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### Capabilities-Based Planning for Force Development: Issues and Challenges for the Malaysian Armed Forces

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**ABSTRACT:** *This paper endeavoured to analyse the issues and challenges faced by the Malaysian Armed Forces (MAF) in force modernization. MAF's existing strategic plan and capability planning approaches was assessed initially. This was followed by validating capabilities-based approaches employed by other modern defence forces. Challenges and issues for MAF in adopting a similar approach are discussed. It was concluded that chief among these challenges was invigorating greater leadership in defence planning. Subsequently, the national security and defence policies must be aligned to provide clearer direction for the military strategy. Other challenges include the need to break old mind-sets vis-à-vis service rivalry. In a resource constrained environment, MAF's force development has to be addressed through a more methodological approach in the form of CBP. Insights and best practices from around the world have to be adopted to avoid the debilitating pitfalls and obstacles.*

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#### 1. Introduction

Capability-Based Planning (CBP) has emerged as 'the' methodology for 21<sup>st</sup> century defence forces development. The previously used 'threat-based' method was relatively uncomplicated as the threat was present and clearly identified and force structures were simply designed to defeating the enemy. There was straightforward political and social support for defence force needs and budgets were made available, often as required. This was the case for the US and its NATO allies during the Cold War era as they faced the 'evil' Warsaw Pact. Similarly, Malaysia too had such an experience in the late 1970s. With the fall of South Vietnam in 1975 and subsequent invasion of Cambodia by Vietnam in 1978, there was great fear of the 'domino effect' being fulfilled. The new communist government of the Socialist Republic of Vietnam was seen as the single biggest threat to the nation's sovereignty. Even though the local Malaysian communist insurgents were still being a menace causing internal security (counter insurgency) operations to prolong, all attention was focused on preparations to face a possible invasion from the north-east, just as the Japanese forces invaded Malaya in 1941. Given such a scenario, a threat-based force structure were quickly designed and approved by the government with a huge allocation of RM 9.8

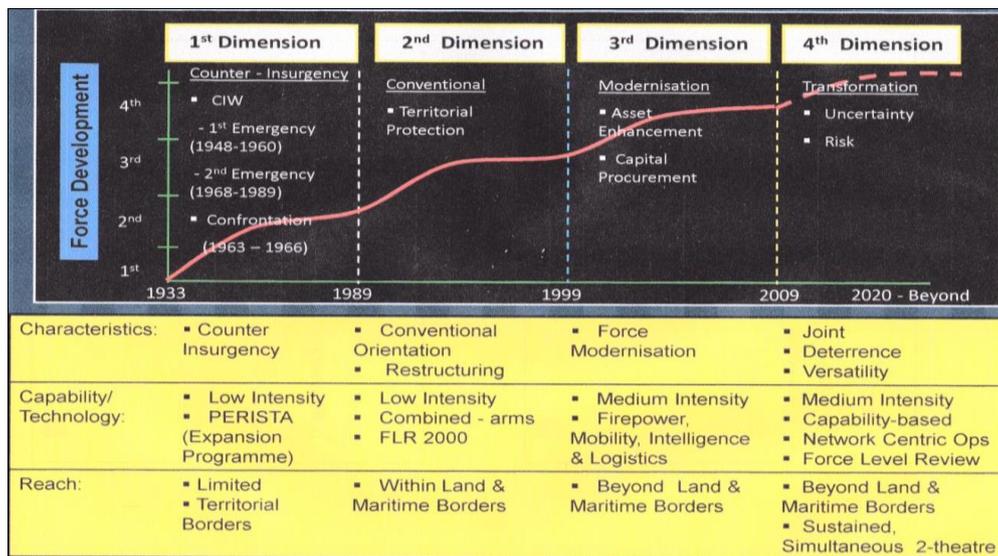
billion. The Malaysian Armed Forces (MAF) embarked on a well-financed “expansion” programme code-named PERISTA or the *Special Expansion Plan of the Armed Forces*. The aim of this plan was to develop a conventional war fighting forces (Muthiah, 1987).

