

CHAIRMAN'S REPORT

TRACK II NETWORK OF ASEAN DEFENCE AND SECURITY INSTITUTIONS (NADI) WORKSHOP ON

RESEARCH AND DEVELOPMENT IN THE REGION AS A MOMENTUM IN STRENGTHENING DEFENCE COOPERATION

15th-17th November 2021

Jakarta, Indonesia

INTRODUCTION

1. The Track II Network of ASEAN Defence and Security Institutions (NADI) Workshop on Research and Development as a Momentum in Strengthening Defence Cooperation in the Region was organised by Center for Strategic, Research and Development (CSSRD), Indonesia National Armed Forces (*Tentara Nasional Indonesia*/TNI), Republic of Indonesia. It was held at the Office of Center for Strategic Studies, Research and Development, Indonesia virtually on Monday, 15 November 2021 to Wednesday, 17 November 2021.
2. The representatives from Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam attended the Workshop through virtual conference due to current COVID-19 pandemic restrictions. The list of the participants is at **Appendix I**. The workshop was chaired by Major General Jhonny Djamaris, S.IP., M.IP., Head of CSSRD TNI.

Opening Remarks by the Chairman, Major General Jhonny Djamaris, S.IP., M.IP., Head of CSSRD TNI.

3. In welcoming all NADI Head of Delegations (HODs) and delegations to the NADI Workshop, Major General Jhonny Djamaris, S.IP., M.IP. highlighted the importance to participate in the development of ASEAN Political And Security Community for the ASEAN Centrality; through focusing on research and development as crucial matter specially in the field of military.
4. He further admitted that although such topic would have make impression of sensitivity, however, it cannot be avoid if ASEAN wanted to form mutual community as one of the goals that drive NADI members, is to strengthen ASEAN centrality, in the face of great power presence in this region. He pointed out that to accomplish that, we need defence industrial independence, as important factor to prevent outside forces of intervention. Research and development are among the keys to achieve that.
5. He pointed out that the topic of research and development is not far from the bigger context, namely defence industrial cooperation, which have started with the establishment of ASEAN Defence Industrial Collaboration (ADIC) at the 5th ADMM meeting, 2011, in Jakarta. ADIC was established

to drive interdependence among defence industry from ASEAN Member States (AMS), with facilitating supply chain network for defence industry. Nevertheless, ADIC still can't influence much on defence industry independence, because of various reasons, one of things is the inequality of technology capabilities.

6. For the workshop, Major General Jhonny Djamaris, S.IP, M.IP hoped there will be dynamic, academic and explorative discussion, but with respect for each other, and emphasize, that togetherness and mutual trust are the main objectives of this workshop.

ADOPTION OF AGENDA

7. The Meeting adopted the agenda and the programme, which are attached as Appendix II and Appendix III respectively.

Keynote Speech by Dr. Ir. Adhi Dharma Permana, Agency for the Assessment and Application of Technology (*Badan Pengkajian dan Penerapan Teknologi*/BPPT) Indonesia on Developing an approach in Joint R&D to support ASEAN Defence and Security Collaboration

8. Dr. Ir. Adhi Dharma Permana highlighted that AMS have cooperated in the Defence Sector, namely engagements in the high level meetings, namely ADMM, which has been established in 2007, and ADIC which has been established in 2011.
9. He emphasized the importance of the Defence Industries (DI) that is strategically vital to a nation, strategically, to secure the supply chain, alleviating arms/parts embargo and providing strength of the armed services. Economically, DI plays the role of spearheading, developing and supporting industries. Besides, it is used as a locomotive to advance the technology of other industrial sectors, create new industries and in the outcome of expansion, modernization and economic spin off. DI provides a stable platform to launch Self-reliance, Security, and Sustainability, which strives to maintain Sovereignty, while aimed at reducing imports, increasing intra-trade among AMS, creating stronger economic resilience.
10. In order to develop a joint Research, Development, Engineering, Operation Program, he proposed that it is important to formulate common interest towards a mutually shared goal/objective; establish a mechanism by which the parties involved can work together towards that shared goals or objectives, define a cooperation/collaboration towards working in a conducive environment, whether that be at the G to G, or B to B domain; and establish a consortium or cooperation for a specific joint R&D.

