

DIREKTORAT JENDERAL PENDIDIKAN TINGGI, RISET, DAN TEKNOLOGI

ementerian Pendidikan, Kebudayaan, Riset, dan Teknologi



GUIDE

77

# RESEARCH AND DEVOTION TO PUBLIC

College Tall Organizer Education Academic





#### DIREKTORAT JENDERAL PENDIDIKAN TINGGI, RISET, DAN TEKNOLOGI Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi

### RESEARCH GUIDE AND DEVOTION TO PUBLICEDITION XIII REVISION YEAR 2021

(College Tall Organizer Education Academic)

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Directorate General Education Tall, Research, And Technology, Ministry of Education, Culture, Research and Technology Right Publication There is on KEMDIKBUDRISTEK

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## PANDUAN

# STUDY IANDDEVOTION TOPUBLICARYARAKAT

Perguruan Tinggi Penyelenggara Pendidikan Akademik



#### PENGANTAR

Assalamualaikum Warohmatullohi Wabarokaatuh,

Regards prosperous for We all,

Let us give thanks to the presence of Almighty God who has bestowed grace and blessings and His instructions so that the Guidebook for Implementing Research and Community Service people Edition XIII Revision Year 2021 This has resolved.

Referring to Law Number 20 of 2003 concerning the National Education System, Article 20 Paragraph (2) Which mention that College Tall obliged organize Pendi-education, Research and Community Service, is also clarified by law Number 14 of 2005 article 60 which explains the obligations of lecturers to carry out educational dikan, study And devotion to public, as well as Constitution Number 12 Year 2012 about Education Tall Which explain that study in College Tall directed un- knock develop Knowledge knowledge And Technology, as well as increase wellbeing bro- people And Power competitive nation, And Devotion to Public is activity Civitas Academics in practicing and educating the nation's life, the Ministry of Education and Culture aware of the important role of research and community service in higher education gi And Keep going endeavor repair quality study And devotion to public. Pen-arrangement Book Guide This held as Wrong One effort Directorate General Education Higher Education, Research and Technology (Ditjen Diktristek) in order to achieve national research standards tian and community service in Indonesian higher education as stated in Regulation Minister Research, Technology, And Education Tall Number 44 Year 2015 about National Higher Education Standards updated with Minister of Education Regulations and Culture Number 3 Year 2020 about Standard National Education Tall. Book Guide This arranged along with development regulations related with implementation study And peng-devotion to public For PTN And PTS in Indonesia.

Funding Study And Devotion to Public This use budget fund Tire- master of State University Operations (BOPTN) in accordance with the Regulation of the Minister of Research, Technology, And Education Tall Number 6 Year 2018 about Help Operational College Tall Negeri Which updated through Regulation Minister Research, Technology, And Education Tall Number 12 2019 concerning Operational Assistance for State Universities. The funding in question is provided by destroy it for lecturer Which is at in lower Ministry Education, Culture, Research, And Te- technology (Kemdikbudristek), while lecturers or researchers outside the Kemdikbudristek institution can participate as a member or research partner. Standard based research costs output is regulated by referring to the Regulation of the Minister of Finance of the Republic of Indonesia concerning Standard Cost Output year Which applies. Funding based outer expected lecturer can more motivated to meet the promised output targets. On the other hand, lecturers are also more spur For optimizing productivity outer study with target outer add-han.

Referring to President Joko Widodo's direction regarding the focus of developing Indonesian research towards the pan, this guidebook also accommodates research focus related *to green econo- my*, *Blue economy*, *Digital economy*, tourist And health. *Green economy* related with climate change and energy structure where the concept is used as a basis for developing gan renewable energy towards energy efficiency and is expected to be able to mitigate the impacts bad from change climate consequence use material burn fossil. *Blue economist* y related with The maritime economy is the greatest asset of the Indonesian nation, so innovation is needed in enhancement utilization potency maritime national specifically for public in

area coast. *Digital economy* or economy based technology computing digital Which covers transformation digital, development *artificial intelligence* until *software engineering*, is concepts that will change the way humans live including industrial mechanisms, government, And managerial in a way general. Tourist as Wrong One sector Which affected consequence there's- yes pandemic Covid-19 expected quick rise To use push growth economy Because Indonesia's tourism potential has not been optimally developed. Meanwhile, the focus of research on Health Health is considered increasingly important with the Covid-19 pandemic, so research in educationtall can push development vaccine, biotech, until therapy genetic in Indonesia.

This guidebook also provides research directions following focus areas, themes and topics research contained in Presidential Regulation Number 38 of 2018 concerning Master Plans Research \_ National T year 201 7 - 204 5 . By more explicit, book guide This accept accommodation \_ *Gender Equity and Social Inclusion* (GESI) and Local Wisdom issues by adding themes and relevant topics for each of these focus areas. The scope of local wisdom birth in various form culture ethnic in Indonesia, No only covers values and norms, but also includes local knowledge and technology systems that can overcome the problem of inability to adapt to global challenges. Therefore That, exploration wisdom local appropriately No only done by para scientist social And hu- minora just, but Also can done by para scientist from field other.

Strategy Which done by DG Diktiristek is with give authority Which more- yuck wide in management study to college tall through program decentralization pe- research And devotion to public, whereas For issues national accommodated through program competitive national. Temporary That, For issues Which seen strategic DG Higher Education- research and technology can give assignment to College Tall Which have competence Which high level in the relevant field through an assignment program. Any research proposal Which funded must target achievements Level Readiness Technology (TKT). With summed up- pun data TKT every activity research, will makes it easier mapping its potential to direction downstream And commercialization results research. Besides That use Sinta as media gauge productivity research and service are also optimized by using Sinta ID to access fundingthrough Simlitabmas.

On its publication Book Guide This we convey saying accept love And award Which highest level to all members of the drafting team as well as the parties who played a role in it The contributions that have been made range from initiating and compiling to implementing Bitan. We realize that book guide This Still Far from perfect, so that we mem-invite the public to provide suggestions and input for improvement in the future. Finally, we would like to thank all readers for their attention. Hopefully This guide can provide benefits to advance the Indonesian nation and the world of education. dikan We on specifically.

Wassalamu'alaikum Warohmatulloohi Wabarokaatuh

Jakarta, November 2021

Plt. Director General Education Tall, Research, And Technology,

Nizam

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# PIG INTRODUCTION

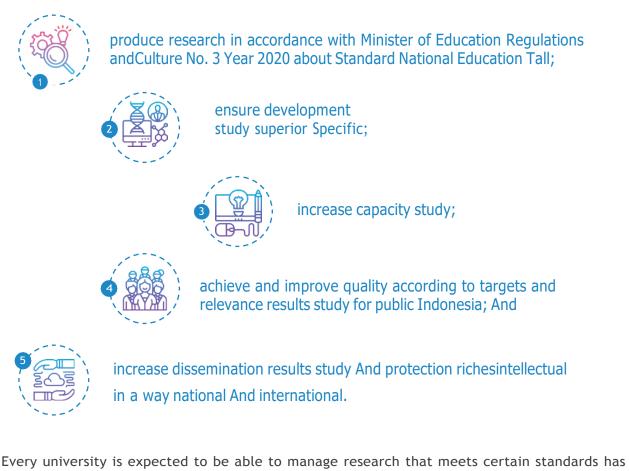


College tall obliged organize education, study, And devotion head- and society as mandated in Law Number 20 of 2003 regarding pliers Education National Chapter 20. Study in college tall directed For expand- improve science and technology, as well as improve community welfare and energy competitive nation like explained in Constitution Number 12 Year 2012 about Education Tall Chapter 45 And 46. Study as meant, done by civitas academics And held based on track competence And competition. Results study must disseminated with method seminar, published, and/or patented. Results study in level per-teacher tall expected beneficial For:



In Law Number 11 of 2019 concerning the National System of Science and Technology Technology has been emphasized that universities are tasked with carrying out science and technology through education And carry out its function prepare source Power man For organizer- raan science and technology, And responsible answer increase ability tridharma college tall. Per- teacher tall Also own role strategic in strengthen position SCIENCE AND TECHNOLOGY as capital investment period short, period intermediate, And period long development national.

Wrong One objective System National SCIENCE AND TECHNOLOGY is increase independence And Power competitive bang- sa Which meaningful that college tall Which supported by institution R&D (LPNK, LPK, And Business Entities) and skilled higher education personnel so they can contribute in strengthening the economy and improving community welfare. College must more encouraged and facilitated to produce more inventions and innovations Which produce downstream technology appropriate To use, create mark plus, as well as increase- increase the production and use of domestic components to reduce dependence onadap product import. So that the above mandate can be carried out well, research and service must be carried out to public in college tall must directed For reach objective And standard ter- Of course. By general objective study in college tall is:



Every university is expected to be able to manage research that meets certain standards has explained in Regulation Minister Education And Culture No. 3 Year 2020 about The National Higher Education Standards are related to the scope and explanation of the National Standards onal Study as following.

- 1. Research result standards are the minimum criteria regarding the quality of research results. Results study directed For develop knowledge knowledge And technology, as well as increase well-being public And Power competitive nation. Results pene- Litian is all outputs produced through fulfilling activities scientific rules and methods systematically according to scientific and cultural autonomy academic. Results study Which No nature confidential, No bother and/or does not endanger the public or national interest, must be disseminated with bro method seminar, published, patented, and/or method other Which can used For convey results study to public.
- 2. Research content standards are minimum criteria which include depth and breadth of basic research and applied research material. Human-oriented basic research tation on outer study Which form explanation or invention For dreaming-anticipation of a new symptom, phenomenon, rule, model or postulate. Recent research Pan is oriented towards research outputs in the form of innovation and development science and technology that benefits society, business, and/or industry. Basic and applied research includes special study material for knock interest national, Which must load principles usefulness, then- cleansing, And anticipate need period coming.

3

- 3. **Standard process study,** is criteria minimum Which includes: a) activity pene- research consisting of planning, implementation and reporting; b) fulfill the rules And method scientific in a way systematic in accordance with autonomy science And culture akademik; and c) consider quality standards, work safety, health, welfare manan, as well as security researcher, public, And environment.
- 4. Standard evaluation study, is criteria minimum evaluation to process And results study, Where evaluation a) done in a way integrated with principle evaluation most A little educative, objective, accountable, And transparent Which is assessment whose procedures and assessment results can be accessed by all stakeholders interest; b) must pay attention to conformity with output standards, content standards, etc research process standards; and c) using relevant methods and instruments, accountable, And can represent size achievement performance process And achievement ki- performance results study with refers provision And regulation in college tall.
- 5. **Researcher standards** are the minimum criteria for researchers which include: a) ability to research For carry out study; b) ability level mastery method pe- research that is appropriate to the scientific field, research object, and level of complexity and the level of research depth determined based on academic qualifications and research results; and c) determine the authority to carry out research on him- tour in the detailed guidelines issued by the Directorate General of Higher Education, Research, And Technology.
- 6. **Standards for research facilities and infrastructure** are the minimum criteria means and infrastructure Which required For support need fill And process study in frame fulfil results study. Means And infrastructure is facility teacher-high an used to facilitate research is least associated with field knowledge program studies as well as can utilized Also For process learning and community service activities. Facilities and infrastructure must be adequate quality standards, work safety, health, comfort and security of researchers, public, And environment.
- 7. Research management standards are minimum criteria regarding planning, implementation, control, monitoring and evaluation, as well as reporting of research activities litian. Management study as intended held by units Work da- in the form of institutions tasked with managing research such as institutions research, research institutions and community service, or other forms- yes Which kind in accordance with need And provision college tall.
- 8. Standard funding And financing study, is criteria minimum source And mechanism funding And financing study Which originate from fund researcher-internal institutions of higher education, government, collaboration with other institutions both in at home or abroad, or funds from the public. Research funding was used to finance research planning, research implementation, research control litian, monitoring And evaluation study, reporting results study, And dissemination research result. Research management funds must be provided by universities and used to finance research management (selection of proposals, monitoring and evaluation, research reporting, and dissemination of research results), increasing capacity researcher sity, and scientific publication incentives or Intellectual Property (IP) incentives. Per- teacher tall No justified For take fees from para researcher.

Devotion to public in college tall is activity civitas academics in practice And civilize knowledge, knowledge, technology For advance welfare- aan general And enlighten life nation like Which explained in Constitution Number 12 Year 2012 about Education Tall Chapter 47 And 48. Objective devotion to bro-people in college tall is:



As with conducting research, each university is expected to be able to manage it community service based on the Regulation of the Minister of Education and Culture No. 3 2020 concerning National Higher Education Standards related to the scope and implementation explanation Standard National Devotion to Public as following:

1. **Standards for the results of community service** are the minimum criteria results devotion to public in apply, practice, And mem-cultivate it knowledge knowledge And technology To use advance well-being general and enlighten the nation's life. The results of community service can be in the form of solving problems faced by society by utilizing skill civitas academic Which relevant, utilization technology appropriate To use, material development of science and technology or teaching materials or learning modulesthank you For enrichment source Study.

- 2. The content standards for community service are the minimum criteria regarding depth And breadth material devotion to public Which refers on standard results devotion to public. Depth And breadth material peng- devotion to public sourced from results study or development knowledge knowledge And technology Which in accordance with need public, Which includes- ti the results of research or development of science and technology that can be directly applied and needed by the user community, development knowledge knowledge And technology in frame empowering public, technolo- gi appropriate To use Which can utilized in frame increase level life And community welfare, problem solving models, social engineering, and/or re- commendation policy Which can applied direct by public, world business, industry, and/or Government, as well as applicable Intellectual Property (IP). direct by public, world business, and/or industry.
- 3. Community service process standards are the minimum criteria for pliers activity devotion to public Which consists on planning, inevitably- activities, and reporting activities. Community service activities can be done in the form of services to the community, application of science and technology according to their field of expertise, increasing community capacity; or pem- community empowerment. Community service must be taken into consideration standard quality, ensure safety Work, health, comfort, as well as security- an executor, public, And environment. Activity devotion to public carried out by students as a form of learning must be done leads to the fulfillment of graduate learning outcomes and fulfills the requirements an And regulation in college tall. Activity devotion to public must held in a way directed, measurable, And programmed.
- 4. Standard evaluation devotion to public, is criteria minimum pe-assessment of the process and results of community service. Process assessment And results devotion to public done in a way integrated with principle sip assessment from at least an educational, objective, accountable and transparent perspective, as well as ta must pay attention to conformity with output standards, content standards and standards community service process. Minimum criteria for assessing service results to the community including the level of community satisfaction, the occurrence of change attitudes, knowledge and skills in society in accordance with the targets of pro-grams, can utilized it knowledge knowledge And technology in public in a way sustainable, creation enrichment source Study and/or learning as well as maturation of the academic community as a result of the development of science and technology technology, as well as the resolution of social problems and possible policy recommendations utilized by holder interest. Evaluation can done with to- use method And instrument Which relevant, accountable, And can represent size achievement of process performance and achievement of performance as a result of service to the community people.
- 5. Standards for implementing community service are the minimum criteria for ability executor For carry out devotion to public, between- Implementers are required to have mastery of appropriate scientific application methods with areas of expertise, types of activities, as well as the level of complexity and depth of the ran activity Which determined based on qualification academic And results devotion to public. Ability executor devotion to public men- toucan authority carry out devotion to public Which arranged in detailed guidelines issued by the Directorate General of Higher Education, Research, and Technology.

- 6. Standards of facilities and infrastructure for community service are the criteria fun minimum about means And infrastructure Which required For support process community service in order to fulfill the results of service to community in higher education to facilitate service to community related to the application of the field of science of the study program managed by universities and target areas of activity. Facilities and infrastructure for Community service is a tool that universities utilize Also For process learning And activity study as well as must fulfil booth-dar quality, safety Work, health, comfort, And security.
- 7. Standard management devotion to public, is criteria minimum about planning, implementation, control, monitoring And evaluation, as well as reporting activity devotion to public Which held by units ker- ja in the form of an institution tasked with managing service to public with form Institution devotion to public, or institution study And devotion to public, or form other Which kind se- in accordance with the needs and provisions of the university. Community Service Institution the community is obliged to a) prepare and develop a program plan community service in accordance with the community service strategic plan yes public college tall; b) compile And develop regulation, pan- Duan, And system guarantee quality internal activity devotion to public;

c) facilitate the implementation of community service activities; d) carry out there monitoring, evaluation implementation, And dissemination results devotion head- and society; e) giving awards to those who carry out their service public Which achievement, f) utilize means And infrastructure devotion to public on institution other through Work The same; g) do analysis to- need Which concerning amount, type, And specification means And infrastructure peng- devotion to public; as well as h) compile And convey report activity devotion on public Which managed to base data education tall.

8. Standard funding And financing devotion to public, iscriteria minimum source And mechanism funding And financing devotionto public through fund internal college tall, funding government, Work The same with institution other, Good in in nor in outside country, or fund frompublic. Funding used For finance planning, implementation, control, monitoring And evaluation, reporting, and service results to public. Mechanism funding And financing pengdevotion to public Which must arranged based on keten-Sir in college tall. College tall must providefund management including enhancement capacity executor- na devotion to public. College tall No justified For take fees from executor ab-



Directorate General Education Tall, Research, And Technology

So that objective And standard study And devotion to public in college tall can achieved, Directorate General Education Tall, Research, And Technology, cq Directorate Research, Technologi, and Community Service (DRTPM) encourages and facilitates lecturers and lam carries out research and community service activities to support enhancement quality education tall, Power competitive nation, And well-being people in a way terpro- grams and sustainable. Research and community service program at DRTPM covers field knowledge as loaded in Attachment 1.

Besides develop various program study And devotion to public directly to universities, DRTPM also continues to build collaborations with various partner institutions, both at national and international levels. At the national level, cooperation carried out with government institutions, such as ministries/non-ministerial, regional governments Ah, and community institutions. DRTPM also continues to develop university collaborations tall Indonesia with institution research international, association science, And institution education in various country.

Apart from the mono-year research funding program, since 1992 DRTPM has emit various program funding study period long (multi-year) Which is expected to produce output that is truly high quality and beneficial to the government. buildings and community welfare. Starting in 2011, a decentralization program was implemented that is part activity study delegated authority its management to college Ting- gi. It is hoped that this policy can further improve the research culture for lecturers as well stimulate formation groups researcher reliable in a way equally in all over teacher- an tall Indonesia. College tall Also required For develop program study excellence in order to utilize the expertise, facilities and infrastructure available in higher education in line with local, national and international development needs. Meanwhile, For answer challenge Which more wide And nature strategic, DRTPM Keep going develop program Study Competitive National Which its management done by DRTPM.

The implementation of decentralization policies has been able to foster research excellence in teacher tall. Superiority study in college tall based field focus has can dip- etch. Results mapping This used as base in giving assignment in accordance with superior areas of research owned by forming a research consortium. Research assignments to universities that have competence in strategic fields is also implemented For support policy Ministry of Education and Culture.

Policy decentralization study on in essence is delegation task And authority to- on college tall in management study so that created climate academic Which conducive For carry out activity study in a way quality, programmed And sustainable. Giving research management authority to universities will ultimately result in produce institutional independence for research in higher education in managing research transparently, accountably and objectively. To support the authority granting program management study to college tall so that walk with Good, DRTPM has dovarious effort, Which covers things following:



mapping performance study Which has classify college high into four groups, namely the Independent, Main, intermediate, And Built. Grouping This used as base ingiving authority And allocation fund study. Mapping performance research is carried out every three years, with the hope that every university will continue to strive to improve performance his research in accordance with indicator Which has set;



preparation of authority mechanisms management study to college tallas base operational;



preparation System Guarantee Quality Study College Tall (SPMPPT);



preparation criteria And mechanism appointment internal university assessors and determination system selection proposal; And



preparation mechanism monitoring And evaluation implementation study.

In line with the research program, DRTPM gives authority to universities For manage funding program devotion to public in a way more autonomy through a decentralization program in accordance with the higher education service performance cluster- gi. By considering institutional capacity and interests, universities can assigned carry out activity devotion to public.

Along with the more complex And breadth scope implementation study And ab- dian to public in college tall, start year 2012, DRTPM (moment That Directorate Research and Community Service Directorate General of Higher Education) develops an educational system management of research and community service based on information technology and communication kasi (ICT). The system is called the Research and Community Service Information System The next community is called Similitabmas. Using Similitabmas, the process of submission and selection of proposals, monitoring and evaluation of implementation, final report, Per- Expenditure responsibilities (SPTJB), as well as reporting the results of research and service to the community can be managed well so that transparency, efficiency and accountabilityability can guaranteed.



DIREKTORAT JENDERAL PENDIDIKAN TINGGI, RISET, DAN TEKNOLOGI Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi

# **CHAPTER II**

## RESEARCH MANAGEMENT AND DEVOTION TO PUBLIC



#### 2.1 Pendahuluan

In line with his role as facilitator, amplifier, And empowerer, Directorate Jen- deral of Higher Education, Research and Technology strives to continue to monitor research and devotion to public in college tall. Management study And ab- dian to public in college tall directed For:



realize superiority study And devotion to public in college



increase Power competitive college tall in field study And devotion to public on level national And international;



increase number participation lecturer in carrying out research and service to public Which quality;



increasing research management capacity and devotion to public in college tall; And



utilize the potential of higher educationsustain Power competitive nation.

#### 2.2 Program Pendanaan Penelitian dan Pengabdian kepada Masyarakat

Program study Which held by DRTPM For lecturer in college Ting-gi covers 3 Scheme based on achievements TKT that is Scheme Study Base (TKT levels 1-3), Scheme Study Applied (TKT levels 4-6), And Scheme Study Manager bangan (TKT le v el 7 - 9). Each s k ema study consists \_ on a number of P ro - gram as following:

#### a. Scheme Study Base

- 1. Program Study Base:
  - Study Base Competitive National (PDKN)
  - Study Basics of Higher Education Excellence High (PDUPT)
  - Study Base Partnership (PDK)

#### 2. Program Study Coaching:

- Study Lecturer Beginner (PDP)
- Study Cooperation between College Tall (PKPT)
- 3. Program Study Postgraduate (PPS):
  - Study Thesis Masters (PTM)
  - Study Dissertation Doctor (PDD)
  - Study Education Masters going to Doctor For Bachelor Superior (PMDSU)
- 4. Program Study Policy Strategic (KKS)

#### b. Scheme Study Applied

- Study Applied Competitive National (PTKN)
- Study Applied Superior College Tall (PTUPT)

#### c. Scheme Study Development

• Study Development (PP)

Authority proposal study held based on on cluster collegetall like Which can seen on Table 2.1.

California Studie		Cluster College Tall							
Scheme Study	Manager	Indepe ndent	Main	Interm ediate	Built				
a. Scheme Study Base									
1. Programs Study Base									
<ul> <li>Basic Research National Competitive(PDKN)</li> </ul>	DRTPM	$\odot$	$\bigcirc$	$\odot$	$\odot$				
<ul> <li>Basic Research Superior CollegeTall (PDUPT)</li> </ul>	PT	$\odot$	$\bigcirc$	$\bigcirc$	-				
<ul> <li>Basic Research Partnership (PDK)</li> </ul>	DRTPM	$\odot$	$\oslash$	$\bigcirc$	$\bigcirc$				
2. Programs Study Coaching									
<ul> <li>Lecturer Research Beginner (PDP)</li> </ul>	DRTPM	-	-	-	$\odot$				
<ul> <li>Study Cooperation Intercollegiate Tall (PKPT)</li> </ul>	DRTPM	-	-	$\bigcirc$	$\bigcirc$				

Table 2. 1	Proposal	Study	Based	on Clu	ster (	College	Tall
	TTOPOSat	Judy	Dased	UII CIU	SUCI	conege	ran

Schome Study	Managar	Cluster College Tall					
Scheme Study	Manager	Indepen dent	Main	Interm ediate	Built		
3. Programs Study Postgradua	ite						
<ul> <li>Thesis Research Masters (PTM)</li> </ul>	DRTPM	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\oslash$		
<ul> <li>Dissertation ResearchDoctor (PDD)</li> </ul>	DRTPM	$\oslash$	$\bigcirc$	$\oslash$	$\oslash$		
<ul> <li>Study Education Master headed Doctorate for BachelorsSuperior (PMDSU)</li> </ul>	DRTPM	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\oslash$		
4. Study Program Policy Strategic (KKS)	DRTPM	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$		
b. Scheme Study Applied							
<ul> <li>Applied Research Competitive National (PTKN)</li> </ul>	DRTPM	$\bigcirc$	$\oslash$	$\odot$	$\oslash$		
<ul> <li>Applied Research Superior CollegeTall (PTUPT)</li> </ul>	РТ	$\bigcirc$	$\bigcirc$	$\oslash$	-		
c. Scheme Study Development							
Study Development     (PP)	DRTPM	$\odot$	$\bigcirc$	$\odot$	$\bigcirc$		

Community Service Program organized by DRTPM for lecturers atteacher tall covers Scheme And Program Devotion to Public as following:

#### a. Scheme Sociability

- 1. Program Partnership Public (PKM)
- 2. Program Partnership Public Stimulus (PKMS)
- Program Studying Work Real Learning And Empowerment Public (KKN-PPM)
- 4. Program Development Community Science and Technology (PPIM)

#### b. Scheme Regionality

- 1. Program Development Village Partner (PPDM)
- 2. Program Empowerment Public Superior College Tall(PPMUPT)
- 3. Program Partnership Region (PKW)
- 4. Program Partnership Development Regionality (PKPK)

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#### c. Scheme Entrepreneurship

- 1. Program Development Entrepreneurship (PPK)
- 2. Program Development Product Superior Area (PPPUD)
- 3. Program Development Business Product Intellectual Campus (PPUPIK)

Authority management And proposal devotion to public based on clustercollege tall arranged as on Table 2.2.

Table 2. 2 Proposal Devotion to Public Based on Cluster College Tall

Categories and Programs			Cluster College Tall						
De	evotion to Public	Manager	Superior	Very Good	Satisfying	Not enough Satisfying			
a.	Scheme Sociability								
	<ol> <li>Programs PartnershipPublic (PKM)</li> </ol>	DRTPM	$\odot$	$\odot$	$\odot$	$\odot$			
	<ol> <li>Partnership ProgramPublic Stimulus (PKMS)</li> </ol>	DRTPM	-	-	-	$\bigcirc$			
	3. Work Study Program Real Learning and Empowerment Public (KKN-PPM)	DRTPM	$\bigcirc$	$\oslash$	$\bigcirc$	$\bigotimes$			
	4. Development Program Science and technology Public (PPIM)	DRTPM	$\odot$	$\oslash$	$\bigcirc$	$\oslash$			
b.	Scheme Regionality								
	<ol> <li>Programs Development Village Partner (PPDM)</li> </ol>	DRTPM	$\odot$	$\bigcirc$	$\odot$	$\odot$			
	<ol> <li>Development Partner Superior College Tall (PPMUPT)</li> </ol>	РТ	$\bigcirc$	$\bigcirc$	$\bigcirc$	-			
	3. Program Partnership Region (PKW)	DRTPM	$\odot$	$\bigcirc$	$\odot$	$\odot$			
	4. Program Partnership Development Regionality (PKPK)	DRTPM	$\odot$	$\bigcirc$	$\bigcirc$	$\odot$			
c.	Scheme Entrepreneurship								
	1. Programs Development Entrepreneurship (PPK)	DRTPM	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$			
	<ol> <li>Program Development Product Superior Area (PPPUD)</li> </ol>	DRTPM	$\odot$	$\oslash$	$\odot$	$\oslash$			
	3. Development Program Product Business Intellectual Campus (PPUPIK)	DRTPM	$\odot$	$\oslash$	$\bigcirc$	$\bigcirc$			

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#### 2.3. Ketentuan Umum

Implementation of research and community service programs must refer to on standards for quality assurance of research and community service in higher education in accordance with established signs. With respect to matter the, DRTPM set provision general implementation program study And devotion to public Which outlined as following.

- a. Chairman researcher/executor devotion is lecturer still college tall in lower Ministry Education, Culture, Research, And Technology Which have Number Parent Lecturer National (NIDN) or Number Parent Lecturer Special (NIDK).
- b. Research members/service implementers are lecturers who have NIDN or NIDK and/or No lecturer.
- c. Proposals are made through Simlitabmas (http://simlitabmas.kemdikbud.go.id) and must obtain approval from the Head of the Research and Service Institute dian to the Community (LPPM), Research Institute, Community Service Institute Society or other similar designation where the lecturer serves aslecturer still.
- d. Each lecturer can propose two research proposals (one proposal as chairman and one proposal as a member or two proposals as a member) and two proposals community service (one proposal as chairman and one proposal as member or two proposal as member).
- e. Proposers who have an h-  $Index \ge 3$  for the social-humanities field with a minimum 3 article as writer First or correspondence on *databases* reputable; And h-  $Index \ge 5$  for the science-technology field with a minimum of 5 articles as author first or correspondence on a reputable *database*, can submit a proposal study until No more from four proposal (two as chairman And two as member; or One as chairman And three as member; or four as an-members); or
- f. Proposer Which own 1 patent granted and/or 5 patent registered Good For field social-humanities and science-technology fields, can submit research proposals tian until No more from four proposal (two as chairman And two as member- ta; or One as chairman And three as member; or four as member);or
- g. Applicants who have works of monumental art/performing art in accordance with Minister of Research, Technology and Higher Education Regulation Number 20 of 2017 (point 7) or work monumental other can submit proposal study until No more than four proposals (two as chairman and two as members; or one like chairman And three as member; or four as member); or
- h. Proposers who have academic texts for Laws **or** Regulations Area (Regional Regulation) or script urgency For Regulation Government And Regulation Pres-ideas that have been discussed by government stakeholders prove it with letter sign accept from holder interest, can submit proposal study until No more from four proposal (two as chairman And two

as member; or One as chairman And three as member; or fouras member).

- i. Especially for Postgraduate Research, the applicant can submit the most five proposals as either chairman or member do not include the provisions of point e until h.
- j. If research or service is stopped prematurely due to negligence researcher/executor devotion or proven obtain funding double or re-proposing research or service that has been previously funded In general, the head of the researcher/executor of the service is not permitted propose research or service whose funding source is from DRTPM for two consecutive years and are required to return the funds that have been received accepted to cash country.
- k. Institute for Research and Community Service (LPPM), Research Institute tian, Institution Devotion to Public or designation other Which kind diwa- oblige For do supervision (monitoring And evaluation) internal on all research and community service activities at each PT with- bro refers to system guarantee quality Which applies.
- I. Researchers and service implementers are required to keep daily notes carry out study or devotion to public. Notes Daily ber- fill in notes regarding the implementation of research or community service according to the stages of the research process or community service. Daily notes are filled in to Simlitabmas as part of the completeness of the document implementation study or devotion to public. Researcher And executor Community service is also required to create a Logbook. Logbook with fill in detailed notes about the substance of the research or community service which includes materials, data, methods, analysis, results, etc. that are considered important ing. Logbook saved by researcher or executor devotion to publicWhich can made proof in submission KI.
- m. Researchers or service implementers who fail to meet appropriate outcomes with target scheme can charged penalty.
- n. Accountability fund study refers on provision SBK And SBM year budget Which applies Which set by Minister Finance.
- o. Researchers or service providers are required to include an acknowledgment mention the source of funding (namely: Directorate of Research, Technology and Community Service dian To the Community, Directorate General of Higher Education, Research and Technology gi, Ministry Education, Culture, Research, And Technology Republic Indonesia) in every form of research output, whether in the form of scientific publications, papers presented, nor poster.
- p. The Research and Community Service Program supports the Merdeka Be- study-Kampus Merdeka in research learning activities for students with a note that in its implementation it adapts the Independent Freedom Guidebook Independent Campus studies published by the Directorate General of Higher Education, Ministry Education And Culture.

q. In frame enhancement capacity research/service to public And research/community service standards in higher education as well as carrying out implement the provisions in Article 54 of the Regulation of the Minister of Education and Culture Number 3 of 2020 concerning National Higher Education Standards which makes it mandatory college tall For provide fund research/service to public internally, then universities are obliged provide management assistance to funds research/community service at least 10% of research/community funds community service provided by DRTPM for all schemes and confirmed on stages agreement by LPPM.

#### 2.4. Tahapan Pengelolaan Penelitian

In general, the stages of research activities include announcement, proposal, lexian/appointment, determination, implementation, monitoring and evaluation, reporting, and evaluation output. Timetable all stages of these activities are delivered by DRT- PM through page http://simlitabmas.kemdikbud.go.id. Distribution authority every research stages based on higher education research performance groups and status its institutions arranged as on Table 2.3.

