



# 美國海岸防衛隊 管理核心職能的作法簡介

## Brief Introduction to the US Coast Guard Competency Management System

### 壹、前言：

「職能」在近幾年風靡台灣，在各式的企業講座、人力資源研討會、商業書籍雜誌等，無不對「職能」進行詳盡的介紹與討論，組織導入「職能模式」，似乎亦成為一種流行的趨勢。美國海岸防衛隊亦早在多年前即致力建立職能模式，將組織內個人的能力極致化，以共同達成組織的目標。透過本個案的介紹，希提供海巡署未來人力資源管理政策思維參考。

職能的英文是competency，談職能時，要把字首compete（競爭）的概念放入，它是一種與別人相比能夠勝出的能力，一定要有統計學上的「顯著性差異」，才能被列為職能。美國海岸防衛隊對職能的定義是放在個體層次，重視員工能夠在組織情境（包括組織核心能力的限制）下，創造組織效能與實現策略目標的工作績效，而為能展現該工作績效背後所須具備的知識、技術、能力與其它特質（例如性格、動機、價值觀、興趣、自我概念等等），簡稱

### Part I. Introduction

"Competence"-- a term that has run wild and most popular in Taiwan in the past few years --- has been given with detailed introduction and discussion to it in every kind of enterprise seminar, human resources discussion, and commercial publication and magazines, and applying "competency model" seems to be turned into a trend of fashion. US Coast Guard has, in a few years before, worked for establishing competency model, and attempted to optimized personal competence within the organization to jointly achieve the objective of the organization. It is hoped that with the introduction of this case it can be provided as reference of policy consideration for human resource management for the Coast Guard Administration in the future.

When talking about competence it is necessary to deliberate the concept of prefix "compete" which is the kind of capability that will prevail when compared with others. And it can be considered as "competence" only if there is "significant difference" statistically. And the definition by the US Coast Guard is placed upon individual level so that the staff can, under the organization context (including the constraint of organization core competence), create organizational efficiency and realize work performance of strategic objective. In order to demonstrate the equipped knowledge, skill, ability, and its features "such as personality, motivation, value, interest, and self-concept" behind the work performance, abbreviated as KSAOs which



KSAOs，且這些KSAOs是必須經由行為展現且能被觀察到的，就是所謂的職能。職能必須能夠反應到工作績效上，而工作績效對於不同職務會有不同的績效標準；就算同類職務在不同的組織情境下亦會有不同的績效標準，惟有能顯著達成，甚至超越績效標準相關的知識、技巧、能力與特質等行為展現，才可稱作職能。

