

# IMPLEMENTATION OF JUST CULTURE IN SAFETY POLICY AND SAFETY REPORTING DOCUMENTATION AT AIR NAVIGATION SERVICE PROVIDER

<sup>1</sup>DWI LESTARY, <sup>2</sup>NOVYANTO WIDADI, <sup>3</sup>MUHAMMAD KRISTIAWAN

<sup>1</sup>Politeknik Penerbangan Indonesia Curug, Indonesia

<sup>2</sup>Pusat Penelitian dan Pengembangan Transportasi Udara

<sup>3</sup>Universitas Bengkulu

<sup>1</sup>E-mail: tary@stpcurug.ac.id, <sup>2</sup>434jupiter@gmail.com, <sup>3</sup>muhammadkristiawan@unib.ac.id

## ABSTRACT

In recent years, the concept of “Just Culture” has become better understood and accepted by people employed in the aviation industry. Elimination of barriers identified by the forming of a “Just Culture” in air navigation services does not necessarily need additional regulations at the international / regional level but, first, must concentrate on appropriate implementation actions at the domestic level. This research aims (1) To review the safety policies and objectives, (2) To implement Just Culture to the safety policy and reporting documentation. This research starts with observation using gap analysis and survey using 40 questions covering key aspects of “Just Culture” and safety management systems. The results show, lack of clarity about what should be reported, how to report and what guarantees after reporting, the questionnaire result shows that Just Culture should be understood and performed by every employee. Focus Group Discussion (FGD) and interview to the top management team was held to get the best solution to overcome the existing problems related to “Just Culture” and safety reporting system. Revision to safety policy and document of safety reporting system PER036 ANSP in Indonesia is a must and 92.1 % of respondent of feedback survey agreed.

**Keywords:** *Air Navigation Service Provider, Just Culture Policy, Safety Reporting System, Safety Management System*

## 1. INTRODUCTION

Air Navigation Service Provider (ANSP) in Indonesia is determined to be an International Air Navigation Service Provider that promotes safety, security and service excellences. Those strategic should be applied consistently to achieve the existence of long term objectives, with refer to customer satisfaction through safety degree and good services on customer’s expectation also financial strength stabilization. The Board of Commissioners glad to welcome the existence of whistleblowing system, as arranged and stipulated in the Regulation of ANSP in Indonesia PER 036 year 2015. Any safety information system depends crucially on the willing participation of the workforce, the people indirect contact with hazard. In ATM organizations, these are the ATM services personnel undertaking safety-related tasks, such as Air Traffic Controllers, engineering and maintenance personnel, etc. To achieve this, it is necessary to engineer a “Reporting Culture”, to

create an organizational climate in which people are prepared to report their errors and near misses.

ANSP in Indonesia has had *Just Culture* and Safety Policy, but need adjustment based on objectives from International Civil Aviation Organization [7] and national regulation. ANSP in Indonesia does not yet have a study of what the risks or impacts of decisions, how to mitigate actions that have not yet occurred and what appropriate follow-ups the company should undertake. It is also very interesting, lack of clarity about what should be reported, how to report and what guarantees then after reporting are very important. ANSP in Indonesia learnt about how to implement all of these important things through clear stages, adopted from Europe. The thing that must be underlined is that ANSP employees feel that what must be reported is only mandatory matters related to incidents or accidents, whereas voluntary reports such as fatigue, inadequate equipment and often operational constraints are the most important to prevent the event catalyst greater future. Currently Just culture was an important

issue, where its implementation would affect a clear benefit to improve safety [1]. It is need a “*Just Culture*”, an environment of trust in which people are supported and rewarded, for providing essential safety-related information – but they are also should be clear for the line must be drawn between acceptable behavior and unacceptable behavior.

When this research starts, there is a big event of ANSP in Indonesia as an Annual meeting for headquarters and all branches was planned to be held. This meeting was conducted as a mandate from ICAO and DGCA, the researcher made the preparation of the meeting and observe the conduct of the meeting. The intern started by studying relevant documents, assisting the daily activities related to safety matter. Its starting with safety promotion and communication performances related to *Just Culture* and other matters which will be discussed further. This will then become a legacy and can be used by ANSP in Indonesia in order to make overall system improvement.

#### A. Theory Review

##### 1. Creating and Implementing a Just Culture

Based on “A Roadmap to a Just Culture: Enhancing the Safety Environment” explains how to create, implement and maintain a Just Culture in eight steps. We can manage the organizations and the staff for worst case scenarios, the organization will use for each step. There are also other steps to help implement related at the same time.

For instance, organizations must decide whether in the event of an incident a controller should be withdrawn from duty irrespective of whether he/she is believed to be at fault. We need to consider carefully because the sooner a report is followed up after the incident, the more precise the results will be obtained. We should implement the eight steps below at the same time, but we have to consider each step is important and needed, an initial, partial, implementation is better than taking no action and all eight steps are as follows:

- a. Reduce the Legal Impediments to reporting and assessment of safety occurrences.
- b. Reporting Policy and Procedures Development.
- c. Methods of Reporting.
- d. Determine Roles and Responsibilities, Tasks and Timescale.
- e. Develop Reporting Form.
- f. Develop Template for Feedback to Potential Users.
- g. Develop a Plan for Educating the Users and

Implementing the System.

- h. Developing and Maintaining the Right ‘Culture’.

A number of additional issues concerning the ‘cultural’ aspects of reporting are necessary in order to maintain motivation to report, such as trust between the reporters and their managers. the reporting system must really function to maintain the existing system.