Table 2. 3
Distribution Authority in Stages Study Based on Group PerformanceStudy College Tall
And Status Institutional College Tall

		CLUSTER AND INSTITUTIONAL COLLEGE TALL									
No	Stages Implementation Study	INDEPEN DENT			MAIN			MADYA		BUILDING	
		РТИВН	PTN BLU / Satker	PTS	РТИВН	PTN BLU / Satker	PTS	PTN BLU / Satker	PTS	PTN BLU / Satker	PTS
1	Announcement	ſ	DRTPM			DRTPM		DRTPM		DRTPM	
	Proposal:										
2	a. Competitive National	$\odot$	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\bigcirc$
	b. Decentralization	$\bigcirc$	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	No Th	ere is
	Selection / Appointment										
	a. Evaluation Document										
	Competitive National		DRTPM		DRTPM and		PM	DRTPM		DRTPM	
	Decentralization		$\odot$	$\odot$	blocks grants	$\odot$	$\odot$	$\odot$	$\odot$	No Th	ere is
3	b. DiscussionAnd visitation	Autonomous									
	Competitive National	andblocks grants			DRTPM			DRTPM		DRTPM	
	Decentralization	5. 4.1.65	$\odot$	$\bigcirc$	$\bigcirc$	$\odot$	$\oslash$	$\odot$	$\odot$	No Th	ere is
	c. Recommendation		Proposed institutions (special Decentralization)		Proposed institutions (special Decentralization)		No There is		No There is		
4	Determination		DRT	ГРМ		DRTPM		DRTPM		DRTPM	

		CLUSTER AND INSTITUTIONAL COLLEGE TALL									
No	Stages Implementation Study	INDEPEN DENT			MAIN			MADYA		BUILDING	
	Study	РТИВН	PTN BLU / Satker	PTS	РТИВН	PTN BLU / Satker	PTS	PTN BLU / Satker	PTS	PTN BLU / Satker	PTS
	Implementation			I					I		
5	a. Contract	DG DICTIRISTEK - PT	DRTPM - PT	DRTPM - LL Dikti- PT	DG DICTIRISTEK - PT	DRTPM - PT	DRTPM - LL Higher Educat ion - PT	DRTPM - PT	DRTPM -LL Dikti-PT	DRTPM - PT	DRTPM - LL Highe r Edu cati on - PT
	b. Thawing Fund										
	to Institution	DG DICTIRISTEK	DR	ГРМ	DG DICTIRISTEK	DR	ГРМ	DR <sup>-</sup>	ГРМ	DR	ГРМ
	• to researcher	LPPM	LPPM	PT- LPPM	LPP/	N	PT - LPPM	LPPM	PT -LPPM	LPPM	PT- LPPM
	Wipe progress	$\bigcirc$	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\odot$	DR	ГРМ	DR	ГРМ
	Supervision (monitoring And evaluation)						1				
	a. Decentralization										
	• Researcher	$\bigcirc$	$\odot$	$\bigcirc$	$\oslash$	$\odot$	$\odot$	DRTPM	DRTPM	No T	here is
6	Institution	DRTPM	DRTPM	DRTPM	DRTPM	DRTPM	PM DRTPM No There is		here is	No There is	
	b. Competitive National										
	Researcher	$\bigcirc$	DRTPM	DRTPM	DRTPM	DRTPM	DRTPM	DRTPM	DRTPM	DRTPM	DRTPM
	Institution	DRTPM	No T	here is	DRTPM	No T	here is	No T	here is	No There is	
7	Reporting										
	a. Decentralization										
	• Researcher	to institutio	on And Siml	itabmas	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\odot$	No T	here is
	Institution	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\odot$	No T	here is	No T	here is
	b. Competitive National										
8	• Researcher	to Institutions & Simlitabmas	$\bigcirc$	$\odot$	$\oslash$	$\odot$	$\bigcirc$	$\odot$	$\bigcirc$	$\bigcirc$	$\odot$
	Institution	$\bigcirc$	No T	here is	$\bigcirc$	No T	here is	No T	here is	No T	here is
	Output assessment implementation Study	Managed Institutions and reported to DRTPM	Institutions and reported to decentralization		edand ed to A For Managed Institution and DRTPM lization aged ition PM for titive		DR <sup>-</sup>	ГРМ	DR"	ГРМ	

Next, each stage of research implementation is as shown in Table 2.3 can be explained further by looking at aspects of higher education research performance, status institutional college tall, And scheme study as following:

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#### 24.1. Stage Announcement

The research management cycle begins with DRTPM announcing acceptance of the research project. lan study in a way online through Simlitabmas. Announcement reception proposal dila- mpiri with book guide study along with book guide technical proposal through Simlitabmas. Universities/Higher Education Service Institutions inform reception proposal to lecturer/researcher in scope it works each each.

#### 242 Stage Proposal

Proposals are made by lecturers by accessing Simlitabmas according to authority owned by universities based on higher education research performance clusters. College tall cluster independent, main And intermediate own authority propose study competitive national And decentralization, whereas cluster built only have-liki authority propose study competitive national. Details procedure intruder- lan through Simlitabmas arranged more carry on on Chapter 3.

#### 243. Stage Selection/Appointment

#### a. Stage Selection

The selection of proposals is carried out by a team of assessors and/or *reviewers* online via Simlitabmas. Authority selection proposal Which owned college tall based oncluster performance study college tall with provision as following:

#### 1. College Tall Cluster Independent

Selection of proposed lecturers from independent cluster universities followsprovision as following:

- Independent cluster higher education institution with institutional status as Legal entity universities (PTNBH Mandiri cluster) do selection of decentralized and nationally competitive research proposals autonomously based on targets and funds allocated by DRTPM Kemdikbudristek in the form of *block grants* to each PTN- Bra cluster Independent.
- Selection proposal study PTNBH cluster Independent can done by *re-viewers* internal.
- College tall (PT) cluster independent non PTNBH do selection usu- lan study in a way independent For study decentralization.
- Selection of non-PTNBH PT decentralized research proposals can be carried out by *reviewer* internal.
- PT non PTNBH give recommendation proposal study decentralization Which will funded to DRTPM based on results selection.
- DRTPM selects research proposals for competitive research national Which proposed by PT non PTNBH.

#### 2. College Tall Cluster Main

Selection proposal lecturer from college tall cluster main follow of coursean as following:

- College tall cluster main with status institutional as per-higher education institutions with the legal entity PTNBH (PTNBH Main cluster) carry out right selection proposal study decentralization in a way autonomous.
- Selection proposal study PTNBH can done by *reviewer* internal.
- Proposal study competitive national Which proposed by PTNBH selected by DRTPM.
- PTNBH national competitive and decentralized research funding through mechanism *blocks grants* .
- PT cluster main non PTNBH do selection proposal study desentralization in a way independent.
- Selection of non-PTNBH main cluster PT decentralized research proposals can done by combined *reviewer* internal And *reviewer* national.
- Non-PTNBH main cluster PTs provide recommendations for researchers' proposals tian decentralization Which worthy funded to DRTPM, based on resultsselection.
- DRTPM do selection proposal study For study competitive national Which proposed by PT cluster main non PTNBH.

#### 3. College Tall Cluster Intermediate

Selection of proposed lecturers from middle school cluster universities following the requirementsSir as following:

- Selection proposal study decentralization done by combined *review- er* internal And *reviewer* national (external) Which lifted by DRTPM.
- *reviewers* appointed by PT with the knowledge of DRT-PM.
- DRTPM do selection proposal study For study competitivenational.

#### 4. College Tall Cluster Built

Selection proposal lecturer from college tall cluster built For study competitive national done by DRTPM.

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#### b. Stage Appointment

Stage appointment done For determine study And team researcher Which will be determined using an assignment mechanism. This assignment mechanism is destroy it for study Which seen strategic in accordance competence institution And team researcher with provision as following:

- 1. Researchers are assigned to conduct research on the basis of a written letter gasan from DRTPM.
- 2. Researcher convey proposal to DRTPM in accordance with assignment.
- 3. Research proposals with appointment mechanisms are still assessed by the Committee Evaluation and/or *Reviewers* For evaluate appropriateness magnitude budget Whichpoured in news program.
- 4. News program the submitted to DRTPM as base considerationdetermination.

#### 244 Stage Determination

Determination proposal Which worthy For funded arranged with provision as following:

- a. Leader PTNBH cluster Independent set proposal study decentralization And competitive national Which will funded, based on results selection.
- b. DRTPM set proposal study as following:
  - 1. study decentralization PT cluster Independent And Main non PTNBH;
  - 2. PTNBH cluster Main based on recommendation committee evaluator and/or *re-viewer* ;
  - 3. study decentralization PT cluster Intermediate;
  - 4. study competitive national besides PTNBH cluster Independent.
- c. Size cost Which set is price output sub output study.
- d. Determination proposal study Which funded informed through Simlitabmas.

#### 245. Stage Implementation

Stage implementation study arranged with provision as following:

- a. Implementation study started with make contract study.
- b. Contract study done after proposal study set And announcedthrough Simlitabmas by DRTPM.
- c. Signing contract study done quick after announcement pene-tapan reception proposal.

- d. The process of signing contracts and disbursing research funds is based on status higher education institutions based on financial management patterns, namely PTN- bra, PTN-BLU, PTN Satker, or PTS.
- e. Signing contract PTNBH held between Minister of Education and Culture And Leader PT.
- f. The leadership of PT PTNBH or LPPM or other names makes an assignment contract to on chairman researcher.
- g. The signing of the non-PTNBH PT contract was carried out between DRTPM and Pergu-room Tall (For PTN)/Institution Service Education Tall (For PTS).
- h. Implementation study refers on contract study.
- i. Contract Study at least containing:
  - 1. Official signatory contract 8. Monitoring Ar
  - Base creation/space scope contract
  - 3. Amount fund And mechanism pen-fluid fund study
  - 4. Period applies contract
  - 5. Target Outer
  - 6. Right And obligation

- 8. Monitoring And evaluation
- 9. Change team executor And substation study
- 10. Tax
- 11. Riches Intellectual
- 12. Force majeure
- 13. Penalty
- 14. Dispute

7. Reporting study

#### 246 Stage Monitoring And Evaluation

Target monitoring And evaluation covers researcher And organizer study (institution), each follow provision as following;

#### a. Monitoring And Evaluation Researcher

- 1. The implementation of research must be supervised by the PT in the form of monitoring activitiestoring And evaluation.
- 2. PTNBH cluster Independent do monitoring And evaluation study desentralization And competitive national in a way internal.
- 3. PT non PTNBH cluster Independent do monitoring And evaluation study decentralization in a way internal.
- 4. PTNBH And non PTNBH cluster Main do monitoring And evaluationstudy decentralization in a way internal.
- 5. Monitoring and evaluation is carried out by *reviewers*, and the implementation of each decision ul research must be monitored and evaluated by 2 certified *reviewers* orin accordance provision Which set by DRTPM.

- 6. Monitoring And evaluation by PT can done by *reviewer* internal.
- 7. *reviewers* are appointed by the Higher Education Leaders follow condition Which explained on part 2.9.
- 8. DRTPM do monitoring And evaluation study competitive national for PT non PTNBH cluster Independent And PTNBH besides cluster Independent.
- 9. Implementation monitoring And evaluation study decentralization and/or comm- The national petition for PT Madya and Binaan clusters is carried out externally withbro *reviewer* external Which lifted by DRTPM.
- 10. DRTPM facilitates the needs of PT *reviewers* , especially for external *reviewers* . nal for PT cluster Intermediate And Built.
- 11. Results monitoring And evaluation be delivered to DRTPM through Simlitabmas.

#### b. Monitoring And Evaluation Institution

- 1. DRTPM organizes institutional monitoring and evaluation for implementers naan study in PT cluster Independent nor Main.
- 2. Institutional monitoring and evaluation is carried out at PTNBH Upper Mandiri cluster implementation study decentralization And competitive national.
- 3. Monitoring And evaluation institution done on PT cluster Independent non PTNBHon implementation study decentralization.
- 4. Institutional monitoring and evaluation is carried out at PTNBH and non-PTNBH cluster Main on implementation study decentralization.
- 5. Institutional monitoring and evaluation activities are carried out by the monitoring team and evaluation institution Which appointed by DRTPM.
- 6. The Monitoring and Evaluation Assessment Form is presented in the management manual. research
- 7. Team monitoring And evaluation institution must report to DRTPM through Sim-litabmas.
- 8. DRTPM is required to provide feedback to institutions for improvement guarantee quality Which sustainable.

#### 247. Stage Reporting

Researcher obliged give report progress, report end year, And reportend study follow provision as following.

- a. Chairman Team Researcher must report progress output research, And notes daily active-vita research in accordance deadline time Which determined through Simlitabmas.
- b. Chairman Team Researcher must make Report Progress And Report End Study.

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- c. Chairman Team Researcher must make Letter Statement No There is Asset (For Which ti- bro There is assets)/News Program Hand it over Accept Asset (For Which own asset) follow format Which determined (format report in accordance with Guide Study Which ber-in demand).
- d. Mandiri and Utama cluster PTs are required to report their institutional research performance viaSimlitabmas.

#### 248. Stage Evaluation Results Study

Stage evaluation results study follow provision as following:

- a. Researchers are required to submit a report on research results which is the final report implementation study And outer results study other Which has promised toon LPPM or designation other.
- b. Assessment is carried out by the Assessment Committee and/or Research Output *Reviewers* For evaluate appropriateness on implementation study based on report results pe-research And achievements outer results study other.
- c. Committee Evaluation and/or *Reviewers* Output Study give recommendation to LPPM or designation others/DRTPM form results evaluation Which consists on:
  - 1. percentage level success study in accordance with proposal Which promised; promised;
  - suggestion And input related suitability budget study Which has given o results study;
  - 3. suggestion And input related continuity study; And
  - 4. recommendation For get cost outer addition.
- d. Implementation contract study Which in accordance with rule scientific And of course- a research contract cannot be declared failed. Judgment about fulfillment rule scientific contract study done based on recommendation *reviewer* wandering aran study.
- e. Results evaluation And recommendation poured in news program For be delivered to LPPM or designation others/DRTPM.

## 2.5. Pengelolaan Pengabdian Kepada Masyarakat

In general, the stages of research implementation as described above apply also in carrying out community service. Service activities to The community is managed directly by DRTPM Directorate General of Education and Technology for national competitiveness and assignments, and managed by PT for decentralization. Management of funding for dian to public follow pattern funding study, that is with hem- Higher education qualifications are based on community service performance. each college tall.

Tentative schedule of all stages of research management and community service community is presented in Table 2.4. Table 2.5 presents a summary of the proposal requirements, selection, And implementation study based on scheme funding. Table 2.6 serve-

a summary of the application requirements for each community service funding scheme public. Summary scheme funding study And devotion to public based on team executor, time, And funding served on Table 2.7 And Table

2.8. Scheme Funding, Team Executor, Time, And Funding Devotion to Sir-people served on Table 2.9.

	Description Activity	Month to											
No	No Description Activity		2	3	4	5	6	7	8	9	10	11	12
			Prop	oosal I	New								
1	Announcement Proposal												
2	Proposal												
3	Evaluation proposal												
4	Discussion of proposals and visit field team expert toproposer/unit proposer (If There is)												
5	Determination of the proposalfunded												
		Fu	Inding	Activ	ity wa	lk							
6	Announcement proposalWhich funded												
7	Contract												
8	Implementation												
9	Report progress												
10	Monitoring And evaluation internal PT												
11	Monitoring and evaluation external												
12	Report end												
13	Seminar Results /Evaluation outer												
14	Submission of proposals Advanced												

Table 2. 4 Timetable Tentative Implementation Program StudyAnd Devotion to Public

Table 2. 5 Summary proposal, Selection, And ImplementationStudy Based on Scheme Funding

						SC	HEME ST	UDY			
STAGES MAN	IAGEMENT			S	TUDY BAS	SE			STUD APP		STUDY DEVELOPMENT
		PDKN	PDUPT	PDK	PDP	РКРТ	PPS	KKS	PTKN	PTUPT	PP
	Charging identity proposer	$\odot$	$\odot$	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\bigcirc$	$\bigcirc$	$\odot$
Proposal in a	Charging identity proposal study	$\odot$	$\oslash$	$\odot$	$\oslash$	$\bigcirc$	$\oslash$	$\oslash$	$\bigcirc$	$\odot$	$\odot$
way online	Fill in completenes s appropriate proposal scheme	$\oslash$	$\odot$	$\odot$	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$
	Agreement leader units	$\odot$	$\odot$	$\odot$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\bigcirc$	$\odot$	$\odot$
	Evaluatio n proposal	$\oslash$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\bigcirc$
Selection	Discussion suggestions and visit field										$\oslash$
	Determina tionwinner	$\oslash$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$
	Charging diary, logbook and Report progress	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$
Implementati on	Monitoring and evaluation internal	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\oslash$
	Monitoring and evaluation external	$\oslash$	$\odot$	$\oslash$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\oslash$
	Report end	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\bigcirc$	$\odot$	$\odot$
Reporting	Evaluation results	$\odot$	$\odot$	$\odot$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\odot$
	Charging And evaluation proposal advanced	$\oslash$	$\odot$	$\odot$		$\odot$	$\odot$		$\odot$	$\odot$	$\oslash$

Information:

PDKN = National Competitive Basic Research; PDUPT= Superior Basic Research College; PDK = Basic Research Partnership; PDP = Beginner Lecturer Research; PKPT = Study Cooperation Between College Tall; PPS = Study Postgraduate; KKS = Study Policy Strategic; PTKN = Study Applied Competitive National; PTUPT = Study Applied

= Study Policy Strategic; PTKN = Study Applied Competitive National; PTUPT =Study Applied Superior College Tall; PP = Study Development.

Table 2. 6								
Summary proposal, Selection And Implementation Devotion								
to Public Based on Scheme Funding								

Funding Stagesin each Program Devotion to Public		Sc	heme Soc	iability		Scheme Regionality				Scheme Entrepreneurship		
		PKM	PKMS	KKN- PPM	PPIM	PPDM	PPMUPT*	PKW	РКРК	РРК	PPPUD	PPUPIK
	Charging identity proposer	$\bigcirc$	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\bigcirc$	$\oslash$	$\odot$	$\odot$	$\bigcirc$
Proposalin a	Charging identity proposal	$\odot$	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\bigcirc$	$\bigcirc$	$\odot$	$\odot$	$\odot$
way online	Fill in completenes sproposal in accordance scheme	$\bigotimes$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\bigcirc$
	Agreement leader units	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\odot$
	Evaluatio n proposal	$\odot$	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\bigcirc$	$\oslash$	$\odot$	$\odot$	$\bigcirc$
Selection	Discussion suggestions and visit field					$\odot$	$\odot$	$\odot$	$\oslash$	$\odot$	$\odot$	$\bigcirc$
	Determina tionwinner	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\bigcirc$	$\oslash$	$\odot$	$\odot$	$\odot$
	Charging notes daily, logbook and Report progress	$\oslash$	$\oslash$	$\oslash$	Ø	Ø	Ø	$\oslash$	Ø	Ø	$\odot$	Ø
Implementati on	Monitoring and evaluation Internal	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\odot$	$\oslash$	$\oslash$	$\odot$	$\odot$	$\oslash$
	Monitoring and evaluation External	$\oslash$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\oslash$	$\oslash$	$\odot$	$\odot$	$\bigcirc$
	Report end	$\odot$	$\oslash$	$\bigcirc$	$\bigcirc$	$\odot$	$\odot$	$\bigcirc$	$\oslash$	$\odot$	$\bigcirc$	$\oslash$
Reporting	Evaluatio nresults	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\oslash$	$\oslash$	$\odot$	$\bigcirc$	$\bigcirc$	$\odot$	$\bigcirc$	$\oslash$
	Charging And evaluatio n proposal advanced					$\odot$	$\odot$	$\bigotimes$	$\odot$	$\odot$	$\odot$	$\odot$

Information:

PKM = Community Partnership Program; PKMS = Stimulus Community Partnership Program; KKN-PPM = Real Work Lecture Program - Learning and Community Empowerment; PPIM = Implementation Program Science and technology to Public; PPDM = Program Development Village Partner; PPMUPT = Program EmpowermentPublic Superior College Tall; PKW = Program Partnership Region; PKPK = Program Partnership

Development Regionality; PPK = Program Development Entrepreneurship; PPPUD = Program DevelopmentProduct Superior Area; PPUPIK = Program Development Business Product Intellectual Campus. \*) Evaluation proposal, discussion proposal, And visit field held by college tall proposer

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#### Table 2. 7 Funding Scheme Summary, Research Team, and Research Time

Scheme Funding	Condition Team Researcher	Time (year)
a. Scheme Study Base		
1. Programs Study B	Base	
• Basic Research Competitive National (PDKN)	<ul> <li>Chairman proposer educated Doctor with minimum position functional Assistant Expert, or educated Masters with positionfunctional at least Lector.</li> <li>Chairman proposer own record footsteps publication minimumtwo articles in reputable indexed databases and/ or journal national accredited ranking 1-2 as first author or corresponding author; or three research books with ISBN as the first author to be published by a publisher member IKAPI/ equivalent or publisher international.</li> <li>Member proposer 1-2 person.</li> </ul>	2-3
<ul> <li>Study Base</li> <li>Superior</li> <li>College Tall</li> <li>(PDUPT)</li> </ul>	<ul> <li>Chairman proposer educated Doctor with minimum position functional Assistant Expert, or educated Masters with positionfunctional at least Lector.</li> <li>Chairman proposer own record footsteps publication minimumtwo articles in reputable indexed databases and/ or journal national accredited ranking 1-2 as first author or corresponding author; or three research books with ISBN as the first author to be published by a publisher member IKAPI/ equivalent or publisher international.</li> <li>Member proposer 1-2 person.</li> </ul>	2-3
• Basic Research Partnership (PDK)	<ul> <li>Chairman proposer educated Doctor with minimum position functional Assistant Expert, or educated Masters with positionfunctional at least Lector.</li> <li>Member proposer 1-2 person.</li> <li>Get assignment from Ministry of Education and Culture</li> </ul>	1-3
2. Programs Study C	oaching	
• Lecturer Research Beginner (PDP)	<ul> <li>Chairman proposer educated Masters with position maximum functional Expert Assistant or not yet position functional Which originate from PT Cluster Built.</li> <li>Member proposer 1-2 person.</li> <li>Member proposer can originate from PT Cluster Intermediate And Cluster Built</li> <li>Proposing members are not limited by levelposition functional And education</li> <li>Proposer only can get schemePDP as much two time as chairman.</li> </ul>	1

Scheme Funding	Condition Team Researcher	Time (year)
	<ul> <li>Team Researcher Proposer (TPP) consists on chairman Andmaximum two members from the college tall cluster Intermediate or Built.</li> </ul>	
	<ul> <li>Chairman TPP educated maximum Masters with position functional maximum Lector.</li> </ul>	
Study	<ul> <li>Cluster performance study college high TPM enter on Cluster Main or Independent;</li> </ul>	
Cooperation Intercollegiate Tall (PKPT)	<ul> <li>TPM consists on a chairman And amember, both of them educated Doctor.</li> </ul>	2
	TPM No reduce quota proposal study.	
	<ul> <li>Chairman researcher TPM minimum have two publicationas writer First or corresponding author on journal reputable international.</li> </ul>	
	<ul> <li>Proposal study made by TPP And TPMas guarantor quality study.</li> </ul>	
3. Programs Study Po	ostgraduate (PPS)	
• Thesis	<ul> <li>The applicant is a permanent university lecturer tall, degree Doctor Which currently guide minimum One student master full time.</li> </ul>	
Research Masters (PTM)	<ul> <li>Proposing members consist of lecturers mentor servant (If There is) And One student master his guidance.</li> </ul>	I
• Study	<ul> <li>The applicant is a permanent university lecturer, degree Doctor, And have guidance studentprogram doctor from in and/or outside country, Good program doctor by course nor doctor by research.</li> </ul>	
Dissertation Doctor (PDD)	<ul> <li>The chief proposer has a minimum of two articles in reputable international journal as the author First or corresponding author.</li> </ul>	1-2
	<ul> <li>Member team consists on co-promoter And Oneperson student doctor his guidance</li> </ul>	
<ul> <li>Study Education Master headed</li> </ul>	<ul> <li>The chief proposer is the student promoter PMDSU programs that are still active and have been stated passed lectures Semester 1, And currentlygo through studying in Semester 2 as well as will start study in year Which currently walk.</li> </ul>	
Doctor for Superior Scholar (PMDSU)	<ul> <li>The chief proposer has an h- <i>index</i> ≥ 2 obtainedfrom institution indexer international reputable Andown record footsteps study Which very Good.</li> </ul>	3
	<ul> <li>Proposing members are co-promoters and PMDSU program students, with division task Which clear between team proposer Which involvedas well as Approved by Which concerned.</li> </ul>	
4. Program Study Policy Strategic (KKS)	<ul> <li>The chairman of the proposer has a minimum of a Master's degree and have competence in accordance with topic Which studied.</li> </ul>	1
	Member proposer 2-5 person.	

Scheme Funding	Condition Team Researcher	Time (year)
b. Scheme Study Applied		
	Chairman proposer educated Doctor with position     Minimum functional, Expert Assistant, or educated     Masters with position functional minimum Lector.	
• Applied Research	<ul> <li>Chairman proposer own record footsteps publication minimumtwo article in <i>databases</i> indexed reputable And/ or journal national accredited ranking 1-2 aswriter First or corresponding author; or three book results study has an ISBN as writerfirst published by a member publisher IKAPI/ equivalent or international publishers; or minimum own One KI (patent/ patent simple minimum registered And other certified).</li> </ul>	
Competitive National (PTKN)	• The KI referred to in the second point is KI that protects substance results study However No including Copyright of books is not the result of research, articles, reports, thesis, thesis, dissertation, guide, And document the like.	2-3
	<ul> <li>Own partner Which proven with letter statementthe need for the products to be produced and support (inkind or cash) Which containing willingness as a user of research results. There is support funding by partner become mark plus from proposal. The partner institutions in question are prospective partners user Which relevant with product study.</li> </ul>	
	<ul> <li>Proposing members are 2-3 people and a minimum of 1 person member proposer from partner. Member proposer Whichoriginate from partner candidate user proven withletter appointment from partner candidate user.</li> </ul>	
	<ul> <li>Chairman proposer educated Doctor with position Minimum functional, Expert Assistant, or educated Masters with position functional minimum Lector.</li> </ul>	
Study Applied	<ul> <li>Chairman proposer own record footsteps publication minimumtwo article in <i>databases</i> indexed reputable And/ or journal national accredited ranking 1-2 aswriter First or corresponding author; or three book results study has an ISBN as writerfirst published by a member publisher IKAPI/ equivalent or international publishers; or minimum own One KI (patent/ patent simple minimum registered And other certified).</li> </ul>	
Excellence College (PTUPT)	• The KI referred to in the second point is KI that protects substance results study However No including Copyright of books is not the result of research, articles, reports, thesis, thesis, dissertation, guide, And document the like.	2-3
	<ul> <li>own partner Which proven with letter statementthe need for the products to be produced and support (inkind or incash) which contains willingnessas a user of research results. There is support funding by partner become mark plus from proposal. The partner institutions in question are prospective partners user Which relevant with product study.</li> </ul>	
	<ul> <li>Proposing members are 2-3 people and a minimum of 1 person member proposer from partner. Member proposer Whichoriginate from partner candidate user proven withletter appointment from partner</li> </ul>	

candidate user.	

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Scheme Funding	Condition Team Researcher	Time (year)
c. Scheme Study Developm	ent	
• Study Development (PP)	<ul> <li>Chairman proposer educated Doctor with position Minimum functional, Expert Assistant, or educated Masters with position functional minimum Lector.</li> <li>Chief proposer own track record publication minimum two articles in reputable indexed databases as The first author or corresponding author is proven by including the URL of the article in question or has a patent/simple patent with status registered or granted or KI other Which certifiedwith substance related proposal study.</li> <li>Having investor partners as proven by statement letter containing commitment inclusion fund by partner in form in cashminimum as big as 10% from fund Which submitted.</li> </ul>	3
	<ul> <li>Proposing members are 3-5 people and a minimum of 1 personproposing members from industry partners. Member Which originate from partner industry proven withletter appointment by institution/industry.</li> </ul>	

Table 2. 8Suitability Scheme Study Funding BOPTN with Reference PMK

Schen	ne Funding	Reference SBK Research	Time (year)
a. Sch	neme Study Base		
1.	Programs Study Base		
	<ul> <li>Study Base Competitive National (PDKN)</li> </ul>	SBK Research Base	2-3
	<ul> <li>Flagship Basic Research College Tall (PDUPT)</li> </ul>	SBK Research Base	2-3
	• Study Base Partnership (PDK)	SBK Research Base	1-3
2.	Programs Study Coaching		
	• Study Lecturer Beginner (PDP)	SBK Research Coaching/Capacity	1
	<ul> <li>Study Cooperation Between College Tall (PKPT)</li> </ul>	SBK Research Base with magnitudebi a y a maximum Rp6 0.00 0.00 0.	2
3.	Programs Study Postgraduate (PPS)		
	• Study Thesis Masters (PTM)	SBK Research Base with magnitudebi a y a maximum Rp3 0.00 0.00 0.	1
	• Study Dissertation Doctor (PDD)	SBK Research Base with magnitudebi a y a maximum Rp6 0.00 0.00 0.	1-2
	<ul> <li>Educational Research Masters going to Doctor ForBachelor Superior (PMDSU)</li> </ul>	SBK Research Base with magnitudebi a y a maximum Rp6 0 .00 0 .00 0 .	3
4.	Programs Study Policy Strategic (KKS)	SBK Strategic Actual Studies	1

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Scheme Funding	Reference SBK Research	Time (year)						
b. Scheme Study Applied								
<ul> <li>Competitive Applied Research National (PTKN)</li> </ul>	SBK Research Applied	2-3						
<ul> <li>Study Applied Superior College Tall (PTUPT)</li> </ul>	SBK Research Applied	2-3						
c. Scheme Study Development								
Study Development (PP)	SBK Research Development	3						

Table 2. 9 Scheme Funding, Team Executor, Time, And Funding Devotion to

Service Schemeto	Team Executor	Time	Cost (million Rp)				
Public		(year)	DRTPM*	PT**	Partner**		
a. Scheme Sociability							
1. Programs Partnership Public (PKM)	Chairman with maximum 2 member	1	50				
2. Programs Partnership Public Stimulus (PKMS)	Chairman with maximum 2 member	1	25				
3. Lecture Program Real Work - Learning And Empowerment Public (KKN-PPM)	Chairman with maximum 2 member	1	50				
4. Programs Application science and technology toPublic (PPIM)	Chairman with maximum 3 member	1	150				
b. Scheme Regionality							
1. Programs Development Mitra Village (PPDM)	Chairman with maximum 3 member	3	150	10			
2. Program Empowerment Public Superior College Tall (PPMUPT)	Chairman with maximum 3 member	3	150				

Service Schemeto Public	Team Executor	Time	Cost (million Rp)				
Public		(year)	DRTPM*	PT**	Partner**		
3. Program Partnership Region (PKW)	Chairman with maximum 3 member	3	150		100		
4. Program Partnership Development Regionality (PKPK)	Chairman with maximum 4 member	3	200	10	10/200***		
c. Scheme Entrepreneur	ship						
<ol> <li>Program</li> <li>Development</li> <li>Entrepreneursh</li> <li>ip(PPK)</li> </ol>	Chairman with maximum 3 member	3	150	20			
2. Program Development Product Superior Regional (PPPUD)	Chairman with maximum 3 member	3	150		10		
3. Program development Product Business Intellectual Campus (PPUPIK)	Chairman with maximum 3 member	3	200	30			

Information:

\*\*

Fees Which proposed to DRTPM minimum 60% from fund maximum Which set every scheme

Contributions minimum in form in cash or in kind

\*\*\* Contribution from partner target Rp. 10 million And partner disabled person fund (eg CSR/Local Government/NGO) Rp. 200 million.

# 2.6. Kewenangan Pengelolaan Penelitian dan Pengabdian kepada Masyarakat

In carry out management study And Devotion to public, need there are clear authority guidelines. This guide is needed as a reference for higher education in formulating research and service management plansto public.

# 261. Obligation DRTPM Directorate General Education Tall, Research, And Technology

Obligation DRTPM Directorate General Education Tall, Research, And Technology da-lam management study And Devotion to public college tallis as following:

a. Develop and establish research and community service norms people on level national in format System Guarantee Quality Researcher- tian And Devotion to public College Tall.

- b. Develop and determine Key Performance Indicators (KPI) for Research and Devotion to public.
- c. Set allocation budget study And devotion to bro-people.
- d. Organizing national competitive research funding, research decentralization, And study assignment.
- e. Organizing competitive community service funding national, decentralization, And assignment.
- f. Compile And set procedure operational standard (POST) For implementation of research funding and community service Which held by DRTPM.
- g. Carry out monitoring and evaluation of research implementation and implementationdevotion to public as arranged on part 2.2.
- h. Carry out guidance and facilitate improving the quality of research and community service to be able to compete at national level. onal And international.
- i. Carry out management complaint in level national.
- j. Compile and manage research and service *databases* to the community starting from proposals, online assessment of proposals, determining winners, monitoring and evaluation, and research performance achievements And devotion to public in accordance with indicator performance main (IKU) And indicator performance activity (IKK) Which relevant with activity pe- research and community service carried out online through http://simlitabmas.kemdikbud.go.id.

#### 262. Obligation College Tall

The obligations of universities in managing research and community serviceon public covers things following:

- a. Carrying out research management and community service as arranged on part 2.2.
- b. Compile plan strategic study (strategic plan study) And devotion to the community (community service strategic plan) in the context of ka increase quality And quantity study And devotion topublic.
- c. Determine research performance indicators and community service Which in accordance with IKU Which set by DRTPM.
- d. Develop guidelines for the development and management of research and devotion to public with refers on standard norm SPMPPT.
- e. Encourage the formation of groups of researchers and community service implementers on public Which Empower competitive national And international.

- f. Developing a research and community service database system community which includes research performance achievements and service to public in level college tall.
- g. Carrying out research and community service contracts between college tall And researcher/executor devotion.
- h. Report results activity to DRTPM through Simlitabmas.

# Obligation Institution Service Education Tall

Obligation Institution Service Education Tall in management study AndDevotion to public in college tall covers things following:

- a. Carrying out research management and community service in accordance authority Which given by DRTPM.
- b. Representing DRTPM in research contracts and community service people with college tall private (PTS).
- c. Assist DRTPM in coordinating coaching and mon- ev research and community service for private universities that needright coaching.
- d. Carry out assignments from DRTPM to manage research schemes and devotion to public certain.

## 2.7. Indikator Kinerja Penelitian

26.3.

Research control is carried out through determining key performance indicators determined nationally. Every university is required to prepare an achievement plan performance main study with refers on IKU Which be measured based results mapping performance, like stated on Table 2.10.

