

Sorotan **DARAT**

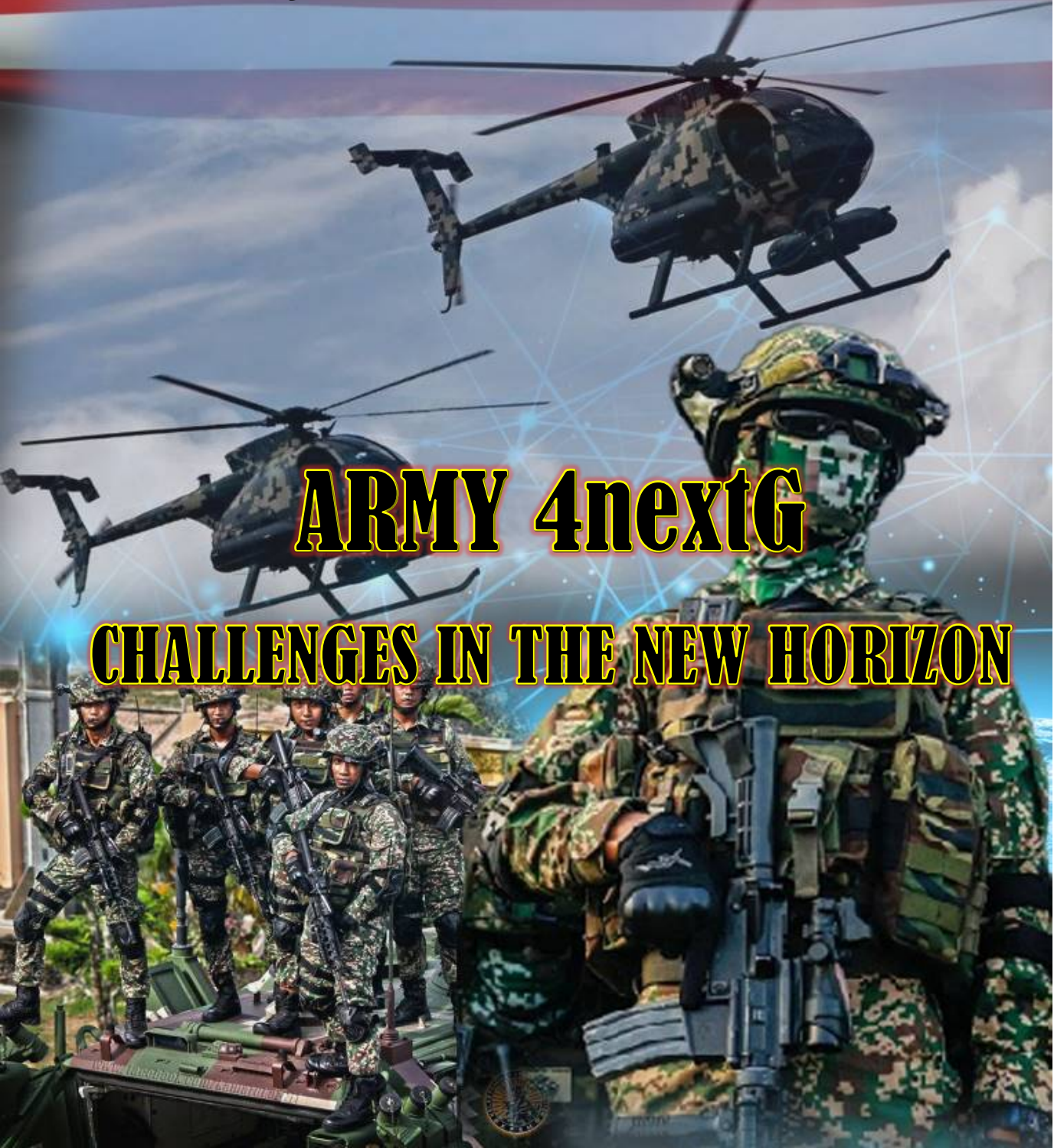
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ARMY 4nextG

CHALLENGES IN THE NEW HORIZON





SOROTAN DARAT
JURNAL TENTERA DARAT MALAYSIA
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KETERANGAN

Sorotan Darat ialah Jurnal Tentera Darat (TD) yang diterbitkan sejak 1 Mac 1983 bagi mempertingkatkan budaya ilmu di kalangan warga TD. Jangka masa pengeluaran ialah setiap 6 bulan iaitu pada bulan Jun dan Disember. Segala isi kandungannya termasuk sebarang ilustrasi, gambar, jadual dan rajah tidak dibenarkan dicetak semula dalam apa corak sekalipun tanpa mendapat kebenaran Kementerian Pertahanan melalui MK PLDTD terlebih dahulu.

Selaku sebuah Jurnal TD, Sorotan Darat adalah bertujuan mewujudkan satu forum bagi perbincangan perkara yang boleh menimbulkan minat profesional terhadap seorang perajurit. Artikel meliputi pelbagai isu dan tema adalah dipelawa dari segenap peringkat dan sesiapa sahaja yang mempunyai pengetahuan khas atau minat terhadap hal ehwal ketenteraan. Isu-isu kontroversi biasanya menjadi nadi penggerak sesebuah jurnal profesional yang mana ia dapat menimbulkan pemikiran dan perbincangan yang sihat. Artikel-artikel seperti ini akan diberi keutamaan, manakala artikel-artikel mengenai operasi-operasi, idea-idea latihan atau kegunaan peralatan adalah antara topik-topik yang sangat dialu-alukan.

Semua pertanyaan mengenai Sorotan Darat hendaklah dikemukakan kepada Ketua Editor iaitu Kol Doktrin, MK PLDTD.

Semua idea yang dikemukakan oleh penulis melalui artikelnya dalam jurnal ini, sama ada sebahagian atau seluruhnya adalah pendapatnya sendiri. Ianya bukanlah pendapat oleh Kementerian Pertahanan Malaysia atau pihak-pihak lain yang berkaitan.

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FROM CHIEF EDITOR'S DESK

Assalamualaikum Warahmatullahi Wabarakatuh. With the name of Allah, the Most Gracious and the Most Merciful.

Praise to Allah SWT, as the second journal of the year 2022, Edition 81 is successfully published to acknowledge the writer's effort in enhancing the readers' mind with informative, useful and meaningful articles. The Editorial Council would like to express our appreciation to all writers who have contributed to the publication of this journal. The commitments and enthusiasm by the thriving writers are certainly a precious aptitude in producing a well-published journal. Nuggets of golden wisdom in thinking and actions come in many forms as they can be extracted from various sources. Therefore, *SOROTAN DARAT* provides such a platform for the readers to extract the ideas shared by the writers in enhancing their professional knowledge and situational awareness.

This edition discusses on the Army 4nextG Strategic Development Plan, which was designed for duration of 30 years (2021-2050). The strategy has also been updated in accordance with the documents adopted by the Ministry of Defence and the Malaysian Armed Forces, including the National Security Policy, National Defence Policy, Defence White Paper, National Military Strategic and the Fourth Dimension Malaysian Armed Forces Strategic Plan. The strategic goals outlined in this plan focus on the ability of the Malaysian Army to operate in two theatres simultaneously, which contains the elements such as the Multi-domain Operating Environment which are technology-based, togetherness, interoperability, mission-oriented, human resource development and training, logistics and also the financial resource management.

The Editorial Council welcomes and encourages more new aspiring writers to contribute articles for future publications. Constructive opinions, dynamics comments and potential ideas as well as feedbacks from the readers are highly encouraged to improve the quality of the journal published in the future. Thank you.

"Knowledge Builds Confidence"



KOL NORULHISYAM BIN MD SHUIB
Chief Editor

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ARMY 4NEXTG: CHALLENGES IN THE NEW HORIZON

**By BRIG JEN (DR) MOHAMAD ASRI BIN DIN
ROYAL MEDICAL AND DENTAL CORPS**

INTRODUCTION

As the dust settles after the 15th General Election, Malaysia faces other challenging problems. With many issues afflicting the nation – politics, economy and social differences - it is time for political reconciliation and realignment. It is also vital for Malaysia to have some clarity about where it is heading soon. Recalling the time much earlier than the recent political turmoil, Malaysia has consistently faced border and maritime disputes. Disputes are common, considering Malaysia is a maritime country. As a sovereign state, it will endeavour to its utmost capabilities to maintain the status quo and preserve stability. Security challenges from many potential sources demand a strong defence force. In the Malaysian context, the Army, the backbone of the armed forces, needs to improve and always be ready. The cost of neglecting the security threat can be very detrimental to the state, but this is always at the expense of a higher budget. The geostrategic environment and fiscal ability are not the only challenges Malaysia faces. Well-defined government policy and future war concepts are other areas that need further consideration.

In 2020, Malaysia published a comprehensive first-ever Defence White Paper (DWP) outlining its strategic plan to develop an integrated, agile and focused force capable of responding to traditional and non-traditional threats. This enhanced force is expected to respond to any threats during peace or conflict with a high level of readiness and competency (DWP, 2021).

WHAT IS ARMY 4NEXTG?

Army 4nextG is a long-term plan for the modernization of the Malaysian Army. Launched by the Chief of the Malaysian Army on 1st Mar March 2021, the plan is a continuation of the previous Army 2 10 Plus 10 that support the Malaysian Armed Forces (MAF) Development Plan (4D MAF). This plan emphasizes Capability-Based Planning as opposed to the previous Threats-Based Planning. The plan focuses on acquiring the critical capability for the Malaysian Army rather than equipping assets for specific Core Brigades (Army 4nextG, 2021).

WHAT IS A CAPABILITY-BASED PLAN (CBP)?

Pietrucha (2015) explained the concept of CBP as a new defence strategy built around shifting to a 'capabilities-based' approach. It reflects that a state cannot know with confidence what nations or non-state actors will threaten the vital interests of a state or its allies. However, it is possible to anticipate an adversary's capabilities to coerce its neighbours, deter the state from defending itself, or directly attack a country. In short, a capabilities-based model focuses more on how an adversary might fight than who the adversary might be and where a war might occur.

The development plan for Army capability is based on five objective strategic capabilities, which are as follows.

- Detection
- Survive and Strike
- Sustainment
- Protraction
- Nation Building

Capability elements include human resources, communication, mobility, materials and firepower. In developing the plan, due consideration has been given to relevant aspects of defence challenges, such as the geopolitical environment, the spectrum of threats, national policy and current fiscal capability. The plan has also been developed with strategic objectives of ensuring the Army is able to operate effectively in two different territories (Peninsular and Sabah & Sarawak) concurrently (Army 4nextG, 2021).

FORCE STRUCTURE

To develop an able force, Malaysia needs to have a long-term plan and strategic investment before it can harvest the result. The outcome expected from the investment is to get intelligent soldiers based on knowledge, skills, and other capabilities. The concepts of this Future Force are as listed below. (DWP, 2020)

- **Integrated.** Jointness and close cooperation across the Services in all stages of the military process, from research and planning to procurements, training and operations.
- **Agile.** Ability to adapt and respond quickly to various threats or critical situations while nimble enough to react to contingencies.

- **Focused.** Prioritizing force capability development plan following the interest-based principle.

This idealistic concept is, to a certain extent, arbitrary. It revolves around five main characteristics - **jointness, interoperability, technology-based, ability to operate simultaneously in two theatres and mission-oriented.**

GEOSTRATEGIC ENVIRONMENT

Malaysia consists of two separate regions – the Peninsular Malaysia on the west and the state of Sabah and Sarawak on the East (also called East Malaysia). Sabah and Sarawak are in the northern part of Borneo Island, which is also shared with other countries, namely Brunei and Indonesia. The west and the east region are separated by some 640 miles of the South China Sea (BBC, 2022).

Malaysia is neighbouring Thailand in the northern part of Peninsular Malaysia. It has 595 km of shared border with Thailand, 266 km with Brunei and 1881 km with Indonesia (Army 4nextG, 2021). It has always been considered the most vibrant economy in Southeast Asia, thanks to decades of industrial growth and political stability. It is a multi-ethnic, multi-religious federation of 13 states and three federal territories (BBC, 2022).

Situated in Southeast Asia, Malaysia is surrounded by the Straits of Malacca, the South China Sea, and the Sulu Sea. Other close neighbours are Singapore and the Philippines, although both are not sharing the land borders with Malaysia. Shared seas often lead to disputes when the maritime areas overlap, and boundaries have not been delineated and agreed. However, shared seas also mean shared resources, which is the main reason behind all the disagreements (Hamidi, 2011).

The Straits of Malacca is also one of the busiest for business worldwide. It is the central passage for more than 60,000 vessels per year, representing 30 per cent of the world sea trade. In addition, a quarter of all oil shipments transported by sea are using the Straits (International Maritime Bureau, 2021). Therefore, it is very inviting to international or national piracy activities and other cross-border criminal activities such as kidnapping for ransom (Hamidi, 2011).

INTERNAL CHALLENGES

❖ Lack of Good Governance

The importance of good governance cannot be overemphasized. Unfortunately, in many cases, it remains only a doctrinal ideal that is difficult to be embraced. Good governance will only be revisited once a problem has attracted the public cry. One of the latest examples is the case of Littoral Combat Ships (LCS) for the Royal Malaysian Navy, which cost the government's budget dearly.

The RM9.13 billion procurement for six LCS for the Royal Malaysian Navy is an example of how vital planning to strengthen the capability of the military was frustrated by delays and cost overruns due to poor corporate governance and alleged mishandling of funds according to the declassified reports that were later made public by the authority. According to the Malaysian Parliament's Public Account Committee (PAC), the project to construct six ships was awarded by the Ministry of Defence to Bousted Naval Shipyard Sdn Bhd through direct negotiation. The government was reported to have paid RM6.8 billion or 66.65 per cent of the cost, but not even one ship has been delivered. Based on the projected timeline, five ships should have been delivered to the Royal Malaysian Navy by August 2022.

It is frustrating when the thoughtful aspiration of having a credible defence force has just been dumped unnecessarily. The image of a broken military tank blocking a busy road in Kuala Lumpur on its way for the 2022 National Day Celebration is fresh in the minds of many of us. We must not forget the purchase of abandoned obsolete Skyhawks fighter aircraft from the US and the alleged unfit submarines for the Navy. If good governance had been practised right from the beginning, planning, purchasing and maintenance with the priority given to national security, all these shady arrangements would not have happened. Good governance comes together with government transparency. This is when the conflicting interest between upholding the noble principle and unquestioned loyalty to the superiors is tested.

Military procurement is often the most significant investment made by any government. It must be balanced with other priorities, such as the necessities for living, healthcare, and education. There is always a competing interest in the financial budget between defence and other sectors. Significant military allocation is not an issue when the economy is stable and prosperous. However, things will not be as easy when people struggle with living costs. An irrational military

budget will spark an outcry, especially when the project is seen as a dubious exploitation of businessman-politician dealing. But how can this issue be tackled effectively?

One of the sensible solutions is for the people to be alert to the need for good governance and transparent government. The 15th General Election has concluded, and the government is in the formation stage. The aspiration of the 'Rakyat' is to uphold the integrity and transparency of administration as promised in their manifesto. Good governance demands the government's willpower. It is not impossible, provided the government is determined towards it, and all people selected to become office bearers are honest and accountable.

❖ Political Stability

The second challenge awaiting Army 4NextG is the country's political stability. By convention, the newly elected government of the day has to honour the previous commitments made by the previous government. However, this is not always the case. For example, when the Pakatan Harapan Government won the 2018 General Election, many projects planned and started by the previous Barisan Nasional government were either stopped or revised. The same scenario repeated when Perikatan Nasional came to power in 2020. This has caused uncertainty and affected many of the country's development projects.

When the PH government came to power in 2018, it introduced the first-ever Defence White Paper (DWP) intending to revolutionize the defence force by the year 2030. This becomes the 'Bible' for everyone to refer. Army 4NextG concept is derived from this DWP, and thanks to the result of the 2022 General Election, the 2018 DWP can be expected to survive the test. What remains to be seen is how the gist of the paper is translated into action. The government will surely revive the doctrine enlisted in the paper, but some adjustments are expected to happen, taking into consideration the government's fiscal ability and budget.

Political stability is needed for any doctrine and long-term plan to survive (Maher, 2016). This is important for any defence planning as nearly all the projects are of long-term nature. The government's political stability will ensure the investors' confidence and the willingness of the major players in defence industries to extend their business (Beveridge, 2010). Political stability does not mean a government without opposition. Oppositions are needed to maintain

the check and balances of the country. A too-powerful government is not, by definition, ideal, as this will lead to corrupt practices as nobody checks them. However, a fragile government is equally bad as this will lead to unending political manoeuvres to topple the existing ones. Here, the maturity of the people is much needed to elect responsible people to power.

❖ **Government Policy and Fiscal Ability**

Government policy determines how a state is run after considering all determinants affecting national interests and fiscal ability. The focus of any government, especially those who have just won the election, is to fulfil their election promises as enshrined in the manifesto and respond to stakeholders' voices. Therefore, the government needs to prioritize their course of action. For example, while the modernization of Army assets and capabilities is its ambitious goal, it might not be feasible if the government is under financial constraint (Augur et al., 2012).

Fiscal ability is undeniably the critical determining factor for the sustainability of any government project. Although many governments are ambitious at improving the physical infrastructure of their countries, many of them fall short of completing them due to financial constraints. Among the priorities mentioned by the 10th Prime Minister, Dato' Seri Anwar Ibrahim, is to tackle the rising cost of living and reduce the burden of the people financially affected by many factors post-Covid era. Although national security is essential, people will not readily appreciate any initiatives to modernize the Army in times when other necessities are more needed.

The fiscal ability of Malaysia is not that great compared to the years before. This problem is not specific to Malaysia but rather a global phenomenon affecting the whole world. However, the degree of its impact differs from country to country, depending on the ability of the government to mitigate the problem. The financial burden and economic recession are challenging and complex. It needs competent leaders but, most importantly, an honest and transparent government. A transparent government policy is needed to tackle many pressing issues, such as the lack of employment opportunities. However, with all those challenges, the financial allocation for the modernization of the Army and materializing the doctrine of Army 4NextG can be expected to be given less priority.

❖ **The Thinking Gap**

The challenge in modernizing the Army is not specific to only developing and Third World Countries. Many developed countries, including the US, United Kingdom, Australia and Canada, face similar issues. Modernization is a complex undertaking grounded in the expected force's roles and missions (Butler et al., 2018). The understanding between the Army and the government on the modernization model might not be on the same wavelength and thus can cause friction among the stakeholders (Bergmann, 2020). Subsequently, it is often translated differently and more often, the delivery of certain assets is reluctantly accepted by the end-users (Davies, 2011). The examples of this mismatch are evident, affecting the day-to-day operation of the Army. Again, this also hinges on transparency and good governance.

❖ **Human Capital Management**

Human capital management has always been challenging for the Malaysian Defence Forces. Army 4NextG hinges on capability-based planning. It will utilize sophisticated assets in the era of cyber warfare. The future concept of warfare demands academically competent and intelligent staff instead of only physically fit and able soldiers. Alongside the procurement of highly sophisticated assets is – does this come together with the same intellectually competent soldiers operating the machine? The answer is always affirmative – they can handle the device as per its manual. But what seems to be lacking is our ability to maintain and repair the assets when they are broken or aged. Maintenance is very costly and outsourcing it for repair and maintenance will financially burden the government further. This scenario exists partly due to the privatization policy and indirectly denies the opportunity for internal military staff to be trained in specific technical aspects.

The Army 4NextG outlined plans to develop an integrated, agile and focused Army force. However, it lacks enabler capabilities such as engineering and technical experts, healthcare, cyber, intelligence and surveillance. Human capital management needs to be planned comprehensively. Efforts must be taken to attract and train future soldiers to become skilled and diversified personnel parallel with the acquisition of current military assets.

EXTERNAL CHALLENGES

❖ Uncertain Big Power Relations

After the end of the Cold War era, the world has not become more peaceful as the conflict between the Russian and the US-European blocks continues, but with a much more complex set-up (Newcomb, 1993). The war between Russia and its previous ally, Ukraine, threatens the region's stability. It is a war between Russia and its Western proxy, although many countries in the block are taking a prudent approach of not directly assisting Ukraine, considering its grave consequence.

