

# STRATEGI PERANG SEMESTA

Journal of Modern Warfare and Defense Strategy



Security Dilemma: Upholding Indonesia's Independence and Active Foreign Policy

Azwar Amar Ma'ruf, Helda Risman



Open Access



2022 Strategi Perang Semesta



Published at 31 December 2022

#### How to cite this article:

Ma'ruf, A. A., & Risman, H. (2022). Security dilemma: Upholding Indonesia's independence and active foreign policy. *Strategi Perang Semesta*, 8(2), 185-194. http://doi.org/10.56555/sps.v8i2.1526

To link to this article: http://doi.org/10.56555/sps.v8i2.1526



# SECURITY DILEMMA: UPHOLDING INDONESIA'S INDEPENDENCE AND ACTIVE FOREIGN POLICY

#### Azwar Amar Ma'ruf\*

#### Helda Risman

Republic of Indonesia Defense University, INDONESIA

Republic of Indonesia Defense University, INDONESIA

#### **Abstract**

The world condition where there has been a war between Russia and Ukraine and the involvement of the US has had a drastic impact on the international political system. As the two superpowers in the world today and not forgetting about China, Indonesia which has Independence and an Active Foreign Policy must face this challenge whether to choose one side or remain as a non-aligned movement country. This research focuses on the point of view where Indonesia is in a security dilemma between remaining as a non-aligned movement country or choosing to side with one of these superpowers.

#### **Article history:**

Received: October 26, 2022 Revised: November 14, 2022 Accepted: December 13, 2022

#### **Keywords:**

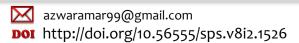
Independence and Active Non-Aligned Movement Superpower States Non-Block

#### Introduction

Since Mohammad Hatta made his speech titled "Mendajung Antara Dua Karang" in front of the BP KNPI Session in September 1948, Indonesia has maintained independence and active foreign policy, which is Indonesia's basic attitude, refusing to join one of the Blocks of superpower states, disputes over the establishment of foreign militaries' bases in the state, and refusing to be involved in the defense pacts of significant states (Materi Edukasi, 2017).

Vice-President Hatta, who served as the young Republic's concurrent Prime Minister and Minister of Defense, clarified the position of the government on a number of domestic and international issues during a meeting of the Working Group of the Central National Committee of Indonesia (KNPI), the forerunner of the Indonesian Parliament. Hatta argued against the People's Democratic Front of the Indonesian Communist Party, which held that Indonesia's best foreign policy during the Cold War was to support Russia. He said: "Do we, Indonesians, in the struggle for the freedom of our people and our country, only have to choose between Russia and America? Is there not another stance we may adopt in the fight for our ideals? "The Government firmly believes that the wisest course of action is one that prevents us from being the focus of a worldwide confrontation. Instead, we must continue to be the ones with the power to determine our own course in life and to pursue our own objective, which is Indonesia's total independence" (Kementerian Luar Negeri RI, 2022).

From this that we know Indonesia is one of the non-aligned countries in the world, and acceptance of standards for new members and reviewers are the Bandung Principles and Non-Aligned Movement Membership Criteria. The movement now includes 120 Member States, 17 Observer States, and 10 Observer organizations (World Data, 2022). The Non-Aligned Movement was founded in reaction to the Cold War decolonization process after World War II and the desire of newly independent nations to avoid allying with either superpower (the US or the USSR). The movement was started in 1961 in Belgrade by leaders





such as Josip Broz Tito of Yugoslavia, Gamal Abdel Nasser of Egypt, Jawaharlal Nehru of India, Kwame Nkrumah of Ghana, and Sukarno of Indonesia. Members of the Non-Aligned Movement are prohibited from participating in military alliances or bilateral military agreements with superpowers if they are connected to conflicts between the Great Powers. The movement, however, opposes neutrality in international politics in favor of giving developing nations a voice and encouraging their cooperation in international issues (Munro, 2022a).

Base on from the article that written by Prof. Anak Agung Banyu Perwita in 2007 concluding that the government of Indonesia must be ablecontinue to promote cooperation with non-state actors in seeking useful income for the formulation of Indonesian foreign policy as part of the policy network approach. More specifically, this approach is in line with what refers to the increasing role and contribution of various community groups as strategic partners in the formulation and making of foreign policy (Perwita, 2017).