Ne	Type Outer		Indicator Achievements				
NO			TS**	TS+1	TS+2	TS+n	
	loaded in journal	International					
2		National accredited					
		National No accredited					
	1     Scientific articles loaded in journal     International       National accredited     National No accredited       International     International	International					
2		National					
		Local					

#### Table 2. 10 Indicator Performance Study

No	Type Outer		Indicator Achievements					
NO			TS**	TS+1	TS+2	TS+n		
	<i>(Keynote Speakers/Invited)</i> in meeting scientific	International						
		National						
		Local						
4	Speaker key/guest (Visiting Lecturer)	International						
		Patent						
		Patent simple						
	Riches Intellectual (KI)	Right create						
		Trademark						
5		Confidential trade						
		Design product industry						
		Indication geographical						
		Protection varieties plant						
		Design system locationcircuit integrated						
6	Book (ISBN)							
7	Book-chapter (ISBN)							
	Amount of Working Funds	International						
8		National						
	Same Study	Regional						
9	Number participation lectur	er*						
10	Document feasibility study							
11	Business plans							
12	Manuscript academic ( <i>policy</i> policy, or model policy strate							

\*

Amount lecturer Which involved in study shared total lecturer still college tall T.S = Year Now, year beginning commencement activity, written down in a way explicit, for example 2018, TS+1 = 2019, etc. \*\*

# 2.8. Indikator Kinerja Pengabdian Kepada Masyarakat

Control activity devotion to public done through determination key performance indicators determined nationally. Every college is obliged compile plan achievement performance main devotion to public with refers to KPI which is measured based on the results of performance mapping, as stated in Ta- bell 2.11.

No	Type Outer	Indicator Achievements	Year				
NO			TS**	TS+1	TS+2	TS+n	
1	Publication in journal scientificprint or electronic	Article in Journal International					
		Article in Journal National Accredited					
		Article in JournalNational No Accredited					
		International					
2	Scientific articles publishedin printed proceedings or	National					
	electronic	Local					
3	Article in media	National					
	print period or electronic	Local					
4	Documentati on implementat ion	Videos activity					
	( <i>Keynote speaker/Invited</i> )in meeting scientific	International					
5		National					
		Local					
6	Guest speaker ( <i>Visiting Lecturer</i> )	International					

#### Table 2. 11 Indicator Performance Devotion To Public

No	Type Outer	Indicator Achievements	Year				
NO			TS**	TS+1	TS+2	TS+n	
	Riches Intellectual (KI)	Patent					
		Patent Simple					
		Variety Protection Plant					
7		Right Create					
		Brand Trade					
		Confidential Trade					
		Design Product Industry					
		Indication Geographical					
8	Book	Book ber ISBN					
9	Book chapters						
	Partner Non ProductiveEconomy	His knowledge increase					
10		His skills increase					
		His health increase					
		His income increase					
		The service increase					

No	Type Outer	Indicator Achievements	Year				
NO			TS**	TS+1	TS+2	TS+n	
		His knowledge increase					
		His skills increase					
		The quality of the productincrease					
		Number of productsincrease					
		Type the product increase					
		Capacity production increase					
		Succeed do export					
	Partner Productive Economy/College Tall	Did it successfully marketing between Island					
11		Amount asset increase					
		Amount turnover increase					
		Total power it works increase					
		Management abilities increase					
		The advantages increase					
		Income generating PT increase					
		Product certified					
		Product standardized					
		Units business body law					
		Number of entrepreneurs new independent					
12	Number participation lectur	er*					

\* Amount lecturer Which involved in devotion to public shared total lecturer still college tall
 \*\* T.S = Year Now

Study in a way Specific Also must mention level readiness or death- bro outer Which generated in accordance Regulation Minister Research Technology, And Education Ting-gi Number 42 of 2016 concerning Measuring and Determining the Level of Technology Readiness technology And Decision Director General Strengthening Research And Development Number 603/E1.2/2016 regarding Guidelines for Indicators for the Achievement of Technology Readiness Levels as stated in- explain on Attachment 3.

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# 2.9. Komite Penilaian dan/atau Reviewer Penelitian dan Pengabdian kepada Masyarakat Internal Perguruan Tinggi

Inter- \_ \_ Higher education institutions select proposals in accordance with established provisions by DRTPM. Research and Community Service assessment/ *reviewer* committee Internal universities must meet a number of requirements. *Reviewer* requirements study internal college tall intended includes:

- a. have responsibility, integrity, Honest, obey code ethics *reviewers*, And capable carry out tasks as *reviewers*;
- b. educated doctorate;
- c. have position functional as low as possible Lector;
- d. experienced in field study at least Once two time as chairman on study scale national And or Once get study ber-scale international;
- e. experienced in scientific publications in international journals indexed with thread and/or nationally accredited rank 1/2 as main author (*first author*) or corresponding author (*corresponding author*) minimum of two titles article;
- f. experienced as speaker in seminar scientific international And or seminar scientific national; And
- g. Preference is given to those who have an h- *index* from an international indexing agency reputable, experience in writing material teach And have KI.

Condition reviewer Devotion to Public internal college tall includes:

- a. have responsibility, integrity, Honest, obey code ethics *reviewers*, And capable carry out tasks as *reviewers*;
- b. doctoral degree with a functional position as low as Lector; or Masters with position functional Lector Head
- c. Experienced in the field of Community Service at least One time as chairman executor activity multi year And One time in activitytan mono year;
- experienced in publication scientific on journal international And or nation- al accredited as writer main (*first author*) or writer correspondence (corresponding author);
- e. experienced as speaker in seminar scientific international And or seminar scientific national; And
- f. Preference is given to those who have an h- *index* from an international indexing agency reputable, experience in writing material teach And hold KI.

Mechanism appointment *reviewer* study And devotion to public internal per-teacher tall is as following:

- a. Research and community service institutions announced this openly reception candidate *reviewer* study And devotion to public.
- b. Prospective *reviewers* register themselves or are registered by other parties with research institutions And devotion to public.
- c. Selection of prospective *reviewers* is based on the criteria mentioned above according to the field skill Which required.
- d. Institution study And devotion to public announce results selection *re-viewers* internal in a way open.
- e. Internal research and community service *reviewers are determined through* Decision of the Head of Higher Education with a one year term of office and can be renewed long in accordance with need.
- f. Universities are required to submit the names of research and service *reviewers* to the internal community to DRTPM by uploading the *reviewer appointment decree* to Simlitabmas.

#### 2.10. Pembiayaan Penelitian dan Pengabdian kepada Masyarakat

Financing study refers on Regulation Minister Finance (PMK) about Booth- dar Cost Output (SBK), Which load policy unit cost For SBK Sub-Output Study. Regulation the arrange budgeting activity study with mem- consider the type, research area, and suboutputs produced. Basically financing study consists on two financing, that is SBK Research And SBK Addition.

SBK research For scheme study through funding BOPTN consists on SBK Research Pembinaan/Capacity, SBK Research Base, SBK Research Applied, SBK Research Development, And SBK Study Actual Strategic as seen on Table 2.8. SBK Research is limit maximum cost Which can Approved For reach target outer must. SBK Research must explained follow Standard Cost Input (SBM) Which currently applies. SBK Addition is limit maximum cost Which can Approved For every outer addition.

Proposers are required to make a research budget plan (RAB) by considering refer to SBK Research. RAB justification is made based on appropriate research needs with characteristics, categories, schemes and research focus areas. RAB details contain component shopping material, collection data, analysis data, rent equipment, reporting, outer must, And outer addition.



DIREKTORAT JENDERAL PENDIDIKAN TINGGI, RISET, DAN TEKNOLOGI Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi

# **CHAPTER III**

# MANAGEMENT THROUGH SIMLITABMAS



As explained in CHAPTER II, the stages of research management and community service community includes the stages of announcement, proposal, selection/appointment, determination, implementation, monitoring and evaluation, reporting, and output assessment. Each stage is managed via <a href="http://simlitabmas.kemdikbud.go.id">http://simlitabmas.kemdikbud.go.id</a>. The process of proposing, assessing, monitoring and evaluating uation, And reporting study And devotion to public through Simlitabmas explained-right as following.

#### 3.1. Pengusulan Penelitian

#### I. IDENTITY

- a. Identitas Ketua Pengusul
  - 1. NIDN/NIDK
  - 2. Name researcher
  - 3. Rank and Position
  - 4. E-mail proposer
  - 5. Stuffing *curriculum vitae* (CV) with show history data researcher-tian proposer form stuffing data publication And acquisition KI (title, je-KI name and status, as well as including the URL if any). Data history researcher in the form of a researcher ID or *link* /URL containing the record footsteps researcher Which listed in institution indexer national or in- international in a way online (Sinta, Scopus, Thompson, Google Scholar, Microsoft Academic, etc.). The researcher's track record can also be demonstrated in form online other, for example *personal webpage*.
  - 6. Stuffing ID Sinta
  - 7. Fill in h-Index
  - 8. Stuffing member researcher Lecturer/Non Lecturer like stuffing 1-7 in on

#### b. Identitas usulan

- 1. Field Knowledge
- 2. Group Macro Research
- 3. Field/Research Focus Study
- 4. Theme study
- 5. Topic Study
- 6. Title Study
- Readiness Level Status Technology (TKT) research and target Which want to achieved

- 8. Scheme study
- 9. Year of proposal and length of implementation litian
- 10. Proposed fees in yearwalk
- 11. SBK study
- 12. Total research costs
- The number of students who suggest getting involved in research tian to support MBKM

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Lembaga Pengusul

- Name units institution proposer, 1
- 2. Mention position units.
- Name leader 3
- NIP/NIK leader 4

#### П. SUMMARY

с.

A research summary of no more than 500 words containing the researcher's background tian, objectives and stages of research methods, targeted outcomes, and description TKT of proposed research. The summary also contains a maximum of 5 words key.

#### III. **BACKGROUND BEHIND**

Background behind study No more from 500 say Which containing background behind And problem Which will researched, objective special, And urgency study. On ba- great This need explained description about specification special related with field focus, themes and topics for national competitive or superior fields, themes and topic For decentralization.

#### IV. **REVIEW REFERENCES**

Literature review of no more than 1000 words stating the state of the art and road maps in the field under study. Charts and road maps made in form JPG/PNG Which Then inserted in stuffing This. Source library/reference primary Which relevant And prioritize results study on journal scientific and/or patent Which latest. Recommended use source library-ka 10 year final.

#### V. **METHOD**

The method or way to achieve the set goals is not written down exceed 600 words. This section is equipped with a research flow diagram describes what has been done and what will be done in the future time Which proposed. Format diagram flow can form files JPG/PNG. Chart pe- research must made in a way intact with phasing Which clear, start from beginning How process And the outside, And indicator achievements Which targeted. In ba- This section must also fulfill the duties of each member of the proposer according to the stages pan study Which proposed.



In this section, the Applicant is required to fill in the mandatory and additional outputs, target year lan, And status his achievements. Complete outer publication form article with mention the name of the journal and the name of the publisher intended for the output in the form book, or description product Which protected For outer KI.

## VII. PLAN BUDGET COST

The maximum research cost budget plan refers to the PMK regarding SBK Applicable Research Sub Outputs. Next the details of these costs must be refers to the applicable SBM. The size of the proposed budget depends on the scheme and focus areas of the proposed research. Cost details in proposal must load SBK study (cost This Already including cost achievement outer must And cost outer addition Which will achieved).

#### VIII. TIMETABLE

Timetable study arranged based on timetable implementation study.

#### IX. LIST REFERENCES

Citations are arranged and written based on a number system according to the order of use. quote, follow format Vancouver. Only References Which cited on proposal pe-research Which be included in List References.

#### X. AGREEMENT OR PARTNER STATEMENT

Agreement or statement partner with format free Which has confirmed by partner with sign hand leader partner And stamp in on ma t erai Rp1 0.000 then saved and uploaded in the form of a PDF file of no size more from 1MB.

#### XI. AGREEMENT PROPOSAL

Proposal ended with confirmation delivery (*submission*) by pengu-sul Which furthermore done agreement (*approval*) by leader units (LP/LPPM or other designation). The proposer will receive confirmation from the Simlitabmas if his proposal Already get away administration And Approved by

leader units. Leader units can form team to doright verification appropriateness administration Which intended. If assessedproposal No worthy with reason Which Enough strong for examplehappen duplication proposal, No in accordance with strategic plan PT un- for decentralization, or plagiarism of proposals, then the unit leader can No agree proposal with give ala-

san Which reported through Simlitabmas.

#### 3.2. Pengusulan Pengabdian kepada Masyarakat

Lecturers who will submit proposals for community service activities rus has an account at Simlitabmas. Next, the proposer must log *in* to fill in data in a way on line as stages following.

# I. IDENTITY

#### a. Identitas Ketua Pengusul

- 1. NIDN/NIDK
- 2. Name executor
- 3. Rank and Position
- 4. Stuffing curriculum vitae (CV) with show history data the proposer must fill in publication data and obtain KI. Ri- The proposer's data route can be in the form of the proposer's ID or link/ link /URL containing the track record of the listed proposer in institution indexer national or international in a way dar- ing (Sinta, Scopus, Thompson, Google Scholar, Microsoft Aca- demic, etc.). The applicant's track record can also be demonstrated and lam form online other, for example personal webpage.
- 5. Stuffing ID Sinta
- 6. Stuffing member proposer, like stuffing 1-5 in on

#### b. Identitas usulan

- 1. Title devotion to public
- 2. Scheme devotion to public Which chosen byproposer
- 3. Year proposal And long devotion to public
- 4. Cost Which proposed in year walk
- 5. Total cost devotion to public
- 6. Target achievements outer devotion to public
- Amount student Which proposed involved in studyFor support MBKM

#### c. Lembaga Pengusul

- Name units institution
   3.
   Name Leader

   proposer
   3.
   Name Leader
  - 4. NIP/NIK leader
- 2. Mention position units
- Guide Study And Devotion To Public Edition XIII Revision Year 2021

## II. SUMMARY

A maximum proposal summary of 500 words containing problems, solutions and target outer Which will achieved in accordance with each scheme abdian to public. Summary Also load description in a way carefully And sing- cat plan activity Which proposed And written with distance One space.

### III. INTRODUCTION

Part introduction maximum 2000 say Which containing description analysis situation And problem. Complete description of the introductory section for each schemema devotion to public outlined on Similtabmas.

## IV. SOLUTION PROBLEMS

Part This maximum consists on 1500 say Which containing description all solution Which offered For finish problem Which faced in a way systematic. Results research Which applied to partner. Description complete part solution perma-errors for each community service scheme are outlined on Similtabmas.

## V. METHOD IMPLEMENTATION

The maximum implementation method consists of 2000 words explaining the stages or steps in implementing the solutions offered to achieve gatasi problem partner. Description complete part method implementation For each community service scheme is described in the Similitab- sir. In this section it is mandatory to fill in a description of the forms of partner participation, expertise and task each member team devotion to public.

## VI. OUTDOOR AND TARGET ACHIEVEMENTS

In this section, the proposer is required to fill in the mandatory and additional outputs, ca- achievement, and status of achievement. Just like research outcomes, The output of community service publications in the form of articles is mandatory mention Name journal Which aimed And For outer form book must men-put Name publisher Which aimed.

#### VII. BUDGET

Justification budget arranged in a way detailed in accordance with format Which direct in- fill in through Simlitabmas. Budget cost For investment to partner minimum 40% from total budget For mono year And multi year; And budget Forhonor maximum 20%.

## VIII. TIMETABLE

The community service schedule is prepared according to the contents in the proposal in Simlitabmas.

#### IX. LIST REFERENCES

Citations are arranged and written based on a number system according to the order of citation, follow Vancouver format. Only the literature cited in the proposed workdian to public Which be included in List References.

## X. AGREEMENT OR PARTNER STATEMENT

Agreement or statement partner with format free Which has confirmed by partner with sign hand leader partner And stamp in on ma t erai Rp1 0.000 is then saved and inserted in the form of a PDF file of no size more from 1MB.

### XI. DESCRIPTION SCIENCE AND TECHNOLOGY

This section contains a description of a maximum of 500 words explaining the description of science and technology will be implemented with partners, equipped with *a flowchart* of implementing science and technology, specification TTG/Science and Technology other.

#### XII. MAP LOCATION

Part This containing map location partner Which be equipped with explanation distance partner with PT proposer.

#### XIII. PROCESS AGREEMENT PROPOSAL

The proposal ends with confirmation of delivery (*submission*) by the proposer which is then approved by the unit leader (LPM/ LPPM or other designation). The proposer will receive confirmation from Siml- itabmas if the proposal has passed the administration and been approved by the leadership units. Leader units can form team For do verification appropriateness administration in question. If it is deemed that the proposal is not feasible for certain reasons strong enough, for example if there is duplication of proposals, it is not in accordance with PT's strategic plan for decentralization, or plagiarism proposal, so leader units can No agree proposal with give reason Which reported through Simlitabmas.

#### 3.3. Penilaian

In accordance with the stages of research management and community service throughout How has outlined on Chapter 2, evaluation done on stages selection, implementation, and reporting. At the selection stage, proposals are assessed and discussion And evaluation in field. On stages implementation done pe-value monitoring And evaluation.

At the time of implementation and at the end of the implementation year, recipients of funding research and community service are required to report progress carrying out research and community service. Progress report And report end year done with access And fill in achievements lu- aran in accordance Which planned, use budget

(For Devotion to Public), file semi-nar results in Simlitabmas by chairman researcher/executordevotion. On stage This done evaluation results and assessment of follow-up proposals for multi-years. Pe- selection, implementation and reporting values refer to on Attachment 4.





DIREKTORAT JENDERAL PENDIDIKAN TINGGI, RISET, DAN TEKNOLOGI

Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi

# **CHAPTER IV**

# SCHEME STUDY



Research in higher education is expected to contribute to increasing competitiveness and national sovereignty based on science and technology, as formulated on RIRN. Because That scheme study must in line with vision Which Already formulated. Men- support instruction President Republic Indonesia so topic And theme study besides must different doman at RIRN, also prioritizing the themes of green economy, blue economy, digital economy, tourism, and health. The direction to strengthen these three themes is not without reason. The whole world is already moving towards a green economy, not only because of the need for new and renewable energy. Case- Trade agreements have included the green economy in them. Indonesia As a maritime country, it has enormous potential in the blue economy. This potential can take advantage of it , right? with Good with support study. In era re v olution indu s tri 4 .0 darling \_ Already going to 5 .0 We Also must prioritize \_ \_ development digital e c onomy . Efficiency in all areas of life will be achieved by using digital technology with te-pat.

The research reference policy at RIRN is accommodated in the national competitive research program, as dangkan study based superior college tall Which poured on Strategic Plan study universities are accommodated in decentralized research programs. Research program needs tian Which nature strategic for DRTPM can inviting college tall through mechanismassignment.

#### 4.1. Skema Penelitian Dasar

Based on Minister of Research, Technology and Higher Education Regulation Number 42 of the Year 2016 about Measurement And Level Determination Technology Readiness, Research Basics are categorized into research that produces the basic principles of technology, for- start draft and/or application technology, until proof of concept ( proofof-con- cept ) function and/or characteristics important in a way analytical And experimental. Target from this research is the production of new theories, methods or policy principles used for scientific development. Basic Research can be oriented towards explanation or invention (invention) То use anticipate something yes symptoms/phenomena, new rules, models, or postulates that support a technological process, health, agriculture, and others in order to support applied research. Research Scheme This basis can be used for collaborative research from within or abroad, including Suk sabbatical leave program. Overseas collaborative research can be carried out online multilateral or in form consortium.

Scheme Study Base consists on four program study, that is **Program Study Foundation**, **Development Research Program, Postgraduate Research Program, Ka- jian Policy Strategic.** Program study base covers Study Base Competitive National (PDKN), Basic Research for Higher Education Excellence (PDUPT), and Research Base Partnership (PDK). Program Research Breeding covers Study Lecturer Beginner (PDP) And Study Cooperation between College Tall (PKPT). Program Study Fit- undergraduate degrees include Doctoral Dissertation Research (PDD), Master's Thesis Research (PTM), and Study Education Masters Going to Doctor For Bachelor Superior (PMDSU).

#### 4.1.1. Program Study Base

National Competitive Basic Research refers to RIRN, while PDUPT refers to the university research strategic plan, and PDK refers to need strategic DRTPM. Program *sabbatical leave* is something activity un- to produce scientific articles that are ready to be published in international journals reputable Which is results study together with partner in outside country and wrote the final draft of the textbook using state-of-the-art materials. Outcomes, criteria and per- conditions proposer Program Study Base arranged as following.

#### a. Outer Study

Outer must PDKN, PDUPT, And PDK per year in the form of:

- One article in journal international Which indexed on databases reputable; or
- One book results study ber ISBN;

Study This Also expected can produce outeraddition in accordance Table 2.10.

#### b. Criteria Study

Criteria Program Study Base follow guidelines as following:

- study nature multi year, period time study 2-3 year Andthe outside will evaluated every year;
- activity *sabbatical leave* done by chairman proposer in outside countrytogether with partner during 2-3 month;
- financing study For every the year follow provisionfunding based on field focus refers SBK Study Base;
- special For sabbatical leave cost mobility in outside from SBK Researcher-tian Base can submitted on proposal in accordance attachment 7; And
- special For PDK required partner with institution in outside go-room tall proposer.

#### c. Condition Proposer

Condition proposer Program Study Base as following:

- The chairman of the proposer has a doctoral degree with a minimum functional position sional Assistant Expert, or educated Masters with position fung-sional at least Lector;
- chairman proposer own record footsteps publication minimum two article in reputable indexed database and/or accredited national journalranking 1-2 as writer First or corresponding author in-

prove it by including the URL of the article in question; or three resulting books research with ISBN as the first author published by the publisher member IKAPI/ equivalent or publisher international;

- special For PDK chairman proposer must get assignment from Kemdikbudristek.
- member proposer 1-2 person.

## 4.1.2 Program Study Coaching

Wrong One objective study in College Tall is increase capacity institution And lecturer in carry out study. Coaching study available but facilitated in two study, that is Study Lecturer Beginner And Researcher- tian Cooperation Between College Tall.

#### a. Study Lecturer Beginner

Beginner Lecturer Research (PDP) is intended as a research activity tian in frame build And direct para researcher beginner For increase ability in carry out study And mepub- publish the results of their research in scientific journals, both national and international. international.

In line with the research decentralization policy by the Directorate General of deral Education Tall, Research, And Technology, PDP is Wrong One research scheme intended for permanent lecturers at universities tall Cluster Built. Objective, outer, criteria, And condition proposerStudy Lecturer Beginner arranged as following.

#### 1. Objective Study

Objective PDP as following:

- become a training facility for novice lecturers to develop publish the results of their research in scientific journals, both national and or one article in an international journal, or seminar proceedingsinternational; And
- initiate preparation map road his research.

#### 2. Outer Study

The mandatory output of PDP is the publication of one scientific article in a journal. accredited national rankings 1-6, or one article in an international journal national, or one article in international seminar proceedings. Pe- This research is also expected to produce additional outcomes refers Table 2.10.

#### 3. Criteria Study

Criteria PDP follow provision following:

- PDP financing refers to SBK Research Development/Capacity; And
- period time study One year.

#### 4. Condition Proposer

Condition proposer PDP as following:

- The chairman of the proposer has a Master's degree with a maximum of functional capacity of Expert Assistant or does not yet have a position functional Which originate from PT Cluster Building;
- member proposer 1-2 person;
- Proposing members can come from PT Madya cluster and Cluster Building;
- Proposing members are not limited to functional position levels And education; And
- proposer only can get scheme PDP as much two time as chairman.

#### b. Study Cooperation Between College Tall

Currently, almost all city districts have established educational institutions. dikan tall. Condition This very encouraging Because education Ting- gi will be more easily accessible to the public. However, it can gap quality maintenance tridharma education tall.

DRTPM Directorate General of Higher Education and Technology has implemented various coaching programs aim to improve the quality of lecturers, especially in the research field. The results can be seen by the development of research centers research and leading research groups in various universities room tall in Indonesia. Group researcher, laboratory, And center pe- research the has own ability And atmosphere academic Which conducive to the development and implementation of research well. However, the quality of results achieved by most tertiary institutionsanyway relatively low.

DRTPM strives to reduce the quality gap between companies high level in the field of research and as a bridge for Assisted Research to Research Superior with facilitate Work The same study between clogpok researcher Which relatively new develop through scheme Study Kerservice Between College Tall (PKPT). Team researcher proposer (TPP) PKPT comes from the Intermediate and Assisted Higher Education cluster universities. TPP partners with universities that have research centers even groups researcher who superior (Team Partner Researcher/TPM).

Directorate General Education Tall, Research, and Technology 53

It is hoped that through this collaboration the quality of TPP research can be further improved And can made as bridge For continue studies to program Docktor. Goals, outcomes, criteria and requirements for Intercollaborative Research proposersCollege Tall arranged as following.

#### 1. Objective Study

Objective PKPT as following:

- provide a forum for TPP lecturers/research groups to can utilize the facilities, expertise, adopt and example culture study TPM;
- intertwined cooperation between TPP And TPM in managementstudy; And
- give opportunity TPP For do preparation melan- surprise studies Doctor in institution TPM.

#### 2. Outer Study

Outer must PKPT per year in the form of:

- Publication of one scientific article per year in international journalsWhich indexed on databases reputable; or
- One book results study ber ISBN. Study This Also dihara- pkan can produce outer addition in accordance Table 2.10.

#### 3. Criteria Study

Criteria PKPT follow provision as following:

- A research proposal is research that can be carried out fostered and developed at TPP institutions after the program study This finished;
- TPM institutions must have relevant Doctoral programs with proposal study;
- The research period is two years and an evaluation is carried out inend year First; And
- financing PKPT refers on SBK Study Base den- bro magnitude bi a y a maximum Rp6 0.00 0.00 0.00

#### 4. Condition Proposer

Condition proposer PKPT as following:

- The Proposing Research Team (TPP) consists of the chairman and the maximum two members from the Intermediate or Higher Education cluster Building;
- chairman TPP educated maximum Masters with position functional maximum Lector;

- TPM higher education research performance cluster entered Cluster Main or Independent;
- TPM consists on a chairman And a member, both- yes educated Doctor;
- TPM No reduce quota proposal study;
- chairman researcher TPM minimum have two publication as first author or corresponding author in journal ep- thread it international;
- Research proposals are made by TPP and TPM as guarantors quality study; And

#### 41.3. Program Study Postgraduate

Postgraduate Research is research that is institution-based and can be followed by lecturers to improve the quality of research, supervision (promoter and copromoter at master's and/or doctoral level), as well as for increasing ascompetency level and scientific quality of graduates and teaching staff at institutions Postgraduate. Wrong One indicator increasing competence graduate of And power teaching at postgraduate institutions is the ability to be able to write and publish the results of their research in the form of articles in international journals with the thread it.

As published in the Circular Letter of the Director General of Higher Education 152/E/T/2012 regarding the implementation of publication obligations for graduates up to level Doctoral education is a strategic step to improve the quality of graduates. That matter emphasized with Regulation Minister Research, Technology And Education Tall No- mor 44 of 2015 concerning National Higher Education Standards as in mention in Chapter 44 Paragraph (5) Which has oblige "Results study Which No confidential, non-intrusive and/or nonharmful to the interests of bro general or national must disseminated with method seminar, dipub-licate, patented, and/or method other Which can used For welcome-provide research results to the community." Still in the contents of the ministerial regulations namely in the Eighth section regarding Research Management Standards specifically on Chapter 51 Paragraph (2) points b Wrong the only one explained that "pe- value study most A little concerning aspect enhancement amount publication scientific". As base from policy And regulation in on so DRTPM through research scheme that emphasizes research productivity and publications reputable international, acceleration solution study task end level master's and doctoral degrees, as well as further research after the doctoral degree. Efforts to improve- improve research productivity and its consequences with the publication of scientific papers in higher education is providing assistance in carrying out research for ma-graduate students. One method chosen is providing support Research funding in postgraduate programs includes Master's Thesis Research- tar (PTM), Study Dissertation Doctor (PDD), And Study Education Mastersgoing to Doctor For Bachelor Superior (PMSDU).

Along with the increasing complexity of research management and in order efficiency in increasing the quality of research management in the future, then third scheme the integrated become Study Postgraduate. Theme da- The Postgraduate Research scheme must refer to ten focus areas as on Attachment 2.

## a. Study Thesis Masters

Objective, outer, criteria, And condition proposer Study Thesis Masters arranged as following.

1. **Objective Study** 

Objective PTM as following:

- produce master's graduates who are able to organize ideas, results thinking, And argument scientific or technical in a way ber- not quite enough answer And based on ethics academic, as well as to- communicate through the media to the academic community mic And public wide;
- increasing the number and quality of scientific publications at both levels national nor international;
- speed up solution studies master so that can increase amount And competence graduate of program magical-tar; And
- increase the educational strata of human resources so that they have power competition and opportunities to pursue a career in the academic field or- even researcher.

#### 2. Outer Study

The mandatory output of PTM is one article published in a journal accredited national scientific ranking 1-2 or one article in the journal nal international or One article on proceedings seminar internal- reputable indexed sional as a student's first author Which guided And chairman researcher as *corresponding author*. Study This Also expected can produce outer add- han in accordance Table 2.10.

#### 3. Criteria Study

Criteria PTM follow provision as following:

- Research proposals are part of the research umbrella supervisor as research material for master students guidance proposer;
- student master intended on points First is ma-student Which currently studies in college tall chairman pengu-sul; And
- period time study during 1 year with magnitude cost maximum Rp3 0.00 0.00 0.00

4. Condition Proposer

Condition proposer PTM as following:

- the chairman of the proposer is a permanent lecturer at the university, doctoral degree who is supervising at least one student master full time; And
- Proposing members consist of assistant supervisor lecturers (If There is) And One student master his guidance.

## b. Study Dissertation Doctor

Objective, outer, criteria, And condition proposer Study Dissertation Doctor arranged as following.

1. Objective Study

Objective PDD as following:

- produce doctoral graduates who are able to find or develop new scientific theories/conceptions/ideas, contribute to development, as well as practice science and/or technology that pays attention And apply mark humanities in field his expertise, den- bro produce study scientific based on methodology- gi scientific, thinking logical, critical, systematic, And creative, or produce graduate of doctor applied Which capable men- discover, create, and make new contributions to development, and practice of science and/ or technology Which notice And apply mark hu-majors in their field of expertise, by producing works design, prototype, or innovation technology worth plus or can be used for problem solving based on thinking logical, critical, creative, And wise;
- increase amount And quality publication scientific in level ininternational; And
- speed up solution studies doctor so that can increase amount And competence graduate of program doctor.

#### 2. Outer Study

The mandatory output of PDD per year is the publication of one scientific article per year as writer First student Which guided And lead researcher as *corresponding author* in an international journal sionally reputable. This research is also expected to produce- right outer addition in accordance Table 2.10.

#### 3. Criteria Study

Criteria PDD follow provision as following:

- Research proposals are part of the research umbrella as material dissertation minimum One student doctor bimb-remember proposer; And
- period time study 1-2 year with magnitude cost mom- simal Rp6 0.00 0.00 0.00 per year For mebi a y ai study dissertation student his guidance.

#### 4. Condition Proposer

Condition proposer PDD as following:

- the chairman of the proposer is a permanent lecturer at the university, holds a doctoral degree, and has the supervision of pro- gram doctor from within and/or abroad, both programs doctor by course nor doctor by research;
- chairman proposer own minimum two article in journal internal- sional reputable as writer First or corresponding author; And
- Team members consist of a co-promoter and one student. student doctor his guidance.

## c. Study Education Masters going to Doctor For Bachelor Superior

Objective, outer, criteria, And condition proposer study PMDSU arrangedas following.

1. Objective Study

Objective PMDSU as following:

- develop superior graduates so that those concerned tan can finish program doctor with more fast;
- produce doctoral graduates who are able to find or develop new scientific theories/conceptions/ideas, contribute to development, as well as practice science and/or technology that pays attention And apply mark humanities in field his expertise, den- bro produces scientific research based on methodology scientific, thinking logical, critical, systematic, And creative; And
- growing postgraduate capacity as a research center tian producing technological innovation in line with advances in science and technologytext.

#### 2. Outer Study

Outer must PMDSU per year form publication One article scientific in journal international reputable as writer First ma- the student being supervised and the head researcher as *corresponding author*. Study This Also expected can produce outer addition in accordance Table 2.10.

#### 3. Criteria Study

Criteria PMDSU follow provision as following:

- Research proposals are part of the research umbrella as material dissertation student guidance proposer; And
- period time study 3 year with magnitude cost maxi- mall Rp6
   0.00 0.00 0.00 per year.

#### 4. Condition Proposer

Condition proposer PMDSU follow provision as following:

- chairman proposer is promoter from student program PMDSU which is still active and has been declared to have passed the course in Semester 1, and currently studying in Semester 2 as well as will start study in year Which currently walk;
- chairman proposer own h- *index* ≥2 Which obtained from gluereputed and reputable international indexers footsteps study Which very Good; And
- Proposing members are co-promoters and student pro- gram PMDSU, with a clear division of tasks between teams proposer Which involved as well as Approved by Which concerned.

## 41.4 **Program Study Policy Strategic**

Process taking policy And implementation in Ministry Education, To- culture, Research, And Technology need support study policy. Matter This is intended so that the policies taken can effectively address problems errors that exist in the dynamics of the strategic environment faced by both in- internal and external. With this background, DRTPM facilitates through Program Study Policy Strategic (KKS). Program This expected can give base academic Which strong in determination policy strategic.

Program Study Policy Strategic can form study to policy Which implemented or reviewed the policies that will be taken. Study the wise Which Already There is and/or Which Already executed expected can mem- provide a strong scientific basis for necessary improvements to be made. Study to policy Which will taken expected can give lan- dasan scientific Which strong in process, context, And substance policy. Outer, criteria, And condition proposer Program Study Policy Strategic arranged se-like following.

## a. Outer Study

Outer KKS form script academic Which can form *policy briefs*, re-policy recommendations, or strategic policy models for an action problem in accordance with field assignment.

## b. Criteria Study

Criteria KKS as following:

- DRTPM pointing And give assignment to college high as implementing the study by taking into account the tension And resource Which owned;
- DRTPM pointing a lecturer in college tall Which appointed se-like chairman team;
- chairman team Which appointed can form team Which originate from per-teacher tall other or institution in outside college tall;
- team proposer submit proposal;
- period time KKS during 1 year; And
- financing Study Policy Strategic refers on SBK Study Ak- tual Strategic.