Keynote Speech by Colonel Army Oktaheroe Ramsi, Directorate of Defence Strategy, Ministry of Defence, Republic of Indonesia, on Cooperation on research and development (R&D) among AMS dealing with current challenges in order to support Indonesian defence strategy

11. Colonel Army Oktaheroe Ramsi highlighted the cooperation on R&D among AMS, dealing with the current challenges in order to support Indonesian defence strategy. He present Indonesia defence strategy and explain the mechanism of

Indonesia defence strategy which is related to total defence strategy orientation supported by Indonesia regulation, norms and values.

12. He brought the understanding of Indonesia Defence Strategy refer to Indonesia Strategic Culture which is certainly different with other countries strategic culture. In Indonesia, the defence and security of the state is undertaken through a total people's defence and security system with the Indonesian Military and the Indonesian National Police as the main elements of force, and the entire people as the supporting element. He emphasized the value of "people-centered" that places the importance of people at the heart of national defence; the value of "territorial-based" emphasizes the preparedness of a self-reliant territorial defence posture in accordance with the distinct features of each territory; while the value of "totality" underscores the integration and unity of efforts across all national defence components in defending the nation-state against any military, nonmilitary or hybrid threats.
13. He raised the questions in relation to five domains in which R&D in Indonesia – and AMS - is shaped by national and then regional policymaking, institutional norms, and the practices of system actors responding to those policies: first, the quality of research and development policy — how research and development as a national asset contributes to national development; and then reaching the regional commitment; second, Indonesia's research and development ecosystem, third, the role of research funding, ASEAN and its impact on research capacity; how domestic and international research networks, links between research institutions and industry; and research accountability to the public matter for research outcomes.
14. He then recommended, to develop and pilot a scheme to professionalize management of research within government research institutions and universities; to undertake a study of how research management has been professionalized in 2-3 comparison systems (i.e., Thailand, Vietnam, Singapore); to allocate some of the national and ASEAN research funding available for this purpose; to demonstrate that some of their institutional funding is being invested in effective research management; and to reduce the compliance burden on individual researchers and research teams.

ROLE OF RESEARCH AND DEVELOPMENT IN STRENGTHENING DEFENCE TECHNOLOGY CAPABILITIES IN THE REGION

Malaysia

Presenter: Mr Wan Mustafa bin Wan Hanafi of Science and Technology Research Institute for Defence (STRIDE), Ministry of Defence, Malaysia

15. Mr Wan Mustafa bin Wan Hanafi highlighted the fostering nation's self-reliance capability by local industry is prominent factor in supporting and sustaining defence capabilities during peacetime and conflict. The development of Malaysian defence industry requires concerted efforts between R&D institutions and private sectors in order to stimulate and enhance defence ecosystem. Hence, the implementation of the whole-of-government and the whole-of-society approach as well as the willingness of all parties to collaborate in synergy is mooted.
16. To support this endeavor, Science and Technology Research Institute for Defence (STRIDE) has become the leading government research agency in formulating and implementing of defence science and technology research programmes for

Ministry of Defence Malaysia. Besides R&D activities, STRIDE also providing technical services in a wide range of defence technology areas which include electronics, communications, surveillance, personal protective equipment, food, rations, chemical, biological, aeronautics, vehicular technologies, weapons, propulsion, ballistics; underwater technologies as well as aircraft accident investigations.

17. Considering the availability of the facilities, capabilities and expertise, STRIDE is looking forward to explore opportunities for potential defence science and technology collaborations with the ASEAN Member States, specifically in the areas of Tropical Testing and Chemical Security. STRIDE's Tropical Testing Centre (TTC) aims to be the reference centre on material profiles and provides various testing services on equipment and asset. STRIDE believes that such collaborative programs will mutually benefit all parties in supporting the effective operations of our troops and preserving of military assets.

