

# 「參訪新加坡相關機關海域監控 及後勤相關系統、設施及作業機制」 心得與建議

## <Visiting Relevant Institutions of Sea Area Monitoring and Logistics Systems, Facilities and Operating Mechanism in Singapore> Reflection and Suggestion

◎文、圖/ 邱謙忠 ◎Article,Photos/ Chiou Chian-jung

### 壹、前言

台灣因四面環海，海域資源豐富，且位處國際航道要衝，海面航行作業船舶眾多，專屬經濟海域與日、中、菲重疊，漁權爭議不斷；另近期政府大陸政策開放，兩岸交流日益頻繁，海上糾紛案件遽增，政府海洋政策的推展，積極開發海上藍色公路及提倡海上休閒活動，海上意外事件發生的機率與日俱增，故海上公共安全及緊急救難任務已為政府保障人民生命及財產安全之重要工作之一。

本署依法職司漁業巡護及海難救助等事項，如何強化整體海域監控、指揮調度能力及提昇後勤補保作業效能，以充分支援各項勤務執行，為現今亟需面對之課題，因新加坡與台灣地理條件及國情相似，藉由此次辦理「赴新加坡參訪海岸監控系統及後勤相關系統」案，瞭解新加坡警察總部海岸警察防衛隊、港務管理局及新加坡科技電子公司等單位，有關海岸防禦、監控設施、後勤補保系統現況及作業機制，促使本署與新加坡執法及港務管理機關間實施良好互動，期使雙方瞭解工作職掌與任務特性，提供本署未來相關系統與相關作業機制發展之參考準據，以提昇本署三大核心任務「海域執法」、「海事服務」及「海洋事務」之執行能量。

### 貳、新加坡地理簡介：

新加坡位於馬來半島南端、麻六甲海峽出口，赤道以北約137公里處，北隔柔佛海峽與馬來西亞相鄰，藉1056公尺長堤與馬來半島通連，南隔新

### Part I. Preface

Surrounded by the sea, Taiwan is abundant in sea resources and located on the pivot of international waterway, plenty of shipping activities taken place on its sea area. Because of the overlapping of Exclusive Economic Zone (EEZ) with Japan、China and Philippine, there is a constant controversy over the fishery rights; moreover, the government's open-up policy toward China stimulates the cross-strait communication, and the maritime dispute cases increase drastically. The government sea policy aims to promote and develop Blue Highway on the ocean, and advocate water recreational activities, raising the chances of possible accidents, thus maritime safety and emergency services have become the most important missions of the government to protect the lives and property of its people.

According to the law, the Administration is responsible for the issues as fisheries patrol and search and rescue operations on sea. How to strengthen the whole sea area monitoring、the ability of directing deployment, and elevate the efficiency of logistics support in order to fully sustain the execution of various services are urgent tasks we have to face presently. Due to the similar geographical conditions and national circumstances of Singapore and Taiwan, with the conduct of the case "Visiting Relevant Institutions of Sea Area



加坡海峽與印度尼西亞相望，控制麻六甲海峽咽喉，為印度洋及南太平洋之交通孔道及歐、亞、澳海上交通之樞紐。全國由54小島組成，其中24小島無人居住，新加坡島佔全國面積9/10，海岸線長14萬公尺。全國地勢平緩，平均海拔15公尺，最高海拔166公尺，海岸線全長19萬3千公尺。



新加坡地理位置示意圖。

The Sketch Map of the Geographic Location of Singapore.

#### 參、參訪所見情形：

##### 一、新加坡警察總部海岸防衛隊

新加坡海岸防衛隊是新加坡警察部隊執行水上任務的執法單位。在新加坡的主權水域進行執法，與新加坡海事港務局、移民檢查局協同進行海上搜救與執法任務，在新加坡領海內維護法律與秩序，確保其海域及海岸安全。

(一) 目前海岸防衛隊擔負的任務主要有：

##### 1. 領海區域的控制

阻止非法移民進入新加坡海域已經成為海岸防衛隊重要任務之一，該隊運用於全島涵蓋綿密的雷達系統和巡邏艇上之光電及夜視裝備，最近幾年上偷渡的人數已經大大的減少。

##### 2. 人員訓練

海岸防衛隊人員訓練制度及設施十分完善，



模擬查驗訓練控制中心。

Control Center of Simulation Training Field of Cargo Ship Inspection.

