Civil and military cooperation on 2018 Lombok earthquake disaster emergency response

D Subagia, D W Anggoro, S Maarif and S T Utomo
Disaster Management Study Programme, Faculty of National Security of the Indonesia Defense University, Kawasan IPSC Sentul, Desa Tangkil, Kecamatan Citeureup,, Bogor 16810, Indonesia

Corresponding author: deny.widianggoro2007@gmail.com

Abstract. – Lombok earthquake in 2018 gave huge impact to West Nusa Tenggara (Nusa Tenggara Barat) provincial government and its society. Lombok earthquake in 2018 is different from the others as it took place repeatedly in short time with huge magnitude. 2018 Lombok earthquake disaster emergency response has involved various elements, such as Indonesia Military Forces (TNI), Indonesia Police Department (POLRI), governmental institutions, society, as well as industries and all its resources. This research aims at analyzing civil-military cooperation in 2018 Lombok earthquake disaster emergency response and its affecting factors using qualitative method with primary and secondary data types. Interviews, observations, and documentations are conducted in order to collect data. This research analyzes civil-military cooperation process from the aspects of legal, organizational and governance, and operational. The result of the research shows that there was a difference in the aspect of command system used in the cooperation. The civil used agreement-based command system while military used hierarchical command system so that the military tended to be more dominant. Organization establishment as a part of effort improvement efforts has not been able to accommodate civil-military cooperation. Civil-military cooperation was initiated to fill gaps between civil and military using military resources. Thus, civil-military cooperation in 2018 Lombok earthquake disaster emergency response needed a better coordination and communication by providing a legal stand through local/governor’s regulations that accommodate all resources in West Nusa Tenggara province to cope with types of threats.

1. Introduction

The earthquake that occurred in Lombok at 2018 was a rare phenomenon and it was important to understand the behavior of its occurrence patterns because seismicity was not as common as usual. Mechanically, the occurrence of earthquakes is triggered by increased fault activity in the northern islands of Bali and Lombok. In addition to seismic vulnerability due to subduction zone activity in the southern part which is the collision zone between the Indo-Australian Ocean plate and the Eurasian Continent Plate, the Nusa Tenggara is also very vulnerable due to a tectonic fault structure rising
behind the island arc which is popularly known as the plate back-arc (back-arc thrust). This structure was formed due to the backward turning of the Eurasian plate against the Indo-Australian Ocean plate. The phenomenon of the arc-continent collision is thought to be a controller of the rising fault deformation mechanism in the north of the islands of Bali and Lombok which triggered a series of strong earthquake events from 29 July to 19 August 2018. This earthquake series event has a relatively large magnitude and is a recurring event because it also happened on May 18, 1963, May 22, 1963, 2 earthquakes on July 14, 1976, May 30, 1979, October 20, 1979, and December 17, 1979 [1].

The earthquake occurred again on August 9, 2018, at 12:25 WIB felt in several locations, this earthquake caused many casualties and damage to the epicenter at 8.44 ° South Latitude and 116.21 ° East at 14 km depth. The next earthquake occurred on August 19, 2018, at 21.56 West Indonesia Time with a magnitude of 6.9 hypocenter depth of 10 km. Data on the affected areas of the 2018 Lombok Earthquake are presented in Table 1.

| Kab/Kota       | Jumlah Korban | MD | Luka | Pengungsi | Rumah Rusak |
|----------------|---------------|----|------|-----------|-------------|
| Mataram        |               | 9  | 63   | 18,894    | 2,060       |
| Lombok Utara   |               | 467| 829  | 101,735   | 23,098      |
| Lombok Barat   |               | 44 | 399  | 116,453   | 37,285      |
| Lombok Tengah  |               | 2  | 3    | 13,887    | 4,629       |
| Lombok Timur   |               | 31 | 122  | 104,060   | 7,280       |
| Sumbawa        |               | 7  | 53   | 41,003    | 9,040       |
| Jumlah         |               | 560| 1,469| 396,032   | 83,392      |

Source: Data on the Kombasgabpad Post of the 2018 Lombok Earthquake.

