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TRANSITION TO NUCLEAR WAR: INDONESIAN PERSPECTIVE RESPONSE USING ANALYTICAL HIERARCHY PROCESS AND STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS METHOD

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Abstract

Since the end of World War II, the use of nuclear power as a weapon of war has been criticized for causing the deaths of up to 55 million people. Then there was a shift in the use of nuclear power from military to peaceful purposes, such as economic goals, and many countries built nuclear reactors as an alternative to conventional fuels. In addition, nuclear power can also serve as a very strong deterrent factor to prevent open war. Indonesia's geographical position is currently surrounded by countries that own nuclear reactors, such as North Korea, Iran, Russia, China, and India, followed by the formation of the AUKUS alliance of Australia, the United Kingdom (U.K.), and the United States (U.S.). With the geopolitical conditions and escalation in the region, Indonesia should take precautionary measures to avoid a nuclear war in the region. This study aims to identify the best anticipatory steps that can be taken by conducting in-depth Focus Group Discussions (FGD) and extracting data using questionnaires from ten academics, diplomats, nuclear experts, military personnel, and professionals, which results in several alternative options. The option is then analyzed to identify which is the best by using Analytical Hierarchy Process (AHP) method and confirmed with Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis. Based on the findings of the analysis, the sequence of anticipatory steps that must be taken is as follows: 1) through diplomacy; 2) through the strengthening of defense equipment; 3) participation in certain alliances, either temporarily or permanently, and 4) building a national nuclear capability as a deterrent. As a result, diplomacy remains the primary option for resolving the region's escalation

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INTRODUCTION

The Transition of Nuclear Weapons after World War II

War and nuclear weapons, became a great historical record for the world, especially the rampant use of nuclear during World War II which led to the destruction of the cities of Hiroshima and Nagasaki (BBC News Indonesia, 2020). It is undeniable that nuclear has a very large destructive power but until now some countries still use it as a defense weapon to achieve political goals (Sharikov, 2018a; Bell, 2019). After the end of World War II, the world saw how much damage and casualties were caused by the war, especially those using nuclear weapons, reaching more than 55 million fatalities (Yustiningrum, 2007). Since the end of World War II, the use of nuclear as a weapon of war has been condemned (Bell, 2019). After a speech from Dwight D. Eisenhower in 1953 entitled "Atoms for Peace Initiative," he delivered and encouraged a shift in nuclear research and use, from military purposes to peaceful purposes, in the interests of peaceful economies and alternatives to conventional energy (Eisenhower Presidential Library, n.d.).

In addition, it was also encouraged by the UN Charter to stop the war and start world peace efforts, then the automatic use of nuclear for war is prohibited (Cousens, Kumar, & Wermester, 2000; Schreurs, 2014). So, a new world order was born that condemned acts of war, colonization, colonialism, and imperialism. Since then, the U.S. has begun exporting nuclear technology and working with its allies and potential allies on nuclear energy research and development. After that many countries began to build nuclear industries. They include Japan and Germany. It is driven by the idea that nuclear is the most potent alternative to addressing the huge global electricity needs and the depletion of conventional energy stocks (Appleby, 1975). As of 2015, there were 437 nuclear power plants in operation worldwide, which overall generated about 16.6% of the

world's electricity. (Denis, 2018) Currently, 66-unit nuclear power plants are being built in various countries. Some of the countries that have large nuclear resources are China, Russia, India, Iran, United Arab Emirates, South Korea, North Korea, Pakistan, Taiwan, India, Germany, and Hungary. Indonesia also has a nuclear reactor managed by National Atomic Energy Agency or *Badan Tenaga Nuklir Nasional* (BATAN), but it is still limited for research purposes ("Badan Tenaga Nuklir Nasional-Rencana Pembangunan PLTN Di Indonesia," n.d.).

In addition to being an alternative to energy, nuclear is currently also a very powerful deterrence factor to prevent open war. Following the concept of impossible war and nuclear becomes a zero-sum factor that becomes the consideration of nuclear power countries to jointly prevent war (Finney, 2017). The most worrying factor is the presence of unpredictable leaders such as North Korea. Nevertheless, China's current role is crucial in locking up North Korea and is not irrational (Colangelo & Hayes, 2019). Iran, where Europe will continue to maintain its interdependence with Iran (Bell, 2019).