Monitoring and Logistics Systems, Facilities and Operating Mechanism in Singapore”, we are able to understand the present situation about coast defense, monitoring facilities, integrated logistics support systems and operating mechanism of the units as Singapore Police Coast Guard (PCG), Port of Singapore Authority and Singapore Technology Company, so as to enhance the interaction between the Administration and the organizations of law enforcement and port management in Singapore, and further reach to a mutual understanding of work duties and mission characteristics in both sides, providing the Administration a guideline of the development of relevant systems and operating mechanism in the future to boost the energy in executing our three core missions: “Maritime Law Enforcement”, “Maritime Services” and “Maritime Affairs.”

#### Part II. Singapore Geographic Location:

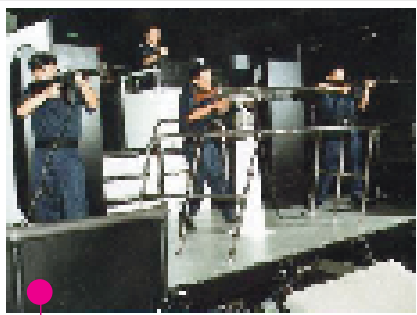
Singapore located at the southern tip of the Peninsular Malaysia, the exit of Strait of Malacca, lies around 137 km north of the equator, bordered by Malaysia with Straits of Johor at the north in between and by Indonesia with the Singapore Strait at the south, connected with the Peninsula Malaysia by a 1056m-long causeway. It takes hold of the throat of Strait of Malacca, a critical pathway of Indian Ocean and South Pacific Ocean and a waterway pivot of Europe, Asia and Australia. The whole country is consisted of 54 isles, among which 24 isles are not inhabited. The Singapore Island covers 9/10 of the country's area with 140 thousand-meter-long coastline. The terrain of Singapore is flat and gently undulating with average altitude of 15 m, and the highest altitude of 166 m, and its coastline extends 193 thousand meters.

#### Part III. Factual Report of the Visiting

##### I. Singapore Police Coast Guard (PCG)

PCG is a law enforcement unit of Singapore Police Force that executes maritime missions, enforcing the law on the territorial





模擬射擊訓練。  
Simulation of Shooting Training.



模擬雷達操控及演練戰術。  
Simulation of Radar Control and Tactics Drill.

基地中建置有模擬貨輪實境查驗訓練場、雷達戰術及射擊模擬器等設備，有利新進人員迅速適應海岸防衛工作，並提昇各項勤務執行素質。

### 3. 跨機關合作支援執法

新加坡有關處理海上事務之機關間非常重視協調合作，海岸警察衛隊、港務局及海軍等單位，已針對全島雷達系統、自動船舶辨識系統等，建置一套跨機關資源分享運用及單位間橫向協調聯繫機制，對充分提高新加坡各單位海域執法及勤務執行效能上，有相當助益。

### 4. 跨國合作交流協同執法

新加坡海岸防衛隊從1990年起即與新加坡海軍以及其他一些國外機構開展聯合執法任務，和馬來西亞皇家警察部隊，印度尼西亞海軍保持緊密合作關係，並與美國海岸防衛隊，新加坡海軍，以及其他幾個東南亞國家的執法力量一起參與年度“海上戰備與合作演習”。並積極參與每年舉辦之亞洲海岸防衛首長會議，藉此與其他國家海岸防衛機關充分溝通，建立跨國合作交流管道。

waters and cooperating with Maritime and Port Authority of Singapore (MPA) and Immigrants & Checkpoints Authority (ICA) to conduct search and rescue and law enforcement missions on sea, and to maintain the laws and the order within the territorial waters and ensure the safety of the sea area and the seashore.

### (I) The Current Missions of PCG:

#### 1. Manage the Territorial Waters

Preventing illegal immigrants from entering Singapore sea area is one of the major missions of PCG. Utilizing radar systems covering the Whole Island, and deploying optoelectronics and night-vision facilities on the patrol boats, the team has greatly reduced the amount of illegal immigration in recent years.