Indonesia

Presenter: First Admiral Joni Sudianto, Director of Strategic Studies, CSSRD TNI, Republic of Indonesia

18. First Admiral Joni Sudianto, highlighted that the role of R&D in strengthening defence technology in AMS is important to encourage the independence of the defence industry, in the midst of political challenges from great power in the region that have the potential to disrupt stability and security. The potential for cooperation between R&D among AMS already exists in ADIC, namely by creating interdependence among regional countries. Its potential has not been fully materialized due to the high competitive level of defence technology, as well as differences in interests among AMS. Research and development in the field of military technology is effective and efficient for AMS, where based on the form of threats that may be faced in the future, it is necessary to determine the concept of defence, as well as the type of strength and quality of defence capabilities that are able to ward off and overcome these threats appropriately.
19. Therefore, he recommended for a beneficial political policies of AMS through ADIC to support R&D in order to improve defence industry independence in ASEAN; improvement of the materialization of cooperation in ADIC, through the realization of mutual benefit and equal cooperation; adoption of technology by transfer of technology and transfer of knowledge defence R&D technology from developed countries outside ASEAN, to accelerate the authorization of AMS; and realization of R&D cooperation in the field of military technology by observing the threats that may be faced in the future.

Myanmar

Presentation by Major General Myint Kyaw Tun, Deputy Chief of the Armed Forces Training (Strategic Studies), Office of the Chief of Armed Forces Training (OCAFT), Myanmar Armed Forces

20. MG Myint Kyaw Tun in his presentation mentioned that defence and security research plays a vital role in building the capability and readiness needed to ensure

the national security, and advanced technologies, coupled with highly trained personnel, are perceived as the sine qua non of a modern military. He mentioned that many countries have been spending a considerable share of their defence budgets on R&D activities. China is expected to be the leading country worldwide in terms of spending on research and development although the United States uses the largest amount of military expenditure in the world.

21. In addition, he also mentioned that cooperation among AMS in defence R&D is limited because of different defence R&D structures and governance arrangements within AMS. He hinted that defence research and development should usher in personnel and equipment innovations that can be used together by AMS, for both security and humanitarian assistance purposes. He also pointed out that rapid developments in artificial intelligence, autonomous and unmanned systems, digital infrastructure, networking and social media, and disinformation are profoundly altering the national security landscape. The major powers increasingly invest in R&D with the purpose of becoming extraordinary technological superpowers. He suggested that AMS should pay more attention to the role of research and development and cooperation among AMS in defence R&D.

Brunei Darussalam

Presenter: Mr Md Umair Akmal bin Hj Noor Ahsffian, Research Officer, Sultan Haji Hassanal Bolkiah Institute of Defence and Strategic Studies, Ministry of Defence, Brunei Darussalam

22. Mr Umair Akmal identified key processes involved in R&D in defence that allows the military to deliver a robust, responsive and resource efficient armed forces by highlighting the role of its R&D units, the Defence Lines of Development (DLoDs), and its thematic requirements to ensure any procurement and acquisitions can contribute to the development of the country's assets and human performance and consequently meet the strategic objectives of the country. Further, with growing access to artificial intelligence and unmanned systems, as a country with a relatively small armed force, capitalising on these platforms would act as a force multiplier and allows Brunei Darussalam to better integrate its weapons systems and allows the learning of new technologies.
23. Therefore, as a way forward SHHBIDSS proposed the following recommendations for consideration:
 - a) ASEAN-led forum on R&D to share best practices and undertake joint research projects. This can be accomplished through utilising and expanding existing platforms such as the ASEAN Defence Industry Collaboration (ADIC).
 - b) To promote technological information sharing and cooperation through dialogue and practical cooperation.
 - c) External partners to be identified and provide expert advice to R&D.