##### 2. Regulation related to Just Culture and Reporting Culture

###### a. The ICAO Position

The ICAO stated very clearly in Annex 13 [8], Section - Non-disclosure of Records - Para. 5.12: The State conducts the investigation of an accident or incident, shall not make the following records available for purposes other than accident or incident investigation, unless the appropriate authority in that State determines that the impact exceeds the current results. This, and then used for future investigations:

- 1) All statements that can be used as investigation data from the people concerned;
- 2) Communication between people involved in aircraft operations;
- 3) Medical information about people involved in the accident or incident;
- 4) Sound recordings and cockpit voice transcripts from these recordings; and
- 5) Opinions or information disclosed, including flight recorder information.

Based on Para. 5.12.1. Relevant records must be included in the final report or its attachments only if they are related to the analysis of accidents or incidents, otherwise records that are not relevant. It is very important that the information contained in the notes listed above, including information provided voluntarily by the people interviewed during an accident or incident investigation, can be used. If the information is distributed, then in the future, it may no longer be openly disclosed to investigators. Lack of access to such information would deter the investigation process and seriously affect flight safety.

As for the subject of non-disclosure of certain accident and incident records, ICAO has issued a Government Letter (dated January 31, 2002) which attaches Assembly Resolution A33-17 (Ref: AN 6 Copies of the letter and attachments were circulated for

information and references at SRC13 in February 2002. The letter was intended as Resolution A33-17, where the ICAO Assembly required "States Parties to discuss the need to enforce laws, regulations and support the need for protection and certain incidents of BANK 13, to reduce barriers to accident and incident investigations".

Assembly Resolution A35-17 [10] has discussed the protection of data from safety data collection/processing systems. Provide an urgent decision to the Council to develop appropriate legal guidelines that will help the State to enact national laws/regulations effectively protect information from safety data collection systems, both mandatory and voluntary, while allowing proper judicial administration in the State. The resolution also requires the State to examine existing laws and adjust as necessary.

ICAO organized a Directors General Conference on a Global Strategy for Aviation Safety in March 2006. The Declaration from the conference states, inter alia, that the DGCA's committed to reinforcing the global aviation safety framework by:

- 1) Sharing as soon as possible appropriate safety-related information among States, all other aviation stakeholders and the public, including the disclosure of information on the results of their safety oversight audit done as quickly as possible and, in every aspect, not later than March 23, 2008;
- 2) Promoting a "Just Culture".

#### b. The European Union Position

It is known that The European Union has issued Directives that form a Legal basis for mandatory occurrence reporting in EU States [4]. The specific Directives are:

- 1) Directive 94/56/EC: Deals with establishing the fundamental principles governing investigation of civil aviation accidents and incidents as well as the principles of separation between the safety regulatory authorities.
- 2) Directive 2003/42 / EC: Dealing with reporting in civil events. This instruction states that the mandatory requirements for all aviation safety data, including air navigation safety data. Under Article 6.1 of the Directive, States are required to request assistance in data that makes all safety related information stored in [their]

databases available to related parties from then, the national baseline agreed above must be in accordance with the European Commission ECCAIRS baseline, and also Article 6.3 states that the party invites the supporter to use.

#### 3) Directive 2014/376/EC:

- a) Supporting safety culture good practice
- b) Definition of Just Culture, it is also based on Sydney Dekker that introduced A culture in which front-line operators or other people are not punished for actions, negligence or decisions made by them because they are in accordance with their experience and training, but apply fairly if they commit negligence, deliberate violations and destructive actions will not be tolerated.

#### c) Organizations must implement a just culture

[1] Each organization established in a Member State shall, after consulting its staff representatives, adopt internal rules describing how 'just culture' principles are guaranteed and implemented within that organization.

[2] Employees and contracted personnel may report to the Member State alleged infringements of these rules.

#### c. Indonesian National Regulation

Civil Aviation Safety Regulation [3] about Safety Management System is stated very clearly in Para 19.71 that Each Service Provider shall, after consulting its staff representatives, adopt internal rules describing how "Just Culture" principles, in particular the principle referred to paragraph (h) of this section, are guaranteed and implemented within that service provider.

#### B. Prior Research

Based on Prof. James Reason, 2007, Just Culture describes as an atmosphere of trust where people are encouraged, even rewarded, for providing necessity safety-related information, but they are also clear about the line between acceptable and unacceptable behavior [6]. An effective reporting culture related on how the organization seeing blame and punishment. Neither feasible nor desirable of "blame culture", most people desire some level of accountability when a failure occurs. In a Just Culture environment, the

culpability line is clearly drawn. Professor James Reason in 1997 describes that organizations need to realize and acknowledge that people at the incisive end are not usually the instigators of accidents and incidents and that they are more likely to their bad situations which have been thriving over a long period of time. In order that organizations learn from incidents, it is necessary to recognize that human error could not be totally eliminated, it is only moderated. In order to overcome human errors organization need to change the conditions of working environment.

Based on International Civil Aviation Organization (ICAO) statement [11], every council should develop appropriate legal guidance that will assist States to enact national laws/regulations to effectively protect information from the system of safety data collection, both mandatory and voluntary, while allowing the proper administration of justice in the State. The resolution also urges States to verify their existing legislation and adjust as necessary.

Indonesia Civil Aviation Safety Regulation stated very clearly in Para 19.71, [3], that Each Service Provider shall guarantee and implement, after consulting its staff representatives, adopt internal rules describing “Just Culture” fundamental as indicated in paragraph (h) of this section.

Sidney Dekker, 2016 gives two views on human error in his book, “The old view”, sees human error as the cause of incidents. To give action to incidents then, it is needed to do something about the particular human involved” [2]. Human error often an effect of trouble deeper in the system. Organization cannot simply blame the system when things go wrong. The new perspective would seem almost incompatible with holding people accountable.