Condition of the superpower countries today as we can see that there are 3 countries that can be counted as superpowers they are America, China, and Russia. A superpower is a nation that commands significant influence within the international system and has the capacity to act on a global scale. Superpowers often possess a powerful military, a robust economy, and great political and cultural influence (Munro, 2022b). However, among the 120 member countries of the non-aligned movement, there are several countries that can be seen as close to one of the superpower countries. This can happen due to closer geopolitical and geoeconomic conditions and various other factors.

As we know that in 2022 there is a war happened between Russia and Ukraine and the involvement of NATO and US in it. This kind of case can make a sudden change in the international political system especially as a Non-Aligned Movement countries. Based on the reports of Vox in April 2022, there is a change with non-aligned movement countries where 93 countries choose to vote Russia expelled from the Human Rights Council, but 58 abstained, and 24 countries voted to against it where the abstentions inside it, including the non-aligned movement leaders Egypt, Ghana, India, and Indonesia, and China is one of the country who against in the vote (Guyer, 2022).

This kind of condition can make a country who stand on abstain in a security dilemma especially Indonesia who stand as one of a leader in Non-Aligned Movement countries whether to stand in abstain or choose to support one of the sides in international political systems. In this article author has 1 questions. The question is "Can Indonesia still uphold Independence and Active foreign policy systems when this kind of conditions happen?"

# Method

The research design is a literature study using qualitative methods. Qualitative data will be obtained through processed data sourced from scientific journals, scientific research results, reference books, sources related to websites regarding the non-aligned movement and independence and active of Indonesia foreign policy. This question will be addressed using realism from the study of international relations, which focuses on the prisoner's dilemma in game theory.

Game theory provides a theoretical framework for imagining social interactions between rival players. In some ways, game theory is the study of strategy, or at the very least it studies the best choices that independent, competitor players may take in a strategic situation (Snidal, 2016).



# **Superpower States**

Superpower states are nations with a sizable degree of political, economic, and military influence on the global stage. Because of their plentiful resources, advance technology, and powerful military capabilities, these nations are frequently regarded as the most powerful in the world. These nations have a strong influence on world affairs and wars, and they may influence international relations. International institutions like the United Nations and global governance are frequently dominated by superpower governments (Munro, 2022b).

Currently, the United States, China, and Russia are considered to be the three superpower states. The "big three" or "triple entente" are common terms used to describe these nations. Because of its powerful economic, military, and political influence, the United States is sometimes regarded as the leading superpower. China is becoming as a prominent participant on the international arena with a military and economy that are both expanding quickly. Due to its extensive natural riches and powerful military, Russia is a significant participant as well (Minakova et al., 2021).

#### **United States**

The United States is often considered a superpower state due to its significant level of political, economic, and military influence on the global stage. It has the largest economy in the world, with a GDP of over \$23 trillion in 2021 (World Bank, 2022). The United States also has a powerful military, with the highest defense budget and the most advanced weaponry. In terms of politics, the United States has a federal presidential representative democratic republic form of government. It has a long history of democracy and has been a leader in promoting human rights and democratic values around the world. The United States is a member of numerous international organizations, including the United Nations, where it holds a permanent seat on the Security Council.

The United States is also a major player in international trade and has a strong influence on the global economy. It is a member of the World Trade Organization and has numerous trade agreements with other countries. The United States is home to many major global companies and is a leader in technological innovation. In addition to its economic and political power, the United States also has a strong military presence around the world. It has military bases in numerous countries and is a key player in international security. The United States is a member of NATO and has played a significant role in conflicts such as the wars in Afghanistan and Iraq (Cordesman, 2019).

Overall, the United States is a significant global player and has a significant amount of influence on the global stage. Its strong economy, political system, and military capabilities make it a dominant force in international relations.

#### Russia

Russia is a superpower state due to its significant level of political, economic, and military influence on the global stage. It has a large and diverse economy, with a GDP of over \$1.7 trillion in 2021 (World Bank, 2022). Russia has a large amount of natural resources, including oil and natural gas, which are major exports. Russia has a federal semi-presidential republic form of government. It has a bicameral legislature, the Federal Assembly, and an executive branch headed by the President (Federation Council of Russia, 2022). Russia is a permanent member of the United Nations Security Council and is a major player in international organizations such as the Shanghai Cooperation Organization. Russia has a large military with advanced weaponry and a significant defense budget. It has military bases in several countries and is a key player in regional security. Russia has a long history of



involvement in international conflicts and has played a significant role in conflicts such as the wars in Afghanistan and Syria (Borshchevskaya, 2022).