In handling the emergency disaster of the 2018 Lombok earthquake, the handling did not only involve related agencies or volunteers but also involved the Indonesian National Army (TNI). Since 1990 in the event of a disaster, the Military and Civilians have been operating simultaneously and there have been times when the Military and Civilians have very close cooperative relations. In the perspective of national resilience, disaster is a threat that must be faced with all existing national potential. Therefore, disaster is not only a civilian matter, but also requires involvement from the military. Civil-Military Coordination is expected to accelerate disaster management so that the number of victims and damage can be minimized. When there is military peace, the TNI can carry out Military Operations Other Than War (OMSP) activities such as assisting in disaster management. With this, the TNI will automatically interact directly with affected communities and other elements of society in disaster-prone areas so that they can, directly and indirectly, increase people's sympathy for the TNI.
and strengthen the solidarity of the Indonesian people. Besides, the impact of disasters will greatly affect the stability of an area and of course, also have an impact on national security. Thus, in efforts to deal with natural disasters and humanitarian assistance where there is a lot of interaction between the military (TNI) with civil authorities (BNPB / BPBD), local governments, other civil society such as the private sector and NGOs, both in the pre-disaster stage, when disaster, as well as in the aftermath of the disaster [2], the TNI took the role of completing the limitations of the BNPB and the Regional Disaster Management Agency (BPBD) in handling emergency response.

The 2018 Lombok earthquake in its response has involved civilians and the military, especially during the emergency response period. In the context of disaster management, BNPB and/or BPBD as the leading sector in coordinating all disaster activities, both from civilian and military elements. The mobilization of resources is maximized, both in terms of human resources and disaster management equipment. The problem faced in military involvement is that there are no permanent procedures that regulate at the regional level, procedures and mechanisms to assist TNI forces in handling disasters are still bureaucratic problems that result in counter-productive for handling disasters quickly and appropriately. On the other hand, the participation of civil society in disaster management is often faced with limited capabilities and facilities and infrastructure they have [3]. In the case of the Nias Earthquake, there are indications that one of the obstacles of the TNI in OMSP includes, among others, insufficient legislation covering the role of the TNI, especially in terms of what may and may not be done [4]. Standard Operating Procedure (SOP) for coordination with civil elements during the emergency response period, and rules regarding the time limit of assistance that all of them result in lack of clarity in the coordination of each element during disaster management. There are differences in perceptions in the command system, sometimes causing obstacles in implementation in the field. Civil and Military Cooperation in disaster management is established to fill the existing gaps in the civilian side [5]. Civil parties are often confronted by constraints of limited human resources, where the military has advantages in the sector.

The involvement of the TNI in OMSP is a task that needs to be based on political legitimacy and legal so that in dealing with various problems of threats, disturbances, obstacles, and challenges that come can be directed following their roles, duties, and functions. The position of the TNI in facing military threats is based on Article 7 paragraphs (2) and (3) of Law no. 3 of 2002 places the TNI as the main component, whereas in facing non-military threats, placing government institutions outside the defense sector as the main element.

This study aims to analyze the cooperation between Civil-Military and efforts to increase cooperation in handling the emergency disaster of the 2018 Lombok earthquake. The theoretical basis used in this study is as follows:

1. The concept of Civil-Military cooperation in Disaster Management which includes the mechanism of Civil-Military coordination relations, the division of Civil-Military tasks, Civil-military coordination arrangements [6].
2. Process-based Partnership Model (Process-based Partnership Model). Factors affecting the performance of civil-military cooperation are the decision to cooperate, the selection of partners, the design of cooperation, the division of tasks and responsibilities, and evaluation of cooperation [6].
3. Influential Factors in Civil-Military Cooperation. Such as policy, implementation period, organizational structure and culture, coordination and communication, and resources [7].
4. Coordination Concept. The form and arrangement of a group of different units to achieve certain goals [8].
5. The legal basis of the OMSP of the TNI in Disaster Management [9].
6. Disaster Management Concepts [10].

