

## Improved System Information on the Job Training (SIOJT) Based on System Development to Improve Services at the Air Transportation HR Development Center

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### Abstract

*The Air Transportation Human Resources Development Center (PPSDMPU) needs changes in the implementation of services, both services that directly intersect with the community or which are services to the agency itself and agency partners. In this Action Change, services are provided to their agencies, namely the Air Transportation HR Development Center (PPSDMPU), Aviation Polytechnic, and also to stakeholders (Airnav Indonesia, PT. Angkasa Pura I (Persero), PT. Angkasa Pura II (Persero), Implementing Units Airport/ UPBU) and Directorate of Aviation Navigation. Services related to the Development of the OJT Information System (SiOJT) which have been regulated in the OJT Guidelines have been ratified in the Decree of the Head of the Air Transportation HR Development Center.*

### Keywords

air transportation; Pt  
Angkasa Pura; services  
development



## I. Introduction

In the era of globalization and reform as it is today, we are facing or carrying out increasingly complex development, as a result of the development of development and progress of science and technology that is increasing rapidly as well as changes in the global environment that includes the development of human resources, especially the ability of the State Apparatus in implementing development (Sophia, 2017). The competence of the state civil apparatus (ASN) has a full role in answering dynamic challenges and changing times. These competencies can influence and have an impact bad on organizational performance if the competencies possessed by ASN are not developed. The State Civil Apparatus (ASN) in Indonesia is a reflection of the condition of the bureaucracy in Indonesia

Indonesia, those improvements in the ASN body are an urgency to reduce obstacles in realizing the vision of Indonesia 2045. In response to this, the Government presents a breakthrough, namely "Smart ASN" as a strategy in Human Capital Management as well as preparation for entering the era of digital. Because according to Engkun (2018) one of the biggest contributors to low effectiveness.

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)

The government in Indonesia is due to the low quality of its apparatus resources, mental attitude government officials who do not carry out public services properly make the Indonesian nation slumped and far behind other ASEAN countries such as Singapore, Malaysia and even Vietnam and the Philippines.

Therefore, in the context of implementing Regional Government by the mandate of the Law, In 1945, the Regional Government regulates and manages its government affairs according to the principle of autonomy and assistance tasks, which are directed at accelerating the realization of community welfare through service improvement, empowerment, and community participation as well as increasing competitiveness regions by taking into account the principles of democracy, equity, justice, privilege, and specificity an area within the system of the Unitary State of the Republic of Indonesia, then for efficiency and effectiveness local government The government issued Law Number 23 of 2014 concerning Local Government, but this is not an obstacle the creation of quality civil servants. Based on one of the programs to acquire resources quality human resources. This program is considered quite good because it can improve the ability of employees owned by the government so that with the skills acquired during the education of these employees can help the government achieve government goals and be able to sustain competitiveness. education level of employees at the Personnel Board and Human Resource Development Dumai City is dominated by the level of education Starta One (S1) as many as 14 (46.66%) people from 30 existing employees, it can be interpreted that support existing knowledge, abilities, and competencies in the Agency for Personnel and Resources Development Human Resources in carrying out their main tasks and functions are quite good (BKPSDM, 2021)

OJT is carried out in every semester 3 and semester 5 where the proposal for OJT is carried out 2 (two) times a year and each proposal from 6 (six) Aviation Polytechnics (PPIC, Poltekbang Medan, Poltekbang Makassar, Poltekbang Surabaya, Poltekbang Palembang , Poltekbang Jayapura) with a total The number of cadets that will be deployed in  $\pm 59$  OJT locations is around 500 cadets. This is carried out by 1 (one) employee in the PPSDMPU Education Program Sub-Section to disseminate the proposed OJT location for each cadet to the OJT location destination, namely Stakeholders. Then the proposal will be processed and approved by the Stakeholders and submitted back to PPSDMPU for later validation and approval from the Directorate of Aviation Navigation (specifically for Air Traffic Services competence). The submission process so far takes about 2 (two) months from the time the data is received by PPSDMPU until the data is returned to the Aviation Polytechnic. Meanwhile, with the Change Action plan to be carried out, the process is estimated to be completed within 1 (one) month.