## 貳、美國海岸防岸隊

### 一、引進職能模式的目的

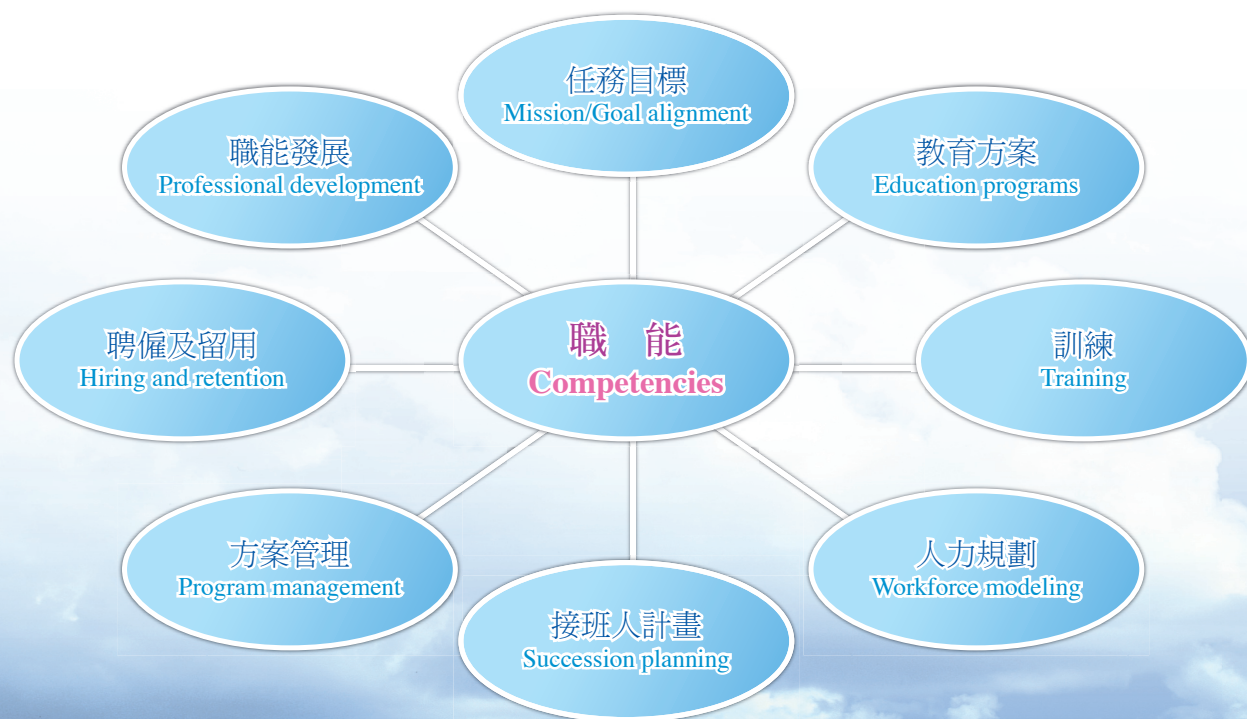
美國海岸防衛隊期望能透過職能的建置，將組織目標、任務、教育訓練、人力規劃、職務接替規畫、方案管理、選才、升遷、留才，以及專業發展等人力資源體系連結起來（如圖1），亦即連結任務、職位、工作與訓練，讓彼此間有一共同的衡量標準，也能藉由各系統的相互搭配，將組織內個人的能力極致化，幫助員工以有效及符合組織價值觀的行為，共同達成組織的目標。

have to be able to be witnessed and observed on work, they are then considered as competence. Competence has to be able to be reflected on work performance, while work performance would render difference performance criteria for different kinds of job assignment. And even if it is of similar job assignment under different organization scenario, there can be different performance criteria. Only if one can prominently achieve and even surpass performance criteria of relevant knowledge, skill, ability, and features and other acts of demonstration before it can be reckoned as competence.

## Part II. US Coast Guard

### I. Purpose of introducing competence model

US Coast Guard would like, with the establishment of competence, to link up with items of human resource system, such as organization objective, mission, education and training, human power planning, succession planning, program management, talent recruitment, promotion, talent retention, and professional development, etc. "found as in figure 1", which is to integrate mission, job position, work, and training so that there is a joint criteria of measures among these items. In other words, it is hoped to make use of complementary coordination of each system so that competence of individuals can be optimized within the organization, and help the staff to, effectively and with conformity to acts of organizational values, achieve the objective of the organization jointly.



◆ 圖1、職能與人資系統關聯圖  
Figure 1. Connection Figure of competence and human resource system



美國海岸防衛隊目前並無單一的方法來衡量、評核或記錄其員工的知識、技術與能力，僅有分別針對各別項目的績效評量，因此，亟需建置一套職能管理系統，以達到下列預期效果：

對員工而言，清楚列出每一個職務該有的 KSAs，員工可依據不同職務所需具備的相關職能而建立個人職涯規劃，為自己設定晉升及發展之目標。

對單位而言，各單位主管能依成員所具的職能，有效的分派工作，完成任務；此外，在協助員工教練和指導的過程中，不但能事半功倍，且可提供更佳生涯諮詢。

對組織而言，促使組織能按優先次序排出重要發展計畫，以充分分配及有效運用資源。其次，一但了解每位員工應具備何種能力後，職能模式可擔任另一角色—衡量員工發展方面優劣程度的標準，此標準會進而影響組織在選才和用才的準則。此外，透過職能進行「訓練需求分析」，可評估員工在該職位上尚欠缺何種能力，勾勒出員工發展計畫，組織之繼承人計劃亦能更完善被規劃。

