector. Hong Kong law is common law. They are used to refer a situation to a case just decided.

There are no specific port rules, what is fundamental are the trade uses and the market leader practice. In this matter government (i.e. Marine Department) only controls the policy (e.g. land uses) and safety.

The competition is free, but at the end the container operators are only five and for this you can say that there is an oligopoly.

About the damage on board or on port are generally disciplined by the concrete interested subjects and the insurances. The goods that arrive to Hong Kong port are most of them further delivered to another location.

Hong Kong railway are no interesting for trade in fact rail transport is not common for freight in Hong Kong. The goods are generally transported or via road or by sea. The goods stay in Hong Kong is not more than three days because after cargoes will be charged at a daily rate (very expensive). This is the reason why a port characterised by so a small land has so huge trade activity. The location of cargo terminal and passenger terminal are separated because in general located in different places. All the questions about port problems are disciplined by the Maritime Arbitration group, Hong Kong Arbitration Centre.

The huge quantity of goods is very well organised: all the principal structures are used to have very modern computer systems that permit to organise works very quickly, with a high stand of security and connecting other operators.

Land infrastructure is supported by public funding. Terminal superstructures (e.g. quay cranes) are invested by the private sector. The document more used is the bill of lading not because the goods are generally reselled but because generally all the commodity are characterised by the bank participation. Bank need for the security a document of title.

The Bill of lading is at the centre of the worldwide trade. What is interesting to explain is the link between Taiwan and Hong Kong, too.



The political problems among China and Taiwan make the trade obstacle. In fact all the vessels and the goods that must arrive to China from Taiwan have to pass through Hong Kong. And all the bill of lading have to be changed.

HPH AND THE HONG KONG INTERNATIONAL TERMINAL (HIT)³

Speaking about Hong Kong port without mentioning HIT is like speaking about a country but not about its people.

The Hong Kong fundamental point in the international trade and its superiority are given by the terminal containers. As I said before, in Hong Kong there are five fundamental terminal operators set in Kwai Chung area. The most important for the handling, for huge and for the efficiency is HIT. Telling what I saw and what I learnt will not give the same impression I received living my experience.

Hong Kong government in the 60s decided to reserve this area for the growing of Hong Kong port. HIT was established in the 1969. HIT is the flagship operation of Hutchison Port Holding (HPH). HPH is the port and logistic group of Hutchinson Whampoa Limited (HWL).

The group is very power-full and has other companies that are active in communication, hotels, energy, electronic control and materials. The group has the capacity to provide quite everything, it doesn't need external help.

The HH was born in 1994 and started colonize the world ports thanks to its experiences, its power and its economic capacity. The first port was Felixstowe in the United Kingdom on the Southeast coast. After, between 1994 and 2006, HPH gained 42 ports in the world.

In 2004, the group handled 47,8 million TEU. The HPH Group also operates and invents in transportation-related service companies that span the entire logistic chain from distribution centres and airports to railways and e-commerce.

The history of HPH began in 1866 when its predecessor, Hong Kong and Whampoa Dock Company, was established in Hong Kong as Registered Company Number One. For nearly 100 years,

3 From the HPH official presentation

it provided ship construction and repair services before diversifying into cargo and container handling operations in the 1960s. As a comprehensive provider of logistics services, HPH provides customers with a full range of value added benefits that include container storage and repair, container tracking, general and bulk cargo transfer, warehousing, marine shuttle services, e-logistics and other related services. They explained me that now who is very interested is China with its ports because of the progressive growing of their activities.

In China there are:

Yanitan International Container Terminals (YICT) which commenced operations in 1994 and is situated in the prosperous Shanzhen Spacial Economic Zone. With excellent natural conditions and efficient operations, the terminal is capable of handling the world's largest container vessels and has attracted the world's top 20 shipping companies.

Xiamen International Container Terminals (XICT) which commenced operations in 1997 and is situated in Haicang Port, in the Xiamen Special Economic Zone of Fujian Province, China. It is 292 nautical miles east of Hong Kong and 163 nautical miles west of Kaohsiung, in Taiwan.

Shantou International Container Terminals (SICT) which was commenced in 1997 and is located in the Shantou Special Economic Zone of Guangdong Province. It is 180 nautical miles northeast of Hong Kong and 100 nautical miles of Xiamen in Fujian Province.

