

Analysis of Aspects of Implementing Room Rehearsal Simulations and Disaster Emergency Handling Command Post Rehearsals at the BNPB Disaster Management Training Center

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Abstract

The purpose of this study was to analyze 9 (nine) aspects of organizing table top exercise and command post exercise, namely participants; creating exercise scenarios; exercise stages; elements, roles and functions in exercise; exercise planning products; execute implementation mechanism; movement of table top exercise; movement of command post exercise and evaluation of the implementation of exercise. The study involved 6 (six) Provincial BPBDs who carried out table top exercise and commands post exercise for disaster emergency response. The approach used in this research is a qualitative method. Data collection techniques used are observation, discussion, and documentation with primary and secondary data sources. The results of the study show that 9 (nine) aspects of organizing exercise had been carried out comprehensively in accordance with the rules, methods and procedures so as to indicate that the process of disaster preparedness training through this exercise has been running well at the BNPB PB Training Center.

Keywords

Simulation exercise; table top exercise; command post exercise



I. Introduction

One of the main elements in disaster risk reduction management is building disaster preparedness by increasing capacity through disaster emergency management exercises (Djalante et al. 2017). An important benefit of emergency preparedness exercises is the ability to identify deficiencies in planning, procedures, resources, communication in dealing with emergencies (Skryabina et al. 2017). In order to increase the preparedness capacity for disaster emergency response, this simulation exercise is designed and screened according to the actual situation in dealing with crisis situations during disaster emergency response (Thamrin, 2017). Development is a systematic and continuous effort made to realize something that is aspired. Development is a change towards improvement. Changes towards improvement require the mobilization of all human resources and reason to realize what is aspired. In addition, development is also very dependent on the availability of natural resource wealth. The availability of natural resources is one of the keys to economic growth in an area. (Shah, M. et al. 2020)

Various studies state that the best exercise in dealing with a disaster emergency crisis is the simulation method (Steward and Wan 2007). A number of research proves that the role of simulation in disaster management can measure a person's readiness in dealing with disasters (Tumbol & Poli, 2014). According to Olson et al. (2010) training on disaster preparedness using the simulation method in the form of games (games) can give better results than those that do not use simulations. Sanjaya (2013) said that simulation can be used as a teaching method with the assumption that not all learning processes can be

carried out directly on the actual object. The method used in the simulation is role playing, which is a learning method as part of a simulation directed at creating actual events, or events that may appear in the future (Indriasari, 2016). This is supported by the statement by Steward and Wan (2007) in their research on the role of simulation in disaster management in measuring a person's preparedness in dealing with disasters. Research shows that success during an emergency response and a person's response to a crisis situation is in accordance with the simulation exercise he has obtained (Lloyd, 2017).

The BNPB Disaster Management Training Center with the motto: "training must precede disaster", organizes superior training using simulation methods in the form of room rehearsals and post training exercises. The implementation of the disaster emergency management simulation exercise is carried out based on the curriculum for the exercise designer. In order for the space rehearsal and post rehearsal to run well, it is necessary to analyze the aspects that affect the implementation of the rehearsal.

Dausy et al. (2007) stated that the success of a rehearsal is determined by aspects of rehearsal implementation, namely collaboration, participants (exercise designer, facilitator), good scenario, regional preparedness, logistical support, exercise design, implementation, and evaluation of the exercise. The BNPB Education and Training Center has available Book Module-03 on Designer of Spatial Rehearsals (2017) and Book Module-04 on Designer of Posko Rehearsals (2017) which are used as guides in every rehearsal. Module 03 and Module 04 books state that there are 9 (nine) aspects of rehearsals, namely: rehearsal participants; creating exercise scenarios; rehearsal stages; elements, roles and functions in rehearsals; rehearsal planning products; rehearsal implementation mechanism; movement (move) rehearsal space;

This study will analyze aspects of the implementation of space rehearsals and rehearsals for disaster emergency handling posts in 6 (six) Provincial BPBDs which are the BNPB Disaster Management Training Center program in 2020. This study analyzes 9 (nine) aspects of organizing space rehearsals and rehearsals. Poskos in the 6 (six) provinces, namely aspects of 1) space rehearsal participants and post rehearsals, 2) training scenario development, 3) rehearsal stages, 4) elements, roles and functions in rehearsals, 5) rehearsal planning products, 6) rehearsal mechanisms. implementation of space rehearsal and post rehearsal, 7) implementation of space rehearsal according to movement (move), 8) implementation of rehearsal post according to movement (move), 9) evaluation of rehearsal implementation, so that it will be known to what extent the rehearsal is in accordance with the rules, the correct method and procedure for organizing room rehearsals and post rehearsals.

