World Maritime University

The Maritime Commons: Digital Repository of the World Maritime University

World Maritime University Dissertations

Dissertations

7-18-2009

Research on port logistics and customs clearance at Shanghai Port

Yi Yao

Follow this and additional works at: https://commons.wmu.se/all_dissertations

Part of the Operations and Supply Chain Management Commons, Strategic Management Policy Commons, and the Transportation Commons

This Dissertation is brought to you courtesy of Maritime Commons. Open Access items may be downloaded for non-commercial, fair use academic purposes. No items may be hosted on another server or web site without express written permission from the World Maritime University. For more information, please contact library@wmu.se.



WORLD MARITIME UNIVERSITY

Shanghai, China

RESEARCH ON PORT LOGITICS AND CUSTOMS CLEARANCE AT SHANGHAI PORT

By

YAO YI

China

A research paper submitted to the World Maritime University in partial Fulfillment of the requirements for the award of the degree of

MASTER OF SCIENCE

INTERNATIONAL TRANSPORTATION AND LOGISTICS

2009

Declaration

I certify that all the material in this research paper that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me,
The contents of this research paper reflect my own personal views, and are not necessarily endorsed by the University.
(Signature):
(Date):
Supervised by Professor: Xu Da zhen Shanakai Maritima Universita
Shanghai Maritime University Assessor
World Maritime University
Co-Assessor
Shanghai Maritime University

ACKNOWLEDGMENT

First of all, I would like to owe my deepest appreciation and gratitude to my supervisor, Professor Xu Da zhen. His guidance, support and encouragement are invaluable acquisition and critical part throughout my dissertation writing. Without his insightful suggestions and continuous assistance, this dissertation would not have been completed. Also, his intelligence, wisdom, kindness, conscientiousness and patience I have enjoyed during my study will benefit me for good.

I am grateful to Ms. Zhou Ying chun, Ms. Huang ying, Ms. Hu Fang fang, and Mr. Liu Tong an, who are in charge of this joint postgraduate program on behalf of Shanghai Maritime University.

I am also thankful to my colleague, Mr. Pu Rong kui, Mr. Yang Zhong chen, Ms. Tang Chun qin and all my colleagues who put high expectations on me, and whose continuous encouragement has been a major source of inspiration and confidence for the completion of this work.

I would like to thank all my friends. It is their help and support that make my life in Shanghai Maritime University an enjoyable experience.

Finally, but certainly not least, I would like to send my indebtedness to my beloved mom, Ms. Xia Li ping, and my wife Ms. Wang Li ping, who offer both financial and emotional support to me. I am fortunate to have their eternal love and encouragement as I go forward.

ABSTRACT

Title of Dissertation: Research on Port Logistics and Customs Clearance

at Shanghai Port

Degree: MSc in International Transportation and Logistics

Against the backdrop of the economic globalization, free trade, integration with international transport market and the sizzling advancement of modern port logistics, in particular, the exponential growth of cargo volume by import and export, efficiency of port logistics needs to be urgently elevated accordingly. Then, custom clearance and inspection, as one of the indispensable key link in the process of port logistics, will undoubtedly hold the balance to a large extent in terms of defending the national sovereignty and national interest, promoting the foreign trade and scientific and technological and cultural contact. However, just as anybody can see that there are two sides to one coin, custom clearance and inspection will more or less delay or even "block" the logistics process to some extent, which is beyond doubt a deathblow to the logistics who do value time above anything else. It is quite evident that efficiency contradicts with national security in this sense when cargoes go through customs and we might ask where the crux lies, the answer is how to strike a proper balance between the maintenance of national security and facilitation of customs clearance.

The dissertation mainly deals with the existing problems (malpractice) in the customs clearance and inspection of the port logistics and its related causes, and put forwards some innovations in terms of customs clearance and inspection for better

iv

efficiency and safety aiming at these problems.

KEYWORDS: Port Logistics, Customs Clearance and Inspection, Efficiency and Safety

TABLE OF CONTENTS

Declaration	ii
ACKNOWLEDGMENT	iii
ABSTRACT	iv
TABLE OF CONTENTS	vi
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF ABBREVIATIONS	x
Chapter 1 Introduction	1
1.1 Background and introduction of this dissertation	1
1.2 Literature review	4
1.3 The objective of the dissertation	6
1.4 The framework and methods of the dissertation	6
CHAPTER 2 OVERVIEW OF THE CUSTOMS CLEARANCE AND	PORT
LOGISTICS	9
2.1 The main trend of logistics development and its impact upon port logistics	9
2.1.1 The trend in international logistics development	9
2.1.2 Impact on port logistics by international logistics development	12
2.2 The requirement of customs clearance by the development of port logistics	14
2.3 The impact on port logistics by customs clearance efficiency	16
2.3.1 The functions of customs	17
2.3.2 The impact on port logistics by customs clearance efficiency	21
2.3.3 Major issues influencing the customs clearance	22
CHAPTER 3 GAP OF CUSTOMS CLEARANCE AT SHANGAHI PORT	ſ AND
THE DEVELOPED COUNTRIES AND ITS CAUSE	26

3.1 The status quo of customs clearance at Shanghai customs	26
3.2 The experience derived from customs clearance in developed countries	31
3.3 The gap in customs clearance of Shanghai and developed countries	41
3.4 Analysis into the gap between Shanghai and developed nations in terms	of 44
CHAPTER 4 STRATEGY AND SUGGESTIONS ON IMPROVI	NG THE
CLEARANCE EFFICIENCY AT SHANGHAI CUSTOMS	48
4.1 Draw on the measures of clearance reform in the developed countries	48
4.2 Concrete measures for clearance reform in Shanghai	54
4.3 Simplification of clearance customs turning multiple step modes to one s	tep mode 57
4.4 Reform the supervisory pattern to enhance the rate of supervision	58
4.5 Solve the problems occurred in the process of clearance procedures simple	lification to
further the reform	62
CHAPTER 5 CONCLUSIONS	69
References	73

LIST OF TABLES

- Table 3.1 Customs Clearance Time January to July, 2008
- Table 3.2 Comparison of Shanghai Tariff Policy
- Table 3.3 2008 Statistics of Clearance Efficiency Shanghai Customs from January until April
- Table 3.4 Comparison in Clearance Factors in Shanghai, Hong Kong and Singapore
- Table 4.1 Four-year Plan of Reform at Shanghai Customs Starting from 2008

LIST OF FIGURES

- Fig 2.1 Effective Tariff Rate from 2001 2008
- Fig. 2.2 Main Issues affecting the Cargo Clearance (Macroscopic)
- Fig. 2.3 Main Issues affecting the Cargo Clearance (Microscopic)
- Fig 3.1 Comparison of Import Time by Sea Transport in Various Nations

LIST OF ABBREVIATIONS

ABI Automated Broker Interface

ACH Automated Clearing House

ACS Automated Commercial System

AMS Automated Manifest System

C/D Clearance Declaration

EDI Electronic Data Interchange

EU European Union

GAC General Administration of Customs

GAFE General Administration of Foreign Exchange

GAQSIQ General Administration of Quality Supervision, Inspection and Quarantine

GDP Gross Domestic Product

GIS Geographic Information System

GPS Global Positioning System

IMF International Monetary Fund

IT Information Technology

NACCS Nippon Automated Cargo Clearance System

NIS National Import Specialist

OAS Operations Analyst

PCA Post-clearance Audit

SDP Simplified Declaration Procedure

WB World Bank

WCO World Customs Organization

WTO World Trade Organization

Chapter 1 Introduction

1.1 Background and introduction of this dissertation

Drastic changes have taken place in the function and position of social and economic development as well as the international economic exchange of countries the world over against the backdrop of the economic globalization which intensifies global sourcing and consumption trends, and the competition in international port logistics is no longer the competition between points but that among supply chain. Port, as the pivot of global comprehensive transportation networks and the optimal convergence point of transportation, distribution center and factors of production, the important cargo storage sites have already been brought into the international logistics chain and become one nude of paramount importance. Under new economic surroundings, in order to cater to the ever-increasing service needs of customers and to establish yourself in the cut-throat competition, port must have to widen its service function

and improve its service efficiency with an aim to develop towards all-dimensional and value-added service. For the time being, more and more ports are altering its single-fold function of loading and unloading, transportation in the past towards the development of modern logistics service, thereby which inspires the booming of the port logistics.

The development of port logistics requires excellent macro environment. As a matter of fact, the port logistics environment, in a broad sense, covers two areas: one is the hardware environment which includes the quay berth, collection, distribution and transportation network (road, railway, water-way), information technology and communication, etc. the other is the software environment, that is, service environment, which includes the service functions such as clearance and inspection, shipping and cargo agency, shipping classification, finance and trade, policy and laws. And comparatively speaking, the hardware environment for the development of port logistics in Shanghai and other parts of China tend to be excellent featuring the accelerating construction of port by the swift growth of foreign trade for consecutive years, "and recent years witness the continuing addition of ports, the strengthening handling capacity, accelerating development of van container pivot ports and gradual consummation of collection, distribution and transportation networks" ¹

And at present, the major impediment that hinders the development of port logistics in Shanghai is the software environment, among which the customs clearance efficiency is one of the most striking factors that influence the port logistics efficiency.

The clearance efficiency tends to be low on the whole in China, and the most

successful in clearance reform is that Shanghai customhouse had already shortened the import and export cargo clearance time of sea transport from average 3-5 days to 24 hours, air transport from average 3 days to 12 hours through the implementation of the new clearance pattern "Entry Inspection In Advance, Customs Clearance Beforehand, Pass with Actual Stock."²

As a matter of fact, the average clearance time nationwide in China is way above this level. And meanwhile, even if compared with the clearance efficiency in developed countries and regions, there is still a far cry from it as far as Shanghai customs is concerned. Here I just put some examples, In Tai Wan, the cargo auto-clearance system has shortened the time needed for clearance to less than 30 minutes, and the average clearance time for cargos exempt from examination and inspection is as low as 10 minutes, and likewise in Singapore trade net and port net are conducted for import and export and transshipment cargoes then customs declaration and clearance can be done in less than 10 and 15 minutes respectively³. In much developed countries, convenient and efficient clearance can offer better environment for port logistics. For instance, in Canada customhouse has been networked with national railways corporation, port, shipping company and the like, and provides efficient customs clearance service on the basis of EDI technology. And clearance formalities can be done and port logistics can pass unchecked 48 hours before the arrival of containers from Shanghai port to Vancouver port through sea transport. ⁴

It is quite evident that compared with developed countries sharp disparity in customs clearance efficiency has already become one of the bottlenecks restricting the development of port logistics in Shanghai. Take international container transfer for example, owing to time-consuming process of Shanghai customs clearance and inconformity of current cargo transfer principles with international practice, and

cargo transfers principles of import first, export second, repeated declaration and multilateral management, the average time for transport of cargoes from pull-in to departure is above 34 hours in China's port, however, the time for clearance in Busan port, South Korea is merely some three hours, then international container transfer route of regular shipping liners prefer Busan port instead of Shanghai port or other coastal ports in China. ⁵ Needless to say, port logistics

The reasons for inefficient customs clearance in Shanghai port cover a couple of area:

- (1) Customhouse laws and regulation construction
- (2) Custom clearance structure (including pre-declaration, examination after release, evaluation mode)
- (3) Customs clearance flow
- (4) Customs clearance formalities
- (5) Digital construction at customs 6.quality of customs personnel

1.2 Literature review

Mr. Liu Jian jun (2001) considers that port logistics is a kind of value-added service provided by port, and meanwhile depending on a set of effective organizational methods and highly efficient information technology port logistics can offer value-added and effective service to customers. Mr. Li Guo de, Chen Jian (2004)(4) hold the idea that the move to develop port logistics lies in four points: the first is to build the logistics center; the second is to establish the commerce and trade center; the third is to construct information center; the fourth is to build up the comprehensive service center. As a matter of fact, it represents ideas of a certain number of people, but these ideas descend into generalities. Of course, there are some ideas with deep insight. Mao Bai ke (2001) thinks that major works of loading

and discharging at port is the key link of logistics and varied services provided by port itself all belong to the category of logistics, and meanwhile he also points out that we should correct some biased conception in the process of developing port logistics and deems that we are supposed to take the renovation of major works and exaltation of core competitiveness as the strategic focus of expanding the port logistics, correcting the lopsided idea just as followed: to merely ensure port production and operation of loading and discharging, just take the fuel and lube, supply of spare parts and motorcade and warehousing system as the logistics operating system; to launch modern logistics equals to the establishment of third party logistics; to launch modern logistics is to launch the warehousing logistics and logistics center; And actually warehousing logistics and logistics center are just one kind of the expansion of logistics by port and we are supposed to prevent the blind investment on logistics. Luo Wen ping pointed out in his works "Probe into China's water carriage logistics" that research into port logistics is supposed to be divided into two layers: the first layer is the macro port environment("Bigger Logistics"), which is used for the review of port as one node in the supply chain and the logistics capability by port (which can be defined as reduction of supply chain cost and elevation of supply chain efficiency for international supply chain customers in the port competition—including the capability of time-saving); the second layer is the development of port enterprise logistics("Smaller Logistics"), which mainly focus on the development of logistics service by port enterprises. It is also a comparatively new idea with deep insight concerning the port logistics. These discussions and researches are both of great value and significance, which to some extent offers the theoretical guidance for the development of port logistics in China. However, at present more researches focus on the infrastructure, operation and management, logistics technology and logistics policy of port and instead pay less attention to the soft environment of port logistics development, that is, service environment which includes clearance and inspection, shipping agency and cargo agency, survey and insurance of ship, finance and trade, policy and laws, etc, in particular, the probe as a specific topic into impact of clearance efficiency upon port logistics efficiency tends to be less.