Zhuhai International Container Terminals (Gaolan) (ZICT(G)) which commenced operations in 1994 and is located on the Nanshui River, southwest of the city of Zhuhai, 45 nautical miles from Hong Kong. Near the industrial city of Zhuhai, ZICT(G) there is also a natural east-bound cargo stop off from southwest from China.

Zhuhai International Container Terminals (Jiuzhou) (ZICT(J)) which commenced operations in 1993 and is located in the city of Zhuhai on the western bank of the Pearl River Delta, just 36 nautical miles from Hong Kong.

Jiangmen International Container Terminals (JMCT) which commenced operations in 1995 and lies on the Xijiang River in the mid-western area of the Pearl River Delta, near the Jiangmen High and New Technology Development Zone, 99 nautical miles from Hong Kong. As the principal city and distribution centre of the entire industrial region, Jiangmen has extensive road and bridge connections to the entire western side of the Pearl River Delta.

Nanhai International Container Terminals (NICT) which commenced operations in 1994 and is located at the Sanshan Economic Development Zone, adjacent to the city of Nanhai in Guangdong province. The terminal lies north of the Pearl River, 86 nautical miles from Hong Kong.

NICT has a 5,000-tonne off-dock refrigerated waterhouse and a 6,000 square metre all-weather Container Freight Station (CFS) located inside the terminal. One-site Customs, joint inspection services, and X-ray container inspection services are provided at the terminal. NICT also offers direct services berthing at Hong Kong International Terminals (HIT), bonded warehousing, local vessel and cargo agency, as well as container repairs.

Shanghai Container Terminals (SCT) which commenced operations in 1993 and is strategically located mid-way along China's coastline at the mouth of the Yangtze River and is one of the country's leading ports. Since commencing operations, SCT has made ongoing investments in facilities, equipment, and berth conversion. These investments have helped to transform SCT into a world-class terminal. SCT comprises three container terminals, namely, Zhanghuabang, Jungonglu and Boshan. Zhanghuabang and Jungonglu terminals comprise seven berths located along the west bank of the Huangpu River. Boshan terminal three berths are situated to the south, along the Yangtze River. SCT uses state-of-the-art management systems to ensure efficient vessel and gate movements at all times. The modern ship planning system co-ordinates the loading/unloading of containers from vessels, while other advanced system such as EDI linkages streamline communications between the terminal and shipping line customers. As

China's premier port, SCT is setting an exceptional standard of excellence in service quality.

Shanghai Pudong International Container Terminals (SPICT) was formed in March 2003 and is ideally located in China's largest comprehensive and multifunctional foreign trade zone, the Waigaoqiao Free Trade Zone. SPICT operates Phase I of the Waigaoqiao Terminal. With a growing number of shipping lines calling at the port, Waigaoqiao Terminal is one of the world's fastest growing ports.

In terms of facilities, the container terminal has three berths with a total quay length of 900 metres hectares, including a Container Freight Station (CFS), reefer facilities and dangerous goods handling areas. The terminal is equipped with 10 quay cranes and 30 Rubber-tyred Gantry Creanes. In addition to domestic services, world-class shipping lines offer direct calls from SPICT to ports worldwide.

Also very interesting is Ningbo Beluon International Container Terminals (NBCT) which commenced its operations in 2001 and is located at Niggbo Beluon Port in Zhejiang province. As a natural deep-water port, Ningbo is situated along the southeast coast where the mouth of Yangtze River intersects with north-south sea routes.

HPH has an interesting inland location too that has the function to link the port facilities to the rest of China.

Shenzhen Hutchison Inland Container Depots (SHICD) commenced operations in 1999 and is situated in the Baoan district of Shanzhen province. It is about 20 miles north of Hong Kong and 20 miles northwest of southern China. SHICD is designed to facilitate the growth of import and export cargo in southern China. In support of HPH's port development in the region, it offers services including cargo consolidation, warehousing, container storage, and value-added services ranging from quality control and inspection, pick & pack, labelling & barcoding, palletizing & wrapping, sorting & kitting to support the logistic needs of global buyers, consolidators, forwarders, manufactures, shipping lines and container leasing companies. It is a one-stop shop with cus-

toms clearance and three inspections (quarantine, commodity and sanitary) on-site.