In principle, no country wants the outbreak of nuclear war, but for a superpower state, tension is energy and energy is eternal so it needs to be channeled in other forms including limited conflict (Black-Branch & Fleck, 2016). In the context of the region, we need to be aware of the situation on the Korean Peninsula as well as the recently formed AUKUS alliance (Perdana, Ramasandi, & Setiawan, 2021). If South Korea again has tactical nuclear weapons, then this is likely to be followed by Taiwan, and Japan and penetrate Southeast Asia including Indonesia. Although there is currently a non-proliferation treaty restricting the use, prohibition, and right of use of nuclear technology for peaceful/economic purposes (Schneider, 2019), which has been ratified and signed by 170 countries since 1995, including Indonesia. One of the countries

that have nuclear weapons but are not included in the treaty is Israel.

Indonesian Perspective

From this background, Indonesia should not be trapped in conflict by using nuclear weapons. Do not let Indonesia become one of the 'tool' countries that are included in the mandala of one of the parties. We believe that no country wants a war to break out, especially by using nuclear force (Sorongan, 2021). But looking at the geographical condition of Indonesia surrounded by nuclear reactors, from the North there is China, Russia, and North Korea, from the West there are Iran, Pakistan, and India. As well as geopolitical conditions where the U.S. and China trade war also spread to various things, the last is the formation of the AUKUS alliance (Australia, UK, and the U.S.) with nuclear-armed submarine projects, aimed at defending itself from China (Perdana et al., 2021).

Indonesia needs to be wary because it is located right in the middle of two opposing camps, and both have nuclear capabilities. For this reason, it is necessary to take steps to anticipate the escalation of nuclear war in the region, and it is necessary to think about what defense measures need to be done by Indonesia (Mudjiono, Alimah, Susiati, Irawan, & Bustomi, 2018). Of course, Indonesia needs to react if the infighting activities begin to 'disrupt' Indonesia in terms of national safety, supply chain security, and violations of national sovereignty including territorial (Colangelo & Hayes, 2019).

In this study, several alternative anticipatory steps can be done by Indonesia in the face of escalation of war tensions in the region and will be further analyzed including diplomacy, strengthening defense surveillance tools, participation in the alliance, certain both temporary as well as permanent, and the latter alternative is to build a national nuclear force as a means of deterrence (Hurst, 2016; Sharikov, 2018a; Perdana et al., 2021; Riyono et al., 2013).

This alternative anticipation step is obtained from the results of FGD followed by experts from various backgrounds, namely military, defense and academia. Furthermore, to determine the priority alternatives taken, researchers conducted an analysis using the Analytical Hierarchical Process (AHP) and SWOT methods. That method is used to take the suitable even the best perspective on Indonesia facing the nowadays and upcoming situation. AHP takes part to make a proper decision in a qualitative method in this research, and SWOT is used to fill full the strategy in between, by taking expert respondents from the military, diplomats, nuclear experts, and defense experts. It tells us about the successful anti-nuclear movement in Germany, they made the green party talk much more about the nuclear effect (Schreurs, 2014).

Weapon Mass Destruction

Weapons of Mass Destruction (WMD) are weapons designed to be able to destroy enemies on a large scale, including in terms of inflicting casualties, which are usually used in the interests of war, but not only at the expense of the armed military but also the lay public (Onderco, 2017). NATO divides WMD into four categories: biological, chemical, nuclear, and radiological (Prelas & Peck, 2020). Nuclear weapons have recently come to attention since the establishment of the AUKUS (Australia-U.K.-U.S.) alliance that cooperates in the manufacture of nuclear-armed submarines. The word nuclear itself comes from the nucleus or atomic nucleus, where the energy from nuclear comes from the nucleus of the atom (Von Der Wense et al., 2016). There are two types of nuclear reactions needed to release energy, the first being fission reactions that are widely used in nuclear reactors and even atomic bombs. And the second is a fusion reaction that occurs naturally in the sun. With this energy nature, the use of nuclear as a weapon and also an energy source is in high demand

because of its nature that can produce considerable energy (Mudjiono et al., 2018; Putro, 2020). Indonesia's position is faced with the trend of nuclear use in the region, particularly highlighting the formation of the AUKUS alliance, as stated by the Foreign Ministry statement (Kementerian Luar Negeri Republik Indonesia, 2021). As follows:

1. Indonesia is watching carefully for the Australian government's decision to have nuclear-powered submarines.
2. Indonesia is deeply concerned over the continued arms race and projected military power in the region.
3. Indonesia stressed the importance of Australia's commitment to continue to meet its obligations regarding nuclear non-proliferation.
4. Indonesia encourages Australia to continue to fulfill its obligations to maintain peace, stability, and security in the region under the Treaty of Amity and Cooperation.
5. Indonesia encourages Australia and other relevant parties to continue to promote dialog in resolving differences peacefully. In this regard, Indonesia stressed the importance of respect for international law, including UNCLOS 1982 in maintaining peace and security in the region.