1.3 The objective of the dissertation

In terms of theoretical significance, the theoretical probe into port logistics is comparatively scattered and weak for the time being, even if there is a research and the research focuses mainly on the infrastructure, operation and management, logistics technology, logistics policy, instead the probe into the impact of clearance efficiency upon port logistics efficiency tend to be quite less. Therefore, as far as I am concerned, the probe into the impact of clearance efficiency upon port logistics efficiency is supposed to be a significant attempt. In the meantime, this essay takes the clearance efficiency as the research target of influencing the port logistics, which expands the scope of port logistics and organically integrates the research into port logistics with the probe into the clearance reform.

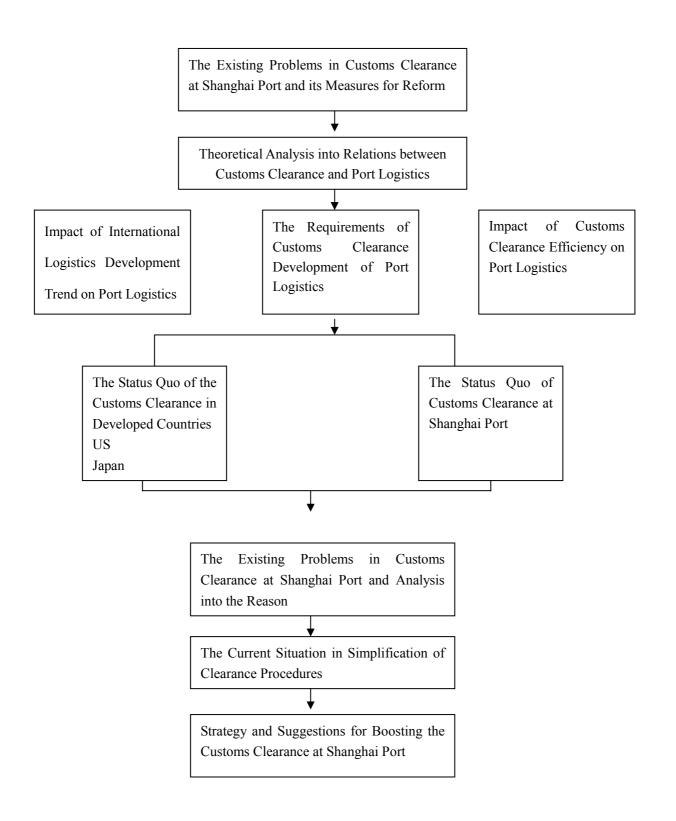
In terms of utility value, the current international logistics globalization trend and exponential growth of foreign trade gives impetus to the booming of port logistics and drastic increase in cargo volume in and out of the ports, and the customers' demand of time become more rigorous, and it is necessary and imperative to probe into port logistics efficiency. This essay probes into the efficiency of port logistics from the perspective of customs clearance efficiency, and provides a train of thought which is the aim of this essay as well.

1.4 The framework and methods of the dissertation

In the light of many and various problems in Shanghai customhouse, the essay tentatively puts forward some suggestions and measures instrumental to the reform of Shanghai customhouse.

In the theoretical part, this essay analyzes interconnections between custom clearance and port logistics in theory, and expounds the sizzling development of port logistics against the backdrop of the international logistics development and the vital role of clearance efficiency in the development of port logistics. In the comparative analysis part, this essay first introduced the status quo of clearance in three developed countries and compares it with that of Shanghai customs in five aspects and then analyzes the major problems existed in Shanghai customhouse. Second, this essay introduces the status quo of customs clearance procedures simplification in Shanghai compared with the current situation of clearance reforms in other countries, and conducts the in-depth comparison and analysis into the two form perspectives of technology, management, legislation and training, compares the basis, status quo and achievement of its reforms, which offers the foundation for future development of custom reform.

Just like the saying goes, there can be no differentiation without comparison. Quantitative and qualitative methods are applied in the process of paper writing, and comparative and analytical methods are applied in the systematic probe into each item and then draw the conclusion through the results of comparison and analysis. And frame diagram is given just as the followed in order to describe the train of thought in this essay intuitively:



CHAPTER 2 OVERVIEW OF THE CUSTOMS CLEARANCE AND PORT LOGISTICS

2.1 The main trend of logistics development and its impact upon port logistics

2.1.1 The trend in international logistics development

International logistics, which belongs to one of the logistics domains with larger scale and faster advancement in the modern logistics system, is the logistics activities resulted from the international economic exchange, trade activities and other international exchanges. Due to steep rise in international trade in recent decades, increasing intensification of international division of labor, and end of cold wars between the West and East, acceleration of the integration process such as Europe and other areas the world over, therefore international logistics has naturally become the hot spot of modern logistics research.

Actually international logistics, in accordance with the principles of international division of work and co-ordination and international practice and internationalized logistics network, logistics facilities and logistics technology, realizes the

international flow and exchange of cargoes with an aim to facilitate the development of regional economy and optimization of world resources.

Development trend of international logistics

With the integration of global economy steps up, current development of international logistics turns out to be new trend by the advancement of science and technology, in particular, the development of information technology and communications technology, together with the intensification of localization production, global procurement and global consumption resulted from the emergence of multi-national companies. And in the essay "International Logistics Development Situation" by Mr. Zheng Rong cai, in which he conducted the comparatively comprehensive discussion and analysis into the development trend of international logistics and meanwhile summed up in the following aspects ⁷:

First, information-based logistics, which gives expression to commercialization of logistics information, codification and database of logistics information collection, electronization and computerization of logistics information disposal, standardization and the real-time process of logistics information transit, digitalization of logistics information storage. Second, automation of logistics, whose basis is the informationization, and the kernel of automation lies in mechanical and electrical integration, and the outward manifestation of automation is the unmanned operation, and the effect of the automation is labor-saving, besides, it can expand logistics operation capacity, increase the labor productivity and reduce the errors of logistics operation as well. Third, networking of logistics, which covers two layers of implications: One is computer communication network of logistics distribution system, which includes the connections between logistics distribution center and suppliers or manufacturers through computer network, and connections with customers in the downstream of the network through computer network as well,

the process that logistics distribution center collects the customer information of orders through computer network can be done as well. The other is networking of organization, that is, so-called Intranet. Fourth, real-time process of logistics, for characteristics of international logistics information system is just as followed: informative but frequent inter-exchange, large volume of transit but strong time value, more links and points but long line process. Therefore, the advancement of EDI in international trade is the mainstream development on condition that international logistics information system with advanced technology will be built. Thus, networking, informationization and automation make it possible for the real-time process of logistics. Fifth, the continuing development of third party logistics, especially development of integrated logistics agent system based on Internet is one of the third party logistics modes, that is, it's up to enterprises and companies with certain advantages in terms of logistics comprehensive management experience, talents, technology and ideas to conduct the business activities of general agency to all logistics activities of two parties between the demand and supply in e-business trade. Integrated logistics agent makes it possible for two parties in-business trade can completely separate themselves from complicated logistics business with multi-party commission and devote themselves to expansion of e-market and business efficiency with undivided attention. Sixth, it is rationalization of international logistics, which is the general objective of pursuit of logistics management and is the process of realizing the integrated optimization of logistics system through the adjustment and improvement of logistics facilities allocation and logistics activity organizations. And it concretely embodies the logistics cost as low as possible to attain service level as high as possible.

2.1.2 Impact on port logistics by international logistics development

Port logistics is not only the key link in modern international logistics system, but also the major radiation patterns of the regional economic integration by international logistics in recent several decades. Currently, the development of international logistics has already entered a brand-new epoch, which has made far-reaching impact on the development of port logistics:

- (1) International logistics service requires the transfer of port functions from loading and unloading to provision of modern logistics service. As the nodes of global integrated logistics network, ports are not the cargo transshipment points that can only provide simple service of loading and unloading any longer but the logistics platform that can provide integrated logistics service, that is, cargo allocating center.
- ①Modern port is the "dragonhead" of integrated logistics supply chain. Modern port, as the logistics distribution center of modern port, is not only responsible for the functions such as storage, sorting, tallying, sub-packaging, stevedoring, processing and goods delivery, but also responsible for the information service of the whole supply chain.
- ② Modern port is the optimal boning point of production factors. Due to the transport advantages of ports, there is layout setting of "port in front, factory behind" in quite a few key ports the world over. Besides, some financially successful powerhouse enterprises choose port city as its development site, in other words, key ports in the world are by and large important industrial bases. Obviously, modern port effectively gives impetus to the development of regional economy and assembles together the optimum manpower, material and financial resources and becomes the regional and world business centers.
- 3 Modern port is the foremost information center. For international trade, port, as

the technological node in the international supply chain, is the aggregate point that includes ships, navigation, inland transport, communications, economy, technology. The institution that settles in port is just as following: cargo owner, cargo agent, ship-owner, shipping agent, commodity wholesaler and retailer, packaging company, inland transport company, customs commodity examination. Modern port develops from the pure transport center in the past through distribution center to logistics center today. With the development of international inter-modal transport and global integrated logistics service, modern port will develop towards the direction of all-dimensional added-value as the nodes of global transport network and will become the convergence center of commodity flow, assets flow, technology flow and information flow.

- ④ Modern port is the largest cargo rally point in the integrated logistics supply chain. Port is the pivot of water-land transport, and collection and distribution site of water carriage, starting point and end point of ocean-going transport. Integrated logistics has not only formed the separation of pivot port at sea but also formed the inland network with ports as end point, inland logistics center as collection-distribution point, multi-modal transport of different transport modes as transport passage, thereby port is the largest cargo rally center as well.
- (2) International logistics demands the port to provide better transport link-up. The data indicates that currently 90% of cargo throughput in international trade is realized through sea transport, and its conjoint inland transport and collection, distribution and transportation management to heighten the benefits and efficiency of modern logistics service. In the whole process of international logistics, port has its irreplaceable role in terms of transport mode changeover and link-up, thus port continuously shoulders the logistics service centering on itself, and in the meantime it has to link ocean-going integrated transport system with inland one and provide

multi-directional co-ordination and service correspondent with international logistics service to realize the continuity and rationality in the whole logistics process. ⁹

(3)International logistics promotes the port logistics internationalization, standardization, informationization. According to statistics, in recent years the total import and export trade volume has maintained the annual growth rate of 16%, which reflects continuous improvement of economic internationalization.

Meanwhile, a large number of advanced logistics management concept and information technology related to port entered China as well, immensely push forward the internationalization, standardization, informationization process in Chinese ports, further enhances the overall level of logistics industry in China and forms the logistics system in conformity with the international logistics. Commercial and trade electronization in international logistics, and application of modern transport technology and operation mode demands the accurate and rapid transfer of the relevant information among the transport links and customers. As "nerve center" of integrated transport, port informationization network has become the mainstream. The rational introduction of advanced technology such as the development of EDI system, GPS, GIS, together with successful butt joint of information system between customs, large-scale multi-national producers and retailers, makes it possible to give an impetus to informationization of port logistics.