2. Methodology

The research method used in this research is qualitative research with a case study design. Sources of data in this study are primary and secondary data. Primary data is data obtained directly from the subject to be studied, and secondary data is data obtained through library materials or obtained from certain institutions or institutions [11].

Primary data collection was obtained from the results of in-depth interviews (semi-structured in-depth interviews) and conducted to BNPB, BPBD, and TNI officials involved in the handling of the 2018 Lombok earthquake disaster emergency. Then secondary data collection was done through documents and secondary data obtained from the provincial government and district/city/district government in the NTB province and military agencies involved in the handling of the 2018 Lombok earthquake.

The technique of selecting informants through purposive sampling. The data is processed using descriptive analysis techniques, and then a recommendation is prepared. The grid analyzed in the form of regulatory aspects, organizational and governance aspects as well as operational aspects in the handling of the 2018 Lombok earthquake disaster emergency.

The data obtained is then processed through a validation process with triangulation. Triangulation is carried out by involving expert judgment, in this case, represented by BNPB and military agencies that are actively involved in the handling of the 2018 Lombok earthquake. This is done to gain a deeper understanding of the phenomenon under investigation [12]. In the context of this study aims to gain an in-depth understanding of Civil and Military cooperation in handling the 2018 Lombok earthquake emergency relief.

Testing the validity of qualitative research includes credibility, transferability, dependability, and confirmability [13]. Primary and secondary data have the same importance as the crosscheck or confirmation functions of each other. The next step is data analysis, which includes: data reduction, data display, and drawing conclusions and verification [14].

3. Results and discussions

According to historical records, Lombok's tectonic earthquake in 2018 was the largest [15]. The series of the 2018 Lombok earthquake began on July 29 with a magnitude of 6.4. This earthquake was centered in the north of Lombok Island at coordinates 116.508 °, -8.2395 °. Initially, this earthquake was named as the main earthquake (mainshock) because it was followed by a smaller earthquake or commonly called aftershock. But on August 5 a bigger earthquake with a magnitude of 6.9 was centered (116.4387 °, -8.2631 °) at a location not too far from the epicenter of the July 29 earthquake. Therefore the name of the earthquake was changed, the earthquake on July 29 became the initial earthquake (foreshock) and the earthquake on August 5 became the main earthquake (mainshock). Shortly after August 9 aftershocks occurred with a magnitude of 5.9, then on August 19, 2018, two large earthquakes shook again with a force of 6.3 Mw and 6.9 Mw. This earthquake is referred to as the second mainshock.
In handling the emergency disaster of the 2018 Lombok earthquake, the TNI was incorporated into the Emergency Response Command Structure. Military Involved in the emergency response of the 2018 Lombok Earthquake is a form of one item Military Operations Other Than War (OMSP). The implementation of OMSP is contained in Law No. 34 of 2004 concerning the TNI and Law No.3 of 2002 concerning National Defense. In handling the emergency disaster of the 2018 Lombok earthquake, civilian institutions namely BNPB and BPBD of NTB Province, BPBD of North Lombok, and East Lombok as well as various other government and non-government institutions provided by the TNI. Initially, after the earthquake, NTB Korem 162 / WB activated its function as the first respondent and coordinated with the NTB regional government and also the central government (BNPB) who formed the command to improve the emergency with Danrem 162 / WB as the unit commander handling emergency issues. 5 of 2018 dated August 23, 2018, concerning the Acceleration of Post-Earthquake Rehabilitation and Reconstruction in West Lombok, North Lombok, Central Lombok, East Lombok, Mataram City, and the NTB Province affected areas. The TNI Headquarters formed the Emergency Response Command Structure, the Integrated Joint Task Force Command (Kogasgabpad), which was led by the Commander of the Integrated Joint Task Force responded to the NTB Governor. The organizational structure created is more similar to the Military Organization, as is the case with military design, but in the end, it was made several times so that the Kogasgabpad involved was not related to civilians and several other organizations joined in the organization could blend in for the emergency needs of the 2018 earthquake disaster.