Russia is not alone in this conflict. It has suddenly made friends with China, North Korea, Iran, Turkey and a few states previously members of the USSR. China has already intimidated the US with its aggressive approach to free access to the South China Sea. Although both countries have had cooperation and dialogues, both are still hostile in many aspects – trade war, maritime tensions, information technology, copyrights and patent and other forms of strains. Foreign vessels' incursions off the coast of Sabah and Sarawak are rampant. China's presence in the South China Sea, US Freedom of Navigation Operations (FONOPs) and equal participation of other superpowers have complicated the existing overlapping sovereign claims. The current scenario has been challenging for Malaysia as its location is at the centre of ASEAN countries.

Malaysia cannot remain idle without taking the necessary steps to safeguard its sovereignty. However, Malaysia is only a tiny nation with its problems and challenges. Fortifying its military assets may not seem a priority now. Therefore, Malaysia must play its diplomacy. But the options are sometimes minimal due to international politics. Taking sides toward specific military blocks will not be wise as the repercussion can be grave. Post-Cold War geopolitical configuration is now becoming very complex, and nuclear-based warfare, as warned by Russia to its opponents, cannot be discredited.

So, where are we heading? The answer to this question requires wisdom from our leaders. Historically, Malaysia has played an excellent role in not taking sides with its membership in the Non-Alignment Movement (NAM). But since the world's geopolitics is reshaped differently, especially after the catastrophic event of 9/11 in 2001 and following the 'lost war' of the US against the Taliban in Afghanistan in 2021, the pendulum has shifted more towards the Russia-Eastern bloc. On the other hand, China introduced its Belt and

Road initiative (BRI), intending to revive the Silk Road. The grandiose project involved the construction of land highways connecting Asia to Europe and Africa. This project enhances the infrastructure, transportation and trade links for the country.

Parallel to this, China has invested hugely in its military modernization, banking services and economic cooperation in selected Asian countries such as Vietnam and Sri Lanka. In addition, institutional initiatives such as the Asian Infrastructure Investment Bank (AIIB), Bank of China, and the Mekong-Lancang Cooperation (MLC) are extending their arms into many Asian countries, including Malaysia. Due to various China's military and economic developments, the US has moved up its US Freedom of Navigation Operations (FONOPs). Many other superpowers followed this step. Consequently, the South China Sea has turned into a new militarised field. These are not conducive for small countries that are unfortunately trapped due to their geographical proximity, direct or indirect. Hence, the question of how it should respond militarily can be very delicate.

❖ **Complex Southeast Asian Neighbourhood**

The complexity of maritime issues affecting Malaysia is not limited to the international level. The same fear is also extended to its surrounding ASEAN neighbourhood. Malaysia's security is very much related to the stability of the Southeast Asia region. What happens in any member state of ASEAN will directly or indirectly affect the security of Malaysia. As a post-colonial state way back in 1511, when the Portuguese first colonized it, it inherited many unresolved land border and maritime delimitation issues with its neighbouring countries (MiDAS, 2011). This is made worse by the fact that Malaysia is located very centrally in the Southeast Asia region. Other bilateral issues such as conflicting interests extended from territorial disputes, humanitarian crises from the persecution by the state's authority (such as the issue of Rohingya from Myanmar) and the uncontrolled migration of people from neighbouring countries (such as the Philippines) (DWP, 2020).

Geographical proximity not only confers disadvantages on Malaysia but also affords some advantages. Immediate neighbours can become strategic partners in additional security, economic and social matters. One key example is security for the international commercial ships crossing the Straits of Malacca. Indonesia, Malaysia and Singapore had formed a practical cooperation, namely Malacca Straits Patrol (MSP), in ensuring the passage of 30% of

seaborne trade pass safely free from piracy threat. One country cannot take these security measures single-handedly (DWP, 2020).

❖ **Increasing Non-Traditional Security Threat**

Non-Traditional Security (NTS) threats can exist in many forms and persistently pose a challenge to Malaysia's security. Unlike traditional security threats such as foreign military aggression, NTS can be complex and challenging to handle. Examples of NTS are terrorism, extremism, cyber threats, maritime threats, nuclear weapons proliferation, Chemical, Biological, Radiological, Nuclear and Explosives (CBRNe) threats, and natural disasters (DWP, 2020). Much has been said about other forms of threat; therefore, this paper will focus on Malaysia's political and religious extremism.

❖ **Political and Religious Extremism**

Malaysia's political, social and religious fabric is very colourful, polarised and, to a certain extent, delicate. The colonial legacy of 'divide and rule' left by the British has taken a significant toll on Malaysia's social structure and extended to political and religious tensions. The forefathers of Malaysia Tunku Abdul Rahman and his successor, Tun Abdul Razak, had successfully tried and managed Malaysia towards becoming a moderate nation. But, slowly, it ruptured thanks to the irresponsible politicians who had disproportionately used the sentiments of race and religion as tools to win the heart and minds of the voters.

What we harvested today is the fruit of an uncareful political game. The Malays, the majority in rural areas, are easily influenced by politicians championing Islam and Malay rights. The perception is that the Malays' rights are threatened and must be safeguarded. The Chinese are equally affected by the same issue, as well as the Indians. Race-based and religion-based politics can be very appealing, which is well understood by politicians across the board. But for the sake of winning, politicians trade barbs with each other. The 'Rakyat', affected by the provoking content of their manifestos, voted for them but later realized that politicians are manipulative lots. Until the 'Rakyat' realizes this, people continue to be used.

Religious extremism can pose a more significant threat if not controlled. We have seen how more than 300 hundred Malaysians have fall prey to Daesh, ISIS and Abu Sayyaf groups (DWP, 2020). Religious extremism can escalate to organized criminal activities such as suicidal attacks, bombing and kidnapping. These political and

religious threats can be a challenging task for the government because it distracts the focus of the authority towards more pressing and threatening issues such as inter-state conflicts. Internal security is equally important, and it will be given priority. Thus, the attention and financial budget for the military will be reduced if not slashed. The eventual consequence of this is that the modernization of the Army will be halted and will further risk national security.

❖ **Future War Concept**

The future war concept is fast changing. It is no longer based on the number of personnel and a massive inventory of equipment. In the future, war will be fought differently using a combination of weapons and Artificial Technology (AI). Autonomous Weapons Systems (AWS) is an example of AI-guided armaments that can be operated independently without a human operator. This will pose a more significant threat to conventional warfare as it can be more atrocious. While the entire world moaned at the use of nuclear weapons, defence industries deliberately invented other types of weapons and named them differently. The concealed fact is that it can produce the same devastating effect, if not worse than the previous nuclear weapons. The hypocrisy of the superpowers continues. As a sovereign nation, Malaysia cannot sit idly or continuously play diplomatic approaches all the time. In this regard, the Malaysian Armed Forces (MAF) has responded with its doctrine to gear up its capabilities in Cyber Electromagnetic Activities (CEMA) in line with the concept of Electronic Warfare (EW) (DWP, 2020).

CONCLUSION

Army 4nextG is an ambitious long-term plan to modernize the force based on capability-based planning. It is also a challenging task, influenced by multiple factors, either tangible or non-tangible. The internal and external factors intertwine. The possible challenges hindering its implementation are lack of good governance, government policy and fiscal capability, understanding gap, human capital management, uncertain significant power relation, complex Southeast Asian neighbourhood, increasing non-conventional threats, and future war concept. We used to fight an identified enemy. However, CBP offers a different view on the military strategy, as if we are unprepared for a real enemy. No matter how convincing the plan has been designed and eloquently put into words, we cannot afford for the document to become just another untenable rhetoric. Time will be the real acid test for its practicality.

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ARMY 4NEXTG: CHALLENGES IN THE NEW HORIZON

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INTRODUCTION

On the 1st of March 2021, in conjunction with the 88th Army Day, the Chief of Malaysian Army launched the highly anticipated 'Malaysian Army Strategic Capacity Development Plan (Army 4NextG) 2021-2050' and 'The Army Strategic Management System Handbook (SPSTD) 2021-2025'. These two documents would serve as a complete guide for the direction of the Malaysian Army's development and management for the coming years. The Army 4NextG 2021-2050 is a long-term strategic plan on the Army's operational capacity. This strategic plan shifted from the previously used 'Threat-Based Planning' (TBP) to the more encompassing 'Capability-Based Planning (CBP)'.

THREAT-BASED PLANNING (TBP)

What is a TBP method? TBP was relatively uncomplicated as the threat was present and clearly identified and security force structures were simply designed to defeat the enemy. There was straightforward political and social support for defence force needs. Budgets were more readily available, as the political leaderships can easily understand and recognised the identified threat. Defence spending can be relatively easy to justify. The public sees the need for competent and fully equipped armies to protect them from the identified enemy.

For Malaysia, the fall of South Vietnam in 1975 followed by the invasion of Cambodia by Vietnam in 1978, the communist government of the Socialist Republic of Vietnam became the single biggest threat to the nation's sovereignty. There was a real fear of the 'domino effect' where South East Asian countries were to be invaded one by one by Vietnam. All attention was focused on preparations to face a possible invasion from the North-East, just as the Japanese forces invaded Malaya in 1941. Due to this clear and well-defined enemy entity, the Malaysian Armed Forces (MAF) convinced the government to embark on an expansion programme. The aim of this expansion plan was to develop a conventional war fighting forces (Muthiah, 1987).

CAPABILITY-BASED PLANNING (CBP)

In the post-Cold War era, military strategists began to question the effectiveness of TBP models. Enemy is not easily identifiable and largely unseen. Planning to face the unseen enemy becomes a huge challenge for military strategists. 'Asymmetric threats' and other 'non-traditional' threats such as terrorism, transnational crime, human and drug trafficking, mass migration, climate change, shortage of food and resources such as energy, infectious diseases, natural disasters and piracy have begun to emerge replacing conventional threats.

Yarger in 2006, described the strategic environment as marked by "a world order where the threats were both diffuse and uncertain, where conflict was inherent yet unpredictable, and where the capability to defend and promote national interests might be restricted by materiel and personnel resource constraints". In summary, it is an environment marked by volatility, uncertainty, complexity, and ambiguity (VUCA) (Yarger 2006). Due to these changes in strategic environment and threats, most of developed countries defence forces have migrated to Capability-Based Planning (CBP) in their defence management system, building upon the earlier TBP model.

What is a CBP method? The United States Department of Defence (US-DoD) in 2001 defined CBP as a model focuses more on "how an adversary might fight than who the adversary might be and where a war might occur". The US-DoD further elaborated CBP as the ability to achieve a desired effect under specified standards and conditions through a combination of means and ways across doctrine, organisation, training, materiel, leadership and education, personnel, and facilities. Kendall in 2002 described CBP as forming a military with asymmetric abilities that can be used universally in different theatres against diverse foes. NATO in 2018 described CBP as "what military organisations must be able to accomplish to cover the full range of the Alliance military missions and to guarantee NATO military effectiveness and freedom of movement". 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).

THE MALAYSIAN ARMY CAPABILITY-BASED PLANNING (ARMY 4NEXTG)

The Malaysian Army CBP model (Army 4NextG) is supported by systematic capacity development with a focus on the goal of the capability for:

- Detection
- Survival and Strike
- Sustainment
- Protraction
- Nation-Building

The plan would be part of the force in the future that would allow them to perform their tasks in a multi-domain environment. It is a continuation from the 'Army 2 10 Plus 10' Strategic Plan and in-sync with the Malaysian Defence White Paper and the Malaysian Armed Forces Strategic Plan (4DMAF).

❖ **The Army Capability to Operate in Two Theatres**

Malaysia is unique where its land mass is divided into two regions separated by the South China Sea; the Malaysian Peninsular (West) and Malaysian States on Borneo Island (East). The most important strategic objective of the Army4NextG model is to develop an army that is capable to operate and defend the sovereignty of both regions at the same time. The Army must have a balanced capability for detection, survival and strike, sustainment, protraction and nation-building in both theatres. In the previous TBP model, due to the perceived threat during Cold War period, the development of the Malaysian Army was biased which is more focused on the Peninsular. However, with changes in the geostrategic situation, the underdeveloped army capabilities in the Eastern Region need to be boosted. The incursion of foreign militia into Lahad Datu in 2013 was a valuable lesson for Malaysian military strategist. Military hardware and troops were brought in from the Peninsular region to support the eastern region command. The militia number maybe relatively small, however the army was facing difficulty in their capability to detect the enemy and sustain its operation. The assistance from western region ultimately neutralised the militia intrusion but at a risk of reducing the Army's capability and readiness in the Peninsular. The Army realised that it may struggle to operate in two regions at the same time. The Army is hoping to resolve this major issue with the implementation of the Army 4NextG capability planning. This has brought to the formation of the Army Field Command West and the Army Field Command East.

The formations of these command headquarters are just a beginning. It needs to be followed with all the required combat, combat support and combat service support elements in both regions for the Army 4NextG strategic planning to be successful.

The importance of strategic goals of Army 4NextG in balancing its capability in two regions are more relevant due to the ever presence of Sulu separatists, kidnap for ransom (KFR) groups, Abu Sayyaf militants group, pirates and other threatening elements on remote Philippines islands neighbouring the state of Sabah. The unsettled issues of the disputed Spratly Islands and the long borders of Malaysia and Indonesia in Sabah and Sarawak also contributed to the pressing needs of a strategic review of the Malaysian Army capability in the Eastern Region.

❖ **Detection Capability**

Detection capability is a critical strategy that allows the Malaysian Army to operate in a multi-domain environment. The Army must have the capacity to accurately detect threats or targets that have the potential to challenge the nation's sovereignty. The Army needs to develop its Command, Control, Communications, Computers, Intelligence, Surveillance, Reconnaissance, and Targeting (C4ISRT) capability including Information Operations (IO). All type of threats can be detected as early as possible and information must in real time.

❖ **Survive and Strike Capability**

The Army will have the capability to protect its forces through the development of Command and Control Centre equipped with Information Fusion Centre (IFC) which is supported by Network Centric Operations (NCO). Survive and strike strategic goal can be achieved through the formation and development of combined battle group consisting of armoured brigade, mechanised brigade, army air wing, field artillery and air defence artillery group in both regions. This will provide a balanced capability in both theatres.

❖ **Sustainment Capability**

The development of sustainable capability is important in ensuring the effectiveness of the Army to operate in a dynamic multi-domain environment. The most important aspect is the capability of the Army logistics operations. An innovative logistics management will ensure all elements of communications, mobility, logistics and fire power are integrated to support the Army strategic goals. The proposed

formation of Divisional and Brigade Logistic Groups will help the Army achieves its sustainment objective.

The capability of the field combat engineers need to be developed in both regions through the integration of all engineers units through the formation of Field Engineers Groups which are capable to face nuclear, biological and chemical threats. The groups should also consist of tactical bridge unit, general engineers unit and field engineers unit. The Army also needs to provide more focus to the development of the human resource and infrastructure of its reserve or territorial units. These units can assist the Army in its sustainment goal and at the same time increase their readiness in facing all spectrums of threats.

❖ **Protraction Capability**

Protraction strategy aims to weaken opposition over time by an attractional campaign through tightly integrated political and military factors. The Army plans to use asymmetric war method until the enemy is defeated through attrition warfare. Our valuable experience and history in fighting the communist terrorist insurgency in the 80's will be utilised and strengthened. This strategy requires the full support from the public. A comprehensive integration at the national level with all civilian agencies is vital in order for this strategic initiative to be a success.

❖ **Nation Building Capability**

This capability contributes towards the development of our country. The Army needs to produce and portray a positive image to gain the trust, support and confidence of the people. The public need to have the confidence that the Army is the pillar of the sovereignty of the country. A capable Army contributes towards a safe and stable country which in turns will be translated into better economics outcome.

The Army is expected to be the nation's frontrunner of Military Operations Other Than War (MOOTW) such as peace support operations (PSO) and humanitarian assistance and disaster relief (HADR) operations. The Army has proven itself time and again of its capability in providing support during disasters. The Army support and handling of the recent COVID-19 pandemic is a testament on the Army's capability in handling one of asymmetric threat which is infectious diseases. The army capability was tested and proven. The nation was indebted to the Army's support during the trying times of the pandemic.

The performances of the Army medical elements were outstanding in supporting the nation in time of needs. The Army only has only two medical battalions which have been stretched to the limit during the two years pandemic. Numerous field hospitals were set up assisting the Ministry of Health in treating and isolating patients. They also assisted in providing vaccinations to military personnel, military family and the public. The Army 4NextG Strategic Plan needs to look at increasing the capability of Medical Battalions. More battalions and Army Medical Centres need to be developed with appropriate equipment to enhance the Army capability in providing health support operations during peace time and war.

The Army's capabilities in international missions including supporting the United Nation's peacekeeping operations need to be enhanced. Providing support to global security and peace will be one of Malaysian Army main tasks in the future. Troops must be capable of conducting peacekeeping operations in any given country, conditions and environment. The Army strategic plan must cater for the preparedness of its troops to be deployed anywhere and anytime.

CHALLENGES IN IMPLEMENTING ARMY4NEXTG

As a long term strategic plan (2021 - 2050), Army 4NextG will face numerous challenges and hurdles to be implemented. Among the challenges that the Army leaderships have foreseen are: fiscal or monetary constraint, government's policy, changes in political landscape, Army personnel understandings of the strategic model, future war concept and the dynamic international geostrategic environment.

For Malaysia, ambiguous, asymmetric and unknown threat environment has caused great obstacles when defence budgets are tabled. Due to poor understanding of the unseen enemies, Non-Governmental Organisations (NGO's), political parties and the public in general frequently question the need for huge spending and purchases of expensive military hardware. Allegations of corruption, delay in products delivery, abuse of power and gross financial leakage frequently make the news causing more scrutiny from stakeholders. Education and healthcare budgets are more readily public friendly and usually received priority in a peaceful country like Malaysia.

A change in government leads to changes in leaderships and policies. The military leaderships may have to re-explain and re-justify their strategic plans to the new political leaderships. In order to minimise misunderstandings, military strategic plans should be tabled

to the government and oppositions in parliament. A bipartisan support will ensure military strategic plans being accepted regardless of who is holding the office. The military leaderships should also get policy guidance from the government and the government must also have a clear strategic defence policy. A more inclusive policy making will ensure a more durable and sustainable strategic plans

The Army may face challenges in producing officers and soldiers who understand Army 4NextG concepts and requirements. Human resource capability is the single most important factor in predicting the success of the Army capability-based strategic plans. The Army needs to do more to expose its personnel to Army 4NextG. Reading materials need to be more readily available to the soldiers and officers. Training centres need to incorporate Army 4NextG concepts into their syllabus. Doctrines need to be reviewed to ensure they follow this new capability-based strategic plan. The Army wants to produce soldiers that have the capability to think critically and innovatively (thinking soldier) and able to push the Malaysian Army to be a 'learning organisation' or 'knowledge army'. The required knowledge and expertise has to be developed across the organisation. Towards the end, human capital training and development is a vital and critical challenge for the success of Army 4NextG.

In the last few years, the Army embarked on strengthening its Eastern Region capabilities. A 'realignment' process of the Army took place. Certain formations and units were redesignated and redeployed. The Army Field Command East was established in 2014. However due to budgetary and defence policy constraints, the Army still struggles to build a more balanced capabilities in both regions. The planned boost in terms of hardware, firepower and manpower for eastern region is still slow but progressing and hopefully all the strategic initiatives will be fulfilled by 2050.

CONCLUSIONS

The capability-based Army 4NextG strategic model main objective is to build a modern and credible Army, capable of facing any future threats. The ability to operate in two regions at any given time is the main pillar on how the Army operates in the future and also how the Army remains relevant. The applications of modern and sophisticated technologies will mould the Army into a responsive, credible and adaptive force. Inter-agencies cooperation is vital in forming a resilient nation. Defending a nation is a collective efforts led by the armed forces. The public must have a good understanding about the Army strategic initiatives so that the army and the people it is protecting can

work together to safeguard the sovereignty of this nation. This article also highlighted the numerous challenges in implementing Army 4NextG in the next 30 years. These challenges are expected for a long term strategic model. The Army, being a highly robust and adaptive organisation will surely have plans to overcome these challenges. Army 4NextG must not become a victim of its own rhetorical success. Its successful implementation will depend on a more precise understanding of goals and limitations than has been identified.

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ARMY 4NEXTG: CHALLENGES IN THE NEW HORIZON

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INTRODUCTION

Army for Next Generation Strategic Development Plan, also known as Army 4nextG replaces the Army 2 10 Plus 10 Strategic Plan to uphold the Fourth Dimension Malaysian Armed Forces (4D MAF) Strategic Plan. The Army 4nextG plan is Malaysian Army transformation strategy that entails modernization initiatives compatible with the geopolitical, threat spectrum, national policy, regional security context, current ability and capability. The transformation is a vital prerequisite in order for the Malaysian Army to be efficacious in the future.