綜言之，美國海岸防衛隊引進職能不但為人力資源發展及管理活動上之共同平台及語言，亦期使組織更集中並有效地運用資源並達成其策略目標。

## 二、美國海岸防衛隊職能管理的基礎架構

美國海岸防衛隊的職能架構如圖2所示，它的關鍵概念在於職能的供需原則：

最上方核心職能係美國海岸防衛隊數十年來執行任務所累積的經驗，來自重覆行動、觀察及試驗的教訓，許多均已內化成組織文化的一部分，例如：海域執法專長、多重任務的靈敏度、海上應變反應等。

For the time being, there is no single method to measure, evaluate, or record the knowledge, skill, and ability of its staff, but only performance evaluation for individual item. Therefore, it is most quite necessary that a set of competency management system has to be established to achieve the following effects as expected:

For the staff, KSAs should be listed out explicitly, and the staff can, based on the relevant competence needed for their job assignment, build up their individual career planning, and set up the objective for promotion and development.

For the unit, management from each unit can, based on the competence of their members, effectively assign work and complete their mission. Besides, such way of coaching and mentoring process cannot only double efficiency with half effort, but also provide better career planning.

For the organization, it would render the organization to prioritize development projects of different importance so as to fully and effectively adjust resources. Besides, once the kind of ability of every staff is equipped competency model can then perform the other kind of role-play - appreciation of criteria that reckon the extent of superiority for development of the staff as such criteria can further affect organization in the criteria of talent recruitment and retention. Besides, "training need analysis" can be utilized to evaluate what other ability of the staff is in lack of, thus delineating the development plan for the staff, while the succession plans can be planned more comprehensively.

To sum up, US Coast Guard has introduced the notion of competence not merely to found as the common platform and language for human resource development and management activities, but also to render the organization with greater concentration to utilize resources more effectively and achieve its strategic objectives.

## II. The fundamental structure of competence management of US Coast Guard:

The competency architecture of US Coast Guard is constructed as indicated in figure 2, and its key concept lies with the principle of supply and demand of competence

The core competence found at the upper-most part is of the accumulated experiences that have been practiced for decades of years by the US Coast Guard from its repeated action, observation, and lessons of trails, and they have been internalized to become a part of the organization culture, for instances, expertise of law-enforcement on the sea, sensitivity of multiple mission, and contingent reaction at sea and so forth.



◆ 圖2、美國海岸防衛隊的職能架構  
Figure 2: Competency architecture of US Coast Guard

就左半部職能需求面而言，組織的任務是最高指導原則，各單位的責任與應有的能力源自組織任務需要，其單位職能可進一步分解成程序、行動及工作，而各單位的職能需求又導引個別職務的職能需求；換言之，職能係因應任務而生，確認組織最重要的目標可幫助組織排定需求的優先順序。

就右半部職能供給面而言，員工加入海岸防衛隊時都具有一定的少數職能，組織人資系統透過各種方法（正規教育、在職訓練、職務任命等），發展及提昇員工完成任務所需的專業職能；供給面有如蓄水庫，儲備員工職能以供組織需要。人資系統透過職位職能需求與員工個人職能的配對，將適當的人，具備適當的技能，於適當的時間，置放於適當的位置。

任務決定職能需求，組織透過績效管理、教育訓練、經驗與激勵發展員工的職能供給，當供需間產生差距時，透過供需分析，可協助組織有效的配置資源並決定優先順序。

For the competence requirements on the left-handed side, the mission of organization is of the highest principle of guidance. The responsibility and ability supposedly to be of each authorities are found with the mission requirements of the organization, and its authorities could further decompose procedure, action, and job assignment, while its competence requirement of each authority could again introduce competence requirement of individual job assignment. In other words, competence results from mission, while the most important objective of organization confirmation is to help the organization prioritize requirement.

As for competence supply on the right-hand side, when staff join the coast guard they are already equipped with certain numbered competencies, the human resource system of the organization will make use of all sorts of ways "regular education, on-job training, job designation and so on" to develop and enhance the needed professional competencies for the staff to complete their task. The supply side is much like that of reservoir as it will store the staff with competencies for need of organization. Besides, the human resource system will resort to the match-making of requirement of position competence with personal competence of staff, and place the suitable individual with suitable technique at suitable time and position.