In addition to its political, economic, and military power, Russia has a long and complex history that has shaped its current status as a superpower state. It has a diverse cultural heritage, with influences from Europe, Asia, and the Middle East. Russia is home to a wide range of ethnic groups and languages, and its culture has been shaped by its history as a major player in international relations. Russia has a long history of artistic and cultural achievements, with contributions in fields such as literature, music, and the arts. It has a rich tradition of classical music and has produced many famous composers such as Tchaikovsky and Rachmaninoff. Russia has also made significant contributions to the field of literature, with writers such as Tolstoy and Dostoevsky being renowned worldwide. Russia has a diverse geography, with landscapes ranging from tundra to forests to mountains. It is the largest country in the world by land area and has a wide range of natural resources, including oil, natural gas, and minerals. Russia is also home to a number of unique and diverse ecosystems, including the Siberian taiga and the Russian Far East (Hosking, 2022).

Overall, Russia is a strong global actor with a large amount of influence on the world stage. It is a powerful player in international affairs due to its robust political structure, economic foundation, and military capabilities. Increasing its influence in places like Eastern Europe and the Middle East, Russia has grown more aggressive in recent years.

#### China

China is a superpower state due to its significant level of political, economic, and military influence on the global stage. It has the second-largest economy in the world, with a GDP of over \$17 trillion in 2021 (World Bank, 2022). China's economy has grown rapidly in recent decades and it is now a major player in international trade (Trading Economics, 2022). China has a complex political system that combines elements of authoritarianism and democracy. It is ruled by the Communist Party of China, which has been in power since 1949. China has a unicameral legislature, the National People's Congress, and an executive branch headed by the President. It is a permanent member of the United Nations Security Council and is a major player in international organizations such as the World Trade Organization (Kamusella, 2021). China has a large and growing military, with advanced weaponry and a rapidly expanding defense budget (Jash, 2022). It has military bases in several countries and is a key player in regional security. China is also a major player in international peacekeeping efforts and has participated in numerous peacekeeping missions around the worl.

In addition to its political, economic, and military power, China has a long and complex history that has shaped its current status as a superpower state. It has a diverse cultural heritage, with influences from various regions of Asia and the Middle East. China has a long history of cultural achievements, with contributions in fields such as literature, music, art, and science. China has a diverse geography, with landscapes ranging from desert to mountains to forests. It is home to a number of unique and diverse ecosystems, including the Tibetan Plateau and the Gobi Desert. China has a wide range of natural resources, including oil, natural gas, and minerals, and it is a major player in the global economy. China has a complex political history, with a long tradition of authoritarian rule. It has undergone significant political and social changes throughout its history, including the revolution of 1911 and the establishment of the People's Republic of China in 1949. These events have had a significant impact on the direction of the country and its position on the global stage. In recent years, China has become more assertive in international affairs and has sought to increase its influence in



regions such as Africa and the Middle East. It has also become more involved in international organizations and has played a significant role in global governance (Wang, 2020).

China is a major global power who has considerable influence on the world stage. It is a powerful player in international affairs due to its robust political structure, economic foundation, and military prowess. China has acted more assertively in world affairs recently and has aimed to expand its influence in places like the Middle East and Africa.

# **Non-Aligned Movement**

The Non-Aligned Movement (NAM) is a group of countries that do not publicly support or oppose any major power bloc. There are 120 member states and 17 observer countries in the movement, which was created in 1961. The Non-Aligned Movement seeks to advance the interests and concerns of developing countries and reduce their reliance on superpowers. The movement seeks to advance mutual aid and support among its members as well as international peace and security. It also aims to defend the territorial integrity and sovereignty of its member nations while promoting social and economic growth. The Non-Aligned Movement has made a significant contribution to international affairs, especially during the Cold War when it gave emerging nations a platform to declare their independence and advance their interests on the world stage (World Data, 2022).