The OJT application process is quite long with limited human resources who process the application, so we need a system that can simplify and speed up the implementation process and without having to add human resources in its implementation. So that the other main tasks in the Education Program Sub-sector can also run optimally. Action Changes that will be carried out are building an information system (SiOJT) related to the OJT submission process by following the submission flow that has been determined. SiOJT will be accessible to the Aviation Polytechnic, Stakeholders who are the destination of OJT and the Directorate of Aviation Navigation. Each user will get an account to access and at the same time monitor the position/process of the OJT application. In this SiOJT there is a database of OJT cadets and OJT Locations and in this SiOJT a letter template is also prepared that can automatically change the purpose of the letter to reduce the occurrence of writing errors. The flowchart of the SiOJT implementation plan is shown in Figure 1.

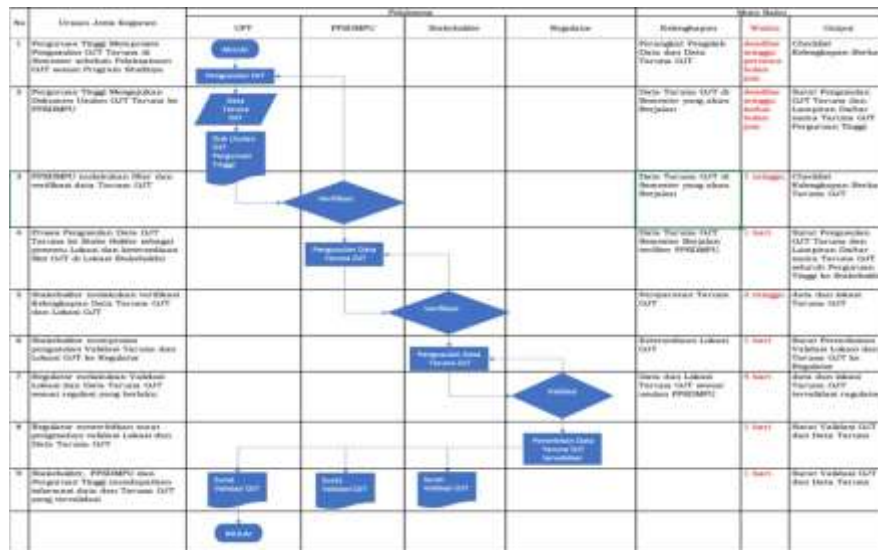


Figure 1. Flowchart of SiOJT

## II. Review of Literature

### 2.1. Objectives and Benefits

Changes made by creating a new system are divided into short-term, medium-term and long-term goals.

#### a. Short-term

- 1) Designing an OJT Information System (SiOJT)
- 2) Dissemination of SiOJT Design to Stakeholders (local host simulation)

#### b. Medium-term

- 1) SiOJT Trial Together with Stakeholders
- 2) Implementation of SiOJT for OJT Taruna in September 2021

#### c. Long-term

- 1) Monitoring and Evaluation of SiOJT implementation results

The changes that will be made are expected to be beneficial for PPSDMPU, Aviation Polytechnic, Stakeholders (Airnav Indonesia, PT Angkasa Pura I (Persero), PT Angkasa Pura II (Persero), UPBU) and the Directorate of Aviation Navigation. The expected benefits of this change include:

- a. Improvement of administrative services for proposing the implementation of OJT to Stakeholders;
- b. Smooth reporting and proposals for implementing OJT documents to leaders and stakeholders;
- c. Improving the Performance Competence of Education Program Sub-sector employees;
- d. Increasing stakeholder trust in PPSDMPU in implementing OJT proposals;
- e. ISO 9001-2015 standardization can be maintained and improved.