2.2 The requirement of customs clearance by the development of port logistics

Recent years has witnessed the sizzling growth of international trade volume in Shanghai, and 86% of the import and export volume in Shanghai foreign trade is realized through sea transport¹⁰, which obviously indicates the rapid advancement of

port logistics. Therefore, needless to say, the rapid development of port logistics put forward higher requirement for customs:

- (1) Speedy Customs Clearance. The dramatic escalation in international trade volume gives impetus to the sizzling development of sea transport industry and the increasingly larger-size ships, and meanwhile the amount of cargoes for clearance has increased drastically as well, and naturally port logistics with higher efficiency demand the quicker and more convenient clearance service.
- (2) Tighten the supervision of customs. With the growing number of cargoes for declaration, a variety of illegal activities such as smuggling and tax evasion will tend to rise accordingly. Customs should guarantee the environment of fair competition and normal order of logistics and of course can never seek rapidity at the cost of security, thus enforcement and supervision are supposed to be tightened.
- (3) Improve the risk management level. With the increasing growth of business volume, the rate of cargoes examination by man must be reduced to gain a higher clearance rate. And customs need to further consummate the risk management mechanism with an aim to undertake the evaluation system and classification methods upon enterprises and improve the supervision level.
- (4) Establish electronized clearance environment. Modern port logistics demands the customs to establish the electronized clearance system, that is, avail itself of e-business platform to integrate the customs, inspection and quarantine, taxation, freight forward, transportation and shipper together, conducting one-stop service and pre-electronized declaration simultaneously, and the clearance links basically are to be conducted online to shorten the time of cargo at port as possible as it can.

(5) Have public information network. Customs should establish the all-inclusive public information network which can provide customers various data and detailed information of clearance in the clearance process and update customers the relevant customs policy and new rules and regulations and consultation service for clearance as well.

2.3 The impact on port logistics by customs clearance efficiency

The Process of Customs Clearance

- (1) Declaration by enterprises: import and export enterprises can attend to declaration of import and export cargoes with customs by means of commission, C/D(Clearance Declaration), electronic data, EDI or though China e-port platform.
- (2) Examination by customs: after receipt of e-data in customs, first, computers are used to check its integrality and logicality with C/D filling requirement, if it conforms to the requirement then it can be transferred to examination center for exam by man; if doesn't then it will send back to declarer for re-application. Examination mainly deals with the correctness and authenticity focusing on classification, price, place of origin, mode of trade and import and export management conditions and the calculation of relevant tax rates. And customs will demand the appliers to re-declare or add if unqualified in the process of examination.
- (3) Presentation of documents on the spot: after examination by man, the customs will send e-note and then applier can deal with the related formalities such as customs declaration, documents with goods and import and export license by the

printed paper customs declaration and pay customs duties and value-added tax and other expenses through banking and online defrayal. For instance, appliers have to remove and unpack the cargoes in accordance with the requirement of customs if customs decides to check the cargoes, and two parties will sign on the examination records and customs can unpack and check the cargoes directly if necessary.

- (4) Release by customs and pick-up of cargoes: after receipt of payment certification of tax and expenses, the customs will sign and issue the release certificate to appliers who can go to pier and warehouse to pick up the cargoes and make arrangement for transportation.
- (5) Customs Transit Transport: if appliers want to deal with customs formalities in the customhouse where the enterprise lies close to or inland, then they can put forward the application of customs transit while application (fill in the customs clearance form), after approval by customhouse's examination they have to deal with formalities of transit transport, and then port customhouse transmit the data such as transport and cargo to customhouse site in-charge through computer network, and do the formalities of examination, custom declaration, taxation after cargoes are transported to the designated site.

2.3.1 The functions of customs

In accordance with customs law and other relevant laws, administrative regulations, customhouse supervises the transport devices, cargoes, luggage articles, post items and other stuffs inbound and outbound and levies duties and cracks down on

smuggling and compiles custom auditing and other sea transport businesses. The detailed functions of customhouse in port are just as followed:

(1) Customs Supervision

In accordance with national law, customhouse undertakes supervision and administration on the cargoes, personal belongings, post items and transport devices inbound and outbound at port.

Customhouse conducts special supervision principle and methods on import and export of special-type cargoes by operation of law, and these cargoes includes:

- ① Bonded cargoes approved by customhouse which is ready for tax formalities and then transported outbound after storage and assembly inbound;
- ② Import and export cargoes processed with materials by suppliers, by process and assembly business, by Sino-foreign joint venture, by Sino-foreign cooperative enterprise;
- ③ Cargoes in and out of the special economic zone and economic and technological development zone

(2) Tax levied by customhouse

Tax is the turnover tax levied on cargoes in and out of port or turnover volume. In the process of tariff levy, the main work of customhouse includes:

Laws and regulations of tariff levy according to law

- ① Participation in formulation of customhouse tariff schedule, defining the classification methods and applicable tax rate of dutiable cargoes and articles
- ② Formulate examination methods of duty paid
- 3 Draw up the different tariff calculation methods

④ Work out the imposition, duration, the refund system of tariff that includes the time, program and condition for tariff imposition, duration and refund.

Responsible for carrying out the tariff regulations and customs tax regulations. The customhouse is supposed to be responsible for tariff imposition, duration and refund, examining the relevant customhouse evaluation and appeal case in the application of tax schedule, and meanwhile conduct the necessary punishment on the behavior of violating the tariff system according to law.

Besides, in the process of tariff levy customs is responsible for imposing the value-added tax and consumption tax upon the import cargoes as well, the tonnage dues on Chinese ships hired by foreign merchants, foreign ships hired by Sino-foreign joint venture, and imposing the procedure fee of customhouse supervision upon the import duty-free cargos. The performance in customs can be measured by tariff rate before and after reform and innovation in customs. After China's entry into WTO and customs reforms at Shanghai customs, the dropping margin in import volume exceeds the declining momentum of customs taxation, which indicates that the effective tariff rate rises instead. And under the circumstances that temporary negative impact resulted from customs officials replacing and implementation of new customs law, this statistics shows that the reform in customs clearance procedures simplification is an impetus to enhancement of customs efficiency. Just shown as the Fig 2.1

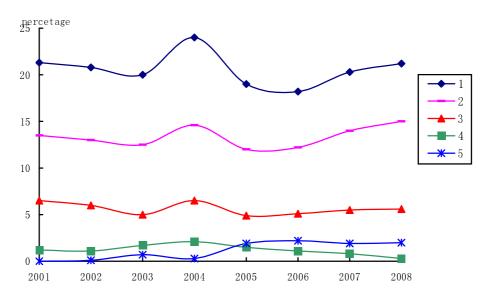


Fig 2.1 Effective Tariff Rate from 2001 – 2008

- 1——Proportion of custom taxation in total import value
- 2——Proportion of value-added tax in import value
- 3—Proportion of customs tariff in import value
- 4——Proportion of Consumption tax in import value
- 5—Proportion of tax on hydrocarbon and its derivative in import value

Source: Shanghai Customs Data

Customs statistics

Authorized by the national government, customs keep a record of cargoes in and out of port in numbers including the category, number, sum, trade nation (region), trade pattern, seat of consignor and consignee, source of foreign currency, etc.

Suppress smuggling

Customhouse cracks down severely on the trans-boundary smuggling activities. Besides, the task of custom management includes the content by customs law such as the intellectual property rights protection, administrative punishment, administrative review and the like.

2.3.2 The impact on port logistics by customs clearance efficiency

Customhouse is the inbound and outbound supervision and management organ, and import and export of cargoes must be conducted orderly under the supervision of customhouse. Port and bonded area in coastal and freshwater area under the supervision of customhouse, objectively speaking, the steps such as declaration and examination, to a large extent, slow down the speed of port logistics; however the examination by customhouse is indispensable for it guarantees the healthy and orderly process of port logistics. Rapidity and safety form a relation of antimony. Therefore, customhouse is play the dual role which restrains the clearance speed in port logistics on one hand and meanwhile maintains the healthy circulation environment and normal logistics order as well.

In actual fact, customhouse is critical to port logistics. Higher custom clearance efficiency means quicker passage of cargoes through port, and here we say higher clearance efficiency means rapid and convenient process of clearance, examination, tax levy, tax refund while walling up the illegal activities such as smuggling and tax evasion. Obviously the lower the clearance efficiency, the longer the time of cargoes at port, then it will reduce the efficiency of port logistics. Port logistics efficiency is quite important for transnational company and logistics enterprises. In modern times, logistics efficiency is the vitality of an enterprise, in particular, the IT industry. Lower logistics efficiency, most often, restrains the marketing move of the enterprises and will put enterprises in a predicament losing the advantageous position; in addition, lower logistics efficiency will add the cost of enterprises and impair its competitive edge in the market. Thus, issue of port clearance efficiency has attracted the eyeball of the transnational companies and logistics enterprises and

further become the direct factor that affects the trade and investment environment in one country or region.

China has gradually been becoming "the world factory" and the mainstream has already given impetus to the rapid development of port logistics. The sizzling development of port logistics push the reform of customs supervision to a new height, then how to realize the rigorous supervision, convenient in and out, the optimal juncture of rapidity and safety is a brand-new task China customs faces. China customs should actively explore the new mentality, new mode and new measures to preserve the fair and orderly environment for the development of port logistics.

2.3.3 Major issues influencing the customs clearance

Clearance is a series of interconnected process made up of different organizations and institutions, and it covers quite a few units and links that interconnect with one another. The efficiency of clearance doesn't simply lie in operation speed of customs but the efficiency of the whole system and the coordination degree of a couple of units such as clearance, port, commodity inspection, consignors. We may say, custom is the main factor that affects the clearance but on the other hand not the decisive factor.

Macroscopically, the major issues affecting the cargoes clearance process can be classified into four sides: law and regulations settings, external surroundings, organizational factors and business process. Law and regulations defines the framework and principle of custom management, which is supposed to make some

revision for convenient clearance; External surroundings continuously set new requirements for customs to promote its continuing reform with the development of trade an logistics; Organization and institution manifests the management capability of customs; And the business process gives expression to the operation capability of custom clearance. (Fig 2.2)

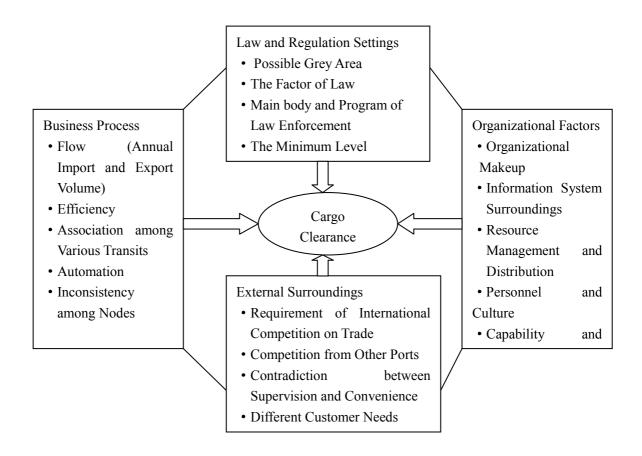


Fig. 2.2 Main Issues affecting the Cargo Clearance (Macroscopic) ¹²
Microscopically, the main issues affecting clearance include risk management issue, system issue, resource management issue,

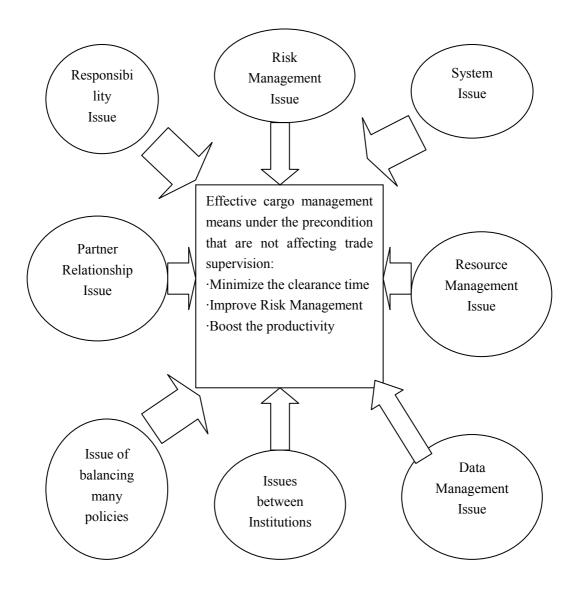


Fig. 2.3 Main Issues affecting the Cargo Clearance (Microscopic) 12

Compared with advanced international level, import and export clearance efficiency in China tends to be low and evidently this kind of faulty service is the bottleneck that restrains the further development of port logistics development in China. Such being the case, it is imperative for the optimization of clearance environment and all-dimensional and all-process supervision. Then, under the guidance of national

policy, customhouse must improve port management, boost clearance efficiency, better the relevant service to ensure the smooth process of port logistics.