In the post-Cold War era, threat-based models have become questionable. Major threats have almost ceased to exist while smaller ‘asymmetric threats’ and other ‘non-traditional’ threats have begun to emerge. Together with these developments, other demands arose for the use of military forces such as in peace support operations (PSO) and humanitarian assistance and disaster relief (HADR) operations. Collectively, these required conventional forces to undertake a host of other operations known as Military Operations Other Than War (MOOTW). This uncertain future environment brought about the need for force development methodology to migrate to a ‘capabilities-based model’, building upon the earlier threat-based model. A capabilities-based model focuses more on “how an adversary might fight than who the adversary might be and where a war might occur” (US DoD, 2001). For Malaysia, this threat ambiguous environment has caused great consternation when defence budgets are tabled. NGOs, opposition political parties and the public in general frequently question the need for huge outlays and purchases of expensive military hardware. Accusations of involvement in a regional arms race, allegations of corruption, abuse of power and gross seepage frequently make the news (Kua, 2013). With annual defence budgets facing greater scrutiny, the need for MAF to embark on the development of a balanced but credible force to undertake a wide array of tasks, through the capabilities-based approach is further substantiated.

This paper has its main objective to discuss the challenges Malaysia faces in its introduction of a capabilities-based approach to planning future defence force structures. The study will be limited to MAF and not discuss challenges for other government and security agencies or defence industry. Since the practice of a capability development and management in MAF is still in its introductory stage, MAF’s existing strategic plan and capability planning approaches will be used as a reference.

## 2. The Malaysian Armed Forces (MAF)

MAF began as an experimental Army company which was raised in 1933 by the British Army in Malaya. Since then, the naval and air force wings have come into being as the situation warranted. MAF has since evolved from a counter insurgency force into a modern conventional war fighting outfit. Figure 1 below, shows the various developmental stages experienced by the MAF in its short history of 80 years.



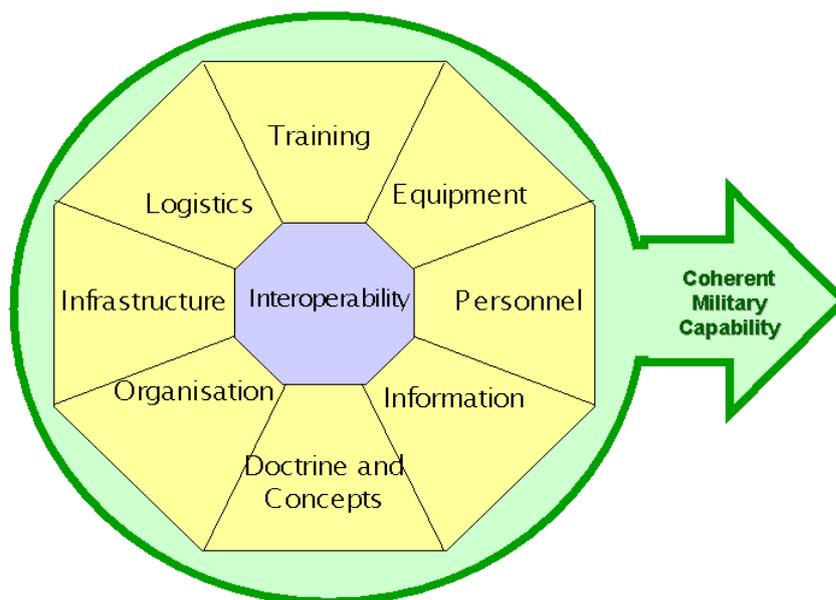
**Figure 1:** MAF’s Evolutionary Eras of Force Development (MAF HQ - DPD, 2013).

Since 2009, the MAF has been pursuing its strategic plan called the Fourth Dimension Malaysian Armed Forces (4D MAF). The objective is to transform MAF into a “joint and versatile force capable of portraying a deterrent posture”. The plan also stipulates MAF’s intention to structure its development to 2020 and beyond through on capability-based approach. This new approach is a break from its traditional threat-based approach, which has been the basis for its metamorphosis in the 2<sup>nd</sup> and 3<sup>rd</sup> Dimension. In the current phase, MAF endeavours to develop core capabilities to meet multi-spectral challenges through a combination of capability-based and network-enabled forces. In the process, some of the identified critical capabilities are; a) enhancing combat power, b) protection of bases, c) persistent surveillance, d) leveraging on information technology and e) the ability to deploy rapidly (MAF HQ - DPD, 2013).