Based on the current situation where Indonesia is surrounded by countries that own nuclear reactors and even nuclear weapons, some of the problem points that will be discussed in this study include:

1. What are the anticipated steps that will be taken by Indonesia to face the possibility of an escalation of the outbreak of nuclear war in the region?
2. How is the application of AHP utilized in strategic decision-making related to the anticipated escalation of nuclear war in the region?
3. How is the application of SWOT utilized in strategic decision-making related to anticipating the escalation of nuclear war in the region?

From the formulation of existing problems, it will be limited to the problem in several restrictions, namely, the perspective that will be taken by Indonesia based on Indonesia's capabilities and conditions, as well as other factors related and influential to the preparation or making of domestic policy as well as regarding criteria and sub-criteria that in determining it will be based on the results of the implementation of FGD and limited to covering only 4 aspects, namely legal aspects, economic aspects, political aspects, and technological aspects. with sub-criteria that have been determined in each aspect. Then continued with the method used in decision-making is AHP, assisted by SWOT (Ghazinoory, Abdi, & Azadegan-Mehr, 2011). Data is taken from expert respondents representing several related elements such as military, diplomats, nuclear experts, and defense experts.

Practically the purpose of this study is to find out how to apply the AHP and SWOT methods as a method of Decision Making Support System (Saragih, 2013), in the selection of steps to anticipate the escalation of nuclear war in the region. Meanwhile, the benefits that can be taken from this study are to provide recommendations and general images to readers and also policyholders, related to the most likely steps to be taken in anticipation of an escalation of nuclear war in the region.

METHODS

In determining the anticipated steps that must be taken by Indonesia, of course, considerations and analytical methods are needed that support decision making (Saragih, 2013). This study will use the Analytical Hierarchical Process (AHP) method to help determine priority alternatives and will be validated with qualitative Strength Weakness Opportunity Threat (SWOT) methods (Görener, Toker, & Uluçay, 2012).

The AHP stages are carried out as follows:

1. Focus Group Discussion: In determining the Criteria, Sub-Criteria, and Alternatives of decisions to be assessed in the AHP, the team conducted limited focus group discussions involving experts from the community, military, defense, and academia.
2. Questionnaire: The research team compiled a questionnaire and conducted a questionnaire deployment to 9 expert respondents from diplomats, military, defense, and nuclear experts.
3. AHP: Furthermore, the results of the questionnaire will be processed by AHP using super decision software so that recommendations and policy determinations will be generated from 4 pre-determined alternatives.

In the FGD point 1 activity, the aspects of criteria and sub-criteria that will be assessed in AHP (Kurttila, Pesonen, Kangas, & Kajanus, 2000) include:

1. Legal aspects, relating to current national and international laws and regulations governing nuclear weapons; with sub-criteria:
 - a. International Humanitarian Law
 - b. International Human Rights
 - c. Treaty on the Non-Proliferation of nuclear weapons.
2. Economic aspects, relating to economic considerations including the capabilities of Resources and Human Resources;
 - a. Cost requirements for the steps taken;
 - b. Availability of Resources;
 - c. Human Resources capabilities;
3. Political aspects, relating to the commitment of the leadership, ideology, and the way of the view of the state and territorial sovereignty;
 - a. Active free politics;
 - b. Government Policies/Commitments;
 - c. Territorial sovereignty (ICAO);
4. Technological aspects, related to Indonesia's defense technology, the effectiveness of the devices used, and the risk of impact on the environment;

- a. Effectiveness of the selected method/device;
- b. Current defense equipment;
- c. Risk of impact on the environment.

Once the AHP results are obtained, they will then be validated again using the SWOT method. In conducting the first SWOT analysis, the aim is to identify variables (Yuan, 2013) that relate to Indonesia's condition in the context of readiness to face the escalation of nuclear war, both supportive, threatening, and necessary variables. Then it is grouped externally or internally (Görener et al., 2012). Internal grouping is often defined as Strength and Weakness. External factors are defined as Opportunities and Threats. Furthermore, assessment and strategy preparation in the quadrant is then carried out the selection of strategies at the highest quadrant. So, the policy recommendations that Indonesia will take as a step in anticipating the possibility of increasing escalation of the war by using nuclear weapons in the region.