Based on personnel data at the Agency for Personnel and Human Resources Development Dumai City is known that employee competence is still a problem that needs to be addressed attention, especially in terms of knowledge/intellectual competence (formal education), skills (structural training, technical/functional training, courses, upgrading), and competencies experience (service period, position/leadership experience), and attitude competence. And measurement the competence of Civil Servants is also shown from the

ability to carry out their duties or jobs and positions, especially in terms of making decisions related to duties and position held, low ability to solve problems or obstacles/obstacles that arise in the implementation of duties and positions, work discipline and have not fully capable of completing work tasks efficiently, effectively, and on time, within meet the performance requirements that have been set.

According to Agustien & Soeling (2020) organizational commitment and happiness at work only positive and significant effects on work motivation which can mediate the relationship significantly. Likewise, when the relationship between happiness at work and employee performance is mediated by work motivation, the results show that work motivation successfully mediates the relationship significantly.

Therefore, proper collaboration and education can improve ASN competencies in carrying out their duties to provide public services to the community. Here is several literature studies related to the research that the author did, namely:

### **a. Competence**

According to Mitrani, et.al in Pfeffer, et al (2003:110) there are 5 characteristics of competence, namely:

The properties mentioned above can be defined as follows:

1. Motives A motive is something that a person consistently thinks so that he take action.
2. Temperament (Traits) Temperament is a character that makes people behave or how someone responds to something in a certain way.
3. Self-Concept Self-concept is an attitude or value that is measured by test respondents to find out what is considered good by someone, what has been done, or what they want to do.
4. Knowledge Knowledge is information that a person has for a field certain. Knowledge is a complex competency.
5. Skills are the ability to carry out a certain task either individually or physically and mentally.

According to Veithzal Rivai Zainal (2015:115), there are several methods that can be used to measuring competence, namely:

1. Behavior Event Interview (BEI)/Competency Based Interview, is an interview technique who have a high level of accuracy in identifying their competencies someone, which is done by looking for detailed data from a person's experience individuals, for example about: What is done by an individual in certain situations; What to think and feel in certain situations; etc.
2. Tests, various kinds of tests can be used to measure competence, for example, work-sample test, mental-ability test, and personality test.
3. Assessment center, competence is assessed by the assessor, where the assessment is carried out through implementation of activities such as in-basket exercise, "stress" exercise, interviews, presentations regarding the vision, mission, and strategy or leaderless group exercise
4. Biodata, some competencies can be predicted based on one's work experience, for example achievement motive, by looking at academic achievement, team leadership from organizational activities they lead, or relationship building from social activities that followed.

A rating can be done by superiors, co-workers, subordinates, or HR specialists/assessors. Often referred to as a "360° assessment". Several rating methods include competency assessment questionnaires, customer surveys, managerial style, and organizational climate. Government Regulation Number 101 of 2000 concerning Education

and Training for Employee Positions Civil Affairs Article 1 Paragraph (1) Explains That "Education and Training of Civil Servants is a process" implementation of teaching and learning to improve the ability of Civil Servants (PNS).

## b. Competency Development

According to A.A. Anwar Prabu Mangku Negara (2004: 44) development is a process long-term education that uses systematic and organized procedures in which employees managerial studies of conceptual and theoretical knowledge to achieve common goals.

### 2.2. Scope

The scope of this Change Action includes the PPSDMPU Education Program Subfield and 6 (six) Aviation Polytechnics under the auspices of PPSDMPU, Directorate of Aviation Navigation, Airport Implementation Unit (UPBU) in 33 locations spread throughout Indonesia, Airnav Indonesia, PT. Angkasa Pura I (Persero) and PT. Angkasa Pura II (Persero) which is located in 13 locations spread throughout Indonesia.