### 3. Military Capability

Military capability as defined by UK Ministry of Defence (MoD) is the enduring ability to generate a desired operational outcome or effect. It is delivered by force elements such as army formations, ships and aircrafts combined into packages for operations or missions (Young, 2013). The Australian Defence Forces’ definition of capability is “the *power to achieve a desired operational effect in a nominated environment, within a specified time, and to sustain that effect for a designated period*” (Australian Government DoD, 2006). On the other hand, the United States military describes capability as “*the ability to achieve a desired effect under specified standards and conditions through combinations of means and ways to perform a set of tasks*” (JCS J-8, 2009). Essentially all three definitions point to the **ability or power to deliver an effect**.

In general, for military capability to be generated, a mix of specific heterogeneous components are required as inputs. UK Defence Forces terms these as ‘Defence Line of Development (DLoD)’. This encompasses eight force elements which are; *training, equipment, personnel, information, doctrine, organisation, infrastructure and logistics* (TEPIDOIL). To produce a coherent military capability, the integrated DLoDs (Figure 2), must be addressed collectively with interoperability of forces (joint and coalition) as the overarching theme. Capability is therefore not a single system or equipment, but instead military sub-units - a combat team, a fighter squadron or a destroyer group - synergised through the eight DLoDs.

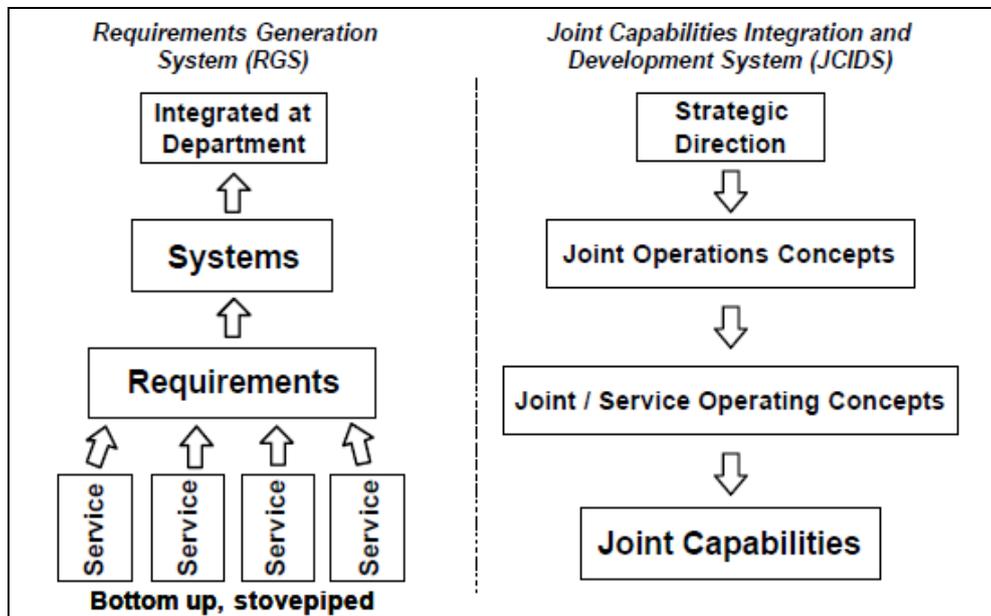


**Figure 2:** The DLODs Framework for Military Capability (Eaton, 2013).

Similarly, the MAF’s definition implies capability as the **ability to achieve an effect**. It is generated through appropriate force structures and preparedness and is very much dependent on the competence of MAF combat formations to synergise the various components; equipment, people, services, facilities, organisation, training, doctrine, and readiness (MAF HQ - DPD, 2013).