Analytical Hierarchical Process (AHP)

The AHP method was developed by researchers, where the model is intended to break the mass of complex multi-criteria into hierarchical sequences (Kurttila et al., 2000). Where the first level is the goal, which is then followed by criteria and sub-criteria to the last level of the alternative. So that these complex problems will seem more structured and systematic and can get problem-solving (Chang, 1996).

The AHP method has the following steps (Saragih, 2013):

1. Define the problem and determine possible solution alternatives.
2. Create a hierarchical structure that begins with the main goal.
3. Create a paired comparison matrix that illustrates the effect of each element on the above-level criteria.
4. Do a paired comparison calculation, so that it looks at the level of importance of an element.

Strength Weakness Opportunity Threat (SWOT)

The abbreviation of SWOT is Strength, Weakness, Opportunities, Threats. SWOT analysis is a useful strategic planning technique for evaluating strengths, weaknesses, opportunities, and threats in a project. The SWOT analysis process required internal surveys to identify strengths and weaknesses and external surveys to identify opportunities and threats (Jackson, Joshi, & Erhardt, 2003), which was later applied to a strategy:

1. How strengths can take advantage of an opportunity, called a SO strategy;
2. How to overcome weaknesses that can prevent the organization from gaining an opportunity, called the WO strategy;
3. How strengths can be used to deal with existing threats, called ST strategy;
4. How to overcome weaknesses that can bring threats also called WT strategy;

The connectedness of these 4 factors will provide convenience for the organization to determine strategies to achieve its goals (Jackson et al., 2003). In the context of the strategy of anticipating the escalation of nuclear war in the region, SWOT will assist policymakers in the preparation of strategies and strategic steps to be taken. Concisely, the SWOT process will be used to validate the AHP process carried out earlier, as illustrated in the conceptual framework as can be seen in Figure 1.

RESULTS AND DISCUSSION

AHP Analysis with Software Super Decision

The first step in using super-decision software is to include criteria, sub-criteria, and alternatives. (Nezarat, Sereshki, & Ataei, 2015) So the AHP Chart can be obtained as can be seen in Figure 2.

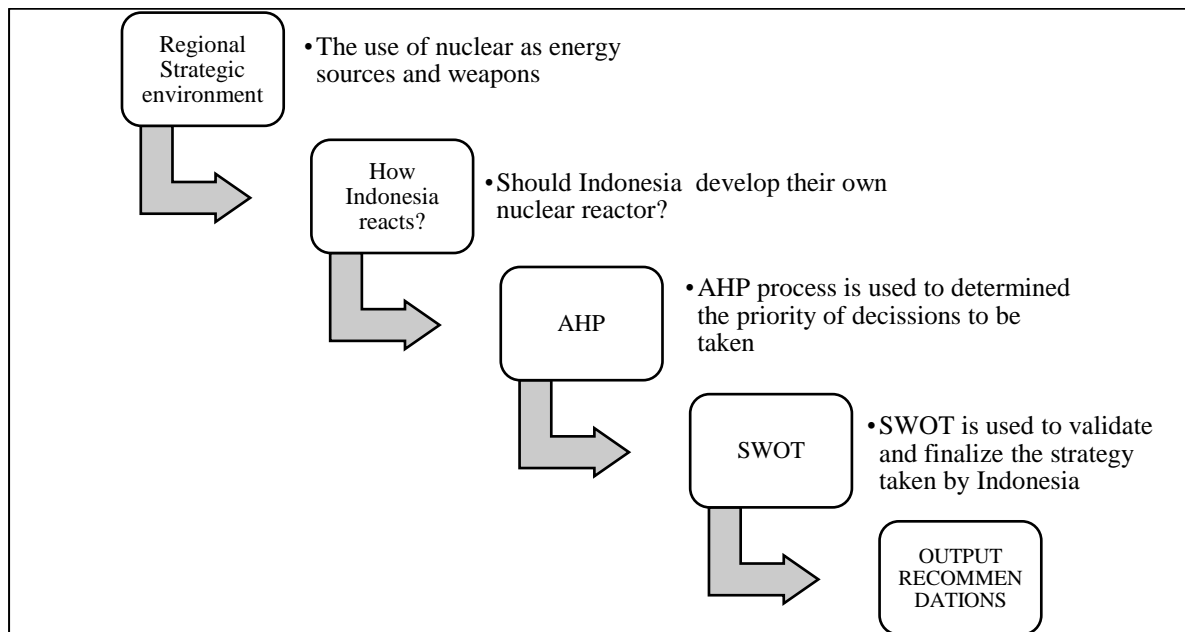


Figure 1. Conceptual Framework of Research
Source: Processed by the Authors, 2021