CHAPTER 3 GAP OF CUSTOMS CLEARANCE AT SHANGAHI PORT AND THE DEVELOPED COUNTRIES AND ITS CAUSE

3.1 The status quo of customs clearance at Shanghai customs

After constructions of quite a few years, six core functions by the platform in the reform of clearance procedures simplification has been available to the whole process of modern port logistics management that includes transaction, supervision, transport, payment at Shanghai customs. And some major flows in the clearance process can be dealt with by enterprises through the networking simultaneously for the major information and data of cargoes that go in and out of the customs can be shared. Compared with the prior procedures based on the principle of completion of one after another, the time and efficiency were improved considerably. For the time being, working hours in clearance process by Shanghai customs is dropped drastically, take

for instance, the average clearance time for clearance in sea transport has been shorten within the 24 hours in the beginning of 2008. Just as shown in table 3.1, from January until July 2008, the average time needed is 13 hours for green passage, 16 hours for yellow passage, 23 hours for red passage. And meanwhile, the time needed for each step in customs clearance is listed in full length. Clearance time refers to the time span from input of import declaration information until the cargo out of the customs warehouse. If the time needed for the departure of cargoes from custom warehouse is not included, then the average time for customs clearance is 7 hours for green passage, 12 hours for yellow passage and 18 hours for red passage.

Table 3.1 Customs Clearance Time January until July, 2008 (average hour, minute)

Table 3.1 Customs Clearance Time Samuary until Jury, 2006 (average flour, filling)				
Custom clearance procedures	Green passage	Yellow passage	Red Passage	Average
①Trade service and rate payment	3:38	3:14	3:03	3:14
⊘distribution channel	3:49	3:01	3:67	3:39
Total time of steps ①②	6:87	6:15	6:70	6:53
③supervision and inspection by customs	0	5:76	11:16	5:69
Total time of step ①②③	6:87	11:91	17:86	12:22
Preparation time of cargoes from the customs warehouse	6:07	3:97	5:48	4:07
Total time of steps ① ② ③ ④	12:96	15:88	23:34	16:29

Source: Mendoza and Gutierrez 2008

At present, the State Council has officially approved 12 bonded port zones including

Shanghai Yang Shan Port Area, Tian Jin Dong Jiang Bonded Area, Dalian DaYao wan Bonded Area, Hai Nan Yang Pu Bonded Area and the like, which, to a large extent, promotes the regional economic development of hinterland. The special functions and policy of the bonded port area provides the prerequisites for the international logistic operators to build up the large-scale logistics distribution center and advance the development of the international logistics industry whose product with its supplier of material and whose market in foreign countries, which is conducive to the development of dock industry and other industries including the boosting of the employment with competitive edge of ports.

Set-up of the bonded port area will lay a solid foundation for in-depth radiation of further intensifying the port service functions and give an impetus to regional import and export trade, and will bring about more scope and new opportunity for its development. The experience of advanced port at home and abroad indicates that the pull for the port development at hinterland is gigantic, likewise, the economic development of the hinterland will further facilitate the development of the port economy to form the structure of beneficent cycle.

Preferential policy attracts the transfer business

The characteristics of "within the bound and outside the customhouse" can considerably heighten the clearance speed, simplify the export rebates procedures, reduce the business cost and provide the policy guarantee for stepping up the international transfer business of Shanghai port. In addition, along with the building up of bonded port area, Shanghai throws a big investment into the communications network of collection, distribution, and transportation complete with the bonded port areas and accelerates its construction which provides the convenience for the development of contain international and domestic transfer business as well.

Table 3.2 Comparison of Shanghai Tariff Policy

Items	2001	2004	2008
Number of Tariff Rate	56	3 ^a	6 ^b
Maximum Tariff	150%	22%	20%
Minimum Tariff	9%	10%	3%
Non-weighted Average Nominal Tariff	47%	20%	13%
Ban	357	20	Almost none
Non-tariff Barriers	Pretty Much		none

a. Four kinds of tariff rates can be got replying on base tariff level 10%, 18% and additional tax rate 5%: 12%, 17%, 20%, 25%.

Source: Data of General Administration of Customs

In 2007, under the circumstances of partial customs cover, the container throughput reached 6.1 million TEU at Shanghai Yang Shan Bonded Port Area and the cargo value in and out of the bonded area reached USD 76.6 billion, and the rate of water-to-water transfer reached 50% and international transfer rate attained 10%, 14% and 5% higher than the average level respectively. And the proportion of international transfer increases considerably compared with around 2.4 % when Yang Shan Port was initially put into operation in 2006. The long clearance time indicates the long time of cargoes at port, which put a dent in the elevation of port logistics efficiency. The low efficiency at Shanghai customs is the higher portion of customs clearance work time against the total clearance time. Shanghai customs is a large scale customs directly under General Administration of Customs, and as a customs with outstanding achievement, the status quo of clearance at Shanghai customs is typical of the whole circumstance in China to some extent. And the following is the statistical chart from January until April at Shanghai customs, from which it can be seen that customs work time accounts for considerably high proportion in total clearance time.

b. Seven kinds of tariff rates can be got replying on base tariff level 2%,4%,6%,15% and additional tax rate 3%:3%,5%,8%,10%,15%,18%,23%.

Table 3.3 2008 Statistics of Clearance Efficiency Shanghai Customs from January until April

Clearance Date	Average total clearance time	Average Customs clearance time	Customs clearance time rate	Average non-customs clearance time	Non-customs clearance time rate
January	.53 hours	34 hours	53.97%	14 hours	26.03%
February	67 hours	42 hours	51.26%	12 hours	28.74%
March	40 hours	29 hours	61.67%	8 hours	18.33%
April	33 hours	26 hours	66.79%	5 hours	13.21%
Average from January until April	48 hours	33 hours	57.94%	10 hours	22.06%

Total clearance time: the time from declaration to cargoes release

Customs clearance time: the time needed for customs work links (examination, evaluation, inspection and etc.) Non-customs clearance time: time of documents by declarant, time of taxation and etc.

The supervision of bonded port areas refers to a couple of departments such as customs, foreign currency, inspection and quarantine, taxation, industry and commerce administration and most of them belong to the organs directly under the central government. After the establishment of the Shanghai Yang Shan Port Area the relevant supervisory departments published the supervision mechanism one after another, for example, General Administration of Customs(GAC)published Provisional Regulations on Administration of Customs Bonded Port Area, General Administration of Foreign Exchange (GAFE) published Administrative Measures on Foreign Currency at Bonded Supervision Area, General Administration of Quality Supervision, Inspection and Quarantine (GAQSIQ) is also working on drafting of Administrative Measures on Inspection and Quarantine at Bonded Supervision Area and evidently publication of these administrative measures will provide the necessary policy basis for the healthy development of bonded port area.

However, on the other hand, the orientation of bonded port area has not yet been given nationwide legal force and the different knowledge to the position of bonded port areas by different supervisory department. Due to the shortage of policy co-ordination, enterprises still faces some uncertain risks in the process of developing the business at bonded port area, to some extent, which influences the industrial aggregation and function display of the bonded port area.

On August 1st 2007 a new Computer Software System has been recently installed at Shanghai Customs to process import clearance on shipments via Shanghai; however, a lot of problems occurred for both sea and air shipments importing into China via Shanghai resulting in long delay in clearance and quarantine inspection. It will still take at least 6 to 8 working days to clear a sea shipment or an air shipment through Customs in Shanghai even though Import Permits and proper import documents are ready and available, most of the shipments importing into China via Shanghai will incur demurrage charges. Furthermore, Shanghai Customs will only clear a maximum of 10 air shipments per working day. They estimated that such unfortunate situation will continue for a few months; however, as they may also understand that such is totally beyond their control. Then there are still some barriers and many difficulties in reform of clearance procedures simplification at Shanghai customs.

3.2 The experience derived from customs clearance in developed countries

It is quite evident that developed countries has all along been bending themselves to take many and various measures to improve its clearance efficiency, as a matter of fact, which accomplished a great achievement. Probe into the existing problems in Shanghai port customs clearance necessitates understanding of the current situations of customhouse clearance in developed countries, and then they can figure out the problems through the comparison of gaps.

United States of America

With an aim to convert the management structure of US customs and build up a brand new image, meanwhile, to meet the new challenge in the future, US customs change its culture focus on the people, process and partners. And this kind of culture has a couple of characteristics just as followed:

- (1) The core program of management essence and this transformation requires many articles of customs and make it possible for them to integrate into more co-operative and coordinated to accomplish the mission and task of customs.
- (2) Take the fulfillment of the legal demands by customs customers as the key point of management program in the organization, and establish partnership with customers to better meet their demands and improve the customs operation.

To achieve the goal, US customs implements the "strategy of informed observance", which is at the present the pattern that majority of customs abide by aiming at modernization, that is, the partnership with customers between on the premise of legality. Informed observance is division of responsibility, for the customs are accountable to transmit effectively the relevant rules of trade and likewise the customers are bound to deal with transactions in accordance with requirement of customs as well. In order to redouble the effort of informed observance, for the time being US customs is shifting its operation focus from transaction to account dealing. Account here means the persons or companies contacting with customs, including all business entity such as importers, shippers, customs broker, manufacturers,

warehouse master, guarantor and the like. Besides, position of account managers was set up to conduct the informed observance in a different way to get the different customers informed with an aim to improve the clearance efficiency. Customs account managers are under the orders of General Administration of Customs (GAC), together with other customs departments identify the non-compliance area operated by the companies and do the research into strategy of mutual interest to establish and maintain the high-level trade compliance.

For the time being, US customs has got large volume of automatic system in operation so as to support commercial function, among which one of the outstanding system is the ACS (Automated Commercial System). ACS (Automated Commercial System) is the system that traces, controls and deals with all cargoes into US, including automated information system of protest and institution of prosecution. Through application of EDI (Electronic Data Interchange) and automatic positioning system of high-risk shipping, ACS makes it easier for the handling of cargoes and then reduces the cost to a large extent and paperwork of customs and importers as well. And since the use of system in 1984, it has been increasingly consummated and strengthened and got some new characteristics. Its mainframe can be operated all the year round. In the importers put on record, over 97% of importers are transmitting information to the customs electronically, and every week transport company transfers 95,000 air transport orders and 60,000 sea transport orders electronically. In 2006, the import and export trade in US reached 3.64 trillion dollars, and the expansion of world trade and addition of trade agreement will continuously put forward new requirements for the handling of ACS. ACS is made of seven modules: (1) ABI (Automated Broker Interface): The interface is originally designed for the communication with automated broker, and now provides a chain of communication for the customers of ABI (customs declarer, importers, transporters, port department and computer service center) and the transmission of import cargoes declaration and its data collection in ACS. ABI saves us a lot of declaration time, improves the quality of declaration data, accelerated the pass speed of inspection and provides the import and export information in time, which obviously is considerably beneficial to the importers.

- (2)AMS (Automated Manifest System): The system is not only the commodity catalogue control system but also the information system for the release of cargoes. AMS reduces the paperwork of shippers and customs through the release notice system, accelerates the velocity of logistics. AMS participants and customs have already recognized that imported cargoes demands stricter control, more convenient communication and less detention time.
- (3) Cargo selection system: The system is the main tool used for checking and classifying the imported cargoes. NIS (National Import Specialist) national and regional intelligence units, OAS (Operations Analyst) and local enforcement department all together set up a database concerning the criterion of cargoes selection used to evaluate the risk.
- (4) Collective system: The system is the accounting system and ACS documents. As one of characteristics of ACS, automated clearing house (ACH) of trade can receive the electronic funds payment by importers.
- (5)Clearance information collective system: The system provides the clearance data with selectively automated collection which is used for regular review by cargo expert. The selective criterion that national and local department collect is supposed to conform to data input and reviewed.

- (6)Quota system: The system control is up to President, administration order or other decree to stipulate the level of imported cargoes quota.
- (7)Special projects: Special project system provides the program support for precision and efficiency of internal disposal that can greatly influence ACS system environment (fro instance, ACS control program maintenance, the structural intensification of security documents).

And the following is the other steps in the internal environment of ACS system or support the ACS system:

- (1) State internal link system: The system support the transport of cargoes from one port to another port in US, and actually it controls the cargoes in the transport process from discharge port to port of entry or port of export.
- (2)Linear release system: The system tracks and releases the multiple transportations through the land border. The bar code was scanned into the computer by customs to check whether it tallies with the data in the invoice, and then let them pass after input of quantities. The data of cargoes released is transmitted to ACS, which requires a copy of declaration data collection and provides the release information to ABI participants.
- (3)Handling of statement: Handling of statement allows ABI document filer to conduct examination or payment on ABI statement of declaration. Needless to say, it reduces the handling time pf collecting and receiving declaration statement. Besides, the filer applies the handling of statement is supposed to accord with the condition of ACH.