At this point, Sydney Dekker makes a step which describes the essentials of what a Just Culture where systems are not enough. Organization should look at the system where people working and improve it to the best abilities [11]; [12]; [13]; [14]. But safety-critical work is ultimately conducted through relationships between human beings or through direct contact of some people with risky technology. At this incisive end, there is often some discretionary space into which no system improvement can completely reach. Rather than individual versus systems, the organization should begin to understand about the relationships and roles of people in systems.

## 2. RESEARCH METHOD

### A. Place and time

This research was held in ANSP in Indonesia who manages all of Indonesia’s airspace which is divided in 2 (two) Flight Information Regions (FIR) with total width of 2,219,629 km<sup>2</sup>, width region of 1,476,049 km<sup>2</sup>, and total air traffic of 9,887 movement/day. Operation areas of ANSP in Indonesia covers whole airspace region of Indonesia except zone A where is still managed by Singapore. The research was conducted from April to August 2018.

### B. Sampling Technique

This research using survey taken about 40 % sample of population in 229’s air navigation service branch in all Indonesian airports, 180 employees from the population.

### C. Data collection

The questionnaire was made in form of Likert scale (strongly agree, agree, neutral, disagree, and strongly disagree). There distributed questionnaire of 40 questions / statements covering key aspects of “Just Culture” and safety management systems. Literature study using the checklist to identify the gaps in the system [7].

### D. Data analysis method

#### 1. Gap Analysis

ICAO [7] provides checklist to assist both existing and new system in establishing of “Just Culture” in Air Traffic Management Safety Reporting System if gaps exist in their program, or improvements can be made. The items on the checklist are designed to identify gaps in the system from achieving their goal of improving safety. A notable thing on this Gap Analysis checklist that it does a full of checklist for greater needs because ANSP in Indonesia needs that data. 4 important areas related to the research topic are state in the table below.

Table 1. ICAO Doc 9859 Gap Analysis Template Used

Component 1 - Safety Policy and Objectives							
Element 1.1 - Management Commitment and Responsibility							
No.	Aspect to be analyzed or question to be answered	Answer	Indicate	Status of implementation	Target Date	Reference Document	Action Required
1.1-1	Is there a safety policy in place?	Yes					
		No					
		Partially					
1.1-2	Does the safety policy reflect senior management's commitment regarding safety management?	Yes					
		No					
		Partially					
1.1-3	Is the safety policy appropriate to the size, nature and complexity of the organization?	Yes					
		No					
		Partially					
1.1-4	Is the safety policy relevant to aviation safety?	Yes					
		No					
		Partially					
1.1-5	Has the safety policy been signed by the accountable executive?	Yes					
		No					
		Partially					
1.1-6	Has the safety policy been communicated, with visible endorsement, throughout the organization?	Yes					
		No					
		Partially					
1.1-7	Is the safety policy being periodically reviewed to ensure that it remains relevant and appropriate to the organization?	Yes					
		No					
		Partially					
1.1-8	Is there a policy in place that provides immunity from disciplinary action for employees that report hazards, incidents or accident?	Yes					
		No					
		Partially					
1.1-9	Are conditions under which punitive disciplinary action would be considered (e.g. illegal activity, negligence or willful misconduct) clearly defined and documented?	Yes					
		No					
		Partially					
1.1-10	Is the non-punitive reporting policy widely understood within the organization?	Yes					
		No					
		Partially					

Using the above gap analysis, I interviewing the mentor and SQA officer then filled in the data. The result of the gap analysis were collected and summarized as follows:

a. Just Culture Policy Analysis

Document of safety reporting system already listed “Just Culture” policy, but it does not explain the definition clearly. It tends to

non-punitive actions employed by the employees. Things to be explained about “Just Culture” policy should be listed on the document of the reporting system, since there is a need to review “Just Culture” policy in accordance with its objectives and that reference from other companies or parties can be utilized.

#### b. Safety Policy Analysis

Safety Policy was provided but it has not covered all elements or suggested objectives [7]. There should be a review to reinforce policies and commitment that the management develops to all employees for the sake of improvement and perfection of company safety. Safety policy has not been updated since ANSP in Indonesia was established. There were a small percentage of ANSP employees who doubt the existing safety policy. Safety policy did not explain in detail how the process of determining the culpability that will be taken by Accountable Executive (Management) to Complainant (reporter) and reported. There was not clear understanding between acceptable behavior and unacceptable behavior either in the existing reporting system, and this will be reviewed and updated.

#### c. Safety Reporting System Flow Analysis.

ANSP in Indonesia reporting system uses a web-based safety reporting application system, also known as the Electronic Form for Occurrences Report (EFFORT) [5]. It is a reporting application system and safety database built in order to provide a formal way to actively collect safety event data which can be used as information about the safety performance of ANSP in Indonesia. So far, this EFFORT Safety integrated system accommodates mandatory reports. The existing voluntary reports were not as clear as what should be reported. The absence of voluntary reports, for example, were related to excess work hours, fatigue, and other system constraints.

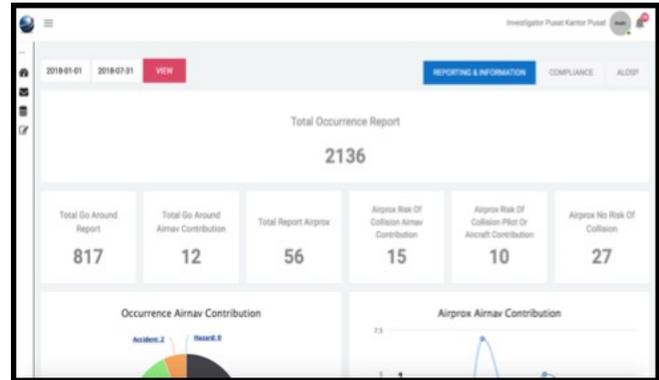


Figure 1. EFFORT Safety Integrated Dashboard I  
(Source: ANSP in Indonesia Website)



Figure 2. EFFORT Safety Integrated Dashboard II  
(Source: ANSP in Indonesia Website)

The reporting system in ANSP only covers gathering report data from each branch and airlines. Next, there has not been feedback from the report having been received. Additionally, it has not yet reached the stage of risk collection and mitigation procedure.