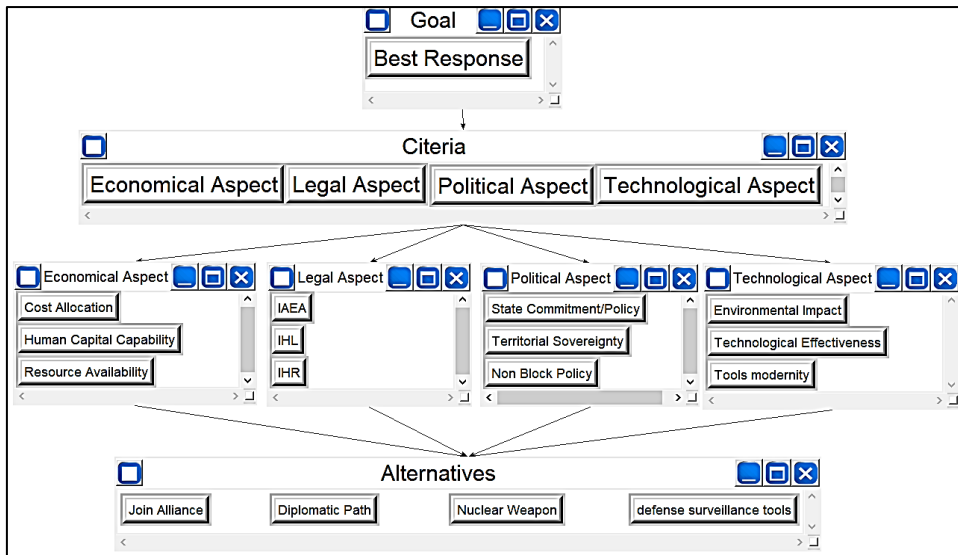


Figure 2. AHP Chart Anticipates Indonesia Facing an Escalation of Nuclear War
 Source: Primary Data Analysis, 2021

Table 1. AHP Results

Name	Summary Adjusted Geomean
Best Response	
Political Aspects	0,2309
Economic Aspects	0,2012
Technological Aspects	0,2222
Legal Aspects	0,3457
Economic Aspects: Availability of Human Capital	0,3021
Economic Aspects: Cost Needs	0,2932
Economic Aspects: Human Capital Capabilities	0,4047
Legal Aspects: IHR	0,3716
Legal Aspects: IHL	0,3186
Legal Aspects: IAEA	0,3099
Political Aspects: Non-Block Policy	0,2778
Political Aspects: State Policy	0,2655
Political Aspects: Territorial Sovereignty	0,4567
Aspects of Technology: Tools Modernity	0,2822
Aspects of Technology: Technological effectiveness	0,2523
Aspects of Technology: Environmental impact	0,4655
Alternative: The Path to Diplomacy	0,3648
Alternative: Strengthening Tools as Defense	0,3395
Alternative: Joining an Alliance	0,2026
Alternative: Making Nuclear Weapons	0,0932

Source: Primary Data Analysis, 2021

Furthermore, from the questionnaire that has been distributed to expert respondents, the results of interest-level answers are further processed using Super Decision

Process software, so that the results of calculations are obtained as can be seen in Table 1.

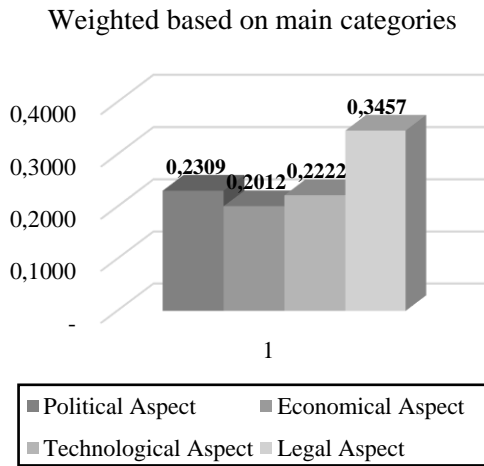


Figure 3. Weighting According to Key Criteria
 Source: Primary Data Analysis, 2021