茲以海上應變反應職能供需為例說明此一職能架構：最上層海上應變反應屬組織核心職能，因應組織任務需要，單位必需具備執行海上搜索與救助作業的職能，就從事此項任務的個人而言，則需具備操縱救難艇的航行／輪機職能。

### 三、美國海岸防衛隊的整合性職能管理資訊系統

美國海岸防衛隊建置本系統的主要目的在提供明確的職位必備條件及人員現有能資資訊以輔助各項人資管理活動，以提昇其服務的準備度及效能，透過比較職位必備的職能（需求面）與員工擁有的職能（供給面）間的差距，規劃配套的人資管理作為以消弭其間的差距。

#### （一）系統的職能模式

圖3的各組成元素定義如下：

- \* 知識—經組織後的資訊，本質上常為事實或程序，為執行一項功能或工作時所必備
- \* 技術—應用知識、能力及行為去完成一份工作或任務時的熟練度
- \* 能力—能做某事的狀態或特質，尤其指體能上、心智上、財務上或法定權力足以完成某事
- \* 熟練度—意味在表現職能時，運用知識、技巧及能力的相對程度
- \* 重要性—意指在該職位上對某項職能與其他職能的相對需求度；職能重要性只針對職位，而非個人
- \* 標準：每一項職能都有一個標準，這個標準可以是人員資格標準（Personnel Qualification Standard, PQS）、訓練的最終績效目標（Terminal Performance Objectives, TPOs）或其他可用以衡量績效的標準

Mission will determine competence requirement, while organization will make use of performance management, education and training, experiences, and stimulation to develop competence supply on the part of staff. Should there gap between supply and demand, analysis of demand and supply is conducted to help assist the organization with effective allocation of resources as well as prioritization.

And it is hereby to be exemplified with contingent reaction on sea to illustrate such a competence structure. At the upper-most level, it indicates the core competence of the organization of contingent reaction on sea, and the authority has to be equipped with the competence with maritime searching and salvaging operation on sea. As for individual who is to conduct such mission, the one must be equipped with the operation of navigation and turbine of rescue boat.

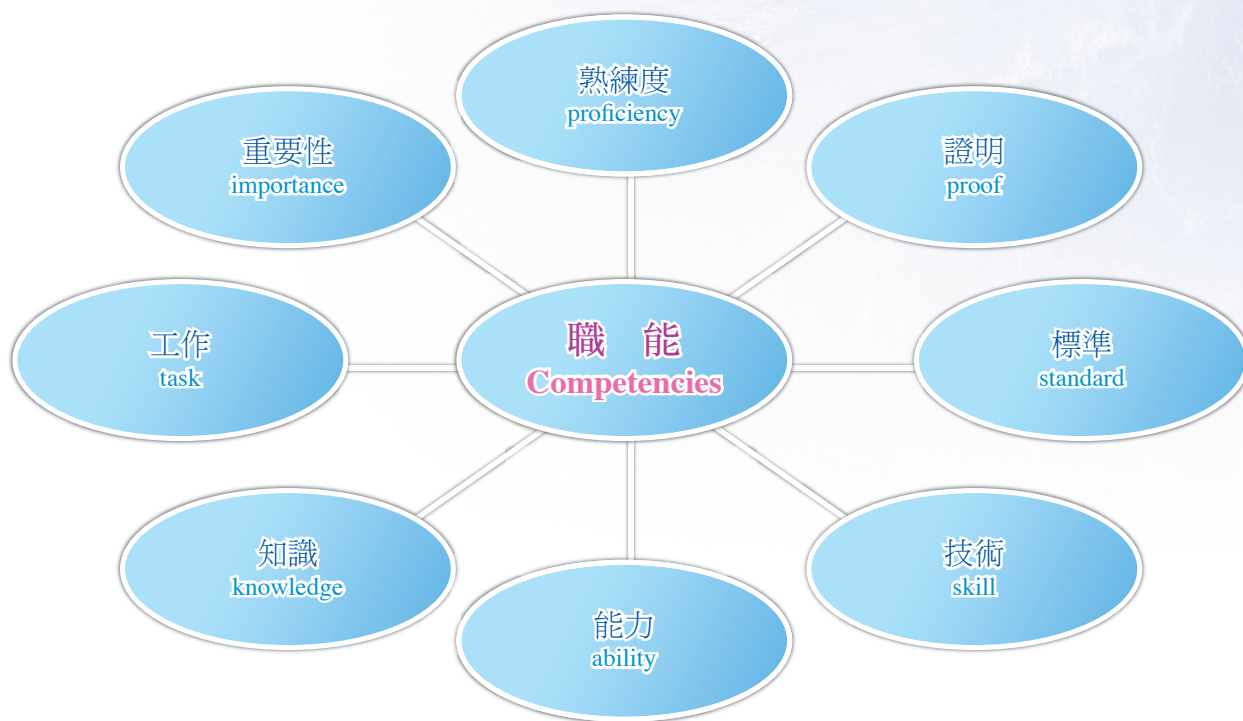
### III. Integrative competency management information system of US Coast Guard