The fusion of the TNI with the BNPB, the NTB Province BPBD, and other agencies as the main elements in the task force is a form of cooperation rather than co-existence [15]. that refers to the UN-CMCoord Field Handbook, which is only done when the State is in a state of danger or war. The fusion of this institution can be seen in the organizational structure formed. In one position the organization is occupied by a combination of the military, civilian, or from the police. Besides, the formation of a joint secretariat by the NTB provincial government as a forum for communication and coordination with Kogasgabpad functions as an alignment in determining direction and policy in the operation of disaster management in the field.

a. Legislative / regulatiry Aspect .

1. Civil-military coordination arrangements.

The researcher uses the Process Based Partnership Model to assume the factors that determine the outcome of a case in the civil and military coordination arrangements. Factors affecting the performance of Civil-Military cooperation during the 2018 Lombok earthquake emergency response include the decision to collaborate. In the handling of the 2018 Lombok earthquake disaster the decision to cooperate with civilians was based on Law no. 24/ 2007 concerning Disaster Management. While the military refers to Law No. 3/2002 concerning National Defense and Law No. 34/2004 concerning the TNI. Thus the BPBD's decision to collaborate with the TNI in handling disaster emergencies is the right choice by collaborating assets owned by both parties so that a solid force will emerge in handling the 2018 Lombok earthquake disaster relief. Design of Cooperation Relations. The basis used in compiling the design of the cooperative relationship formed since the beginning of the earthquake was the NTB Governor's Decree on the Determination of the Emergency Status of the Lombok earthquake and the establishment of a Command for disaster emergency response. This decree was followed up with the membership structure of the Emergency Response Command in handling the Lombok Earthquake Disaster which involved civilian and military elements. Then after
Presidential Instruction No. 5/2018 issued, there was a change in the organization of earthquake emergency response that is expected to accommodate all available resources.

The implementation of Civil and Military cooperation in the 2018 Lombok earthquake emergency response can be seen from the beginning of the formation of the disaster emergency task force. Where every phase of organizational change that has been formed still involves and accommodates all relevant stakeholders. During the operation of the operation, obstacles that arise during the implementation of the cooperation are at the beginning of the determination of the target due to repeated earthquakes resulting in changes both from the civilian and military in dealing with the dynamics that occur. Division of Duties and Responsibilities. In the decree and the Presidential Decree issued, clearly explained the tasks of each element of the government in carrying out the emergency response to the 2018 Lombok earthquake disaster. At that time the prominent Civil and Military cooperation were during the Kogasgabpad period, where all command of emergency disaster management operations were located under the kogasgabpad and coordinate with all agencies and all relevant stakeholders who are then responsible for the operation of this Command to the governor of NTB. Evaluation of Cooperation. The Joint Combined Task Force Command conducts an evaluation every day in the afternoon after serving. The evaluation was carried out by holding a coordination meeting involving representatives from civilian and military institutions in a joint meeting forum. Internal evaluation of the activities of each institution is also held every day. Internal evaluation reports of each institution, both civilian and military, were also made, but their contents were still focused on the activities carried out, not on the overall evaluation report on civil-military cooperation.