#### 2. Just Culture Survey

This method should need more respondents, because it is needed all responses from ANSP in Indonesia employees, especially ATCOs and ACOs as front liners. But this is also comparable to the need for a long time to get overall results. The following respondent data can be presented:

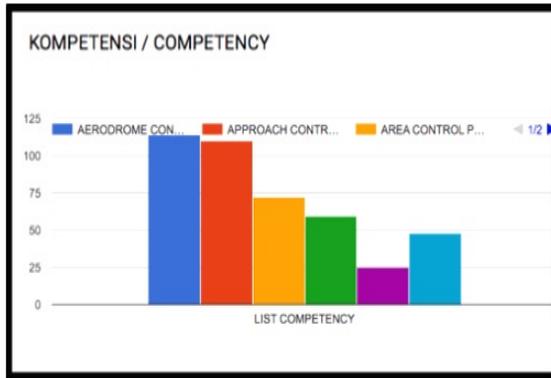


Figure 3. Competency of “Just Culture” Survey’s Respondents  
(Source: Resume of Just Culture Survey)

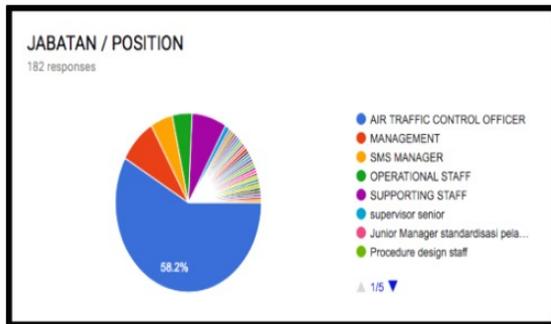


Figure 4. Position of “Just Culture” Survey’s Respondents  
(Source: Resume of Just Culture Survey)

a. Just Culture Policy Analysis

The survey has provided me with valuable information and the results will be used over the next years to help prioritize the tasks in the development of safety culture and SMS promotional material and in the performance of safety oversight of the aviation industry in Indonesia. It is important to emphasize, however, some pertinent points about the survey results:

- 1) Respondents demonstrated a strong knowledge of Safety Management Systems and their own personal role in ensuring an effective system.
- 2) There is evidence of a generally positive safety culture throughout the industry, representing a firm foundation for safety culture.
- 3) All respondents, from management to line operations, stated their commitment to safety and saw safety as a personal responsibility.

- 4) Respondents understood the need to report incidents and learn from them as an organization, to improve safety.

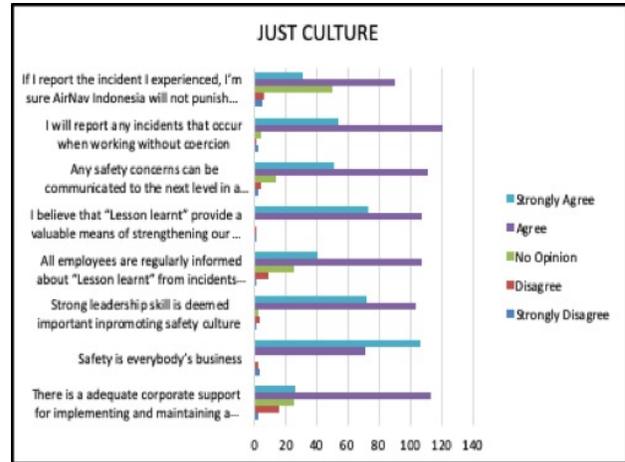


Figure 6. Questionnaire Results related to Just Culture Policy I  
(Source: Resume of Just Culture Survey)

As one would expect, the results also highlighted areas where improvements can be made based on ICAO [7].

For example:

- 1) The need for effective and frequent communication between operational staff and management is paramount in dealing effectively with safety concerns and the responses suggest that there is scope for improvement in this area.
- 2) There is a strong personal belief in the importance of hazard identification and reporting. Subsequent risk management should happen more swiftly and effectively based on the results.

Some respondents felt that their organizations were encouraging enough and supportive to staff when they raised safety concerns. Another issue to arise under the safety culture theme is that the safety culture will vary across different functional areas of a single organization. Some highlighted that their area had an excellent safety culture but that in other areas of their organization the SMS safety culture was effectively non-existent and was not promoted.

There were a large number of comments relating to question 40 of the survey ‘Our safety culture is excellent and requires no further improvement.’ Respondents made the point that while their organization’s SMS may be excellent there is always room for

improvement. The comment ‘Just Culture should be understood and performed by every employee, Just Culture needs to be embedded and implemented in daily work, because safety is not a job but a necessity’ is a typical example of the responses received.

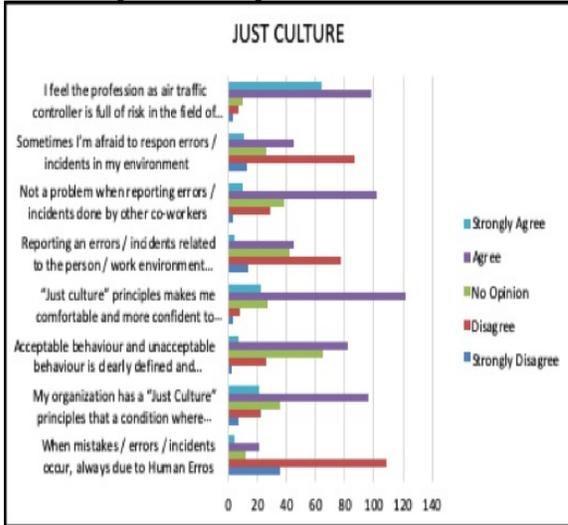


Figure 7. Questionnaire Results related to Just Culture Policy II

(Source: Resume of Just Culture Survey)

Respondents’ responses revealed interesting facts. Some employees were in doubt on what to report, how to file a report and how the directors of the company should provide guarantee to the report having been delivered. Respondents did not know either that “Just Culture” is an atmosphere of trust in which people are encouraged, even rewarded, for providing essential safety-related information – but in which they are also clear about where the line must be drawn between acceptable behavior and unacceptable behavior [6]. It means that they should understand that repeated and intentional mistakes will result to punishments.