(4) ACH (Automated Clearing House): ACH is a kind of electronic payment, allowing ABI filer to conduct the customs procedure fees, tariff and other taxes one-off through electronic way. The accuracy and speed of ACH boosts the handling efficiency between importers and customs and saves the money and time as well. At present, US customs is regulating its business process and system with an aim to improve its customs operation, intensify the decree and business management functions and make the modernization of customs come true.

Japan

To a large extent, Japanese customs has already actualized the electronization of import and export declaration (90% electronic declaration of cargoes), and conducted cargoes checkup by computer technology on the basis of risk evaluation. From Oct, 1999, Japanese customs has further expanded NACCS (Nippon Automated Cargo Clearance System) to sea transport and information handling in the process of storage after the arrival of cargoes at port. Majority of information is in essence business information such as airway bill, discharge information, delivery information and cargo data. Besides the customs process, a large number of subdivided business functions is handled by NACCS. For example: (1) warehouse keeper (stock control) (2) joint person (entry of non-joint cargoes) (3) Air freight forwarding (prepares entry bills for warehouse supervisor). (4) Banks (telegraph of tax bills) (5) Flight course (input of indenture data) (6) Data statistics (official trade data and form provided by system users).

In the past, the customs procedure demands import declaration and tariff payment must synchronize with one another. After adoption of SDP system, the importers can take delivery of goods before tariff payment on the basis of SDP right after they seeks the approval from Director of the Customs General Administration ahead of

schedule and most often it doesn't need any written procedures in the process of cargoes provision and tax declaration. The adoption of SDP system will skip the link of check and inspection by customs and give the efficiency of customs better play in the cargo issuance and tariff declaration.

As far as the importers are concerned, they can't get approval until they meet lots of requirements. Meanwhile, importers must be responsible for maintaining the correct accounts and records. The establishment and consummation of these works is a part of risk management conducted by Japanese customs.

Singapore

Singapore throws a big investment into the development of the quick clearance system with high efficiency, to be more concrete, USD 20 million was invested to establish a network service platform company in Singapore. These measures have contributed a lot to prosperity of ports in Singapore.

The key of the highly efficient clearance system lies in EDI network on the basis of internet. "Trade network" was built up in Singapore and SNS networks companies are responsible for its operation. And the total investment of this company is USD 20 million and trade development department holds a 55% equity and the remaining shares is held by 20 government agencies. Actually there are five considerations by Singapore:

- (1) Co-ordination by government.
- (2) Intercourse between government and business circles.
- (3) Risk management and classification of enterprises.
- (4) Secure e-clearance platform.
- (5) E-business and legislation of network security.

Co-operation between different authorities is the basis of redesigning the current clearance program in Singapore. The application of e-business further intensifies the co-ordination process. Based on the e-declaration and e-examination, customs and other government departments in Singapore built the seamless one-stop e-clearance system. And the customer only needs to do declaration for one time then the clearance process of import and export can be done. One-stop declaration includes all the relevant departments such as customs, commodity inspection, port, transport companies, banks and tax administration and the like. As a matter of fact, this kind of clearance pattern has been widely adopted by countries the world over and hence it is also supposed to be a good reform project for China to learn from.

Likewise, the strategic partnership between customs and business circles ensured the exchange of information and intensification of understanding between the two and meanwhile contributed to the reduction of operating cost of two parties. Training on clearance provided to the business circles helps the business circles to get an understanding of customs target as well. And the adopted methods include:

- (1) 24-hour telephone information center built by Network companies operating the trade network, which will help users to tackle many and various problems related to trade. Besides, the information center will offer 8 to 10 hours interactive enquiry service every day.
- (2)The website also provides e-declaration service for small and medium-sized enterprises through "service bureau".
- (3) Every registered user in the website must have to receive the training of half day to two days on how to declare on-line.

In the face of ever-growing trade volume, Singapore adopted the risk management pattern to solve the issue of customs resources shortage. And the characteristics of e-declaration system and risk management in Singapore lie in:

- (1) Customs uses the e-survey for e-declaration, that is, it's up to the computer to complete the document survey work automatically.
- (2) The foundation of e-survey is the risk management system. It is a special system, which will determine whether it needs to be inspected with the container open through the analysis of large amount of factors such as commodity categories, place of origin, transport means, history of importers, and it is not a random inspection system.
- (3) Unpacking rate maintain the level of around 2% to 4%.

The clearance experience in economic powerhouses indicates that exchange and transmission of data by electronic patterns is essential to the improvement of trade surroundings. The standardization of cargo data by import and export and transit, together with data sharing among different departments are conducive to the boosting of clearance efficiency. And Singapore adopted the following steps to handle this key issue:

- (1) Offer the service of paperless declaration. And there are some 4000 corporations, among which about 95% of them are importers who can deal with declaration in their offices through the network of trade.
- (2) The network of trade is nonstop available with 24 hours a day 365 days a year. The network will transmit the demands to the customs and give the feedback to the customers. 85% of the customs declaration can be done within 15 minutes and shortening of declaration time can still be expected.

- (3) After e-declaration the release time for general cargoes are respectively as followed: 4 minutes for cargoes by land, 8 minutes for cargoes by sea and 15 minutes for cargoes by air.
- (4) As a matter of fact, the network of trade is the first e-network that connects the trade departments, customs and banks. And the importers and exporters can get the following jobs done through above-mentioned network: e-clearance, e-taxation, e-application, e-trade settlement and application of e-financing.

And the other goal for Singapore is to build up an e-exchange, which includes clearance system, trade financing system, transport and logistics system and storing and e-purchasing system.

The legislation for e-commerce laid a solid foundation for the e-declaration and offers the official legal basis and guarantee for e-commerce as well. And most of important lies in the recognizability of legality of e-payment and digital signature. Besides, Singapore launched two reforms with an aim to actualize the e-declaration: one is to make the legislation for e-data serving as the foundation for e-declaration; the other is developing the digital signature to ensure the security of e-declaration.

From above-mentioned experience derived from the developed countries like US, Japan and Singapore, there are still a lot of highlights in customs clearance to accelerate the simplification process for higher efficiency that are beneficiary and helpful for simplification of customs clearance in Shanghai customs.

3.3 The gap in customs clearance of Shanghai and developed countries

Compared with developed countries, Shanghai customs still have a long way to go featuring by many links of the customs clearance, time-consuming and low efficiency, to be more concrete, it mainly includes the flow, structure, procedure, factors and efficiency of clearance.

First, in terms of the clearance flow of serial and multiple system mode, the current clearance flow in Shanghai customs is serial pattern characterized by many links and complicated procedures closely attached with one another, in other words, when you go through these links you have to take it one by one and you can't overstep it and thus the existing problems in the previous steps will inevitably impact the following steps, besides problems in any links will put a dent on the efficiency of the whole clearance process and delay the clearance time span. The work flow of multiple system in the developed nations, which makes it possible for the declaration, entry inspection, evaluation and cargo sorting to happen simultaneously and you can get customs clearance on condition that every links passed the inspection, and there is no need for sequencing and problems in one of the links won't impact the other links, which obviously improved the clearance efficiency to a large extent. Second, in terms of olivine type and dumbbell type, the clearance pattern in Shanghai port is olivine type, which doesn't allow the various procedures of clearance to be dealt with until the arrival of cargoes at the port, in other words, no declaration, entry inspection and sorting is allowed beforehand. And by contrast the customs clearance pattern in the developed countries is the dumbbell type which is available for declaration, entry inspection and sorting beforehand and strengthens the check after release which smoothes the process from the arrival of cargoes and pick-up of cargoes. Third, in terms of multi-step and one step clearance formalities, Shanghai adopts the multi-step type which demands the customers to go to customs, quarantine and inspection, port and taxing authorities to deal with various formalities and submit different documents. On the contrary, one-step e-clearance has already been popular in the foreign customs and government agencies, which makes it possible for the customers to tackle all the import and export formalities necessary for the clearance through electronic way and declaration once off. Fourth, in terms of the gap in clearance factors, we could say that Shanghai customs takes the lead in hardware facilities and management as far as inland China is concerned, and we could sense the difference with the developed countries in clearance factors with comparison to US, Japan and Singapore.

Table 3.4 Comparison in Clearance Factors in Shanghai, Hong Kong and Singapore

Items	Hong Kong	Singapore	Shanghai
port container throughput in 2007	23.88 million TEU	27.9 million TEU	26.15 million TEU
E-declaration system	 build up the electronic forecasting data system for road cargo construct the seamless clearance platform non-stop operation of port declaration and clearance all the year round 	1.Coverage rate 99% 2.pre-declaration mechanism 3.24 hours a day, 365 days a year 4. e-examination of documents	1.EDI declaration only by portion of logistics corporations 2.pre-declaration just by portion of express business 3.30 minutes for duty-free articles

Risk	1.international advanced level mechanism for the inspection of cargoes	1.professional mechanism available for the evaluation of commodities	and even longer time for duty articles by manual exam 1.category management mainly based on different scale
Management One-step Service	2.unpacking rate is low as 1%-2% and random inspection the whole process from customs declaration to the transport can be done at	2.unpacking rate is about 2%-4% and sampling according to the blacklist the link such as customs, commodity inspection, port, transport, taxation,	2. unpacking rate is around 10% and spot check as well Declaration needs to be done for a couple of times and respective
	one stroke	etc can be done within once-off declaration	exam, vouching and payment
E-business Application Platform	GETS (Government Electronic Trade Service)	1.adoption of public platform financed by Trade Development Agency 2. business operation mode	Not available
E-business	digital certificate and	digital signature	Not available

Legislation and	confirm the electronic	validated by	
Network	information, which is	legislation	
Security	validated by HK legislation		

Fifth, the gap in terms of clearance efficiency, and the following chart indicates the difference from the perspective of port logistics between Shanghai customs and developed nations.

(Unit: hours)

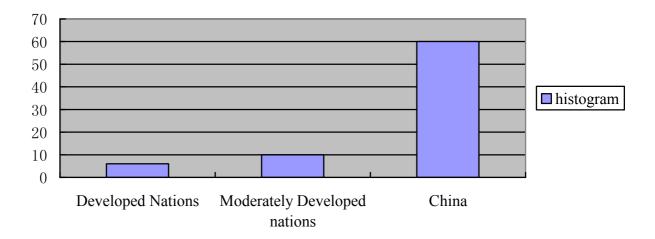


Fig 3.1 Comparison of Import Time by Sea Transport in Various Nations
In the developed nations such as US, Japan and Singapore customers can get all the formalities done and pick up cargoes within six hours after arrival of cargoes; And in Malaysia the time for pick-up of cargoes is eight to twelve hours; and it turns out to be two or three days in Shanghai even if everything is smooth.

3.4 Analysis into the gap between Shanghai and developed nations in terms of customs clearance

It is no denying the fact that there are many and various reasons for the gap between Shanghai customs and that of developed nations, in other words, it includes both the structural and management issues.