2. Influential factors in civil-military cooperation.

Based on Law No. 3 of 2002 and Law No. 34/2004, Perpres No. 66/2018 concerning the organizational structure of the TNI, and Permenhan RI No. 09/2011 concerning the Principles for Carrying Out the Assistance Task Force of the TNI in Tackling Natural Disasters, Displacement, and Humanitarian Assistance and RI Decree No. 06 / 2015 concerning Guidelines for Involvement of the TNI in Disaster Management in article 1 (3) discusses the involvement of the TNI in disaster management based on a process of TNI participation as part of not BNPB / BPBD on the mirror, emergency response, and post-disaster issues. So, the implementation of cooperation in disaster management in Indonesia between BNPB, the Ministry of Defense (Kemhan) and the TNI is based on a Memorandum of Understanding (MoU) between the Indonesian Ministry of Defense and BNPB with MoU numbers 66 / BNPB / 03/2016, KB / 3 / M / III / 2016 concerning Cooperation in Disaster Management and MoU between TNI Headquarters and BNPB with MoU number 47 / BNPB / III / 2016; KERMA / 6 / III / 2016 concerning cooperation in Disaster Management. In handling the 2018 Lombok earthquake emergency, BNPB carries out its duties and activates it as a non-director and executor by coordinating all the resources needed in handling the Lombok earthquake emergency as well as plunging directly into the Lombok earthquake location and providing direct assistance through Pospenas under Law No. 24 of 2007 concerning Disaster Management and Presidential Regulation No. 1 / 2019 concerning BNPB and PP No. 21 / 2008 concerning Disaster emergency operations. The Indonesian National Armed Forces at the central level coordinated with BNPB then gave direction and arranged the disaster management task force and deployed all the resources needed in handling the earthquake emergency in 2018. The process of handling the earthquake in Lombok was also based on Presidential Instruction No. 05 of 2018 dated 23 August 2018 Based on the Presidential Instruction,
the TNI Headquarters established a disaster management task force called the Kogasgabpad (Integrated Joint Task Force Command).

Based on the Decree of the Korem 162 / WB Governor Commander who was given the mandate as the Incident Commander in dealing with the earthquake disaster emergency in Lombok. Korem 162 / WB is a TNI territorial unit in the NTB region. Internally, Korem 162 / WB already has Permanent Procedures in disaster management in their areas, while internal BPBD has Renkon that has been compiled. The things that are used as the basis for handling emergencies at the Provincial level. At the operational level in the field, district/city BPBDs are guided by the Decree of the Regent / Mayor. Whereas the territorial unit at the district level is the Kodim which is guided by the Permanent Procedures that have been prepared by the Internal Military. In this statutory regulation, the regulations of each TNI unit in disaster management and procedures for assistance to local governments have been determined in dealing with disasters. However, there are no implementing regulations or planning for disaster management specifically explaining good collaboration and coordination in the implementation of Civil-Military cooperation. The organizational structure, task and responsibility requirements, provisions, and how the collaboration system has not been regulated in the existing regulations.

In handling the 2018 Lombok earthquake disaster emergency status the state of disaster emergency has lasted for approximately 17 months. Perka BNPB No. 03 / 2016 concerning the Disaster Emergency Management Command System, whereby the Status of Disaster Emergency Conditions is determined by the Government or local government for a certain period based on the recommendation of the agency that carries out affairs in the field of disaster management starting from the status of an emergency alert, emergency response and emergency transition to recovery [16]. When compared to the greater emergency status of the disaster, in 2004 Aceh earthquake and tsunami the state of the emergency disaster lasted for 3 (three) months, the 2006 Central Java and Jogjakarta earthquakes for 1 (one) month, then the status of the earthquake emergency This Lombok is the longest. Until now the provisions regarding the determination of the status of a state of a disaster have not been regulated in separate regulations, but they are still integrated as a sub-part of other legislation, such as Perka BNPB No. 03 of 2016 concerning the Disaster Emergency Management Command System [17]. In general, organizational culture, leadership, and regional culture influence the implementation of Civil-Military cooperation in humanitarian assistance in the handling of the 2018 Lombok earthquake disaster relief. Although in the organization formed there was a merger between Civil and Military but the merger was only limited to the organization, it did not fuse one another. This is inseparable from the culture of TNI organizations which will be difficult to be merged with civilian organizations, because military members in carrying out their duties must be instructed and accountable to the command of his superiors is hierarchical, while the civil parties prioritize agreement in decision making.