The primary purpose of USCG to establish this system is to provide the needed conditions and personnel for certain position with existing ability information to assist each items of human power management activities so as to enhance its service availability and competence. With comparison of position that one should equip (demand aspect) and gap among the competence as one already equips (supply aspect), compatible measures of the human resources can be planned to eliminate the gap in between.

#### (1) Competency Model

The definition of each component is found in figure 3:

- \* Knowledge: an organized body of information, usually of a factual or procedural nature, required to perform a function or task.
- \* Skill: the proficient application of knowledge, ability, and behavior to complete a job, task or duty.
- \* Ability: the state or quality of being able to do something, especially the physical, mental, financial, or legal power to accomplish something.
- \* Proficiency: the relative level of performance capacity in a competency. Implies a level of competence in the particular Competency. Connotes level of knowledge as well as skill and ability to perform a competency.
- \* Importance: Indication of the relative need of a competency in relation to other competencies assigned to the position. Importance levels are assigned to POSITIONS, not INDIVIDUALS.
- \* Standard: every competence has its own standard, and such



◆ 圖3、USCG職能管理資訊系統的職能模式  
Figure 3. Competency model of USCG competency management information system

\*證明：取得該職能的日期、最後應用該職能的時間、取得該職能的證明（如證照）

\*工作：那些職位及工作應具備此職能  
具體而言，在USCG職能管理資訊系統中，職能資料包含：

- 1、可重複使用的定義，述明個人擁有該項職能可做什麼、取得該職能的要件（如：受何訓練、需那些前置職能）、那些人應擁有該職能（如軍職、文職、士兵）。
- 2、來龍去脈：此職能係被指定給某一職位或為某人所獲得。
- 3、證明：合格的證明及日期，包括評量方法、評量日期及結果、證照及發證機關。

standard can be of personnel qualification standard (PQS), terminal performance objectives (TPOS), or other quantifiable standard for performance.

\*Proof: the date obtaining such competence, time making use of such competence, and proof obtaining such competence (such as license).

\*Task: job position and work that should be equipped with such competence

In specific terms, competency information of USCG competency management information system should include:

1. the reusable definition will elaborate on what kind of competence one should equip for doing certain thing, and the conditions to obtain such competence (for instance, to receive what kind of training, and what kind of pre-competence is requires), and who should possess such competence (military position, civilian position, soldier).
2. context: such competence is referring to be designated to certain position and to be obtained by certain individual .
3. evidence: proof of qualification and the issued date, including method of evaluation, date and result of evaluation, license and the authority that issues such license.