Army 4nextG is the Malaysian Army's long-term strategic plan, which is generally comprehensive and systematic to achieve the ability operating in two-theatre simultaneously. This strategy was developed in accordance with the nation's development policies to sustain the National Security and Defence Policy. Army 4nextG strategy takes into consideration the fundamentals of the Future Forces as outlined in the Defence White Paper (DWP), as well as the requirements of the National Military Strategic. The strategy will allow the Malaysian Army to operate effectively towards Future Force, which seems empowered to execute tasks in a multi-domain environment. There are challenges identified in Army 4nextG strategic plan that will be elaborate further in this article. However, a well-planned strategy is needed to mitigate the impact on the Malaysian Army's development and this article will focus on the Royal Electrical and Mechanical (REME) Corps action plan to uphold the Army 4nextG challenges.

ARMY FOR NEXT GENERATION STRATEGIC DEVELOPMENT PLAN

The Army 4nextG Strategic Development Plan was designed for duration of 30 years (2021-2050). This strategy has also been updated in accordance with the documents adopted by the Ministry of Defence and the Malaysian Armed Forces, including the National Security Policy (DKN), National Defence Policy (DPN), DWP, National Military Strategic (SKN) and Fourth Dimension Malaysian Armed Forces (4D MAF) Strategic Plan (The Malaysia Army, 2021). The strategic goals outlined in this plan focus on the ability of the Malaysian Army to operate in two-theatre simultaneously, which contains the elements

such as a multi-domain operating environment which are technology-based, togetherness, interoperability, mission-oriented, human resource development and training, logistics and financial resource management (Ministry of Defence Malaysia, 2020).

The 5th Generation Warfare concept, a complicated and uncertain future conflict, was introduced to the Malaysian Army in 2021. "In 5GW, violence is so dispersed that the losing side may never realise that it has been conquered" (Daniel H. Abbott, 2010). This threat could be addressed merely through a military response strategy rather, it necessarily requires collaborative efforts with the government and the people via the Whole of Government and Whole of Society approach. Future conditions will also necessarily require a force capable of delivering military response in a multi-domain warfare environment (Multi-Domain Operating Environment). Thus, Malaysian Army's future development is based on five capability goals which are detection, survivability and strike, sustainability, protraction and nation building.

ARMY 4NEXTG: CHALLENGES TOWARD MALAYSIAN ARMY

Army 4nextG's planning for the Malaysian Army in the multi-domain operating environment of the future battlefield is the key element. The Army 4nextG is a long-term strategic plan for the army's operational capabilities, supported by systematic capacity development management. This plan would be an element of the force in the future, enabling army personnel to accomplish their duties in a multi-domain environment. The Army 4nextG needs to prioritize intelligence operations and intellectual input to interact with unusual threats and changes in the geostrategic environment. Army 4nextG is not rigid or unchangeable by nature because its execution is flexible to the current situation as long as its sustainability is focused on the achieved purpose. The main challenge for Army 4nextG is incorporating a variety of tangible and intangible factors. Among the challenges identified as having a positive impact on the overall plan's implementation are government policy, the concept of future warfare and most importantly physical capabilities which will relate to the defence budget.

The Army 4nextG focuses on the establishment of an army which thus encompasses combat, combat support, service support, as well as human capital development in order for the army personnel to respond to a diverse selection of situational threats which align with the concept of future warfare. The architectural planning is technology-based, which would include Information and Communication Technology (ICT), weaponry technology advancement, human

resource development, doctrine, training, facilities development and logistics management. With today's technological advancements, our nation needs a military force that can classify multiple threats and distinguish between them, enabling us to take swift action based on the situation. The Army 4nextG plan will also be affected due to the limited defence budget. Hence, the Malaysian Army's physical capabilities and future technologies will latency further behind those of other countries. Therefore, the Malaysian Army must prioritise the aspects and developments that need to be focused on the RMK 12 to RMK 17.

CHALLENGES TOWARD THE MALAYSIAN ARMY LOGISTICS OPERATION

Logistics is defined as the planning, organization and control of all activities in the material flow, from raw material until final consumption and reverse flows of the manufactured product, with the aim of satisfying the customer's and other interest party's needs and wishes to provide a good customer service, low cost, low tied-up capital and small environmental consequences (Jonsson et al., 2005). An economic nation's operational forces are connected by logistics. It offers the means for national resources to be translated into combat power. It transforms human resources, natural resources, and industrial capacity into service units, weapons, equipment, and supplies (MD 4.0, 2017). Logistics and Combat Service Support (CSS) are phrases that are frequently used as interchangeable terms. Logistics refers to all actions necessary to move and maintain forces. This includes the acquisition and positioning of resources, as well as their delivery to the forces.

Sustainable capacity building is essential for the efficiency of the Malaysian Army in a dynamic multi-domain environment. The capabilities of the Malaysian Army Logistics Operations are the dominant driver that will assist in the management of Malaysian Army capabilities. Innovative logistics management will allow all elements of the capability to be integrated to support the Malaysian Army Strategic Goals, including communication, mobility, logistics/materials and firepower. The Malaysian Army doctrine of Logistics Operation entail the functions areas of logistics consist of supply, maintenance, transportation, general engineering, health service and other services (MD 4.0, 2017). The establishment of the Field Logistic Group (FLG), Division Logistic Group (DLG) and the Brigade Logistic Group (BLG) is in line with the emphasis on achieving the Sustainable Capability Goals. The purpose of forming this establishment would be to balance

the organization's development in the aspect of providing integrated logistics assistance based on effective logistics management.

Capability Development Management Strategy for the Army 4nextG is a strategy designed to empower the Malaysian Army in the future whilst also maintaining national policy, operational concepts, priorities, and fiscal strength. A systematic approach that considers all the requirements capability elements, such as human resources, communication, mobility, logistics/materials and firepower that will allow Malaysia Army to maximise overall strategic success targets in a limited resource environment. Future Malaysian Army Logistics Operations also included responsiveness, integrated networking and indeed the agility of logistics assistance services. These features are designed to allow logistics operations to be carried out continuously and consistently while adhering to the philosophy of resource management. This plan is referred to as the Base 60 Initiative Plan and it will be implemented in three stages which are evolution, stabilization and progress following the Financial Plan (RMK 12 – RMK 17). This strategy takes a comprehensive approach to assessing the Malaysian Army's level of vigilance and capability, putting special emphasis on a thoughtfully planned capability management strategy that takes into current financial capabilities.

In the Malaysian Army, more dynamic logistics operating systems will be integrated which could boost Malaysian Army combat power. This integration will include structural aspects of the logistics team that are based on a clearer and simpler mission, command and control. This integration will also be supported by a real-time integrated database system. The implementation of inventory management will be achieved by the success of this integration, which will also enable the reduction of operating expenses and improvement of maintenance. As a consequence, the Malaysian Army logistics operation will become increasingly dynamic, predictive and agile. The success of a logistic operation is dependent on constant and deliberate coordination of joint and service logistics mechanisms that are constantly linked and synchronised at all levels across the operational spectrum (MD 4.0, 2017).

The Malaysian Army Capability Management Transformation is implemented in a focused manner based on limited resource management and taking into account technological advancements in robotic, bio-mechanical, nuclear, and information systems engineering. This will encompass the strategy competencies of Lifecycle Management, Total Maintenance Program, Dynamic Technology

Management and eventually the use of resources implemented openly and cost-effectively, as well as the impact of success.

Through a distinct mechanism approach designed to allow the cost of managing the Malaysian Army to be optimised, the previously mentioned capability development management strategy can be expanded. The cost of managing expenses that have the potential to be optimised is focused on two aspects which are asset as well as material management should indeed be carried out cost-effectively, systematically, sustainably and concentrate on the management of human resource-intensive support services. Based on the challenges toward the Malaysian Army and logistics operation outlined, REME has developed a strategic plan that complements and aligns with the Malaysian Army plan. The REME Action Plan will be implemented over the ten years between 2021 to 2030 by emphasising and prioritising development within RMK 12 and RMK 13. This REME Action Plan is designed based on the details and challenges of Army 4nextG, also known as the REME Strategic Plan 2021-2030.

WAY FORWARD: REME STRATEGIC PLANNING TOWARDS ARMY 4NEXTG

REME Strategic Plan (2021-2030), also known as *Generasi Profesional 2030* (GenPro30) is a holistic approach toward corps development. This strategy plan establishes REME's vision of developing into a professional organisation in determining the capability and readiness of Malaysian Army equipment to ensure that it is maintained to fulfil the operational requirement. Thus, REME's goal is to implement REME Operation effectively and efficiently in order to support the Malaysian Army mission executing operations in two-theatre simultaneously, align with the Army 4nextG Strategic Development Plan. This strategic plan is based on the existing environment, specifically the DWP, Army 4nextG, Directive Chief of Army (CoA) 2019-2022, 28th CoA Prime Order and Industrial Revolution 4.0. (IR 4.0).

GenPro30's strategic objective is to establish the future success of REME's Operations, which is significantly dependent on the implementation of the Management Information System (MIS) in accordance with IR 4.0. The development of *Sistem Logistik Tentera Darat* (SISLOG TD), which will integrate REME's Engineering Maintenance System (EMESYS) and other logistics systems, does have the potential to enhance efficiency through real-time data sharing. This strategic plan will initiate systematic MIS module development to

enable other strategy such as organisational development, human resources, equipment and productivity.

There are five strategies in the GenPro30 plan that will drive the progression of the corps which are organizational development, human resource development, doctrine and training development, REME Operational capability and productivity development and MIS development. A survey was conducted to find out the opinions and recommendations from REME personnel at all levels in ensuring the strategy is more inclusive for corps holistic development.

❖ **Strategy 1: Organizational Development**

This Organizational Development strategy is focused on developing organizations, units and personnel to fulfil the requirements of REME Operations based on future development of the Malaysian Army. In line with the Army 4nextG plan, two new units have been established in the year 2021 which are 308 Light Aid Detachment (LAD) in Kuching, Sarawak and 45 Artillery Workshop in Kota Kinabalu, Sabah. Furthermore, REME has planned the establishment of new units such as 5 Brigade Workshop in Kota Kinabalu, Sabah, 22 Artillery Workshop in Kota Belud, Sabah, 23 Artillery Workshop in Taiping, Perak and 113 LAD in Lahad Datu, Sabah.

REME corps units will be restructure holistically to fulfil the requirement of the integration with the Malaysian Army Logistics organization consists of Royal Service Corp and Royal Ordnance Corp, the establishment of FSG, DSG and BSG in accordance with the Army 4nextG plan. GenPro30 identified the collaboration to establish Army Logistics Training Centre which consists of *Pusat Latihan Kor Perkhidmatan* (PULMAT), *Pusat Latihan Kor Ordnans Diraja* (PULNORD) and *Institut Kejuruteraan Tentera Darat* (IJED).

❖ **Strategy 2: Human Resource Development**

Human resource development is illustrated by increasing the capacity of competent human resources to designate roles and tasks, along with career planning and service retention which need to be manage efficiently. The implementation of this strategy requires REME to maintain a minimum of 80% human resources in each REME unit. Additionally, the allocation and staffing of human resources in the REME units have been meticulously organised to match with the job descriptions, specifications and competency. As a consequence, REME's has also adopted the approach of producing references for job description and specification criteria to employ human resources in

relevant positions. The scope of this duty is also designed to ensure that all professionals REME personnel have the necessary qualifications, credentials, knowledge, abilities and Subject Matter Expert (SME) to carry out the responsibilities based on the position. REME has also embraced this approach by recognising and forming groups based on their particular fields of competence and SMEs such as automotive, electric and electronics, weaponry, mechanical, aero-mechanical and aeronautic, information technology and management (Ts. Noorsyahira Abd Hamid et al., 2022).

On 15 July 2022, REME launched a professionalism recognition certification by the Malaysian Board of Technologies (MBOT) as Professional Technologist (Ts.) and Certified Technician (Tc.) for REME officers and personnel. This recognition consists of a total of 52 members as Ts. and 43 members as Tc. who were granted to REME officers and personnel during the celebration of the 65th REME Corps Day at IJED (Siti Hajar Mohamad Radzuan, 2022).

❖ **Strategy 3: Doctrine and Training Development**

The doctrine and training development strategy is represented in determining the doctrine and training to meet the requirement of REME Operations, as well as to develop professionalism through competency development and continuity in education. REME has endorsed doctrinal manual to meet the needs of REME Operation. A total of 17 doctrine manuals were endorse since 2021 which cover the REME Operation and technical inspection of Malaysian Army equipment. To further ensure the success of this strategy, REME has also planned to annually develop 10 doctrine manuals for endorsement by Army Tactical Doctrine Committee, TRADOC.

REME is developing its capability to develop pre-course online training and digital training material packages to enhance the training implementation. This training packages will be uploaded into the EMESYS for easy access via online. Other initiative taken in this strategy is to enhance the effectiveness and competency of REME personnel by participating in the World Skill Malaysia (WSM) competition (A Tahar. A Manan, 2022). Through the participation, REME's personnel competency will be in line with current technology and practice.

❖ **Strategy 4: REME Operational Capability and Productivity Development**

This REME Operational capability and productivity development strategy emphasis on equipment modernization to enhance REME's Operational capabilities and develops effective policies, instructions, work procedures, financial management and repair productivity. To support this strategy, REME has made procurement plan for 15 Light Recover Vehicles (LRV), Armoured Heavy Recovery Vehicles (AHRV), and 8 axis Computer Numerical Control (CNC) machines, which was approved and endorsed through the RMK 12. Besides that, REME has collaborated with the defence industry to integrate and incorporate Maintenance, Repair, and Overhaul (MRO) and Life Extension Program (LEP) contract plans on Malaysian Army equipment and assets.

REME Operational capabilities have also been tested in Eagle Exercise 2nd Infantry Division which was held from 8 to 14 September 2022. This initiative was implemented to test the effectiveness of the tactical plan and operational doctrine, as well as logistical support plans, including the establishment of the Mobile Workshop Operation in the Brigade Maintenance Area (BMA). This exercise exposes REME personnel to gain the experience, knowledge and responsibilities to accomplish the Mobile Workshop Operation which is based on the REME doctrine.

❖ **Strategy 5: Management Information System (MIS) Development**

In MIS development strategy, it focuses on improving the MIS by integrating the Army System and developing work procedure modules for human resources, training management and equipment management. EMESYS is the online MIS on equipment maintenance performed by REME including maintenance on vehicles, weapon, electronics and miscellaneous equipment (Nurul Shahnaz at el., 2021). REME's strategy is to implement MIS that suit to IR 4.0 and Artificial Intelligent (AI). Every REME units, need to perform repair and maintenance process through online and paperless via the EMESYS. EMESYS manual doctrine has been published as guidance and reference to the user.

The Malaysian Army logistic systems data integration is being developed to provide data source for SISLOG TD from EMESYS and others system such as *Sistem Pengurusan Material Tentera Darat* (SPMTD), *Sistem Pengurusan Alat Komunikasi dan Elektronik*

(SPAKE), *Sistem Pengurusan Rejimen Askar Jurutera Diraja* (SUTERA), Service Corps Management System (SCOM), Army Inventory Management System (AIMS), Computerised Ordnance Depot Inventory Management (CODIMS), *Sistem Pengurusan Senggaraan Kem Tentera Darat* (SPSKTD) and *Sistem Senggaraan Pasukan Udara Tentera Darat* (SSPUTD).

CONCLUSION

The Army 4nextG capability development concept was designed to establish the Malaysian Army as a modern and credible force equipped to deal with any future threat scenarios. Strategic Goals which are the ability to operate in two-theatre simultaneously and efficiently is the essential to how the Malaysian Army remain relevant in the future. The strategy that has been developed will mitigate the impact on the development of the Malaysian Army. To support this strategy, REME has developed the REME Strategic Plan (2021-2030) which is a holistic approach toward corps development. The action plan is the direction for REME towards the challenges of Army 4nextG which include the advancement of organizational development, human resource development, doctrine and training development, REME Operational capability and productivity development and MIS development. REME Strategic Plan known as GenPro30 developed the corps development strategic plan aligned with and uphold the Army 4nextG. It can be concluded that REME Strategic Plan is an innovative plan and realistic implementation approach toward the future development of the Malaysian Army.

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ARMY 4NEXTG: CHALLENGES IN THE NEW HORIZON

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INTRODUCTION

The Army's Strategic Capability Development Plan (Army 4nextG) was launched by the Chief of Army on 2nd March 2021, during the 88th Army Day. According to the Chief of Army, General Tan Sri Dato' Seri Zamrose bin Mohd Zain, these documents will serve as a comprehensive blueprint for the development and management of the Army for the next several years. The Army's operational capacity is a plan for the next half-century, with the help of the long-term strategic plan known as Army 4nextG 2021-2050. In addition, the programme would be a component of the future force, enabling the Army to carry out the missions in a multi-domain environment. Army 4nextG thereby supports the Malaysian Armed Forces Strategic Management System 2021-2025, the Defence White Paper, and the Strategic Plan of the Ministry of Defence. By 2021 and beyond, the Army will face the complex and uncertain concept of future warfare known as 5th Generation Warfare. Based on the situation, military action cannot solely eliminate threats. Instead, it necessitates collaboration between the government and the populace through "whole of government" and "whole of society" approaches. Therefore, the strategic goal outlined under the Army 4nextG plan is the ability of the Army to operate in two theatres simultaneously and be supported by five capability goals: Detection, Survive and Strike, Sustainment, Protraction, and Nation Building.

However, many believe that if the strategies and plans outlined in the Army 4nextG do not have sufficient provisions, the Malaysian Army will trap in the "Hollow Force Syndrome." Apart from that, the lack of strategic resources will harm the Malaysian Army in maintaining the sovereignty and peace of the country. Consequently, this essay will explore the challenges the Army 4nextG faces in the new horizon due to Changes in Software and Hardware Technologies, Military Human Performance, the Malaysian Defence Industry, Geopolitical Uncertainty, and Defence Procurement issues.



Picture 1: The Chief of Army launched the Army 4nextG on 2nd March 2021, during the 88th Army Day

CHANGES IN SOFTWARE AND HARDWARE TECHNOLOGIES

Initially, the Army will deploy a detection technique to ascertain adversary intent and identify initial targets. Detection in times of peace can either utilise the Army's diverse electronic detection capabilities or rely only on human intelligence. However, during times of war or armed conflict, commanders will get battlefield information and data collected in real-time to aid them in making effective tactical and operational decisions. Integrating data across components and other cutting-edge systems will enhance this process further. The use of Unmanned Aircraft Systems (UAS) in time warfare is a relatively new approach. UAS operations are focused on the Forward Edge of the Battle Area (FEBA) to obtain a Common Operating Picture (COP) related to enemy activity and terrain. Information collected includes aspects of Intelligence, Surveillance, Reconnaissance, and Target Acquisition (ISRT), which is the assignment of UAS to support detecting and identifying a target and collecting related information about threats and enemy activities in an operational area. The strategic level of UAS will assist the Army and other agencies in bolstering the nation's defence system. One part of a force multiplier that can affect military action is how UAS are used.

As a result, UAS can provide a clear perspective and give commanders an advantage in applying Command and Control, Communication, Computer, Intelligence, Surveillance, and Reconnaissance and Target Acquisition (C4ISRT) more efficiently. On the other hand, technology has endless potential to improve our lives and affect the planet. Technology product security is one of the

industry's most critical and complex challenges. Unfortunately, the dangerous landscape is well known to be rapidly developing. In 2020, there were a record number of market vulnerabilities reported. Instead of being slowed by the pandemic, malicious actors have accelerated the deployment of various software and hardware vulnerability mitigation technologies from conception to retirement. In particular, technologies with longer inherent product lifetimes, such as the microprocessors found in UAS, have a longer risk exposure window. In addition, increased product renewal cycles and support for backward compatibility lengthen their lifecycles, adding to this difficulty. Finally, the attack surface is growing as technological solutions continue to get more complicated to support increasing use cases. Because of these traits, hardware technology providers face new challenges that the Army must meet.