Other problems on the ground at the operational level include, among others, the military feels that it is more capable than civilian authorities, especially in dealing with issues that are urgent or require quick decisions. There are two possibilities why this can happen. First, the military culture may be too strong to feel uncomfortable when leadership is taken by civilians who do not have a command line. Secondly, the leadership carried out by civil officials is indeed not appropriate in the sense that it is not optimal for making decisions quickly when needed [18]. In the implementation, coordination and communication are carried out in the organization that has been formed. Within the organization of the emergency response command structure that was formed, there have been several changes in the framework of adjusting to the needs on the ground and as an effort to accommodate the many actors
involved in disaster emergency management. The military and civilian elements are moving in unity under the well-organized Emergency Response Command so that the movement can assist affected communities on the ground. Although all elements have been completed, in the implementation there are still gaps where there are deficiencies in the implementation of coordination.

Resources, both material and personnel resources determine the implementation of tasks in Civil-Military cooperation. Military resources are filling and supplementing the NTB regional government resources which are still limited when facing an earthquake disaster that occurs, both in terms of human resources, equipment, and supporting equipment. The TNI has human resources in the form of personnel who are ready to face critical situations such as natural disasters, as well as equipment and equipment that can be prepared and deployed quickly. This is the reason for the need to cooperate with the TNI in disaster management, especially those that have major escalations such as the emergency response to the 2018 Lombok earthquake.

b. Organizational and governance aspects.

The coordination mechanism was realized through the formation of a joint secretary from the NTB regional government led by the NTB Provincial Secretary and the Military organization formed by Kodam IX / Udayana and TNI Headquarters. The organization that was formed started from the Disaster Emergency Response Command Structure led by Danrem 162 / WB as the Incident Commander, then the Kogasgabpad led by Pangkogasgabpad, moved to the Rehabilitation and Reconstruction Task Force and currently the disaster emergency management was carried out by the Corruption Task Force 162 / WB. Although working within the same command structure, both the TNI and BPBD and local governments work in a hierarchical structure according to their respective institutions, the needs needed from each institution are still communicated internally, both internal TNI according to its hierarchical path through the command line and BPBD / Pemda according to the structure they have. So those emergency response activities that continue to run following the mechanisms and procedures of the TNI and BPBD both at the regional level and at the central level. The division of civil and military tasks lies with the established task force organizations. TNI involvement can be said to include three aspects, namely in the task of providing direct assistance, providing indirect assistance, and providing support for infrastructure improvement [19]. The TNI, both from Kodam IX / Udayana internal units and units from outside the Kodam at the beginning of the disaster, moved quickly to assist by helping evacuate affected victims, health and treatment assistance, and logistical distribution assistance. Indirect assistance provided by the TNI can be seen from security assistance provided by TNI personnel in the distribution of logistics. The provision of infrastructure improvement support provided by the TNI was seen when the TNI assisted the government in building temporary and permanent shelters. Also, the TNI built and improved public facilities such as public bathrooms, school buildings, health facilities, and several other developments.

c. Operational Aspects.

The resources owned by the TNI in terms of the readiness and support of their equipment, equipment, and defense equipment can certainly greatly assist BNPB / BPBD in disaster management which must prioritize speed. Examples in the deployment of heavy equipment from the Army Zeni and Marine Engineers in helping to move and clean heavily damaged buildings, Indonesian Air Force aircraft in logistics distribution, and TNI resources are always ready to be assigned at any time and can
be available in large numbers to handle and evacuate the community it certainly can fill in gaps and improve the performance of the NTB Province BPBD. The involvement of the military in disaster management is only to provide support and not lead the operation, it is also following PP No. 21 of 2008 concerning the implementation of Disaster Management wherefrom the Civil (BNPB) remains as the leading sector. Thus, it can be said that the use of military force in the response to the 2018 Lombok earthquake was not excessive and following existing regulations. With the TNI and BPBD complementing the existing gaps, the Civil-Military cooperation in the emergency response to the 2018 Lombok earthquake emergency can go well to achieve common goals.