First, the matter in the process of clearance flow. As a matter of fact, since we will talk about the root-cause for clearance in Shanghai customs we have to mention the general background, that is, China still belongs to the category of the developing countries and the pattern of series traced back from the planned economy period still remains in terms of its operation mechanism. And with the passage of time, we may say, the clearance flow in series pattern is deeply rooted in the implementation link and, to be more exact, the steps taken forward to reform the clearance flow is a sea of troubles. Besides, the clearance flow in multi system demands pretty higher management level by customhouse and that is to say it is only through the continuous innovation and boosting of management can Shanghai make true the clearance flow in multi system. Second, it is the issue in the clearance structure. To be sure, Shanghai customs has initiated the innovation of customs clearance structures featuring push-forward and carry-down a couple of years ago, but the process of innovation and reform tends to be relatively slow due to a variety of issues like legislation, organizational structure, personnel and the like, thus the momentum of reform in consummation of pre-declaration, pre-exam of prices and pre-classification mechanism is not quite satisfactory. And in inspection after release the system of apanage collection has not been established yet. Take the evaluation pattern, the essential in the clearance structure reform for instance. The strategic transfer of WTO evaluation agreement has been early implemented in developed nations like the countries in EU, US and Japan, and it is worthy to be mentioned that US and Japan has already carried out operation mechanism centering on customs post-clearance audit (PCA) respectively in 1974 and 1968 from the pattern of port administration in the past to follow-up management pattern characterized by the unit of enterprises and focused on the post-clearance audit. However, the year 2002 just witnessed the legislation that adjusting the bench level of evaluated dutiable value from the indicative price to knocked-down price in China, which indicates only the first step forward in the implementation of WTO evaluation agreement. And for the time being the focus of evaluation modes on the whole are still on the spot instead of the follow-up, the audit instead of check, the payment of tax unpaid instead of the punishment. Third, and the reason for the gap in the clearance formalities is that the clearance mechanism characterized by advanced technology and administration are essential for one-step clearance procedures, that is, the building of mutual trust relations between customs, inspection and quarantine, agency, port, transport, consigner and the relevant departments of the government and the utilization of e-business platform to integrate the previously mentioned departments to actualize the date sharing. However, the involvement of several government agencies in clearance procedures is still prevalent in China and lack of co-ordination between one another, one word, there is no integrated clearance system in China's customs. Take Shanghai for instance, electronic clearance still has way beyond its formation, operation patterns are still focusing on the semi-hand, semi-automatic and paper documentation, and the digitalization construction is still in its initial stage. At the present, the information system by customs has not expanded its integration of data with port, inspection and quarantine, government agencies but only centered on clearance operation in itself. Besides, it goes without saying that information sharing can never be made since no unified yardstick for the co-ordination of EDI between government agencies, customs, port. Fourth, some other issues: (1) the professional level of customs personnel is low: on one hand, ageing and semiliterate in astronomical number of public servant in customhouse. Merely 38% of the total 75,000 in China's customs are bachelor and above as of 2007, which is resulted from

the previous black case operation in the process of recruitment of personnel for customs¹⁵. Besides, customs personnel are not skilful in part of the industry especially the sun-rise industry which will inevitably put a dent in the service and supervision by customs. Take IT industry for instance, which belongs to the hi-tech product and have a considerable number of categories, and obviously there will undoubtedly be more or less some difficulty in exam and evaluation of the cargoes for the customs staff. Take Shanghai Books Import and Export Corporation for example, at present the books imported reaches as high as 10,000 categories and the most common is as high as 4,000 categories as well, most often, the mountain-high inventory of cargoes behind the bill of entry is just like a sealed book. That is to say, the time for clearance will be delayed on condition that customs staff doesn't have much relevant knowledge to inquire about the price with the importers.

On the other hand, there still exists some deficiency in customs law and regulations, and the popularization of the related rules and regulation has not yet been made so that some importers and agents have not acquainted themselves with the customs law and its updated revision and there is no specific or detailed instructions as to the implementation of the customs law. Besides, the enforcement and supervision dimension need more effort, for instance, general administration of customs accordingly stipulated some new rules and regulations to improve the trade flow after the unveil of the new customs laws and the problem is that there will be some regional difference such as the yardstick of enforcement in the process of implementation. And likewise it will take some period of time for the importers and exporters, enterprises to accept the updated revision to the new rules and regulations.

CHAPTER 4 STRATEGY AND SUGGESTIONS ON IMPROVING THE CLEARANCE EFFICIENCY AT SHANGHAI CUSTOMS

4.1 Draw on the measures of clearance reform in the developed countries

There are quite a few factors for the success of customs reform in the developed countries, among which the most common key measures adopted are the legislation, training of customs officials and the digitization construction at customs.

Compared with the developed nations and some developing nations, there is still gap to go in the digitalization process at Shanghai customs. E-customs initiative advocates the popularization of pilot projects such as the declaration of the warehouse warrant, import and export clearance system by express, IT industries networking supervision, administration of processing trade as well as the application of tax reduction or exemption, which realized the inter-regional and cross-sectional data exchange and networking check. The ascension of E-headquarter to a new level, the initial achievement of risk management information platform as well as completion in development and application of the tax-related projects, which realized supervision and analysis of business at headquarters and informationization of aided decision- making and boosted the levels of business supervision and analysis at headquarters as well as scientific decision-making. And in 2005, the integrated startup of the second development strategy in the building of modern customs system just follows the heel closely, which shows the determination by Shanghai according to plan and gradually. And the concrete measures supposed to be taken include: First, implementation of strategic proposal on digitalized customs at Shanghai port. Digital infrastructure construction demands the realization of interconnection and inter-working, sharing of information, cooperative office as well as the realization of unified and regulated enforcement within the whole Shanghai customs. The experience and lessons at home and abroad indicates that digitalization construction is the sum-up of 30% technology and 70% administration, from which we can see that the key for success or failure is whether there is a powerful and unified management. Second, the construction of information-based government administration framework grounding on three networks and one information databank at customs system, that is, government affairs information network at customs system connecting the customs nationwide as well as the office business resource network of the governments nationwide, government affairs information network within the departments of customs, public information network at customs on the basis of the internet, and the digital information resource database commonly established and shared by customs departments at various levels. On the basis of three networks and one information databank at the customs, the information-based network at the customs is extended to connect ports, banks, importers and exporters, government taxation, statistics as well as the foreign trade departments, and in the meantime, the unified data transmission standard is adopted to realize the data sharing. Third, the distribution of functions and institutional framework is regrouped. The in-depth fuse between digitalization technique and customs business will inevitably give rise to the drastic change in segregation of functions and institutional framework at customs. From perspective of landscape orientation, the customs procedures are necessitated to be regrouped as the digital clearance, digital business administration, digitalized detection in the construction of digitalized customs according to the characteristics of procedures and work flow. Digital clearance refers to procedures involved in the process from the cargoes declaration to the release of cargoes; Digital business administration refers to the first-phase preparation before clearance and the follow-up supervision work; Digital detection is the procedures to investigate and tackle the smuggling crime or irregular conduct. However, the construction of digitalization customs demands the dramatic reform of this operational mode; in other words, General Administration of Customs can undertake the direct management on hundreds of grass-root customs nationwide by means of the digital technique, and various policies, document and information can be directly and quickly delivered to the grass-root customs through the unified at internal office network at customs. And the following is building of learning customs officials accustomed to the digitalization development. Digitized customs is still operated by the people in the final analysis, then a group of staff who are accomplished in operating digitization technology and facilities are imperative for construction of digitized customs. Actually digitization construction will inevitably bring about the mergers of departments and optimization of flows, classifying and merging and integrating into less links, departments, which obviously require the customs officials to have the capability of handling with a variety of affairs simultaneously and versatile talents to meet with the challenge in the future. Then, optimization of procedure flow and simplification of approval formalities are needed. And in the meantime, the optimization of the operation flow and the simplification of the operation links demand the reform of the administrative approval program as well. The instant arrival of digitalized information transmission at the era of information, timely handling with myriads of workloads, and the digitalization construction demands the dealing with the work as possible as it can within the less time. Thus, the less post in the post setup is concentrated on the integrated tackling of the business, and the original approval system must have to be reformed and the daily discretion on the business that needs immediate decision is supposed to be transferred to the customs official at the front as possible as it can making it possible for them to deal with the business that needs immediate decision speedily which will avoid the disjoint and deadlock of the business handling and ensure the smoothness and convenience of the business flow. Of course, the last one is construction of the relevant laws and regulations aiming at consummate the digitalization construction at Shanghai customs. With the promotion of digitization construction, various online crimes and law disputes will pop out gradually. Under the network circumstances, the rights and obligations between customs and other departments, customs and social intermediaries, customs and enterprises should be stipulated in the form of law, rule and regulations to ensure the interests of each party. And meanwhile, the authority, responsibility and operating instructions of each unit and department within the customs in the functioning of digitization are supposed to be defined in the form of the system. It is quite obvious that the digitization construction in Shanghai customs should be safeguarded by the laws and regulations and cannot go anywhere without it.

Besides, Shanghai customs is devoting itself to building up the mechanism of countering price humbug with risk management as the means and information-based risk databank as the support. And the following is the concrete measures Shanghai customs should take:

- (1) Scientific design and accurate positioning is a must. Science, norm, strictness as well as countering the price humbug are supposed to taken as the ultimate goal for the establishment of long-acting tax collection and administration, and in the meantime reform of the current work mode of price auditing and buildup of a three-dimensional new set of price auditing mode featuring survey into the price at earlier stage, midterm price control on the spot and the following price inspection. Then the pressure on the price auditing in the process of the customs clearance can be relieved through the widening of the price auditing space at the customs, to be more exact, price auditing put forward and price auditing postponed, to get the time in return with space. On the basis of the new price auditing, three lines of defense with prophase, metaphase and anaphase were established based on the complete laws and regulations of price evaluation, supported by price data and information means, centered on risk management, on the platform of regional price monitoring mechanism, ensured by the price monitoring and the following price inspection. And the three lines are separately risk supervision and parameter setting before the import of the cargoes; evaluation of prices on the spot while customs clearance; price monitoring and check after cargo release.
- (2) Learn from others to improve itself with mentality of innovation. First, New mentality of customs evaluation management must have to be established. Shanghai customs should shift from the administration-dominated management concept in the past to the modern management concept focusing on the expert management.

Moreover, Shanghai customs should carry out the work with the mentality of credibility for efficiency in mind and establish the brand-new flexible and highly efficient customs evaluation system to produce the maximum effects with the lowest cost. And the innovation and reform of the relevant laws and regulations as well as the expansion of mutual links and applicability scope are also necessary. Second, the management organs and teams must have to be regrouped. In the light of the actual needs of cracking down on the price humbug, we should lose no time in conducting the rational allocation on the current evaluation resources and do the adjustment or restructuring of the organizational composition in a big way in accordance with the reform mode by the related customs departments, which will lay a solid foundation for the solution of the real problems of evaluation mode in-depth. Third, Shanghai customs should take the lead in the reforming the current customs evaluation management system and methods. At present, Shanghai customs is supposed to give prominence to the specialty and technicality of the customs evaluation forming a whole set of the work link that includes collection and streamlining of price information, tracking and research, analysis and evaluation of enterprises, discussion with importers, and coordination with the related departments. Besides, the mixed work mechanism of duty evaluation and investigation and anti-smuggling should be established that includes a series of means like probe into commodities, analysis of data, questioning of prices, price negotiation, auditing of documents, accounting auditing as well as price check. Fourth, the application level of high-tech should be improved gradually. The customs evaluation mode must have to be established on the high technology for the post clearance auditing can be promoted with the support of the advancement of high-tech. The determined check criteria and clearance treatment assorted on the basis of clearance information by the computers are submitted to the customs on the spot in quite a few nations, and then the customs clearance directly sends the feedback to the customs department of enterprise

archives, which provides the support for the customs to determine the key enterprises for further check-up after release. Besides, in the light of experience of strategic adjustment in the carrying out the WTO evaluation agreement, the strategic adjustment at Shanghai customs should be bound up closely with the risk management, classification management of enterprises, while the latter is a long and gradual process. The new price auditing mode cannot be made at one stoke either and only can be done step by step.

4.2 Concrete measures for clearance reform in Shanghai

The feasibility of solution hinges on the political, economic and cultural environment in which customs supervisory departments to some extent. Therefore, the reform strategy we put forward must be in line with the status quo of the clearance reform, infrastructure and logistics environment at Shanghai port, in other words, in the light of the reform measures by the developed and developing countries, we are supposed to advance some exact countermeasures conducive to the Shanghai customs clearance reform in accordance with the actual conditions.

One thing worthy of being mentioned that WCO has all along been devoting itself to facilitating the customs reform by customs authority of its member countries, from which we can see WCO is still keeping abreast of the times and positioned in the frontier of enhancing the efficiency. And the specific countermeasures as to the clearance reform at Shanghai port are just as followed, which to some degree is inspired or stimulated by the work of WCO. ²⁰ Meanwhile, the earliest actual conditions at Shanghai port against the backdrop of simplifying the customs clearance is taken into account as well.

Evidently the specific countermeasures are mainly oriented to the gap in terms of clearance structure, clearance flow, clearance procedures compared with the developed countries and the deficiencies in customs supervision as well as the problems occurred in the reform of simplifying the customs clearance procedures.

(1)Optimize the clearance flow and shift from the serial mode to the multiple system At the present, the redundant flows and links and complex formalities that hook up with one another in the serial clearance flow at Shanghai customs, the existing problems in the prior link will undoubtedly make a material effect on the following step and to be more exact, once the problems happen in any link will beyond doubt put a dent in the efficiency of the whole clearance work and delay the clearance time to a large degree. However, the clearance flow of "multiple system" makes it possible for the happening of declaration, entry inspection and cargoes sorting simultaneously, which will dramatically improve the clearance efficiency.

The innovation and reform of the clearance flow requires the following measures:

①The customs revises the relevant regulation and stipulates the new clearance flow in the form of legislation enabling importers and exporters to deal with a variety of formalities such as the declaration, entry inspection simultaneously, and it can be released with all necessary procedures ready.

②The customs must have to establish a databank with powerful function keeping record of the enterprise clearance activities, which can conduct real-time tracking on the clearance circumstances of enterprises. The customs must have to set up a set of mechanism to intensify the supervision and management while assisting the enterprises to conduct the multi-system clearance.