There are weaknesses and advantage from this movement (Miholjcic, 2020), the following are:

#### Weaknesses

- The Non-Aligned Movement (NAM) has been successful in uniting a diverse set of nations, but it lacks the right institutional structure for efficient decision-making.
- The NAM's lack of a permanent secretariat is a structural fault that prevents it from developing and causes it to be ineffective and uncoordinated.
- The NAM is reduced to a purely symbolic organization without genuine international influence to represent the needs and interests of its member nations as a result of this institutional deficit.
- The NAM struggles to establish itself as a significant international actor with a compelling agenda because it lacks clear guidelines and a solid institutional foundation.
- The NAM has no legal duties to uphold any policies or allegiances because it lacks a charter or legislation as well as a permanent secretariat.
- Because of its informal system of collaboration and absence of a permanent secretariat, the NAM is currently experiencing institutional difficulties.
- According to some critics, the NAM's actions are confined to infrequent meetings with protracted speeches and unimplemented decisions.
- The NAM's weak institutional foundation and lack of a rigid organizational culture harm its standing abroad and limit its capacity to take decisive, and well-defined action.

# **Advantages**

- Since the NAM's establishment, its membership requirements have not altered and now include an autonomous, non-aligned foreign policy, non-participation in military alliances, support for national liberation movements, and the lack of any bilateral military agreements or foreign military installations.
- The NAM has had issues with its membership policy, such as an expanded membership without sufficient institutional change, which results in less effective action plans.



Despite these difficulties, participation in the NAM gives many developing countries from the Global South access to more political and economic influence than they could separately.

- Because they feel that "strong in numbers" will give them more influence over international affairs and a louder voice, a lot of developing nations join powerful alliances like the NAM. However, participation in powerful coalitions may also result in control and hegemonic supremacy, thus democratic and inclusive decision-making procedures are crucial.
- A group with more equal members is typically more democratic and accepting, and a group with greater equality based on common traits can be more powerful as a whole.
- If the NAM makes the required changes to its decision-making process and if UN reforms give weaker member states more democracy and influence, its size and diversified membership shouldn't be a concern.

### Results and Discussion

# Realism: Prisoner Dilemma of Game Theory

The study of strategic interactions between rational decision-makers is called game theory, a field of economics and mathematics. Game theory is used to examine state conduct as well as that of other international entities, such as multinational firms and nongovernmental organizations. Researchers may better understand how various players in the global system make decisions, interact with one another, and react to systemic changes by using game theory (Hayes, 2022).

The current world condition where a country has decided not to side with one of the super power states has begun to show that this country has chosen one of its sides. This can be known from the news shown by the United Nations' social media, more precisely on Twitter, which shows support for the US to expel Russia from the UN Human Rights Council when the conditions are reversed, we still won't know for sure who was at fault in the case of the Russian and Ukraine war (UN News, 2022).



Picture 1. The UN General Assembly votes to suspend Russia's membership in the UN Human Rights Council - April 2022.



From this picture can be seen that so many countries are now choosing sides between US and Russia, and few that still abstain or not even coming to the assembly. Not only this assembly as a base that proves the possibility of the non-aligned already choosing sides, from the journal of Caucasus Strategic Perspectives also said that the non-aligned movement may stay as a non-aligned country but has high possibility of choosing sides because of the geographic, geopolitics, geoeconomics, and history of each country in it (Gurbanov, 2020).

Due to the situation in Indonesia's Natuna area, or more specifically the South China Sea, China will also have the ability to exert pressure on Indonesia. As a result, Indonesia's reaction to China's claims over the northern Natuna Sea cannot be based on hasty or emotional judgments. Calculations and analytical analyses of Indonesia's losses and profits from the policies adopted must serve as the foundation for Indonesia's decision-making and policies. Based on estimations of Indonesia's economic might and dependency on China, policy factors influencing its response may be determined (Ma'ruf et al., 2020).

Indonesia, as a country that stands in the non-aligned movement, can be seen that stay abstain in the UN General Assembly. Indonesia chose to stay with their idealism of Independence and Active foreign policy or non-bloc. In order to stand with their idealism and not choose sides, in the game theory of international relations. Indonesia should be able to convince non-aligned countries to remain non-aligned or increase the military, economic and political defense and resilience capabilities to maintain its sovereignty and position in the international environment. But the fact that the first solution, where Indonesia should convince the non-aligned countries to remain non-aligned, has already far from possible to do, and the second solution, where Indonesia must increase the military, economic, and political defense, is also hard to do because of Indonesia non-aggression pact and could not be possible to spend more on military capabilities and this is written in the white paper of Indonesia where Indonesia is not increasing so much in military capabilities because Indonesia is not an aggressor (Indonesia Ministry of Defence, 2015).