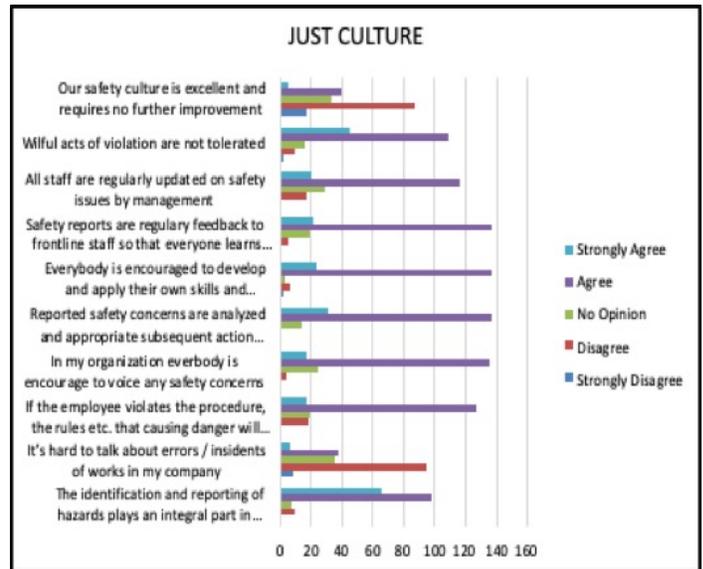


Figure 8. Questionnaire Results related to Just Culture Policy III

(Source: Resume of Just Culture Survey)

b. Safety Policy Analysis

Most of the respondents strongly understood that safety is the most important part, but they also told that leaders’ and implementers’ commitment are needed to help succeed the program. For them, punishment & reward, continuous supervision, added with various activities such as safety corner, safety review meeting is very important.

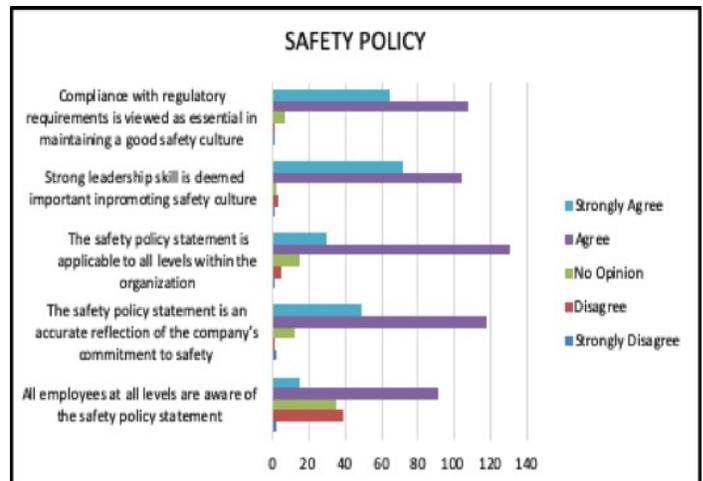


Figure 9. Questionnaire Results related to Safety Policy I (Source: Resume of Just Culture Survey)

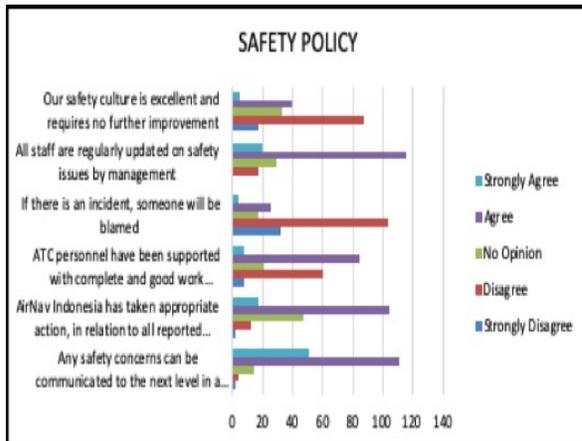


Figure 10. Questionnaire Results related to Safety Policy II  
(Source: Resume of Just Culture Survey)

In addition, there is a need to conduct socialization on the knowledge and the importance of Safety Policy, from the top level to the bottom. This is because safety aspect is often inversely proportional with financial aspect. For example, the officer needs regeneration of new devices but the company can only afford to buy less adequate equipment for operations, in which if there is an error, users will potentially be victims. Improvements on all fields are still being conducted by ANSP in Indonesia. Regarding knowledge about aviation world, employees commented that it is better to conduct a lecture in each branch regularly. They also said that it is also better to conduct some sort of refreshing about lessons that the employees have ever got during their study.

c. Safety Reporting System Process Analysis  
EFFORT Safety Integrated system already integrated with compliance and investigation, but follow-up on the stage has not really run. Therefore, in the next new safety reporting system manual will also be solutions or concepts of improvement in the future.