SHICD is a warehousing and inland container depot facility. It has a total area of 330,000 square metres. Its facilities include 20,000 square metres of warehouse and 54,000 square metres of containers stocking area. To cope with increasing demands, SHICD is undergoing a series of expansions plans. One warehouse with 14,000 square metres is under construction and three warehouses totalling 46,000 square metres will be built in the next phase plus a parcel of land of 250,000 square metres has been reserved for future development.

Pingyan Railway is connected to Yantian International Container Terminals (YICT), one of the busiest deep-water terminals in southern China. Pingyan Railway provides a wide range of multi-modal services for customers, including cargo trans-shipment, and departure and arrival of dedicated trains. Pingyan Railway effectively extends terminal services to the inland by rail.

HPH has important locations in the rest of Asia too:

Jakarta Container Port(JCP) is Indonesia's largest container terminal and comprises both Jakarta International Container Terminal (JICT) and KOJA Terminal (KOJA);

Hutchinson Korea Terminals (HKT) operates three deep-water container terminals at Busan and Gwangyang Ports.

HPH has developed seven deep-water container berths at Gwangyang Port Phase II, known as Korea International Terminals(KIT). With a depth alongside of 15 metres and an approach channel with a depth of 20 metres, KIT is ideal for serving the largest container vessels afloat.

In 2000, HPH acquired a stake in KMT-Westport, Port Klang (KMT). KMT is an integrated port situated on 587 hectares of waterfront land with terminal handling facilities for containers, dry bulk, liquid bulk and conventional cargo of Port Klang, Malaysia's premier port.

Myanmar International Terminals Thilawa (MITT) is located just 25 kilometres from Yangon, the nation's capital city.

Karachi International Container Terminal (KICT) is Pakistan's

leading container terminal. Located at the Port of Karachi, a natural deep-water harbour on the Arabian Sea, KICT has been in operation since 1998. As KICT was the first operation to be privatised in the ports and shipping sector, the company is regarded as the torch-bearer for privatisation.

Thai Laemchabang Terminal (TLT) commenced operations in early 2002 with 400 metres of quay. The terminal is located at Laem Chabang Port, a deep-water port on the east coast of the Gulf of Thailand about 100 kilometres from Bangkok and 25 kilometres from Pattaya City.

HPH Group has positions in the rest of the world: Egypt, Saudi Arabia, Oman, Tanzania, Netherlands, Belgium, Germany, United Kingdom, Poland, Argentina, Bahamas, Panama and Mexico.

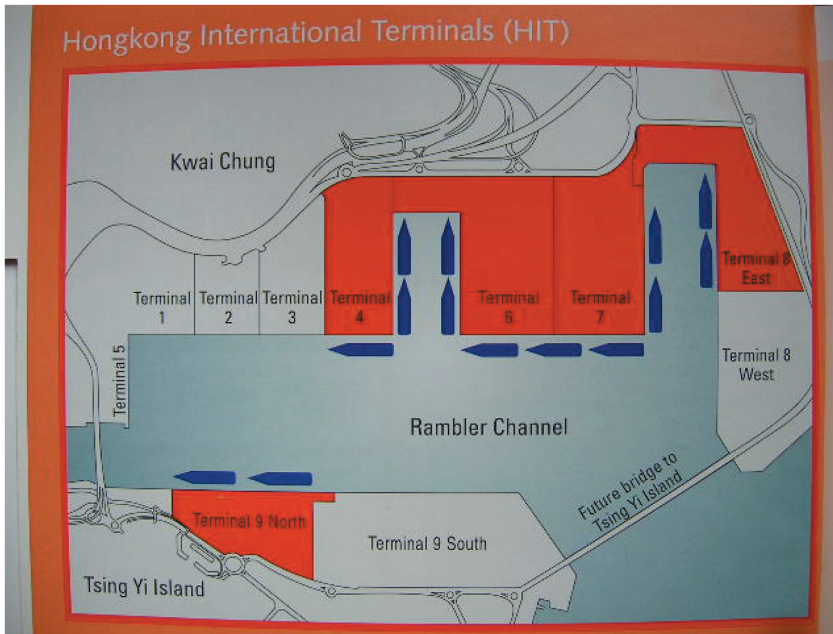
HPH with Taiwan's Pou Chen Group created a SupplyLINE that is the solution to the supply chain solutions and logistic services arm of the group. SupplyLINE delivers managed logistics services through a global service network. The Company's services feature a complex management capability with a global reach. These services help customers reduce costs, improve order-to-cash cycle, and accelerate product's total time-to-market cycle.