To prove that Indonesia as a non aggressor state, in the article from titled "Understanding National Identity To Create Love and Proud of Being a Part of The Indonesian Nation" from defense university said that, this is happening because of our history of wanting to be separated from the colonialism experienced, where from that with the same indonesia want to achieving independence, eliminating freedom by achieving justice and common prosperity (Arief et al., 2021).

In this kind of situation where another non-aligned country other than Indonesia is already choosing sides, Indonesia must do something in order to uphold their sovereignity. In the game theory, there is a theory about a quadrant of dilemma from an actor in the international system called Prisoner Dilemma. The prisoner's dilemma is a well-known illustration of a game theory issue that shows the tension between personal gain and the common good. In the prisoner's dilemma, two people must choose between working together or betraying one another. Both are confessing and remaining silent are options available to any person in this circumstance. If one person confesses and the other doesn't, the confessor gets off with a less sentences while the silent person gets a longer one. They both get a less penalty if they both confess. They each receive a relatively brief punishment if they both keep silent. The problem for the individuals is that it is always in their best advantage to confess, regardless of what the other person does. Due of this, even if it is not in their best interests to confess together, both people end up doing so. The conflict between self-interest and the good of the whole has been extensively researched in subjects including economics, psychology, and political science (Forst & Lucianovic, 1977).



According to the prisoner's dilemma, if both Indonesia and another non-aligned country cooperate and choose not to take sides, both parties would benefit from the peaceful resolution of the conflict. However, if one party defects and chooses to take sides and the other party cooperates, the defector would gain a strategic advantage while the cooperator would be at a disadvantage. If both parties defect, both will suffer the consequences of being involved in a destructive and potentially costly conflict. In this situation, Indonesia may be faced with the dilemma of deciding whether to cooperate with the non-aligned movement and maintain its neutrality or take sides with one of the superpowers. Suppose Indonesia were to cooperate and maintain its neutrality. In that case, it may avoid the risks and costs associated with being involved in a conflict, but it may also miss out on potential benefits that could be gained by aligning with a superpower. On the other hand, if Indonesia were to defect and take sides with a superpower, it may be able to gain some short-term advantages, but it could also potentially jeopardize its relationships with other non-aligned movement countries and expose itself to the risks and costs of being involved in a conflict.

Based on all of the weaknesses and advantages about non-aligned movement, Indonesia may choose to stand with Independence and Active Foreign Policy, that can be a good or bad decision to Indonesia. Indonesia in the matters of GDP, Indonesia only has 1 trillion US \$ in 2021 (World Bank, 2022), and it may be a bad decision not to choose one of these superpower states in the future. In another way Indonesia can choose to stay as Independence and Active country or Indonesia choose to be Independence in Active foreign policy, but in order to achieve it, Indonesia must be able to have power as powerful as major power countries in the world.

## Conclusion

Indonesia may still uphold its Independence and Active foreign policy but, as a state that stands as a non-aligned country in the world today, but the condition of Russia and Ukraine war has impacted the condition of international political systems where there are non-aligned countries choosing to side with one of the superpower states like US, Russia, and China. This research found that the condition for Indonesia today must be able to follow the challenge of the change in the international political system, especially as a non-aligned movement country in the world.

Overall, the change in International political systems drastically affects the foreign policy of all countries in the world today, including Indonesia in it. To follow the challenge, Indonesia must choose between to side with one of the superpower states or staying as a non-aligned movement country with so many disadvantages in the world today especially when the non-aligned movement's goal is only to be non-bloc countries when the proxy war between Uni Soviet and United States happened in the past.