## c. Condition Proposer

Condition proposer KKS as following:

- chairman proposer educated minimum Masters And have commpotential in accordance with topic Which studied; And
- member proposer 2-5 person.

## 4.2. Skema Penelitian Terapan

Scheme Study Applied is study Which addressed For get- provide a solution to a problem that exists in society, industry and government. This research is a continuation of basic research to produce downstream products. sasi. Applied Research is a research model that is more directed at finding create innovation and development of science and technology that is utilized by industry and community through collaboration with its users. This research is oriented science and technology products that have been validated in a laboratory/field environment or environment Which relevant. In process measurement TKT, target Study Tera-pan will is at in level 4-6.

Applied science and technology and social humanities products resulting from research are aim to have novelty and direct relevance to the solution problems needed by society, government and industry. Product Output study applied required own benefit direct to partner user- na, by Because That testing on level use Good scale limited/lab-

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oratory or area/condition real, become important For input in pros-es research. The results of applied research are encouraged to gain recognition Riches Intellectual (KI) And directed can developed to the front in research and development to become industrially produced productsmass with TKT 7-9.

This Applied Research Scheme can be carried out for collaborative research from da- at home or abroad. Research must be carried out multilaterally or in depth the form of the consortium is clearly outlined in the product update, map road study including distribution task between team researcher And partner user- na. Partner Study And Partner User must involved in study.

The Applied Research Scheme consists of National Competitive Applied Research (PTKN) and Higher Education Leading Applied Research (PTUPT). PTKN men- refers to RIRN while PTUPT refers to the university's research strategic plan tall. Outcomes, criteria and requirements for applicants of the Applied Research Scheme are regulated as following.

#### a. Outer Study

The mandatory output of PTKN and PTUPT is in the form of innovative products, which have added value. bah, and protected by KI (Patents, Simple Patents, Copyright, Protection ungan Variety Plant, Design System Location Circuit Integrated) or script policy with criteria for each output stage as follows regulated in Appendix 5 point H. This research is also expected to be able to produce outer addition in accordance Table 2.10.

## b. Criteria Study

Criteria PTKN And PTUPT follow guidelines following:

- study nature multi year, period time study 2-3 year And outer will evaluated every year; And
- Research funding follows funding provisions based on field focus refers SBK Study Applied;

#### c. Condition Proposer

Condition proposer PTKN And PTUPT as following:

- chairman proposer educated Doctor with position functional min-Minimum Expert Assistant, or Master's degree with a functional position sional minimum Lector;
- chairman proposer own record footsteps publication minimum two article in reputable indexed database and/or accredited national journalranking 1-2 as writer First or *corresponding author* dib-prove it by including the URL of the article in question; or three books Research results with ISBN as the first author are published by publisher member IKAPI/ equivalent or publisher international; or minimum own One KI (patent/ patent simple minimum registered And other certified);

- KI Which intended points second is KI Which protect substance Haresults study However No including Right Create book No results research, articles, reports, theses, theses, dissertations, guides, and do-kumen the like;
- have a partner as proven by a statement of need will product Which will generated And support (*inkind* or *cash*) which contains willingness to be a user of research results. There is Funding support from partners is an added value to the proposal. In- The partner institutions in question are potential user partners who are relevant.vans with product study; And
- 2-3 proposing members and a minimum of 1 proposing member from partner. Member proposer Which originate from partner candidate userproven with letter appointment from partner candidate user.

## 4.3. Skema Penelitian Pengembangan

Indonesia Empower competitive And sovereign based knowledge knowledge And technology is vision plan parent research national (RIRN) Where Wrong One strategy un- knock reach vision That is "increasing contribution research to growth- han national economy". Economic growth is influenced by exports and imports. Indonesia still imports a lot of final products and exports raw materials. Apart from that, Indonesia still imports a lot of technology products. Because it encourages research that produces commercial products such as right matter Which very important. No all study Can end to commercial-ization, but most of the research results can be directly applied to the public. people in context devotion.

Universities (PT) and industry must form a collaborative innovation system PTindustry, so partnerships with industry are really needed to support the commercialization of research results. The knowledge value created by PT can be applied effectively to improve innovation performance. When Which The same, industry can reduce cost R&D through cooperation research with PT. On the other hand, Industry contributes to research inspiration from a company perspective sahaan, Which can promote achievement study scientific in PT, with thereby can push growth economy And Power competitive nation.

PTKN/PTUPT research results that have been funded in previous periods Generally, there are several that have the potential to be commercialized through schemes PP. Inputs For PP This naturally No only from PTKN/PTUPT Which funded by Directorate General of Education Tall, Research, and Technology (Directorate General of Higher Education and Technology), but also other funded research that produces products Ready For commercialized. Scheme This expected can produce product worthy industry And own potency commercialization.

This research is directed at increasing the productivity of product commercialization research results protected by Intellectual Property. In this research it is necessary to right involvement partner industry as investors And member researcher. In pros- ice measurement Kindergarten T , target study development is at in le v el TKT 7 - 9. PP can done For study cooperation from in or outside country. Study

Foreign cooperation can be carried out multilaterally or in the form of consorsium. Objectives, outcomes, criteria and requirements for Development Research proposers-bro arranged as following.

## a. Objective Study

Objective Study Development as following:

- produce product knowledge knowledge, technology, art, And culture;
- realize map road technology or results research Which nature mulundisciplined Which produce product commercial;
- build partnerships Academic, Business, Government, and Comcommunity (ABGC); And
- increase And push ability researcher in college Ting- gi to collaborate with partner institutions in the country or in outside country.

## b. Outer Study

Outer must Study Development can form product industry or product policy with criteria each stages outer every ta-hun arranged as following:

- the first year in the form of an industrially viable prototype trial document inenvironment limited
- the second year in the form of an industrially viable prototype trial document in environment Actually
- year third form document feasibility study And business plans

Detailed output per year can be seen in Appendix 5 point I. This research is also expected to produce additional appropriate outcomes Table 2.10.

#### c. Criteria Study

Criteria Study Development as following:

- study nature multi year, period time study 3 year;
- outer form product science and technology will evaluated every year; And
- Research funding for each year follows the provisions funding based on focus areas refers to Research SBK Development.

## d. Condition Proposer

Condition proposer Study Development as following:

- chairman proposer educated Doctor with position functional Minimum Expert Assistant, or Master's degree with position functional minimum Lector;
- chairman proposer own record footsteps publication minimum two article in reputable indexed database as first author or *corre- The sponsoring author* is proven by including the URL of the article in the Meaning or own patent/patents simple with status registered- ar or granted or other KI that is certified with substance related proposal study;
- have investor partners as proven by a statement letter which contains a commitment to invest funds by partners in the form *of this cash* minimum as big as 10% from fund Which submitted; And
- 3-5 proposing members and a minimum of 1 proposing member from industry partners. Members who come from industry partners are proven-right with letter appointment by institution/industry.



DIREKTORAT JENDERAL PENDIDIKAN TINGGI, RISET, DAN TEKNOLOGI Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi

CHAPTER V

# SCHEME DEVOTION TOPUBLIC



#### 5.1. Skema Kemasyarakatan

Directorate of Research, Technology and Community Service (DRTPM) Directorate General of Higher Education- Research and Technology Kemdikbudristek tries to apply a new paradigm in community service activities dian to public Which nature solve problem, comprehensive, meaningful, complete, and *sustainable*. Community Schemes include the Social Welfare Program traan Public (PKM), Program Partnership Public Stimulus (PKMS), Program Labourer- ah Community Learning and Empowerment Real Work (KKN-PPM), and Programs Application Science and technology to Public (PPIM). Activity in scheme society ber- characteristic mono year. Objective, outer, criteria, condition, And characteristics Scheme Pack-yarakatan arranged as following.

#### 5.1.1. Objective Activity

Scheme Sociability aims:

- a. forming/developing an independent group of people economy And social;
- b. helps create peace and comfort in life community;
- c. improve thinking, reading and writing skills or skills other Which needed (*soft skills* And *hard skills*);
- d. specifically for KKN-PPM : changing the implementation of the KKN-PPM program from the paradigm ma development becomes an empowerment paradigm with the concept of *co-creation ation*, *co-financing* and *co-benefits* ; and downstreaming of lecturers' research results can applied to public through program KKN-PPM;
- e. special PPIM give support, strengthening, And accompaniment executornaan program priority in implementation cooperation with institution negfig/LPK/LPNK;

#### 5.1.2. Outer Activity

Outer must Scheme Sociability as following:

- a. increasing the level of partner empowerment quantitatively and qualitatively accordingly problem Which faced refer on Table 2.11.
- b. One article scientific Which published through Journal ber ISSN or proceedingsber ISBN from seminar national;
- c. One article on media mass print/electronic;
- d. videos activity;

Outer addition Scheme Sociability can form outer other in outside lu-aran must in on refers on Table 2.11.

## 5.1.3. Criteria Activity

Criteria Scheme Sociability as following:

- a. SCIENCE AND TECHNOLOGY Which applied from results study team proposer prioritized Forfunded;
- b. The community scheme is a mono-year program with a term of eight months of activity (PKM, and PPIM) 6 months (PKMS), and a maximum of 2 months lan/144 JKEM (KKN-PPM);
- c. involving at least 2 students (PKMS, PKM and PPIM), 20 people (KKN-PPM), Which his activities recognized become part from MBKM minimum 5 SKS in 1 year implementation;
- d. Problems handled by partners include at least two problem areas need expertise Which different;
- e. support transformation Education Tall through 8 Indicator Performance Main (IKU) minimum 2 indicator;
- f. distance from college tall proposer maximum 200 km, except PKMS maximum 100 km; And
- g. Budget Which used For invested to partner minimum 40% of the total proposed budget in the form of goods and capital expenditure (No including land And building construction).

## 5.1.4 Condition Proposer

Condition proposer Scheme Sociability as following:

- a. the proposer has multidisciplinary competence in accordance with the field being tested sulkan, minimum two competence, And possible For collaborate den-bro college tall other;
- b. Applicants may only implement three community schemes time as chairman; And
- c. team executor minimum two person And maximum three person (One chairman AndOne or two member).

## 5.1.5. Characteristics Program

## a. Characteristics Program Partnership Public (PKM)

The Community Partnership Program (PKM) is an improvement program community potential. The target audience (partners) of a productive society economically such as: craftsmen's groups, fishermen's groups, groups farmer, group cattle, Which every its members own character product- tive economically. Home industry target partners (IRT) with ownership business nature individual/individuals required have Minimum of 4 employees excluding family members. Target partners who leads on field economy productive required is clog-pok with amount member minimum 5 person, like group dasawis- ma, pokdarwis, PKK groups, recitation groups, homemaker groups mah ladder And etc. Partner target public Which No productive in a way economy for example school (PAUD, elementary school, JUNIOR HIGH SCHOOL, high school/vocational school), coral ta- runa, group moms House ladder, group children street, RT/ RW, hamlet, village, Community Health Center/Posyandu, Boarding school And other etc.

Type problem Which must handled in program PKM, specifically economically productive communities or potential new entrepreneurs include field production, management business And marketing. For activity Which does not focus on the economic field, it is mandatory to disclose detailed problems that are prioritized to be resolved such as increasing services, increasing public peace, improving/helping facility service And etc.

## b. Characteristics Program PartnershipPublic Stimulus (PKMS)

In line with the PT clustering policy based on service performance to the community, then DRTPM designed a special scheme in up- I encourage increased involvement of PT lecturers in the Less cluster Satisfactory or not yet have clustering in the form of a Pro- gram Community Stimulus Partnership (PKMS). PKMS scheme provides stimulation PT in cluster Not enough Satisfying For can increase performance devotion to public in college its height. Audience PKMS program targets can include: 1) a productive society economically; 2) a society that is not yet economically productive, but has a strong desire to become an entrepreneur; or 3) society that does not bro productive in a way economy (public general/ordinary).

Partner target public Which productive in a way economy like industry households (IRT), craftsmen, fishermen, farmers, livestock breeders and product partners tif other. For partner public Which Not yet productive in a way eco- e.g but desire strong become entrepreneur, required shaped groups with a minimum number of members 3 people. Community partners which are not economically productive can be schools (PAUD, SD, JUNIOR HIGH SCHOOL, high school/vocational school), coral cadets, group moms House ladder, clog- street children's groups, RT/RW, hamlet, village, Community Health Center/Posyandu, Pe-Islamic boarding school And Which kind other.

Types of problems that must be addressed in the PKMS program, especially especially economically productive people or potential new entrepreneurs covers field production, management or marketing. Whereas For non-productive partner activities can be in the form of problem handling health, blind script, or training in accordance need partner. Activity carried out at PKMS at least one area of activity but a team proposer must with minimum two expertise Which different.

# c. Characteristics Program Studying Work Real Learning And Empowerment Public (KKN-PPM)

Program Studying Work Real Learning And Empowerment Public (KKN-PPM), is a field activity for students who are studying puh the final part of the undergraduate education program. This program actually characteristic must for all student, Because program This capable push student empathy and sympathy for community problems, and can contribute to solving existing problems public. The KKN-PPM program provides opportunities for students to get learning in the field that was not possible before obtained in seat studying. Besides That activity KKN-PPM become form real contribution College Tall (PT) for public industry, government- tah regions and community groups who want to be economically independent as well as social. This KKN-PPM program requires a Supervisor Field (DPL) and students play an active role in knowing the existing problems and provide solutions to these problems in period time during 1 until 2.5 month in field with draft "Work together public" as replacement draft "Work Forpublic".

In an effort to improve the image and quality of KKN-PPM activities, then implementation KKN-PPM designed more contextual with change paradigm development become paradigm empowerment. Revitalization Studying Work Real (KKN) become Studying Work Real – Learning And Community Empowerment (KKN-PPM) for Higher Education (PT) throughout Indonesia is very important to do. This was driven by ken- true that Lots PT Which previously set eye studying KKN-PPM become eye studying must level bachelor Now only become eye choice of college and even many universities already accept center for KKN-PPM courses from the curriculum. Thus the program KKN-PPM is specifically only for PT which requires KKN-PPM for students before completing undergraduate studies, where opera design- sional and implementation methods need to be adapted to social conditions. each PT.

# d. Characteristics Program Application SCIENCE AND TECHNOLOGYto Public (PPIM)

This is an Assignment Program aimed at supporting the work of cooperation with other institutions in an effort to improve DRTPM performance in particular and government performance in general. The Ministry of Education and Culture, Research and Technology, with its various expertise, is obligation to make development successful in all fields by providing support, strengthening and mentoring in the form of cooperation implementation of priority programs implemented by the institution country/LPK/LPNK, especially programs that relate to the needs han public.

Audience target (partner) PPIM can form group business public (such as Bumdes or other village business units), cooperatives, and groups business economy productive Which formed by institution country/LPK/LPNK. Partners from general community groups such as youth organizations, dasa wis- ma, pokdarwis, and other general community groups in village. Partners are determined by at least two groups of the general public, or two groups of economically productive society; or a group of people general And One group public economy productive.

Implementation of the PPIM scheme is carried out by referring to the results PT performance assessment by looking at the achievements of all aspects of the Standards National Community Service. Performance assessment analysis results- ja This, mainly competence college tall For carry out task downstream Science and technology to public, can used as reference Forgive assignment implementation devotion to public.

## 5.2. Skema Kewilayahan

Empowerment public based territoriality is activity multi year (3 ta-hun) which is aimed at helping various regional problems faced by but by regional/city government, village/village (another name with the same governance), Subdistricts, traditional villages, in accordance with RPJM or Non-RPJM, both *Bottom Up* or *Top Down* in order to improve the quality of life for the general public, education, health, business and industrial communities found in fruit region Which become location built College Tall (PT). Forms activity This regionally based program is nationally competitive, namely PKW (Mi- Regional Traan), PPDM (Partner Village Development Program), PKPK (Partnership Program Regional Development), and superior PT-based regional programs, namely PPMUPT (Leading Higher Education Community Empowerment Program). Goals, lu- aran, criteria, condition, And characteristics Scheme Regionality arranged as following.

## 5.21. Objective Activity

Scheme Regionality aims:

- **a.** apply results research superior college tall Which in accordance with urprestige need public on region built;
- **b.** provide solutions to partner problems with a holistic, based approach research multidisciplinary;
- c. assist government programs in community and human development regional errors, as well as helping to ensure successful implementation of the program RPJM Village;
- d. increasing the independence and welfare of the general public, society Which move in field economy (IRT, SME/UMKM, And group business other), Education, health, environment, etc in accordance need region;
- e. strengthening the synergy of higher education institutions (PT) with stakeholders related in development regionalism; And
- f. form *science-techno-park* college tall based region.

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#### 5.2.2. Outer Activity

Outer Must Scheme Regionality is :

- a. enhancement levels empowerment partner Which refer on Table 2.11.
- b. produce at least one product that has KI (copyright, patent and patent). simple) (on th to 3);
- c. produced one scientific article published in a national journal indexed Sinta minimum ranking 4 or One article in Proceedings indexed Scopus from seminar international Which held in a way online or do-there in in country, or One journal International indexed Copernicus/equivalent (on th to 2);
- d. videos activity (every year); And
- e. article in Media mass print/electronic (every year)

Outer addition can form outer other in outside outer must in on admit-cu on Table 2.11.

#### 5.2.3. Criteria Activity

Criteria Scheme Regionality as following:

- a. Activity nature multi year (3 year);
- b. proposal fund k e D R TPM maximum Rp15 0.00 0.000 per year ( except \_ Maximum PKPK Rp20 0.00 0.00 0 );
- c. Need it \_ sharing fund minimum Rp1 0.00 0.000 (for PPDM) from go room tall, Rp10 0.00 0.000 (for PKW), And Rp20 0.00 0.000 (for PKPK) which can originate from Local Government/CSR/NGOs And source other;
- d. Budget Which used For invested to partner minimum 40% from total budget Which submitted in form shopping goods And capital (ti- bro including land And building construction); And
- e. Distance location Village Partner from College Tall proposer maximum 200 km or can more from 200 km provided Still in One province, except PKW can cross province through partnership with PT local with budget Pem- da/City Government/CSR Which rational.

## 524. Condition Proposer

Condition proposer Scheme Regionality includes:

a. team proposer amount minimum three person And maximum four person (One chairman with two or three members); especially PKW to get involved minimum One person team from PT partner;

- **b.** the proposing team has the appropriate capabilities (scientific track record).with activity Which proposed/problem Which handled;
- c. the proposing team must involve a minimum of five students/year; And provide recognition for a minimum of 5 credits per year of activity to students;And
- d. the proposing team was formed by the institution on the recommendation of the Chair of the LPM/LPPM/P3M/ DPPM where each university may nominate more than 1 team Devotion Public Scheme Regionality.

#### 5.25. Characteristics Program

#### a. Characteristics Program Development Village Partner (PPDM)

Development economy public Indonesia Lots happen in region per-village. So the importance of villages as assets, history, heritage and starting points development of the nation's civilization, the state has issued Laws dang Number 6 of 2014 concerning villages which are implemented with Government Regulation Number 43 of 2014 concerning Implementing Regulations Law Number 6 of 2014. As a follow-up, the government scrolling program grant development rural.

In line with the government program to accelerate the village economy that focuses on handling infrastructure, then universities must have show concern by contributing to providing reinforcement through applications science and technology, policy models, and research-based social engineering. The village's socio-economic development will be faster with its construction infrastructure And it opened access. Touch from college tall recently pa downstream results research multidisciplinary will give acceleration quality And quantity of village progress in all fields (social, economic, legal, health, culture, education, agriculture, resilience food, maritime, energy new And renewable, environmental and others) without leaving superior value or characteristic typical Which has owned village the. With thereby, will awakened The College Partner Village has certain advantages as an icon and the main driver of village development as well as one of the mod- El techno-science and *tourism park*. A number of example results activity PPDM ter- in the form of a Halal Food Center Village, Bamboo Craft Village, Conservation Village Rare Plants/Animals, Energy Mandiri Village, Organic Farming Center Village, Culinary Village, Tourism Village, Traditional/Arts and Culture Village, Garam Beryo Village- dium, Healthy Village, Syariah Village, Community Development Village, Bu-Card Village Daya, Nature Reserve Village, and so on. Centers in the village become science-techno-park college tall. So that Can made object For devotion And learning for student, lecturer And visitor in And outside country.

Through the PPDM program, the proposed village is one village that Now partner with PT/Team proposer Which proven with letter agree- juan Work The same; village Which intended in accordance with Act No. 6 Year 2014 that is traditional villages and administrative villages, not sub-districts; involving at least two community groups in Mitra Village per year, both those involved in productive economic field or social organizations, partner groups that handle it in Village Partner Which The same can change every year, And on

year second And third recommended get support funds/facilities from REGIONAL GOVERNMENT/ Service And/ or party third other;

#### b. Characteristics Program Partnership Region (PKW)

Program Partnership Region (PKW) held For give solution to various problem territoriality like field education, health, social culture, economy, tourism, infrastructure, production (agriculture, animal husbandry, fisheries, creative industries, etc.), environmental bro, village administration and government). A proposed PKW program is prepared together with related parties including: Proposing Universities, Universities Tall Partner, Regency/Municipal Government and/or CSR. There is college tall Mi- tra considered For build tradition togetherness between go- The higher room is also intended as a refinement of types of expertise required in the implementation of PKW. Partner universities can selected from universities in the PKW region. References used in preparing the PKW proposal is the RPJMD for district/municipal government and non-municipal government RPJMD in accordance with region PKW.

Regional partners in the PKW program only consist of one village or one ward, handle minimum two field problem territoriality for example field health And education or agriculture And law or agriculture- an And economy or field agriculture And tourist And etc; universities implementing PKW are required to partner with universities other gi from nearby PKW areas; The PKW program consists of various program And activity during three year Which its implementation No need consecutive, or started on year Which The same;

#### c. Characteristics Program Empowerment Public Superior College Tall (PPMUPT)

Based on Regulation Minister Research, Technology And Education Tall And Number 44 Year 2015 about Standard National Education Tall, every college tall required own plan strategic (Renstra) ab- dian to the community. This strategic plan was prepared taking into account the strength of the resources possessed by each university gi. To support the acceleration of achieving the higher education strategic plan, DRTPM designed a scheme Community Empowerment Program Higher Education Excellence (PPMUPT). Thus PPMUPT must refers to the Community Service Strategic Plan which has been dis-usun by PT.

Program Empowerment Public Superior College Tall (PPMUPT) has the same form of activity as PPDM but has partner freedom, namely being able to partner with one administrative village, or ward, whatever village custom on two group public per ta-hun to apply various superior research results of PT in helping that various problem group public in region the. In this way, a village will be built that characterizes PT's excellence at the same time as science-techno and *tourism park model* so that it can be make it object For devotion And learning for student, lecturerAnd visitor in And outside country.

#### d. Characteristics Program Partnership Development Regionality (PKPK)

Pandemic covid 19 Which Already walk more from a year result the decline of the nation's economy, where many SMEs/UKMK/Groups loss of business, causing an increase in the number of disruptions ran and a decline in the level of economic growth at both the national level, regional to international. Issues handled by the management team partner, covers all over devotion together facet business UKM/UKMK/Group Business, since from management material standard until to marketing product, supporting facilities and infrastructure to facilitate business operations SMEs/SMEs/business groups located in the area. Dis- Apart from that, there are village/customary lands which have not yet been optimally utilized. Yes, to improve the regional economy, PKPK is an option area management model that has gone through studies carried out there minimum through FGD together with government village/custom And group public manager Region the, complete with Anal-Isis Economy potency Region.

The Regional Development Partnership Program can be implemented at Villages, Subdistricts or Traditional Villages in the form of : a) Increasing pro- productivity of land, especially Ulayat land/Traditional land or community land immunity other Which owned by community public or land private- adi Which given right its management For public local in minimum period of 10 years, and b) Increased SME productivity/UKMK/other business groups in one village/sub-district area/ custom. The minimum number of target partners is 2 SMEs/UKMK/US groups. aha.

The PKPK development model will be an integrated area managed in a way together PT with group public, on This- initiative of community groups, or by management institutions appointed by determined by the village/customary government, or UKM/UKMK entrepreneurs, and other business groups. Mapping the potential of the area really needs to be carried out be the first to prepare proposals and involve appropriate expertise. The PKPK proposal was initiated with the results of research by the proposer will be a plus point in consideration of the funding. Scope field activity in PKPK is Integration agriculture, plantations, animal husbandry, fisheries, edu-tourism/travel, UKM/UKMK, or other fields in an integrated manner in one area. College give strengthening through application science And technology, model kebi- jakan, as well as manipulation social. Downstreaming results research multidisciplinary will mem-give acceleration progress of partner areas without abandoning the value of hips or characteristic typical Which has owned area the. Potency economy is reference For compile indicator achievements ( outcome ) levels to- empowerment public in a way economy; like enhancement asset, turnover, community income, contribution to village/customary government, form *outcomes* other Which impact to enhancement economy Andwell-being public.

The proposed area is an area proven by a letter agreement Work The same Which signed by Village/Traditional, And owner land (if land owned by individual Which submitted right manage to

community minimum period of 10 years); The size of the managed area is there minimum 2 (two) hectare Which proven with *copy* certificate or Letter Owner's Statement and ratified by the Village Head; minimum involve 10 (ten) person public Which involved direct in activity da- lam Region. PKPK Also can partner with SMEs/SMEs , For partner UKM/UKMK/other Business Groups, minimum 2 (two) partners, and locatedin 1 area village/custom/sub-district.

#### 5.3. Skema Kewirausahaan

Entrepreneurship-based community empowerment is a multi-year activity (3 year) Which addressed For help push ability entrepreneurship based Science and Technology produced by lecturers and students. Various forms of activities This entrepreneurial system is nationally competitive, namely PPK (Development Program entrepreneurship development), PPPUD (Regional Featured Product Development Program), PPUPIK (Campus Intellectual Product Business Development Program). Two Second Programs entrepreneurship, namely PPK and PPUPIK, is carried out on campus, while PPPUD carried out on partners outside the campus. Goals, outcomes, criteria, requirements and characteristicsteristic Scheme Entrepreneurship arranged as following.

## 5.3.1. Objective Activity

Objective Scheme Entrepreneurship as following:

- a. increasing networking between higher education entrepreneurship and the communitypeople industry And institution other;
- b. increase the attractiveness of superior products/services to the wider community/ market, UMKM/UKM so that tough, develop, And give income for public surroundings;
- c. accelerate the diffusion of technology and management from the university community tall to public industry;
- **d.** developing a *link and match process* between universities, industry, Local Government And public wide;
- e. For PPK aim create method training entrepreneurship Which se-suitable for students of the Student Creativity Program (PKMK/other PKM), Entrepreneurial Student Program (PMW), another entrepreneurship-based schemen-yes, students/alumni Which currently pioneering business;
- f. for PPPUD aims to increase knowledge and skills of co- eration, community business groups, and SMEs/MSMEs who play a stimulating role growth of regional superior products/services for the domestic market and market global; And increase quality And quantity product/service so that ber- Power competitive tall with still stand on uniqueness/characteristics typical the area;And
- g. For PPUPIK aim support autonomy campus college tall through acquisition income independent or partner; And give chance And experience Work to student;

## 5.3.2 Outer Activity

Outer Must Scheme Entrepreneurship is :

- a. enhancement levels empowerment partner Which refer on Table 2.11.
- b. produce at least one product that has KI (copyright, patent and patent). simple)(on th to 3);
- c. produced one scientific article published in a national journal indexed Sinta minimum ranking 4 or One article in Proceedings indexed Scopus from seminar international Which held in a way online or do-there in in country, or One journal International indexed Copernicus/equivalent (on th to 2);
- d. videos activity (every year); And
- e. article in Media mass print/electronic (every year)
- f. increase income generating PT (special PPUPIK)

Outer addition can form outer other in outside outer must in on admit-cu on Table 2.11

## 5.3.3. Criteria Activity

Criteria Scheme Entrepreneurship includes:

- a. proposal fund k e D R TPM maximum Rp15 0 .00 0 .000 per year ( except \_ Maximum PPUPIK Rp20 0 .00 0 .00 0 );
- b. Need it \_ sharing per year fund partner minimum Rp1 0.00 0.000 (for PPPU D), Rp2 0.00 0.000 (for PPK), And Rp3 0.00 0.000 (for PPUPIK) who can \_ originate from College tall And source other;
- c. Budget which is used to invest in PPUD partners, ma- entrepreneurial students, and PPUPIK units at least 40% of the total budget submitted in form shopping goods And capital (No including land And building construction); And
- d. Distance location Village Partner from College Tall proposer maximum 200 km or may be more than 200 km as long as it is within one province, except PPK andPPUPIK is at in the PT.

## 5.3.4. Condition Proposer

Condition proposer Scheme Entrepreneurship includes:

- a. team proposer amount minimum three person And maximum four person (Onechairman with two or three person member);
- **b.** the proposing team has the appropriate capabilities (scientific track record).with activity Which proposed/problem Which handled;

- c. support transformation Education Tall through 8 Indicator Performance Main (IKU) minimum 2 indicator;
- d. team proposer must involve minimum five person student/year (except-li PPK minimum 20 students); and to support the MBKM program then it is mandatory to provide recognition for a minimum of 5 credits per year of activity tostudent.
- e. the proposing team was formed by the institution on the recommendation of the Chair of the LPM/LPPM/P3M/ DPPM Where every college tall can propose more from 1 team ske- ma Entrepreneurship (except For PPK only 1 activity per Faculty)

#### 5.3.5. Characteristics Program

#### a. Characteristics Program Development Entrepreneurship (PPK)

Directorate of Research, Technology and Community Service (DRTPM) carry out something program with mission produce entrepreneurentrepreneur- new shares from campus, through an integrated program with creative methods which is completely handed over to universities through the Program Entrepreneurship Development (PPK). Every college is eligible managing more than one PPK program. PPK may be proposed by Faculty of bag/major with involve a number lecturer Which experienced ber- entrepreneurs from various disciplines. PPK carries out training on to tenants through business management training and a number of activities creative other For produce businessman new Which independent based science and technology. Tenants must improve their skills in producing products in each study program. PPK managers are also advised to collaborate laboratories with institutions that related to development entrepreneurship, Good in in nor in outside campus, including program development of campus intellectual product businesses (PPUPIK) in universities tall each.

PPK can held in form training entrepreneurship, find- Get students to carry out internships at companies established/business units/PPUPIK in the tertiary institution and facilitating students in entrepreneurship. Training is carried out for provide entrepreneurial knowledge, encourage the growth of entrepreneurial motivation, increasing understanding of management (organization, production, finance and marketing) as well as creating a business plan or business feasibility study. Internship activities at companies/business units ha/PPUPIK held For give experience practical skill- sahaan to student with method follow Work daily on units the effort. Students who have started entrepreneurship, students Entrepreneurship Student Creativity Program (PKMK), Creativity Program- Other Student Activities (PKM), Entrepreneurial Student Program (PMW), students who are interested and are starting a business, and alumni who interested or just starting a business can perfect their activities entrepreneurship Which has done previously, For increase no need-Anya. Manager Program PPK college tall recommended For dig type commodity business para tenants Which takes priority in form product unique and superior goods/services according to talents and not only just stuck on his interest.

Units service PPK build tenants Which has selected as much 20 person during 3 (three) year. Every year must produce minimum 5 wirau- saha new independent. Selection really new held For replace a number of independent tenants, so that every year the number lah really Which built still 20 person. Tenants can nature individual or group, if in form group maximum amount its members is 3 person. From 20 person really can form maximum 4 clog- pok And the rest nature individual. Really from alumni limited maximum 5 person. Tenants may be provided with assistance in purchasing equipment or repair means production Which its nature rolling.

#### b. Characteristics Program Development Product Superior Area (PPPUD)

Product superior area is product form service And goods den- bro, uniqueness/characteristics at the village/village level, sub-district, karegents, and provinces, produced by micro, small and medium enterprises (UMKM) And Business Small Intermediate (SME). Potency product superior Which are found in various regions of Indonesia, making it possible to develop bang more carry on with help lecturer in college tall, through activity devotion to public in a way sustainable interrupt- ma three years in the Regional Featured Product Development Program (PPPUD).

The criteria for superior products are : a) have local content stand out and be innovative in the agricultural, creative industry and service sectors, b) has high competitiveness in the market, c) good marketing reach wide Good in in country nor global, d) have characteristic typical area And involve power Work local, e) availability material standard memadai, f) does not damage the environment, is sustainable and nondestructive local culture. The development of superior products will also be moreresults when supported by role as well as government area.

PPPUD program partners are Micro, Small and Medium Enterprises/Small Enterprises Medium (UMKM/UKM), and with the following characteristics: 1) Business Already walk minimum One year; 2) Represents product/service superior area, like product based results plantation, agriculture, fishery, food processed, art show, craft, And industry creative other;

product/service Which own uniqueness/characteristics typical local/regional local; 4) domestic market potential or export destinations;
 environmentally friendly bro And based culture local; 6) candidate partner amount One partner;

7) requires the application of science and technology; 8) can potentially be developed more carry on through program PPPUD; And 9) willing give contribution fund minimum Rp1 0.00 0.000 (ten million rupiah h) per year, during three year.

#### c. Characteristics of Business Development Programs Product Intellectual Campus (PPUPIK)

In connection with efforts to develop a knowledge-based economic culture knowledge, universities need to be given access in the form of *knowledge and technopark* Which utilise knowledge, education nor results

lecturer research. By organizing a Business Development Program Campus Intellectual Products (PPUPIK), universities have the opportunity to earn income and help create new entrepreneurs. Results university research which is a new innovation and has value economical and gets Intellectual Property (IP) protection such as right create or patent, is asset Which very valuable for pertum- buhan And development PPUPIK.