#### 2. Faculty Training

The training systems and facilities of PCG are very complete and of good quality. The base of operation is utilized with facilities as Simulation Training Field of Cargo Ship Inspection, Radar Tactics and Shooting Simulator to effectively help the new employees adapt to the coast guard mission promptly, and elevate the quality of various services.

#### 3. Inter-Organization Cooperation of Law Enforcement

Singapore gives much weight to the co-ordinations and cooperation between the related organizations of maritime affairs. Units such as PCG, MPA and the navy have established an inter-organization mechanism of resources sharing and sidelong co-ordination and contact for the island-wide radar systems and Automatic Vessel Identification



## (二) 組織結構

新加坡海岸防衛隊目前在全島擁有4個地區基地，分別為：南部布拉尼地區基地，西部蓋爾地區基地，北部林厝港地區基地，和東部洛陽地區基地，另外在烏敏島地區還有一個小型的基地。



由於新加坡位處赤道無風帶，水域風浪平靜，且與鄰國接近，為能快速反應，所配屬巡邏艇均以小型船艇為主，船數、噸位如下：

1. Command Boat 約100噸級共2艘。
2. PH Class 約50噸級共10艘
3. PT Class 約20噸級共40艘。



Command Boat 指揮艇  
Command Boat



PH Class 巡邏艇  
PH Class Patrol Boat



PT Class 巡邏艇  
PT Class Patrol Boat

System, which effectively boost the efficiency of various maritime law-enforcement units and of the execution of services.

4. Inter-national Communication and Cooperation of Law Enforcement PCG has begun cooperating with Singapore Navy and other foreign or organizations to execute law-enforcement missions since 1990. Besides of the close partnership with the Royal Malaysian Police (Polis Diraja Malaysia, PDRM) and the Indonesian Navy (Tentara Nasional Indonesia Angkatan Laut, TNI-AL), PCG participates in the annual "Maritime War Preparations and Cooperative Maneuvers" with other law-enforcement forces of several southeast Asian nations, and actively takes part in the Heads of Asian Coast Guard Meeting every year to fully communicate with other foreign coast guard organizations and establish inter-national cooperative channels.

## (II) Organization Structure

PCG currently has four main bases and a minor one all over the island: Southern Brani Base、Western Gul Base、Northern Lim Chu Kang Base、Eastern Layan Base and a small Ubin Post.

Located in the doldrums, Singapore has a calm sea area and is close to the neighbor countries; in need of quick reaction, the deployed patrol boats are mainly small ones, the numbers and tonnage are as follow:

1. Command Boat, two 100-ton class ships in total.
2. PH Class, ten 50-ton class ships in total.
3. PT Class, forty 20-ton class ships in total.
4. PC Class, twenty 10-ton class ships in total.





PT Class 巡邏艇  
PC Class Patrol Boat

4.PC Class約10噸級共20艘。

海岸防衛隊的船隊分為3個中隊。「攔截中隊」裝備有PC級的高速巡邏艇能夠在柔佛海峽處就能攔截住非法移民。「港口中隊」裝備更新的PT級的船隻，主要應對港區的突發事件和保持警方的存在來維護新加坡港的安全。「海岸中隊」裝備PH級的海岸巡邏艇維護新加坡水域航道的通行，保障航道的安全。另外海岸防衛隊還擁有一支精銳的特勤力量，即「特種任務中隊」，其任務功能類似「本署特勤隊」，配賦高機動性的船艇與精良的武器配備，擔負新加坡海域特殊救難與反恐等特殊任務。

### (三) 人員

海岸防衛隊目前擁有1000多名警員，是新加坡警察部隊中最大規模的執法力量之一。近年來海岸防衛隊為解決人員不足問題，已開始進用替代役人員擔任一般庶務工作及簡單之巡邏勤務。



新加坡海岸防衛隊各類服裝  
Uniforms of PCG

### (四) 後勤補保管理

海岸防衛隊整體後勤管理作法係以外包為主，於警察總部設有後勤局，海岸防衛隊內部則設「後勤行政組」，人力約20人，其業務包含駐地廳舍的維護、裝備器材保養、槍械維修、服裝籌補等，另外，針對船舶維修亦設有維修部門，整體裝備保養區分三級，初級維護由海岸防衛隊人員自行處理，