The calculation formula used is to calculate the value of W (Kendall's Concordance) or Rater Agreement:

$$\begin{aligned}
 &\text{Responden } 1...n; \text{ Node } 1...p \\
 &U = (T_1+T_2+\dots+T_p)/p \\
 &S = (T_1-U)^2+(T_2-U)^2+\dots+(T_p-U)^2 \\
 &\text{MaxS} = (n-U)^2 + (2n-U)^2+\dots+(pn-U)^2 \\
 &W = S/\text{MaxS}
 \end{aligned}$$

Rater agreement needs to be calculated as a test of validity to assess the consistency of measurements between different times. Rater agreement results are displayed in tables and graph images, ranging from Criteria and sub-criteria to alternatives. This AHP process was carried out on 11 respondents which included officials from the National Cyber and Crypto Agency or *Badan Siber dan Sandi Negara* (BSSN), Ministry of Foreign Affairs, Indonesia National Defense Forces Head Quarters (*Mabas* TNI), and Academician, with Rater Agreement value for criteria with its W value. It is 10%, covering economic, technological, legal, and political aspects. This means that the 3 respondents have a low level of agreement.

For the sub-criteria of the economic field, the value of W obtained is 4%, it can be seen in Figure 4.

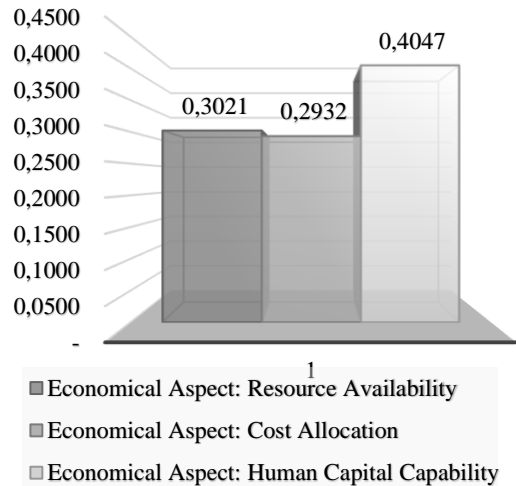


Figure 4. Graph of Economic Sub-criteria
 Source: Primary Data Analysis, 2021

The sub-criteria of the political field in 11 respondents in the 23% W value, which includes active free logging, government policies, and also territorial sovereignty, is seen in Figure 5.

**Priority Base on Sub Criteria:
 Political**

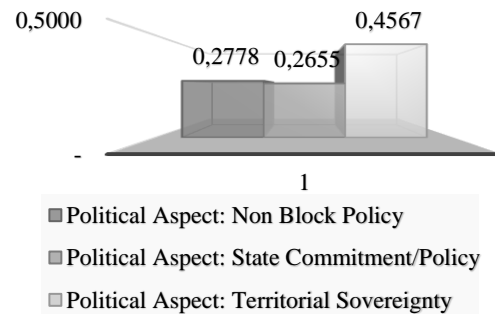


Figure 5. Political Sub-Criteria Graph
 Source: Primary Data Analysis, 2021

The W (Kendall's Concordance) grade on the Legal sub-criteria was detected at only 2%. Continued with the sub-criteria Technology value obtained for W is 23%, for tool sophistication, technological effectiveness, and environmental impact caused, seen in the graph in Figure 7. Then, according to the results of the respondent's analysis of Alternatives, the W value obtained was 76%.