Program PPUPIK expected capable push college tall in build access Which produce service products and/or technology his own creation. The form of PPUPIK in higher education can be: units business, as example: center production, center consultation, center de- science, center training, center repair And maintenance, center study and development, and health care centers. PPUPIK can partners with Banks, BUMN, Regional Government, Investors and can also partner with bro, other industrial circles. PPUPIK can be managed by a group of lecturers according to their competence at the laboratory level, sample planners han, workshop, department/department, faculty/school, UPT, research center and development or other institutions within higher education the. Once established, PPUPIK is expected to continue to develop through development mastery knowledge knowledge, research, perseverance effort and foresight to seize the opportunities that exist in good society internal and external campus. The mission of the PPUPIK program is to create there will be access to socialization of superior lecturers' intellectual products and innovation in the higher education environment within the framework of fulfilling the needs Lord public Good internal nor external campus.





DIREKTORAT JENDERAL PENDIDIKAN TINGGI, RISET, DAN TEKNOLOGI Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi

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CLOSING

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Completion of the Research and Community Service Handbook, Edition XIII Revised Ta- 2021 will go through a continuous process. Records of research and service implementation to public with use guide edition previously become material enrichment Which very valuable in every stage its perfection. Besides endeavor in support Independent Campus Learning (MBKM) program and achievements of Key Performance Indicators (IKU) in Higher Education, Research and Community Service as regulated in the Book This guide has also accommodated the dynamic development of research directions with focus the latest research and introduce the formulation of research and service schemes to the public people Which more systematic.

Blessing effort Work hard all Team Compiler And Synchronizer Finally Book Guide Researchertian And Devotion to Public Edition XIII Revision Year 2021 This can resolved. For That, flavor I'm grateful proper We climb it to Lord Which Maha One on His approval Book Pan- Duan This has resolved with Good.

Book guide This is reference Which clear in implementation activity study And peng- devotion to public, specifically for para lecturer as perpetrator main activity study and community service. This guidebook also serves as a clear reference for manage activity study And devotion to public Good in college tall nor within the DRTPM Kemdikbudristek environment including a team of experts who oversee the start of the selection process until to stage reporting. With refers on book guide This, para holder interest- bro (*stakeholders*) can carry out research and community service activitiesits function with Good.

This guide has been adapted to the implementation of Information Technology-based management. masi and Communication (ICT) starting from the process of proposal, selection, implementation, monitoring and evaluation until with reporting. System management based ICT, supported with guide What is clear is that it has been proven that research and community service can be managedin a way efficient, transparent, And accountable.

Although this guidebook has been prepared with the utmost care, it is not exhaustive There may still be deficiencies. We ask for suggestions and criticism for improvement this manual in the next edition. Hopefully this Guidebook can guide activities research and community service in higher education so as to produce results inventions and innovations that can answer needs and increase the nation's competitivenessIndonesia.



- 1. Constitution No 13 Year 2016 neighbor Patent.
- 2. Constitution Number 12 Year 2012 about Education Tall.
- 3. Constitution Number 20 Year 2003 about System Education National.
- 4. Constitution Number 18 Year 2002 about System National Study, Development, And Application Knowledge Knowledge And Technology.
- 5. Constitution Number 11 Year 2019 about System National Knowledge Knowledge And Technology.
- 6. Regulation President Number 13 Year 2015 about the Ministry Research, Technology and EducationTall.
- 7. Republic of Indonesia Government Regulation Number 66 of 2010 concerning Amendments to Government RegulationsNumber 17 Year 2010 about Management And Maintenance Education.
- Regulation Government R.I Number 41 Year 2006 about Licensing Do Activity Study And Development For College Tall Foreign, Institution Study And Development Foreign, Body Business Foreign, And Person Foreign.
- 9. Regulation Minister Research, Technology, And Education Tall Number 42 Year 2016 neighbor Gauge-ran And Determination Level Readiness Technology.
- 10. Minister of Research, Technology and Higher Education Regulation Number 69 of 2016 concerning Pe- doman Formation Committee Evaluation and/or Reviewers And Procedures Implementation EvaluationStudy with Use Standard Cost Output.
- 11. Minister of Research, Technology and Higher Education Regulation Number 13 of 2015 concerning Plans Strategic Ministry Research, Technology And Education Tall Year 2015-2019.
- 12. Regulation Minister Research, Technology, And Education Tall Number 15 Year 2015 about Organi-sasi And System Work Ministry Research, Technology, And Education Tall.
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- Guide to Implementing Research and Community Service in Higher Education Edition XII Year 2018 Revision 2019 Directorate Research And Devotion Public, Directorate General Pen- guatan Research And Development Ministry Research, Technology, And Education Tall.
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# Attachment 1. Field Knowledge

Code	Field Knowledge	Levels
100	MATHEMATICS AND KNOWLEDGE KNOWLEDGE NATURAL (MIPA)	1
110	KNOWLEDGE IPA	2
111	Physics	3
112	Chemistry	3
113	Biology (And Biotechnology General)	3
114	Field Ipa Other Which Not yet Listed	3
120	MATHEMATICS	2
121	Mathematics	3
122	Statistics	3
123	Knowledge Computer	3
124	Field Mathematics Other Which Not yet Listed	3
130	EARTH AND SPACE	2
131	Astronomy	3
132	Geography	3
133	Geology	3
134	Geophysics	3
135	Meteorology	3
136	Field Geophysics Other Which Not yet Listed	3
140	KNOWLEDGE PLANT	1
150	KNOWLEDGE AGRICULTURE AND PLANTATION	2
151	Knowledge Land	3
152	Horticulture	3
153	Knowledge Pest And Disease Plant	3
154	Cultivation Agriculture And Plantation	3
155	Plantation	3
156	Breeding Plant	3
157	Field Agriculture & Plantation Other Which Not yet Listed	3

Code	Field Knowledge	Levels
160	TECHNOLOGY IN KNOWLEDGE PLANT	2
161	Technology Industry Agriculture (And Agrotechnology)	3
162	Technology Results Agriculture	3
163	Technology Agriculture	3
164	Mechanization Agriculture	3
165	Technology Food And Nutrition	3
166	Technology Post Harvest	3
167	Technology Plantation	3
168	Biotechnology Agriculture And Plantation	3
169	Knowledge Food	3
171	Field Technology In Knowledge Plant Which Not yet Listed	3
180	KNOWLEDGE SOCIOLOGY AGRICULTURE	2
181	Social Economy Agriculture	3
182	Nutrition Public And Source Power Family	3
183	Economy Agriculture	3
184	Sociology Rural	3
185	Agribusiness	3
186	Counselor Agriculture	3
187	Field Sociology Agriculture Other Which Not yet Listed	3
190	KNOWLEDGE FORESTRY	2
191	Cultivation Forestry	3
192	Conservation Source Power Forest	3
193	Management Forest	3
194	Technology Results Forest	3
195	Field Forestry Other Which Not yet Listed	3
200	KNOWLEDGE ANIMAL	1
210	KNOWLEDGE FARM	2
211	Knowledge Farm	3
212	Social Economy Farming	3
213	Nutrition And Food Cattle	3

Code	Field Knowledge	Levels
214	Technology Results Cattle	3
215	Development Farm	3
216	Production Cattle	3
217	Cultivation Cattle	3
218	Production And Technology Feed Cattle	3
219	Biotechnology Farm	3
221	Veterinary Science	3
222	Field Farm Other Which Not yet Listed	3
230	KNOWLEDGE FISHERY	2
231	Social Economy Fishery	3
232	Utilization Source Power Fishery	3
233	Cultivation Fishery	3
234	Processing Results Fishery	3
235	Source Power Waters	3
236	Nutrition And Food Fish	3
237	Technology Arrest Fish	3
238	Biotechnology Fishery	3
239	Cultivation Waters	3
241	Field Fishery Other Which Not yet Listed	3
250	KNOWLEDGE MEDICAL ANIMAL	2
251	Medical Animal	3
252	Field Medical Animal Other Which Not yet Listed	3
260	KNOWLEDGE MEDICAL	1
270	KNOWLEDGE MEDICAL SPECIALIST	2
272	Anesthesia	3
273	Surgery (General, Plastic, Orthopedics, Urology, Etc)	3
274	Midwifery And Disease Content	3
275	Medical Forensics	3
276	Medical Sport	3
277	Disease Child	3

Code	Field Knowledge	Levels
278	Knowledge Medical Nuclear	3
279	Knowledge Medical Physique And Rehabilitation	3
281	Disease ENT	3
282	Pathology Anatomy	3
283	Pathology Clinic	3
284	Disease In	3
285	Disease Heart	3
286	Disease Skin And Sex	3
287	Disease Eye	3
288	Knowledge Medical Physique And Rehabilitation	3
289	Disease Lungs	3
291	Disease Nerves	3
293	Microbiology Clinic	3
294	Neurology	3
295	Psychiatry	3
296	Radiology	3
297	Rehabilitation Medic	3
298	Field Medical Specialist Other Which Listed	3
300	KNOWLEDGE MEDICAL (ACADEMIC)	2
301	Biology Reproduction	3
303	Knowledge Biology Reproduction	3
304	Knowledge Biomedicine	3
305	Knowledge Medical General	3
306	Knowledge Medical Base	3
307	Knowledge Medical Base & Biomedicine	3
308	Knowledge Medical Family	3
309	Knowledge Medical Clinic	3
311	Knowledge Medical Tropical	3
312	Immunology	3
313	Medical Work	3

Code	Field Knowledge	Levels
314	Health Reproduction	3
315	Field Knowledge Medical Other Which Not yet Listed	3
320	KNOWLEDGE SPECIALIST MEDICAL TOOTH AND MOUTH	2
321	Medical Tooth	3
322	Surgery Mouth	3
323	Disease Mouth	3
324	Periodontics	3
325	Orthodontics	3
326	Prosthodontics	3
327	Conservation Tooth	3
328	Field Specialist Medical Tooth Other Which Not yet Listed	3
330	KNOWLEDGE MEDICAL TOOTH (ACADEMIC)	2
331	Knowledge Medical Tooth	3
332	Knowledge Medical Tooth Base	3
333	Knowledge Medical Tooth Community	3
334	Field Knowledge Medical Tooth Other Which Not yet Listed	3
340	KNOWLEDGE HEALTH	1
350	KNOWLEDGE HEALTH GENERAL	2
351	Health Public	3
352	Safety And Health Work (Health Work; Hyperkes)	3
353	Policy Health (And Analyst Health)	3
354	Knowledge Nutrition	3
355	Epidemiology	3
356	Technique Health Environment	3
357	Promotion Health	3
358	Knowledge Insurance Soul And Health	3
359	Health Environment	3
361	Knowledge Exercise Body	3
362	Field Health General Other Which Not yet Listed	3
370	KNOWLEDGE NURSING AND MIDWIFERY	2

Code	Field Knowledge	Levels
371	Knowledge Nursing	3
372	Midwifery	3
373	Home Administration Sick	3
375	Entomology (Health, Phytopathology)	3
376	Knowledge Biomedicine	3
377	Ergonomics Physiology Work	3
378	Physiotherapy	3
379	Analyst Medical	3
381	Physiology (Sports)	3
382	Reproduction (Biology And Health)	3
383	Acupuncture	3
384	Rehabilitation Medic	3
385	Field Nursing & Midwifery Other Which Not yet Listed	3
390	KNOWLEDGE PSYCHOLOGY	2
391	Psychology General	3
392	Psychology Child	3
393	Psychology Public	3
394	Psychology Work (Industry)	3
395	Field Psychology Other Which Not yet Listed	3
400	PHARMACY SCIENCE	2
401	Pharmacy General And Pharmacist	3
402	Pharmacology And Pharmacy Clinic	3
403	Biology Pharmacy	3
404	Analysis Pharmacy And Chemistry Medicinal	3
405	Pharmaceuticals And Technology Pharmacy	3
406	Pharmacy Food And Analysis Security Food	3
407	Pharmacy Other Which Not yet Listed	3
410	KNOWLEDGE TECHNIQUE	1
420	TECHNIQUE CIVIL AND PLANNING SYSTEM ROOM	2
421	Technique Civil	3

Code	Field Knowledge	Levels
422	Technique Environment	3
423	Design City	3
424	Planning Region And City	3
425	Technique Irrigation	3
426	Technique Architecture	3
427	Technology Tool Heavy	3
428	Transportation	3
429	Field Technique Civil Other Which Not yet Listed	3
430	KNOWLEDGE TECHNIQUE INDUSTRY	2
431	Technique Machine (And Knowledge Machinery Other)	3
432	Technique Production (And Or Manufacturing)	3
433	Technique Chemistry	3
434	Technique (Industry) Pharmacy	3
435	Technique Industry	3
436	Aviation/Aeronautics And Astronautics	3
437	Technique Textiles (Textile)	3
438	Technique Refrigeration	3
439	Biotechnology In Industry	3
441	Nuclear Engineering (and Or Other Nuclear Sciences)	3
442	Technique Physics	3
443	Technique Energy	3
444	Sensing Far	3
445	Technique Material (Knowledge Material)	3
446	Field Engineering Industry Other Which Not yet Listed	3
450	TECHNIQUE ELECTRO AND INFORMATICS	2
451	Technique Electro	3
452	Technique Power Electric	3
453	Technique Telecommunication	3
454	Technique Electronics	3
455	Technique Control (Or Instrumentation And Control)	3

Code	Field Knowledge	Levels
456	Technique Biomedicine	3
457	Technique Computer	3
458	Technique Informatics	3
459	Knowledge Computer	3
461	System Information	3
462	Technology Information	3
463	Technique Device Soft	3
464	Technique Mechatronics	3
465	Field Technique Electro And Informatics Other Which Not yet Listed	3
470	TECHNOLOGY EARTH	2
471	Technique Hot Earth	3
472	Technique Geophysics	3
473	Technique Mining (Manipulation Mining)	3
474	Technique Petroleum (Petroleum)	3
475	Technique Geology	3
476	Technique Geodesy	3
477	Technique Geomatics	3
478	Field Technology Earth Other Which Not yet Listed	3
480	KNOWLEDGE SHIPPING	2
481	Technique Shipping	3
482	Technique Machinery Boat	3
483	Technique System Shipping	3
484	Technique Marine And Knowledge Marine	3
485	Oceanography (Oceanology)	3
486	Field Shipping Other Which Not yet Listed	3
500	KNOWLEDGE LANGUAGE	1
510	SUB FIELD KNOWLEDGE LITERATURE (AND LANGUAGE) INDONESIA AND AREA	2
511	Literature (And Language) Area (Java, Sunda, Batak Etc)	3
512	Literature (And Indonesian	3
513	Literature (And Language) Indonesia Or Area Other	3

Code	Field Knowledge	Levels
520	KNOWLEDGE LANGUAGE	2
521	Knowledge Linguistics	3
522	Journalism	3
523	Knowledge Literature General	3
524	Record management	3
525	Knowledge Library	3
526	Field Knowledge Language Other Which Not yet Listed	3
530	KNOWLEDGE LANGUAGE FOREIGN	2
531	Literature (And Language) English	3
532	Literature (and Language) Japan	3
533	Literature (And Language) China (Mandarin)	3
534	Literature (and Language) Arab	3
535	Literature (And Language) Korea	3
536	Literature (And Language) German	3
537	Literature (And Language) Malay	3
538	Literature (And Language) Dutch	3
539	Literature (And Language) France	3
541	Field Literature (And Language) Foreign Other Which Not yet Listed	3
550	KNOWLEDGE ECONOMY	1
560	KNOWLEDGE ECONOMY	2
561	Economy Development	3
562	Accountancy	3
563	Economy Sharia	3
564	Banking	3
565	Taxation	3
566	Insurance Commerce (Loss)	3
567	Notary	3
568	Field Economy Other Which Not yet Listed	3
570	KNOWLEDGE MANAGEMENT	2
571	Management	3

Code	Field Knowledge	Levels
572	Management Sharia	3
573	Administration Finance (Office, Tax, Hotel, Logistics, Etc)	3
574	Marketing	3
575	Management Transportation	3
576	Management Industry	3
577	Management Informatics	3
578	Secretariat	3
579	Field Management Which Not yet Listed	3
580	KNOWLEDGE SOCIAL HUMANITIES	1
590	KNOWLEDGE POLITICAL	2
591	Knowledge Political	3
592	Criminology	3
593	Connection International	3
594	Knowledge Administration (Commerce, Country, Public, Development, Etc)	3
595	Criminology	3
596	Knowledge Law	3
597	Knowledge Government	3
601	Knowledge Social And Political	3
602	Studies Development (Planning Development, Region, City)	3
603	Resilience National	3
604	Knowledge Police	3
605	Policy Public	3
606	Field Knowledge Political Other Which Not yet Listed	3
610	KNOWLEDGE SOCIAL	2
611	Knowledge Well-being Social	3
612	Sociology	3
613	Humanities	3
614	Study Region (Europe, Asia, Japan, East Middle Etc)	3
615	Archeology	3
616	Knowledge Sociatrics	3

Code	Field Knowledge	Levels
617	Population (Demography, And Knowledge Population Other)	3
618	History (Knowledge History)	3
619	Study Culture	3
621	Communication Broadcasting Islam	3
622	Knowledge Communication	3
623	Anthropology	3
624	Field Social Other Which Not yet Listed	3
630	RELIGION AND PHILOSOPHY	1
640	SCIENCE (KNOWLEDGE) RELIGION	2
641	Religion Islam	3
642	Religion Catholic	3
643	Religion Christian And Theology	3
644	Sociology Religion	3
645	Religion (Philosophy) Hindu, Buddha, And Other Which Not yet Listed	3
650	KNOWLEDGE PHILOSOPHY	2
651	Philosophy	3
652	Knowledge Religion And Culture	3
653	Philosophy Other Which Not yet Listed	3
660	KNOWLEDGE ART, DESIGN AND MEDIA	1
670	KNOWLEDGE ART SHOW	2
671	Artistry	3
672	Art Theater	3
673	The Art of Puppetry	3
674	Art Music	3
675	Art Karawitan	3
676	Art Show Other Which Not yet Called	3
680	KNOWLEDGE ART	2
681	Creation Art	3
682	Ethnomusicology	3
683	Anthropology Dance	3

Code	Field Knowledge	Levels
684	Art Appearance Pure (art painting)	3
685	Art Statue	3
687	Art Graphic	3
688	Art Intermedia	3
689	Field Knowledge Art Other Which Not yet Listed	3
690	KNOWLEDGE ART CRAFTS	2
691	Craft Statue	3
692	Craft Wood	3
693	Craft Skin	3
694	Craft Ceramics	3
695	Craft Textiles	3
696	Craft Metal (And Metal Noble/Jewellery)	3
697	Field Art Craft Other Which Not yet Listed	3
699	Tourism	3
700	MEDIA SCIENCE	2
701	Photography	3
702	Television	3
703	Broadcasting (Broadcasting)	3
704	Graphics (And Publishing)	3
705	Field Media Other Which Not yet Listed	3
706	DESIGN	2
707	Design Interiors	3
708	Design Visual Communication	3
709	Design Product	3
710	KNOWLEDGE EDUCATION	1
720	EDUCATION KNOWLEDGE SOCIAL	2
721	Education Pancasila And Citizenship	3
722	Education History	3
723	Education Economy	3
724	Education Geography	3

Code	Field Knowledge	Levels
725	Education Sociology And Anthropology	3
726	Education Accountancy	3
727	Education System Commerce	3
728	Education Administration Office	3
729	Education Language Japan	3
731	Education Sociology (Knowledge Social)	3
732	Education Cooperative	3
733	Education Population And Environment Life	3
734	Education Economy Cooperative	3
735	Field Education Knowledge Social Other Which Not yet Listed	3
740	KNOWLEDGE EDUCATION LANGUAGE AND LITERATURE	2
741	Education Language, Literature Indonesia And Area	3
742	Education Language (And Literature) English	3
743	Education Language (And Literature) Indonesia	3
744	Education Language (And Literature) German	3
745	Education Language (And Literature) France	3
746	Education Language (And Literature) Arab	3
747	Education Language (And Literature) France	3
748	Education Language (And Literature) Java	3
749	Education Language (And Literature) China (Mandarin)	3
751	Field Education Language (And Satra) Other Which Not yet Listed	3
760	KNOWLEDGE EDUCATION EXERCISE BODY AND HEALTH	2
761	Education Physical, Health And Recreation	3
762	Education Physical And Health	3
763	Education Sport And Health	3
764	Education Coaching Sport	3
765	Knowledge Sports	3
766	Education Exercise Body And Health Other Which Not yet Listed	3
770	KNOWLEDGE EDUCATION MATHEMATICS AND KNOWLEDGE KNOWLEDGE NATURAL (MIPA)	2
771	Education Biology	3

Code	Field Knowledge	Levels
772	Education Mathematics	3
773	Education Physics	3
774	Education Chemistry	3
775	Education Knowledge Knowledge Natural (Science)	3
776	Education Geography	3
777	Education Mipa Other Which Not yet Listed	3
780	KNOWLEDGE EDUCATION TECHNOLOGY AND VOCATIONAL	2
781	Education Technique Machine	3
782	Education Technique Building	3
783	Education Technique Electro	3
784	Education Technique Electronics	3
785	Education Technique Automotive	3
786	Education Technique Informatics	3
787	Education Well-being Family (Cullinary art, Fashion, Makeup Etc)	3
788	Education Technology And Vocational	3
789	Field Pend. Technology And Vocational Other Which Not yet Listed	3
790	KNOWLEDGE EDUCATION	2
791	Education Outside Normal	3
792	Education Outside School	3
793	Education Teacher School Base (PGSD)	3
794	PGTK And preschool	3
795	Psychology Education	3
796	Measurement And Evaluation Education	3
797	Development Curriculum	3
798	Technology Education	3
799	Administration Education (Management Education)	3
801	Education Child Age Early	3
802	Curriculum And Technology Education	3
803	Guidance And Counseling	3
804	Field Education Other Which Not yet Listed	3

Code	Field Knowledge	
810	KNOWLEDGE EDUCATION ART	2
811	Education Art Drama, Dance And Music	3
812	Education Art Appearance	3
813	Education Art Music	3
814	Education Art Dance	
815	Education Skills And Craft	
816	Education Art Craft	
817	Field Education Art Other Which Not yet Listed	
900	FIELD KNOWLEDGE OTHER	1

## Attachment 2. Field Focus Research, Theme Research, And Topic Research Priority

No	Field Focus Research	Theme Research	Topic Research
		-Agriculture Breeding technology seed plant, cattle, And fish	Utilization technique radiation Forsearch strain mutant superior.
			Breeding plant with technologybased biotechnology.
			Breeding plant technique conventional.
			Revitalization And enhancement knowledge farmerbased community in breeding plant.
	Food-Agriculture		Breeding cattle with technology based biotechnology.
			Breeding cattle technique conventional.
			Revitalization And enhancement knowledge farmerbased community in breeding cattle.
			Breeding fish with technology based biotechnology.
			Breeding fish technique conventional.
			Revitalization And enhancement knowledge farmerbased community in breeding fish.
			Utilization of local wisdom in the process breeding seeds plant, cattle, And fish
			Anatomy plant from perspective anthropology culture

No	Field Focus Research	Theme Research	Topic Research
			Modernization system agricultureAnd utilization land.
		Cultivation	Agriculture land sub-optimal wet.
		technologyand	Optimization system agriculture tropical.
		utilization land sub- optimal	Optimization of tropical agricultural systems in community Woman For resilience foodfamily based knowledge local.
			Use of local wisdom in utilise And conserve landin frame continuity
			Development identity functional agriculture.
			Transformation between generation worker agriculture.
		Development resource man	Shift work agricultureon Woman farmer.
		agriculture	Food based diversity resource plant local through rolecommunity, Woman, And family.
			Pattern development HR Agricultureon public traditional/local
	Food-Agriculture	Technology postharvest and technological engineering processing food	Strengthening the agro-industry standard source Power local.
1.			Management and conservation resource land, water, And biological.
			Precision agriculture .
			Manipulation machines agriculture And processing.
			Technology irradiation preservation results agriculture.
			Diversification And downstream product agriculture, plantation, farm, And fishery.
			Revitalization And strengthening knowledgelocal Woman farmer.
			Management, conservation source Power, And downstream product based wisdom local
			Supporter independence food (paddy, corn,And soya bean) And plant plantation.
			Independence food commodity ruminant.
			Independence food commodity waters.
			Results value chain efficiency agriculture, plantation, farm.
		Endurance technologyand	Development product foodbased source Power tropical.
		independence food	Development product food functional.
			Technology development for detection forgery product agriculture,farm, And fishery.
			Technology development for testing product halal.
			and independence strategiesfood on public traditional

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No	Field Focus Research	Theme Research	Topic Research
			Technology supporter conversion tomaterial burn gas (BBG). Dimethyl ether For energy House
			ladder And transportation. Development component converter kits.
			Development technology And product biogasoline.
		Substitution	Development and utilization of bioenergy For transportation, electricity And industry.
		technology material burn	Development technology And utilization fuel cells.
			Development technologymaking bio-crude oil.
			Development technology making bioethanol generation
			Development of local fuels assubstituent material burn fossil
			Design get up PLT hot earth.
		Independence	Design get up PLT micro hydro land And marine.
		technology	PLT bioenergy (biomass, biogas, biofuel) massive.
		generator electricity	Design get up PLTB (Bayu).
	Integration		Land restoration and development initiationenergy electricity based source Power local
2	Focus Energy Research - Energy New AndRenewable	Technology conservation energy	Building economical And independent energy.
			System <i>smart</i> grids And management conservation energy.
			Technology component electricity economical energy.
			Development of microgrid systemsin management energy
			renewable.
			Technology hybrid in utilizationsource energy renewable.
			Local wisdom in architecture for Building development energy saving
			Technology supporter EOR.
			Setup infrastructure NPP.
			Technology supporter clean coal.
		Technology endurance,energy diversification and strengthening community social	Transfer And adoption innovation diversification energy based community insightfulgender And sustainable.
			Model transformation community independent energyrenewable based knowledge local, community And public local.
			Technology development electrification rural.
			Technology appropriate To use in utilization energy new And renewable.
			Management Energy Renewable Based Wisdom Local Public

No	Bidang Fokus Riset	Tema Riset	Topik Riset
		Teknologi produk biofarmasetika	Penguasaan produksi vaksin utama (hepatitis, dengue).
			Penguasaan sel punca (stem cell).
			Penguasaan produk biosimilar dan produk darah.
		Tokrologi olat	Pengembangan <i>in vivo</i> diagnostic (IVD) untuk deteksi penyakit infeksi.
		Teknologi alat kesehatan dan diagnostik	Pengembangan <i>in vivo</i> diagnostic (IVD) untuk deteksi penyakit degenerative.
			Pengembangan alat elektromedik.
			Pengembangan fitofarmaka berbasis sumber daya lokal.
			Bahan baku obat kimia.
		Teknologi	Saintifikasi jamu & herbal, teknologi produksi pigmen alami.
	Kesehatan - Obat	kemandirian bahan baku obat	Pengembangan obat tradisional berbasis IPTEK untu penyakit-penyakit tropis (neglected diseases).
			Pengembangan teknologi biosimilar, biosintesis, dan biorefinery untuk produksi bahan obat.
			Etnomedisin (daun, akar, umbi, batang, buah)
3		Pengembangan dan penguatan sistem kelembagaan, kebijakan kesehatan, dan pemberdayaan masyarakat Dalam mendukung kemandirian obat	Penguatan pengetahuan perempuan dalam pengembangan fitofarmaka berbasis pengetahuan lokal.
			Pengetahuan lokal untuk penggunaan jamu dan herbal dalam kesehatan masyarakat, yang sensitif <i>gender</i> dan inklusif sosial.
			Penguatan pengetahuan dan pengembangan kebiasaan masyarakat dalam berperilaku sehat.
			Kearifan lokal untuk mendukung pola hidup bersih dan sehat
			Kearifan lokal untuk mengatasi wabah penyakit
		Komodifikasi	Kearifan Lokal Untuk Mengatasi Stunting dan Pola Asuh Anak dalam Keluarga
		kearifan lokal di bidang Kesehatan untuk menangani	Kearifan Lokal kaitannya dengan Pengolahan makanan sehat dan bergizi
		permasalahan kesehatan	Identifikasi hambatan budaya dalam tumbuh kembang dan pola asuh anak
			Kearifan lokal di bidang Kesehatan untuk menangani permasalahan kesehatan reproduksi perempuan
			Pengetahuan Perempuan Tentang Kesehatan Reproduksi berbasis Kearifan lokal

No	Field Focus Research	Theme Research	Topic Research
			Management safety.
			Means infrastructure supporter safety.
		Technology and management safety	Management transportation friendly <i>gender</i> , child, And group need special.
		transportation	Wisdom local in mobilitypublic traditional
			Adoption mark And norm public localin developing management safety transportation
			Mode road And rail.
		Strengthening	Mode water.
		technology transportation	Mode air.
		industrynational	Strengthening the transportation industryfriendly environment social And culture
			System intelligent management transportation.
4	Transportation		Technology infrastructure transportation.
			System construction infrastructure transportation.
		Technology infrastructure And system support transportation	Work safety management implementation construction infrastructure.
			Control system management and quality assurance of implementation construction infrastructure transportation.
			Involvement of local figures in technology development planning infrastructure system transportation
		Policy studies, social And economy transportation	Basic research supporting technologyAnd system transportation.
			Social systems that support participation Woman, child, And inclusion social as well as inuse means And infrastructure transportation.
			Local knowledge for developmentpolicy transportation
		Intelligent	Management transportation urban/urban.
		transportation system	Management transportation logistics.
			Technology 5G ( broadband ).
			Internet-based telecommunications protocols (IP) And Internet of things
	Technology	Development	Network , data and information security .
5	Technology InformationAnd	Development Infrastructure ICT	Broadcasting multimedia based digital.
	Communication		I.T security .
			Development network sensors.
			Technology antenna And propagation wave radio.

## Development system radio cognitive.

No	Field Focus Research	Theme Research	Topic Research
		Development system/platform based Open Source	System ICT e-Government.
			System ICT e-Business.
			Frameworks/Platforms support industry creative And control.
			Technology-based information system supporter industry micro insightful <i>gender</i> And sustainable.
			System information based wisdom local
			Technology and content for data information geospatial And senses.
		Technology for Enhancement Content ICT	Development technology big data.
5	Technology InformationAnd	Content IC I	Technology For data information various form wisdom local in Indonesia
	Communication	ICT device technologyAnd supporter ICT Development	Device ICT For system network.
			Device ICT For smart city
			Device ICT For customerspremises equipment (CPE).
			Policy And social humanities supporter ICT.
			Technology device supporter participation Woman, child, group <b>sed</b> needs, and securityuse information based ICT.
			Device ICT For preservation wisdom local
			Development application system intelligent.
		based system Intelligence artificial	Technology robot vision
			Development product tool transport dimension land.
			Development product tool transport dimension sea.
6	Defense And	Supporting	Development product tool transport dimension air.
	Security technology Power motion		System adoption knowledge and technologylocal in developing tool productstransport dimension land, sea, And air
		Local technology system in development product tool transport dimension land, sea, And air Which friendly Woman, child, & group prone to	

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No	Field Focus Research	Theme Research	Topic Research
		Supporting technologyPower	Development product rocket.
			Development product handcuffs.
		thunder	Development product system weaponry.
			Development product Command, control, Communication, Computing, Integration,Observation, And Reconnaissance (K4IPP), especially radar, communication tool and satellite.
6	Defense And Security	Supporting	Development product material.
		technology defense	Development source Power defense.
			Development of a supporting social system defense And security based culture localWhich insightful <i>gender</i> And inclusion social.
			System-based defense system Knowledge And Technology local
		Conflict handling	Identify local wisdom valuesin handling conflict
		through approach social culture	Adoption values wisdom localFor handle conflict
		Technology mineral processingstrategic materials standard local	Extraction and designfactory metal land seldom.
			Development cell Sun based non silicon.
			Processing ore mineral strategic local.
		Technology development	Production polymer For application separation in industry.
			Material supporter biosensors And chemosensor.
			Development membrane.
			Development catalyst And biocatalyst(enzyme) For application in industry.
7	Material Drassed	material functional	Innovation technology material material building local
7	Material Proceed		Technology extraction asphalt from rock experience (asphalt rock Buton).
			Development material geopolymer.
			Innovation technology material material building local.
			Design And exploration material pigment absorber.
		Exploration technologypotency material new	Supporter transformation materialrubbish And processing waste.
			Supporter material structure.
		Technolog	Characterization material based laser And optics.
		Technology characterization materialand support industry	Characterization material biocompatible.
			Independence material standard magnet strong
			Development material alloy.

No	Field Focus Research	Theme Research	Topic Research
			Resilience social And strengthening economy coast.
			Community food sovereignty coast And island isolated.
			Border coastal management of aspect <i>social security</i> And <i>prosperity</i> .
		Sovereign technology	Diversification, And preservation resource marine.
		area 3T (front, isolated, backward)	Exploration and utilization source Power coast And sea.
			Development technology And managementislands small And coast.
			Development industry tourist nautical.
	Maritime		Development industry tourist nauticalin area 3T based wisdom local.
			System knowledge And technology local in preservation source Power sea And coast.
8		Conservation technology environment maritime	Conservation And rehabilitationecosystem coast And sea.
			Ecosystem and supporting zoning area conservation sea.
			Technology conservation And rehabilitation ecosystemcoast And sea based wisdom local
			Exploration of local wisdom values in management and utilizationsource Power sea And coast.
			Health And service ecosystem coast And sea.
			Mastery technology survey SDE/SDA sea in.
		Strengthening technology infrastructure maritime	Development of vehicle technology coast, free beach, And sea in.
			Mastery technology communication, navigation, <i>security</i> and supervision.
			Development technology infrastructure beach And free beach.
			Integration of local wisdom in development technology infrastructure, communication, And vehicle maritime.