The fleets of PCG are divided into three squadrons. "Interceptor Squadron", equipped with PC class Fast Patrol Boat, is able to intercept the illegal immigrants at the Straits of Johor. "Port Squadron", equipped with more advanced PT class vessels, mainly reacts to the abrupt events and maintains the presence of police force to secure the port. "Coast Squadron", equipped with PH class coast patrol ships, ensures the safety of the navigation on the waterways. In addition, PCG has an elite force called "Special Duties Squadrons", which is similar to the "Special Units" of the Administration, equipped with high-mobility ships and superior weapons, undertaking special rescuing and anti-terrorist tasks.

### (III) Faculty

PCG, having more than one thousand police officers, is the one of the largest law-enforcement forces in Singapore Police Force. In recent years, in order to overcome the shortage of its faculty, PCG starts applying the substitute military service personnel to the general affairs and basic patrol tasks.

### (IV) Logistics Support Management

The whole logistics support management of PCG is chiefly outsourcing. A logistics office is set in the police headquarters, and "Logistics Administration Section" in PCG with approximately 20 staffs. The tasks include the maintenance of the station building, upkeep of the equipment, repair of firearms, preparation and patchery of the clothing. Moreover, a Repair and Maintain Department is set to keep the boats in good condition. And the whole equipment maintenance is divided into three levels: the initial level of maintenance is processed

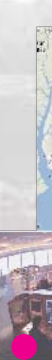




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新加坡港務局POCC2控制中心  
POCC2 Control Center of Port of Singapore Authority

新加坡港務局為掌握轄區內海面船舶之動態與靜態，提供航商及船舶完整之服務，已建有船舶交通管理系統（VTMS）、自動船舶辨識系統（AIS）及港口船舶辨識與監控系統，其中該局建置之自動船舶辨識系統（AIS）係依國際海事組織（International Maritime Organization, IMO）訂定的Universal AIS標準，主要功能計有「船舶之間的避碰」、「船舶報告供沿海國取得船舶」及「其載貨資訊、作為VTS交通管理之工具」等3大功能，並將船舶相關動靜資訊整合於船舶交通管理系統（VTMS）平台上，使目前系統支援港埠管理方面更有效率。

以下就本次參訪港務局港務控制中心VTC塔台內相關系統逐一說明。

#### （一）船舶交通管理系統（VTMS）

新加坡港務局之船舶交通管理系統，整體系統係採用挪威NOR-CONTROL公司之VTMS系統為底層，於港區設置港區雷達11處、自動船舶辨識系統（AIS）7處、無線電系統、電腦及控制系統、閉路電視（CCTV）系統、特高頻無線電探向儀等相關設備，並將相關雷達資訊提供新加坡警察總部海岸警察衛隊分享運用。



新加坡港務局港區雷達  
Port Area Radars of Port of Singapore Authority

the Universal AIS standard concluded by International Maritime Organization (IMO). Its three major functions are “anti-collision among vessels”, “providing ship report for the application of coastal nations to obtain boats and their cargo information”, and “as the tools of VTS traffic management”. AIS further integrates related information of ship movement into the platform of VTMS, making current system support the port management in a more efficient way.

The following is the illustration of the systems in VTC control tower:

#### (I) Vessel Traffic Management System (VTMS)

The whole system is based on the VTMS of NOR\_CONTROL IT in Norway, setting up radars in 11 places around the port area, Automatic Identification System (AIS) in 7 places, radio systems, computer control systems, Closed-Circuit Television (CCTV) Systems, VHF wireless direction finders and other related facilities, which shares radar information with PCG.

#### (II) Port Vessel Identification and Monitoring Systems

Port of Singapore Authority builds separately a vessel identification and monitoring system for the fishery ships and recreational boats which are under 300-ton class and with no AIS. By installing a signaling device on the boat, the control center could receive information sent by the GSM system, such as the name of the boat, its course, speed and longitude and latitude, so as to have full knowledge of the condition of various ships on the waterways.