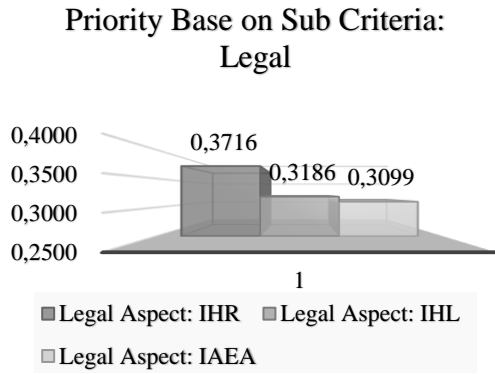


Figure 6. Legal Sub-Criteria Graph
 Source: Primary Data Analysis, 2021

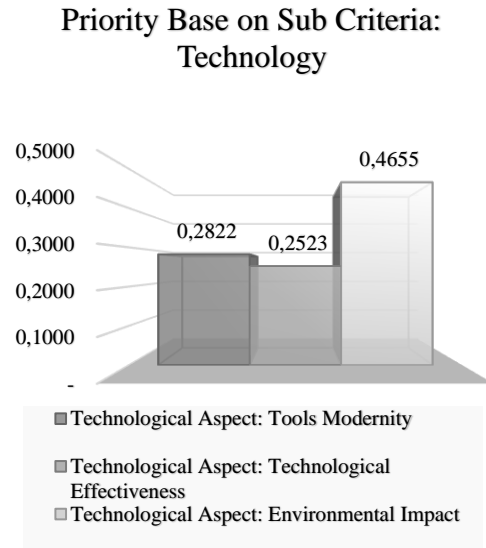


Figure 7. Technology Sub-Criteria Graph
 Source: Primary Data Analysis, 2021

Table 2. Rater Agreement based on Alternatives

Respondent	Diplomatic Path	Defense Surveillance Tools	Join Alliance	Nuclear Weapon
R1	1,0	3,0	2,0	4,0
R2	1,0	2,0	3,0	4,0
R3	1,0	2,0	3,0	4,0
R4	2,0	1,0	3,0	4,0
R5	2,0	1,0	4,0	4,0
R6	3,0	1,0	2,0	4,0
R7	1,0	2,0	3,0	4,0
R8	1,0	2,0	3,0	4,0
R9	1,0	2,0	3,0	4,0
R10	2,0	1,0	3,0	4,0
R11	2,0	1,0	3,0	4,0
Total	17,0	18,0	32,0	43,0

Value μ : 27,5
 Value S: 461,0
 Max S : 605,0
 W : 76%

From the calculation of the AHP obtained Consistency Ratio (CR) of 0.0084, the limit is 0.1 or 10%, so it can be concluded that the most recommended anticipated steps in a row are:

1. Through the path of diplomacy, it becomes the first alternative to be taken. Where the resolution of disputes and escalation of nuclear war will be pursued prevention through diplomacy;

2. Strengthening the Defense Supervisory Tool, the second alternative is taken with the consideration that Indonesia's territorial boundary control system needs to be improved through the strengthening of reliable defense supervisory tools, advanced and has high interoperability and is connected to all surveillance systems built between ministries and agencies;

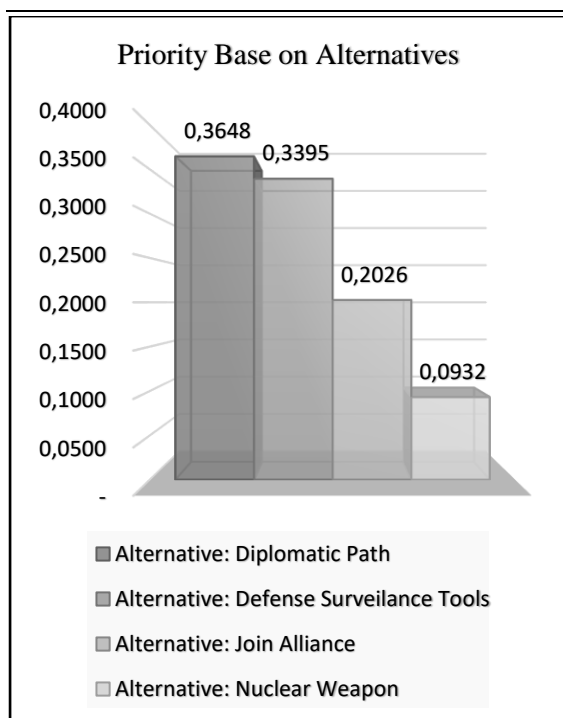


Figure 8. Alternative Graphic
 Source: Primary Data Analysis, 2021

3. Joining the Alliance, this chosen third alternative can be taken if alignment with a particular alliance is in line with Indonesia's national interests;
4. Making nuclear weapons is the last alternative because in addition to the impact of the risks posed, also banning the use of nuclear in military weapons is a big consideration. An alternative that is more likely to be done related to nuclear utilization is to build nuclear power plants with the aim of the economy and conventional energy replacement.

In this study, the AHP calculation is still the first stage of analysis. The writers then conduct a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis for validation of the AHP results. The SWOT analysis is composed of the following steps:

1. Identify internal (Strengths/Strengths and Weaknesses/Weaknesses) and external (Opportunities/Opportunities and Threats/Threats) factors. We identified the internal and external factors through FGD 1 with some experts from the military, diplomats, and academia.
2. Then determine the SO-WO-ST-WT strategy table as shown in Table 3.
3. To determine which strategy is the most recommended, the research team performed a weighting calculation based on the scale value gained from 11 expert respondents when filling out the questionnaire as the results are stated in Table 4.