#### References

Arief, R., Prakoso, L. Y., & Risman, H. (2021). Understanding National Identity To Create Love and Proud of Being a Part of The Indonesian Nation. Jurnal Inovasi Penelitian, 1(11), 2549-2556. https://stp-mataram.e-journal.id/JIP/article/view/518

Borshchevskaya, A. (2022). Russia's Strategic Success in Syria and the Future of Moscow's Policy. The Washington https://www.washingtoninstitute.org/policy-analysis/russias-strategic-success-syria-



- and-future-moscows-middle-east-policy
- Cordesman, (2019). Afghanistan. Н. Iraa. Syria. Libya. and Yemen. https://www.csis.org/analysis/afghanistan-iraq-syria-libya-and-yemen
- Federation Council of Russia. (2022). Federation Council of the Federal Assembly of the Russian Federation Council of Federation. Russia. http://www.council.gov.ru/en/structure/council/
- Forst, B., & Lucianovic, J. (1977). The Prisoner's Dilemma: Theory and Reality. 5, 55–64.
- Gurbanov, L. (2020). Non-aligned movement and its perspective in international affairs. Caucasus Strategic Perspectives, 1(1), 164.
- Guyer, J. (2022). Why some countries don't want to pick a side in Russia's war in Ukraine. Vox.Com. https://www.vox.com/23156512/russia-ukraine-war-global-south-nonalignedmovement
- Hayes, A. (2022).Game Theory. Investopedia. https://www.investopedia.com/terms/g/gametheory.asp
- Hosking, A. (2022). Cultural life. Britannica. https://www.britannica.com/place/Russia/Cultural-life
- Indonesia Ministry of Defence. (2015). Indonesian Defence White Paper. In Ministery of Defence of the Republic of Indonesia.
- (2022). Budget: Jash, A. China's 2022 Defense Behind the Numbers. https://jamestown.org/program/chinas-2022-defense-budget-behind-thenumbers/#:~:text=At the fifth session of,(Xinhua%2C March 5).
- Kamusella, T. (2021). How China combined authoritarianism with capitalism to create a new communism. The Conversation. https://theconversation.com/how-china-combinedauthoritarianism-with-capitalism-to-create-a-new-communism-167586
- Kementerian Luar Negeri RI. (2022). Indonesia's Foreign Policy. RI. https://kemlu.go.id/washington/en/pages/kebijakan luar negeri ri/716/etc-menu
- Ma'ruf, F., Legionosuko, T., & Risman, H. (2020). The Rationality of Indonesia Free-Active Politics Facing Chinese Aggressiveness in the Claims of the North Natuna Sea. Technium Social Sciences Journal, 228-297. https://techniumscience.com/index.php/socialsciences/article/view/332/124
- Materi Edukasi. (2017). Sejarah Lahirnya Politik Luar Negeri Bebas Aktif Indonesia. Materi https://www.materiedukasi.com/2017/09/sejarah-lahirnya-politik-luar-Edukasi.Com. negeri-bebas-aktif-indonesia.html
- Miholicic, N. (2020). The Non-Aligned Movement: In Pursuit of Validity and Relevance in the Contemporary Global Order. Caucasus Strategic Perspectives.
- Minakova, I., Bukreeva, T., Solodukhina, O., & Golovin, A. (2021). The USA, Russia and China as a Center of Influence in Global Economy. SHS Web of Conferences, 92, 09009. https://doi.org/10.1051/shsconf/20219209009
- (2022a). Non-Aligned Munro, A. Movement. Britannica. https://www.britannica.com/topic/Non-Aligned-Movement
- Munro, A. (2022b). Superpower. Britannica. https://www.britannica.com/topic/superpower Perwita, A. A. B. (2017). Agenda dan Tantangan Politik Luar Negeri Bebas Aktif: Sebuah Teoretis. Jurnal Politik Internasional, Refleksi Global: 9(1). https://doi.org/10.7454/global.v9i1.259
- Snidal, D. (2016). The Game Theory of International Politics. 38(1), 25–57.
- Trading Economics. (2022). China GDP Annual Growth Rate. Trading Economics. https://tradingeconomics.com/china/gdp-growth-annual
- UN News. (2022). The UN General Assembly votes to suspend Russia's membership in the UN



Human Rights Council @UN HRC. United Nations. https://twitter.com/UN News Centre/status/1512095779535609862/photo/1

China (2020). The China Complex. Center. https://www.chinacenter.net/2020/china\_currents/19-1/the-china-complex/

Bank. (2022). GDP (current The World World US\$). Bank. https://data.worldbank.org/indicator/NY.GDP.MKTP.CD

World Data. (2022). Member states of the Non-Aligned Movement. World Data Info. https://www.worlddata.info/alliances/non-aligned-movement.php