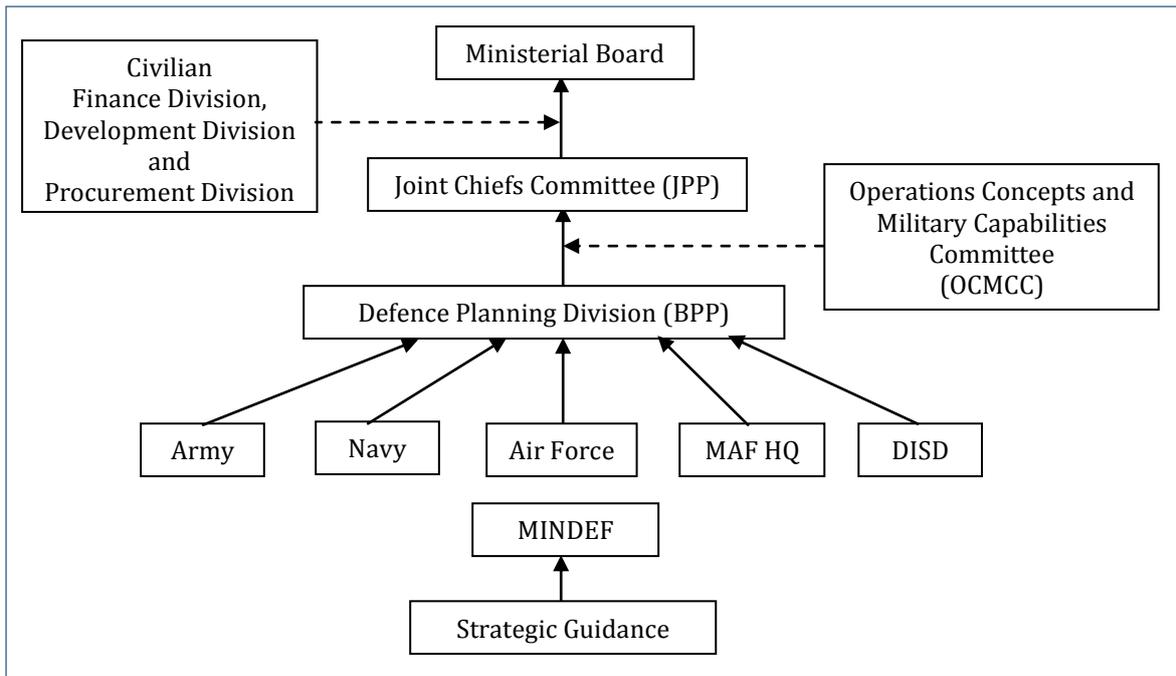
**4. Capabilities-Based Approach**

Figure 3 shows a comparison of US DoD’s old and new approach to capability development. It compares the old Requirements Generation System (RGS) approach and the new Joint Capabilities Integration Development System (JCIDS) used under the *Capabilities-Based Approach* (CBA). The new approach is driven from the top through a clear strategic direction which then gets translated collectively until joint capabilities are developed.



**Figure 3:** Comparison of Old and Current Capabilities-Based Approaches (Walker, 2005).

In the old system, each service (Army, Navy, and Air Force) would analyse their tasks and current capabilities periodically. This analysis is usually done in isolation and requirements are formulated and forwarded to the higher decision making body for consideration. This method labeled as a ‘bottom-up, stove-piped approach’, ensured that the US DoD received large chunks of ‘service-centric’ requirements for approval and funding. Former US Secretary for Defence, Donald Rumsfeld referred to this as the ‘train wreck’ as DoD and the Joint Chiefs of Staff felt the full burden of attempting “to integrate these independent proposals into an integrated force” (Walker, 2005).