Furthermore, from the weighting scores above then, we counted the total rating and resulting in the scores of Strength: 33,3; Weakness: 24,87; Opportunity: -2,7; and Threats -11,7, we put these scores in Table 5, and then we derived the Coordinate x, y as shown in Table 6.

4. Ultimately, the x, y coordinates are located in quadrant I, indicating the SO strategy, in a SWOT graph (Figure 8).

Table 3. SWOT Analysis Correlation to AHP

SO Strategy	WO Strategy
Since nuclear power is prohibited in military weapons, Indonesia would have to use diplomacy to avoid a nuclear escalation. To maintain sovereignty, Indonesia could optimize national resources such as satellites and nuclear power plants.	Indonesia can utilize nuclear resources for economic purposes as well as alternative renewable energy sources.
ST Strategy	WT Strategy
Indonesia can avoid nuclear war by joining alliances aligned with its national interests.	Indonesia's territorial boundary monitoring equipment needs to be upgraded. Furthermore, it is necessary to lobby Singapore through diplomacy regarding territorial boundary supervision.

Source: Primary Data Analysis, 2021

Table 4. Weighting Scores of SWOT

		Survey Scores										
		1	2	3	4	5	6	7	8	9	10	11
Total (+)	Strengths	28	22	35	26	36	31	40	38	36	33	40
Total (-)	Weakness	21	17	27	18	27	24	30	29	26	25	29
Total of Internal Factors		7	5	8	8	9	7	10	9	10	8	11
Total (+)	Opportunity	5	4	10	10	9	9	9	10	8	10	10
Total (-)	Threats	32	22	39	39	36	36	38	40	35	40	38
Total of External Factors		-27	-18	-29	-29	-27	-24	-29	-30	-27	-30	-28

Source: Primary Data Analysis, 2021

Table 5. SWOT rating scores

	X	Y	
S	33,3	-2,7	O
W	24,87	-2,7	O
W	24,87	-11,7	T
S	33,3	-11,7	T

Source: Primary Data Analysis, 2021

Table 6. Determination of X and Y

x	0	8,4
y	0	9

Source: Primary Data Analysis, 2021

So, it is seen in the table that supporting quadrant 1 of the Strength-Opportunity strategy is that Indonesia needs to take the path of diplomacy in anticipation of nuclear escalation, arguing that nuclear is prohibited in military weapons. Indonesia can utilize nuclear resources for economic benefit and renewable energy alternatives. So Indonesia will put forward diplomacy as the main option in the face of the escalation of nuclear war in the region as an effort to resolve the conflict peacefully. The use of AHP is very useful in making strategic decisions related to nuclear war because with this tool we can determine alternatives and considerations of criteria that are assessed comprehensively by experts. While SWOT helps validate decisions by considering strategic conditions and the environment, it is known that diplomacy steps are the best decisions to take.

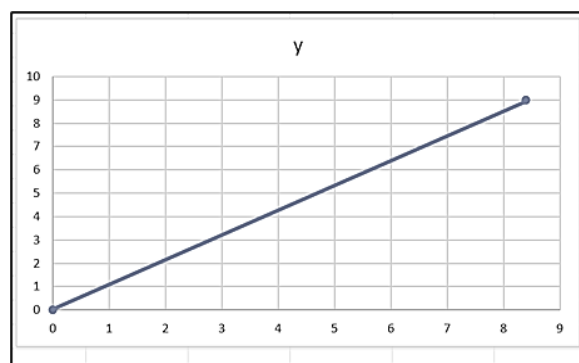


Figure 8. SWOT Results Graph
Source: Primary Data Analysis, 2021

CONCLUSIONS, RECOMMENDATIONS, AND LIMITATIONS

Seeing the escalation of the strategic environment related to nuclear use makes Indonesia need to anticipate early in dealing with it. In determining the anticipatory steps that will be taken this research uses AHP by involving experts who are competent in their fields so that the best priority steps to be considered the best to take is through diplomacy steps. Furthermore, to further validate the decision, a SWOT strategy analysis was carried out by considering internal and external factors, from this step also obtained the same results, namely through diplomacy in the face of the escalation of nuclear use in the region. Consideration of this decision is motivated by the doctrine of active- free foreign policy and commitment

to maintaining world peace. It is hoped that by taking peaceful steps Indonesia can avoid and reduce the escalation of nuclear war in the region. Indonesia seeks to minimize or reduce the escalation of nuclear conflict in the region by implementing peaceful initiatives.

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