- 4、向度：包含個人對該職能是否有興趣、該職能對某一職位的重要性與權重、該職能最後被使用的時間。

## (二) 職能的確認

美國海岸防衛隊的職能均基於需要而產生，這些需要係以完成一項任務或法規的績效要件方式展現。其確認的方法包含：

- 1、績效技術模型：本模型整合了系統理論、行為學、認知學、傳播資訊學和管理學等理論基礎，以系統的方式對人的表現進行分析，找出表現的鴻溝，再透過合宜與多樣的解決方案來對行為表現的缺失進行改造。
- 2、人力需求決定：原本主要用來測量勞動力消耗量，不過在決定過程中，附帶指出必要的職能群組。
- 3、職業分析：美國海岸防衛隊定期對每一級別的士官做職業分析，視各級別所需技能群的複雜度與重要性，再決定是否指定為職能。
- 4、焦點群體：召集專家、傑出表現者及其直屬長官一起討論完成工作必需具備的技能群。

## (三) 職位職能的派定

此程序著眼於安全性考量；當職能確認後，要派定給某一職位時，必需先分析其對該職位的關鍵性及如所用非人時可能產生的結果？（例如要派到自動扶正救難艇任職，必需經長時間的訓練與取證，假使派任無證照者可能導致的後果），職能是否有初階及進階之分？其複雜性？如無法量化衡量時，則需考

4. dimensions: it includes if the individual is interested in the competence, the importance and weight of the competence for a certain position, and the last time such competence is utilized .

## (II) identify the competency

The competencies of USCG are brought as of needs, and these needs are demonstrated based on the way to complete a task or conditions of legal performance, and its method of confirmation include:

1. Human performance technology (HTP): this model has integrated system theory, behaviorism, cognitive science, media information science, and management science and other fundamental theory, which should conduct analysis upon human demonstration in systematic manner. Then, the gap of demonstration is discovered, and appropriate and diversified ways of solution are exploited to conduct transformation regarding defect of behavior demonstration.
2. Manpower requirement determination (MRD): while primarily used to measure labor consumption, it also identifies needed skill sets as a "by product" of the process.
3. Occupational analysis: the USCG performs an OA on each enlisted rating on a regular basis, and determine if it can be considered as competence upon the complexity and importance of the needed technique cluster by each level.
4. focus group: scholars, excellent performers, and its direct superiors are convened to discuss the technique cluster needed to complete certain task.

## (III) assigning to positions

The focus of the procedure is based on the consideration of safety: when the competence is confirmed and it is to be assigned to certain position, it is necessary to analyze the significance awarded to the position, and what kind of result it will end up if unsuitable person is assigned? (For instance, if one is assigned to position of rescue boat where automatic promotion prevails as one needs rather long-span of time for training and license-obtainment, and what result there will be if one without license is assigned) Is competence found with primary and advance level? What about its complexity? If it cannot be quantified, it is necessary to consider the amount of work and importance of the position. Besides, existing equipment "such as how many rescue boats are in the



慮該職位的工作量及重要性。此外，單位的任務、現有設備（如救難站有幾艘救難艇）、同時發揮單位能量的具備職能人員數量需求等均是考量重點。

#### 四、結論及建議

一、根據上述簡介，概可歸納基本結論如下：

- (一) 美國海岸防衛隊職能模式的人力資源發展架構，包括內涵特徵、外衍特徵及運用範疇三大面向，首先從知識、技術、能力及特質等內涵特徵，整理成「職能群組項目」、「職能資料庫」、「職能清單」及「職能辭典」等外衍特徵，進而運用在組織文化、人員招募、培育訓練、才能評鑑、職涯發展、接班計畫、績效評估及職能薪資上面，交叉設計，形成綿密周備的職能發展架構。
- (二) 美國海岸防衛隊導入職能模式的目的係做為連結人力資源系統各元件與組織策略方向與任務需求間的橋樑，使組織策略目標和任務、為達成目標所投入的資源與行動、執行這些行動的人員三者能方向一致，同時在人力資源的管理上，亦能使人力需求、個人發展、指派、評核、升遷等面向遵循共同的原則。
- (三) 美國海岸防衛隊建置職能模式管理系統係歷經近十年的努力，籌組數個專案小組針對不同主題進行研究，包括：士官生涯發展計畫、初階士官管理研究、士官進階研究、技能結構暨管理研究等，逐步累積研究成果再整合至現行的人力資源管理資訊系統中，過程十分嚴謹，所有研究均以結合組織需要與個人發展為目標。

rescue station" as well as amount requirement of personnel with such competence at the authority that can demonstrate its capability will be items of consideration.