In addition, technological product security requirements evolve with time. As a result, new vulnerabilities often emerge after introducing a product to the market. The government may enact new laws and rules in response to major breaches in security or privacy. Even though regulators have implemented privacy laws and data protection standards, the safety of general technology goods may be no better than in the field of information security. As hardware solutions become more embedded in our daily lives, their security strength becomes increasingly crucial to our safety. But it is up to the technology providers to keep track of changes in the law and be ready to make changes as needed to stay in compliance. Such quick changes in product security need to become highly troublesome regarding hardware. Unlike software, hardware technologies change slowly over time, and fixing new security holes takes a lot more than just a patch. Instead, it needs close cooperation between researchers, software companies, operating system companies, hardware companies, and other players in the ecosystem.

MILITARY HUMAN PERFORMANCE

Protecting Malaysia's national interests and territorial integrity is the primary goal of the Army Policy. The Army Plan is current and applicable to guarantee the success of upcoming conflicts. By taking into account Army 4nextG objectives to sustain two theatres of operations (Peninsular Malaysia and Sabah/Sarawak), regional commanders have encouraged the Army to embrace the combined arms concept. The Army will employ the techniques necessary to accomplish this goal. Most importantly, the Army's survivability will depend a lot on force protection and good communication systems. There are concerns with overdependence, such as the failure to

maintain technologically supported capabilities and skills, even though new technologies may significantly improve an army's ability to survive and strike. Personal electronics are a fantastic source of empowerment, but soldiers must also prepare for a sudden loss of these powers during isolation or electronic warfare. Also, it would be harder to get an edge over a competitor who is used to working in low-power and low-communication environments (for example, someone who knows how to find their way).

New technologies will likely alter all battlefield roles and responsibilities. As a result, new roles emerge while the old ones are phased out or performed less frequently, transforming the human performance needs at all levels of the military. For instance, computerised decision-making aids may expedite decision-making while lowering mental strain and enhancing command and control. Furthermore, human-machine teams may significantly impact front-line fighting performance needs. The future military will likely employ a broad spectrum of robotic technologies. As a result, Artificial Intelligence (AI) will considerably impact ground commanders' judgements. Even though you can't know what will happen in the future, the tactical level will have the most impact on your physical and mental performance needs.

At the strategic level, where extremely long-term (10 to 20-year) high-level decisions are made, introducing new technology may nearly completely remove people from the decision-making loop. The human part may consist of acting on recommendations produced by cloud robotics, which curate and interpret continuously streaming data. These capabilities of the next generation of computing may imitate the functions of the human brain, thereby rendering it obsolete. Humans may one day only be involved in combat on the level of making broad strategic decisions. It's important to note that "allowing" machines to make judgements raises serious moral, legal, and ethical concerns. Our technology is insufficient to recreate human thoughts and phrases. Besides, it emphasises the significance of interdisciplinary research collaboration in complexity science, neuroscience, and computer science. The military's human resources play a critical role in ensuring that the human combatant rapidly adopts, integrates, and uses cutting-edge technologies. This assistance will be essential if our military stakeholders continue to value us.

MALAYSIAN DEFENCE INDUSTRY

Since the 1980s, the government has made substantial financial and personnel investments in building Malaysia's Defence Industry.

Bitzinger (2015) classifies Malaysia as a "third-tier arms-producing nation." The Malaysian Defence Industry was very limited to producing relatively "low-tech" weapons, such as small arms, ammunition, armoured vehicles, and small ships. It consists of licenced small arms like rifles and imported components for specialised military equipment like helicopters and armoured vehicles. Countries in the second tier have a substantial and sophisticated defence sector capable of designing, developing, and manufacturing their weapon systems. Taiwan, Japan, Indonesia, Singapore, and South Korea are examples of such nations. Lastly, "first-tier" countries like the United States, the United Kingdom, France, and Germany are able to make their own military systems.

While Malaysia has made significant strides in expanding its defence sector and contributing to the country's economic environment, its forward momentum is slowed by some complicated issues, including a lack of government guidance over the future strategic direction of the industry. These challenges need to be solved for Army 4nextG plans to move forward, and soon if possible. And the tactics developed to back up the National Security and Defence Policy will be directly affected by any limitations in this area. Concerns were raised by Balakrishnan (2008) regarding the following: (1) implementing defence industry policy development; (2) increasing the equipment in the Malaysian Armed Forces, as the majority of it comes from outside the country, particularly from the original equipment manufacturer (OEM); (3) minimal research and development (R & D); (4) OEMs' reluctance to share their technology; and (5) local companies' inability to meet the required capacity.

Smaller businesses may not be subject to the same rules as larger ones with higher product costs since they have fewer employees, a lower turnover rate, and lower prices. In addition, unlike their smaller and more recently created competitors, few defence contractors have a detailed vendor policy. Such actions result in the loss of highly skilled human capital and associated vendors who rely on the product to meet production and contractual requirements. These circumstances amount to a lost opportunity for the defence industry to benefit from the full potential of its human resources. Immediate improvements to the plan are needed to address several challenging problems that would improve the defence and security of the country and create more jobs. It can also help Malaysia become more self-sufficient in meeting its security and defence requirements and contribute to the growth of a more sustainable defence industry. Furthermore, the devised approach should allow for the Army's operational capability and survival during a confrontation between the major powers. The government of Malaysia

is working on a Defence White Paper, which could offer the impetus needed to solve the many problems that threaten the growth of the Malaysian Defence Industry.

THE GEOPOLITICAL UNCERTAINTY

The Russia-Ukraine war has already affected the world's crude oil prices due to restrictions on Russian oil and raised food prices in most regions due to disruptions to the supply chain from Ukraine. As it is known, Moscow is the second-leading exporter of oil globally and of natural gas, mainly to Europe. As soon as Putin launched the attack, the price of Brent crude oil reached US\$100 per barrel for the first time since 2014. With this increase, it also means that the current price of petrol in Malaysia will also increase. The rise and fall of oil prices in our country depend on the world crude oil price and the Ringgit currency exchange rate. Therefore, when there is an increase, it will affect the cost of transportation and business and may cause an increase in the price of goods.

As a result, the connection between the factors that drive consumer spending and corporate investment, as well as the choices that families and businesses ultimately make, can vary and is becoming increasingly difficult to forecast. Uncertainty reduces the efficiency of monetary transmission, and rising commodity prices will contribute to an increase in inflation, which was already substantially higher than the target level. The volatile geopolitical environment won't stop the Central Bank of Malaysia from raising its policy rate, but we can expect it to put more weight on how its decisions are based on data.

In terms of the danger of nuclear weapons, Malaysia may not be directly affected because, from a geographical point of view, the country is far away from Eastern Europe. However, even though Malaysia is neutral, we will be directly affected politically, geopolitically, and economically. The impact of this geopolitical uncertainty will affect planning, especially involving the procurement of Army equipment. Therefore, long-term planning is required to implement the planned Army 4nextG according to the set timeline. The government will also consider the national economy's priority over purchasing military equipment. Therefore, this long-term issue needs a strategy that includes the military and relationships with other industry players.

DEFENCE PROCUREMENT

Defence procurement refers to managing the acquisition of goods and services for the military that are essential to implementing

national security goals and the growth of military capacity. The program's ultimate goal is to save money without sacrificing quality by acquiring products and services that will help with the mission and provide operational assistance. Defence procurement requires long-term planning, as it takes many years to bring significant equipment into service. Army 4nextG policies and strategic goals, which offer a long-term perspective and a future force structure, direct the planning process. However, ensuring the effectiveness of defence procurement raises some challenges.

It's important to remember that Malaysia is still a developing nation. Growth in the economy over the past two decades has improved the national economy. However, the country's financial situation is weaker than in the past. The federal government has had a budget deficit of around 5% annually for the past few years. The annual defence budget is still not tied to the Gross Domestic Product (GDP). That is to say, defence spending is not always a certain percentage of GDP. There will be far-reaching repercussions for capacity planners if the annual budget is subject to last-minute cuts that disrupt carefully laid-out growth strategies. Moreover, constantly readjusting capability development plans owing to financial restraints may not result in cohesive force structures. The other issue with defence procurement is that it regularly exceeds the authorised cost. The procurement exceeds the budget due to incorrect preceding analysis and planning by staff officers, which resulted in underestimating the beginning budget. Furthermore, inefficient procurement methods, such as contract discussions favouring suppliers over customers, would increase overall prices. Finally, it could lead to inconsistency and a lack of commitment, which could cause friction in the procurement process.

The second issue of concern is the monitoring and governance element. Leadership weaknesses will hinder the Army's 4nextG objectives within the organisation. The lack of oversight at all levels of government will result in officers and members becoming negligent with their assigned obligations. For the acquisition of new assets, the replacement of depreciated assets, and the upkeep of existing assets, funding is needed. At the same time, financial constraints need to be dealt with wisely. The Army reevaluates past achievements and systematic improvements, considering current conditions and future needs. Explicit commitments from multiple levels must accompany every action plan. So, the three principles and five pillars outlined by the Chief of the Army's must be fully understood at every level of the Army.

Lastly, projects for systems integration always in terrible results. They are expensive, take time, and may not deliver the desired result. Major projects frequently face difficulties in overcoming dysfunctional internal interfaces. So it is between systems and the rest of the defence inventory and infrastructure. Additionally, there is a lack of interoperability considerations resulting from service rivalry focused on specific goals and budgets. Aside from that, the government intends to establish a domestic defence industrial base. However, it is typically unsuccessful due to the unwillingness of local participants in the defence sector to financially support research and development. The lack of quality and sustainable products is due to a lack of expertise, human capital, raw materials, economies of scale, and return on investment. Subsequently, defence management, both civilian and military, who lack the necessary technical and business experts contribute to the failure of all types of acquisition programs. In addition to systems engineering, human factor integration, risk management, and capability-based planning, there are also ideas like lack of knowledge.

CONCLUSION

According to the discussion of Army 4nextG challenges on the new horizon, the future of wars and conflicts is unpredictable. Army 4nextG is an innovative and futuristic tactic. Armed conflicts and wars may continue to occur globally, but their scope, intensity, and location may be limited or constrained. The increasing complexity of current and future battles makes upgrading the Army's capacity to conduct future wars much more difficult for planners and strategists. Investing in cutting-edge military technology is the best option for the Army of Tomorrow. However, superior technology alone cannot determine the outcome of fights. Today, the Army will initiate its 4nextG capabilities by doing the right thing for the right reason and in the right way. What are the right things, the proper motives, and the correct methods? War preparation would be straightforward if all necessary resources were available, but this is not always the case. The most crucial aspects of battle are still the soldiers and the officer corps leadership. So, the Army must always stay up-to-date on military technology, professionalism, and command in order to carry out its roles and responsibilities and protect the integrity and sovereignty of the country.

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ARMY 4NEXTG: CHALLENGES IN THE NEW HORIZON

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INTRODUCTION

The Malaysian Army Strategic Capability Development Plan is also known as Army 4nextG (For Next Generation). The Army 4nextG plan is a development plan based on capability-based planning beyond 2021 to 2050. This strategic plan started in 2021 to replace the previous plan, Army 2 10 Plus 10, which ended on the 31st of December 2020. The Army 4nextG plan has also been updated in line with the Ministry of Defense and Malaysian Armed Forces document. This document was also developed by balancing existing resources with the country's strategic interests (Kementerian Pertahanan, 2020). The strategic goal outlined under the Army 4nextG plan is the ability of the Malaysian Army to operate in two regions (theatre) of the country simultaneously. With the plan in place, it will prepare the Malaysian Army to be part of the Future Force capable of performing tasks in a multi-domain environment. This document was launched on the 1st of March 2021 by the 28th Chief of Army, Jeneral Tan Sri Dato' Seri Zamrose bin Mohd Zain in conjunction with the 88th Army Day Celebration. The Army 4nextG plan was also developed to support the National Defense Policy and align with the national development agenda. It also considers the requirements of the National Military Strategy and Future Force as outlined in the Defense White Paper (Tentera Darat Malaysia, 2021).

The Malaysian Army's capability development plan is always an essential agenda in ensuring that the Malaysian Army remains a superior organisation in defending the sovereignty and security of the country. As mentioned above, the strategic goal outlined under the Army 4nextG plan is the ability of the Malaysian Army to operate in two regions of the country simultaneously. The Army 4nextG plan also considers a few aspects such as a multi-domain operational environment based on technology, interoperability and mission-oriented; human resource development and knowledge-based training, logistics resource management, and logistics resource management, well-planned financial management (Tentera Darat Malaysia, 2021). On the other hand, the Army 4nextG plan is a long-term strategic plan for the Malaysian Army's operational capability, supported by systematic development management with a focus on the objective of capability detection, survival and strike, sustainment, protraction, and

nation-building (Bernama, 2021). In addition, the Army 4nextG plan will increase the Malaysian Army's capability status from 53.2% to 78.5%, an increment of 25.3%. At the same time, the readiness status will be improved by 31.8% to 76.5% at the end of the execution of the Army 4nextG plan (the year 2050) (Tentera Darat Malaysia, 2021).

CHALLENGES TO THE MALAYSIAN ARMY

As a long-term development plan, this plan is sensitive toward external and internal elements that may affect the aspirations of the strategic goals that have been outlined. Among the challenges related to the execution of the plan are the Malaysian government policies, the concept of future warfare, and, most important financial ability. In addition, the geostrategic environment also affects the overall aspirations of the government, the Malaysian Armed Forces, and the Malaysian Army in the future (Tentera Darat Malaysia, 2021).

❖ Budget Uncertain

As mentioned above, all the challenges must be addressed in implementing this plan. In this context, the main challenge that needs to be faced is the economic situation which is not very conducive; this has limited the government's ability to provide sufficient financial allocations for the acquisition of new assets as well as for maintaining existing assets. The Army 4nextG plan requires a large amount of financial budget involving Development Expenditures (DE) and Operating Expenditures (OE) to enable the Malaysian Army's capability and readiness to be high. This allocation is needed to fund the development of the Defense Sector for the long term until the year 2050.

As we already know, the allocation obtained for the Defense Sector is through the annual national budget. The budget for the Defense Sector is uncertain due to the country's current economic situation. For the record, for the year 2022, this budget has been allocated to the Ministry of Defence RM 16.4 billion. The budget is to fund the development of the Malaysian Armed Forces, including the Malaysian Army, Navy, and Air Force services. Of that amount, RM 11.10 billion is allocated for Operating Expenditures, and RM 5.04 billion is earmarked for Development Expenditures. Then, this allocation will be distributed to each service according to the requirements and dependencies. The budget allocation is more focused on enhancing the readiness of the assets of the Malaysian Armed Forces, maintaining schools in military camps, military facilities, and married quarters (Kementerian Kewangan Malaysia, 2021). Thus,

the main challenge here is to provide sufficient allocations to fund the execution of the Army 4nextG plan, especially for establishing new units, new infrastructure, and acquiring new assets. Therefore, the Defence Sector demands a stable financial allocation to ensure the Malaysian Armed Forces is equipped with adequate assets and equipment to deal with any challenges. Those things are essential to allow the Malaysian Armed Forces to achieve the ability to protect national interests, especially to defend the sovereignty and territorial integrity.

As outlined in the Defense White Paper, the Future Force will integrate the latest technologies in the organisation to meet the current and future operational requirements. All planning should consider the Fourth Industrial Revolution (IR 4.0), Internet of Things (IoT) and Artificial Intelligence (AI) to increase efficiency, reduce workload and achieve sustainable operating costs in the long term (Economic Planning Unit, 2018). Therefore, to review and restructure the existing organisation, the Malaysian Army also needs to review the current doctrine and incorporate technology that prioritises the widely use of automation and robotic systems compared to traditional methods that rely on the human workforce (Kementerian Pertahanan, 2020). With limited human resources, extensive automated systems are considered the best option. However, it depends on the current financial allocations for system procurement and maintenance costs.

❖ **Shrink Organisation**

On the other side, the Defense White Paper (DWP) has stated that the strength of the Malaysian Armed Forces will remain at the current size for the period of this Defense White Paper in effect (Kementerian Pertahanan, 2020). At the same time, the Army 4nextG plan needs to be executed according to the plans that have been set and in line with the Malaysian Plan from Twelfth Malaysia Plan (12th MP) started in the year 2021 to Seventeen Malaysia Plan (17th MP) which will end on the year 2050. With the limited resources and the current requirement for the establishment of new units, the Malaysian Army must use existing resources to fulfil the need of the Army 4nextG plan by adhering to the philosophy of doing more with less. With this approach, each establishment of a new unit will use existing resources by transferring or redeploying staffing resources to the newly established unit. While getting the approval of a new staffing source from the Malaysian Public Service Department, this approach will affect the existing unit in terms of holding strength and indirectly 'shrink' the organisation. The current unit must also be structured and reorganised to establish a new unit based on Army 4nextG planning. The structuring

also needs to consider the ability of the Malaysian Army to operate in two theatres simultaneously.

❖ **Global Security Environment Uncertain**

These days, the global security environment has changed drastically over the decades. Global and regional geopolitical changes, the desire to control natural resources and the evolution of technology have created threats and new challenges to the national interest and security. Suppose these issues related to the security environment are not addressed carefully and immediately. In that case, this situation can lead to potential to occur conflict and will affect national and economic stability. Therefore, awareness and defence capability must be at the highest level to protect our national interests and sovereignty (Kementerian Pertahanan Malaysia, 2021). The uncertainty of superpower relations at the global level is affecting changes in the balance of power in terms of economic and military, for example, the relations between two superpower countries, the United States of America and China, and their relationship with other countries. This bilateral relationship is intermixed with cooperation and competition, which affects the region's stability, security, and peace (Takahashi, 2022). The interaction between these two superpowers with other countries will affect regional and global relationship patterns (Kementerian Pertahanan Malaysia, 2021).

Furthermore, Malaysia's security depends on regional stability in Southeast Asia. As a maritime country, Malaysia shares land and maritime borders with most countries in the Southeast Asia region. Relations between countries in the Southeast Asian region are a significant factor in determining policies and actions related to security and defence. Emphasising prosperity-sharing initiatives, understanding and the spirit of unity in the regional neighbours will continue to be the core of stability of the Southeast Asian region (Strangio, 2021). National sovereignty needs to be defended not only from traditional threats but also involves non-traditional security threats. The use of advanced technology without limitations, gap and control have made efforts to deal with these threats increasingly challenging (Kementerian Pertahanan Malaysia, 2021). The uncertain regional security situation can also disrupt our national defence focus. Currently, the Army has prioritised increasing security control in East Malaysia. In addition, the Army 4nextG plan has also provided planning for increasing strength and establishing new units in the region to balance the strength in both regions.

WAY FORWARD

❖ **Efficient Financial Management**

This long-term development plan will involve a significant financial implication to allow the capability and readiness of the Malaysian Army to be at the highest level. Therefore, the systematic planning and management of finances is a critical requirement for executing this plan. Efficient and effective resource management is a crucial part of ensuring a competent workforce in various fields to lead the pathway that has been set. Apart from that, efficient and effective management of financial resources is also the primary basis to ensure that the planned program can be executed successfully. In other words, efficient financial management can optimise expenses and outcomes. Every Malaysian Armed Forces personnel must have fundamental values such as integrity and accountability.

❖ **Good Governance**

The Malaysian Army must also prioritise effective governance and logistics management systems in managing limited resources. A well-organised governance system still needs to be optimised to ensure that the management and administration of the Malaysian Army can be implemented properly and effectively. Therefore, all levels of command need to commit to improving the governance system to increase productivity in managing limited resources. In addition, they need to ensure the best governance practices to strengthen the Defense Sector through transparency, accountability, and excellence in pursuing organisational transformation.

❖ **Whole-of-Government and Whole-of-Society**

Terms of Whole-of-Government and Whole-of-Society are often mentioned in the Defense White Paper and MINDEF Strategic Plan 2021-2025. Thus, a comprehensive new strategy and approach must be considered to deal with today's uncertain threats. In line with the current requirements, the development of the Army 4nextG plan needs to apply a whole-of-government and whole-of-society approach. The approach needs to consider the involvement and views of all ministries, departments, government agencies, non-government organisations (NGOs), defence industries, Malaysian Armed Forces Veterans, academicians, and societies (Nik Mohamed Rashid Nik Zurin and Ivy Kwek, 2020). The need to consolidate a whole-of-government and whole-of-society approach for national defence is needed and more appropriate to be executed (Kementerian Pertahanan, 2020). By

2021, the Malaysian Army will deal with a complex and uncertain concept of future warfare known as 5th Generation Warfare. This threat cannot be dealt with only by a military approach but requires collaboration with the government and the societies through executing the Whole of Government and Whole of Society approach.