II. Review of Literature

2.1 Disaster Management Training Method

The disaster management training method consists of training and capacity building, simulation exercises, room rehearsal and post rehearsal. Training and capacity building are a series of comprehensive preparedness activities that are carried out regularly and repeatedly through five systematic stages, namely: planning, organizing and providing resources, training and training, evaluation, and corrective action (WHO, 2017). According to Rahadi (2020), the simulation exercise method is carried out in stages, stages and continues and has 3 (three) stages, namely: a) the training stage includes seminars, lectures and workshops, b) the simulation stage includes room rehearsals (Table Top Exercise), games, games, and drills, c) the system test phase includes Command Post Exercise and Field Training Exercise.

a. Room Rehearsal

The relationship between literature and social (reality) became a serious arguments from various experts, including Plato and Aristotle. Plato argues that literary works are picking from reality. While Aristotle argues that literary works have their own world that is free from reality, literature is not a mimetic of reality, but the values contained in literary works can be applied in reality. The independence of literature with reality is reinforced by Sausure who argues that literature is an autonomy work. Soekanto in Ismail (2019) social change refers to changes in social aspects, communitygovernance, and group behavior patterns. One example of social change is the increasingnumber of formal community institutions. For example various organizations ranging from government organizations, to social gathering organizations, are now becoming more formal, with a more rational pattern of relations. This is different from social organizations in the past, which are more informal by using emotional relationships.

b. Rehearsal post

In the Module-04 Book (2017) about the design of the Posko rehearsal exercise, it is stated that the Posko rehearsal trains the abilities and skills of the leadership and staff elements in making decisions in an operational plan. Activities involving various institutions/agencies to test their capacities and functions according to the rehearsal scenario, where the team is simulated by involving policy makers, staff, and communicating with leadership elements. Posko rehearsal is an interactive rehearsal like a real event without the deployment of equipment and simulated a realistic event.possible to be able to mobilize all the actual resources.

2.2 Aspects in Organizing Room Rehearsals and Posko Rehearsals

Disaster management training is a collaboration that involves stakeholders in the field of disaster. The success of the implementation of the simulation exercise depends on the interrelated and continuous aspects. In the Module-03 book (2017) about the designer of room rehearsals and the Module-04 book (2017) about the design of post rehearsals, it is stated that there are 9 (nine) aspects of organizing room rehearsals and posko rehearsals that will be analyzed in this paper.

III. Research Method

The research method uses a qualitative descriptive approach, which is a research procedure that produces descriptive data in the form of speech or writing and observable behavior from the person (subject) himself. The focus of this research is on the process of planning and organizing space rehearsals and rehearsals for disaster emergency management posts at the BNPB Education and Training Center program in 2020.

IV. Result and Discussion

4.1 Participant Aspects of Room Rehearsal and Post Rehearsal

From the available data, the participants of the space rehearsal and the post rehearsal have described multi-stakeholder collaboration so that the majority of stakeholders in disaster emergency management have been represented. The rehearsal participants consisted of resource persons and designers of the central exercise, resource persons and designers of regional exercises, as well as actors from all regions.