Singapore

Presenter: Mr Christopher Chen, Associate Research Fellow, S. Rajaratnam School of International Studies (RSIS), Nanyang Technological University (NTU), Singapore

24. Mr Christopher Chen underscored the research and development (R&D) efforts by Singapore's defence agencies in enhancing humanitarian assistance and disaster relief (HADR) and COVID-19 pandemic responses. For example, collaboration between the Defence Science and Technology Agency and the Republic of Singapore Air Force had enhanced the capabilities of Singapore's next-generation A330 Multi-Role Tanker Transport in aeromedical operations and HADR missions. Meanwhile, R&D efforts by Singapore's defence agencies to assist in the national COVID-19 response included support for front-line operations, contributions towards developing COVID-19 treatments, and improving mass testing and contact tracing capabilities. These examples illustrated how defence research agencies could provide technological solutions to be used at the whole-of-government level and for the public good. Mr Chen also emphasised the importance of regional collaboration on proactive practices and pre-emptive strategies to deal with future pandemics or shocks. He indicated that the COVID-19 outbreak provided a unique opportunity to foster defence cooperation to deal with non-traditional security threats.

25. Mr Chen put forward the following recommendations to promote defence cooperation in R&D: (i) The ADMM could identify and share best practices and proven technological solutions from within and outside the region, to better equip defence establishments of ASEAN Member States (AMS) to support whole-of-government responses to pandemics and other health crises; (ii) The defence establishments of AMS could promote collaboration with academia and scientific communities to develop technological solutions for future non-traditional security challenges; (iii) The ADMM could identify future non-traditional security challenges to facilitate more proactive and collaborative R&D to tackle these issues. Further, the ADMM could work with other external partners to facilitate R&D on such issues.

POTENTIAL COOPERATION AMONG RESEARCH AND DEVELOPMENT AGENCY IN REGIONAL COUNTRIES IN SUPPORTING DEFENCE STRATEGY

Indonesia

Presenter: Prof. Dr. Anak Agung Banyu Perwita, M.A., Ph.D, Lecturer of the Defence Strategy Faculty, Republic of Indonesia Defense University (RIDU), Ministry of Defence of Indonesia.

26. As has been stated previously, defence cooperation has a very crucial role in reducing the level of regional and international security uncertainties. Further, strengthening and expanding defence cooperations among AMS should also involve the engagement of any research and development institutions to further support defence strategy in dealing with multidimensional threats both in the national and regional context. Thus, this kind of cooperation should not only

involve defence institution of the AMS, but it should also engage the participation of any Research and Development Institutions.

27. Success in empowering research and development institutions, increasing the joint research, exchange of students and lecturers, budget sharing and the creating pool of shared resources to deal with non-traditional security threats might become the best way for ASEAN to further anticipate a more complex security environment in the future. Arguably, the road ahead for ASEAN will be much tougher, but if ASEAN can show its cohesiveness and improve its centrality to the world, it can stand united against COVID 19 pandemic and any other possible conventional and non conventional threats, it can surely overcome the challenges and the uncertain future holds of ASEAN.

Lao PDR

Presenter: Brigadier General Viengxay Somvichit, Director General of Military Science and History Department (MSHD), Ministry of National Defence of Lao PDR

28. Brigadier General Viengxay Somvichit stated that it is undeniable that ADMM is one of the top cooperation mechanisms within the framework of ASEAN Political-Security Community. Since the inception of ASEAN Defence Ministers' Meeting (ADMM) back in 2006, a number of documents: concept papers, SOPs, ToRs, Protocols, excluding Joint Declarations or Joint Statements have been adopted by ADMM and the areas of cooperation have embraced from the areas that exclusively for AMS such as HARD, defence industry, communications, education, counterterrorism, Cybersecurity, military education, border management, illegal and unregulated fishing just to name some, as well as the 7 areas of cooperation with the plus counties under the framework of ADMM-Plus EWGs, namely HARD, CT, MS, PKO, MM, CS and HMA. These cooperation mechanisms are based on two important documents of ASEAN Charter and ASEAN Political-Security Community Blueprint.
29. Therefore, the consideration of the possible areas of cooperation among AMS research and development institutions in supporting defence strategy should be in-line with the scopes and principles of the ASEAN Charter as well as APSC Blueprint 2025 to ensure the feasibility of implementation and practicality of the initiative. Thus, the possible areas of cooperation shall ensure the promotion of trust and confidence within and among AMS. It is important to note that the sharing and exchanging views on the possible areas of cooperation are as important as the voice is heard by the concerned parties, especially ADMM. We, therefore, need to ensure that all the outcome of the NADI's handwork could be delivered to the concerned bodies in order to increase the possibility realisation of the suggestion.