#### IV. Conclusions and recommendations

(I) Based on the aforementioned introduction, the fundamental conclusions can be thus reached as follows:

1. The human resource development structure of competence model of USCG encompasses three major aspects as endowment features, derived characteristics, and scope of utilization. First of all, endowment features as knowledge, skills, and ability are categorized as "competence cluster item," "competence database," "competence check-list," and the derived characteristic as "competence lexicon." Then, they are employed in organization culture, talent recruitment, education and training, talent evaluation, career development, successor plan, performance evaluation, and competence salary, and with cross design they have helped form comprehensive and well-exhausted competence development structure.
2. The purpose to lead USCG into competence model is to help formulate as the bridge between each of the components of human resource system and approach of organization strategy with its mission so that the organization strategy, objective, and mission can be invested on the resource, action, and implementation toward the objective to be achieved. As of such, the three components in execution of such actions can be geared towards the same direction, meanwhile, the competence model can, as well, render human power requirement, personal development, assignment, evaluation and screening, and promotion and other aspects in adherence to the common principle in the management of human resources.
3. The competence model management system of USCG has gone through the efforts for last 10 years as several special teams of projects have been put up to conduct various researches, including the career development of rank and file, management research of junior officer, advanced research of junior officer, technical structure and management research. Then these accumulated results of research are integrated to existing human resource management information



## 二、鑑於美國海岸防衛隊職能模式的推動過程、內涵及應用，謹就海巡署是否導入職能模式，提出下列建議：

- (一) 海巡署在進行是否導入職能模式的決策時，必要審慎多方的考量—包含推動職能模式的成本效益、海巡署推動職能模式的準備度、建構的方法及策略、適用的範圍與應用層面、推行後在法制面、組織面、環境及技術面可能遭遇的問題、變革的規劃及變革抗拒的管理等。
- (二) 導入職能模式不應以「美國海岸防衛隊都已經做了，所以我們也必需要有職能模式」的思維角度，而需從海巡署的願景與組織策略、內外環境現況與挑戰著眼思考是否導入及目前時機是否成熟。
- (三) 要將組織的願景以職能為基礎的方式勾勒出來，是一件極具挑戰的事，在推動過程中，亦會遭遇許多問題，等待組織人員一起努力解決。人資人員在建立職能模式的過程中扮演舉足輕重的角色，因職能模式的應用多為人力資源各功能面，故人資人員宜深入瞭解職能模式的內涵、導入方法與執行應用等策略性人力資源專業知識，以不急不徐的心態引領組織推動創新變革。

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system, with most cautious procedures, and all of the researches are conducted in conjunction to the goal of organization need and personal development.

## (II) In view of the facilitation process, endowment, and application of the competence model of USCG, following suggests are put forth in the following as if competence model should be introduced to the Coast Guard Administration:

1. When considering if competence model should be introduced into the Coast Guard Administration, it is necessary to deliberate from aspect with caution: which includes the cost-effect to facilitate competence model, the readiness of the Coast Guard Administration to facilitate competence model, method and strategy for the establishment, scope of application and aspect of appropriation, and the problems that could have encountered in legal, organization, environment, and technical aspect as well as the planning for reform and the management of resistance against reform.
2. The introduction of competency model should not be based on the mentality that "since USCG has already resorted to it, we would then need as well such competency model," but rather we have to view from the vision and organization strategy of the Coast Guard Administration, and internal and external status of the environment and challenge to see if time is ripe for the administration to introduce such model.
3. It is a rather challenging task trying to delineate the vision of organization based on competence, and quite a many problems will be encountered during the process of facilitation, which would need the staff of organization to resolve them jointly. The personnel of human resource play rather significant role in the establishment of competence model as the application of competence model is mostly of human resource aspect. Therefore, it would be best that personnel of human resource should deeply appreciate the endowment of competency model, introduce method as well as strategic professional knowledge of human resources in as execution and application, and lead the organization to facilitate innovative reform with good steps and measures.

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