Table 1. Participant Aspects of Room Rehearsal and Post Rehearsal

Provincial BPBD	Number of participants	Participant Description
Aceh	38 person	<ul style="list-style-type: none"> Narsum & Designer of regional training: BPBA, BMKG, IM Kodam, Unsyiah Regional actors: BPBA, Dishub, Health Office, Social Service, Dispupr, BMKG, Diskominfo, Basarnas, IM Kodam, Aceh Police, Aceh City BPBD, Aceh Besar BPBD, PMI
Boast	41 person	<ul style="list-style-type: none"> Narsum & regional designers: Deputy Governor of West Sumatra Province, West Sumatra BPBD, BMKG, Unand, PMI, West Sumatra PRB Forum Regional actors: West Sumatra BPBD, Padang City BPBD, BMKG, Korem 03, Lantamal II, Lanud, West Sumatra Regional Police Dispupr, PMI, PUSDALOPS, Basarnas, Customs, Dispupr, Social Service, Health Office, Diskominfo, Immigration, Dishub, RAPI, RRI, FPT PRB, Unand, M Jamil Hospital, Gergatin.
Central Java	40 person	<ul style="list-style-type: none"> Narsum & regional designer: Central Java Provincial Secretary, Central Java BPBD, BPPTKG, PMI, MDMC, Central Java Provincial Health Office. Regional actors: Central Java BPBD, BPPTKG, Basarnas, Tagana, Social Service, Diskominfo, RAPI, RRI, RSUD, MDMC, LPBI NU, PLN, BPKP, DPU SDA, DPU BMCK, PSB UNES, Central Java Bank, PT Pos, Disperakin, Senkom.
Yogyakarta	39 person	<ul style="list-style-type: none"> Narsum & regional designers: BPBD DIY, BPPTKG, PSBA UGM, FPRB DIY, PSMB UPN. Regional actors: DIY BPBD, DIY Police, Korem 072, BMKG, Sleman BPBD, DIY Social Service, Dispora, DPKP, Health Office, Dispupr, Diskominfo, Dispar, DIY Basarnas, BPPTKG, DISTRANPOR, RAPI, PMI, DIY PRB Forum, Kadinda, PWRI .
NTT	38 person	<ul style="list-style-type: none"> Narsum & regional designer: BPBD NTT Province, BMKG, DLHK, Distan KP, Social Service, Health Office, FPRB. Regional actors: BPBD NTT, BPBD Kupang, BPBD Belu, BPBD TTS, Korem Wirasakti, Polda NTT, Lanudal, Lantamal VII, Basarnas, Distan KP, Health Office NTT, Dispet, Dis LHK, Dis PMD, Bappelitbangda, FPRB, Bulog, UN Nusa Sandalwood Kupang
West Papua	40 person	<ul style="list-style-type: none"> Narsum & regional designers: BPBD West Papua, Health Office Pap Bar, Kodam Kasuari, Polda Pap Bar, Social Service, Basarnas, Dispupr, Diskominfo, PT Pulman, UNIPA. Regional actors: West Papua BPBD, Kasuari Military Command, Pap Bar Police, Social Service, Dispupr, Diskominfo, Health Office, Transportation Agency, BMKG, Basarnas, BPKAD, FPRB, Tagana, PMI, Orari, Bulog, PT Pulmon, PT Tri Abadi Mineral, mass media .

c. Actors are the most important element in the rehearsal where the composition of actors reflects multi-stakeholder collaboration consisting of local stakeholders in disaster management. The perpetrators consisted of individuals from the Provincial BPBD,

BMKG, related OPD, TNI, Polri, academics, and the business world. The actors in room rehearsals should be structural officials who make decisions, ideally echelon 2 officials and at least echelon 3 officials. However, in its implementation, 40% of the actors are represented by their staff. The condition of the perpetrators like this also occurred in the implementation of the post rehearsal. The room rehearsals should be the same as the posko rehearsals, but in practice there are still actors in the posko rehearsals that are different from those in the space rehearsals. Problems like this always appear in every rehearsal activity.

4.2. Aspects of Screenplay

The preparation of the rehearsal scenario has been based on the contingency plan (Renkon) that is owned by each BPBD so that the scenario has the realism of disaster risk and threat situations in accordance with actual conditions.

Table 2. Aspects of Screenplay

Screenplay			
Provincial BPBD	Contingency Plan	Scenario	Information
Aceh	Tsunami earthquake	Tsunami earthquake	scenario based on Renkon
Boast	Tsunami earthquake	Tsunami earthquake	scenario based on Renkon
Central Java	Mount Merapi Eruption	Mount Merapi Eruption	scenario based on Renkon
Yogya Karta	Mount Merapi Eruption	Mount Merapi Eruption	scenario based on Renkon
NTT	Drought	Drought	scenario based on Renkon
West Papua	There is not any	Tsunami earthquake	scenario not based on Renkon

Of the 6 (six) provincial BPBDs, only the West Papua provincial BPBD does not yet have a contingency plan, so the rehearsal scenario is made and developed based on the study and input from the training planning team referring to the disaster risk document in the West Papua provincial BPBD. Scenarios are used as the basis for making rehearsal planning products so that scenarios have been created by training designers who fully understand the characteristics of potential disaster risks in the area where the rehearsal is carried out. Scenarios have been made based on the contingency plans (Renkon) that are already available in each Provincial BPBD. There are 5 (five) provincial BPBDs that make rehearsal scenarios based on their renkon. While the province of West Papua does not yet have a renkon so that the preparation of the rehearsal scenario refers to the available disaster risk reduction documents, as well as the results of discussions and input from the relevant agencies. One of the benefits of conducting rehearsals is to test existing contingency plans.