❖ **Improving Admission Scheme**

They were related to the development of technology and the level of education to date. The Malaysian Army has also seen the need to provide more educated personnel. The entry requirement into the service scheme is also given priority and upgraded. Since 2013, the minimum qualification to join the recruit is *Sijil Pelajaran Malaysia* (SPM) for other ranks; to be an officer, the applicant must have a degree. This entry requirement is the best approach to ensure that every Malaysian Army personnel has an excellent foundation education to adopt new technology in the service. These groups are expected to be able to accept technological advances while in service in a short time. Their knowledge should be able to be translated into the service requirement. These generations are skilled in technology and can operate sophisticated assets and systems in service (Nik Mohamed Rashid Nik Zurin and Ivy Kwek, 2020). Therefore, the training period for them will be shorter. These groups are trained and skilled and can assist the Malaysian Army in procuring appropriate equipment. Even though the Malaysian Army is not directly involved in Research and Development, the presence of these groups is seen to be a positive way for the Malaysian Army to conduct procurement. They can also be part of the 'think thank' team for procurement. These can be the best example approach that can be continued to ensure that the asset to be received meets the service requirements and suits the allocation received from the government.

❖ **Cooperation and Sharing of Information and Assets with Related Agencies**

Information is the crucial element that needs to be considered in strategic planning to ensure our national and territorial sovereignty is protected. Once the information is received, it is analysed, and a strategic plan is conducted. All actions taken need to consider the available assets in service. As mentioned earlier, the Malaysian Army has limited financial allocation from the government. Therefore, the Malaysian Army needs to strengthen good relations and cooperation with all government and non-government agencies through Whole-of-Government and Whole-of-Society approaches in gathering information and using assets. Not all requirements required by the

Malaysian Army need to be purchased. These approaches are essential for balancing the Malaysian Army's capability to operate in two regions simultaneously. Based on the record, these approaches have been proven through conducting an OP BENTENG and positively impacting national security. This operation has succeeded when illegal immigrants' entry and cross-border activities can be reduced (Sukhani, 2020). These approaches are suggested to be continued and relevant to be implemented in the future. It will also provide the Malaysian Army with enough allocation to procure other special equipment for the troops and save some budget. On the other hand, any positioning and placement of all assets are should not under service or Malaysian Armed Forces' decision. Still, they should be coordinated by the Malaysian National Security Council.

❖ **Strengthening Defense Industry**

MINDEF is suggested to refine the current policy related to the national defence industry. MINDEF's Defense Industry Division needs to empower MINDEF's functions by collaborating with industry players such as DEFTECH and others. Bilateral cooperation involving MINDEF and industry players is vital to ensure that every piece of equipment and asset the Malaysian Armed Forces receive is according to the required specifications and that the local industry can supply it (Parameswaran, 2019). The ability to obtain spare parts and related services in the period that should be seen is essential to ensure that the Malaysian Army's readiness is always at the highest level. In addition, providing local products also can reduce the dependence on foreign products. It is suggested that a representative from the military personnel be placed (secondment) in every company with a defence industry. To some extent, military representatives in the industry will provide advantages related to procurement planning because planning and service needs must run concurrently with the company's preparations. This collaboration will have a positive impact on IR 4.0.

CONCLUSION

The national Defence Sector requires consistent and stable financial allocations so that all related plans and activities can be planned and executed continuously. The requirement for a consistent financial budget is compulsory to maintain the momentum of implementing a plan based on a set period so as not to affect the level of operation and Malaysian Armed Forces readiness. Although there are various barriers, efficient economic management is essential means to ensure that the development of the Malaysian Armed Force's capabilities in the long term can be implemented according to the plan.

As stated above, financial resources are crucial in executing the Army 4nextG plan. In addition, economic factors also affect the country's financial situation and the success of the Army 4nextG plan. Furthermore, the condition of the national currency and the global economy also affect the distribution of financial allocations to the Malaysian Armed Forces.

The Army 4nextG plan is a long-term plan for developing the Malaysian Army until 2050. However, there is still room for improvement. Establishing a new unit to balance the strength in East Malaysia needs to consider the need for new staffing resources from the Malaysian Public Service Department. The new unit should not use existing staffing resources and redeploy or restructure from the current sources. In conclusion, although there are various challenges in executing the Army 4nextG plan, the plan should consider all the factors to reduce the impact on the development of the Malaysian Army.

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ARMY 4NEXTG: CHALLENGES IN THE NEW HORIZON

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ROYAL MALAY REGIMENT**

INTRODUCTION

World and regional conditions are unpredictable and influenced by factors of uncertainty in international relations. Indicators exhibited in geostrategic and geopolitics at the global level have shown the evolution of the threats that will be faced. A country must be able to deal with all types of threats from various dimensions including virtual threats. Some might say that this plan is only written on paper, but in develop countries like Malaysia, it has played a crucial role in national defence after positive achievement are shown from the previous plan. Strategic aims of this plan as mentioned also take into account a several aspects like technology-based multi-domain operating environment, togetherness, interoperability and orientation mission, human resource development and knowledge-based training as well as targeted management of logistics and financial resources and planned. Aware of this fact, this plan also can be MAF's readiness step to face the uncertain and challenging concept of future warfare known as 5th Generation Warfare. This threat cannot be dealt with only with a military response approach, it requires joint venture with the government and the people through the Whole of Government approach and Whole of Society.

Army 4NextG is current initiative that has been implemented by MAF after the previous initiative well-known as Army 2 10 Plus 10. In 2021, this initiative has been updated based on National Defence Policy (NDP), National Security Policy (NSC), Defence White Paper, National Military Strategy and MAF Strategic Plan Fourth Dimension Malaysian Armed Forces (4D MAF). Generally, Army 4NextG is long-term strategy plan of MAF based on the capability for MAF to make sure MAF can function concurrently in two locations. It was developed for a span of 30 years. This is the future situation that will be met as well will require a force capable of responding military in a multi-domain warfare environment (Multi Domain Operating Environment). Thus, the development of the Army at the time forward is based on five capability goals which known as Detection, Survive & Strike, Sustainment, Protraction and Nation Building.

SECURITY THREATS IN MALAYSIA

Generally, threats can be divided by two approaches or issues which known as traditional issues and non-traditional issues. These paradigms exist in different conceptual but it has common element in all these approaches is a call to broaden the meaning of threats that cause insecurity to the nation. Future conflicts will emerge through various means and spaces including through physical and non-physical threats. In these challenging efforts, the Strategy of Land Warfare (Strategi Peperangan Daratan) will change by take into account the coordination of strategies in two different fields.

The threats also influenced by the globalization that is weakening of the physical boundaries surrounding the nation or states, in which affects the aspects of human life such as culture, social interaction, economy, politics and many other aspects. The impact resulting from the phenomenon of globalization on security is terrorism, crimes, cyber-attack, environment, natural disaster and humanitarian crisis. So, these threat indirectly will be challenging for MAF in filling the criteria in the Army 4NextG plan.

CHALLENGES FACING BY MAF IN NEW HORIZON

In implementing Army 4NextG plan, MAF must have enough resources in defence management which is man, machine, material, method and money (5Ms). In the meantime, MAF must also comply with the components of military capability, which will support MAF's action plan in facing the threats in the new horizon. The identified challenges that are related to the implementation of the overall plan is national policies, the concept of future warfare and the most important thing is fiscal ability or money.

Our national policy is basically based on National Defence Policy (NDP) which forms three fundamentals of defence policy. In the new horizon, MAF must make sure our national interest is fully protected from any domestic and global threats. There are some evidences that our national interest is facing the external threats from 2010 until 2020 as published in National Security Council (NSC) in 2021 and one of most concerned is the claim of the heirs of the Sultanate of Sulu against the Malaysian government. After the invasion done by them in 2013, MAF in particular has acted to further strengthen the security and defence of the country especially in Sabah waters.

Apart from that, in achieving the Army 4NextG mission, MAF has made Network Centric Warfare (NCW) as an indicator and benchmark

to see the success of this plan. An NCW is a combination of strategy, new tactics, technology and procedures, and organization that are fully or partially networked forces deployed to create decisive advantage in warfare. NCW also links people, platforms, weapons, sensors, and decision makers into a single network and the most important thing is it creates a whole that is clearly greater than sum of its parts.

The need to ensure the ability to train every army in able to defend the country in modern defence and non-traditional issues, especially where every army will be able to handle sophisticated computer equipment and cyber tools. Traditional weapons such as ships and armoured cars are still needed but the type of defence in the future will also require equipment such as drones, cyber security and Unmanned Aerial Vehicles (UAVs) to further strengthen the capabilities in this plan standing with the development of today's threats. UAV also well-known as strategic vehicle in serving the intelligence, surveillance and reconnaissance (ISR) to MAF defence missions especially towards important target and national interest such as our Economic Exclusive Zone (EEZ) and the South China Sea. This is also in line with one of the 7 main pillars of MAF which is the focus on training; to develop soldiers of the Malaysian Army with the mentality of a developed nation.

Defence capability development is one of the agendas in Malaysia's NDP. Therefore, the issue of procurement assets should not be underestimated in the effort in developing this plan. MAF plays a vital role to ensure these efforts able to improve the ability of procurement assets effectively. In fact, the skills and exposure of MAF to the acquired assets also need to be guaranteed so that the effectiveness of handling the assets can be achieved to a satisfactory level. In line with the Army 4nextG development plan which focuses on the ability of the Army to operate in two regions simultaneously, this includes the acquisition of the M109 A5 SPH Howitzer cannon, the 105MM Light Gun (LG) cannon and six MD530G light attack helicopters equipped with the latest weaponry system includes rockets and gatling guns. The acquisition of six attack helicopters will give exposure and skills to the pilots of the Army Air Force (PUTD) to operate combat helicopters in the future.

In order to keep MAF maintaining their full-spectrum operation, In Malaysia, the concept of "System of System" system was brought in 2008, and then it was agreed to create it in 2013. SAPURA Technologies Sdn. Bhd., with its technological partner THALES, has been appointed to develop the Development of Network Centric Operation (NCO) Malaysian Armed Force's program at the cost of RM140 million. Nowadays, Malaysia has a company that produces

products that help MAF to increase its military capabilities. Among the major companies in the production of defense products in Malaysia are like BOUSTEAD, SAPURA and DEFTECH. But in recent years,

MAF has identified several aspects that will be obstacles in realising the future soldier system in order to carry out the structured plan and achieve the mission of this plan. The obstacle that has been identified is funding, technology, human capital, and operational environment. MAF believes that if the country cannot provide funds to cover the expenses in the development plan, important elements in the plan should be given priority. Therefore, Malaysia has tried to face this challenge by increasing the defence budget in 2022. The allocation of 6.14 billion to this budget is 1.8 percent increase compared to the previous year and expected to rise further in coming year. The government, on the other hand, has endeavoured to shield defence acquisition from the weight of such decreases.

The Revolution Military Affairs (RMA) in the era of globalization has now changed the pattern of MAF's approach in carrying out the plan drawn up, among which is a change in the trend of military technology. When compared to the military technology of neighbouring countries such as Indonesia, Singapore and Thailand, Malaysia is the last in terms of power index score which includes military technology capabilities. So, in the limited military technology capabilities, surely it becomes dilemma for MAF and it will be the challenges for MAF in safeguarding the sovereignty of the nation. Military development is an element that has been identified as a starting point for the survival of the nation. MAF is an organization that is believed to be at the forefront of the country and create the element of deterrence. Deterrence is an aspect where one prevents the enemy's desire to create problems in the country. In general, security forces, especially the military, are deterrence assets that make the enemy think twice about doing aggressive military actions. Security forces and military assets are insurance to achieve national peace.

Malaysia has to deal with the changing of security environment in the era of borderless communication and fighting against enemies in hybrid condition. Cybersecurity is one of challenges that must be refined by MAF in maintaining the continuity of the plan produced. As we all know, the sovereignty of the country must be protected by ensuring the land, sea and air space are not invaded by external forces. However, the primary challenges will be facing by MAF in the era of information and communication technology (ICT) that is happening at this time and is expected to be more challenging in a short time ahead.

Along that point, cyberspace is a new sovereign space for Malaysia which is an important virtual place and its importance same as physical space for social, economic, political and defence. Therefore, the nature of cyberspace is that it has no boundaries and vulnerable to cyber-attacks and is currently widely used by individuals or groups that have the ability and capability to cause damage to the country through cyberspace. In addition, with the presence of disruptive and advanced technologies such as 5G and Big Data, it has given huge opportunities to the enemy to carry out cyber assault against military operations. It is crucially to understand that the cyber terrorism can be distinguished by identify the aims and the objectives that has been carried by the group.

Top 10 Least Cyber-Secure Countries in Asia						
Rank	Country	Average Monthly Drive-by Download Pages	Phishing Sites	Malware Hosting Sites	Compromised Computers	Cyber Danger Score (/100)
≈1.	Indonesia	25	1,080	1,040	643	82.8
≈1.	Cyprus	24	1,730	1,280	400	82.8
3.	Malaysia	23	740	900	1,557	79.9
4.	Vietnam	30	630	780	3115	78.2
5.	Singapore	16	780	2,160	204	75.9
6.	Nepal	126	640	890	558	73.3
7.	Turkey	10	740	620	1,907	70.1
8.	India	10	490	1,360	600	67.3
9.	Philippines	19	200	880	790	62.7
10.	Thailand	9	320	730	2,829	61.8

Source: Rebootonline.com - Represents data across 2018 to 2022.

Table 1: Top 10 Least Cyber-Secure Countries in Asia

At this point, the pattern of cyber-attacks faced by MAF is generally the same as the development of cyber threats at the global level. The cyber threat includes intelligence or espionage activities, crime and hacktivism or hackers. Thus, it is needed to ensure the ability to identify the cyber threat is top-notch. The elements of MAF preparedness which are "versatile" and "deployable" are very closely related in dealing with this issue (cyber threats) where it includes the context of flexibility, agility, and response to deal with all spectrums of conflict as well as the ability to be organized in carrying out various forms of missions from various dimensions. Therefore, MAF needs to be committed to increasing the level of cyber security to a more effective level.

The dependency on technology and IoT is increasing significantly. Thus, this evolution causes cyber threats and attacks to also go through dynamic cycles. We have seen cyber threats and attacks increase all over the world these few years where Malaysia is no exception and it occurs generally almost every day. The strategic

capabilities of the Malaysian Army continue to be enhanced through the operation of the Intelligence Fusion Center (IFC). The development of IFC TD is based on the development of MAF's Army 4NextG strategic capabilities (2021-2050) and is one of the five MAF capability goals which is detection; includes its capabilities in Intelligence Surveillance Reconnaissance and Targeting (ISRT) and Information Operation (IO). MAF also need to ensure that the continuous tracking and channeling of information can be done correctly to ensure the level of Information Dominance, Battle space Awareness, Decision Advantage and Decision Superiority.

The ability of MAF is also closely related to the assets or the logistics it has. In this context, logistics aspect is defined as the providence of material support and services needed by the armed forces either during wartime or Operations Other Than War (OOTW). In connecting the two separate regions, system logistic is important as it affects the success and failure of a military operation through the effectiveness of the logistic support to the armed forces. However, to ensure the role of this support is successful, it also depends on the ability to maintain and sustain proper support in the long term. In connecting the two separate regions, the government is a party who is responsible to win the hearts and minds of the people of Sabah and Sarawak who are at high risk of external threats including from the Sultanate of Sulu. So, it is important for the government to provide facilities and security for the people of Sabah so that they believe in the ability and security provided by the government and further cooperate with MAF as an important actor in this issue.

According to Salim Miandad (2002), MAF practically depends on some sources which are not strong and guaranteed; Civil National Support and International support. In fact, MAF also facing difficulties where there are equipment purchased cannot be operated optimally. In this context, Malaysia must take a serious step to ensure logistics management is planned and developed properly to sustain in this IoT era. However, there is no denying that Malaysia is carrying out its defence industrial activities for the military in order to increase the level of national defence capability to achieve that credible level. If this effort continues, defence industry can be developed properly. This will be able MAF to create well planned logistics management which also able them to rely on local sources of spare parts and logistics support, modifications, overhauls and upgrades without (or with minimal) other parties.

Other than that, The COVID-19 pandemic has shocked the security of the world since it broke out in 2019. Most countries are still

facing security challenges due to the spread of the pandemic that claimed millions of human lives. This pandemic challenge is the resilience of our country, thus having a high impact on national security. COVID-19 has become a non-traditional national security threat that is closely related to the economic and political security of a country. A renowned scholar in the field of security studies, Barry Buzan introduced the 'securitization' security theory to discuss national and global security issues. He said, the security framework includes politics, economy, social, military and environment. The COVID-19 pandemic belongs to the environmental context. Practically, national economic security is the backbone of national security and whenever economic security has been collapses, the country's national security also possible to collapse. Then, the country will become a failed country if these symptoms continue.

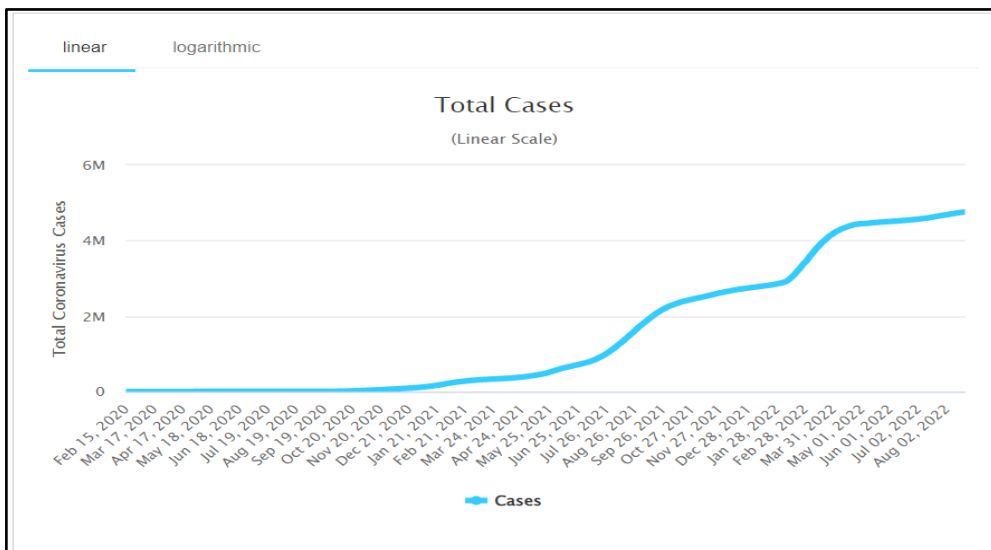


Table 2: The Statistic of Total Case COVID-19 in Malaysia

CONCLUSION

In order to ensure the implementation of "Army 4NextG", we must consider to a wider dimension. It is not only emphasized on the challenges and obstacles that might be faced throughout this plan, but also include the level of capability (man, method, machine, material & money) and readiness of MAF. To allow MAF to be able to be mobilized to defend the country in an era that is dense with IoT and in line with "Army 4NextG", it is vital to guarantee the smoothness and effectiveness of this plan. The main challenges to Army 4nextG are including several tangible and intangible factors. As a long-term development plan, this plan is very sensitive to external and internal

elements that may affect the aim and the goal of strategies that have been outlined. Among the identified challenges have positively related to the implementation of the overall plan is fundamental government, the concept of future warfare and the most important is fiscal ability. Apart from that, the international geostrategic environment also affects the overall aspirations of the country, MAF and Malaysian Army at the time ahead. However, a plan that has been formulated can avoid the impact to the development of Malaysian Army.

The Army's 4nextG capability development concept is aimed to transform Malaysia Army into a cutting-edge force that can handle at all potential threat situations in the future. The key to how Malaysian Army will function and continue to be important in the future is its ability to operate in two regions simultaneously. In line with the rapidly evolving technology revolution, Malaysian Army will encourage a creative and inventive culture among its citizens in order to expand the development of future defence capability. Modern, new and sophisticated technologies will be used to transform Malaysian Army into a force that is responsive, credible, adaptable, and combat-capable in line with the mandate of the Malaysian Chief of Army in 2022 which is to Increase Malaysian Army's Readiness and Capability.