No	Field Focus Research	Theme Research	Topic Research
		Empowerment and improvement participation women and social inclusion In the	Revitalizing local wisdom for resilience, family And preservation source Power marine.
8			Participation women, minority groups, And family For endurance, And diversification product processing source Power marine.
	Maritime		Women's participation, and social inclusion in reception And utilization tourist nautical.
		environment maritime.	Integration conservation environment maritimein the educational curriculum insightful gender And inclusion social.
			Participation Woman in development, maintenance, And strengthening infrastructure beach And free beach.
			Mitigation subtraction risk disaster geology.
	Disaster	Technology and management disaster geology	Prevention And preparedness responsive emergency geology.
			Rehabilitation And reconstruction geology.
			Regulations And culture aware disaster geology.
			Danger And vulnerability geology.
			Technology And application digital inmanagement disaster geology.
			Exploration And adoption wisdom local aswarning early disaster geology
9			Risk reduction mitigation disaster hydrometeorology.
			Prevention and preparedness, responsive emergency hydrometeorology.
		Taskaslasy and	Rehabilitation And reconstruction hydrometeorology.
		Technology and management disaster hydrometeorology	Regulations and conscious culturedisaster hydrometeorology.
			Danger And vulnerability disaster hydrometerology.
			Deep digital technology and applications management disaster hydrometerology.
			Exploration And adoption wisdom local aswarning early disaster hydrometeorology

No	Field Focus Research	Theme Research	Topic Research
		Technology and management disaster fire land And forest	Mitigation subtraction risk disasterfire land And forest. Prevention And preparedness responsiveemergency fire land And forest. Rehabilitation And reconstruction fire land And forest.
			Disaster awareness regulations and culturefire land And forest. Revitalization of local cultural values and participation women for fire disaster prevention forest, field herding, And land productive.
	Disaster		Danger And vulnerability disaster fire land And forest.
			Exploration And Adoption mark wisdom localin land and forest management For prevent disaster fire
			Empowerment mitigation based community.
9		Technology and management disaster nature: earthquake, tsunami, flood bandang, land landslides, drought (dry), mountain erupted.	Technology warning early disaster natural.
			Re <i>Cover</i> y life social, economy, And culture
			public post disaster.
			Model and system development information mitigation disaster.
			Mapping disaster as information system room region And design building.
			Exploration and adoption of local wisdom as warning early disaster natural.
			Mitigation impact change climate.
			Change cover land And Power support land.
		Mitigation, change	Contribution And role forest in change climate.
		climate and governance ecosystem	The resulting environmental management process change cover land And change climate.
			Exploration and adoption of local wisdom overcome change climate And manage forest.

No	Field Focus Research	Theme Research	Topic Research
		Technology and management environment	Study mapping health environment.
			Rehabilitation ecosystem.
			Exploration friendly environment.
			Regulations And culture.
			Technology And application digital in management disaster fire land And forest.
			Danger, vulnerability, risk And managementbiological disasters (including the spread of disease, insect explosion, explosion population bird, fish etc.).
			Biotechnology environment.
			Bioremediation environment.
			Management waste dangerous And poisonous.
			Environmental adaptation to change climate and/or pollution.
			Analysis risk environment.
			Conservation source Power natural.
			Valuation source Power natural.
			Restoration damage environment.
9	Disaster		Technology processing waste congested, liquid And gas.
			Local knowledge and technology systems in manage source Power natural Forprevent damage environment.
			Policy development or regulation about activity productionAnd consumption Which pro environment.
		Disaster failure technology	Danger, vulnerability And risk failure technology.
			Management disaster failure technology (including nuclear, construction modern, etc.).
		Disaster social	Danger, vulnerability And risk disaster social (including damage social).
			Management disaster social.
			Wisdom local For prevent Andovercome disaster social
		Mitigation sustainableto disaster natural	Region with vulnerability tallto disaster natural.
			Evaluation intelligent to facility general which has awakened ( <i>smart assessment</i> on existing public facilities ).
			Preparedness public face disaster natural.
			Disaster And wisdom local.
			Mitigation disaster natural based wisdom local

No	Bidang Fokus Riset	Tema Riset	Topik Riset
		Pembangunan dan penguatan sosial budaya	Indigenous studies.
			Global village.
			Identitas, mobilitas, <i>diversity</i> , dan multikulturalisme
			Budaya dalam upaya mencegah dan menangani akibat dari kekerasan, radikalisme, kekerasan berbasis <i>gender</i> , anak,etnisitas, agama, dan identitas lainnya, serta dalam upaya mengembangkan kesejahteraan dan keunggulan prestasi.
			Soft power diplomacy
			Komunikasi publik di era revolusi teknologi informasi dan komunikasi
			Tatakelola dan pemerintahan
			Demokrasi, politik, dan pemilihan umum
			Hubungan internasional
			Corporate Social Responsibility (CSR)
			Perempuan dalam penguatan sistem sosial-budaya untuk Pembangunan Inklusi dan Berkelanjutan
	Cosial Humaniara		Urban planning.
10	Sosial Humaniora - Seni Budaya - Pendidikan	Sustainable mobility	Urban transportation.
			Mobilitas berbasis pengetahuan lokal dan pekerja
			keluarga untuk industri.
			Mobilitas orang, nilai, dan barang serta implikasinya pada transformasi nilai budaya dan perilaku komsumtif dalam era global.
			Mobilitas pada masyarakat lokal dan strategi memelihara lingkungan asal dan tujuan.
			Mobilitas pada Perempuan dan Kelompok Rentan sebagai resiliensi dalam sistem dan struktur masyarakat dalam era global
		Penguatan modal sosial	Reforma agrarian.
			Pengentasan kemiskinan dan kemandirian pangan.
			Rekayasa sosial & pengembangan pedesaan.
			Modal sosial budaya untuk pencegahan dan penanganan akibat dari kekerasan perempuan dan anak, ketahanan keluarga, dan komunitas minoritas.
			Menggali kearifan lokal sebagai modal sosial bagi ketahanan bangsa
			Modal sosial Perempuan Dalam Ketahanan keluarga, komunitas, dan masyarakat yang berwawasan keadilan <i>gender</i> , perlindungan anak, inklusi sosial, dan berkelanjutan

No	Field Focus Research	Theme Research	Topic Research
	Social Humanities - Art Culture - Education	Economy And source Power man	Entrepreneurship, cooperative, And MSMEs. Women in entrepreneurship, cooperatives, and MSMEs based knowledge typical Woman. Art and culture supporter tourist. <i>Grand design</i> riches intellectual local, legacy history, And its preservationin supporting national character and tourist Which sustainable Internal human resources scope organization industry Women as Resource PowerHumans in Economic Development Which oriented on
			justice gender , inclusion social, & sustainable Strengthening Capacity Resource Man which is justice oriented gender , inclusion social, And sustainable Patriarchy And domination
10		Mainstreaming gender in development	socialin development. Grand design local knowledge and based local knowledge of women, men, children, minority communities, communities with needs special For creation Power competitive nation.
			Mapping, revitalization, And transformation knowledge and skills basedlocal knowledge for improvement Power competitive economy nation insightfulgender, inclusion social, And sustainable.
			Development system social Which push improvement, distribution, and creation resource man Which creativeface development sustainable.
			Education character and empowerment competitive insightful justice <i>gender</i> , child, inclusion social Which sustainable.
			Explore local wisdom about roles Woman in family And public
			Manipulation social And System manage in <i>gender</i> equitable development, inclusion social, And sustainable
			Leadership And Transformation in <i>Gender</i> Mainstreaming Governance in development sustainable

chnology

No	Field Focus Research	Theme Research	Topic Research
	Social Humanities - Art Culture	Art, identity, culture, And character nation	Art tradition And inheritance.
			Art ritual.
			Conservation art.
			Revitalization art.
			Art And Power competitive nation.
			Art And equality gender
			Art and national ideology
			Digital economic/ <i>smart</i> economy/economy creative
			Diaspora And power Work migrantinternational Indonesia
			Civilization values character main
			Enhancement quality Teacher in strengthening education character
			Integration character nation in process learning
			Networking partnership institutionorganizer education
			Formation identity through explorationhistory local in border
10			Exploration And diffusion technology art.
	- Education	Art	Art And environment
			Art And education
			Art And life public
			Art And development economy
			Technology And media art.
			Development art based wisdom local
		Education	Technology education And learning
			Management education
			Source Power education (power educator And education)
			Equality gender And inclusion social in education
			Results education And formation character nation
			Internalisation values wisdomlocal in learning.
			Development of school managementbased wisdom local.
			Curriculum education character based wisdom local.

No	Field Focus Research	Theme Research	Topic Research
		Wisdom local	<ul> <li>Exploration wisdom local in Archipelago.</li> <li>Strategy preservation wisdom local.</li> <li>Exploration system government local as a basis for system development manage government modern.</li> <li>Values democracy based wisdom local.</li> <li>Relay Social And System manage Wisdom Local in the resilience and competitiveness of the nation fair gender , inclusion social, And continuity</li> <li>Local wisdom, Creative Work and Power Competitive Nation Power Competitive Nation Which fairgender , inclusion social, And continuity</li> </ul>
10			Woman, Wisdom Local, And Work Creative And Power Competitive Nation Power Competitive Nation Whichfair <i>gender</i> , inclusion social, And continuity
		Tourism and	Tourism and economic development creative based wisdom local.
			Development ecotourism based wisdom local.
			Development tourism sustainable.
			Tourist virtual: readiness technology And period front.
		Economy Creative	Development tourism creative.
			Economy creative in support development sustainable.
			Policy in push economy creative.
			Tourism and economic development creative based wisdom local Which fair <i>gender</i> , inclusion social, And continuity

#### Information:

Theme And topic Which listed on table in on Still nature dynamic. Changes will be made if there are strategic considerations and de- sack.

### Appendix 3. Description Level Readiness Technology (TKT) TKT Type General And Hard Engineering

NO	DEFINITION/STATUS	INDICATOR	
1	Principle base from technologyresearched And reported	<ol> <li>Assumption And law base (ex.physics/ chemistry) Which willused on technology (new) has determined;</li> <li>Studies literature (theory/ empirical -research previous) aboutprinciple base technology which will</li> </ol>	
		developed; And	
		3. Formulation hypothesis research.	
		1. Equipment And system Which will used, has identified;	
		<ol> <li>Studies literature (theoretical/empirical) technology Which willdeveloped possible For applied;</li> </ol>	
		3. Design in a way theoretical And empirical has identified;	
		<ol> <li>Elements base from technology Whichwill developed has is known;</li> </ol>	
	Concort formulation and/	<ol> <li>Characterization component technology Which willdeveloped has mastered And understood;</li> </ol>	
2	Concept formulation and/ or application formulation.	<ol> <li>Performance from each element compiler technology Which will developed has predictable;</li> </ol>	
		<ol> <li>Analysis beginning show that function main Which needed can Work with Good;</li> </ol>	
		8. Model And simulation For test truth principle base;	
		9. Research analytic For test truth principle basically;	
		<ol> <li>Components technology Which will developed, in a way separated can Work with Good;</li> </ol>	
		11. Equipment Which used must valid And reliable; And	
		12. Is known stages experiment Which will done.	
		<ol> <li>Studies analytic support predictions performanceelement- element technology;</li> </ol>	
		<ol> <li>Characteristics/traits And capacity show off Work systembase has identified And predictable;</li> </ol>	
		<ol> <li>Has done test laboratory For testappropriateness application technology the;</li> </ol>	
	Proof draft function	<ol> <li>Model And simulation support predictionsability elements technology;</li> </ol>	
3	and/or characteristics important analytically And experimental	<ol> <li>Development of this technology step by stepEarly use of very mathematical models possible And can simulated;</li> </ol>	
		<ol> <li>Research laboratory to predict performance each element technology By theoretical, empirical And experiment has is known components systemtechnology the can Work with Good;</li> </ol>	
		<ol> <li>Has done research in laboratory withuse data dummies; And</li> </ol>	
		<ol> <li>Technology worthy in a way scientific (studies analytic,model/simulation, experiment).</li> </ol>	

NO	DEFINITION/STATUS	INDICATOR	
4	Validate internal components/subsystems environment laboratory	<ol> <li>Laboratory tests of componentsin a way separated has done;</li> <li>Condition system For application according to user has is known (desire adopters);</li> <li>Results test laboratory to component- componentshow that component the can operate;</li> <li>Test function main technology in environment Which relevant;</li> <li>Prototype technology scale laboratory has created;</li> <li>Research integration component has started;</li> <li>Process 'key' For its manufacturing has identified And studied in labs; And</li> <li>Integration system technology And design get upscale lab has finished ( <i>low fidelity</i> ).</li> </ol>	
5	Component validation/ subsystem in a environment Which relevant	<ol> <li>Preparation production device hard has done;</li> <li>Market research (<i>marketing research</i>) and research laboratory For choose process fabrication;</li> <li>Prototype has created;</li> <li>Equipment And machine supporter hastested in laboratory;</li> <li>Integration system finished with accuracy tall ( <i>highfidelity</i>), ready tested on real/simulated environment;</li> <li>Accuracy/ <i>fidelity</i> system prototype increase;</li> <li>Condition laboratory modified so that similar with environment Which indeed; And</li> <li>Process production has reviewed _ by part manufacture</li> </ol>	
6	Model demonstration or prototype system/ subsystem in something environment Which relevant	<ol> <li>Condition environment operation actually has is known;</li> <li>Need investment For equipment And process manufacturing identified;</li> <li>M&amp;S For performance system technology on environment operation;</li> <li>Part manufacture/ manufacturing agree And accept results testing laboratory;</li> <li>The prototype has been tested with accuracy/fidelity a laboratory high in environmental simulationoperational (Which Actually in outside laboratory); And</li> <li>The test results prove it technically feasible ( engineering feasibility )</li> </ol>	

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NO	DEFINITION/STATUS	INDICATOR	
7	Demonstration prototype systemin environment Actually	<ol> <li>Equipment, process, method And design technique has identified;</li> <li>Process And procedure fabrication equipment start tested;</li> <li>Equipment process And equipment test / inspectiontried out in in environment production;</li> <li>Draft picture design has complete;</li> <li>Equipment, process, method And design technique hasdeveloped And start tested;</li> <li>Calculation estimation cost has validated (<i>design to cost</i>);</li> <li>Process fabrication in a way general has understood with Good</li> <li>Almost all function can walk in environment/conditions operation;</li> <li>Prototype complete has demonstratedon simulation environment operational;</li> <li>Prototype system has tested on trials field; And</li> <li>Ready For production beginning (<i>low rates initial production - lrip</i>).</li> </ol>	
8	System has complete And reliable through testing And demonstration in actual environment	<ol> <li>Form, suitability And function componentcompatible with system operation;</li> <li>Machine And equipment has tested in environment production</li> <li>Diagram end finished created;</li> <li>Process fabrication tried out on scale pilot (<i>pilot line</i> or <i>lrip</i>);</li> <li>Test process fabrication show results And level productivity Which can accepted;</li> <li>Test all over function done in simulation environment operation;</li> <li>All material/ material And equipment availableFor used in production;</li> <li>System fulfil qualification through test And evaluation.</li> <li>Ready For production scale full (capacity full).</li> </ol>	
9	System really tested/proven through success operation	<ol> <li>Includy For production scale full (cupacity full).</li> <li>Draft operational has truly can applied;</li> <li>Estimation investment technology Already created;</li> <li>No There is change design Which significant;</li> <li>Technology has tested on condition Actually;</li> <li>Productivity on level stable;</li> <li>All documentation has complete;</li> <li>Estimate price production compared to <i>competitors</i>; And</li> <li>Competitor technology is known.</li> </ol>	

# TKT Type Software

NO	DEFINITION/STATUS	INDICATOR	
1	Principle base from technologyresearched And reported	<ol> <li>Represents level Lowest from readiness technology device soft;</li> <li>Represents realm device soft new Which currently explored by community research base; And</li> <li>Also includes development of level usage base, characteristic base from architecture device soft, formulationmathematics, realizable device concepts, study of basic software principles, scientific principles, formulation hypothesis research, And algorithm general.</li> </ol>	
2	Formulation and/ or application technology.	<ol> <li>After principle base researched, continues onmaking application Which nature practical;</li> <li>Application nature speculative, And there is possibility has no evidence or detailed analysis to support assumption Which exist/do; And</li> <li>Examples are limited to analytical studies withuse data synthetic (artificial).</li> <li>User/ customer Already can identified, applicationsystem or subsystem Already identified</li> <li>Studies appropriateness application device soft</li> <li>Solution design empirical nor theoretical Already identified</li> <li>Component technology in a way partial Already characterized</li> <li>Prediction performance every element Already made</li> <li>Has done study impression/interest user/ customers to device soft</li> </ol>	
3	Proof draft function and/or characteristics important analytically And experimental	<ol> <li>There is initiation of the research process and development Which done in a way active;</li> <li>Appropriateness scientific showed through studiesanalytic And laboratory; And</li> <li>Also includes development of limited function environments For validate characteristic critical And predictions analytical use :</li> <li>A. Component device soft Which No integratedAnd B. Part data Which represent</li> <li>Prediction ability every element technology Already validated through study analytical</li> <li><i>Outline</i> algorithm device soft available</li> <li>Prediction ability element technology Alreadyvalidated through modeling And simulation</li> <li>Laboratory experiments have been carried out ensure appropriateness device soft</li> <li>Representative user Already Can included in development device soft</li> <li>Appropriateness scientific here fully showed</li> <li>Mitigation risk has identified</li> </ol>	

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NO	DEFINITION/STATUS	INDICATOR	
		<ol> <li>Component device soft base integratedWork in a way together;</li> </ol>	
		<ol> <li>Relatively primitive related with efficiency And reliability ( robustness) compared to with system/product Finally;</li> </ol>	
		<ol> <li>Architectural development begins with coverage of issues related interoperability, reliability, convenience maintenance, ability enhancement, scalability, And security;</li> </ol>	
		<ol> <li>There is business adjustment with element (technology) current; And</li> </ol>	
		<ol> <li>Prototype Which There is developed For showaspect Which different on system/product Finally.</li> </ol>	
4	Validation module subsystem In the environment	6. Issue " cross technology " (If There is) fully has identified	
	laboratory	<ol> <li>Development architecture system device soft in a way formal started</li> </ol>	
		8. Document need user	
		9. Algorithm has converted to <i>pseudocode</i>	
		10. Analysis need data format has complete	
		11. Demonstration device soft Already donein environment simple	
		12. Estimate size device soft	
		13. Study integration started	
		14. Draft design conceptual documented	
		<ol> <li>Is the level at which the device technology soft Which developed Ready For integrated with system Which Already There is;</li> </ol>	
		<ol> <li>Implementation prototype Which in accordance with environment/interface;</li> </ol>	
		<ol> <li>Done experiment to problemWhich actually (real);</li> </ol>	
		<ol> <li>Do simulation to interfacefrom system Which Already There is;</li> </ol>	
		5. Architecture device soft system finished; And	
	Module validation and/ or deep subsystem environment Which relevant	<ol> <li>Algorithm walk on (multi) processor in environment operational with characteristics Which in accordance hope</li> </ol>	
5		<ol> <li>Influence "cross technology " (If There is) hasidentified And set through analysis</li> </ol>	
		8. Need interface system is known	
		9. Architecture device soft system Already set	
		10. Analysis need interface internal has complete	
		11. Coding function/module has complete	
		12. Prototype has made	
		13. Quality And reliability already become consideration	
		<ol> <li>Environment laboratory Already modified approach environment operational</li> </ol>	
		15. management risk documented	
		16. Function Already integrated in modules	
		17. Drafts test and evaluation masters plans	

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NO	DEFINITION/STATUS	INDICATOR	
	Validation module and/or subs systems in the environment "end-to-end"	<ol> <li>Represents level Where appropriateness manipulationfrom technology device soft showed; And</li> </ol>	
		<ol> <li>Covers Also implementation prototype laboratory with problem realistic scale full, Where technology device soft integrated in a way Partial withdevice hard/soft from system Which Already There is.</li> </ol>	
6		<ol> <li>Validation characteristics measurement And performance" cross technology " has complete</li> </ol>	
	(end-to-end environment)	4. Level quality And reliability tea set	
	Which relevant	5. Environment operational has is known	
		<ol> <li>M&amp;S done For simulate performance system in environment operational</li> </ol>	
		7. Test and evaluatioan masters plans Already final	
		8. Analysis structure <i>databases</i> And interface has complete	
		9. Documentation device soft limited Already There is	
		10. Device soft version " <i>alpha</i> " released	
	Prototype demonstration	<ol> <li>Represents level Where appropriateness program fromtechnology device soft showed; And</li> </ol>	
		2. Includes also implementation of environmental prototypes operational, Where functionality risk technical Which nature critical is available to demonstrate and test under conditions the software technology is well integrated with device hard/soft from system operational.	
7	system in the	3. System prototype Already built	
	environmentoperational or environment	4. Algorithm Already walk on processor in environment operations	
	accuracy tall	5. Part big " bugs " device luunak Already No There is	
		6. Device soft " <i>beta</i> " version released _	
		<ol> <li>Process manufacture device soft in a way general Already can understood</li> </ol>	
		8. Plan production has complete	
8	System in a way actual has complete and fulfilling requirements through testing and demonstrations in operational environment/ application Actually	<ol> <li>Represents level Where technology deviceThe software is fully integrated with the devicehard And soft from system operational;</li> </ol>	
		2. Documentation development device soft complete; And	
		<ol> <li>All function tested Good in scenario simulation nor operational.</li> </ol>	
		4. Device soft in a way whole Already in- <i>debugged</i>	
		5. Diagram architecture end has finished	

NO	DEFINITION/STATUS	INDICATOR	
9	The system is truly tested/ proven through successuse operational	<ol> <li>Represents level Where technology device softIt is ready to be developed and used in a way repeated ( rapid development/re- use );</li> <li>Device soft based technology Which fully integrated with device hard/soft from system operational;</li> <li>All documentation device soft has verified;</li> <li>Own experience success from side operational;</li> <li>There is support sustainable to manipulation device soft; And</li> <li>System nature actual (truly There is And used)</li> <li>Production device soft Already stable</li> <li>All documentation has complete</li> <li>Draft operational has implemented with success</li> </ol>	

# TKT Type Software

NO	DEFINITION/STATUS	INDICATOR	
1	Principle base from something technology has researched	<ol> <li>Formulation question research or hypothesis study Already There is;</li> <li>Studies literature about principle base relatedstudy Already done; And</li> <li>Methods/methods/processes/products researched and will be developed Already There is And own opportunity success.</li> </ol>	
2	Technology concept and application has in formulate	<ol> <li>Means And infrastructure Which will used has identified;</li> <li>Validation results studies literature has done; And</li> <li>Design study in a way theoretical And empirical has identified.</li> </ol>	
3	Concept and characteristics important from something technologyhas been proven analytical And experimental	<ol> <li>Design research Already arranged (methodology choice, stages, And data Which needed For study);</li> <li>Theoretically, empirically and experimentally have been is known And components system technology the can Work with Good; And</li> <li>Technology has worthy in a way scientific (studiesanalytic, model/simulation, experiment).</li> </ol>	

NO	DEFINITION/STATUS	INDICATOR	
		<ol> <li>Laboratory tests of componentsin a way separated has done;</li> </ol>	
	Technological components has been validated in environment	<ol> <li>Performance from each component technology (method/method/process/product) to be developed has showing results Which Good;</li> </ol>	
4		<ol> <li>Experiment the main functions of deep technology environment Which relevant has held;</li> </ol>	
	laboratory	4. Prototype technology scale laboratory has created;	
		5. Study integration component has started;	
		<ol> <li>Analysis beginning show that function main Which needed can Work with Good; And</li> </ol>	
		<ol> <li>Integration component technology And design get upscale laboratory has tested ( <i>low fidelity</i> ).</li> </ol>	
5	Technological components has been	<ol> <li>The technology prototype is ready to be tested in laboratory conditions modified Which approach environment Which indeed;</li> </ol>	
	validated in	2. Accuracy/ <i>fidelity</i> increase;	
	environment Which relevant	<ol> <li>Integration component technology has testedwith accuracy tall ( <i>high fidelity</i> ).</li> </ol>	
		<ol> <li>Condition something technology hasis known (on condition optimal);</li> </ol>	
6	Model or Prototype has tested in the environment Which relevant	<ol> <li>The technology has been tested with high accuracy on operational environment simulation with data complete (in accordance with design or design research);</li> </ol>	
		<ol> <li>Results test prove worthy in a way technical( <i>engineering feasibility</i> ); And</li> </ol>	
		<ol> <li>Draft analysis economy (estimation beginningappropriateness economy) Already available.</li> </ol>	
		<ol> <li>Condition environment operational / actually for technology has is known;</li> </ol>	
		2. Has done test multi location technology scale field;	
	Destation a bas to stad in	3. Results test roomy show performance / performance Which stable;	
7	Prototype has tested in environment Actually	4. Results test multi location prove worthy in a way technology.	
		<ol> <li>Need investment For process production has identified; And</li> </ol>	
		<ol> <li>Analysis appropriateness economy complete (resultsvalidation in environment Actually).</li> </ol>	
		<ol> <li>Picture prototype And detailengineering equipment supporters have available;</li> </ol>	
8	Technology Systems have complete and fulfilling condition (	<ol> <li>Cultivation process with productivity levels Which desired has mastered;</li> </ol>	
		3. Has done standardization technology; And	
	qualified )	<ol> <li>All material / material And equipment For used in production has available.</li> </ol>	

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NO	DEFINITION/STATUS	INDICATOR
9	Technology really tested/proven through success operation	<ol> <li>Draft application technology truly can applied;</li> <li>Estimation investment technology Already created;</li> <li>No There is change design Which significant;</li> <li>Technology has tested on environment Actually;</li> <li>Has fulfil certification Which needed; And</li> <li>All documentation has complete.</li> </ol>

# TKT Type Health-Products Vaccines/Biologicals

NO	DEFINITION/STATUS	INDICATOR
1	Principle base from technology researched And reported	<ol> <li>Studies literature scientific about principle basetechnology Which developed Already There is;</li> <li>Surveys beginning market has started And assessed;</li> <li>Potency application scientific For solutionproblem has depicted.</li> </ol>
2	Concept formulation and/or application formulation. (Intensive intellectual ones focus on the problem produces literature studies that <i>review</i> and generate research ideas, hypotheses and design experiment related issues scientific.	<ol> <li>Hypothesis has formed;</li> <li>Development design research Already There is;</li> <li>Research protocol for testing truth principle Already There is; And</li> <li>Protocol Already reviewed _ by gatheringpara expert And Approved.</li> </ol>
3	Proof draft function And/ or characteristics important in a way analytical And experimental. Initiation <i>Proof</i> of Concept for development vaccine products are described with study limited Good in a way in vitronor in Vivo on animal model.	<ol> <li>Studies analytic support predictions performanceelement- element technology Already There is;</li> <li>Characteristics/traits and performance capacity system base has identified And predictable;</li> <li>Experiments have been carried out laboratory in a way <i>in vitro</i>; And</li> <li>Has done test laboratoryin a way <i>in Vivo</i> on animal model.</li> </ol>



NO	DEFINITION/STATUS	INDICATOR
4	Validation components/subsystems in environment laboratory. Basic components of integrated technology to show that technology will work together. Currently <i>low fidelity</i> (stillerror is possible) if compared to with technology original. Exampleaddition tool ad hoc in Laboratory. Study laboratory non GLP doneto define the hypothesis and identify relevant data necessary for technology assessmenton design experimental Which accurate. Studies explorative from critical technology For effective integration into the candidate biologics/vaccines (pH, <i>adjuvants</i> , <i>stabilizers</i> , preservative, <i>buffer</i> , method of administration, method purification Which proposed, characterization chemistry and physics, metabolite results and excretion/ elimination, <i>dose ranging</i> , test challenge (For protection). Candidate vaccines/biologics has been tested on animal models for see potency, effect biology, security, effectside effects and toxicity. <i>Marker</i> marker For determine <i>end</i> <i>point</i> on preclinical nor test clinical Already identified.	<ol> <li>Prototype scale Lab has produced;</li> <li>Prototype scale Lab <i>Good Laboratory Practice</i></li> <li>(GLP) has generated For material test Preclinical;</li> <li>Process 'key' For production has identified And studied in labs;</li> <li>Integration system technology And design get upscale lab has finished ( <i>low fidelity</i> );</li> <li>Has set <i>Target Products Profiles</i> (TPP) consistsfrom description preparation, content preparation, indication, dosage, <i>dose ranging</i>, method of administration, efficacy, effects side Which possible, type preparation; And</li> <li>Initial preclinical tests include safety tests and efficacy of a biologic/vaccine candidate has depicted And defined in animal model.</li> </ol>
5	Validation components/subsystems in something environment Which relevant. Period intensive studies non clinical And preclinicaldone involve data parametric and analysis is carried out on that system validated, and pilot scale production of biologic/vaccine candidates. Research results show test potency Which in accordance, proposal production that will meet GMP rules on scale pilot, identification And proofPoC on animal test can predict test in humans, via appropriate markers. Do GLP test toxicity on animaltest, set markers For predictions clinical trials in humans, as well as proving immunogenicity And potency, as well as PK AndPD And initiation from studies stability preparation.	<ol> <li>Preparation production And facility GMP;</li> <li>Production biology/vaccines scale pilothas designed And done;</li> <li>Formulas parent preparation biology/vaccines has reviewed _by Quality assurance And fulfil rule GMP;</li> <li>Test preclinical security, immunology/activity biologyAnd efficacy preparation GLP has done;</li> <li>The design for clinical trials in humans has been created and registered to Body POM based on test preclinical;</li> <li>Design test stability And test stabilitylimited has done.</li> </ol>
6	Demonstration model or prototype system/subsystem in a environment Which relevant. Pre-IND discussions have begun with the Agency POM and documents have been prepared and entered, Phase 1 CT was done done on amount participant small and subjects are controlled and evaluated exists symptom clinical in a way intensive. Data immunogenicity And or pharmacokinetics and pharmacodynamics are readily available forpredictions CT phase 2 in man.	<ol> <li>1 clinical trials in humans with numbers limited has been carried out and fulfilled security requirements and show results immunogenicity And pharmacokinetics (PK) Andpharmacodynamics (PD) Which expected; And</li> <li>2. Data results test clinical 1 Which supportarranged protocol test clinical phase.</li> </ol>

NO	DEFINITION/STATUS	INDICATOR
7	System prototype demonstration in environment Actually. Test CT phase 2 For evaluate security and immunogenicity and activity biology done. Finals dose product, <i>dose</i> <i>ranging</i> , method And time giving Already set from results PK/PD. Phase 2 CT results data were documented and reported to the Director General of POM for preparation test CT phase 3 ( <i>efficacy</i> ). Point enda clinical test site and its markers are established on agreement Body POM.	<ol> <li>Test clinical phase 2 in man Already held;</li> <li>Product dosage data, ranging dosage, method And time giving as well as data pkand pd becomes the basis for compiling protocol test clinical phase 3 has There is;</li> <li>Protocol test clinical phase 3 has madeAnd submitted to body pom;</li> <li>Has done scaling up process to scale commercial in accordance condition gmp;</li> <li>Process validation at production scalehas done; And</li> <li>Production facilities and space to scale production Which fulfil gmp has prepared.</li> </ol>
8	Complete and reliable through testing and demonstrations in the environment Actually. Results test CT phase 3 fulfil condition security And efficacy from candidateiologic/vaccine. Process validation is complete fulfilled, and reproducibility studies/ consistency Already done. Pre registrationAlready be delivered to Body POM.	<ol> <li>Agreement registration from Body POM;</li> <li>Drafting <i>dossier</i> has started related <i>Chemical</i>, <i>Material</i> and <i>Control</i> data, facility, building, power Work, etc;</li> <li>Facility production has Approved by Body POM;</li> <li>Test clinical phase 3 fulfil condition;</li> <li><i>Dossier</i> has registered to Body POM; And</li> <li>Product has registered to body POM.</li> </ol>
9	The system is truly tested/proven through success operation. Biologics/vaskinAlready can distributed And marketed. <i>Post marketing studies</i> are designed after there is an agreement with the POM and did it <i>post marketing surveillance</i> (PMS). <i>Surveillance</i> done Keep going continuously.	<ol> <li>Production routine product biologics/vaccines have been done;</li> <li>Distribution And marketing productbiology/vaccines has done;</li> <li>Pms protocols on biological and animal productsAlready made And submitted to body pom; And</li> </ol>
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# TKT Type Health - Product Tool Health

NO	DEFINITION/STATUS	INDICATOR
		1. Level Lowest readiness technology;
		2. Explanation theoretical principle base technology;
		<ol> <li>Survey beginning utility technology;</li> </ol>
1	Proof Principle Base Technology (Basic Principle Report)	<ol> <li>Study of the basic concepts of scientific theory underlying technology tool health related;</li> </ol>
		<ol> <li>Formulation of basic concepts and proof in a way theoretical; And</li> </ol>
		<ol> <li>Review of scientific literature related to the principlesprinciple base technology.</li> </ol>
	Technology Concept Formulation ( <i>Technology Concept formulation).</i>	<ol> <li>Formulate topics study, compilehypothesis, and planning designs experiment to find a solution problem with base technology related;</li> </ol>
2		<ol> <li>Preparation of scientific hypotheses. Making plan study And protocolget review And agreement; And</li> </ol>
		3. Through study literature And discussions scientific, arranged plan study And studies For identify potency And opportunity therapeutic targets. Documented in form protocol or plan study which received <i>review</i> and approval.
	Research to prove the concept technology (Research of Technology Concept).	<ol> <li>Basic research, data collection and analysis experiment, For test hypothesis Which arranged. Inspect draft alternative, And identifyas well as evaluate component technology;</li> </ol>
		<ol> <li>Testing beginning to draft designAnd evaluation various alternative;</li> </ol>
3		<ol> <li>Verification design, determination specification component;</li> </ol>
		<ol> <li>Initial proof of the truth of the concept (proof- of- concept) medical device technology on amount limited And model laboratory; And</li> </ol>
		<ol> <li>Documentation results test scale laboratory Which give proof beginning truth draft technology tool health.</li> </ol>
	Validation component and/or sequence laboratory scale system (Validation Components in laboratories).	<ol> <li>Test And testing scale model laboratoryto evaluate and review levels security, effect side And effectiveness;</li> </ol>
4		<ol> <li>Preparation of procedures and methods used in studies non clinical And clinical;</li> </ol>
		3. Proving the truth of the concept ( <i>proof-of-concept</i> ) technology And level security; And
		4. Publication ( <i>peer-reviewed</i> ) of evidentiary data truth draft technology And level security.