- ③ The various organs engaged in the clearance are supposed to work closely with one another to commonly carry out and supervise the clearance flow in multi-system, probe and co-ordinate the problems in the clearance flow and offer the proposals and suggestions aiming at improving the overall efficiency of clearance and solving problems as well.
- (2) The key to adjust the clearance pattern from olive mode to dumbbell mode is to adjust the middle links from arrival of cargoes to pickup of cargoes, and the major measures are pre-entry system and post-clearance audit system. First, it's necessary for customs to build up the pre-entry system by legislation. The importers are supposed to offer the accurate information to supervisory departments in the customs and thus the customs can do customs clearance before the arrival of large portion of cargoes at port on condition that the customs get the accurate information beforehand. In the process of pre-entry, the information of cargoes will be audited electronically for its completeness, and the information will be returned to the importers if incomplete. Before the accurate submittal of information by importers the module in the front end of the computer system at customs will not allow this information to be submitted to the customs, which can save lots of time and resources. The outcome resulted from such a mechanism is that customs brokers and importers are compelled to correct its errors instead of relying upon the customs staff to correct it. And the customs computer system will determine whether it needs manual handling based on its risk level after the submittal of the information to the customs. The computer system will automatically deal with the pre-entry declaration for the low risk cargoes. It is evident that the customs can better allocate the relevant resources and let go cargoes before the arrivals of large portion of cargoes at ports and realization of automatic declaration on condition that the customs get the

information beforehand. On the other hand, post-clearance audit is part and parcel of any risk management system, and essentially the audit is systematically, which is totally different from transaction methods for it is the audit after the clearance, which requires the complete internal control system of the importers and exporters. Post-clearance audit is quite different from the traditional customs practices which take the cargoes as the unit and does not let go the cargoes until the delivery, while the post-clearance audit takes the enterprises or companies as the units of management, the follow-up audit as the means, which give much larger freedom and flexibility to the cargo clearance.

Then, they can see that the combination of effective risk management and post-clearance audit is the most feasible and practicable pattern for importers and exporters with large import and export volume and high value in terms of good handling the import and export as well as accelerating the cargo flows.

4.3 Simplification of clearance customs turning multiple step modes to one step mode

"One-stop" clearance is a kind of electronic clearance pattern which enables the customers to complete all the procedures necessary for imports and exports through the electronic data interface with once-off application.

Data transmission system based on the internet is the basis of "one-stop" clearance practice. The customs must have to develop an online declaration system on the basis of initial information infrastructure and high-grade network technology application. The system is in 24-hour operation, integrating the customs, inspection and quarantine, taxation, freight forwarding, transportation, consignors into one by e-business platform, and then the clearance links such as the declaration, taxation,

inquiry about the relevant data concerning the cargoes, inspection and quarantine, customs evaluation can basically be completed online. Meanwhile, the system can also be pre-declared electronically. Besides, the local laws and regulations of interchange standard about the relevant data are supposed to be established so that data can be automatically exchanged to meet the demands of "one-stop" service. In 2002, Shanghai Foreign Economic Relations & Trade Commission, Shanghai Customs and WaiGaoqiao Free Trade Zone management council have reached an agreement on establishing a unified electronic declaration platform at WaiGaoqiao free trade zone. The system will be independently developed, of course, which will be involved with the well-known enterprises, and the platform is mainly used for the transmission of government data and customs documents. Actually the system was firstly applied to enterprises engaged in foreign trade and export processing at Waigaoqiao free trade zone. At present, the system is under the piloting operation and once the technology of the system is feasible and practicable it will be used at SongJiang Export Processing Zone and the whole Shanghai. The application of the proposal to a large degree improved the investment environment of bonded area, bettered the clearance efficiency and partly made true the online declaration.

4.4 Reform the supervisory pattern to enhance the rate of supervision.

(1) Enhancing the risk management

The understanding of the risk management responsibilities in the customs operation is to lay down certain programs to accelerate the declaration process and exactly dig out the illegal transactions with proper principles of risk management.

One of the common mistakes is to consider the risk sporadically in the customs supervision, to be more exact, considering there is a considerable amount of latent

possibility that all the importers and exporters are violating the regulations. The more effective and scientific methods to analyze the risk is to probe into the two interrelating elements of risk, that is to say, the possibility of certain circumstances and the outcome once the occurrence of the circumstance. Take for example, we will find that they have never made mistake in declaration while analyzing the trade history of the certain importers. Therefore, the outcome resulted from the declaration mistakes but there is a slim possibility of the occurrence. Likewise, there is also a slim possibility of making mistakes while we are dealing with the certain cargoes imported from specific countries, then we are supposed to let go this kind of cargoes with less possible delays.

The following two steps are supposed to be taken in order to carry out an orderly and methodical risk management program. First, all the activities under the authority of the customs and the activities that possibly influence the customs supervision are supposed to be subdivided and its outcome should be analyzed. Moreover, the customs should conduct the corresponding handling based on the analytical result and risk level, for instance, check every batch of cargoes, exam the cargoes randomly and audit any companies at random. Second, a mechanism which can update the risk management information is supposed to be established, which requires the building of comprehensive databank that can automatically audit according to the reference materials and the characteristics produced by the system and special transaction mode. In addition to the special requirement, only the transactions deemed risky by the filtering will be sent to the customs staff for manual handling. The equipping with the comprehensive databank should ensure all data elements such as the country of origin, quarantine, classified alarming and the like and take into account all elements while dividing the risk levels. While determining what kind of treatment to importers and exporters, risk management is one of the fundamental components, in other words, risk management offers a more flexible management system.

- (2) Flexibility of supervision is supposed to be enhanced. There is a wide scope and many aspects as to flexibility that includes:
- ①Different treatment will be given to the importers and exporters in accordance with the different risks on the basis of customs duty, that is, it is possible to give preferential treatment to certain importers and exporters for they are deemed that they will not bring any risk to national taxation or embargo, we also call the relationship sort of cooperative partnership.
- ② Customers can enter the operating system to get the report from the system in different ways. And the system is available to combine a couple of proposals to adapt itself to the different business demand, customer demands, service choices and trade volume, that is, the flexibility of input system at the prior end and output system at the latter end.
- ③The system is supposed to have the capability to adapt to the future technological changes and practical methods, namely, the modularization of system platform.
- ④ As a matter of fact, over 80% of the cargoes, the risk are pretty small in terms of value, quantity or the perspective of the importers, moreover, the cargo flow can be accelerated once these cargoes are marked exactly. Thus, we say flexibility indicates the offer of convenience to the transport with low risk, and meanwhile, we should develop the capability to identify the cargoes with high risk and can properly devote certain resources and dedication to the monitoring of the cargoes with high risk.
- (3) Obviously the cooperative partnership with enterprises is quite necessary. It's the plan to establish the cooperative partnership that many developed nations are implementing. In the past the customs focused on the cargoes while the modern

customs system requires the customs' focus on the enterprises and cargoes. The regulation of enterprise conducts by the customs is to regulate the import and export logistics from its origin, which effectively solved the major contradictions in how to strike a proper balance between strict supervision and rapid clearance.

The customs can take the following measures to implement the supervisory mode: Firstly, the customs must have to analyze the operating system of importers and exporters fully and select some law-abiding traders with good reputation and business turnover. Second, the customs must have to establish the enterprises archives databank and monitor the import and export of companies through the customs risk management platform and on the basis of current enterprise classification further perfect and improve the credibility evaluation system. Third, the customs have to offer concrete preference to the selected enterprises with good reputation in accordance with the risk level of enterprises. Then, we can see that the cooperative partnership between the customs and enterprises will not only intensify the monitoring of the cargo flows but also monitor the documents and asset flow of enterprises as well as the collection and analysis of important information in the production and sales links, which undoubted will make the supervision much more effective; On the other hand, enterprises become part of the cooperative partnership and receive the regulation of import and export conduct by the customs, thus two win situation comes from behind, that is, what enterprises do can not only meet the supervisory requirement of customs and enjoy the preferentially convenient clearance and the internal management of enterprises tend to be more perfect and highly efficient. We can see that the cooperative partnership with enterprises is based on the management concept of honesty for convenience, which widen the time and space of customs supervision and can be named as the transformation of supervisory mentality as well as the innovation of management means.

4.5 Solve the problems occurred in the process of clearance procedures simplification to further the reform

(1) Reform the work system and optimize the port service environment. To tackle the incomplete conditions of one stop service at port and the relatively enduring time of declaration and inspection, Shanghai customs took lead in putting the work system of five work days plus weekends into trial use, that is, the work system of five work days plus weekends and the system of make an appointment with inspection and declaration at night at airports and certain sea ports of Shanghai, which can offer seven-day declaration and inspection service. Besides, the work system of cargo release after check and exam at relevant ports all the year around. And the implementation of these work systems has achieved pretty good effect and can be popularized to the nationwide. The work system of five work days plus weekends has radically alleviated and eliminated the congestion and suspension in information flow, logistics, people resulted from the past five-day work system, and further enhanced the work efficiency at port and optimized the environment; Thus Shanghai port can further adapt itself to the increasingly growing requirements of foreign trade and meet the demands of import and export enterprises. And starting from 2008, Shanghai customs lay out the four-year plan for furthering the reform at Shanghai customs.

Table 4.1 Four-year Plan of Reform at Shanghai Customs Starting from 2008

2008	2009	2010	2010
1)Prospectus of revision	1)Completion of E-BASE		
on customs law	system for import declaration,		1)Popularize paperless
2)Training of customs	which is to be widely applied		clearance and optimize
officials as well as	to airports, ports	1)Completion of	the clearance work on
importers and exporters,	2)Enabling the public	trial use of IT	the spot
declarant	information service system in	system	
3)Improve public	wide range	2)Completion of	2)Establish and improve
information service with	3)Training of E-BASE on	comprehensive	risk management
an aim to get traders and	customs officials	application of	mechanism to exalt the
agents known the new	4)Expanding the application	E-BASE	intelligentization level
customs flow and	scope of E-BASE	system	of customs
application of IT system	5)Development of other	3)Comprehensiv	management
4)Define the	modules in IT system, in	e application	3)Reconstruction of
requirements of software	particular, export declaration,	of IT system	flows and construction
and hardware as well as	statistics of taxation, hauling,		of new maquiladora
communication	warehousing		mechanism
technology			

Source: Shanghai Customs

(2) Expand the coverage of the enterprises by the clearance reform and enhance the influence of reform

① Expand the enterprise coverage of clearance pattern featuring inspection and declaration in advance and release with the actual, which is initiated in Shanghai and widely adopted at major ports nationwide for the time being. The mode puts the procedures of declaration and inspection in advance to the arrival of the transport means and makes it possible for the pickup of the cargoes once cargoes arrived at port, which shortens the time for pickup of cargoes. However, at the moment the rate of inspection and declaration by enterprises is still low. Then, what we need to do right now is to actively guide and propel the information construction inside the

enterprises and adopt the declaration beforehand to further improve the rate of declaration and inspection in advance.

- ②Expand the trial coverage of faster clearance at bonded areas and export processing zones. The faster clearance is the three links including entry inspection, declaration and pickup of cargoes can be done at one stop within the bonded area after the arrival of cargoes and direct transport to the bonded area. While the mode of trial points at processing zones for faster clearance is simultaneous handling with the declaration in advance, shipping bill after-check, release at gate, administrative formalities and logistics, then cargoes are directly transported to the export processing areas under the supervision of GPS and picked up by the enterprises within the processing zone.
- ③ Expand the scope of the enterprises that can enjoy the convenient clearance. General Administration of Customs originally stipulated that the enterprises whose export volume must exceed USD100 million can enjoy the convenient clearance, which is in actual fact a too high requirement for quite a few companies, then the customs is supposed to lower the threshold and get more enterprises inside the scope of preferential treatment of convenient clearance.
- (3) Accelerate the construction of e-platform with a wider scope of networking and full service function
- ① Promotion of the networking management of processing trade e-accounting is another new move to deepen the reform of clearance procedures simplification. It is the networking management of processing trade e-accounting that optimized the clearance management mode and facilitated the export. On the basis of the first batch

of successful trial operation, Shanghai customs can facilitate the trial operation of processing trade e-accounting according to plan and step by step and make it possible for the qualified enterprises to join in the network and expand the coverage of networking enterprises.