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ARMY 4NEXTG: CHALLENGES IN THE NEW HORIZON

**By LT KOL KAMARULZAMAN BIN IDRIS
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INTRODUCTION

World Effective armies are dynamic in nature, constantly evolving and adapting to meet the demands posed by their adversaries and their operating context. History is replete with myriad examples of both successes and failures in this regard. We ignore the need to modernize at our peril. The purpose of The Malaysian Army Modernization Strategy is to ensure the Army is positioned to address the numerous challenges in our turbulent security environment. The world is facing significant change, with far-reaching and cascading implications for Malaysia, the Malaysian Armed Forces, and the Malaysian Army. Drivers of this change are a confluence of stressors, many made acutely clear during the COVID-19 Pandemic, and include: global power re-ordering where national goals are achieved through conflict below the threshold of mass violence; the continued rise of extremism in novel and unpredictable ways; accelerating technological change, especially in the space and cyber domains; a rapidly changing global climate; evolving societal demographics, norms, and expectations; and the clear centrality of the information environment in all endeavors.

With this change, the nature of war endures. It is still very much a human endeavor. The security environment continues to be fraught with unpredictability, fog, friction, chance, irrationality, fear, and bloodshed. Despite technological marvels, it remains a contest of human will. In the face of this change and continuity, land power retains its relevance and criticality to achieve decisive outcomes, whether at home or abroad. That said, the manner in which it is employed is advancing and its integration with, and indeed subordination to, the larger joint, domain effort is more important than ever. To succeed in this milieu, the Army we have is not the Army we need.

BUILDING A MODERN MILITARY: THE FORCE MEETS NEW CHALLENGES AND HORIZONS

Security politics will be different in the future, but the goal of security policy has not changed; to identify the most effective and efficient means for advancing Malaysian safety and prosperity. That entails ending the forever wars, terminating needless military spending,

rethinking the fundamentals of strategic deterrence, and focusing the entire defense establishment on innovation and adaptation. The defense establishment's most urgent requirement is prioritization. The nation's resource constraints are real, and hard choices cannot be postponed. In particular, all military branches should emphasize innovation over the preservation of legacy systems and practices. This will require cooperation from Malaysian Government, which must address the budget pathologies that stifle new thinking and keep the Ministry of Defense locked into old ways of doing business. Senior defense officials must orient the future force around a different approach to power projection, one less dependent on permanent forward bases, and toward a renewed focus on the requirements for strategic deterrence. The services must also think anew about how to best capture and use information.

Building a modern military requires a clear conceptualization of the realities of international conflict and tight alignment with a country's foreign policy. Strategic planners must have a clear-eyed view of both the threats facing the country and the tools necessary to defend its vital interests. Planners in Malaysian Government should take account of the country's fortunate circumstances, including its geography, dynamic economy, and political stability, and recognize that maintaining these advantages does not require a massive military apparatus that is constantly active in nearly every part of the world. As the Malaysian Army marches onwards after celebrating 88 years of Army Day, it is timely to do an inventory stock take on its current position and look ahead to identify challenges beyond its immediate horizon. Firstly, the Malaysian Army will need to enhance its warfighting effectiveness through the adoption of 4th IR technologies that have become more prevalent and affordable, lest it loses its technological and qualitative edge over its regional neighbors. Secondly, it was forecasted that the Malaysian Army would be facing an impending work force crunch, with up to 20% work force reduction. This could potentially impede its ability to continue performing full spectrum operations at its current scale and operational tempo. The latter challenge means that there is a greater imperative for the Malaysian Army to continue investing and utilizing technologies as force multiplier.

ADVANCING WITH PURPOSE: THE MALAYSIAN ARMY MODERNIZATION STRATEGY AND STRATEGIC PLAN

It is our change agenda for the next half decade. Although titled a strategy, it encompasses elements of an action plan as well, directing tangible initiatives to evolve force structure, readiness, sustainment, training, and personnel. It is informed by and fully aligned with extant

and emerging policy and strategic direction. The strategic environment is increasingly complex, dynamic, volatile, highly uncertain, and will remain so for the foreseeable future. The Malaysian Army will continue to face challenges at home and abroad as it balances generating readiness and conducting operations across an increasingly broad spectrum of operations. Trends indicate that some known security factors will endure while developing threats will become more pronounced. New threats will also arise. Interstate competition, hybrid or domain operations, violent extremism, resource scarcity, migration, inequalities, changing demographics, climate change, and pandemics all present operational problem sets to which the Malaysian Army must continually adapt.

While the fundamental nature of war remains constant, greater uncertainty arises regarding its precise character and how warfare will evolve and be conducted. An additional layer of ambiguity surrounds the use of militaries in ways that were once considered non-traditional. Exercising an inherent versatility of employment is now common, standard practice and indeed expected. As the Malaysian Army evolves and prepares the future force, it must continually assess the security environment to ensure that it has the right capabilities, structures, processes, and readiness to operate effectively in any scenario. The multitude of threats faced will require agile responses coordinated with domestic and international partners.

Technological developments are occurring at a higher rate than ever before. This phenomenon makes technological anticipation and integration more difficult. Historically, militaries have relied on technological superiority to maintain military overmatch but the rapid development and replication of readily accessible technologies narrows that advantage. Moreover, the advent of capabilities in space, cyberspace, artificial intelligence, quantum computing, and others is changing militaries and their conduct of warfare. These capabilities also give adversaries, including less conventionally strong or advanced ones, further means to produce disruptive effects across great distances. The Malaysian Army must consider how to use these same technologies to best adapt and optimize concepts, operational efficiency, and organizational digitalization.

The future operating environment will be characterized by intense competition that will occur on the cognitive, moral, and physical planes, which may be prosecuted in ways that are both direct and indirect. Cyberspace, space, and the information environment are increasingly critical operational domains, and adversaries are conducting activities within them in asymmetrical and non-kinetic ways

that do not reach the threshold of violent conflict. These opponents do this deliberately to obscure attribution, compensate for conventional disadvantages or offset technological advantages, or to undermine friendly public support. This phenomenon is coupled with an increase in the speed, range, and lethality of peer adversary capabilities that can be cued through pervasive observation across all domains. The Malaysian Army must learn to mitigate these threats in a systematic and deliberate way.

A MODERNIZING AND RELEVANT FORCE

The Malaysian Army seeks the best ways to meet the needs of defense policy. Therefore, it must effectively communicate how it contributes to Malaysian defense objectives and clearly articulate the resources required providing the government with a broad range of options, in all domains, at home and abroad. This modernization strategy takes account of ongoing investments and priorities, but primarily depicts how the Malaysian Army will adapt and innovate with its thinking, structures, and capabilities in the future context. Above all, the key requirements driving this strategy are the need to retain readiness for longer periods and the necessity to structure the force in a way that optimizes the Malaysian Army for domain operations.

The Malaysian Army has launched the Army Strategic Capacity Development Plan (Army 4NextG) 2021-2050 in conjunction with the 88th Army Day. Army Chief, Jeneral Tan Sri Zamrose Mohd Zain said Army 4NextG 2021-2050 would serve as a complete guide for the direction of TDM's development and management for the coming years. The Army 4NextG 2021-2050 is a long-term strategic plan on the Army's operational capacity, supported by systematic capacity development management with a focus on the goal of capability detection, survival and strike, sustainment, protraction and nation building. The plan would be part of the force in the future that would allow the Malaysian Army to perform their tasks in a multi-domain environment.

It is learnt that the Army plans to phase out or refurbish its aging fleet of 26 British-made FV101 Scorpion light tanks and the 400-plus German-made Radpanzer Condor 4X4 armored personnel carriers (APC). Already, the Army has reportedly acquired in batches a total of 257 Deftech AV8 Gempita 8x8 multi-purpose armored vehicles built locally in collaboration with Turkey. Plans are also afoot to increase the Army's arsenal of about 170 units of 105mm towed artillery guns, the establishment of the 99th Cyber Warfare Signals Regiment and the Air Defense Artillery Group. The Army Air Unit is also scheduled to receive

six McDonnell Douglas MD530-G light-attack helicopters from the United States in August. Such upgrades and strategic acquisitions are vital to enhance the Army's firepower, to remain credible and relevant. All these falls under the progressive 30-year 'Army 4NextG' (for next generation) modernization programme from the 12th Malaysia Plan.

CONCLUSION

The Malaysian Army must evolve to meet the demands of a rapidly changing operating environment. It must adapt its strategy to retain readiness for longer periods, and it must structure itself for domain operations through the Army Strategic Capacity Development Plan (Army 4NextG) 2021-2050. This strategic plan will have postured the Malaysian Army with a more relevant force structure, making it better able to provide a range of land power options for multiple concurrent operations. Its soldiers and units will be better equipped, trained, and prepared for the challenges that lay ahead. Finally, it will be more adaptive and better able to pivot to new challenges in the uncertain future ahead. The rapidity with which the geopolitical environment is now changing requires an immediate adjustment to course. Moving forward, the Malaysian Army must nest its doctrine with joint concepts, explore the ways in which land power can shape and support domain operations, and align with the foundational principles of modernization. Interstate competition is now the primary concern of the operating environment. However, many current challenges, like violent extremism and climate change, will remain extant and may increase in severity. The Malaysian Army must organize for domain operations and learn how to apply land power across a variety of environments and operations while ensuring it retains the ability to defeat a pacing threat force in land combat. The Malaysian Army must retain what it has learned and apply these lessons creatively. In this context, the Malaysian Army will continue to work alongside its allies and partners to achieve objectives.

The key characteristics of the future force will be its corps of professional soldiers, agility, and medium-weight structure with light and heavy augmentation. The combined arms team is the Malaysian Army's vital ground with its junior and mid-level leaders as its center of gravity. The Malaysian Army will become a more unified force with the Regular and Reserve forces proportionately contributing to operational tasks and better able to help ensure Malaysian sovereignty at its extremities. Notably, land power will be a key factor in continental defense and national sovereignty. The Malaysian Army cannot afford to become complacent with the current force structure and doctrinal

mindset. It must always be looking to the future, anticipating challenges and finding solutions to them in order to best serve Malaysia.

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ARMY 4NEXTG: CHALLENGES IN THE NEW HORIZON

By LT KOL NOOR AZAM SUHARTO BIN MOHAMMED
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INTRODUCTION

Army Chief Jeneral Tan Sri Dato' Seri Zamrose Mohd Zain presented the Army Strategic Capacity Development Plan (Army 4NextG) 2021–2050 to the Malaysian Army in conjunction with the 88th Army Day. This manuscript serves as a complete road map for the direction of TDM's development and oversight for the ensuing years. He explained to reporters at a press conference yesterday that the Army 4NextG 2021-2050 is a long-term strategic plan on the Army's operational capacity, accompanied by comprehensive capacity development management that concentrates on the goal of competency classification, survival and strike, sustainment, protraction, and nation-building. While the Army Strategic Management System Handbook 2021–2025 served as a short-term reference and a map for attaining the objectives developed based on the principles and components of TDM's strategic planning as illustrated in Army 4nextG. Due to historical events, particularly those of the Emergency from 1948 to 1960, Malaysia has experienced security conflicts that have resulted in deployment architectures that are distinct from those of our regional neighbours in many ways. In order to counter the Communist threat in 1948, the British decided to drastically increase the size of the police force, with a sizable portion of Malayan officers. In contrast, the military was made up of battalions from the Royal Malay Regiment, the Federation Regiment, and various Commonwealth Regiments.

Malaysia, Brunei, and Singapore are the only countries in Southeast Asia that have not had a dominant force in their societies. The Malaysian security force was established on March 25th, 1807, along with the establishment of the Malaysian police, and it continues to be under central direction. Their composition has always been roughly equivalent to that of the armed forces. Malaysia's security system was only completely "Malaysianized" in 1971 after the Anglo-Malaysian Defense Agreement expired and British forces were withdrawn from areas to the east of the Suez Canal. The Tun Razak Hussein government's pursuit of a more neutral and non-aligned foreign policy perspective coincided with this occurrence. Up to the signing of the Hatyai Peace Accord in December, the Malaysian security apparatus was focused primarily on the counter-insurgency battle. With significantly fewer numbers of comparable supporting

formations, the current Malaysian Army is mostly made up of infantry battalions. During this time, Malaysia developed became a global voice for the Muslim-majority countries and the Third World. Malaysia as a whole seems to slack off during the years that are generally prosperous. The 2008 Global Financial Crisis crippled the United States and Europe while greatly strengthening China's economy, military, and assertiveness. We face a complex global dilemma since China is our closest neighbour, our largest trading partner, and a rival claimant in the South China Sea. Everyone has had to re-evaluate and start over as a result of COVID-19 and the aftermath of the Donald Trump Presidency.

THREAT TO THE NATIONAL SECURITY FROM SOCIAL MEDIA

A study of the level of readiness of the Malaysian government significantly influences by the rise of web-based life clients, the development of innovations, and access to the cheapest, fastest Internet have all occurred in the twenty-first century. In any case, every person with Internet access has at least one online account. In stark contrast to traditional media, which are described by a single direction correspondence stream, internet-based living is determined to have a very abnormal condition of client collaboration (Liaw et al., 2021). Without a doubt, users of social media can concurrently send and receive data, produce and consume content. Customers were able to use online networking efficiently without extensive knowledge of the necessary specialised skills, thanks to simple features and realistic design. Additionally, access to this social network can be obtained for free or at a minimal cost by using other services like LinkedIn and Facebook promotion. The Malaysian Communications and Multimedia Commission (MCMC) Survey 2017 estimates that there were 21.9 million users of internet networking services in Malaysia in 2016 (Liaw et al., 2021).

News and gossipy titbits can be shared instantly thanks to this new correspondence medium, it has both positive and negative consequences on the public. The 90 % of cell phone users have given in to false information to cause unrelated difficulties due to their lack of awareness of morality and regulations. These are the findings of a nationwide study that dispersed data utilising social media platforms and messaging apps including WeChat, WhatsApp, and Messenger between May of last year and this year (2017). The misuse of internet-based life can lead to many different kinds of danger. From security breaches, including the use of explosives inside organisations or states, shadowy activities, and damage caused by the zealot, oppressor, and criminal's use of online life to further their objectives.

According to the Defense Intelligence Staff Division (DISD) of the Malaysian Armed Forces, social media technology poses threats to national security in Malaysia on a military scale in 17 occasions, including data breaches, between 2015 and 2016. The dissemination of MAF secret messages, character falsification, the use of geo-labelling in location-based applications like Foursquare and Facebook, and the dissemination of information about MAF important areas were among the complex situations. The adversary of the country can use a few methods, outside open data breaches, to obtain crucial information using online life. One method for information mining from open-source intelligence (OSINT) that makes use of data from online networking (Shah et al., 2021).

Malaysians were also implicated in the financing of terrorism through social media. Numerous Malaysians were tricked into making financial contributions to Islamic State (IS) fighters, according to police investigations into the funding of terrorism. These requests for gifts, according to deputy superintendent Foo Wei Min, are frequently made through social media sites like Facebook and Twitter, with some even using pretended affiliations with charities or religion as a cover. With internet networking, the message is distributed quickly in all ways, and because it is shared, it is widely disseminated. Furthermore, thanks to convenient banking, people can transfer money right away to the account numbers provided via Internet banking or an ATM. DSP Foo further stated that funds are then used to support Malaysians fighting for IS in Syria and Iraq, assist the widows of attackers who passed away while fighting, or take care of these groups of competitors' basic requirements while they are gone.

THREAT TO THE NATIONAL SECURITY FROM SOCIO-ECONOMIC

The difficulty of finding and keeping qualified employees, altering shifts in social value systems, and technical improvements are all having a significant impact on the working environment within the armed forces. It is impossible to handle these tendencies as independent problems. Their mutually reinforcing effects will continue to have a significant impact on the military, its culture, and how people perceive leadership. The conventional methods and philosophies of motivation need to be reconsidered in the context of contemporary social changes. The military's total effectiveness can be improved in the future by applying cutting-edge leadership techniques in a way that is appropriate for it. The necessity for military leaders with strong fundamentals character, integrity, and ethics which remains constant despite these social shifts (Sulaiman et al., 2020).

Leadership now faces new challenges because of the evolving character of conflict and the spread of national interests well beyond geographical bounds. The moderately paid military professionals have experienced their own pressures from materialism and economic advancement. Numerous leadership errors have also been made public as a result of intense media scrutiny, causing the military leadership to turn inward and place more emphasis on ethics and principles. The military has a pyramidal organisation; competition has always been fierce; and in the past, soldiers have resigned or left the service gracefully and with little fanfare. This was mostly caused by two factors. First, the assessment and promotion process lacked much transparency, and secondly, officers' adherence to the honour code was so strong that deviations were concealed within the organisation in order to protect the "izzat" of the defence services and avoid airing dirty laundry in public. Things are very different now. Because of the uncertainty surrounding the economy and resettlement, military officials do not want to retire early. Many leaders occasionally have a strong desire to advance in status by "hook or crook," but their ambition exceeds their capacity to do so. As a result of increased transparency and the emergence of leaders who believe they have been denied their due share of the spotlight, disputes over fair play, ethics, and values are increasingly coming to light.

INVOLVEMENT OF WOMEN IN THE MALAYSIA SECURITY ORGANIZATION

The architecture security fields were change in recent year and induction of women into the armed forces is the new flavour of the 21st century which ushering in winds of change in the male-dominated establishment. Women are now working shoulder to shoulder with men in various and excelling in their assignments. Gender equality, however, remains a major challenge in the male-dominated defence services. Malaysia military force involve the female officers was given equal right and promotions on par with their male counterparts. The addition of female cadets also given change to joint oversea cadet training program for generate more vital and adapt new military dimension combat training (Abdul et al., 2020).

As the century progresses, the gender bias will gradually fade away. Without compromising training standards, implementation must be deliberate, progressive, and adaptable to all ranks. Several gender-specific challenges remain in both war and peace. As a result, the induction of female officers into the defence services, and then into combat arms, must be carefully considered and debated. Women's

induction into the ranks of commanding officers and beyond will herald a paradigm shift in military leadership styles.

DYNAMICS OF POLITICAL-CIVIL-MILITARY IN MALAYSIA ENVIRONMENT

Malaysia political-civil-military relationship has reached a new turning point. Army Chief Jeneral Tan Sri Dato' Seri Zamrose Mohd Zain focuses that the army places a high priority on providing adequate housing, welfare, healthcare, education, attire, equipment, and nutrition for its soldiers always. Indeed, much of what is wrong with Malaysia national security framework today can be attributed to a civil-military relationship that successfully to grow and mature in response to modern-day security challenges. The resulting avoid dissonance has harmed not only the larger issues of war and peace, but also the strategic decision-making process, nuclear strategy, war fighting capabilities, conventional operational readiness, long term defence & operational planning, procurement processes, morale, and human resource management (Balakrishnan, 2008).

The Malaysian Army has identified six areas of focus for implementation this year to meet the mandate and aspirations of the Malaysian Armed Forces' highest command. Personnel well-being and welfare; improving readiness and capability; organisational structuring; empowering governance; enhancing defence diplomacy; and assisting the government in military operations other than war are the six focus areas. Army Chief Jeneral Tan Sri Dato' Seri Zamrose Mohd Zain keep focusing the army's first priority would be to continue working with related parties to increase the number of *Rumah Keluarga Angkatan Tentera* (RKAT), particularly in areas with high house rental costs. The *Rumah Keluarga Malaysia Angkatan Tentera* (RKMAT) seems like a tool for the army fully perceives that adequately empowered organization and personnel would bolster morale and productivity. Army Chief Jeneral Tan Sri Dato' Seri Zamrose Mohd Zain focuses on army constantly placed great importance on adequately providing housing, welfare, healthcare, education, attire, equipment, and nutrition for its soldiers always. The annual budget allocated for defence and security to ensure man and machine are well maintained to safeguard the sovereignty and safety of the nation and its people.

RECOMMENDATION

MAF capabilities are required for the upcoming conflict to ensure the nation's land, sea, and air borders are secure. Given the current level of strategic uncertainty on the international stage, Malaysia would

be better prepared if existing tensions between major countries worsened and resulted in a nuclear conflict that threatened our way of life as a nation. Furthermore, collaboration with all relevant organisations, including the National Security Council, *Khazanah Nasional Berhad*, relevant government ministries and agencies, including the MAF, partners in the defence industry, the corporate sector, and educational institutions, is required to develop a concrete strategy to address the myriad difficult problems encountered. Creating opportunities for military production to be converted into alternate forms of production, such as Poland's conversion of munitions and anti-tank production to agricultural tractors (Hartley, 1996). As a result, other countries' experiences in expanding the development of their defence industry to include non-military items can be learned through additional research or collaboration with such friendly nations.