Based on the implementation of the OJT proposal that has been carried out so far, several problems were found, including:

1. Implementation of OJT guidelines that are not yet uniform;
2. Coordination of the placement of OJT cadets has not been synchronized;
3. There was an accumulation of the number of participants in one location because the OJT was carried out simultaneously;
4. Long OJT application procedures and processes;
5. Submission plan implementation OJT from Polytechnic

The flight was too close to the implementation of the OJT. The problems above are then analyzed using a SWOT analysis as follows:

**Table 1. SWOT analysis**

<b>STRENGTH</b>	<b>WEAKNESESS</b>
<ol style="list-style-type: none"> <li>1. Availability of competent human resources in managing the implementation of OJT</li> <li>2. Availability of adequate facilities and infrastructure in the process of managing the implementation of OJT</li> <li>3. Good financial support in accordance with regulatory provisions</li> <li>4. Have comprehensive OJT Guidelines for OJT implementation</li> <li>5. Intensive relationship and coordination with Aviation Polytechnic/ Aviation Academy in PPSDMPU</li> <li>6. Relationships and connectivity that good with stakeholders</li> </ol>	<ol style="list-style-type: none"> <li>1. Limited competent human resources in managing the implementation of OJT</li> <li>2. OJT guidelines are not well socialized at OJT locations</li> <li>3. Do not have competent human resources in the field of information technology</li> </ol>
<b>OPPORTUNITY</b>	<b>THREATS</b>
<ol style="list-style-type: none"> <li>1. Development Technology Information in managing OJT implementation</li> <li>2. Good coordination with Aviation Polytechnic/ Aviation Academy and Stakeholders in the implementation of an integrated system</li> </ol>	<ol style="list-style-type: none"> <li>1. Information Technology Integration System (SITI) which is not yet optimal</li> <li>2. Aviation Polytechnic / Aviation Academy and Stakeholders do not periodically update the system</li> <li>3. Different procedures at each Aviation Polytechnic/ Aviation Academy and Stakeholders</li> </ol>



From the results of the SWOT analysis, the following is the SO-WO-ST-WT strategy as shown in table 2:

**Table 2. SO-WO-ST-WT Strategi Strategy**

	<b>STRENGTH</b>	<b>WEAKNESESS</b>
<b>O</b>	<p><u>SO Strategies</u></p> <ol style="list-style-type: none"> <li>1. Improving the competence of HR in the field of Information Technology to manage the implementation of OJT;</li> <li>2. Development of Information Technology Integration System (SITI) by utilizing competent human resources and optimizing existing facilities and infrastructure;</li> <li>3. Improve coordination and connectivity with Stakeholders in the development of Information Technology and the implementation of an integrated system;</li> <li>4. Submitting a budget plan for Information Technology development and system integration Information Technology.</li> </ol>	<p><u>WO Strategies</u></p> <ol style="list-style-type: none"> <li>1. Addition of competent human resources in the field of Information Technology to manage the implementation of OJT;</li> <li>2. Dissemination of OJT Guidelines and integrated OJT management system for Aviation Polytechnic and Stakeholders.</li> <li>3. Propose a budget plan for the socialization of the OJT Guidelines and an integrated OJT management system for the Aviation Polytechnic/Academy of Aviation and</li> <li>4. <i>Stakeholders.</i></li> </ol>
<b>T</b>	<ol style="list-style-type: none"> <li>1. Continuous monitoring and evaluation on the implementation of Information Technology Integration System (SITI);</li> <li>2. Perform intensive coordination and connectivity with the Aviation Polytechnic/Academy of Aviation and Stakeholders in optimizing the Information Technology integration system;</li> <li>3. Submit a letter to the Aviation Polytechnic</li> </ol>	<ol style="list-style-type: none"> <li>1. Improving HR competence in optimizing the implementation of Information Technology Integration System (SITI);</li> <li>2. Intensively reminding HR to always submit letters to the Aviation Polytechnic / Aviation Academy and stakeholders as a reminder to update the system periodically.</li> </ol>

So that there are several alternative solutions for the SO-WO-ST-WT strategy that have been identified, namely:

1. Development of Information Systems (SiOJT) by utilizing competent human resources and optimizing existing facilities and infrastructure;
2. Improve coordination and connectivity with Stakeholders in Information Information development and implementation;
3. Improving the competence of HR in the field of Information Technology to manage the implementation of OJT;
4. Continuous monitoring and evaluation on the implementation of Information Systems (SiOJT).