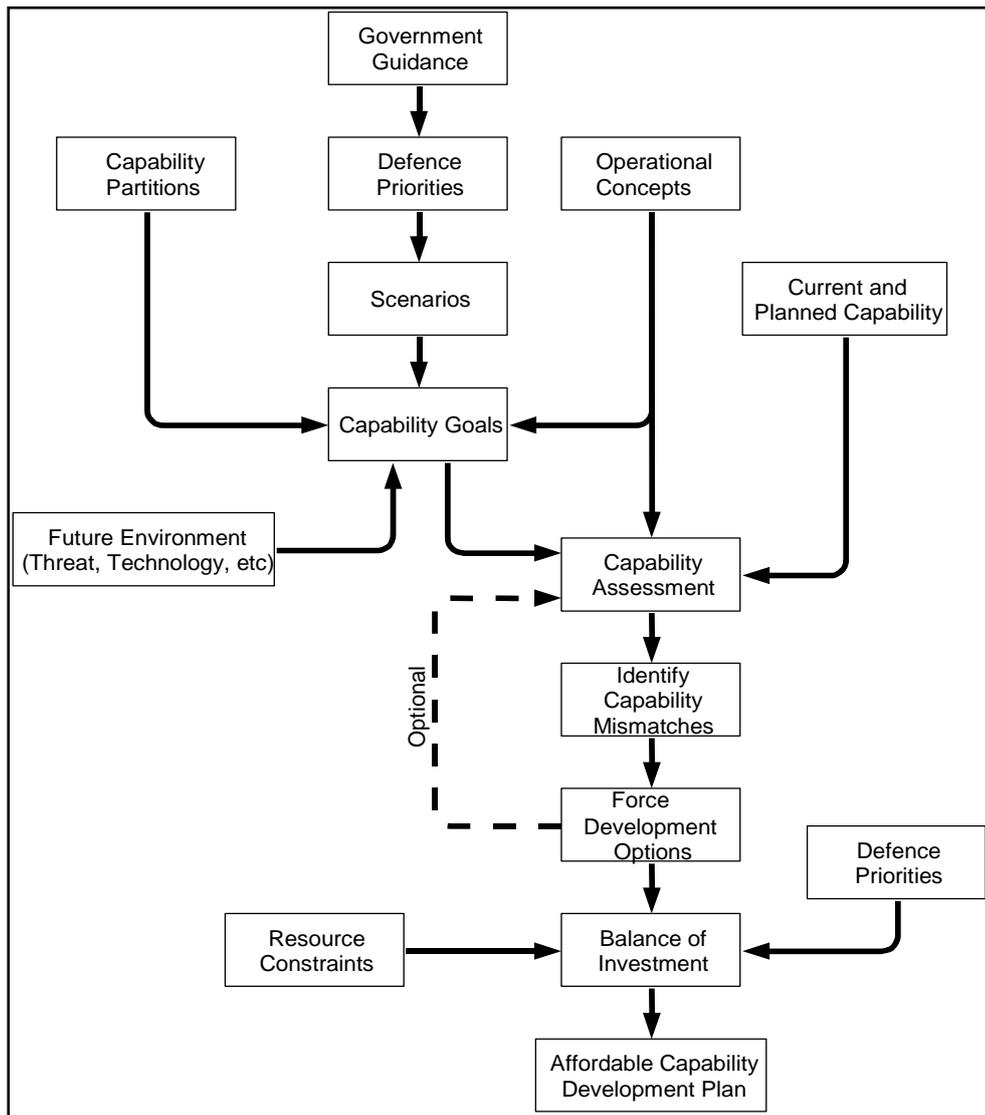


**Figure 4:** MAF's Force Capability Planning Process (MAF HQ - DPD, 2013).

In many ways, MAF is still entrenched in using the old system despite having embarked on a stated capabilities-based approach. This can be deduced from Figure 4. Requirements are formulated at the service level (Army, Navy, Air Force, Joint Force Command at MAF HQ and Defence Intelligence) and passed up to the Defence Planning Division at MAF HQ. This Division together with the Operations Concepts and Military Capability Committee (OCMCC) assesses inputs and transforms them into complete systems for approval of the Joint Chiefs Committee. This effectively indicates a bottom-up stove-piped approach.

## 5. Generic Process of Capability-Based Planning

Figure 5 shows the generic process for CBP used by defence forces of Australia, Canada, United Kingdom, United States and New Zealand. For MAF to introduce CBP, a similar approach is suggested. Initially, capability goals will have to be drawn from a process of government guidance and establishing defence priorities. This has to be substantiated with operational concepts and appropriate capability partitions. Capability partitions or groupings are based on forces assigned to perform tasks, or to deliver effects, for example, "control and denial of the air-space. An analysis of this chart shows some of the likely challenges MAF will have to face in introducing CBP. They are namely; a) involvement of government and their providing of clear strategic policy guidance, b) challenges caused by changes in the future environment, c) overcoming organisational challenges and service rivalry in developing appropriate capability partitions, d) creating new organisations for CBP, e) possessing the know-how and utilising analytical approaches (scenario creation, modelling, cost estimating, etc), f) preparedness to enable current and planned capabilities to be reviewed and amalgamated with future force development options and g) overcoming budgetary and resource constraints.