CONCLUSION

In conclusion, planning of Army 4nextG in facing Challenges in The New Horizon will be a clear pictures and guidance which focus on Malaysia Army direction and wisdom. This planning should focus threat to the national security from social media, threat to the national security from socio-economic, involvement of women in the Malaysia security organization and dynamics of politico-civil-military in Malaysia environment to ensure multispectral was view and analysis for develop robust, comprehensive, and competent facing future need. The Army 4nextG will clearly indicated commander to drive and lead the Army organization for better national security achievement.

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ARMY 4NEXTG: CHALLENGES IN THE NEW HORIZON

By LT KOL SHAFUL REDZUAN BIN ABU BAKAR
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INTRODUCTION

The evolution of national defence has been seen since 1957 until now, the policy and the Malaysian Armed Forces (MAF) reflect the country's desire to defend and safeguard national security and sovereignty. Accordingly, Malaysia developed a National Defence Policy and modernized the defines force starting after the Cold War from 1990. This policy is the basis for defence development as well as National Security development.

In 2010 Malaysia launched the direction of the National Defense Policy (DPN) 2010 that can say to be the "Defense White Paper" at that time. DPN 2010 is actually a policy which can basically give explanations to the community regarding responsibility and the role of the Ministry of Defense to involve all parties in maintaining peace and national sovereignty through the Comprehensive Defense approach. DPN 2010 has been launched under the Malaysian Ministry of Defense was appointed by the Prime Minister on that time as the basis for the country's military development in the future.

The Defense White Paper (DWP) was officially presented in December 2019 at parliament by the defense minister. DWP involving the eight main messages presented to renew the National Defense Policy, so that its strategy and capabilities are in line with and relevant to the changing global security environment. DWP will be the strategic direction of national defense for the period 2020 to 2030. The Minister of Defense said that through the DWP, MAF plays a major role in protecting national interests and defending sovereignty. DWP is a document on strategic direction and national defense planning. Unlike classified national defense policy documents, they are open and accessible to citizens. DWP structure as shown in **Figure 1**.

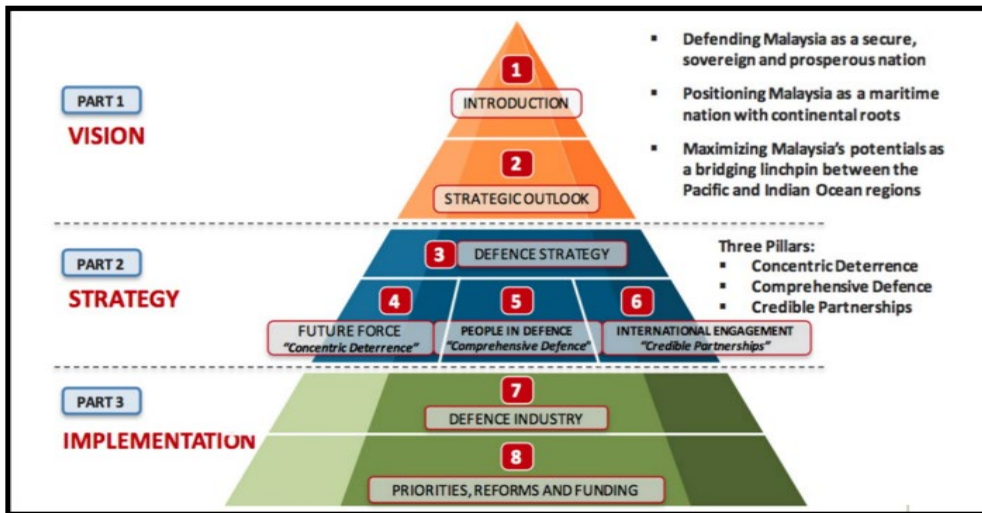


Figure 1: Defence White Paper Framework

The Malaysian Army launched the Army Strategic Capacity Development Plan (Army 4NextG) 2021-2050 in Mac 2021. The Army 4NextG 2021-2050 is a long-term strategic plan on the Army's operational capacity, supported by systematic capacity development management with a focus on the goal of capability detection, survival and strike, sustainment, protraction and nation-building. With the plan in place, it will prepare Malaysian Army to be part of the Future Force which capable of performing tasks in a multi-domain environment. The Malaysian Army developed a strategic development plan known as Army 4nextG as a preparedness measure to face the changing threat of future technology-based warfare. The technology-based Army 4nextG involves information and communication technology, the advancement of weaponry technology, human resource development and training, in addition to planned logistics management.

This plan focuses on the establishment of the land force including combat elements, combat support, service support and human capital development to enable Malaysian Army personnel to act against any different threats. Malaysian Army is able to distinguish each threat that occurs, thus allowing them to take swift action as the situation requires. Army 4nextG will focus on intelligence and intellectuals to face any threats and changes in the geo-strategic environment to ensure that the sovereignty of the country and the well-being of the people remain preserved. This long-term plan will provide guidance to all leaders and personnel of the next generation of the Army related to the planning and direction of the Army based on the development of capabilities beyond the year 2021 until 2050. This plan was developed to support the Security Policy and National Defence

and in line with the national development agenda. It also takes into account the needs of the National Military Strategy and also the principles of the Future Force as outlined in the Defence White Paper.

The Strategic Goal that has been outlined under the Army 4NextG Plan is the ability of the Army to operate in two regions of the country simultaneously. In order to support this strategic goal, the Army 4NextG Plan also takes into account aspects such as the operational environment of various domains based on technology, togetherness, interoperability and mission-oriented, the development of human resources and knowledge-based training as well as the management of logistics and financial resources in a targeted and planned. In general, Army 4NextG is specifically designed to meet the needs of the next generation of the Malaysian Army taking into account the various spectrums of warfare, the uncertain geostrategic environment and the rapid development of defense technology in the future. The Army will face a complex and uncertain concept of future warfare known as 5th Generation Warfare. This threat cannot be dealt with only by a military response approach, but requires collaboration with the government and the people through a Whole of Government and Whole of Society approach. The future situation that will be encountered will also require a force capable of responding militarily in a multi-domain operating environment (Multi Domain Operating Environment). Therefore, the development of the Army in the future is based on five capability goals, namely Detection, Survive & Strike, Sustainment, Protraction and Nation Building.

EFFECTS OF THREAT TO SOVEREIGNTY

The world and regional situation are difficult to predict and is influenced by factors of uncertainty in international relations. The indicators exhibited in the geostrategic and geopolitical environment at the global and regional levels have shown the evolution of threats to be faced. A country must be able to deal with all types of threats from various dimensions, including cyber threats. The threat is able to absorb and influence people's thinking through the advancement of technology and borderless information systems. Meanwhile, the emergence of stakeholders who want to expand the influence of beliefs such as politics and religious extremism also has an indirect effect on national security.

Malaysia shares land and maritime borders with almost all Southeast Asian countries. In this context, the issue of ongoing territorial claims and the political issues of neighbouring countries always put the country's borders exposed to a wide spectrum of

threats. This geographical position requires elements of national defence to be able to monitor, prevent and defend the vast borders of the country. In addition, the profile of the terrain and the coastal area also make it difficult for security monitoring efforts to be fully implemented. Malaysia has two land regions separated by the South China Sea where any conflict between these two regions will affect the governance network, territorial integrity and national sovereignty. Therefore, TD needs a land defence element that is capable of acting in a dynamic operational environment and has a convincing capability to guarantee the security and continuity of the country's sovereignty. Thus, the country demands a credible army capability in protecting and defending the security of the country's land domain.

FUTURE CHALLENGES

The main challenge to Army 4nextG includes several tangible and intangible factors. As a long-term development plan, this plan is very sensitive to external and internal elements that may affect the aspirations of the strategic goals that have been outlined. Among the challenges identified as positively related to the implementation of the overall plan are government policy, the concept of future warfare and, most importantly, fiscal capacity. Apart from that, the international geostrategic environment also affects the overall aspirations of the country, ATM and TD in the future. However, the plan that has been formulated can reduce the impact on TD development.

The main challenge in the implementation of this strategic development plan is the financial factor. In the strategic plan, the purchase of military assets is undoubtedly a priority along with the latest technological developments. However, if financial allocations do not allow, all planned plans cannot be realized. Not only the purchase of new assets, but the development of infrastructure in the military camp also needs to be improved from time to time to raise the morale of the members. All these requirements require financial allocation so that the planning of this plan can be implemented. Financial needs are essential for the acquisition of new assets and the replacement of obsolete assets as well as maintaining existing assets. The procurement and maintenance aspects need to be prioritized and realigned based on existing assets. Financial allocation is also an important requirement in improving the well-being and quality of life of Malaysian Army personnel so that they are always in a comfortable environment. New methods need to be explored to enable this aspect of well-being to be dealt with more effectively.

The weak leadership factor in the Malaysian Army organization can also hinder the achievement of the set targets, especially in the aspects of monitoring and governance. The weakness of monitoring at every level of government will cause officials and members to be careless in carrying out their entrusted responsibilities. The audit management carried out by the Malaysian Army Inspectorate shows that there are still weaknesses in terms of monitoring, inefficiency and lack of integrity in the management of the team. In addition, Malaysian Army is also facing challenges related to human resource competence in order to keep up with organizational modernization and technological change, where the filling of skilled human resources is very important so that Malaysian Army can continue to move in parallel with the development of science and technology.

The next challenge is in terms of the Malaysian people's confidence in Malaysian Army due to the rapid spread of information and demands Malaysian Army to try to increase the trust and confidence of the people including through social media. Belief and confidence of Army personnel in the benefits of the strategic development plan also is the challenges. If we believe we can do it, then we will do it seriously and succeed in doing something. If we believe we can't do it, then we won't do it with a good attitude and we will fail to do something. Belief gives confidence and determination to do something. This is the psychological preparation to publish the motivational and mental readiness to carry out the work of transformation. Among the focuses that need to be prioritized is that army will carry out a re-evaluation of past achievements and carry out systematic improvements taking into account the current situation as well as future needs. Besides that, every planned action plan needs to be followed up with precise commitment from various levels. Therefore, every layer of Army level needs to be given a clear understanding of the Army's Strategic Capability Development Plan.

CONCLUSION

The concept of Army 4NextG capability development is aimed at forming Malaysian Army as a modern and credible force to deal with any threat scenario in the future. The strategic goal of being able to operate in two regions simultaneously is the core of how Malaysian Army will operate and remain relevant in the future. In line with the technological revolution that is developing dynamically, Malaysian Army will foster a creative and innovative culture among its citizens in line with the development of future abilities. The use of modern and sophisticated technology will shape Malaysian Army into a force that is responsive, credible, adaptable and capable of combat.

In addition, this development concept is also strengthened by the existence of a reserve force that functions based on the '*Bantu Ganti*' Concept to support the land defence mechanism as a whole. Cooperation between agencies is a significant added value element to achieve the Comprehensive Defence principles outlined in the DPN. The responsibility to defend the country from external and domestic threats is a collective effort at the national level and needs to be embraced by every member of the people of this country. It can be concluded that Army 4NextG is a creative and innovative plan. It uses a realistic and practical implementation approach to face the future strategic uncertainty environment. Malaysian Army capabilities will be cost-effectively managed without compromising combat capability in the face of any contingency requiring a military response. This is in line with the responsibility to defend sovereignty and territorial integrity.

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ARMY 4NEXTG: CHALLENGES IN THE NEW HORIZON

**By LT KOL WILLIE ANAK CHAHAT
ROYAL RANGER REGIMENT**

INTRODUCTION

The development of the national defence policy or defence doctrine has started since independence and it continues to develop with change after change until the norms of policy also changed from conventional to strategic so that it continues to be a solid foundation for maintaining the national security. National Defence Policy (NDP) has gone through a long phase with various dimensions of threat. Looking at security threats are also developing which do not only involve on traditional security threats (traditional threats) such as territorial issues, conflict, crisis and war, on the other hand after the Cold War era elements of security threats have become more widespread involving non-traditional threats such as terrorist threats, drug smuggling, economic , disease, border disputes and so on that have forced the formulation of a defence policy that the NDP will becomes more relevant and can be used to curb these threats. Army modernization is the best step towards transforming an armed force into a balanced, authoritative, integrated force that is ready to face challenges in any conflict.

Army modernization is developed keeping in mind the defence function of the modern era. The country needs to implement a stable weapons capability increase and balance with the skills of its military personnel (Abdullah Sudiran, 2005). By the end of the Cold War back in 1991 security threats also grew with security threats not subject to traditional threats alone but also involving non-traditional threats. This scenario also involves threats in the Asia Pacific region as an uncertain and hard to predict.

ARMY 4NEXTG

In connection with the 88th Army Day, Malaysia's Chief of Army on 2 Mac 2021 (Borneo Post Online) unveiled the Army Strategic Capacity Development Plan (Army 4NextG) 2021-2050. These documents will act as a comprehensive road map for the development and management of Malaysian Army in the ensuing years. The Army's operational capacity is the subject of the Army 4NextG 2021-2050, a long-term strategic plan underpinned by systematic capacity development management and centred on the objectives of capability

detection, survival and strike, sustainment, protraction, and nation-building. The future force that would enable them to carry out their duties in a multi-domain environment would include the plan. This long-term plan will provide guidance to all leaders and members of the Army Generation Coming (Next Generation) related to the planning and direction of the Army that relies on the development of capabilities beyond the year 2021 until 2050. This plan is developed to support the National Security and Defence Policy and in line with the country development agenda. It also takes into account the needs of the *Strategik Ketenteraan Negara* (SKN) and also the principles of the future force as outlined in the Defence White Paper (DWP).

The strategic goals outlined under the Army 4nextG Plan is the ability of the Army to operate in two regions of the country simultaneously. To support this strategic goal, Army 4NextG Plan also take into account aspects such as the operating environment of various domains which is based on technology, togetherness, interoperability and orientation mission, human resource development and knowledge-based training as well as management of logistics and financial resources in a targeted manner and planned. By 2021 and beyond, the Army will facing the complex and uncertain concept of future warfare known as 5th Generation Warfare. This threat cannot be addressed only with a military response approach only, it requires joint venture with the government and the people through the Whole of Government approach and Whole of Society. This future situation also requires a force capable of responding military in a multi domain operating environment. Thus, the development of the Army at the time forward is based on five capability goals namely detection, survive and strike, sustainment, protraction and nation building.

CHALLENGES IN THE NEW HORIZON

The main challenges to Army 4nextG are several tangible and intangible factors. As the long-term development plan, this plan is very sensitive to external and internal elements that may affect the aspiration of the goal strategies that have been outlined. According to Malaysia Chief of Defence Force, Affendi (2022) Malaysia faces three challenges in the changing regional security environment, particularly in the strategic, geopolitical, security and economic paradigms in an effort to defend national security and sovereignty. At the same time, Army challenges in terms of planning the replacement of assets as well as the acquisition of new high-tech assets in carrying out our mission to become a credible and relevant force.

❖ Political Intervention in Spending

The political stability of the nation has an impact on the Army development process as well. This is due to political meddling that links the problem with the nation's defence spending to waste that prevents the MAF development process from moving forward. The issue of out-of-date defence equipment caused by technological growth is one that the government is aware of. Army capability development was frequently stymied during a "gloomy" period in which spending on the Army was politicized, even though this was only an accusation and political polemic. A nation's success and security depend on political stability in logistical growth. This is due to the fact that a nation's security and defence needs cannot be ignored. The ability of the nation to defend itself will be impacted by an intervention scenario in Army technological development. The actions of this political organization impede Army development and expose weaknesses in Army development and procurement, which are crucial to the nation's security and defence.

❖ Outdated Equipment

The challenges in Army 4nextG are also related with outdated equipment used such as Land Rover Defender 300 TDI, this Land Rover model is a brand that specializes in four-wheel drive vehicles owned by a British multinational manufacturer. The Army used the $\frac{3}{4}$ Ton GS Cargo Truck 4x4 Land Rover Series II A in 1971 and then the $\frac{3}{4}$ Ton GS Cargo Truck 4x4 Land Rover Series III in 1976. According to the history of the British Army in Malaya, this vehicle was first used during the First Emergency (1948–1961). With the equipment of more than 50 years old, it is outdated war equipment compared to other military vehicle used by other countries in war and rescue operations. This will weaken Army operation and indirectly pictures government's half-heartedness in developing Army asset.

Preparedness needs to be seen not only in terms of physical movement preparation and the level of mental and moral preparation of the nation's soldiers but also includes modern and high-tech knowledge and weapons. The government needs to ensure that the Army has assets that are modern and capable of being used effectively in dealing with the threats of the 21st century. The Army needs to have assets that are high-tech, cost-effective, and easy to maintain by their relevancy and function.

❖ **The Purchase Not According to Real Needs**

The nation's military development, particularly in the acquisition of defence equipment, has given rise to some dubious situations. For a country to secure its security and sovereignty, military development is a need. Therefore, any government can choose to purchase strategic, contemporary, smart, and cutting-edge equipment. The ability of the weapons system to be employed for a prolonged amount of time is, however, guaranteed to be a "fake" in many instances, despite the employment of phrases like modern, clever, and strategic. The majority of equipment transactions are one-time events that are quite expensive. Even so, this acquisition also includes technology transfer and post-sale services. However, there are few after-sales services in practice. The "one-off" concept of buying has been adopted by numerous nations, and Malaysia is no exception. The complex tank equipment system that the country obtained has some limitations due to purchase costs, time, and technological improvement. If the system being given was created in the 1980s, the supplier nation may add some 'new' advanced features that will actually boost the system's capacity level to solve the issue at hand. The statement may not always be accurate, but in the fiercely competitive business realm of defence systems, a seller may sometimes say or do anything to get his product chosen.

❖ **Global and Domestic Economy Stability**

The domestic economy is not only dependent on trade and business activities within the country. International trade activities are closely related and have a direct impact on the domestic economic environment. Global economic and economic balance domestic is important for Malaysia's socioeconomic stability. The economic recession is expected to hit the whole world, starting with the United States towards the end of 2022, before spreading to the rest of the world next year. The current economic situation has explained it all. Most economists believe that an economic recession will occur in the next year. The World Bank also warns about this. With inflationary pressures intensifying (rising sharply), economic growth slowing, and aggressive monetary policy tightening being taken by almost all central banks around the world, the chances of a recession in 2023 are bright.

Malaysia should be ready to adjust the domestic economic environment to any form of impact from the global economic impact. The resilience of the country's economy is very important in ensuring that the country is stable, balanced and able to continue to generate prosperity and well-being of the people. With the unstable domestic

economic situation where the price of goods is increasing daily, the position of the Malaysian Ringgit is not strong. It will directly affect the budget given to the ministry of defence and the Army 4nextG development program.

❖ Integrity and Untrustworthy Governance

Malaysia earned a "D" grade in Transparency International's (TI) Government Defence Integrity index (GDI) for 2020, which examines efforts to curb corruption in defence and security institutions in 77 countries. According to TI Malaysia, the study found that Malaysia has weak legislative oversight over the budget, low bidding competition for procurement, no independent ombudsperson and a lack of data transparency. In a statement, TI-M said Malaysia's defence sector is a vague government activity where the defence budget is general compared to comprehensive expenditure details. The "D" grade also indicates that the country is at a "high" risk of corruption in the defence and security sector.

Not even the issue of the littoral combat ship (LCS) construction scandal worth RM 9 billion has subsided. The national defence procurement process continues to rage due to poor governance and low-integrity practices in the Ministry of Defence. The most recent issue is the awarding of direct tenders for self-propelled howitzer artillery cannon systems worth RM 854 million to the Malaysian Army. The practice of corruption and inefficient governance will hinder the modernization process of the army, especially in acquiring sophisticated equipment to meet the WDP mission.

❖ Weak Defence Policy

Issues with the NDP because Malaysia established the practice of cooperative defence principles, regional and external help is viewed as being similar to the principles of defence self-reliance, whereas each country must achieve national self-sufficiency while choosing to pursue regional cooperation and overseas aid. This, according to Jaafar Kasim (2002), is how Malaysians define independence. It is a good idea, without a doubt, but only the military forces are aware of how to apply it; the other agencies are either unaware of it or unaware that it even exists. A national commitment to self-reliance should permeate all elements of political, social, and economic activity with a focus on the primary goals of maintaining national security. Currently, the majority of defence-related organizations prioritize financial gain over meeting the nation's defence needs (Jaafar Kasim, 2002:36).