Cambodia

Presenter: Major General Sophea Sam, Deputy Director of Department of ASEAN Affairs, General Department of Policy and Foreign Affairs (GDPFA), Ministry of Defence, Cambodia

30. Major General Sophea Sam started his presentation by providing a brief overview of Global Research and development (R&D) and its central role in advanced economies in areas such as economic development and job creation, industrial competitiveness, energy, agriculture, and defence sector, as well as expanding the frontiers of human knowledge understanding. He also stressed the strategic importance of R&D in the defence portfolio in developing military innovation, science and technology and capability, creating force multiplier and producing new combat concepts. In discussing ASEAN defence R&D, he noted the joint Research and Development concept under ASEAN Defence Industry Collaboration (ADIC) framework. He also highlighted some challenges that might prevent the advancement of joint Defence R&D, such as capacity gaps in defence innovation, science and technology, and engineering among AMS; different priorities in capabilities requirements, the sensitivity of technology and information transfer, and the allocation of budget to other priorities of different countries. In responding to how R&D cooperation supports defence strategy, he stated that such collaboration will:

- a) Deepen trust and confidence-building in the region;
- b) Provide a greater chance to AMS to develop indigenous technology capability with appropriate R&D budget;
- c) Assist regional countries to achieve national defence strategic goal to become self-reliant or self-sufficiency in defence as well as enhance regional supply chain resilience; and
- d) Enhance AMS defence capabilities and provide analytical solutions to address future challenges.

31. Major General Sophea Sam also provided some recommendations, as follows:

- a) ASEAN should have some form of institutionalization for R&D cooperation. The motivation to cooperate is to address issues of common interests and urgent or critical issues, especially in HADR, climate change, and pandemics.
- b) Cross-sectoral R&D collaboration within ASEAN should be encouraged to provide a systemic framework for the generation, diffusion and exploitation of knowledge in the region. Such cooperative platforms and databases can be used by regional agencies and institutes to promote and exchange findings.
- c) ADMM/ADMM-Plus should enhance practical cooperation on Defence R&D. Under the ADMM-Plus cooperative framework, AMS can benefit from the knowledge and expert sharing of the Plus countries. However, ASEAN Outlook on Indo-Pacific (AOIP) must be a guiding principle for such cooperation.

Philippines

Presenter: BGen Archimedes H Viaje Afp (Ret), PhD, MNSA, CESE, President, National Defence College of the Philippines

32. In his presentation, BGen Viaje discussed defence diplomacy in ASEAN through education and research. Noting that multilateral defence diplomacy in the Southeast Asia is led by ASEAN, he pointed out that the ASEAN Defence Ministers' Meeting (ADMM) has a number of areas of cooperation, such as humanitarian assistance and disaster relief (HADR), maritime security, peacekeeping operations, military medicine, counter-terrorism, logistics support, defence industry collaboration, interaction and communication, and cybersecurity. He discussed two major ADMM initiatives related to education and research: a) "Principles for ADMM-Wide Education and Training Exchanges"; and b) "Concept Paper on Enhancing the Linkages Between the ADMM and NADI."
33. BGen Viaje also shared the experience of the NDCP in education and research collaboration. He noted that education and research are important in strategy development. In conclusion, he underscored how education and research can support peace and security efforts in the region. First, education and research promote understanding among the security officials of various countries. After all, the worldview of defence and military officials are shaped in part by educational institutions. Second, education and research serve as means of establishing networks with counterparts. With the opportunity to study abroad, military and defence officials can create channels for engaging their counterparts and, in the process, broaden their own perspectives. Third, education and research are important confidence-building measures. The goodwill generated through education and research may eventually spill over on other possible areas of cooperation. Indeed, education and research are important avenues to promote peace and stability. As the region faces a whole range of security challenges, all avenues that will promote cooperation between and among nations must be explored.