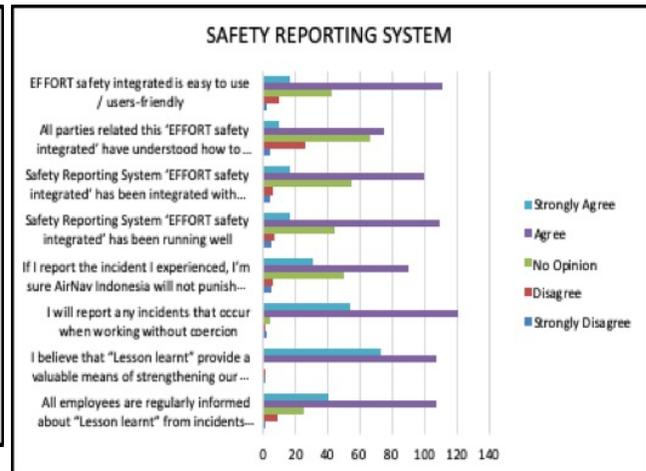


Figure 11. Questionnaire Results related to Safety Reporting System I  
(Source: Resume of Just Culture Survey)



Figure 12. Questionnaire Results related to Safety Reporting System II  
(Source: Resume of Just Culture Survey)

As explained, users of reporting system owned by ANSP in Indonesia got less knowledge and understanding on how to use such system. They, on the other hand, think that data filling might only doing by Safety Manager of each branch, and the item reported only related to accident and incident. Meanwhile, in accordance with the message from ICAO [7] and for the purpose of mitigation towards future dangers, a simple report such as tired and workload is important to do. Socialization on Effort Safety Integrated is expected to be re-conducted in all branches, on how to use it and it should be informed that any report will be analyzed and suitable follow-up actions will be conducted in which

feedback will be regularly distributed to *frontline staff*. Many respondents said they still did not know how to use EFFORT Safety Integrated System which is a good reporting system that very user-friendly and easy to use. Instead, there were most employees who have never opened this system.

### 3. RESULTS AND DISCUSSION

#### A. Assessment of Possible Solution

The result of analysis and discussion with SQA Division team suggested that there should be a review or important discussion regarding how to improve the Air Traffic Management Safety Reporting System as a whole, starting from improving the policy of the company and how ANSP in Indonesia handles blame and punishment as to guarantee the reporter and reporter for actions taken. In addition, a good safety reporting system that accommodates user needs will be the focus of the system being built. The following below will explain how the solutions to each part of the improvement become SQA Division's concern:

##### 1. Just Culture Policy

I made a new draft of Just Culture policy that was discussed with the mentor and the SQA division team. This draft had been taken into consideration in reference to the development of international standards. It is expected that with this new policy, all employees can easily understand and undergo with "Just Culture" in their daily lives.

##### 2. Safety Policy

Similar to "Just Culture" policy, safety policy is the main foundation as the commitment from top level to bottom. This will also be reviewed and then socialized. Workshop, seminar, and training can be conducted to promote Just Culture and Safety Policy. Yet, it will be explained why it cannot be conducted by ANSP in Indonesia for the time being.

##### 3. Air Traffic Management Safety Reporting System

The result of the discussion with mentor also suggests that the intern will contribute to the development of safety reporting system documents based on the ICAO standards and Indonesia's regulations, in which the development aims to increase the company's progress towards safety. To adopt "just culture", the organization should be cleared with all staff, because successful safety

management system relies on the knowledge and expertise of front-line staff [1].

#### B. Implementation of Just Culture in Safety Policy and Safety Reporting Document

The results obtained from the research were document development. The new "Just Culture" Policy and Safety Policy in ANSP in Indonesia will be foundation and commitment to the existing system, in which the document of safety management manual in ANSP in Indonesia will be completed with culpability decision including acceptable behavior and unacceptable behavior criteria. Safety reporting system manual will be equipped with processing of occurrences reports and using of the data, more occurrence report forms, request for information form, follow up and feedback from the significant report.

##### 1. ANSP in Indonesia Just Culture Policy

The new Just Culture draft was felt to accommodate the needs of all ANSP in Indonesia employees as a result of the feedback questionnaire distributed to all branches and then submitted by the mentor to the Board of Directors. Just culture policy is like the mandate of ICAO which must be renewed and always communicated to all employees. This is also a survey conducted by Euro control of ANSP in Indonesia in May 2018, and in line with what was done by the Intern before that survey.

##### 2. ANSP in Indonesia Safety Policy

The new Safety policy draft was also felt to accommodate the needs of all ANSP in Indonesia employees as a result of the feedback questionnaire distributed to all branches and then submitted by the mentor to the Board of Directors. This is also a survey conducted by Euro control of ANSP in Indonesia in May 2018, and in line with what was done by the Intern before that survey.

##### 3. Document Development (Commitment, Information and Guidance on Mandatory and Voluntary Occurrence Reporting to ANSP in Indonesia)

Aviation safety occurrences report is vital to prevent of accidents [6]. It contributes to understand where safety risks are placed in the aviation system and helps decision makers in organizations and competent authorities to adopt relevant measures. The information and safety intelligence are needed to support safety improvement in the industry. It relies

on individuals reporting occurrences when they happen. The realities of aviation safety issues cannot be properly understood and addressed without it. Safety occurrences reports by all personnel contribute to the prevention of accidents. Their role is fundamental to ensure the safety of aviation activities within the organization that employs them or uses their services, but also more generally in the overall ANSP in Indonesia Safety Reporting System. The development of PER 036 is important, as demands from international and national standards rules also require a review of all existing regulations. As long as the company is established, there has never been a renewal of this PER 036. When the intern did analysis of the existing problems, there were also problems with the ANSP in Indonesia Safety Reporting System Process. Here are some things that will be a concern for updating of PER 036:

a. Processing of Occurrences Reports and Use of the Data

Processing of occurrences reports and use of the data must be carried out as the rules stated [4]. Even though it may not be the first, any person specified in the legislation should report any reportable event of which they have positive knowledge, unless they have good reason to believe that appropriate details of the occurrence have been or will be reported by someone else. An occurrence that able to report in relation to an aircraft means any incident that endangers or which would endanger an aircraft, if not corrected, its occupants or any other person. It is should also be submitted on any occurrence that involves. A defective condition or unsatisfactory behavior or procedure which did not immediately endanger the aircraft but would create a hazard as if it continues uncorrected, or repeated in similar or different circumstances. It is of great importance to the success of the scheme that the reporters keep firmly in mind, when deciding whether or not to submit a report, the concept of 'endangering' or 'potentially endangering', as used in the above definition. The occurrence reporting intend to monitor, disseminate and record for analysis, critical or potentially critical safety occurrences. Normal flow of day-to-day defects/incidents is not intended to collect and monitor. Even Procedures and systems already exist to carry out this function the latter still an important part of the overall

flight safety task. ANSP in Indonesia comprise industry responsibilities monitored overall. Systems also provide the necessary records for statistical purposes when appropriate.

In relation to all reported occurrences:

- 1) Evaluates each occurrence report received.
- 2) Decides which occurrences require investigation by the Safety and Quality Assurance (SQA) Division in order to discharge the SQA's functions and responsibilities.
- 3) Makes such checks as it considers necessary to ensure that the organization involved is taking any necessary remedial and preventative action in relation to reported occurrences.
- 4) Takes such steps as are open to it to persuade foreign aviation authorities and organizations to take any necessary remedial and preventative action in relation to reported occurrences.
- 5) Assesses and analyses the information reported to it in order to detect safety problems which may not be apparent to individual reporters.
- 6) Makes available the information derived from occurrence reports to the industry.
- 7) Makes available the results of studies of the data to those who will use them for the benefit of air safety.
- 8) Where appropriate, issues specific advice or instructions to particular sections of the industry.
- 9) Where appropriate, takes action in relation to legislation, requirements or guidance material.

b. Occurrence Report Forms

In order to facilitate consistent reporting and subsequent storage and analysis of data, these new standard Occurrence Report Forms, designed in consultation with mentor and learned from State Safety Program (SSP) other country, are available. ANSP in Indonesia may wish to use an in-house report format designed to meet its own system requirements. However, in such cases, the official report to ANSP in Indonesia shall be transmitted by using the ANSP in Indonesia occurrence Report Form.

The standard occurrence report are :

- 1) AIRPROX Occurrence Report Form
- 2) Flight Occurrence Report Form
- 3) ATS Occurrence Report Form

- 4) Dangerous Goods Occurrence Report Form
- 5) ATS AIM Occurrence Report Form
- 6) Aerodrome Occurrence Report Form
- 7) Bird Strike Occurrence Report Form
- 8) Technical Occurrence Report Form
- 9) ATS Engineering Occurrence Report Form

c. Request for Information Form

To accommodate user needs for other system information, ANSP in Indonesia will also provide requests for information forms. Follow Up and Feedback from the Significant Report. Follow up and feedback from the significant report must be carried out as the rules stated. The employee’s supervisor will review the report, determine if it meets all criteria for acceptance and notify the employee. The employee’s supervisor is responsible for contacting the Safety Division immediately for review if the report is not accepted. Concurrence from the SQA division is required prior to the non-acceptance of a report. The SQA division will record and review all reports submitted under this program.

The SQA division will accomplish a monthly review of corrective actions. All long-term changes to procedures and policies will be added to the audit program and become permanent evaluation items for future audits. A summary of employee reports received under this system will be presented to the Board of Directors Safety Committee quarterly. Summary information will also be shared with employees regularly.

4. Validation of the Solutions against Initial Needs

I drafted a feedback questionnaire of 20 questions / statements covering the results from “Just Culture” survey. The feedback survey form distributed to all branches in order to get assessment towards the objective purposes of the research. They are all well received by all ANSP in Indonesia employees. There is validation from safety expert accommodated by three Managers and Head of Quality and Safety Assurance Division. This survey is match to the needs of existing resume, where there were follow-up from the intern after the previous questionnaire was distributed. Among them, to review the Just Culture Policy and Safety Policy listed on

Safety Management Manual ANSP in Indonesia.

This is, because, some additional statements or comments from respondents are of concern to the intern, such as: When performing voluntary reporting of an action, how the policy will be done by management. The most important thing is, I conduct review on reporting system Per 036 ANSP in Indonesia, in which there will be a concept of processing occurrences reports and use of the data. This is because a good reporting system must be followed up and provides feedback to the reporter and the person being reported. From 38 respondent, 92,1 % agree with a new Safety Reporting System concept (PER 036) that summarized the resume of respondents and linked to the concept of System Reporting System based on Indonesian National Regulation.

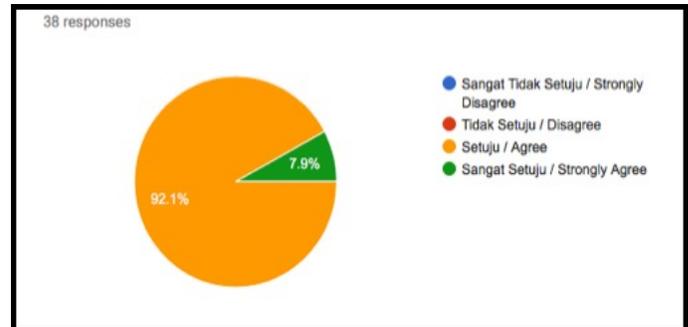


Figure 13. Feedback Questionnaire Revision PER 036 (Source: Resume of Feedback Questionnaire)

71.7% respondent agree that a new Safety Policy, it is stated that ANSP in Indonesia is committed to “Ensure that all our staff are provided with adequate and appropriate training, are competent in safety matters, and are allocated only tasks commensurate with their skills in delivering the air navigation services”.