HPH is one of the most technologically advanced port operators, its technology made it different from all the other and is the reason of their actual economic power. In particular the efficiency of Hong Kong International Terminal (HIT) is given by a next generation container terminal management system, aptly named nGen. At this point is fundamental to focalize the analysis on the HPH origin port: the Hong Kong International Terminal.

HIT operates 12 berths at Terminals 4,6,7 and 9, in the addition to two berths operated in a joint venture with COSCO Pacific Limited at Terminal 8 (East). Using modern management techniques, state-of-art computer system and award winning in-house IT applications, HIT and COSCO-HIT handle the majority of the Hong Kong's container traffic each year. At the heart of HIT's operations is the terminal's advanced terminal management system-nGen. This next generation terminal management system is highly customer focused to ensure that shipping lines receive a

world-class service. In fact what is fundamental in HIT organization are the electronic services.

HIT on terminal 4 has a Control Tower where there are employers that are each focused on a determined area and in real time they control and manage the containers handling by computers.



HIT has no vessels and trucks. They only organise the containers handling. The not huge area is excellently organized.

The containers are set in the centre of the area in groups. They are put one over the other, eight if they are empty and six or five if they are full. There is a zone for refrigerating containers too. The exact container position is controlled by the employers in the tower and from the personnel that are set in the container area. At the enter of the terminals there is a control barrier where the truck and driver documents are checked and where the terminal personnel controlled with great attention the container status. If there is a container damage the personnel calls the shipping company

reporting the situation, if they say that all is regular the truck can enter.

The trucks that every day enter are eight thousand and they have only forty five minutes from the entry moment. Normally, the truck driver after entering goes to the terminal personeel set in the centre and asks where he has to carry the containers.

The biggest truck companies have a program by what when the truck arrives to the terminal control it has a card that automatically premises its enter and controls all the details. These trucks have a program that directly gives the exact position where to put the container too without the necessity for the driver to go to the personnel area and to go down from the truck to have all the information. When the container is left by the truck all the work is made by the HIT personeel.

HIT has trucks that can only move in the terminal area. They have cranes that are manual and electric. That are: container quay cranes(34 on terminal 4,6 and 7), rubber tyred gantry cranes (90 on terminal 4,6 and 7), rail mounted gantry cranes (24 on terminal 4,6 and 7) rail mounted jib cranes (4 on terminal 4,6 and 7) and bridge cranes(12 on terminal 4,6 and 7).

The vessels are fill up whit 22 containers in width and first nine and after seven or nine in height.

The containers arrive 5 days before the vessel for import and 7 for export.

They give a service to the vessels anchored or tied at buoys too. In fact using its structures HIT is able to service the vessels that are not in port, giving them the possibility to unload by their positions the containers. All their activities are ensured. The container handling is 9,600 TEU. They have a land government concession that officially has an end in 2007, but it will be certainly repeated. The Marittime Department has a location in Kwai Chung too, but its function is only traffic control. All the five containers operators are part of the Hong Kong Container Terminal Operators Association that manages all the operations. They are going to make a bridge to connect terminal 9 south and terminal 8 west with out bases in the water to permit the passage of the vessels with out any

obstacle. This will be a product of technical wonder. What I have reported is just a little hint on the huge facilities offered by this fantastic Group.

The efficiency, the order, the instruments, the speedy, the indefatigable work, the philosophy and way to work make them look like another planet.

A WORLD PROJECTED IN THE FUTURE

The growing of China, Singapore and Malaysia into a centralized Asian economic power doesn't tuck the Hong Kong fundamental position. The fear of the after 1997 was completely warded off by facts, the China interest of having such a rich and flourishing region involved the no Chinese government taking part in Hong Kong strategy.