#### (III) Three-Way Reporting Mechanism

In addition to the three-way co-operative platform with neighboring Indonesia and Malaysia, Singapore establishes a mechanism compelling the boats to give a notification automatically. In accordance with the “Straits Channel Responsibility Area”, the boats that enter the Straits of Malacca



## (二) 港口船舶辨識與監控系統

新加坡港務局針對未滿300噸以下未安裝自動船舶辨識系統 (AIS) 之漁業及娛樂漁業船隻，另建置乙套港口船舶辨識與監控系統，於船上安裝信號發送器，利用GSM系統發送該船隻船名、航向、航速及經緯度等資訊至控制中心，以充分掌握航道內各類船舶活動狀態。



港口船舶辨識與監控系統  
Harbor Identification and Monitoring System

## (三) 建立三方通報機制

新加坡除與鄰近國家印尼、馬來西亞建立三方合作平台外，並建立強制船隻自動通報機制，對進入麻六甲及新加坡海峽之船隻，依劃分之「海峽水道責任區」，運用各項電子交換方式（如e-mail、傳真等）實施通報，俾利新加坡港務局獲取各類航行船舶資訊，強化海域航行商貨輪身分識別及船務管理工作。



本署參訪人員與港務局合影  
Group Photo of Visiting Staff and Port of Singapore Authority

## 三、新加坡科技公司

新加坡科技公司係屬新加坡政府及民間出資成立之科技公司，屬淡馬錫控股集團旗下公司，國內

and Singapore Strait have to give a notification in certain forms of electronic exchange (such as e-mail, fax and so on), for the Port of Singapore Authority to gather all sorts of messages of ship and further enhance ship identification and management.

## III. Singapore Technology Company

Singapore Technology Company, a branch company of Temasek Holdings, is a technology company invested by Singapore government and the civilians. It constructs a part of the MRT system and the Forward Command Vehicle (FCV) of National Disasters Prevention and Protection Commission. The following is a brief illustration of the visiting:

### (I). Integrated Communication System

The system could integrate GSN, HF, VHF, UHF, satellite phones and VOIP communication network, and implement the unity of command and deployment. Singapore Technology Company currently has accomplished the integration of the communications of Singapore Navy naval ships and built 12 Forward Command Vehicles for National Disasters Prevention and Protection Commission. It is capable of providing an integrated platform between different communication systems, so as to unite various rescuing information of the disaster area, and make the most use of time when executing rescuing missions.

### (ii). The Third Generation of VIMS

Every radar of the system could track 2000 targets and every multiple-sensor tracker could process 10000 targets. The system applies the latest digital processing technology which greatly enhances the efficiency of detecting small targets on the sea surface, and its 3D image processing capacities could display the heights of the waves and detect the leak of oil.

### (III). Automatic Report and Recall Dispatching System

The system can notify the supervisory level and recall relevant staffs based on the types of



部分捷運系統及行政院災害防救委員會救災指揮通信平台車即由該公司建置完成，信譽成效良好，參訪所見情形簡述如下：

#### (一) 通信整合系統：

該系統可將GSN、HF、VHF、UHF、衛星電話及VOIP通訊網路等實施整合，達到指揮調度一元化之目的，目前該公司已有完成新加坡海軍艦艇通信整合及國內行政院災害防救委員會12輛救災指揮通信平台車建置之經驗，可提供不同通信系統間之整合平台，以統合災區現場各項救災訊息，爭取救災工作黃金之时效。



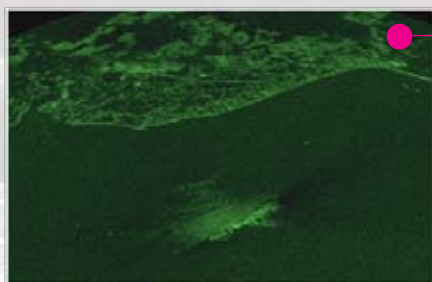
通信整合系統架構示意圖  
Sketch Map of the Framework of Communications Integrated System



國內災防會救災指揮通信平台車  
Domestic Forward Command Vehicle

#### (二) 第三代船舶交通管理系統：

系統內每座雷達站可追蹤2000個目標，每個多傳感追蹤器可處理10,000個目標，利用最新之數位信號處理技術，可大幅提高對海面小型目標偵蒐效能，並具有3D影像處理能力，可顯示波浪高度及偵測石油洩漏情形。



雷達偵測海面油污洩漏3D影像圖  
3D Picture of Radar Detecting Oil Leak

the event, and remind the frontline staffs to report the latest situation. The back-end staffs of the duty command center could systematically and unitedly deliver the current situation, which would help the units of all levels instantly understand the whole situation of the case. Singapore Technology Company has helped Hong Kong Fire Service Department establish similar systems, and effectively carry out missions of accident reporting, staff dispatching and case managing.