4.3. Aspects of the Stages of Rehearsal

All stages of the rehearsal were carried out by the central and regional teams and were in accordance with the sequence of rehearsal activities, namely starting with the stages of preparation, planning, implementation, evaluation. All 6 (six) provinces have carried out the rehearsal stages, according to the schedule determined by each Provincial BPBD.

Table 3.Aspects of the Stages of Rehearsal Implementation

BPBD	Stages of Rehearsal				
	Preparation	Planning	Implementation	Evaluation	Information
Aceh	Executed according to schedule	Executed according to schedule	Executed according to schedule	Executed according to schedule	Stages of preparation to evaluation by the central and regional teams
Boast	V (ideum)	V (ideum)	V (ideum)	V (ideum)	
Central Java	V	V	V	V	
Yogyakarta	V	V	V	V	
NTT	V	V	V	V	
West Papua	V	V	V	V	

4.4. Aspects of Elements, Roles and Functions in Rehearsal

The success of the rehearsal is determined by the various elements that have their respective roles and are functioned to support the operation of the rehearsal. From the available data, these roles are as: scenario manager, facilitator, evaluator, note taker, time keeper, actor and observer. The existence of this rehearsal element is a series of continuous processes towards the realization of a good rehearsal mechanism. The appointment of rehearsal elements is adjusted to their position, expertise and experience in previous rehearsals. The central and regional teams reached an agreement to appoint the elements of the rehearsal which consisted of central and regional elements. All 6 (six) Provincial BPBDs have completed their rehearsal elements and functioned according to their roles. The dynamics in the implementation of the rehearsal are determined by the supporting elements as well as the roles and functions that are simulated. These elements consist of:

- b. Scenario controller/manager: ensures the exercise takes place according to the schedule, general goals and objectives of the exercise, prepares inject scenarios when necessary to stimulate discussion of the trainees.
- c. Facilitator: arranges questions for discussion and directs the discussion according to the move in the implementation of the room rehearsal.
- d. Evaluator: evaluates the implementation of the rehearsal, to the results of the rehearsal in achieving the objectives, the main things identified by the participants, and recommendations.
- e. Minutes/note-takers: record the course of the discussion and gather input from/and by the facilitator and the after-action reviewer/evaluator team.
- f. Time keeper: ensures activities in each phase run on time and reminds facilitators of the time available.
- g. Actors: provide input from related organizations, identify matters that need to be further coordinated with other stakeholders, follow the rules of the game set by the organizers.
- h. Observer: observes the mechanism of the rehearsal and notes important things and provides written input to the organizers.

Table 4. Aspects of Elements, Roles and Functions in Rehearsal

Provincial BPBD	Elements, Roles and Functions in Rehearsal						
	Scenario Manager	Facilitator	Evaluator	Notes	Timer Keeper	Perpetrator	Observer
Aceh	Yes, according to role & function	Yes, according to role & function	Yes, according to role & function	Yes, according to role & function	Yes, according to role & function	Yes, according to role & function	Yes, according to role & function
Boast	V (idem)	V (ideum)	V (ideum)	V (ideum)	V (idem)	V (ideum)	V (ideum)
Central Java	V	V	V	V	V	V	V
Yogyakarta	V	V	V	V	V	V	V
NTT	V	V	V	V	V	V	V
West Papua	V	V	V	V	V	V	V

Attention is given to the role and function of the facilitator who plays an important role in controlling the dynamics of the space rehearsal according to the movement. The implementation of space rehearsals in the 6 (six) provincial BPBDs has carried out the roles and functions of all elements of the rehearsal in accordance with applicable rules.

4.5. Product Aspects of Rehearsal Planning

Rehearsal planning is the most important stage in the rehearsal cycle because what will be carried out during space rehearsals and post rehearsals refers to the products produced by the training design team at the planning stage. From the available data, the rehearsal planning products consist of: Rehearsal Outline Plan (RGB), Problem Inventory Matrix (MIP), Exercise Operation Plan (ROL), and Rehearsal Information Plan (RIG). The exercise designers from 6 (six) provincial BPBDs have made RGB, MIP, ROL, RIG according to the scenarios and problems agreed upon by the central and regional training design teams. In more detail can explained as follows:

Table 5a. RGB, MIP, ROL, RIG Produk Products

Provincial BPBD	Rehearsal Planning Products			
	RGB	MIP	ROLLER	RIG
Aceh	As per the Exercise directive	According to the scenario, made by the central and regional training designers	According to the scenario, made by the central and regional training designers	According to the scenario, made by the central and regional training designers
Boast	V (ideum)	V (ideum)	V (ideum)	V (ideum)
Central Java	V	V	V	V
Yogyakarta	V	V	V	V
NTT	V	V	V	V
West Papua	V	V	V	V