**Figure 5:** Generic Process for Capability-Based Planning (TTCP, 2010).

## 6. Challenges in Introducing Capabilities-Based Planning

### 6.1 Policy Guidance

MAF's current approach to capability development and planning has many shortcomings. This can be concluded by comparing MAF's current structures, policies and organisation for capability development with that as outlined by The Technical Cooperation Program (TTCP). This can be attributed to a lack of sufficient guidance and desire to institute defence reforms at the national level. A cursory appraisal of how the 'Five Eyes' nations (Australia, Canada, United Kingdom, United States and New Zealand) have instituted capability-based planning into their defence management system shows that it has all originated from clear policy guidance from the executive branch of the government. In the United States, it was the Secretary of Defence, Donald Rumsfeld who pushed for this approach to be implemented based on the 2001 Quadrennial Defence Review (JCS J-8, 2009). In New Zealand, it was the result of an initiative by the government to undertake a Defence Review in 2010 and produce a Defence Capability Plan in 2011 (Defence Review, n.d.).

In this respect, Malaysia has to adopt a particular model which is easily understood. Given our historical ties and similar system of government, the UK model is best suited for this purpose. To begin with, Malaysia's defence policy should be reviewed and a comprehensive National Security Strategy (NSS)

and a Strategic Defence and Security Review (SDSR) document must be produced. This has to be followed by a Defence White Paper such as that published by Australia and New Zealand. These actions will be seen as government’s seriousness about greater transparency on defence and security related matters. Defence white papers reflect a determination for transparency and a promise for prudent defence spending. It will also indicate a greater resolve to adhere to established long term plans. Collectively these documents may lead to defence reforms and facilitate the implementation of CBP in its full breadth and scope.

## 6.2 Strategic Guidance

One important aspect for the implementation of CBP is the availability of clear strategic guidance in the form of National Security Strategy (NSS), National Defence Policy (NDP), National Military Strategy (NMS) and Joint Operations Concepts. However, the availability of these strategic guidance documents alone is not sufficient. Linkages between each strategy/concept must be evident and clearly seen when juxtaposed as illustrated in Figure 6. Essentially, those strategies covering the “Battle Space” and “Operations Space” must be aligned with the “Geopolitical” and “Political-Military Space” (Eaton, 2013). The absence of a National Security Strategy hampers the formulation of ‘subordinate’ strategies and concepts. Further to that, the National Defence Policy is also in need of a review. The Minister of Defence when launching the current version in November 2010 clearly alluded to this fact (Malaysia MoD, n.d.). Besides that, MAF must also ensure all three internal strategic guidance documents (defence, military and joint operations concepts) are properly aligned. The lack of such an alignment will make CBP analytical processes difficult.



**Figure 6:** Relationships of Key Strategic Documents (Adapted from JCS J-8, 2009).

Nevertheless, Malaysia’s existing defence policy reiterates the country’s key strategic concerns as: *territorial defence, the defence of the South China Sea Exclusive Economic Zone, sea and air lanes between West and East Malaysia and the waterways in Singapore and Malacca Straits*. This amounts to a land area of approximately 300,000 square km and a maritime region of 600,000 square km. Collectively, the three

services of MAF do not have sufficient capability to execute the assigned tasks. Hence the 4D MAF strategy calls for extensive capability enhancement to fulfil the mandate given to MAF. The National Defence Policy however does not provide a clear picture on how Malaysia's military reform and modernisation programmes launched several years ago will be undertaken. Inadequate financial resources due to economic problems have ensured that modernisation aspirations are not fully met (House of Commons Library, 2011).