### III. Research Methods

#### 3.1. Achievement Milestones

The planned stages of the Change Action (Milestone) to be achieved are as follows:

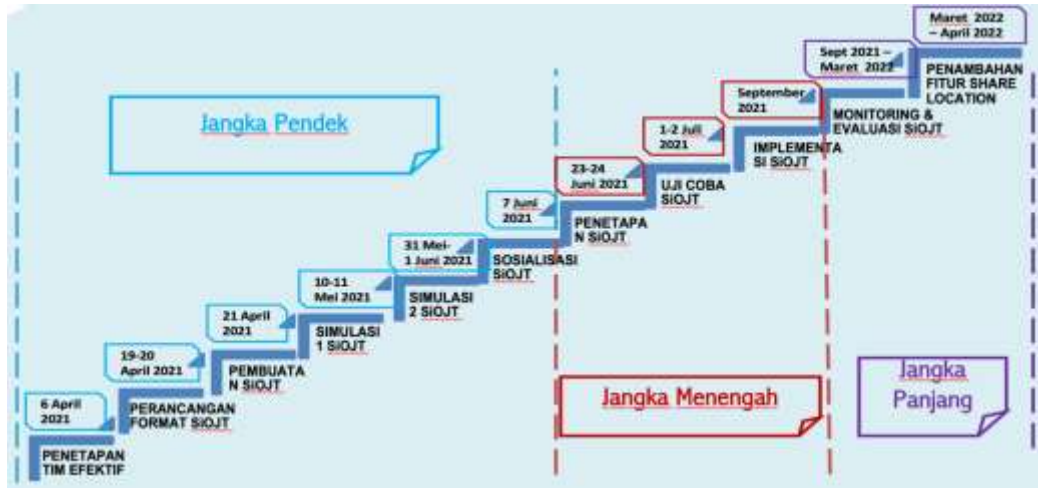


Figure 2. Planned Milestones

Achievement stages / milestones can be determined short term, medium term and long term as follows:

1. Short Term (2 months)
  - a. An On The Job Training Information System (SiOJT) was built which can be simulated using a local host.
  - b. Be socialized Information System On The Job Training (SiOJT) to Stakeholders.
2. Medium Term (6 months)

Implemented Information System On The Job Training (SiOJT)
3. Long Term (12 months)

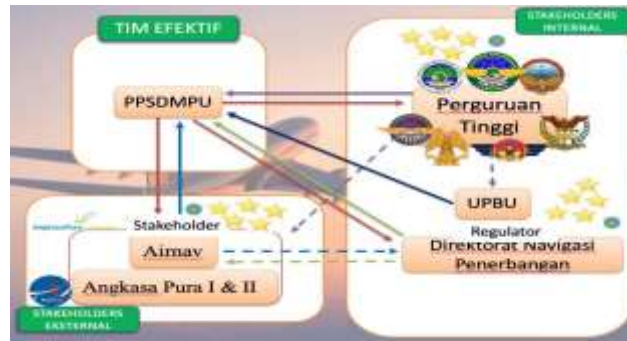
The results of the implementation of the On The Job Training Information System (SiOJT) can speed up the OJT service process.

#### 3.2. Activity Program Plan and Stages

The plans and stages of the short-term program of activities will be carried out starting April 1, 2021 and ending on June 7, 2021. The planning and stages that will be carried out are the preparation of the Effective Team until the formation of the Effective Team which then coordinates with the SiOJT making team to start its construction. After the SiOJT design is formed, and then the SiOJT design is simulated using a local host and then socialized to stakeholders to get input before the SiOJT is established and implemented in the medium term.