- 1) An Outline Plan (RGB) for the exercise has been prepared by six Provincial BPBDs based on the Training Directive. This RGB exercise contains the basis of the exercise, the main points of the implementation of the exercise and a summary of the story or scenario of the exercise being played. RGB exercises include planning the completion of tasks with a clear time-line, determining the focus of the exercise, participants, narsum, and evaluator team and so on.
- 2) A Problem Inventory Matrix (MIP) has been created and contains a description of the activities, objectives, related parties and issues that need to be discussed in each move. Problem identification becomes the basis for determining evaluation targets related to responsibilities/roles/functions that must be carried out in relation to the training scenario. MIP is used as the basis for compiling the ROL.
- 3) The Exercise Operations Plan (ROL) for room rehearsals has been prepared based on training scenarios and becomes the main control tool in carrying out room rehearsals. Contains things or issues that are the subject of discussion in the exercise, several issues (injected) in the form of questions and expected responses and references related to the things being trained. The ROL table contains: phases/activities, time, issues/materials to be discussed, questions, addressed to, expected responses, related references.
- 4) The Rehearsal Information Plan (RIG) for Posko rehearsals has been made and is the main document for the controllers in carrying out the exercise. RIG contains a collection of activities and injections that refer to training scenarios and ensure the achievement of training goals and objectives. The RIG lists the activities expected by the actors as a reaction to the problem (inject) which refers to the exercise scenario. RIG is a chronological time-line of expected actions and written events that will be entered into the game by the controller to generate or request player activity. RIG as an exercise blue-print consists of messages or events designed to test the objectives of the exercise. RIG becomes an important part for the main controller of operations-based training to control the course of the exercise.

Table 5b. Rehearsal Guide

Provincial BPBD	Rehearsal Guide Products			
	Operation Guide	Performer's Guide	Facilitator's Guide	After Action Review Guide
Aceh	Created by central and regional training designers	Created by central and regional training designers	Created by central and regional training designers	Created by central and regional training designers
Boast	V (ideum)	V (ideum)	V (ideum)	V (idem)
Central Java	V	V	V	V
Yogyakarta	V	V	V	V
NTT	V	V	V	V
West Papua	V	V	V	V

The RIG table contains: time (actual and assumptions), scenarios, problems, actions (central and regional), controllers, and activities that cause situations (bullies).As for the Rehearsal Guide Book Product, it is necessary to ensure the smooth running of the rehearsal. This guide is useful for rehearsal organizers, actors, facilitators and evaluators. There are 4 (four) kinds of guidebooks that have been made by each control team in 6 (six)

Provincial BPBDs, namely, 1) Implementation Manual; 2) Actor's Handbook; 3) Facilitator's Handbook; 4) After Action Review/AAR Handbook. In general, the guidebook is made according to the format and contains material that can guide and facilitate the implementation of the rehearsal. There are differences in the material from the guidebooks, which generally come from different scenarios and problems between provinces.

4.6. Aspects of the Mechanism of Implementing Room Rehearsals and Posko Rehearsals

All participants of room rehearsal and post rehearsal have carried out 3 (three) mechanism sessions. First, the debriefing session is given before the rehearsal is conducted which aims to provide an understanding of the material and the mechanism of the exercise with resource persons who are experts in their fields.

Table 6. Aspects of the Mechanism of Rehearsals

Provinci al BPBD	Rehearsal Implementation Mechanism					
	Room Rehearsal			rehearsal post		
	Briefing Session	Training Session	Evaluati on Session	Briefing Session	Training Session	Evaluat ion Session
Aceh	V	V	V	V	V	V
Boast	V	V	V	V	V	V
Central Java	V	V	V	V	V	V
Yogyakarta	V	V	V	V	V	V
NTT	V	V	V	V	V	V
West Papua	V	V	V	V	V	V

Second, training sessions at room rehearsals use plenary form, the role of the facilitator is very important in implementing the ROL which contains moves and problems (injects) and is supported by the controlling role. The training session at the Posko rehearsal uses a role-play form, the role of the controller is very important in implementing RIG which contains moves and problems (injects) and is supported by the role of situation-generating. Third, the evaluation session of the evaluation team presented the results of the compilation related to the implementation of the rehearsal regarding the main things that became priorities. All participants from 6 provinces participated in and carried out all sessions in the room rehearsal and post rehearsal.