Thailand

Presenter: Group Captain Choosak Kasatewit, Director of Regional Studies Division, Strategic Studies Center (SSC), National Defence Studies Institute (NDSI), Royal Thai Armed Forces Headquarters (RTARF HQ)

34. The Covid-19 pandemic exposed the vulnerabilities of the defence-industrial complex in super-powers and major-power states across the Indo-Pacific region. Trade tensions and technological competition between great powers also have disrupted global supply chains. The import-based procurement model has not been immuned to this disruption. It is important to transit away from an import-based defence procurement using foreign manufacturers by building a resilient,

indigenous defence industrial base. Various steps would be taken in this respect, including technology transfer to facilitate localized production and further research and development as well as supporting research and development and defence manufacturing through collaborative programs.

35. The Defence Technology Institute (DTI) is a research and development agency operating as a public organization under the oversight of the Thai Ministry of Defence. The main objective is to encourage systematic development of defence technologies, from the beginning of research to production and utilisation of the technologies and cooperate with other state and private sectors. DTI push forward all research and development of defence technologies and promote self-reliance of the defence industry in compliance with the government's policy through 1) jointly establish a legal entity for produce and sale purpose/ service or other purpose. 2) Co-Investment: business joining, share holding and partnership.
36. It is important for AMS to work together to increase ASEAN technology and industrial competitiveness in order to reduce dependencies in technologies from outside the region. In this regard, 1) ASEAN should analyze the common threats and work together to counteract these threats e.g. pandemic, climate change, HADR. 2) Finding the ASEAN's technological solutions for mitigating and resolving the threats. 3) Enhancing ASEAN Defence Industry Collaboration (ADIC) in dealing with those common threats. ADIC is a vehicle to make AMS more integrated through standardization of defence equipments which will lead to interoperability to counter those threats that disrupt the regional stability.

Viet Nam

Presenter: Major Le Huu Hai, Researcher, Institute for Defense Strategy (IDS), Viet Nam.

37. The Fourth Industrial Revolution (4IR) is putting the defence sector under revolutionary pressure for change, driven by technological developments, changes in modern warfare, increasing costs, economic restrictions as well as changes in the international political environment. The rapid development of emerging technologies means that not any individual country can successfully adapt and maintain the technical capability of the defence forces due to limitation of resources, such as: a highly skilled workforce, modern facilities, finance and logistic system. In addition, more restricted defence budgets make it increasingly difficult for any country to maintain, solely by themselves, the traditional range of technological capabilities that their armed forces are required to have. In order to cope with the new environment, retaining and developing overall capabilities, the defence sector needs to go through radical structural changes and more intensive international cooperation. Deepening international cooperation in R&D will be an irreversible trend to allow countries to maintain necessary defence capabilities.
38. International cooperation in R&D will help to form a platform for exchanging knowledge, new technologies as well as other resources, reduce the technological gap and provide the authorities with a better understanding about the impacts of 4IR on defence sector, facilitating the process of formulating capability building strategy of the defence forces. Cooperation in R&D will also

allow small, developing countries to access advanced technologies and high-quality military capabilities, saving on maintenance, repair, and overhaul cost through joint exercises and training. Enhancing R&D cooperation will foster an innovative and competitive defence industrial market; bring benefits in terms of growth, jobs and innovation to the industrial sector and bolster defence cooperation in the region. Moreover, cooperation in R&D can help countries to better prepare in dealing with non-traditional security issues such as: climate change, new emerging infectious diseases, cybercrime, disinformation, illegal migration, people smuggling, drug trafficking and transnational crime; facilitate the digital transformation process of the defence sector; and build a solidary community, promote peace and prosperity in the region.