Efforts to Increase Cooperation between Civil and Military in Handling the 2018 Lombok Earthquake Disaster Emergency. Efforts to increase Civil-Military cooperation in handling the emergency disaster of the 2018 Lombok earthquake, were realized by adjusting the form of organization, which in the process of formation involved the Central Government, relevant Ministries / Institutions, BNPB, TNI, Polri, and NTB Regional Government. As a rule, it states that the disaster management coordinator is the head of the government/province/region and the role of the military in disaster management is as a supporter of the head of the regional government. The Regional Head has the authority to mobilize the offices that are under the coordination of its structure, while the military cannot move these services, because it is only coordinating. The military cannot give orders to other agencies/institutions while the regional head can legally order the service of institutions that are in one organizational structure. Thus it is indeed appropriate if the regional head is the main coordinator in disaster management. Thus the organization formed as a form of Civil-Military cooperation in the handling of the 2018 Lombok earthquake disaster, has referred to UN-Cmcoord [19], wherein carrying out operational and controlling emergency disaster management tasks under the command of the military as a commander in disaster emergency response, however, remain accountable to the government and regional government. With the recovery carried out through effective Civil-Military cooperation based on appropriate regulations, it is hoped that the acceleration of rehabilitation and reconstruction of the impact of the Lombok earthquake disaster can proceed quickly according to plan. So that the creation of these conditions will automatically create national security.

4. Conclusions and recommendation

Based on an analysis of the elements used in the analysis of the process based partnership model, namely policy, implementation period, organizational structure and culture, coordination and communication as well as resources owned by both civilian and military institutions. The main things that need to be improved in Civil-Military cooperation are the need for policies that specifically regulate Civil-Military cooperation in disaster management at the local government level, and the existence of a coordinated unit both from regional and national posts in the handling of the 2018 Lombok earthquake disaster. Civil-Military Cooperation that runs in the Emergency Response Command Structure in the handling of the emergency disaster of the 2018 Lombok earthquake still runs following the functions of each institution and no cooperation mechanism reflects the overall Civil-Military relations. In terms of legislation, despite having strong laws and regulations at the central level regarding Civil-Military cooperation in disaster management, there are still inaccuracies in the application of these regulations at the provincial level and implementing elements in the field. Aspects of organization and governance, Civil-Military cooperation is realized.

Through the formation of an emergency disaster management organization that accommodates all elements of both the Civil and Military who experienced some changes as an adjustment effort. Operational aspects there are differences in the command system used between the Civil and Military
parties, the Civil uses the command system based on an agreement while the military uses a hierarchical command system, so that the military tends to dominate more in the implementation of Civil-Military cooperation. Civil-Military Cooperation aims to fill the existing gaps on the Civil side and use the resources owned by the Military. Organizational changes that occur indicate that there is no standard form of organization that has legality as a forum for coordination in disaster management organizations. The level of coordination involved in handling the emergency disaster of the 2018 Lombok earthquake is already at the level of synchronization, that is, each agency involved has carried out its duties and functions by their respective responsibilities. The coordination that was established at that time also reached the Maximum Desired stage which was the highest stage in the concept of coordination. Based on the conclusions that have been prepared, recommendations can be formulated to the civilian and military parties, especially the NTB Provincial Government, including:

1. Making regulations at the level of regional regulations or at least the governor's regulations related to disaster management at the provincial level which include specifically involving all available resources in the region, explaining the duties and responsibilities of each element involved in disaster management, and explaining the authority of the task and responsibility for implementing Civil and Military cooperation.
2. Coordination and communication need to be improved through training and the formation of a joint organization between the Civil and Military parties in each province region, faced with the form of existing disaster threats.
3. The formation of an organization that specifically facilitates Civil-Military cooperation at the provincial level, so that in the event of a disaster the organization can be automatically activated and operationalized by both civilian and military personnel by the division of their respective tasks.
4. Implementation of information dissemination to all elements involved in disaster management at the provincial level regarding disaster management regulations. Specifically Permenhan RI No 06 of 2015 concerning Guidelines for Involving the TNI in Disaster Management.

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