#### 3.3. Identification Of Stakeholders (Stakeholders)

In implementing the implementation of the Change Action requires the involvement of stakeholders in the implementation and implementation of this Change Action. Identification is divided into Effective Team, Internal Stakeholders and External Stakeholders as shown in Figure 3 below:



**Figure 3. Stakeholder Identification**

Based on Figure 3 above, it can be explained that:

1. The Effective Team consisting of PPSDMPU is an agency under BPSDMP which oversees 6 (six) Aviation Polytechnics that carry out OJT. PPSDMPU in this case is the center for the management and distribution of the proposed OJT cadets from each Aviation Polytechnic.
2. *Stakeholders Internal* consisting of:
  - a. College; there are 6 (six) Aviation Polytechnics under the auspices of PPSDMPU who propose OJT cadets to be placed in several locations.
  - b. Airport Implementation Unit (UPBU); is an agency under the Directorate General of Civil Aviation ( $\pm 33$  UPBU) as the destination for OJT locations.
  - c. Directorate of Aviation Navigation; is the Technical Directorate under the Ministry of Transportation which validates the distribution of OJT cadets in special locations for OJT cadets with the aim of Airnav Indonesia.
3. *Stakeholders External* consisting of:
  - a. Airnav Indonesia; is a BUMN agency that provides OJT locations throughout Indonesia, coordinated by Central Airnav (Jakarta).
  - b. PT. Angkasa Pura I (Persero); is a BUMN agency that provides OJT locations in the eastern part of Indonesia as many as  $\pm 13$  locations.
  - c. PT. Angkasa Pura II (Persero); is a BUMN agency that provides OJT locations in the western part of Indonesia as many as  $\pm 13$  locations.

After identifying stakeholders, it is necessary to identify the influence and interests of stakeholders in their involvement in this change action as shown in Table 4 below:

**Table 3. Identification of Stakeholder Influences and Interests**

NO	STAKEHOLDERS	INTEREST	SIKAP DUKUNGAN (+) (-)	PERAN	DAMPAK TERHADAP UPAYA (POWER, INTEREST)	STRATEGI KOMUNIKASI
1	POLITEKNIK PENERBANGAN	Membutuhkan tempat untuk OJT Taruna	+	Mengirimkan tarunanya untuk melaksanakan OJT	Promotor	Manage Closely
2	AIRNAV	Mendapatkan bantuan tenaga untuk pelaksanaan operasional kegiatan	+	Menyediakan tempat bagi praktek (OJT) taruna	Promotor	Manage Closely
3	ANGKASA PURA I & II	Mendapatkan bantuan tenaga untuk pelaksanaan operasional kegiatan	+	Menyediakan tempat bagi praktek (OJT) taruna	Latent	Keep Satisfied
4	DIT. NAVPEN	Mengimplementasikan program OJT Taruna Politeknik Penerbangan	+	Menyediakan tempat bagi praktek (OJT) taruna	Promotor	Manage Closely
5	UPBU	Mendapatkan bantuan tenaga untuk pelaksanaan operasional kegiatan	+	Menyediakan tempat bagi praktek (OJT) taruna	Promotor	Manage Closely



The influence and interests of Stakeholders as shown in Table 4 above, it can be stated that Stakeholders will provide positive (+) support for this change action, because each of them has an interest in this change action, including:

1. The Aviation Polytechnic will get OJT locations for their cadets so that the cadets' competence is met. In addition, the faster process can make the Aviation Polytechnic better prepare for the implementation of its cadets and the academic calendar will run well.
2. Airnav Indonesia, PT. Angkasa Pura I (Persero), PT. Angkasa Pura II (Persero) and UPBU will get additional personnel in carrying out operational work in the field. Although in the early days of the pandemic, PT. Angkasa Pura I (Persero) and PT. Angkasa Pura II (Persero) did not accept OJT cadets due to reduced operational activities and scheduling of many employees in Work From Home (WFH) positions. For this reason, the strategy taken to overcome the Latent impact is a slow approach by providing confidence and trust that the OJT cadets sent are in good health and have undergone the tests determined by the stakeholders, including the handling of cadets affected by Covid-19 is the responsibility of the Aviation Polytechnic.
3. The Directorate of Aviation Navigation as a regulator has regulations and powers in implementing the OJT program for Aviation Polytechnic cadets, where HR in printing OJT guidance (OJTI) is regulated in the Regulation of the Director General of Civil Aviation Number: KP. 166 of 2020 concerning the Establishment of Technical and Operational Standards Part 69-01 (Manual of Standard Part 69-01) License, Rating, Training and Skills of Aviation Traffic Control Personnel.

## IV. Result and Discussion

### 4.1. Effective Team and Governance

The effective team for this change action will be stipulated in the Decree of the Head of the Air Transportation Human Resources Development Center with the structure as shown in Figure 3. An effective team was formed with the aim of revitalizing the performance of the Air Transportation Human Resources Development Center in order to improve the quality standards of Education and Training in the Development Center Environment. Air Transportation Human Resources. An effective team consists of:

1. **Director;** responsible for providing direction and setting policies as well as supervising the process of implementing activities.
2. **Person responsible;** Leads and is responsible for all Task Forces for the Implementation of Activities.
3. **Chairman;** Responsible for coordinating, determining technical implementation and leading the implementation of activities.
4. **Secretary;** Responsible for the orderly administration and reporting of the implementation of activities, coordination and socialization.
5. **IT Team Coordinator;** Responsible for coordinating the implementation of IT manufacturing and the stages of making and implementing simulations.
6. **Coordination Team Coordinator;** Responsible for coordinating data, information and implementation phase with stakeholders.
7. **Outreach and Documentation Team Coordinator;** Responsible for coordinating the implementation of socialization and documenting all evidence of activities.
8. **Team Member;** Assist the coordinator in the implementation of orderly administration, preparation and reporting of activities.

#### 4.2. Work Quality Control

Quality control that will be carried out on each plan and stage to be carried out is "Supervision + T3". Supervision is carried out by looking directly at the details of the implementation of each stage, recording each stage carried out (minutes, minutes, documentation), making reports on the overall implementation. And then added T3 (concrete action/action) where the project leader intervened in the implementation of each planning stage.

#### 4.3. Identification Of Obstacles What Will Be Faced

An obstacle that may arise in the implementation of the change action is that the SiOJT development team cannot complete the design according to the planned stages that have been determined. Implementation of comprehensive socialization of SiOJT to 6 (six) Aviation Polytechnics under the auspices of PPSDMPU, Directorate of Aviation Navigation, Airport Implementation Unit (UPBU) in 33 locations spread throughout Indonesia, Airnav Indonesia, PT. Angkasa Pura I (Persero) and PT. Angkasa Pura II (Persero) which is located in 13 locations spread throughout Indonesia which is carried out online.

This change action is said to be successful if:

1. Formation of an Effective Team;
2. The achievement of each milestone (milestone) marked by evidence;
3. The formation of the SiOJT design.

### V. Conclusion

The development of SiOJT is very useful for improving services at the Air Transportation HR Development Center to PPSDMPU itself, Aviation Polytechnic under the auspices of PPSDMPU and also to stakeholders. The development of SiOJT will get good support from stakeholders and can be well implemented by all users. "NOBODY IS PERFECT BUT A TEAM CAN BE", a quote that we believe that if the thoughts and abilities of several people are united in a team, the plans and tasks that are the goals of an organization will be achieved. The Effective Team must always be Awareness and Responsive to the Internal and External environment so that the objectives of the Change Action can be achieved optimally and are beneficial for all users. Thus, we present the proposed action plan for this change.

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