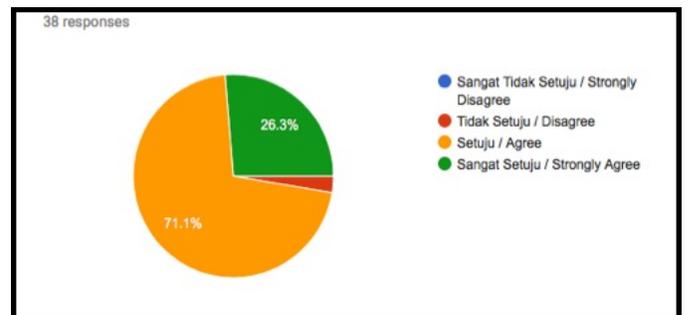


Figure 14. Feedback Questionnaire Results Revision Safety Policy (Source: Resume of Feedback Questionnaire)

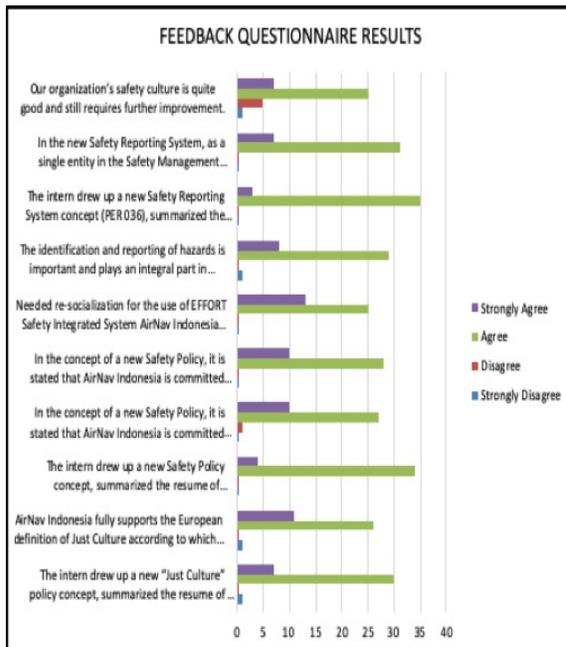


Figure 15. List of Feedback Questionnaire Results  
(Source: Resume of Feedback Questionnaire)

#### 4. CONCLUSION

A number of significant comments address the subject of what should be reported mandatorily and voluntarily, as sometimes voluntary reporting is likely to be feared will have an impact on punishment. Employees wished conditions in which everyone will not be punished for their acts, omissions and decisions resulting from limited knowledge and training they have required. In addition, socialization or SMS training activities are considered very important to distinguish acceptable and unacceptable behavior in accordance with the understanding of "Just Culture" itself. Because, in principle, voluntary reporting will have an excellent impact when properly processed as "Lessons Learnt" which is a valuable tool for strengthening our safety culture.

Based on the results of the discussion of ANSP in Indonesia safety reporting system, accident/incident reporting must be simple, accessible to all personnel involved in safety-related duties and commensurate with the size of the service provider. In addition, procedures are expected to ensure that hazards/threats identified or uncovered during incident/accident investigation processes are appropriately accounted for and integrated into the hazard collection and risk mitigation procedure. From the results of the discussion as well, the SQA division team in the

future would try to involve the use of an objective risk analysis tool in identifying hazards and risk mitigation.

#### ACKNOWLEDGEMENT

We would like to express our special thanks and gratitude to Director Politeknik Penerbangan Indonesia Curug, Indonesia, Pusat Penelitian dan Pengembangan Transportasi Udara and Rector Universitas Bengkulu who gave us the support to do this wonderful project. This project was funded independent. Secondly, we would also like to thank our friends in who helped us a lot in finalizing this project within the limited time frame.

#### REFERENCES:

- [1] Amalia, D., "Promoting just culture for enhancing safety culture in aerodrome airside operation", Journal IJSTR, Volume 8, Issue 10, October, 2019
- [2] Dekker, S., "Just Culture: Balancing Safety and Accountability 2nd Edition", Taylor & Francis Ltd, 2016
- [3] CASR 19, "Safety Management System", Indonesia, 2016
- [4] EUROCONTROL, "EAM 2/GUI 6 Establishment of Just Culture principles in ATM Safety Data Reporting and Assessment", Edition 1.0, Safety Regulation Committee, 2006
- [5] EFFORT, "Safety Integrated Data", 2018
- [6] GAIN Working Group E, "A Roadmap to a Just Culture: Enhancing the safety environment", 2004.
- [7] International Civil Aviation Organization, "ICAO Doc 9859 3rd Edition – Safety Management Manual, 2013
- [8] International Civil Aviation Organization, "ICAO Annex 13", 2011
- [9] International Civil Aviation Organization, "ICAO Annex 19", 2013
- [10] International Civil Aviation Organization, "ICAO A35-17", 2004
- [11] Irmayani, H., Wardiah, D., & Kristiawan, M. (2018). The Strategy of SD Pusri In Improving Educational Quality. *International Journal of Scientific & Technology Research*, 7(7).
- [12] Khasanah, U., Kristiawan, M., & Tobari. (2019). The Implementation of Principals' Academic Supervision In Improving Teachers' Professionalism in the State Primary Schools. *International Journal of*

- Scientific & Technology Research*, 8(8).
- [13] Tobari., Kristiawan, M., & Asvio, N. (2018). The Strategy of Headmaster on Upgrading Educational Quality In Asean Economic Community (AEC) Era. *International Journal of Scientific & Technology Research*, 7(4).
- [14] Wandasari, Y., Kristiawan, M., & Arafat, Y. (2019). Policy Evaluation of School's Literacy Movement on Improving Discipline of State High School Students. *International Journal of Scientific & Technology Research*, 8(4).