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NO	DEFINITION/STATUS	INDICATOR
	Prototype Scale Laboratory <i>(Lab Scale prototype).</i>	<ol> <li>Determining the classification (class 1, 2 or 3) of the prototypetool health based on equality with tool health Which Already There is;</li> </ol>
5		<ol> <li>Testing level security prototypelab scale based on standards applies (for example: iec60601);</li> </ol>
5		<ol> <li>Lab scale prototype validation testing about effectiveness And effect side, as well asinterference to/from equipment other. (For tool health class 1-2); And</li> </ol>
		<ol> <li>Proof level security And effectiveness prototype scale lab.</li> </ol>
6	Prototype Scale Industry (Industrial Scale prototype).	<ol> <li>Industrial scale prototype validation testing on a limited amount of effectiveness and side effects, as well as interference with/from equipment other. (For tool health class 1-2);</li> <li>1 clinical testing of industrial scale prototypes for know level security And effectiveness on amount limited (For tool health class 3); And</li> <li>Proof level security And effectiveness prototype scale industry on amount limited.</li> </ol>
7	Testing Field Prototype Scale Industry	<ol> <li>Testing validation prototype scale industry on amount big For ensure effectiveness and reduce side effects, as well prevent interference to/from equipmentother. (For tool health class 1-2)</li> <li>Phase 2 clinical testing of industrial scale prototypes For ensure level effectiveness on amountmore big (For tool health class 3)</li> </ol>
	Prototype Complete Tested.	<ol> <li>Industrial scale prototype validation testing on larger quantities to be sure effectiveness and complete data required. (For tool health class 1-2);</li> </ol>
8		<ol> <li>Industrial scale prototype phase 3 clinical testing For ensure level effectiveness on amountmore more wide (For tool health class 3);</li> </ol>
		<ol> <li>Certification And standardization, as well as submissionlicensing Which necessary; And</li> </ol>
		<ol> <li>Proving the level of safety and effectiveness prototype scale industry on amount more big.</li> </ol>
9	Prototype Tested And Certified.	<ol> <li>Tool health can distributed And marketedafter get licensing Which necessary;</li> </ol>
		<ol> <li>Setup service And supervision full sell; And</li> <li>Strategy marketing And supervision full sell.</li> </ol>

### TKT Type Pharmacy

NO	DEFINITION/STATUS	INDICATOR
1	Principle base from technology researched And reported.	<ol> <li>Reviews And evaluation invention scientific as Foundation For classification technology new;</li> <li>Has done survey beginning about markets And the assessment; And</li> <li>Has There is explanation about applicationpotential scientific problems problem Which has determined.</li> </ol>
2	Formulation draft And/ or application formulation. Focus intellectual on problem, which resulted in a study of publication scientific Which review and generate research ideas, hypothesis and experimental design connection discourse scientific related.	<ol> <li>Has it produces hypothesis</li> <li>Has developed, reviewed And he agreed research plans And or research protocols</li> </ol>
3	Proof draft function And/ or characteristics important in a way analytical And experimental. Initial synthesis of candidate drugs is carried out, identify location and mechanism it works And characterization beginning todrug candidate in studies preclinical.	<ol> <li>Has done And proved it proof of concept beginning as drug candidate in model research in vitro And in Vivo in amount limited; And</li> <li>Has commencement research base, collection data and analysis to test hypotheses, explore alternative concepts and identify as well as evaluate technologyWhich support development drug.</li> </ol>
4	Component/subsystem validation in environment laboratory.	<ol> <li>Research was conducted in non-GLP laboratories ( <i>Good laboratories Practice</i> ) in something designtest Which strict (condition worst);</li> <li>Has done research exploration drug candidate (that is formulation, method giving drug, method synthesis, characteristic physique And chemical, track metabolism And excretion or expenditure from body, And measurement dose usage);</li> <li>Has done testing drug candidate onanimal models to identify and assess its potential safety and toxicity, incompatibility, And effect side; And</li> <li>It has been carried out and proven by <i>proof of</i> <i>concept</i> (proof draft) And security formulation drug candidates on a laboratory scale or on animal model Which set.</li> </ol>

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NO	DEFINITION/STATUS	INDICATOR
	Validate internal components/subsystemssomething environment Which relevant.	1. Achieving a decision point is confirmed there is sufficient data regarding the candidate drug in the draft technical data package for support continuation process with preparation application <i>Investigational New Drugs</i> (IND);
		<ol> <li>Has done research non-clinical And clinical strictly includes data collection parameter And analysis in method Which well formulated with <i>a pilot lot</i> (prototype Which validated) drug candidate;</li> </ol>
5		<ol> <li>Results research use <i>pilot lots</i> give foundation for the production process fulfil CGMP ( <i>Current Good ManufacturingPractice</i>)- compliant <i>pilot lots</i> production;</li> </ol>
		<ol> <li>Has did it study security And toxicityin a way GLP use animal model;</li> </ol>
		<ol> <li>Has done identification <i>endpoints</i> efficacy clinical ( <i>clinical efficacy</i> ) or <i>surrogate</i> his;</li> </ol>
		<ol> <li>A study has been carried out for evaluate pharmacokinetics and pharmacodynamics drug candidate; And</li> </ol>
		7. Has started research stability.
	Demonstration model or prototype system/subsystem in a environment Which relevant.	<ol> <li>Test clinical Phase 1 done For prove security drug candidate on man inamount small And in supervision Which heart- heart And monitored condition the clinical;</li> </ol>
		2. Application IND prepared And submitted (submit);
6		<ol> <li>Technology production proven throughqualification facility cgmp; And</li> </ol>
		<ol> <li>Results from Phase 1 testing have been conducted and fulfil condition security clinical Andsupport process to test clinical Phase 2.</li> </ol>
	Demonstration prototype system in environment Actually.	<ol> <li>Test clinical Phase 2 has done For provepreliminary efficacy and to obtain data security And toxicity more carry on;</li> </ol>
		<ol> <li>Plan research clinical Phase 3 or plan surrogate test has Approved;</li> </ol>
7		<ol> <li>Activity product (that is proof beginningefficacy) has determined;</li> </ol>
		<ol> <li>Has determined dose product end, range dosage, schedule, method of administration, proven (established) from pharmacokinetic data and pharmacodynamics in a way clinical; And</li> </ol>
		5. Has done <i>scaling up</i> process For scale commercial Which fulfil condition GMP.

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NO	DEFINITION/STATUS	INDICATOR
8	complete and reliable through testing and demonstration in environment Actually.	<ol> <li>Validation process has finished held And followed with test lots consistency (consistency product end);</li> <li>Has done test clinical phase 3 Which expanded or surrogate test to gather information related security And effectiveness drug candidate. Testing done For evaluate wholerisk-benefit from giving drug candidate And For give base Which EnoughFor giving label drug (drugs labeling);</li> <li>Dossier prepared And submitted to BPOM;</li> <li>Agreement dossier For drug by BPOM; And</li> <li>Facility scale production commercial hasThere is And has inspected BPOM.</li> </ol>
9	The system is truly tested/proven through success operation.	<ol> <li>Pharmaceuticals (drug) or tool medical hasdistributed/marketed; And</li> <li>Has done research And supervision post- marketing (non-clinical nor clinical).</li> </ol>

# TKT Type Social Humainora And Education

NO	DEFINITION/STATUS	INDICATOR
1	The basic principles of research have been observed And reported	<ol> <li>Background behind And objective R&amp;D has defined;</li> <li>There is question R&amp;D (question research) Which want to is known or answered;</li> <li>Relevant facts and basic arguments and support necessity done R&amp;D And</li> <li>R&amp;D required For supportgovernment policy, knowing phenomenon or solution problem, etc</li> </ol>
2	Support Data Beginning, Hypothesis, Design& Procedures R&D has explored	<ol> <li>Hypothesis R&amp;D has arranged;</li> <li>Initial data supports the questionR&amp;D Which want to answered;</li> <li>R&amp;D design (<i>research design</i>) will done has explored (determination topics data, preparation questionnaire, theme FGD, etc.); And</li> <li>Alternative methodology, procedure And stagesWhich will done has explored</li> </ol>

NO	DEFINITION/STATUS	INDICATOR
		<ol> <li>Design methodology Which used For answer question study has arranged;</li> </ol>
		<ol> <li>Sampling design, and/ or gathering data requirements andtechnique collection data has arranged;</li> </ol>
3	Design And Methodology Study arranged Complete	3. Adequacy And completeness data has set;
		4. Evaluation technical And predictions results has done;
		<ol> <li>Scenario And alternative For completenessdata has arranged; And</li> </ol>
		6. Design R&D has Complete.
		<ol> <li>Collection data primary has held (questionnaire/FGD//or in form other);</li> </ol>
	Collection , Validation on	<ol> <li>Validation For ensure data Which obtained relevant And related has held;</li> </ol>
4	Environment Simulation or Example /Activity R&D	<ol> <li>Secondary data support can complete the data beginning Which has obtained previously; And</li> </ol>
		<ol> <li>Data Which There is tested validity And its reliability. Reliability data And system (relatively) Still lowcompared to with system Which expected.</li> </ol>
		1. Reliability data has increase significant;
	Data Completeness and Analysis on Environment Simulation / Activity R&D	<ol> <li>Data has Enough And fulfil requirements for further analysis;</li> </ol>
5		<ol> <li>Preliminary analysis with that datacomplete has done;</li> </ol>
		<ol> <li>Data integrated For analysis taking conclusion; And</li> </ol>
		<ol> <li>Progress Report (preliminary analysis has been generated) And design output has arranged.</li> </ol>
	Results R&D important And significant For supporter decision And policy	<ol> <li>Report (conclusion from analysis has been generated) has been prepared;</li> </ol>
		<ol> <li>Humainora and Social R&amp;D results/output Education (making recommendation / policy briefs And other) has finished created;</li> </ol>
6		<ol> <li>Design recommendation (alternativeregulation, policy or intervention government) has produced;</li> </ol>
		<ol> <li>List party related with regulations/ policy/ intervention Which recommended has is known;</li> </ol>
		<ol> <li>Initial communication with related parties (internal external) start done; And</li> </ol>
		<ol> <li>Letter Introduction delivery Results / Outputs R&amp;D has prepared.</li> </ol>

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NO	DEFINITION/STATUS	INDICATOR
	current Good Manufacturing Practice	<ol> <li>Letter Introduction And Results / Outputs R&amp;D (recommendations/conclusions/alternatives) has be delivered to party related;</li> </ol>
		<ol> <li>Proof (<i>Evidence</i>) accepted results /Outputs R&amp;D by party related;</li> </ol>
7		<ol> <li>Results/ output R&amp;D Which be delivered becomereference And information for party related;</li> </ol>
		<ol> <li>Part or several R&amp;D results/outputs Which be delivered become basic considerationto improve the application of non-R&amp;D results Social Humainora, And Education or strategy utilization And application the result;</li> </ol>
		<ol> <li>Some or some of the R&amp;D results/output submitted as a basis/consideration for regulations / policy or intervention government; And</li> </ol>
		<ol> <li>Happen communication intensive with partyrelated about results/output R&amp;D.</li> </ol>
8	Support for Regulations and Policies related to Social Aspects Humainora And Education	<ol> <li>Part big (more half) results/ output R&amp;DSocial Humanities and Education are the basis/ considerations for improving the application of the results non-Social R&amp;D Humanora and Education or strategy utilization And application the result;</li> </ol>
		<ol> <li>Most (more than half) of the results/output Humanora Social R&amp;D and Education be delivered become basic consideration For regulations/policies or government intervention;</li> </ol>
		<ol> <li>Happen communication (intensive) withrelated parties regarding the results/output R&amp;D and action he continued; And</li> </ol>
		<ol> <li>Proof (evidence) has utilized itresults / output R&amp;D by party related.</li> </ol>
9	Contribution policy Which recommendedFor repair Condition Development	<ol> <li>Recommendations from R&amp;D results provide contribution in repair results R&amp;D nonSocial Humainora And its application;</li> </ol>
		<ol> <li>Recommendations from R&amp;D results make a contribution in repair element social economy public;</li> </ol>
		<ol> <li>Results R&amp;D And recommendation truly has succeed improve conditions socio-economic;</li> </ol>

# TKT Type Art

NO	DEFINITION/STATUS	INDICATOR
		<ol> <li>Background behind And formulationproblem has identified;</li> </ol>
		<ol> <li>Question R&amp;D (research/creative question) which is already known or answered For get findings;</li> </ol>
		<ol> <li>Objective R&amp;D has defined withsee formulation problem R&amp;D</li> </ol>
1	The basic principles of art	<ol> <li>Identification problem has doneto gain ground thinking as approach;</li> </ol>
	have beenobserved And reported	<ol> <li>Research approach/ planning/ creation/ viewing has set;</li> </ol>
		<ol> <li>Fact empirical And argument base Which relevant Andsupport necessity has done R&amp;D</li> </ol>
		<ol> <li>Has There is studies literature, theoretical/empirical researchprevious become base R&amp;D</li> </ol>
		<ol> <li>There has been a method/method/process that has been researched/ created/ applied And will developedas well as own opportunity success.</li> </ol>
		1. Principle base R&D has explored;
	Draft and/or application form artformulated And has explored;	<ol> <li>Has There is principle base R&amp;D Which nature qualitative, unique, particularism (fact, information), interpretation meaning, And narrative-descriptive;</li> </ol>
		3. R&D design ( <i>research design</i> ) has been communicated with <i>focused groups discussion</i> (FGD) (specifically art creation and topic study certain) Which refers on chart flow creative, productive, And distributive;
2		<ol> <li>Elements base art, that is form (<i>appearance</i>),weight (<i>content</i>), And appearance has set;</li> </ol>
		<ol> <li>Characteristics elements aestheticshas mastered And understood;</li> </ol>
		<ol> <li>Alternative methodology, procedure And stagesWhich will done has traced;</li> </ol>
		<ol> <li>Has There is model And simulation process creative Forcreation art Which can determine results;</li> </ol>
		<ol> <li>8. Has done analysis For testtruth principle base creation;</li> </ol>

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NO	DEFINITION/STATUS	INDICATOR
		<ol> <li>Methodology study /design /creation/views used to answer research question And question creative planning / creation / broadcast has been compiled, and using the SMART:S method (specific), M (measurable), A( achievable / reachable), R ( reasonable / reasonable), And Q ( timeable / scheduled);</li> </ol>
		<ol> <li>Arguments have been prepared against question study And question creative planning/ creation/ viewing designed according to the source art creation and/or collecting need And technique collection data;</li> </ol>
3	Research Methodology/Design/ Creation/display arranged in a way complete.	<ol> <li>Identification of research/design/problems creation /delivery has been set for determine base theory or base thinking;</li> </ol>
		<ol> <li>Approach study/ planning/ creation/viewing has mastered And understood;</li> </ol>
		<ol> <li>Characterization component aesthetic And element-cultural elements to be developed has mastered And understood;</li> </ol>
		6. Data Enough And complete;
		<ol> <li>Evaluation technical process creative study/planning/ creation/display;</li> </ol>
		<ol> <li>Design research/design/creation/theoretical and empirical views has identified And set.</li> </ol>
	Implementation of the creative process of studio workor deep laboratory environment development prototype work art.	<ol> <li>Basic components of methods and processes creation integrated Work in a way together And sustainable;</li> </ol>
4		<ol> <li>Originality and uniqueness of art products enrich identity personality national;</li> </ol>
		3. Prototype Which generated in scale studio;
		<ol> <li>Already done test try For getevaluation or critics from circles observer Which competent.</li> </ol>
	Validation prototype/product/work artscale studio ( <i>Studios Scale</i> <i>Prototype</i> ).	<ol> <li>The category of artwork prototype has been determined based on equality with work art similar;</li> </ol>
5		<ol> <li>Has done development prototypescale studio as part from innovation And actualization style art.</li> </ol>
		<ol> <li>Has done testing level representation prototype scale studio based on standard Whichapplies in a way national And international.</li> </ol>
		<ol> <li>Validation testing has been carried out studio scale prototype using aesthetics Which applies on moment That.</li> </ol>

chnology

NO	DEFINITION/STATUS	INDICATOR					
		<ol> <li>Studio scale prototype validation testing become part strategic socialization product art culture related with strength Power competitive.</li> </ol>					
		<ol> <li>Studio scale prototype testing for know the level of trust or satisfaction public to quality product.</li> </ol>					
6	Testing Field Prototype/ product/work art Scale Studio	<ol> <li>Proving the level of trust or satisfaction public And effectiveness prototypescale commercial on amount limited.</li> </ol>					
		<ol> <li>Prototype has tested with accuracy/fidelity studio / laboratory high on simulation public as base social.</li> </ol>					
		<ol> <li>Studio trials have been carried out analyze appropriateness in a way technicalAnd financial in business creative.</li> </ol>					
7		<ol> <li>Prototype validation testing on a exhibition/performance/display level national followed minimum 3 province.</li> </ol>					
	Testing Field Prototype/product/workart Which Already implemented in public.	<ol> <li>Has done testing prototype Forensure the level of effectiveness on amount more big level national.</li> </ol>					
		<ol> <li>The artwork specifications have superiority comparative And competitive.</li> </ol>					
		<ol> <li>Testing validation results work art on A exhibition/performance/display level international (followed by at least 3 countries);</li> </ol>					
	Results product/work art has complete tested on environment actually.	2. Has done analysis appropriateness economy;					
8		<ol> <li>The certification process has begun and standardization to maintain quality and programs exhibition/performance/display Which necessary;</li> </ol>					
		<ol> <li>Level proof has been carried out popularity And effectiveness results work arton exhibition/performance/display.</li> </ol>					
9	Results product/work art Tested And Certified.	<ol> <li>Results work art has accepted in a way nationaland internationally through curatorial processes;</li> </ol>					
		2. Document certification Already complete					
		3. Estimate price work art Already determined					

#### Attachment 4. Evaluation Selection, Monitoring And Evaluation, And Results

### A. Evaluation Proposal Study

NO	COMPONENT EVALUATION		STUDY BASE							PLIED	STUDY DEVELOPMENT
		PDKN	PDUPT	PDK	PDP	РКРТ	PPS	KKS	PTKN	PTUPT	PP
1	Record Footsteps Proposer										
	a. Quality And quantity publication of articles in journal scientific	$\oslash$	$\odot$	$\oslash$		$\oslash$	$\oslash$		$\odot$	$\odot$	$\odot$
	<ul> <li>D. Quality and quantity publication in proceedings</li> </ul>	$\bigcirc$	$\odot$	$\bigcirc$					$\odot$	$\bigcirc$	$\odot$
	c. Quality And quantity book ber ISBN	$\bigcirc$	$\odot$	$\bigcirc$					$\odot$	$\bigcirc$	$\bigcirc$
	d. Quantity and status acquisition of KI, Works Monumental, Manuscript Academic/Manuscript Urgency			$\bigcirc$					$\odot$	$\odot$	$\odot$
	e. Member track record proposer (concerning points a until d)	$\bigcirc$	$\odot$	$\odot$					$\bigcirc$	$\oslash$	$\odot$
	<ul> <li>f. Has a registered patent or granted and/or create special For fieldart related to substance proposal study</li> </ul>			$\bigcirc$							$\odot$
2	Feasibility of Research Proposa	l									1
	a. Relevance of the proposal study to focus areas, themes, And topic RIRN	$\bigcirc$		$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$		$\bigcirc$		$\bigcirc$
	b. Relevance of the proposal study to Strategic Plan PT		$\odot$							$\odot$	
	c. Quality and relevance goals, problems, <i>state of</i> <i>the art</i> , methods,novelty study, And innovation product study	$\odot$	$\odot$	$\bigcirc$	$\odot$						
	d. Linkage of proposals research on research resultspreviously obtained and future plans( <i>roadmap</i> study)	$\oslash$	$\odot$	$\odot$		$\odot$	$\odot$		$\odot$	$\odot$	$\oslash$
	e. Compatibility of the research team's competencies and division of tasks reflect Cooperationbetween partner study	$\oslash$	$\odot$								
	f. Quality outer must / product quality promised researchAnd protected	$\bigcirc$	$\odot$	$\bigcirc$	$\oslash$	$\odot$	$\bigcirc$	$\bigcirc$	$\odot$	$\odot$	$\odot$
	g. Reasonableness of the method, target stages, mandatory external achievements, schedule compliance study, And WED	$\odot$	$\oslash$								
	h. Fairness target TKT	$\bigcirc$	$\odot$	$\bigcirc$	$\odot$	$\bigcirc$	$\bigcirc$	$\odot$	$\odot$	$\bigcirc$	$\odot$
	i. Current and source primary reference References	$\odot$									
	j. Collaboration supportstudy	$\oslash$	$\odot$						$\odot$	$\odot$	
	k. Partner candidate user results			$\bigcirc$					$\bigcirc$	$\odot$	$\odot$
	<ol> <li>Funding supportfrom prospective partners user results</li> </ol>			$\bigcirc$					$\odot$	$\odot$	$\odot$

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# B. Evaluation Proposal Devotion to Public

NO	COMPONENT	sc	HEME COM	MUNITY			SCHEME TE	RRITORY		SCHEME ENTREPRENEURSHIP			
NO	EVALUATION	РКМ	PKMS	KKN- PPM	PPIM	PPDM	PPMUPT	PKW	РКРК	PPK	PPPUD	PPUPIK	
	Record Footsteps Proposer												
	a. Quality And quantity publication of articles in journal scientific	$\oslash$	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\oslash$	$\odot$	$\bigcirc$	
1	b. Quality and quantity publication in proceedings	$\bigcirc$	$\odot$	$\bigcirc$	$\odot$	$\oslash$	$\odot$	$\bigcirc$	$\bigcirc$	$\odot$	$\odot$	$\oslash$	
	c. Quantity And status acquisition KI	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\bigcirc$	$\odot$	$\bigcirc$	$\odot$	$\odot$	
	d. Record footsteps member	$\odot$	$\odot$	$\bigcirc$	$\oslash$	$\odot$	$\odot$	$\bigcirc$	$\oslash$	$\odot$	$\odot$	$\odot$	
	Proposal												
	a. Sharpness of analysis problem situation partner target	$\odot$	$\odot$	$\odot$	$\odot$	$\bigcirc$	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\odot$	
	b. Formulation of the problem priority partner	$\oslash$	$\odot$	$\bigcirc$	$\oslash$	$\bigcirc$	$\odot$	$\bigcirc$	$\oslash$	$\oslash$	$\odot$	$\oslash$	
	c. Competency suitability team to complete problem partner	$\odot$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\odot$	$\bigcirc$	$\bigcirc$	$\oslash$	$\odot$	$\oslash$	
	d. Implementation method, solutions, and plans activity Which offered	$\odot$	$\odot$	$\bigcirc$	$\bigcirc$	$\odot$	$\odot$	$\bigcirc$	$\oslash$	$\odot$	$\odot$	$\oslash$	
2	e. Suitability assignment team executor	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\oslash$	
	f. The quality of science and technologyoffered (result study)	$\bigcirc$	$\bigcirc$	$\odot$	$\bigcirc$	$\bigcirc$	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\odot$	
	g. Quality outer must Which promised	$\odot$	$\odot$	$\odot$	$\oslash$	$\odot$	$\oslash$	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\odot$	
	h. Fairness stages target achievements outer must	$\bigotimes$	$\odot$	$\bigcirc$	$\bigcirc$	$\odot$	$\odot$	$\bigcirc$	$\odot$	$\bigotimes$	$\odot$	$\odot$	
	i. Suitability timetable	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\bigcirc$	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\odot$	
	j. Fairness WED proposal	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\odot$	
	k. Contribution participation partner	$\bigotimes$	$\odot$	$\oslash$	$\oslash$	$\odot$	$\oslash$	$\bigcirc$	$\odot$	$\oslash$	$\oslash$	$\odot$	

## C. Evaluation Discussion And Visit Field Proposal Study

NO	COMPONENT EVALUATION	STUDY DEVELOPMENT
		РР
1	Ability presentation And mastery material proposal	$\bigcirc$
2	Suitability substance proposal with material presentation	$\oslash$
3	Readiness And willingness means in institution proposer And partner	$\bigcirc$
4	Readiness results study previous For reach target outer Which proposed (formula, prototype, results study, model, product, etc.)	$\bigcirc$
5	Organization: a. Leadership And team work b. Completeness system organization c. Coordination And distribution task	$\bigcirc$
6	Record footsteps partner	$\oslash$
7	Commitment support financial partner	$\bigcirc$
8	Readiness application scale industry or application productscience and technology other including proof ownership KI	$\bigcirc$

# D. Evaluation Discussion And Visit FieldProposal Devotion to Public

NO	COMPONENT	:	SCHEME TE	RRITORY		SCHEME ENTREPRENEURSHIP				
	EVALUATION	PPDM	PPMUPT	PKW	РКРК	РРК	PPPUD	PPUPIK		
1	Presentation skillsand mastery material proposal	$\oslash$	$\oslash$	$\bigcirc$	$\bigcirc$	$\oslash$	$\bigcirc$	$\oslash$		
2	Suitability substance proposal with material presentation	$\oslash$	$\bigcirc$	$\bigcirc$	$\odot$	$\bigcirc$	$\oslash$	$\bigcirc$		
3	Readiness and willingness means ininstitution proposer	$\oslash$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\oslash$	$\oslash$	$\bigcirc$		
4	Fund commitment contribution PT	$\oslash$	$\bigcirc$		$\bigcirc$	$\bigcirc$		$\bigcirc$		

NO	COMPONENT	:	SCHEME TE	RRITORY		SCHEME ENTREPRENEURSHIP			
	EVALUATION	PPDM	PPMUPT	PKW	РКРК	РРК	PPPUD	PPUPIK	
5	Unit institutional entrepreneurship / business in PT					$\bigcirc$		$\bigcirc$	
6	Readiness means building and infrastructure for support program					$\bigcirc$		$\bigcirc$	
7	Implementation readiness program And scheduling	$\oslash$	$\odot$	$\bigcirc$	$\bigcirc$	$\oslash$	$\oslash$	$\bigcirc$	
8	Readiness And Appropriateness Implementation Team (expertise, cohesiveness And experience)	$\oslash$	$\odot$	$\bigcirc$	$\odot$	$\oslash$	$\odot$	$\bigcirc$	
9	Implementation strategyprogram	$\oslash$	$\odot$	$\bigcirc$	$\oslash$	$\bigcirc$	$\oslash$	$\bigcirc$	
10	suitability, quality And mark strategic program	$\oslash$	$\odot$	$\bigcirc$	$\bigcirc$	$\oslash$	$\oslash$	$\bigcirc$	
11	Prospects for success program	$\bigcirc$	$\odot$	$\oslash$	$\odot$	$\bigcirc$	$\bigcirc$	$\oslash$	
12	Appropriateness partner target(location, support natural And environment, equipment, workshop Work, office, means And infrastructure)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	
13	Contribution commitmentfunds from partners target and or partner cooperation			$\bigcirc$	$\bigcirc$		$\odot$		

# E. Evaluation Monitoring And Evaluation Internal orExternal Implementation Study

NO	COMPONEN			S	TUDY BAS	SE			STUD APP		STUDY DEVELOPMENT	
	EVALUATI ON	PDKN	PDUPT	PDK	PDP	РКРТ	PPS	ккѕ	PTKN	PTUPT	РР	
1	Progress achievement outer must Which promised	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\bigcirc$	$\bigcirc$	$\oslash$	$\oslash$	
2	Progress achievement outer additionWhich promised	$\odot$	$\bigcirc$	$\oslash$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\bigcirc$	$\bigcirc$	
3	Research suitability with proposal	$\odot$	$\bigcirc$	$\bigcirc$	$\oslash$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	
4	Integrity, dedication, and cohesiveness team researcher										$\bigcirc$	
5	Realization cooperation(If There is)										$\oslash$	
6	Realization of contribution partner (If There is)			$\bigcirc$					$\oslash$	$\oslash$	$\odot$	
7	Potency continuity results study	$\oslash$	$\oslash$	$\oslash$		$\odot$	$\oslash$		$\oslash$	$\oslash$	$\odot$	

## F. External Monitoring and Evaluation Assessment Implementation Devotion to Public

NO	COMPONEN	SCHEME COMMUNITY				S	CHEME TEI	RRITORY		SCHEME ENTREPRENEURSHIP			
	T EVALUATI ON	РКМ	PKMS	KKN- PPM	PPIM	PPDM	PPMUPT	PKW	РКРК	РРК	PPPUD	PPUPIK	
1	Progress achievementouter must	$\bigcirc$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\bigcirc$	$\oslash$	$\bigcirc$	$\oslash$	
2	Progress achievement outeraddition	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\bigcirc$	$\bigcirc$	$\oslash$	
3	Level achievement empowerment	$\bigcirc$	$\odot$	$\odot$	$\odot$	$\oslash$	$\oslash$	$\oslash$	$\bigcirc$	$\oslash$	$\oslash$	$\oslash$	
4	Suitability program with plan activity	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\bigcirc$	$\oslash$	$\oslash$	$\bigcirc$	$\odot$	$\odot$	

NO	COMPONEN	SCH	SCHEME COMMUNITY				СНЕМЕ ТЕ	RRITORY		SCHEME ENTREPRENEURSHIP			
	T EVALUATI ON	PKM	PKMS	KKN- PPM	PPIM	PPDM	PPMUPT	PKW	РКРК	РРК	PPPUD	PPUPIK	
5	Integrity, dedication, compactness and team intensity internal implementer activity in field	$\bigcirc$	$\odot$	$\bigcirc$	$\bigcirc$	$\oslash$	$\odot$	$\odot$	$\bigcirc$	$\bigcirc$	$\odot$	$\odot$	
6	Participation rate partner target	$\bigcirc$	$\oslash$	$\odot$	$\odot$	$\oslash$	$\odot$	$\oslash$	$\oslash$	$\bigcirc$	$\oslash$		
7	Participation rate partner cooperation			$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\oslash$	$\bigcirc$	$\bigcirc$	$\oslash$	

# G. Evaluation Results Study

NO	COMPONENT			S	TUDY BAS	SE			STUDY APPLIED		STUDY DEVELOPMENT	
NO	EVALUATION	PDKN	PDUPT	PDK	PDP	РКРТ	PPS	KKS	PTKN	PTUPT	РР	
1	Level achievement and external quality must Which promised	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\oslash$	$\bigcirc$	$\oslash$	$\odot$	$\oslash$	$\bigcirc$	$\bigcirc$	
2	Achievement level and quality outer addition Which promisedCHECK	$\oslash$	$\odot$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\bigotimes$	$\oslash$	$\oslash$	$\bigcirc$	
3	Suitability results studywith proposal	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\bigcirc$	
4.	Potency continuityresults study		$\oslash$		$\oslash$	$\oslash$	$\oslash$			$\oslash$	$\odot$	

# H. Evaluation Results Devotion to Public

NO	COMPONENT	SCHEME COMMUNITY				SCHEME TERRITORY				SCHEME ENTREPRENEURSHIP			
NO	EVALUATION	РКМ	PKMS	KKN- PPM	PPIM	PPDM	PPMUPT	PKW	РКРК	РРК	PPPUD	PPUPIK	
1	Achievement level and quality outer must	$\bigcirc$	$\oslash$	$\odot$	$\odot$	$\odot$	$\oslash$	$\bigcirc$	$\bigcirc$	$\odot$	$\bigcirc$	$\bigcirc$	
2	Level achievement And quality outer addition	$\bigcirc$	$\bigcirc$	$\odot$	$\bigcirc$	$\odot$	$\oslash$	$\oslash$	$\bigcirc$	$\odot$	$\oslash$	$\bigcirc$	
3	Level achievement empowerment	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\oslash$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	
4	Suitability of program resultswith plan activity	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\bigcirc$	
5	Potency continuity					$\odot$	$\oslash$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\oslash$	$\bigcirc$	

# I. Assessment Performance Institutional in Management Study

NO	COMPONENT	EVALUATION	Weight (%)
1	Quality assurance SOP based on cycle study	Is there any or not There is, held/No held	5
2	Amount Incentive fund internal For study lecturer	Proportion amount fund study internal compared to amount lecturer Which owned	20
3	Allocation of funds from PT for management/assurance quality (operate cycle study)	Proportion amount fund managementstudy internal compared to amount lecturer Which owned	5
4	Reviewers internal	Proportion of the number of internal <i>reviewers</i> compared to amount proposal.	5
5	Suitability every title studywith Strategic Plan study PT	Proportion amount title study Whichin accordance with field superior PT	25
6	Outer every title study	Proportion of number of publications (international, national, IPR, externalother) compared to with amount title study Which funded and Funding amount	30
7	Downstreaming results study	Proportion of the number of research titles succeed downstream compared towith amount research Which funded	10
	AMOU T	Ν	100