4.7. Aspects of the Implementation of Space Rehearsals According to the Movement (Move) of the Events

The movement of the simulated flow of events is the stage of the process during the space rehearsal. Move is useful for guiding the discussion stage of rehearsals in responding to disaster events according to the sequence of how to act in the Disaster Emergency Management Command System procedures. According to the available data, the move in the room rehearsal has been carried out based on the Problem Inventory Matrix (MIP) and the Exercise Operations Plan (ROL) which in its implementation is guided by the facilitator's manual. In the Training Designer Training module, it is stated that there are 4 (four) stages of moves, namely: move 1 to the information phase, move 2 to the standby phase, move 3 to determine the emergency response status, move 4 to mobilize resources, and move 5 to the termination phase. Meanwhile, the move during the space rehearsal

consists of 3 (three) stages of move, namely: move 1 early warning stage, move 2 determination of emergency response status, move 3 mobilization of resources, move 4 termination stage. There is a difference in move stages between moves in conditions according to the module and moves in actual conditions during implementation where at the time of implementation of move 1, the information stage and the alert stage are combined into an early warning stage move. In the rehearsal, the move room is realized through a Focus Group Discussion (FGD). All 6 (six) Provincial BPBDs implement 4 (four) stages of move. In the rehearsal, the move room is realized through a Focus Group Discussion (FGD). All 6 (six) Provincial BPBDs implement 4 (four) stages of move. In the rehearsal, the move room is realized through a Focus Group Discussion (FGD). All 6 (six) Provincial BPBDs implement 4 (four) stages of move.

Table 7. Aspects of Movement (Move) Spatial Rehearsal Events

Movement/Move	Ideal Condition According to Module	Conditions During Implementation	Information
<i>Move1</i>	Information Stage	Early Warning	At the time of implementation stage information and alert are combined into an early warning stage
<i>Move2</i>	Standby Stage		
<i>Move3</i>	Establishing Emergency Response Status	Establishing Emergency Response Status	
<i>Move4</i>	Resource Deployment	Resource Deployment	
<i>Move5</i>	Termination Stage	Termination Stage	

There are differences in the stages of movement (moves) carried out in room rehearsals with the stages of movement listed in the book Module 03 Designer for Spatial Rehearsals where there are 5 (five) moves/moves. In Module 03, space rehearsal consists of 5 (five) movement events, namely:

- 1) *Move1* (information stage): The monitoring post sends information on early warnings or disasters that will/have occurred to local governments.
- 2) *Move2* (standby stage): The monitoring post sends information on the development of the situation to the Regional Government and the BPBD/TNI/Polri Pusdalops and the community.
- 3) *Move3* (emergency response status): The Regent/Mayor declares the emergency response status and appoints the emergency response commander to create a command structure in activating the operational plan on the basis of the contingency plan.
- 4) *Move4* (resource mobilization): The Emergency Response Command through the command post mobilizes resources at the direction of the Regent/Mayor to mobilize resources to disaster sites in emergency response operations.
- 5) *Move5* (termination/demobilization stage): The Emergency Response Command reports on field conditions regarding access to transportation, evacuation and rescue, refugee locations, vulnerable groups, health, security, economy and others for revocation of emergency response status.

During the spatial rehearsal, there are 4 (four) moves where move 1 and move 2 are made into one move, namely the information stage and the alert stage as an early warning move. The reasons for the merger are 1) because move 1 and move 2 are included in the preparedness stage where the condition of preparedness when an imminent threat occurs is included in the early warning category. 2) based on experience in the field when a disaster occurs, the regional BPBD and BMKG officials will provide early warnings to the community that include information about potential disasters and disaster preparedness status. This early warning move is broken down in detail and coherently in the ROL so that the merging of this move does not affect the smooth implementation of space rehearsals, it makes it easier for perpetrators to understand the beginning/initiation of disaster emergency response in the region.

4.8. Aspects of the Implementation of the Command Post Rehearsal according to the Movement (Move) of the Event Flow

The movement aspect of the post rehearsal is the same as the space rehearsal, so during the post rehearsal, move 1 and move 2 were merged into an early warning move. This early warning move is broken down in detail and coherently in MSEL so that the merger of this move does not affect the smooth implementation of space rehearsals, it makes it easier for perpetrators to understand the beginning/initiation of disaster emergency response in the region. The flow of events that are simulated or move is a stage of the process during the Posko rehearsal. Move is useful for guiding the response stage of rehearsals in solving disaster problems according to the sequence of how to act in the disaster emergency response command system procedure. Moves at the command post are based on the Problem Inventory Matrix (MIP) and the Exercise Scenario Master (MSEL). In the Posko rehearsal there are 5 (five) stages of move, while the move during the Posko rehearsal consists of 4 (four) move stages. There is a difference in move stages between moves in conditions according to the module and moves in actual conditions during implementation where at the time of implementation of move 1, the information stage and the alert stage are combined into an early warning stage move. At the Posko rehearsal, the move is manifested in role play.