SUMMARY OF DISCUSSIONS

39. NADI delegates exchanged views on Research and Development as a Momentum in Strengthening Defence Cooperation in the Region:

- a) Acknowledged the importance of the principles of the ASEAN Charter and the APSC Blueprint 2025, to support the R&D cooperation.
- b) Acknowledged that Indonesia has a total defence strategy. In this strategy, Indonesia involves many institutions to minimize the impact of any threats. The TNI has succeeded in overcoming the situation, including in dealing with the two waves of the pandemic that occurred in Indonesia.
- c) Acknowledged and encouraged the exchange of students, officers, and lecturers among defence universities in AMS. These exchanges reflected the spirit of defence cooperation, particularly in defence R&D.
- d) Recognised the value and importance of each delegations' presentation in R&D topics and the need for AMS to promote defence R&D cooperation, to fill the gap in technology capabilities, human and financial resources in AMS.
- e) Acknowledged that there are challenges in building R&D independence in ASEAN, but we also acknowledged that there are differences in AMS R&D policies.

RECOMMENDATIONS

40. NADI agreed the following recommendations for consideration of the ADMM:

- a) To foster national resilience by enhancing capacity in defence industry in supporting and sustaining defence capabilities during peacetime and conflict.
- b) To promote ASEAN efforts on R&D through sharing best practices and undertaking joint research projects. Such cooperation, should be flexible, non-binding, and voluntary, could be based on existing platforms such as ADIC and initiatives of common interest in HADR, climate change, and pandemics. This could involve technological information sharing and cooperation.
- c) To improve collaboration with academia and scientific communities to develop technological solutions for future non-traditional security challenges.
- d) To promote joint research and new initiatives among AMS to help address the current COVID-19 pandemic.
- e) To promote cross-sectoral R&D collaboration within ASEAN to provide a systemic framework for the generation, diffusion, and exploitation of knowledge in the

region by using cooperative platforms and databases by regional agencies and institutes to promote and exchange findings.

- f) To enhance practical cooperation on Defence R&D, under the ADMM-Plus cooperative framework, to benefit from the knowledge and expert sharing of the Plus countries, with the ASEAN Outlook on Indo-Pacific (AOIP) as the guiding principle.

OTHER MATTERS

Future NADI Activities

41. The meeting noted the following future NADI activities:

Date	Activities	Country	Via
16 – 17 December 2021	NADI Workshop: <i>ASEAN Centrality in an Era of Great-Power Competition</i>	NDCP, Philippines	VTC
21 – 22 March 2022	15 th NADI Annual Meeting / 7 th NADI Retreat	GDPFA, Cambodia	VTC
27 - 28 April 2022	NADI Workshop: <i>Climate Change (TBC)</i>	SHHBIDSS, Brunei Darussalam	VTC
28 - 30 June 2022	NADI Workshop: <i>ASEAN Security Challenge in the Next Five Years (2023-2027)</i>	SSC, Thailand	VTC
End of July 2022	NADI Workshop: <i>Strengthening ASEAN CBR Cooperation</i>	RSIS, Singapore	VTC
Early September 2022	NADI Workshop: <i>Cyber Threat and Its Impacts to National and Regional Security in Southeast Asia</i>	RIDU, Indonesia	VTC/Physical
15 - 17 November 2022	NADI Workshop: <i>Strengthening Border Management Cooperation in the Region</i>	CSSRD TNI, Indonesia	Physical/VTC

CONCLUDING REMARKS

Closing Remarks by the Chair of the NADI Workshop, Major General Jhonny Djamaris, S.IP, M.IP, Head of Center for Strategic Studies, Research and Development (CSSRD), Indonesia National Armed Forces (*Tentara Nasional Indonesia/TNI*).

42. In his concluding remarks, Major General Jhonny Djamaris, S.IP, M.IP expressed sincere appreciations for the Dynamic, Academic, and Explorative Discussion. He congratulate all of NADI Members' for their excellent presentations and inspiring discussion.