#### Part IV. Thoughts and Suggestions

##### I. Integrate Information of relevant Organizations, Establish Sharing Mechanism

Singapore government makes efforts in inter-organization communication and co-ordination. Coast Guard of Police Force, Port of Singapore Authority and Singapore Navy have accomplished inter-organization resources sharing systems, such as island-wide radar system, Automatic Identification System and so on, which provide great advantages on Singapore law-enforcement organizations and the efficiency of government administration. The Administration, on the other hand, has integrated Vessel Monitoring System (VMS) of Fisheries Agency, Council of Agriculture, and the Radar Reporting Display System. In the future, we will make efforts in coordinating Ministry of National Defense and each Harbor Bureau of Ministry of Transportation and Communication, and obtaining domestic "Vessel Traffic Service System (VTS)", "Automatic Identification System (AIS)" and the information of integrated chains in Bo-Sheng Project, in order to achieve the goal of the integration of information between organizations, and establish an inter-organization sidelong coordinative mechanism, so as to fully make the use of the protecting, preventing and rescuing resources of each unit, and to elevate the efficiency of execution of law enforcement and various tasks.

##### II. Develop Short-Range and Medium-Range Radar Systems, Intensify Sea



### （三）自動通報與回召派遣系統

該系統可根據事故類型發出通報至相關管理層級與回召所屬人員，並在特定時間提醒一線處理人員回報最新狀況，後端勤指中心人員可以利用系統化之方式統一傳送當前狀況，使各級單位快速了解案情、指揮掌握及管制案件處理情形，目前該公司已協助香港消防處建立類似之通報管理系統，有效實施事故通報、人員派遣及案件狀況管理等相關工作。

#### 肆、心得與建議

##### 一、整合國內相關機關海上船舶動、靜態資訊，建立分享機制：

新加坡政府致力於機關間溝通與協調合作效能，海岸警察防衛隊、港務局及海軍間，已完成全島雷達系統、自動船舶辨識系統等，跨機關資源分享作業，對強化新加坡海域執法機關整體能量及提升政府行政效率有極大助益；目前本署已完成鏈結農委會漁業署漁船船位監控系統（VMS）整合雷情顯示系統工作，未來本署亦將積極協調國防部及交通部各港務局，獲得國內「船舶交通服務系統（VTS）」、「船舶自動辨識系統（AIS）」、博勝專案整合鏈路資訊，達到跨機關間動、靜態資料整合之目的，並建立跨機關間橫向協調聯繫機制，充分運用各單位海岸防衛與防災救難能量，以提高本署整體海域執法及勤務執行效能。

##### 二、發展本署近、中程雷達系統，綿密海面監控能力，擴大執勤能量：

近年政府大陸政策開放，兩岸交流日益頻繁，積極開發海上藍色公路，為因應與日俱增的海上遇難事件與執行經濟海域漁業巡護任務，維護海上公共安全，保障我方作業船隻安全，為本署首要核心工作之一。藉由本次至新加坡參訪第三代船舶交通管理系統，瞭解有關偵測海面小型目標與3D影像處理能力，顯示波浪高度及偵測石油洩漏等最新之處理技術，未來可輔以納入本署發展近、中程雷達系統之規劃參考，以期能延伸對海面上目標偵蒐範圍，發揮早期各項電子偵蒐預警功能，並可提供即時研析資料，強化監測能力與縮短前置作業時程，提昇本署海域偵蒐監控基本能量，維護民眾生命財

##### Monitoring Capability, Magnify Executing Ability

In recent years, the government's open-up policy toward China stimulates the cross-strait communication. Since the increasing sea accidents, patrolling Exclusive Economic Zone, ensuring maritime safety, and ensuring the security of our operating ships are the core missions of the Administration. With the visit of the third generation of Vessel Traffic Management System in Singapore, the latest technology of detecting small targets on the sea surface and the 3D image processing capacity which display the heights of the waves and detect the oil leak can be a reference of our development of short-range and medium-range radar system. And hope that could extend the detecting range of the targets on the ocean, bring the old searching and warning electronic facilities into full play, provide instant analysis of information, strengthen monitoring capability, shorten the lead time, elevate the basic ability of detecting, searching and monitoring the sea area, and thus achieve the ultimate goal- secure the lives and property of our people.