Table 8. Aspects of Movement (Move) Event Flow of Posko Rehearsal

Move	Ideal Condition According to Module	Conditions During Implementation	Information
<i>Move1</i>	Information Stage	Early Warning	During the implementation of the information and alert stages, they are combined into an early warning stage
<i>Move2</i>	Standby Stage		
<i>Move3</i>	Establishing Emergency Response Status	Establishing Emergency Response Status	
<i>Move4</i>	Resource Deployment	Resource Deployment	
<i>Move5</i>	Termination Stage	Termination Stage	

4.9. Aspects of Evaluation of the Implementation of the Rehearsal

Evaluation is useful to find out the added value and room for improvement for the next rehearsal. Evaluation has been carried out on 4 (four) areas, namely: evaluation of the academic session, evaluation of the implementation, evaluation of the implementation of space rehearsals and evaluation of the implementation of Posko rehearsals. Evaluation is carried out by a team of evaluators from each central and regional committee. The evaluation is carried out based on a study of various indicators that have been previously determined. Evaluation is carried out to comprehensively assess the achievement of training goals and objectives.

Table 9. Aspects of Evaluation of the Implementation of the Rehearsal

Provincial BPBD	Evaluation of the rehearsal			
	Academic Session Evaluation	Evaluation of the organizer	Evaluation of the Implementation of Room Rehearsal	Evaluation of the Implementation of the Command Post
Aceh	•Evaluation of resource persons by participants : Material, presentation, fluency. Suggestions & feedback	•Support for participants, facilities, equipment, layout •Application of Health Protocol (Prokes)	•Readiness & room layout, equipment according to Prokes, •Scenario according to Renkon •Move according to ROL •Role of facilitator •Perpetrators understand SOP •Role of tasks of GDP Post	•Readiness & space, equipment according to Prokes, •Scenario according to Renkon •Move according to MSEL •Actor's activities on assignments & •Response to injections
Boast	V (ideum)	V (ideum)	V (ideum)	V (ideum)
Central Java	V	V	V	V
Yogyakarta	V	V	V	V
NTT	V	V	V	V
West Papua	V	V	V	V

The integrity of the assessment as an evaluation material is measured from the results of the review and the results of the evaluation team, which are compared with the goals and objectives of the exercise. From the evaluation will be obtained the status of the success of the exercise, identification of gaps, obstacles found as well as lessons learned. In the space rehearsal and the Posko rehearsal, four aspects have been evaluated, namely:

- 1) Evaluation of the academic session, evaluation of the resource persons by participants, evaluation of the material, presentation method, fluency and suggestions and input have been carried out.
- 2) Evaluation of the organizers, has evaluated the support for participants, preparation of facilities, equipment, layout and implementation of health protocols during rehearsal.
- 3) Evaluation of space rehearsal has evaluated: a) readiness and space layout; b) equipment in accordance with health protocols; c) scenarios and moves according to ROL; d) the

- role of facilitator; e) understanding of the perpetrators of the SOP; and f) the roles and duties of the Disaster Emergency Command Post.
- 4) Evaluation of the implementation of the Posko rehearsal, has been evaluated regarding: a) readiness and spatial planning; b) facilities and equipment according to health protocols; c) scenarios and moves according to MSEL, d) actors' activities towards the task; and e) the perpetrator's response to the problem (inject).

V. Conclusion

Planning the dimensions of the aspects of organizing space rehearsals and post rehearsals has been made collaboratively by the central and regional training design teams. Simultaneous implementation of space rehearsals and rehearsals of disaster emergency management posts in 6 (six) provincial BPBDs have been carried out in accordance with 9 (nine) aspects of comprehensive rehearsals in accordance with the rules, methods and procedures so as to show that the process of disaster preparedness training through this rehearsal has been running smoothly either at the BNPB PB Training Center.