### **6.3 Organisational Challenge**

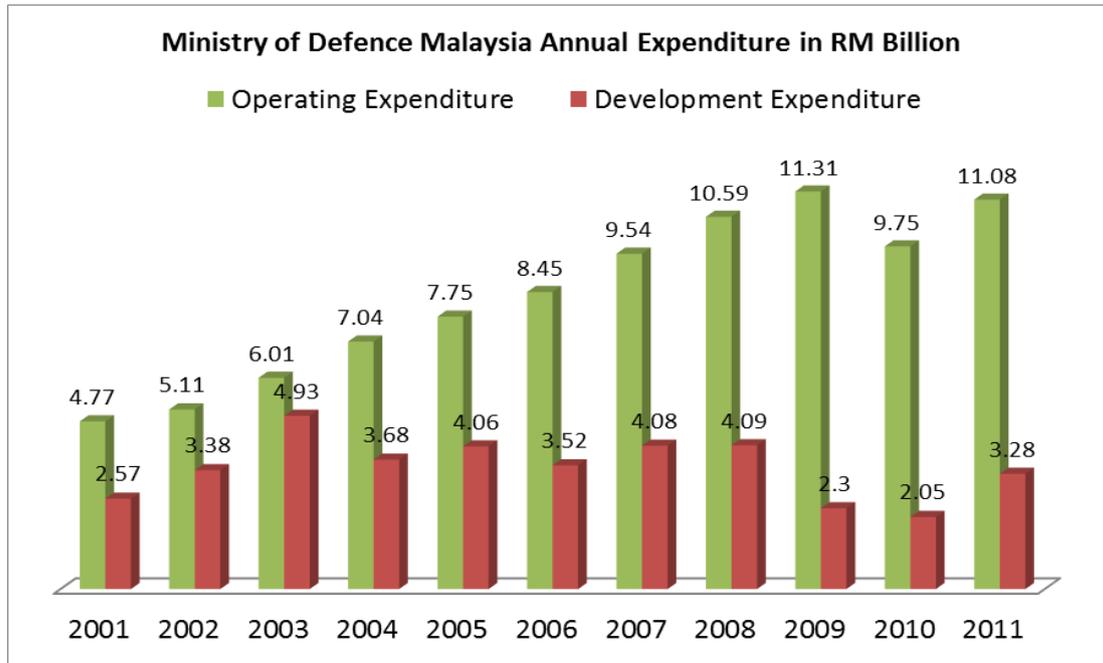
Service rivalry is an age-old issue in MAF. Traditionally, the respective service chiefs themselves have controlled the development and management of each service. This is a legacy from the Malayan 1<sup>st</sup> and 2<sup>nd</sup> Emergency eras. During this period, the Army was very much involved in jungle operations while the Navy undertook patrolling and enforcement duties in the maritime areas. The Air Force being the junior service embarked on its own modernisation programme. Currently, besides the 4D MAF strategic plan formulated by MAF HQ, the Army has its own **Army 2 10 plus 10** development programme. The Royal Malaysian Navy has its **Blue Navy** plan and the Royal Malaysian Air Force its **Air Force Next Generation (AF-NG)** plan (MAF HQ - DPD, 2013). Breaking the proverbial silos is a formidable challenge for capability planners at MAF HQ's Defence Planning Division.

### **6.4 Capability Development Organisation**

Capability development in MAF is currently managed by the MAF Defence Planning Division. CBP requires a much larger organisation to look into the extensive needs of planning, analysing, modelling, simulation, development, etc. MAF could use the Australian Defence Force Capability Development Group as a model. The establishment of a large organisation to oversee the full breadth and depth of CBP requires buy-in from the top. It will also require extensive re-organisation and more importantly, funding. The capability development organisation should be seen as an organisation whose *expert advice is respected and accepted by defence, government, industry and the other central agencies*. Across MAF, it will be an organisational challenge to ensure DLoDs is planned and executed simultaneously, appreciating the fact that different elements of DLoDs will require different periods for maturity. Procurement of new major defence equipment does not translate to capability. To quote the Australian Defence Force Chief "...it's just equipment until we do all the coordination of the fundamental inputs to capability" (Australian Government DoD, (2006).

### **6.5 Financial and Budgetary Constraints**

Malaysia is still a developing country. While the overall economy has grown in the last two decades, the nation's financial position is not as strong as it used to be. The government has been running an average budget deficit of 5% for a number of years. In terms of annual budget for defence, it remains decoupled from GDP. In other words, the defence budget is not determined through a fixed percentage of the nation's GDP. Figure 7 below portrays actual annual defence expenditure since 2001. The development expenditure (expenditure for purchase of capital assets) in particular, is unpredictable. This has serious implications for capability planners as steep changes to the annual budget affects the forecasted developmental plans. Capability development plans that are routinely adjusted due to budgetary constraints may not produce coherent force structures.