- ②Accelerating the networking between export processing zones, bonded areas and e-platform of clearance procedures simplification is a must.
- ③ Trial use of one document two declarations, that is, enterprises input the date of relevant information once-off through the e-platform of clearance procedures simplification, which will send the data of entry inspection and declaration to the quarantine and inspection department and customs respectively, which will reduce the repeated procedures and improve the efficiency of data input and accuracy.
- ④ Facilitate the eletronized application and development of export ten-set bill by sea transport as well as the e-application system of applied shipping information. At present, Shanghai customs has already completed the design work of the export e-document system integration. The development work is now undergoing and part of the e-document has been put into operation.
- (4) Facilitate the regular operation of the international freight forwarding industries and markets. Facing the status quo of the current international freight forwarding market, Shanghai customs must have to devote itself to facilitate the normative operation of the international freight forwarding enterprises in a big way and the following is the applicable measures supposed to be taken:
- 1 Enact the service norms of Shanghai international freight forwarding industry to

guide them to operate its business normatively.

- ② Establish the democratic appraisal system of service level and daily complaint system. Implement service commitment system and accept the supervision from all society.
- ③ Strengthen the supervision and management of the freight market and severe punishment will be given to enterprises that seriously violate the laws and regulations, raids the market, do harm to the interests of the customers.
- ④ Fostering the normative freight forwarding market with an aim to breed a batch of freight forwarding enterprises with good brand effect and form a freight forwarding market with normative services and full competition.
- (5)Regulate the charge administration and reduce the clearance cost
- ① Straighten out the charge items. Shanghai customs is supposed to publicize the necessary links and charge items in the clearance process; revenue from administrative and institutional fees, non-selectable service charges and standard are supposed to be open to the public after reassessment in accordance with the legal and reasonable principles; selectable service charges are implemented according to the principle of independent consignment; service charges that has been naturally formed in the market are supposed to be improved in its charge transparency as well.
- ② Reduce the charge level. It must have to be strictly implemented if there is a national regulation, and it's up to the price department in charge to check and ratify the price separately in the lower cost principle; According to trial operation and promotion of one bill of entry, two declarations, Shanghai customs will gradually

combine the formalities of quarantine and inspection and entering and reduce the entering charges; Shanghai customs and inspection and quarantine departments will put the check points of imported containers together at the areas that includes port area, free trade zone and processing zone as possible as it can to avoid the repeated check as well as the corresponding charges resulted from it.

③ Streamline the charge move. Unify the charge criteria of inspection inside and outside the Shanghai port and it's up to the municipal price department in charge to carry out the universal management of the charges resulted from the customs and quarantine and inspection.

(6) Realize the work mechanism of clearance procedures simplification

- ① Perfect the work mechanism, to be more exact, perfect the meeting system of leading groups at various levels that advocates the innovation of simplifying the clearance system and the leading group will hold a plenary meeting annually discussing the mentality and measures concerning the simplification of clearance procedures; meeting will be held in time for discussion into how to coordinate and tackle it in case of important tasks or major issues; perfect the meeting system of department heads contact mechanism between members who are undertaking the simplification of the clearance procedures and symposium are held in time to coordinate and tackle the related problems in the daily work at port; perfect the work session system of seaport and airport and regular circular is needed for the coordination of conditions and problems in the frontline work.
- ② Lay down the laws and regulations on the integrated management of port. Port regulation is probed and drafted with an aim to provide the legal safeguard for intensification of port construction and deepening of simplifying the clearance

procedures.

③ Formulate the laws and regulations on the port electronic platform and electronic data. Governing regulation on the electronic data and port electronic platform construction are researched and drafted; Prior to the publication of the related regulations, it is up to the port administration office, information office, the customs, quarantine and inspection, maritime bureau to dispatch document jointly making universal stipulation on the relevant problems which enables the enterprises to have regulations to abide by.

CHAPTER 5 CONCLUSIONS

The sizzling development of port logistics necessitates much higher clearance efficiency at Shanghai customs, and a variety of functions, legal system and management style of clearance management at Shanghai customs are supposed to be adjusted for adaptation to the international norms and the requirement of the rapid development in port logistics driven by the advancement of international logistics. The improvement in clearance efficiency is conducive to the boosting of port logistics efficiency and further spurs on economic development of port cities, namely, the surrounding area, which is of practical and far-reaching significance.

The existing problems in Shanghai customs clearance are analyzed and the status quo and deficiencies in clearance reform at Shanghai customs are discussed in this essay and the corresponding countermeasures are put forward as well. And the major conclusions are just as the following:

- (1)The gap in customs clearance between Shanghai and the developed nations are mainly embodied in the clearance flow, clearance structure, clearance procedures, clearance factors, clearance efficiency, among which the clearance efficiency is the concentrated reflection of the prior four aspects. The reasons for the drastic gap in customs clearance between Shanghai and the developed nations mainly include: lack of the transparency in customs laws and regulation; declaration, price auditing, classification beforehand as well as the unavailability of check mechanism after release of cargoes; duplicated department in charge, links and formalities in the process of declaration; interaction of various links in clearance flow of "serial mode"; backward evaluation mode at Shanghai customs; slowness in digitalization construction at Shanghai customs; quality of customs and customs official still need to be improved, which put a dent in the clearance efficiency at Shanghai customs to a large degree and need to be tackled immediately in the customs reform at Shanghai.
- (2) The phased positive result has been achieved in reform on the simplification of customs clearance procedures after years of efforts, which boosted the clearance efficiency of customs at various areas to some extent and created the favorable surroundings for the development of port logistics. The simplification of customs clearance procedures is long-term and systematic project, the current achievement in the reform is comparatively less, which is supposed to be furthered. And some deficiencies occur that still need to be improved in the process of the simplification of customs clearance procedures.
- (3) There is a common point in the success of customs clearance reform in some developed and developing nations, namely, the reform is carried out from the perspective of legislation, training of customs officials, digitalization construction at customs as well as the evaluation mode. US, Japan and Singapore are the most representative of all.

(4) And the following measures must have to be taken to enhance the clearance efficiency at Shanghai customs: first, on the basis of the successful experience by customs in some developed and developing nations, reform is supposed to be launched at Shanghai customs in terms of legislation, training of customs officials, digitalization construction at customs as well as the adjustment of evaluation mode; Second, Concrete countermeasures are supposed to be taken aiming at the existing problems in clearance structure, clearance flow, clearance procedures as well as the deficiencies in the customs supervision. And these concrete measures include: the establishment of clearance flow in the serial mode with dumbbell structure and one-station clearance formalities; Supervisory mode is reformed and supervisory efficiency is boosted through intensification of risk management, enhancement of flexibility as well as establishment of cooperative partnership; Through the reform of work mechanism at customs and the expansion of customs clearance reform coverage on enterprises, the construction of e-platform with the multiple service functions will be accelerated, and the regulated operation of the international freight forwarders and freight forwarding market as well as the regulated charges management are facilitated, and the actual problems will be solved in the realization of work mechanism in clearance procedures simplification.

Enhancing the clearance efficiency is a systematic project, and the reform at customs can only be done with close cooperation between various parties. The reform is supposed to be launched in the customs itself first, which should become the key link to facilitate the development of port logistics instead of only serving as an organ of authority. But it doesn't follow that the customs supervision will be crippled, and quite the reverse, partnership with the importers is formed through application of risk management and establishment of flexible computer platform, which will boost the clearance efficiency of the customs dramatically.

Informative communication and dialogue mechanism with enterprises are supposed to be established in the implementation of customs reform, which make it possible for enterprises to have access to commonly analyze and solve various problems occurred in the process of clearance together with the customs and enhance its competitiveness effectively.

The clearance efficiency at Shanghai customs will catch up with the advanced levels the world over in the near future and make contributions to the vigorous development of port logistics in China with the resolution in reform of clearance procedures and far-sightedness.

References

Chen Liu qin, (2002), The New Characteristics of Modern Port Development and Construction of China Port, China Third Party Logistics Network

Chen Yi long, (2000), *Transport Economics*, People's Transport Press

China General Administration of Customs Website: www.customs.gov.cn

China Society Press (2004) China Federation of Logistics and Purchasing: (China Logistics Yearbook 2004)

Chopra S, (2001), Supply Chain Management: Strategy, Planning and Operation, New York: Prentice Hall,

Comparison of Port Logistics Information System in Asia-Pacific Region www. jctrans.com

Coyle J J, Bardi E J, Langley, (1996) *The Management of Business Logistics*, West Publish Company,

Donald J Paul Shaux, (1999-12), Logistics Management: *The Integration of the supply chain*, Mechanical Industry Press

Ding Ke yi (2001, (11)), Port and Modern Logistics, China Port

Fan li li, 2002,(2), A Glimpse into the Global Port Logistic, China Port

Guo Qun, Dai Zhi qiang (2007) Twenty-Year Review of the Customs Law Implementation in the NanNing Customs Law Newsletter http://www.pagx.cn/html/2007/8-8/20070808101131152.html

Hou Xue dong, 2002, (4), Research on the Port Logistics Development, Port Economics

Jiang Hui yuan, Xie Wu zhou, Wang Wan xiang, 2003, (14), Accelerated Construction of Modern Port Logistics Center, Business Times

Jiang Wei jun (2002) Port Industry Analysis Report 2002 http://finance.tom.com

Li Hua, 2003, (1), *The Future Development Trend of Ports in China*, Port Logistics, Port Economics

Lumsden Kenth, Stefansoon Gunnar, Tilanus Berhard, (2003), *Collaboration in Logistics*, European Journal of Operational Research, 144(20): 235-236

Lv Jing, (1998), *Decision-making on International Shipping*, People's Transport Press

Meng Xiang lin (2007) *Probe into Countermeasure of Port Logistics Development*, Peking University Lian Tai Supply Chain Research and Development Center www. pkultc.com

Rutur Stephen M, Gibson Brian J, Williams Susan R, (2003), *The Impacts of the Integrated Logistics System on Electronic Commercial and Enterprise Resource Planning Systems, Transportation Research Part E: Logistics and Transportation Review*, 39(2): 83-93

Shanghai Port Management Committee Office (2003) Policy Introduction of Shanghai Port Construction on "Simplification of Customs Clearance Procedures"

State Economic Trade Commission (2002) China-Canada Inland Multi-modal Transport Project Investigation Report

The data and raw materials are collected from: Zhu Xiao ming (2006) Facilitation of Clearance Procedures-improve the efficiency of Shanghai Clearance, FuDan University Press, and the website: www.cjhy.gov.cn

Wang Hai ping,2001, (8), The Strategic Significance to Facilitate the Modern Logistics Development with an aim to Establishment of Port Logistics Center, water carriage economy

Wang Yi qun, (2002), *The Development of Logistics at port is focused on the Major Works*, China Third Party Logistics Network

Wu Ping, 2003,(6), The Inspiration of Comparison—The Development of Port Logistics in China from the Perspective of Asian Container Logistics Center, China Logistics and Sourcing

Xu Da zhen, Zhu Bing qiu, (2003), *Operation Management of Port Enterprises*, People's Transportation Publishing House

Yang Cheng xin, 2002,(8), Analysis into the Structure of Port Logistics System, China Port

Yao Li xin, (2000), Analysis into Logistics Pattern of e-business sales, Xia Men University Press

YeJian, (2005), Innovation of Customs Logistics Monitoring Mode for Trend of International Logistics

China Shipping and Trading Information Network www.snet.com.cn

Yu Zhong xu (2004(3)) Sober Reflection after Ascending Ranking, China Water Carriage

Zhang Geng yun, 2003, (5), Cases of Port Logistics: Logistics Center of Bonded Area at Tian. Jin Port

Zhang Ji guo, 2003,(8), Strategy of Information Platform Construction at Port Logistics Center, Logistics Technology

Zhao Gang, (2005), *Operational Management of Shipping Enterprises*, People's Transport Publications

Zhen Hong, 1999, (8) ,On Optimization of Port Logistics, China Port

Zheng Rong cai,(2002,(1)), *International Logistics Development Situation*, Logistics Technology Publications

Zhu Xiao ming (2003) Facilitation of Clearance Procedures-improve the efficiency of Shanghai Clearance, FuDan University Press, P₂

Zhu Xiao ming (2003), "Simplify customs clearance procedures"——improve Clearance Efficiency in Shanghai Port, FuDan University Publisher P182

Zhu Xiao ming (2006) Facilitation of Clearance Procedures-improve the efficiency of Shanghai Clearance

Zhou Zai qing, Yang zhi gang, (2004), *Modern Logistics Management*, People's Transport Publications

 $http://www.ce.cn/ztpd/tszt/hgjj/2005/zhwllt/dingyi/200510/25/t20051025_5017890.shtml$

http://www.foodmate.com/bizinfo/bgzn/otherzhn/2009/906.html 2009