References

- Addiarto, W., Wahyusari, S. (2018). The Effectiveness of Tabletop Disaster Exercise (TDE) as an Indoor Simulation Media to Improve Triage Ability and Referral Flow for Disaster Victims. *JI-KES: Journal of Health Sciences*, Volume 2, No. 1, Page 12-22.
- Module-03 Book of Space Rehearsal Exercise Design. (2017). Disaster Management Training Designer Training. BNPB Disaster Management Training Center.
- Module-04 Book of Command Post Rehearsal Design. (2017). Disaster Management Training Designer Training. BNPB Disaster Management Training Center.
- Dausy, DJ, Buehler, JW, & Lurie, N. (2007). Designing and conducting tabletop exercises to assess public health preparedness for manmade and naturally occurring biological threats. *BMC Public Health*. 7:92.
- Djalante, R., Garschagen, M., Thomalla, F., & Shaw, R. (2017). Disaster Risk Reduction in Indonesia: Progress, Challenges, and issues
- Heumuller, E., Richter, S., Lechner, U. (2012). Towards a framework for command post exercises. ResearchGate. Conference Papers.
- Hobbs, C., Lentini, L., Moran, M. (2016). The Utility of Table Top Exercises in Teaching Nuclear Security. *International Journal of Nuclear Security*. Vol 2. No.1, Article 8.
- Indriasari, FN (2016). The Effect of Giving the Earthquake Alert Simulation Method on Children's Preparedness in Yogyakarta. *Sudirman Journal of Nursing*, Vol 22, No. 3.
- Lloyd, A. (2017). Simulation Exercise Overview: Activities Designed To Assess, Enhance And Evaluate Preparedness. French Crisis Management Academy.
- Olson, DK, Schelle, A., Larson, S., Lindeke, L., & Edwardson, S. (2010). Using Gaming Simulation to Evaluate Bioterrorism and Emergency Readiness Education. *Public Health Rep.*, 125, 468-477.
- PAHO. (2011). Guidelines For Developing Emergency Simulations And Drills.
- Preparedex, (2018). 5 Key Benefits From Conducting Table Top Exercises <https://Preparedex.Com/5-Benefits-Conducting-Tabletop-Exercises?> Accessed August 26, 2021.
- BNPB-1 Education and Training Center. (2020). Report on the Implementation of Simulation of Mount Merapi Eruption Disaster Management during the COVID-19

Pandemic in Central Java.

- BNPB-2 Education and Training Center. (2020). Report on the Implementation of Earthquake and Tsunami Disaster Management Simulations during the COVID-19 Pandemic in Nanggroe Aceh Darussalam Province.
- BNPB-3 Education and Training Center. (2020). Report on the Implementation of Earthquake and Tsunami Disaster Management Simulations during the COVID-19 Pandemic in West Sumatra Province.
- BNPB-4 Education and Training Center. (2020). Report on the Implementation of Simulation of Mount Merapi Eruption Disaster Management during the COVID-19 Pandemic in Yogyakarta.
- BNPB-5 Education and Training Center. (2020). Report on the Implementation of Drought Disaster Management Simulations during the COVID-19 Pandemic in East Nusa Tenggara Province.
- BNPB-6 Education and Training Center. (2020). Report on the Implementation of Simulation of Earthquake and Tsunami Disaster Management during the COVID-19 Period in West Papua Province.
- Rahadi, R. (2020). Disaster Management Training Method. Planning Meeting of BNPB Training Center Simulation Exercise Designers.
- Sanjaya, W. (2013). Learning Strategy: Standard Oriented Educational Process. Jakarta: Kencana Prenadamedia Group.
- Shah, M. et al. (2020). The Development Impact of PT. Medco E & P Malaka on Economic Aspects in East Aceh Regency. Budapest International Research and Critics Institute-Journal (BIRCI-Journal). P. 276-286.
- Skryabina, E., Reedy, G., Amlot, R., Jaye, R., & Riley, P. (2017). What is the value of health emergency preparedness exercises? A scoping review study. *International Journal of Disaster Risk Reduction*, 21, 274-283
- Steward, D., & Wan, TT (2007). The Role of Simulation and Modeling in Disaster Management. *J Med Syst*. 3, 125–130.
- Thamrin, TFR (2017). Definitions of Various Terms of Disaster Preparedness Exercise. Working Paper.
- Tumbol, SS & Poli, H. (2014). Center for Disaster Management Simulation and Training: Disaster Response Design.
- Ulya, I., Kusumaningrum, BR, & Rini, IS (2020). Getting Ready for Earthquake Disaster with Tabletop Exercise for Disaster Management, *Journal of Nursing Science: Journal of Nursing Science*. Vol.8, No.1, 22-29.
- WHO (2017). Simulation Exercise Manual.