**Figure 7:** MoD's Operating Versus Defence Expenditure from 2001 to 2011 (Hasleena, 2013).

### 6.6 Cost Estimates

Cost estimating is a huge problem for military capability planners the world over. Cost estimates of defence projects often go wrong due to attendant volatility of prices as well the poor quality of estimation. Given the aforementioned vagaries of political influence as well as the financial and budgetary inconsistencies, the challenge to MAF's capability planners is indeed formidable in this particular area. Wrong cost estimates can result in serious shortfalls of the desired quantities of a weapon system. Wrong cost estimates may lead to budget cuts for lower priority but vital items. Cost estimates need constant scanning of the environment for changes and risks. It must also be realised that even when cost estimates are routinely 'corrected', they will remain volatile due to factors such as the global economy, changes in government's policy and project delays.

### 6.7 Changes in the Planning Environment

As a strategic planning tool, CBP is long term in nature. It requires time for results to materialise. While it is appreciated that military plans generally do not survive the test of time, changes to the original CBP should only be done through thorough methodological analyses and approaches. Changes to the CBP environment could be caused by any one of these factors namely; a) technology, b) defence policy, c) threat, d) resources, and e) management organization (Burton, 2011). In the Malaysian context, all these changes are very likely to occur, though at varying degrees of significance. The intrusion by a small band of militia from south Philippines into Sabah (East Malaysia) in February 2013 is a case in point. This intrusion brought the perennial security issues in the east coast of Sabah to the limelight. The Government has since established a new security command called the East Sabah Security Command (ESSCOM). This organisation has been tasked to merge and oversee the operations of all security, law enforcement and government agencies with an initial budget of RM 200 million (Government Allocates RM 200 million, 2013). This new threat has put a fresh constrain on MAF's financial capacities. Developments such as these may put a damper on the 4D MAF strategic plan in the long run. There are even calls for MAF to focus its capability for irregular warfare instead.

### 6.8 Resources for a CBP Process Model

Admittedly, CBP relies on the extensive use of models. Before CBP is introduced, MAF may have to develop its very own model based on best practices employed by the Five-Eyes nations. Besides this, the following critical resources have to be made available.

#### *Human Capital*

The TTCP Guide to Capability-Based Planning stresses that the successful execution of CBP requires “work at high levels of abstractions” (JCS J-8, 2009). This requires knowledge and expertise, which has to be developed across the organisation. Towards this end, human capital training and development is a vital and critical challenge for the introduction of CBP in MAF.

#### *Funding*

The TTCP document also implies the challenge to ensure the availability of adequate funding for both the introduction and implementation of CBP processes. MAF will also require the development of associated methods and tools for force structure analysis and new costing models.

#### *Time*

The broader aspects of CBP implementation will require a substantial period to produce tangibles results. MAF must be prepared to provide time to allow expertise to develop before desired results materialise, especially in a budget-constrained environment. It must also be appreciated that the various components of capability (DLoDs) require different periods for maturity. Various organisations must be made responsible for coordinating and developing each component of DLoDs.

## 7. Conclusion

This paper has highlighted the numerous challenges for introducing CBP into MAF for planning future force structures. Chief among these are the challenges of invigorating political leadership and the creation of appropriate strategic guidance for MAF. This will be the initiating move for CBP to take-off. Other challenges include the dismantling of old mind-sets vis-à-vis service rivalry and the desire to safeguard service interests. CBP breaks down traditional organisational boundaries to provide transparency and unity in force development. Business as usual i.e. working through a bottom-up stove-piped approach has to be replaced with a new methodology as suggested by the Generic Process (Figure 5). The existence of a threat-ambiguous environment has made it increasingly difficult for the nation’s defence planners to justify the various resources for force development. Though MAF has begun to apply some concepts of a capability-based approach, structural changes will be required before the full scope of CBP can be adopted. To support the introduction of CBP into MAF, insights into the planning process of other defence forces such as from United Kingdom and Australia must be keenly sought and applied. Lessons from their successes and failures will help MAF avoid the initial debilitating pitfalls.

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