Here, it is obvious that every nation requires independence when talking about security-related issues. NDP in Malaysia must be self-sufficient in this environment. Although the idea of interregional cooperation and outside assistance is optional. This is due to the fact that the country needs to be self-sufficient, whereas action a country takes to cooperate and get outside help is optional to that country. One example of this would be to add or maintain authority in order to ensure a country's safety and survival in the international system. The flaws in this strategy reveal that the Malaysian government's knowledge of the self-reliance defence principle was obviously not well researched before developing a strategy for defence. Given the difficulty in understanding the self-reliance movement as a whole, it is clear that the Army's application of self-reliance defence doctrines is lacking.

❖ **Impact of COVID-19 Pandemic**

Malaysia would probably have to restrict its defence procurement intentions as a result of the present COVID-19 issue. Not only is it anticipated that the virus's effects will cause the economy to weaken, but the government will also prioritize funding for programs aimed at reducing the impact on Malaysia's population. The impact on defence won't be apparent until the 2021 Defence Budget and 12th Malaysia Plan (2021-2025) are released in November and early 2021, respectively (Dzirhan Mahadzir, 2021). The Malaysian government launched *Op BENTENG*, a border control operation, in response to COVID-19 to stop unauthorized entry into Malaysia by land or sea. The effort was started out of concern that undocumented immigrants and refugees could transfer more COVID-19 infection clusters into Malaysia. The Malaysian Armed Forces, Royal Malaysian Police, Malaysian Maritime Enforcement Agency (MMEA), and the Immigration Department are all involved in the multi-agency operation known as *Op BENTENG*. For small-scale purchases of 44 transporters and all-terrain vehicles, the government has made cash available to the armed forces.

❖ **Regional Conflict**

Despite regional cooperation amongst Southeast Asian nations, there are still a lot of domestic problems in the region that have not been resolved. Border wars and territorial disputes continue to afflict Southeast Asian nations, such as Malaysia's territorial claim to the Spratly Islands and China's rivalry with it (Balakrishnan, 2002). China also makes threats to assert its territorial claims militarily and with force. Similar to the conflict on the grounds of the ancient temple Preah Vihear, involving the armed conflict between Thailand and Cambodia

since 2011, as well as the ethnic conflict in Myanmar involving the oppression of the Rohingya ethnic group, which caused the Rohingya ethnic group to flee themselves to regional countries and become a burden to regional countries. When the ASEAN nations were dealing with the issue of "people drifting" as a result of fighting and political unrest in Indochina, these phenomena once occurred (Balakrishnan, 1999). If this geographical dispute is not settled, it has the potential to spark major new conflicts.

In addition, the Malaysian Prime Minister acknowledged that his country faces threats both from within and outside of its borders with Thailand, Brunei, Indonesia, Singapore, the Philippines, Vietnam, China, and Taiwan. Although threats from within the government are considered to be insignificant, they can lead to a more serious crisis if they are poorly handled, as in the case of some countries' internal uprisings that had an impact on Malaysia's safety.

❖ **Great Power Competitors**

China, American, and Russian great power rivals have put in place modernization projects to counteract our conventional supremacy, and the problems they pose are becoming more trans-regional, multi-domain, and multi-functional. To prevent military deployments into operational theatre's, advanced nations are building highly effective anti-access and area denial systems, air and missile defence, cyber, electronic warfare, and counter-space capabilities. Even while we might not directly compete with near-peer rivals, they are nevertheless posing a threat to us through non-violent means. As they spread military capabilities among others, we are also likely to encounter their systems and ways of combat.

The effects of the battle in Eastern Europe extend beyond merely the alliance between the US, Europe and Russia. A series of manageable disputes between the US and China over trade, intellectual property, and military positioning have now crystallized into what is likely to be a protracted struggle for global dominance. As a result, each bloc will pursue strategies to bolster its defences and keep its enemies at bay. These strategies include a significant military build-up, which will likely also include increased spending on research and development (R&D) into high-tech weapons and cyberwarfare. Additional penalties as well as alternative trade, financial, and financial pressures. The major powers will be more concerned about their supply chains, how dependent they are on rival exports and imports, and how secure the transportation routes that carry supplies of food, energy, and essential components are as a result of a stronger focus on potential

threats. To encourage their private enterprises to modify their tactics and lessen these risks, policies will be established.

❖ Budget

Every year, the Ministry of Defence underspends the budgeted amount relative to MAF's demands. It is crucial that the government distribute its budget in order to address the defence system's weaknesses. Lack of funding is another issue that affects Army management issues. Army needs a large budget for the newest equipment in order to assure the success of its activities and operations. While solidifying the military administration management for the Army staffs, these training and activities can improve the quality of education management for future leaders. With a large budget, intelligence coverage can also be implemented to the best of its ability to aid the Army in carrying out its operations through military diplomacy and positive two-way relationships, as well as to provide the MAF staff in the Ministry of Defence with good health services through treatment, examination, and consultation.

Only if the Army is given a large budget can this be accomplished. Previous Mohamad Sabu, Malaysia's Minister of Defence, stated that his department's budget will rise in 2019. He added that the Ministry of Finance is responsible for providing an estimated RM 1.4 billion for MAF main asset maintenance, making the Ministry of Defence's actual budget for 2019 in RM 15.3 billion. The Ministry of Defence will soon implement the budget channelling method and mechanism. **Table 1** displays data on Malaysia's operating and development defence budget expenditures from 2018 to 2020. General Tan Sri Affendi Buang, the Chief of the Defence Forces, stated that in order to maintain the greatest level of defence asset readiness, the Malaysian Armed Forces (MAF) need an allocation of at least 1.5 percent of the GDP. When the 2023 Budget is presented later, he hopes that there will be an increase in defence budget allocations. MAF preparedness is built on five components that must constantly be at a high level: primary asset readiness, auxiliary asset readiness, ordnance readiness, logistics readiness, and human resource readiness.

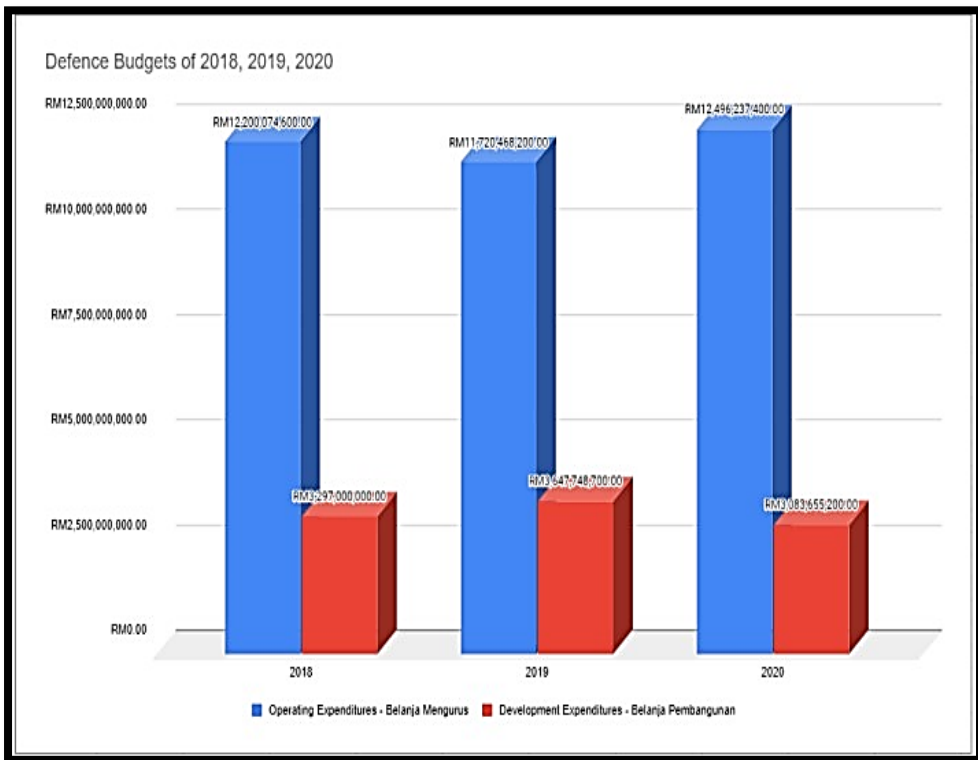


Table 1: Malaysia's Defence Budget Statistics from 2018 to 2020 in RM billion. Source: Ministry of Finance, (2021)

❖ **Technologies Changes**

The peculiarity of warfare in the 21st century is a result of shifts in the global balance of power and the rapid development of information and communication technologies. There is now a common understanding of the expanding significance of information and psychological operations in warfare. As a fourth block to the Three Block War concept (Annis, 2020), Mattis and Hoffman (2005) argue that psychological or information operations are necessary because "insurgencies are wars of ideas, and our ideas need to compete with those of the enemy." Similarly, Chekinov and Bogdanov (2013), two Russian military experts, define information as a distinct aspect of war.

The use of the term "hybridity" to describe current security challenges has been encouraged by the growing significance of non-military tools in modern warfare. The fundamental characteristic of "hybrid warfare" and "hybrid threats" is the synthesis of various tools and techniques, both military and non-military. The list of hybrid tools compiled by Treverton et al. (2018), which includes propaganda, fake news, strategic leaks, funding of organizations, political parties, organized protest movements, cyber tools (espionage, attack, and

manipulation), economic leverage, proxies and covert warfare, and paramilitary organizations, gives an idea of the range of tools that adversaries may employ. The list is not all-inclusive, and any of the aforementioned tools could be utilized in addition to conventional warfare.

❖ **Weak Defence Industries**

Malaysia's defence industry has a long history; for instance, in the 1970s, it collaborated with a local business to produce the *Jerung*-class rapid attack boat from a German design. Malaysia, however, seems to be lagging behind while nations like Indonesia have made strides on exporting light armoured vehicles to the Philippines. The fabrication of provided components and the assembly process are the only aspects of Malaysia's defence industry. Even though the asset in question is domestically produced, the essential and primary components are still imported. Consider the components of land and sea assets' engines. There is no economy of scale, hence this is inefficient in terms of cost per unit. While attempts are made to encourage local businesses, many of them end up acting as agents or middlemen for international businesses.

The Adnan combat vehicle, the *Pendekar* tank, and the *Gempita* armoured vehicle are among the assets for which the government has also spent billions of ringgits on the designs, although local development of these items ceases after the contract is completed. The industry also doesn't seem to want to create or research new inventions, much less compete with markets outside. The performance of the Army 4NextG is also negatively impacted by the weak defence industry in our nation. Military technologies and weapon production are handled by the defence industry. Dependence on the outside defence sector causes the asset recovery process to take longer, which makes it difficult to perform long-term training and reduces Army preparedness. The country's defence industry's inability to provide high-quality Army equipment puts troops' lives in danger by causing damage to technical equipment that results in accidents. The Ministry of Defence should put more effort into encouraging, exposing, and teaching more young people to pursue careers in the defence business in order to grow and advance the nation's defence industry.

WAY FORWARD

❖ Whole of Government Concept

In addition to military prowess, security is derived from the effectiveness of governmental and non-governmental organizations combined diplomatic and humanitarian efforts (Tong,L.C, 2017). However, in order to attain a sufficient degree of national security for the nation, there is a greater need for inter-agency cooperation due to the difficulties of today. In order to safeguard national security and interest, it is crucial for government agencies and departments to work together.

A concept known as the Whole of Government (WoG) approach to national security encourages intergovernmental organizations to work together to optimize all available resources. Overcoming contemporary security difficulties is more about anticipating, preventing, and controlling disruptions like the spread of terrorism, global contagion, and natural disasters than it is about achieving hegemonic aims. As a result, proposals have been made for a government-wide strategy for national security (Gockel, 2008). Additionally, it places an emphasis on making the best use possible of scarce resources while also achieving the idea of effective defence administration.

❖ Invest in Our Defence Industry

Focused investments in the defence industry should be made in specialized fields that will best support the Army 4NextG transformation and meet interest-based requirements outlined in the Defence White Paper, as well as create new, well-paying jobs. It is important to follow the principle of limited self-reliance, putting more of an emphasis on niche industries with high added-value applications such as shipbuilding and cyber capabilities. As these developments take place, discussion and examination of the National Development Investment Plan and the revised Joint Capability Plan will be essential. In order to ensure that the industry does not continue to be vendor-driven, the government must actively participate in funding and directing these developments. Additionally, doing so will generate economic benefits in the form of high-value jobs and encourage innovation that can be applied to other industries.

We should strengthen steps to build domestic capacity in producing security products. Dependence on security products from foreign sources should be reduced. The construction of this self-

sufficiency requires continuous support and commitment from each party. Government entities and private entities should complement each other in order to achieve this objective. The local security industry should be able to support the defence sector, internal security, public order, disaster management, health security management, social integrity and cyber security.

❖ **Fighting Corruption**

The national defence industry is now seen as a gold mine full of impurities and lacks integrity. Several measures can be implemented to combat corruption in the national defence industry. First, there are too many players in the industry who are simply middlemen or project brokers. This needs to stop. Corruption, abuse of power and misconduct of integrity must be eradicated. It is an enemy of the country that can bring down Malaysia. Corruption, abuse of power and misconduct of integrity must not be allowed to go by or Malaysia will face severe destruction in all aspects. Efforts to fight corruption must continue and be done consistently. Any strategy, effort, technology and approach to maintaining national security will fail if elements of corruption, abuse of power and behaviour that violates integrity occur in government administration, private administration and community behaviour. Fighting corruption is a joint effort of all parties.

The government, through government entities, can negotiate directly with producers to procure strategic assets. No need to use an intermediary. This middleman culture is too easy to misuse to legitimize corruption. Second, if a big project costs more than RM 1 billion, an independent body needs to set up a way to keep track of it and make sure it goes smoothly and openly. This is very important to promote a system of checks and balances that works well and ensures that the KPIs are followed as closely as possible. Third, the government's payment system for buying military equipment needs to be based on the level of readiness instead of the timeline. Payments are only made when the level of readiness is agreed upon. In the contractor, the management timeline is met. For example, when 30 percent of a project is completed, the government makes 30 percent of the payment. This will generate the growth of the country's defence industry's growth, which will provide more job opportunities and investment.

❖ **Build Economic Resilience**

The worst may be over for Malaysia's economy after two years of uncertainty brought on by the unexpected arrival of the Covid-19

pandemic as the country gradually shifts its gear back to a recovery mode. Due to the reopening of the economy and the restart of businesses, Malaysia's financial situation has also improved throughout the year (MIDA, 2022). Continuing economic opening in 2022, supported by initiatives like the planned reopening of international borders, will aid the services sector, which has had difficulty recovering over the past two years, in recovering and catching up with manufacturing, which has returned to the immediate pre-Covid 19 level in terms of GDP levels, broadening economic growth.

Strengthen the national economic base to face global economic competition in addition to maintaining the Government's legitimacy in managing the national economy without being influenced by foreign powers. Economic interests abroad need to be protected to support domestic economic growth. The preservation of Malaysian industry and products to compete fairly at the international level is also a strategic interest of the country that needs to be strengthened. External restrictions that hinder Malaysia's economic development need to be overcome through the actions of various parties in an orderly and integrated manner.

❖ **Strengthening Regional Cooperation**

More so than it has been able to in recent years, ASEAN must act with greater unity and cohesiveness. To confront the likely, potentially harmful strategies of the big powers in light of the altered external circumstances, there needs to be stronger unity. Indonesia, the dominant country and natural leader of the region, will need to exercise more leadership than it has hitherto been ready to do for this to materialize. It is doable, but it won't be simple. To increase their economies' dynamism and significant resilience in what will be a more challenging global environment, individual nations will need to quicken the pace of reforms (Bashkaran, 2022). By stepping up their anti-corruption efforts, strengthening the checks and balances they have in place, such as a freer press and more transparency, they will also need to improve their ability to cope with subversion and attempts to co-opt opinion leaders and officials.

Ensuring elements of regional cooperation in preserving and defending core national values such as territorial sovereignty and integrity, and socio-political stability. At the regional level, Malaysia actively uses the ASEAN platform to manage various regional conflicts. ASEAN, which is the basis and pillar of Malaysia's Foreign Policy, places this principle as a priority in its relations with foreign countries. ASEAN's strategic importance in all fields is something that cannot be

denied. At the same time, ASEAN also provides another mechanism for Malaysia to establish closer relations with other major world powers that are ASEAN's dialogue partners. This two-pronged approach has opened opportunities for Malaysia to remain stable, strong and independent and supported by a "non-partisan" stance that also contributes to regional neutrality.

CONCLUSION

Defending our nation is an indispensable task that we must not lose sight of. In a time when the country is faced with great challenges and limited resources, we must, more than ever, effectively reconcile limited resources against pressing priorities. The government must see to it that funds and appropriate resources are made available to service those pressing priorities effectively. The opportunity cost of not investing properly in defence planning will be felt in the long run and will not serve the interests of Malaysia. The Army contributes to Malaysia's wider national interests by working in concert with the Foreign Policy through the National Defence Policy. As a defence force, it is routinely required to complement security agencies due to its legacy and inherent capacity to carry out security operations in support of civilian authorities. Army aspiration of developing into a modern and credible war fighting force requires a greater focus on procurement of capital equipment, training and development of doctrine. However, due to uncertainty in the security environment and the various security challenges that are ever present, Army has to be constantly involved in routine operations classified as operations other than war such as border security operations, humanitarian and disaster relief, and peacekeeping operations. Coupled with financial constraints and budgetary cuts, Army modernisation in accordance with Army4NextG. The government has to consider providing more development funding in both the 11th Malaysia Plan (2016-2020) and 12th Malaysia Plan (2021-2025) to ensure the modernisation of MAF progresses according to the planned trajectory.

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1ST PLACE

**PRESERVATION OF THE PERSONNEL'S WELL-BEING;
COMMANDER'S PERSPECTIVES IN FULFILLING THE THIRD
PILLAR OF THE CHIEF OF ARMY ORDER OF THE DAY**

Kol Mohd Nadzri bin Samiran@Jumiran, REME



2ND PLACE

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Lt Kol Maszuraidy bin Masduki, RIC



3RD PLACE

**PRESERVATION OF THE PERSONNEL'S WELL-BEING;
COMMANDER'S PERSPECTIVES IN FULFILLING THE THIRD
PILLAR OF THE CHIEF OF ARMY ORDER OF THE DAY**

Brig Jen Zahar bin Ariffin, RSR

INFORMATION FOR WRITERS

➤ The article length limit ranges from 4,000 to 6,000 words, which is around 8 to 11 pages. The writing should be in a size 12 Arial font. The text of the article should be typed at an interval of one and a half lines using the A4's paper format. Articles must be forwarded in both printed and soft copy versions to the *Bahagian Pembangunan Doktrin, MK PLDTD (UP: Editor Sorotan Darat)*.

➤ The writing procedure must follow the APA standard or any procedure for writing academic articles which endorsed by the local public universities. The article must have several subheadings. Reference systems such as footnotes and bibliography/references are adopted and sorted alphabetically. An example of its writing method is as follows:

- ❖ Flyod, K. (2009). *Interpersonal Communication: The Whole Story*. New York: McGraw-Hill
- ❖ Mohd Radzi & Jusang Bolong. (2015). *Komunikasi Pemimpin*. *Jurnal Komunikasi Malaysia* , 45 (3), 89-102
- ❖ Risya Zu. (12 Feb 2014). *Etos Kepahlawanan Tentera Darat*. *Utusan Malaysia* , ms 9
- ❖ Rozman Malakan, (2011). *Pembentukan jati diri insan*. [http:// www.open subscribe. com/ worldlibrary /teks /7.html](http://www.open.subscribe.com/worldlibrary/teks/7.html). Capaian pada 30 Mei 2016

➤ Diagrams, tables and pictures should be used on a limited basis and numbered as recorded in the text description.

➤ Requirements:

- ❖ Each article must be forwarded together with a brief biodata/background and a softcopy of passport-sized photo of the writer.
- ❖ A synopsis of the article not exceeding 100 words containing the main arguments/opinions discussed in the article.

REMINDER: ARTICLES MUST BE OF THE GENUINE THOUGHTS AND IDEAS OF THE WRITERS AND NOT FROM THE RESULT OF PLAGIARISM.



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