The splendid natural location, the various incentives to invest, the number of companies and a big number of links with the rest of the world made Hong Kong one of the principal places where to concretise a dream.

The growth of the other regions doesn't create a problem but favours the trade development. What must be clear and what I have underlined before, is the fact that the principal trade and operators companies have interests in all these expanded ports.

Banks and other financiers promote this kind of investment because there is the certainty that the amount invested in port activity or transport in general is amortized in few time.

If some points of its value must be shown, these are:

The work sector: all the big companies operate in a specific matters, and they don't expand in other subjects but they work "in the same way" in other places. The deep specific knowledge of one determined activity makes them unbeatable in the world.

The technology : the big companies have a high and new generation support technology, that permit to work faster with more precision and efficiently.

The regulation: the difference between Hong Kong and other

wonder natural ports is the regulation. When business is the only principal point to compare to the other, it is impossible to find a better place for operations growing.

The deep business sense: The capacity to create new relations and operations that make happy all the parties makes Hong Kong operators invincible in this matter.

The philosophy: They are a stock completely different by ours, their history, their religion, their customs and their way of every day living. They live for work and their resistance to the effort is amazing, element strictly connected with the principle that to have success in something you have to make sacrifices, the more difficult it is, the bigger will be your premium.

One of the principal point in port regulation recognised by all the world is safety, asking if the Hong Kong system grants safety is like talking about a cake with out sugar; in fact safety in general is perfectly realized by a kind of organization as Hong Kong, the private interests in all the port activity grant a huge attention for life on the see, goods, operations realised on the port and on the see. The economic interests and the fear to lose income make the Hong Kong port activity striking as no place in Italy.

A country, two systems, the Hong Kong particular situation was analyzed deeply and the studies carried out on it are a lot; in these days was very interesting a Sole-24 ore article⁴ that pointed the attention on the Hong Kong capacity to support the Asiatic growth.

The article tells that the financial services are showed as the most potential matters and that now Hong Kong is the third Asiatic Stock Exchange and the ninth in the world for capitalization. It express the concrete possibility for Hong Kong to became an Asiatic London.

The aim of the major Hong Kong project is to create a better place for living with environment, the necessity to heal the actual environment situation is similar to other Chinese reality like

4 PAOLO MIGLIAVACCA: *Hong Kong regge la sfida asiatica*, Sole 24 ore, martedì 13 giugno 2007, pag 23.

Shanghai and Beijing. In fact the only very heavy element of the Chinese power is pollution, but it is interesting to see how high is the will and the technological possibility to create an optimum cured situation in few years.

Italy has 300 enterprises at the moment in Hong Kong but seems not to take part of this possibility.

The Hong Kong emporium has a very good sensibility to what is an investment, a good choice and a wonderful thing and take a lot of attention to what is the best in all the sector.

The Hong Kong persons that have id card, have English passports and live on the Island are a high test for what is the best: work until late in the evening and wake up soon to be able to control all the countries situation, has international partners, eat few at lunch to be able to work light with all the attention and usually after work go to the gymnasium (the most fashionable is “California”) to realise the ancient teaching “mens sana in corpore sano”. But it is also interesting to know that what is very expensive in Hong Kong are the apartments, naturally for the little land, but the best apartments set in beautiful jointly-owned buildings full of services are made in harmony with Feng Shui and are very well furnished.

Hong Kong is full of beautiful and very expensive shops and restaurants. Their interest for occidental taste is very deep.

They are able to copy all, now we can not fight with this kind of strength but what we could do is to export involving them in the production programmes.

The basic sectors are investments and transport. Italy must try to participate to this Asiatic growth because they are happy to have partners but there must be added value.

It is easy to invest in Hong Kong, they don't fight the intrusion of foreign companies and they are interested in valid products.

Hong Kong doesn't fear competition, its companies growth is impossible to compare, because they understand that the improving of one matter is strictly connected to the improving of another. To base a farm in China now is not so convenient. To make a good business in such field it should have been done fifteen or

ten years ago (now are better Cambodia or Vietnam), but by now working on Hong Kong area trying to export Italian products and ideas could be a real possibility for Italy in general to grow in international trade.

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