III. Scheming out Integrated Communication System, Achieve Unity of Command, Boost the Efficiency of Various Task Deployment The Administration could take the experience of National Disaster Prevention and Protection Commission as the reference of designing communication system of the Administration in the future, develop integrated all-area seamless system, provide integrated platform for different communication systems, thus achieve the goals of "unity of coast and sea" and "unity of command", and boost the efficiency of various task deployment.

IV. Refer to Singapore Share Service Outsourcing Experience, Promote Six Reforms of Coast Guard Logistics Singapore government carrying out "Shared Service & Outsourcing" policy has developed to the mature expanding stage. The policy extending from national defense affairs (personnel



產安全。

三、規劃本署通信整合系統，達成指揮一元化，提昇各類勤務調度效能：

本署未來通訊系統可參考國內行政院災害防救委員會經驗，規劃發展整合式全區域無縫隙之系統，提供不同通信系統間之整合平台，達到岸海合一、應變指揮一元化之目的，提昇各類勤務指揮調度效能。

四、參考新加坡共用服務外包經驗，推展海巡後勤六化工作：

新加坡政府推行「共用服務外包」政策已發展到成熟擴張階段，尤其從國防事務領域（人事及財務）擴展到政府機關全面推行，達到共創政府與民間企業雙贏的目的。

反觀國內，自政府組織改造方案提出後，為精簡組織、人事，簡化行政流程，推行政府事務外包工作因受限於法令及採購人員保守心態，成效不甚明顯，而共用服務外包主要用意是要降低政府預算成本支出，建立政府與民間合作夥伴關係，把政府所需資源寄託厚植於民間，共創政府與民間雙贏局面，雖國情環境不同，惟其理念殊值參考。

本署海巡後勤六化工作已納入97年國家建設計畫推展要項之一，「補民力為我力、化我力為戰力」，希望降低本署自身庫存、活絡善用現有物資裝備，並將所需資源寄託厚植於民間，期能發揮極大效能。

五、建立狀況通報處理系統，簡化及加速案件通報處理流程：

為使各類重大狀況發生時，本署各級單位可於系統中快速了解案情，通報相關人員、指揮掌握、管制案件處理情形，未來將參酌本次所見情形，擬規劃本署狀況通報處理系統，以系統化方式統一傳送、通報案件處理狀況，並將案件處理、通報情形執行加以分類儲存，提供相關人員查詢運用，使珍貴的執勤經驗得以傳承，提高各類重大案件處理效能。📞

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and finance) to overall government organizations in particular has led to a win-win result of government and civilian industries.

In contrary, since our government proposed the organization reform plan, in order to simplify organization, personnel and administration procedure, the outsourcing of governmental affairs is restricted by the laws and the conservative views of the purchasing officers, and thus is of little progress. The purpose of "Shared Service & Outsourcing" is to reduce the prime cost of the budget, establish the partnership between government and civilian, root the needed resources deep in civilian, and create a win-win situation of government and civilian. Although the national circumstances are different, the concept is worth learning. The six reforms of coast guard logistics of the Administration have been brought national development plan, "supply the civilian power as my power, make my power the battle capacity." Hope the Administration could reduce the reserves and make the most use of the assets on hand, and place the needed resources in civilian to create the most advantageous effect.

V. Establish Occurrence Notification and Processing System, Simplify and Accelerate Notification and Processing Procedure When various types of occurrences happen, to make each unit of the Administration can instantly understand the case, report to relevant staffs, command and control the processing of the event, the Administration will scheme out a notification and processing system in reference of this visit, which systematically and unitedly delivers and reports the processing condition, and store up the processing and reporting condition in a classified manner for relevant staffs to look up and utilize, and thus pass down the precious experiences and elevate the processing efficiency of various cases.

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