## Attachment 5. Criteria Stages Outer Study And Validity Evaluation Outer

#### SKEMA PENELITIAN DASAR

#### A. Outer Must Program Study Base (PDKN, PDUPT, And PDK)

#### A1. One article in journal international Which indexed on databases reputable with status accepted

		Transaction	outer on pro	posal		Validation/assessment outer						
Year	Categor yOuter	Type Outer	Status	Proof Outer	Target Achieveme nts	Criteria Appropriate ness	Stuffing Researcher	Proof Supporter	No Valid			
Number 1, 2, or 3	Publicati onin Journal International	Article in journal international	Accepted	Letter information Accepted fromchief editor Article or galleys (manuscript final of publisher or preprinted article )	There is/ available There is/ available	<ul> <li>There's a letter informatio nAccepted from the chief editor</li> <li>Indexed on databases</li> </ul>	<ul> <li>Name journal</li> <li>Publisher journal</li> <li>Title article</li> <li>Name Writer</li> <li>URLs Article(If There is)</li> <li>DOI (If There is)</li> <li>Institution indexer</li> </ul>	<ul> <li>Letter information Accepted fromchief editor</li> <li>Article or galleys (manuscript final of publisher or preprinted article )</li> </ul>	<ul> <li>Letter information Accepted fromchief editor No There is</li> <li>No including article international indexed reputable</li> <li>Publisher including in the list predatory</li> <li>Year Accepted before period study</li> <li>Substance article no in accordance with the topic study</li> </ul>			

		Transaction	outer on pro	posal					
Year	Categor yOuter	Type Outer	Status	Proof Outer	Target Achieveme nts	Criteria Appropriate ness	Stuffing Researcher	Proof Supporter	No Valid
				<i>Softcopy</i> article	There is/ available	• The article has Published	<ul> <li>Name journal</li> <li>Publisher journal</li> <li>Title article</li> </ul>		<ul> <li>Softcopy of the articleNo There is</li> <li>No including article international indexed reputable</li> <li>Article no can exploredfrom that URL given</li> </ul>
Number 1, 2, or 3	Publicati onin Journal International	Article in journal international	Published	Article URL from publisher	There is/ available	<ul> <li>Indexed on databases reputable</li> </ul>	<ul> <li>Name Writer</li> <li>URLs Article</li> <li>DOI</li> <li>Institution indexer</li> </ul>	<i>Softcopy</i> of the article Which rise in journal	<ul> <li>Publisher including in the list predatory</li> <li>Year Published before period study</li> <li>Substance article no in accordance with the topic study</li> </ul>

#### A2. One article in journal international Which indexed on databases reputable with status published

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Daftar Pustaka dan Lampiran

## A3. One book results study ber ISBN in form print

		Transaction (	outer on pro	posal	Validation/assessment outer				
Year	Categor yOuter	Type Outer	Status	Proof Outer	Target Achieve ments	Criteria Appropriate ness	Stuffing Researcher	Proof Supporter	No Valid
Number 1, 2, or 3	Book Print Results Study	<ul> <li>Monograp h</li> <li>Book referenc e</li> <li>Book Teach</li> </ul>	Published onISBN	Letter Information rising from publisher And mention amount copy Softcopy Book in format pdf (max20 MB)	There is/ available	<ul> <li>There is ISBN</li> <li>Already Published (there is a letter information from publisher)</li> <li>Type of book in the form of: bookteach, book reference/ monograph</li> <li>Book contents in</li> </ul>	<ul> <li>ISBN number print</li> <li>Name writer (could be more from 1)</li> <li>Name Publisher</li> <li>URLs (If There is)</li> </ul>	<ul> <li>Letter Information rising from publisher And mention amount copy</li> <li>Softcopy Inside book format pdf</li> </ul>	<ul> <li>No There is ISBN</li> <li>No There is letter information from publisher</li> <li>The contents of the book are not in accordance with thetitle, no complete, or can not be read</li> <li>The contents of the book are not in accordance with the substance study</li> <li>Publication Yearbefore period study</li> <li>Amount page less than40 page</li> </ul>

		Transaction	outer on pro	oposal		Validation/assessment outer				
Year	Categor yOuter	Type Outer	Status	Proof Outer	Target Achieve ments	Criteria Appropriate ness	Stuffing Researcher	Proof Supporter	No Valid	
Number 1, 2, or 3	Book Electronic Results Study	<ul> <li>Monograp h</li> <li>Book referenc e</li> <li>Book Teach</li> </ul>	<i>Online</i> ber ISBN	e-book URL on publisher/ distributor Softcopy Book in format pdf (max20 MB)	Can accessed There is/ available	<ul> <li>There is ISBN</li> <li>Has a URL the one that can accessed</li> <li>Type of book in the form of: bookteach, book reference/ monograph</li> <li>Book contents in accordan ce with substance study</li> <li>Year of publication in period study</li> <li>Amount page minimum 40 page</li> </ul>	<ul> <li>ISBN number electronic</li> <li>Name writer (could be more from 1)</li> <li>Name Publisher</li> <li>URLs Book</li> </ul>	<ul> <li>Book URL electronic</li> <li>Softcopy book electronic format pdf.</li> </ul>	<ul> <li>No There is ISBN</li> <li>The contents of the book are not in accordance with thetitle, no complete, or can not be read</li> <li>URL No can accessed</li> <li>The contents of the book are not in accordance with the substance study</li> <li>Publication Yearbefore period study</li> <li>Amount page less than40 page</li> </ul>	

#### A4. One book results study ber ISBN in form electronic

#### B. Outer Must Study Lecturer Beginner (PDP)

		Transaction out	ter on proposal			Validation/assessment outer			
Category Outer	Type Outer	Sub Outer	Status	Proof Outer	Target Achievements	Criteria Appropria teness	Stuffing Researcher	Proof Supporter	No Valid
		Article in		Letter information Accepted from chief editor or	There is/ available	The article hasstatus	rjournal nAccepto • Title article chief • Name editor	informatio nAccepted from the chief	<ul> <li>Certificate Accepted from chief editor No There is</li> <li>Article or galley (manuscript final from publisheror preprinted article</li> </ul>
Num ber	<ul> <li>Publicati onin the journal national accredited</li> <li>Yum ber</li> </ul>		Accepted / Published	Article or galleys (manuscriptfinal of publisher or preprinted article )	There is/ available	Accepted or Published	<ul> <li>Writer</li> <li>URLs Article(If There is)</li> <li>DOI (if There is)</li> <li>Institution indexer(If There is)</li> </ul>	<ul> <li>Article or galleys (manuscrip t final of publisher or preprinted article )</li> </ul>	<ul> <li>) No There is</li> <li>Year Accepted / Published before period study</li> <li>Article substanceit is not in accordance with with the topic study</li> </ul>
1	<ul> <li>Publicati         <ul> <li>onin             journal             international</li> </ul> </li> <li>Publication         <ul> <li>proceeding             s</li> </ul> </li> </ul>			Letter information <i>Accepted</i> from <i>chief editor</i> or	There is/ available	The article	<ul> <li>Name journal</li> <li>Publishe rjournal</li> <li>Title article</li> </ul>	<ul> <li>Letter informatio nAccepted from the chief</li> </ul>	<ul> <li>Certificate Accepted from chief editor No There is</li> <li>Article or galley (manuscript final from publisheror</li> </ul>
		Article in journal international	Accepted / Published	Article or galleys (manuscriptfinal of publisher or preprinted article )	There is/ available	hasstatus Accepted or Published	<ul> <li>Name Writer</li> <li>URLs Article(If There is)</li> <li>DOI (if There is)</li> <li>Institution indexer(If There is)</li> </ul>	editor • Article or galleys (manuscrip t final of publisher or preprinted article )	<ul> <li>preprinted article ) No There is </li> <li>Year Accepted / Published before period study </li> <li>Article substanceit is not in accordance with with the topic study </li> </ul>

		Transaction out	er on proposal	Validation/assessment outer					
Category Outer	Type Outer	Sub Outer	Status	Proof Outer	Target Achievements	Criteria Appropria teness	Stuffing Researcher	Proof Supporter	No Valid
Num ber 1	<ul> <li>Publicati onin the journal national accredited ranking 1-6</li> <li>Publicati onin journal international</li> <li>Publication in proceeding s</li> </ul>	Article in proceedings seminar international	Published	<i>Cover</i> , list content, And articleWhich printed in proceedings	There is/ available	Proceedings proceedings seminar international	<ul> <li>Name seminar</li> <li>Time implementa tionseminar</li> <li>Title Article</li> <li>Name Writer</li> <li>Publisher</li> <li>URLs proceedi ngs(If There is)</li> <li>Institution indexer(If There is)</li> </ul>	<i>Cover</i> , list content, And articlein proceedings	<ul> <li>Cover, list content, And article)No There is</li> <li>Not included proceedings</li> <li>Year implementation seminar before period study</li> <li>Article substanceit is not in accordance with with the topic study</li> </ul>

#### B. Outer Must Study Lecturer Beginner (PDP)

#### C. Outer Must Study Cooperation Between College Tall (PKPT)

#### C1. One article in journal international Which indexed on databases reputable with status accepted

		Transaction oute	r on proposal			Validation/assessment outer				
Category Outer	Type Outer	Sub Outer	Status	Proof Outer	Target Achieve ments	Criteria Appropriatene ss	Stuffing Researcher	Proof Supporter	No Valid	
Number 1, 2, or 3	Publicati onin Journal International	Article in journal international	Accepted	Letter information Accepted fromchief editor Article or galleys (manuscriptfinal of publisher or preprinted article )	There is/ available There is/ available	<ul> <li>There's a letter informatio nAccepted from the chief editor</li> <li>Indexed on databases reputable</li> </ul>	<ul> <li>Name journal</li> <li>Publishe rjournal</li> <li>Title article</li> <li>Name Writer</li> <li>URLs Article(If There is)</li> <li>DOI (if There is)</li> <li>Institution indexer</li> </ul>	<ul> <li>Letter informatio nAccepted from the chief editor</li> <li>Article or galleys (manuscrip t final of publisher or preprinted article )</li> </ul>	<ul> <li>Certificate Accepted from chief editor No There is</li> <li>No including articles international indexed reputable</li> <li>Publisher included inlists predatory</li> <li>Year Accepted before period study</li> <li>Article substanceit is not in accordance with with the topic study</li> </ul>	

#### C2 One article in journal international Which indexed on databases reputable with status published

		Transaction oute	r on proposal		Validation/assessment outer				
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achieve ments	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid
Number 1, 2, or 3	Publication Science in Journals International	Article in journal international	Published	<i>Softcopy</i> article Article URL from publisher	There is/ available There is/ available	<ul> <li>The article has Published</li> <li>Indexed on databases reputable</li> </ul>	<ul> <li>Name journal</li> <li>Publishe rjournal</li> <li>Title article</li> <li>Name Writer</li> <li>URLs Article</li> <li>DOI</li> <li>Institution indexer</li> </ul>	<i>Softcopy</i> article	<ul> <li>Softcopy of the articleNo There is</li> <li>No including articles international indexed reputable</li> <li>Article no can exploredfrom that URL given</li> <li>Publisher included inlists predatory</li> <li>Year Published before period study</li> <li>Article substanceit is not in accordance with with the topic study</li> </ul>

#### C3 One book results study ber ISBN in form print

YearCategory OuterType OuterStatusProof OuterTarget Achieve mentsCriteria Appropriat enessStuffing ResearcherProof	oof Supporter	No Valid
		no valia
Number 1, 2, or 3       Results Print BookStudy       •       Monograph error erroro error error error error error error error e	Letter Information rising from publisher And mention amount copy Softcopy Inside book format pdf	<ul> <li>No There is ISBN</li> <li>No There is letter information from publisher</li> <li>The contents of the book are not in accordance with thetitle, no complete, or can not be read</li> <li>The contents of the book are not in accordance with the substance study</li> <li>Publication Year before period study</li> <li>Number of pagesnot enough from 40 page</li> </ul>

		Transaction ou	ter on proposal			Validation/assessment outer				
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achieve ments	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid	
				e-book URL on publisher/ distributor	Can accessed	<ul> <li>There is ISBN</li> <li>Has a URL the one that can accessed</li> <li>Type of book in the form of:</li> </ul>	• ISBN number		<ul> <li>No There is ISBN</li> <li>No There is letter information from publisher</li> <li>The contents of the book are not in accordance</li> </ul>	
Number 1, 2, or 3	Electronic BooksResults Study	<ul> <li>Monograph</li> <li>Book referenc e</li> <li>Book Teach</li> </ul>	On line ber ISBN	<i>Softcopy</i> Book in format pdf (max20 MB)	There is/ available	<ul> <li>form of: bookteach, book reference/ monograph</li> <li>Book contents in accordan ce with substance study</li> <li>Year of publication in period study</li> <li>Amount page minimum 40 page</li> </ul>	<ul> <li>Name writer (could be morefrom 1)</li> <li>Name Publishe r</li> <li>URLs Book</li> </ul>	<ul> <li>Letter Information rising from publisher And mention amount copy</li> </ul>	<ul> <li>with thetitle, no complete, or can not be read</li> <li>URL No can accessed</li> <li>The contents of the book are not in accordance with the substance study</li> <li>Publication Year before period study</li> <li>Number of pagesnot enough from 40 page</li> </ul>	

#### C4. One book results study ber ISBN in form electronic

149

Daftar Pustaka dan Lampiran

#### D. Outer Must Study Thesis Masters

		Transaction out	er on proposal			Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achieve ments	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid
				Letter information <i>Accepted</i> from <i>chief editor</i> or	There is/ available		<ul> <li>Name journal</li> <li>Publishe rjournal</li> </ul>	Letter     information	<ul> <li>Certificate Accepted from chief editor No There is</li> <li>Article or galley (manuscript final</li> </ul>
• Publicati onin the journal	National / accredited Publ ranking 1-2	Accepted / Published	Article or galleys (manuscriptfinal of publisher or preprinted article )	There is/ available	The article has status Accepted or Published	<ul> <li>Title article</li> <li>Name Writer</li> <li>URLs Article(If there is0</li> <li>DOI (if There is)</li> <li>Institution indexer</li> </ul>	Name Writer URLs Article (If there is0 DOI (if There is) Institution	<ul> <li>from publisheror preprinted article</li> <li>) No There is</li> <li>Year Accepted / Published before period study</li> <li>Article substanceit is not in accordance with with the topic study</li> </ul>	
Number 1	national accredited Publicati onin journal international Publication in proceeding s	Accredited Publicati ournal nternational Publication n proceeding Article in journal	Letter information Accepted from chief editor or Published Article or galleys (manuscriptfinal of publisher or preprinted article )	There is/ available	The article has status Accepted or Published	<ul> <li>Name journal</li> <li>Publishe rjournal</li> <li>Title article</li> <li>Name Writer</li> <li>Article or rournal</li> </ul>	<ul> <li>Certificate Accepted from chief editor No There is</li> <li>Article or galley (manuscript final from publisheror preprinted article ) No There is</li> <li>Year Accepted /</li> </ul>		
				(manuscriptfinal of publisher or preprinted	There is/ available		<ul> <li>URLs Article(If there is0</li> <li>DOI (if There is)</li> <li>Institution indexer</li> </ul>	galleys (manuscript final of publisher or preprinted article )	<ul> <li>Published before period study</li> <li>Article substanceit is not in accordance with with the topic study</li> </ul>

		Transaction out	er on proposal			Validation/assessment outer				
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achieve ments	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid	
Number 1	<ul> <li>Publicati onin the journal national accredited</li> <li>Publicati onin journal international</li> <li>Publication in proceeding s</li> </ul>	Article in proceedings seminar international indexed	Published	<i>Cover</i> , list content, And articleWhich printed in proceedings	There is/ available	Proceedings indexed on databases reputable	<ul> <li>Name conference/ seminar</li> <li>Time implementa tion conference</li> <li>Title Article</li> <li>Name Writer</li> <li>Publisher</li> <li>URLs proceedi ngs(If There is)</li> <li>Institution Indexer</li> </ul>	<i>Cover</i> , list content, And articlein proceedings	<ul> <li>Cover , list content, and articles)No There is</li> <li>Not included proceedings indexed reputable</li> <li>Year implementation conference before period study</li> <li>Article substanceit is not in accordance with with the topic study</li> </ul>	

#### D. Outer Must Study Thesis Masters

#### E. Outer Must Study Dissertation Doctor

#### E1. One article scientific in journal international reputable with status accepted

		Transaction oute	er on proposal	Validation/assessment outer					
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achieve ments	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid
Number 1 or 2nd	Publication in Journals International	Article in journal international	Accepted	Letter information Accepted fromchief editor Article or galleys (manuscriptfinal of publisher or preprinted article )	There is/ available There is/ available	<ul> <li>There's a letter informatio nAccepted from the chief editor</li> <li>Indexed on databases reputable</li> </ul>	<ul> <li>Name journal</li> <li>Publishe rjournal</li> <li>Title article</li> <li>Name Writer</li> <li>URLs Article(If There is)</li> <li>DOI (if There is)</li> <li>Institution indexer</li> </ul>	<ul> <li>Letter information Accepted fromchief editor</li> <li>Article or galleys (manuscript final of publisher or preprinted article )</li> </ul>	<ul> <li>Certificate Accepted from chief editor No There is</li> <li>No including articles international indexed reputable</li> <li>Publisher included inlists predatory</li> <li>Year Accepted before period study</li> <li>Article substanceit is not in accordance with with the topic study</li> </ul>

		Transaction out	er on proposal	Validation/assessment outer					
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achieve ments	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid
Number 1 or 2nd	Publication in Journals International	Article in journal international	Published	Softcopy article Article URL from publisher	There is/ available There is/ available	<ul> <li>The article has Published</li> <li>Indexed on databases reputable</li> </ul>	<ul> <li>Name journal</li> <li>Publishe rjournal</li> <li>Title article</li> <li>Name Writer</li> <li>URLs Article</li> <li>DOI</li> <li>Institution indexer</li> </ul>	Softcopy article	<ul> <li>Softcopy of the articleNo There is</li> <li>No including articles international indexed reputable</li> <li>Article no can exploredfrom that URL given</li> <li>Publisher included inlists predatory</li> <li>Year Published before period study</li> <li>Article substanceit is not in accordance with with the topic study</li> </ul>

#### E2. One article scientific in journal international reputable with status published

#### F. Outer Must Study Education Masters going to Doctor For Bachelor Superior (PMDSU)

F1 One article scientific in journal international reputable with status accepted

		Transaction oute	er on proposal	Validation/assessment outer					
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achieve ments	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid
Number 1, 2nd or the 3rd	Publication in Journals International	Article in journal international	Accepted	Letter information Accepted fromchief editor Article or galleys (manuscriptfinal of publisher or preprinted article )	There is/ available There is/ available	<ul> <li>There's a letter informatio nAccepted from the chief editor</li> <li>Indexed on databases reputable</li> </ul>	<ul> <li>Name journal</li> <li>Publishe rjournal</li> <li>Title article</li> <li>Name Writer</li> <li>URLs Article(If There is)</li> <li>DOI (if There is)</li> <li>Institution indexer</li> </ul>	<ul> <li>Letter information Accepted fromchief editor</li> <li>Article or galleys (manuscript final of publisher or preprinted article )</li> </ul>	<ul> <li>Certificate Accepted from chief editor No There is</li> <li>No including articles international indexed reputable</li> <li>Publisher included inlists predatory</li> <li>Year Accepted before period study</li> <li>Article substanceit is not in accordance with with the topic study</li> </ul>

	_	Transaction out	er on proposal	_	Validation/assessment outer				
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achieve ments	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid
Number 1 or 2nd	Publication in Journals International	Article in journal international	Published	Softcopy article Article URL from publisher	There is/ available There is/ available	<ul> <li>The article has Published</li> <li>Indexed on databases reputable</li> </ul>	<ul> <li>Name journal</li> <li>Publishe rjournal</li> <li>Title article</li> <li>Name Writer</li> <li>URLs Article</li> <li>DOI</li> <li>Institution indexer</li> </ul>	Softcopy article	<ul> <li>Softcopy of the articleNo There is</li> <li>No including articles international indexed reputable</li> <li>Article no can exploredfrom that URL given</li> <li>Publisher included inlists predatory</li> <li>Year Published before period study</li> <li>Article substanceit is not in accordance with with the topic study</li> </ul>

#### F2 One article scientific in journal international reputable with status published

#### G. Outer Must Program Study Policy Strategic (KKS)

		Transaction oute	er on proposal		Validation/assessment outer				
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achieve ments	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid
Number 1	Manuscript Academic	Policy briefs , recommendatio n policy, or policy model strategic	Finished	Manuscript Policy briefs , recommend ation policy, or policy modelstrategic	There is/ available	Manuscript Policy briefs , recommend ation policy, or model policy strategic fit assignment has been resolved	<ul> <li>Title Manuscript Policy briefs , recommend ationpolicy, or models policy strategic</li> <li>Name compiler script (could be morefrom One)</li> </ul>	Softcopy of the manuscriptPolicy briefs , recommendation policy, or model policystrategic	<ul> <li>Softcopy of the manuscript Policy briefs, recommendatio n policy, or model policy strategic No There is</li> <li>Substance script Policy briefs, recommendation policy, or policy model strategic no in accordance assignment</li> </ul>

#### SKEMA PENELITIAN TERAPAN

- H. Outer Must Study Applied Competitive National (PTKN) And Study Applied Superior College Tall (PTUPT)
  - H1. One product Science and Technology-Social Culture form Right Create

	Transacti	ion outer on pro	oposal			Validation/assessment outer				
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid	
	<ul> <li>Program computer</li> <li>Props For education and knowledge knowledge</li> </ul>			Certificate of Rights Create issuedMinistry of Law and Human Rights or institution international	There is/ available			Certificat	<ul> <li>Certificate of title create No There is</li> <li>Certificate year Copyright before period</li> </ul>	
	<ul> <li>Song or music</li> <li>Drama or drama musical, dance, choreograph y, puppetry And pantomime</li> <li>Art in all</li> </ul>		Number 1	Description and specification creation	There is/ available		<ul> <li>Name Creatio n</li> <li>Holder Copyright</li> </ul>	eRight Create • Description and specification method	study <ul> <li>Description and specification No There is</li> <li>Copyright whichproduced noin accordance with the</li> </ul>	
Right Create	form like art paint, draw, art carve, calligraphy art,	Has Approved (Certified)		Test Results Documenttry/test expert	There is/ available	OwnRight Create	(Can more from 1) • Number recording Right		substance study	
	sculpture, sculpture art,collage and art applied • Architecture • Map		2nd or	Documentation testing formPhoto or videos	There is/ available		Create     Date     recording     right     create	<ul> <li>Document Results test try/test expert</li> <li>Documentati ontesting in</li> </ul>	<ul> <li>Document results testtry No There is</li> <li>Documentation testing form</li> </ul>	
	<ul> <li>Art Batik or Art motif other</li> <li>Cinematograp hy</li> </ul>		the 3rd	Guidebookuse (manual books)	There is/ available			<ul> <li>the form of a photo or videos</li> <li>Book instruction use</li> </ul>	<ul> <li>boto or video No There is</li> <li>Guidebookuse No There is</li> </ul>	

Daftar Pustaka dan Lampiran

	•	Photography					
	•	Translation					
	•	Interpretation					

#### H2. One product technology form Patent

	Tra	ansaction ou	ter on propo	osal		Validation/assessment outer				
Categor yOuter	Type Outer	Status	Year	Proof Outer	Target Achieve ments	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid	
			• Number 1	The letter state number registration the patent issued Ministry of Law and Human Rights or institution international	There is/ available	• Has get The letter state	Name patent	<ul> <li>The letter state number registration the patent issued Ministry of Law and Human Rights or institution</li> </ul>	<ul> <li>The letter state number patent registrationwhich are issued Ministry of Law and Human Rights or institution international No There is</li> <li>Year registration patent before period study</li> <li>Description and</li> </ul>	
Patent	<ul> <li>Paten t proces s</li> <li>Patent produc</li> </ul>	•Registere d		Description and specification patent	There is/ available	letter state number registration the patent issued Ministry of Law and Human Rights or institution international	<ul> <li>Holder patent (can more from 1)</li> <li>Number registration patent</li> <li>Date recording</li> </ul>	international <ul> <li>Description and specification patent</li> </ul>	<ul> <li>patent</li> <li>specificationsNo</li> <li>The patent</li> <li>produced noin</li> <li>accordance</li> <li>with the</li> <li>substance</li> <li>study</li> </ul>	
	t			Document results test try	There is/ available	donetest try	<ul> <li>Date Testing</li> </ul>	<ul> <li>Document Results test</li> </ul>	Document results     testtry No There	
			2nd or the 3rd	Documentation testing in the form of a photo or videos	There is/ available			try • Documentatio n testing (in the form of a photo or videos test)	is • Documentation testing (in the form ofphoto or video test) No There is	
				Guidebookuse (manual books)	There is/ available			<ul> <li>Guidebookuse (manual books)</li> </ul>	Guidebookuse     (manual     books)No     There is	

	Trai	nsaksi luarar	ı pada propo	osal		Validasi/penilaian luaran				
Kategori Luaran	Jenis Luaran	Status	Tahun	Bukti Luaran	Target Capaian	Kriteria Kelayakan	Isian Peneliti	Bukti Pendukung	Tidak Valid	
			Ke-1	Surat yang menyatakan nomor pendaftaran paten yang dikeluarkan Kemenkumham atau institusi internasional	Ada/ tersedia	• Telah	• Nama paten	<ul> <li>Surat yang menyatakan nomor pendaftaran paten yang dikeluarkan Kemenkumham atau institusi</li> </ul>	<ul> <li>Surat yang menyatakan nomor pendaftaran paten yang dikeluarkan Kemenkumham atau institusi internasional tidak ada</li> <li>Tahun pendaftaran paten sebelum periode penelitian</li> </ul>	
Paten Sederhana	<ul> <li>Paten produk</li> <li>Paten alat</li> </ul>	Terdaftar		Deskripsi dan spesifikasi paten	Ada/ tersedia	mendapatkan Surat yang menyatakan nomor pendaftaran paten yang dikeluarkan Kemenkumham atau institusi internasional	<ul> <li>Pemegang paten (bisa lebih dari 1)</li> <li>Nomor pendaftaran paten</li> <li>Tanggal pencatatan paten</li> </ul>	internasional • Deskripsi dan spesifikasi paten	<ul> <li>Deskripsi dan spesifikasi paten tidak ada</li> <li>Paten yang dihasilkan tidak sesuai dengan substansi penelitian</li> </ul>	
				Dokumen hasil uji coba	Ada/ tersedia	• Telah dilakukan uji coba	• Tanggal Pengujian	• Dokumen Hasil uji coba	<ul> <li>Dokumen hasil uji coba tidak ada</li> </ul>	
			Ke-2 atau ke-3	Dokumentasi pengujian berupa foto atau video	Ada/ tersedia			<ul> <li>Dokumentasi pengujian (berupa foto atau video uji)</li> </ul>	<ul> <li>Dokumentasi pengujian (berupa foto atau video uji) tidak ada</li> </ul>	
				Buku petunjuk penggunaan (manual book)	Ada/ tersedia			• Buku petunjuk penggunaan (manual book)	<ul> <li>Buku petunjuk penggunaan (manual book) tidak ada</li> </ul>	

#### One product technology form Patent Simple H3.

	Tran	saction oute	er on propos	al		Validation/assessment outer			
Categor yOuter	Type Outer	Status	Year	Proof Outer	Target Achieve ments	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
Protection Variety Plant (PVT)	Variety of kind or species plant new	Has submitte d	1st and to-2 2nd or the 3rd	Results document testing multilocation varieties covers description uniqueness, uniform, stable, And novelty. Results document testing multilocation varieties covers description uniqueness, uniform, stable, And novelty. Document Submission PVP with status accepted Letter published protection temporary	There is/ available There is/ available There is/ available	Own documentPVP that has submitted	<ul> <li>Name species</li> <li>Name varieties</li> <li>Name Researcher/ Breeder (can more than 1 breeder)</li> <li>Instituti on Breeder</li> <li>Number document protection temporary</li> <li>Date its publication document protection temporary</li> </ul>	<ul> <li>Document protection temporary</li> <li>Descripti on varieties</li> <li>Results document testing multilocation varieties covers description uniqueness, uniform, stable, And novelty.</li> <li>Document PVP Submission with status accepted</li> <li>Letter published protection temporary</li> </ul>	<ul> <li>Document protection temporary No There is</li> <li>Description and variety specificationsNo There is</li> <li>Results document testing multilocation varieties include unique description, uniform, stable, and novelty. No There is</li> <li>Document PVP Submission with status accepted No There is</li> <li>Letter published protection temporary No There is</li> <li>Date its publication document protection temporary before the year implementatio n study</li> </ul>

#### H4. One product Protection Variety Plant (PVT)

	Tra	nsaksi luaran p	ada proposa	l		Validasi/penilaian luaran					
Kategori Luaran	Jenis Luaran	Status	Tahun	Bukti Luaran	Target Capaian	Kriteria Kelayakan	Isian Peneliti	Bukti Pendukung	Tidak Valid		
				Dokumen hasil uji DTLST	Ada/ tersedia				<ul> <li>Sertifikat DTLST yang dikeluarkan Kemenkumham atau institusi internasional tidak ada</li> <li>Tahun</li> </ul>		
			Ke-1 dan ke- 2					Sertifikat DTLST	pendaftaran DTLST sebelum periode penelitian		
							<ul><li>Nama DTLST</li><li>Pemegang hak</li></ul>	yang dikeluarkan Kemenkumham atau institusi internasional	<ul> <li>Deskripsi dan spesifikasi DTLST tidak ada</li> </ul>		
Desain Tata	Desain Tata			Deskripsi dan spesifikasi DTLST	Ada/ tersedia	• DTLST telah	DTLST (bisa lebih dari 1) • Nomor Sertifikat	<ul> <li>Deskripsi dan spesifikasi DTLST</li> </ul>	<ul> <li>DTLST yang dihasilkan tidak sesuai dengan substansi</li> </ul>		
Letak Sirkuit Terpadu	Letak Sirkuit Terpadu Elektronik	Bersertifikat				<ul> <li>diujicoba</li> <li>DTLST telah bersertifikat</li> </ul>	• Tanggal	<ul> <li>Dokumen Hasil uji coba</li> </ul>	penelitian		
				Dokumen hasil uji DTLST	Ada/ tersedia	Dersertmikat	Sertifikat DTLST • Tanggal	<ul> <li>Dokumentasi pengujian (berupa foto atau video uji)</li> </ul>	• Dokumen hasil		
				Dokumen publikasi	Ada/	•	Pengujian DTLST	Buku petunjuk     penggunaan	uji coba DTLST tidak ada		
			Ke-2 atau	permohonan DTLST	tersedia			(manual book)	<ul> <li>Dokumentasi pengujian (berupa foto atau video</li> </ul>		
			ke-3	Sertifikat DTLST	Ada/				uji) tidak ada • Buku petunjuk		
					tersedia				penggunaan (manual book)		
				Buku petunjuk penggunaan (manual book)	Ada/ tersedia				tidak ada		

#### One product Design System Location Circuit Integrated H5.

#### H6. One product Manuscript Policy

	Trans	action outer	on proposa	I		Validation/assessment outer				
Categor yOuter	Type Outer	Status	Year	Proof Outer	Target Achieve ments	Criteria Appropriaten ess	Stuffing Researcher	Proof Supporter	No Valid	
	<ul> <li>Manuscript DraftPolicy</li> <li>Law Invite</li> </ul>		Number 1	• Draft script policy	There is/ available	Draft script policy, consisting top: background back, analysis related to existing, sociology, law, academic	Script type policy (PP, Presidential Decree, Candy, Regional Regulations, Governor Regulations, City Government Regulation, District Government Regulation, Perwalkot, Perbup or Policy organization national/ international)	Draft script policy	<ul> <li>Draft script policy No There is</li> <li>Contents of Draft policy it is not in accordance with with substance study</li> </ul>	
Manuscr ipt Policy	<ul> <li>Regulation Governmen t</li> <li>Presidential Decree</li> <li>Candy,</li> <li>Regional Regulation,</li> <li>Governor Regulation, City Government Regulation, District Government Regulation, Perwalkot, Regional Regulation or</li> <li>Policy organization national/ international</li> </ul>	Has submitte d	2nd or the 3rd	<ul> <li>Documen t test results expert/ public testscript policy</li> <li>Letter statement that document script policy has accepted by maker policy</li> </ul>	There is/ available	policy text, consisting of: background behind, analysis related to existing, sociology, law, academic	<ul> <li>Type script policy (PP, Presidential Decree, Candy, Regional Regulations, Governor Regulations, City Government Regulation, District Government Regulation, Perwalkot, Regional Regulation or Policy organization national/ international)</li> <li>Institution/ that institution accept script</li> <li>Date submission</li> </ul>	<ul> <li>Manuscri pt policy</li> <li>Document resultsexpert test/test public script policy</li> <li>Letter/Form submission script policyto the makerpolicy</li> </ul>	<ul> <li>Policy textNo There is</li> <li>Document results testexpert/public test script policy No There is</li> <li>Letter/Form submission script policy the makerpolicy</li> <li>Contents of the policy it is not in accordance with with substance study</li> <li>Year of letter/ form submission script policy before period study</li> </ul>	

			script policy to maker policy		

#### SKEMA PENELITIAN PENGEMBANGAN

- I. Outer Must Study Development
  - I1. Product Industry form prototype worthy industry

	Transaction outer on proposal						Valid	ation/assessment outer	
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid
				Description and specification product	There is/ available			<ul> <li>Description and specification</li> </ul>	<ul> <li>Results documentfield test/ environment limited No There is</li> <li>Documentatio</li> </ul>
			Number 1	Test results document field products/ environment limited	There is/ available	Has done deep test field/ environme ntlimited	<ul> <li>Name produc t</li> <li>Date</li> </ul>	<ul> <li>product</li> <li>Document test results product field/ environme</li> </ul>	n testing (Photoor videos) No There is • Description and product
	5 - cill			Documentation testing product (Photo or videos)	There is/ available		Testing product	ntlimited • Documentati ontesting (photo or videos)	specificationsNo There is Date product testingbefore period study Product isn't itpart of substance study
Product Industry	Feasible prototype Industry	Done		Draft design industry	There is/ available			• Documentati	<ul> <li>Results documentfield test/ environment Actually No There is</li> <li>Documentatio</li> </ul>
			2nd	Document results testfield products/ environment Actually	There is/ available	Has done deep test field/ environme	<ul> <li>Name produc t</li> <li>Date Testing product</li> </ul>	ontesting (photo or videos) • Document test results product	<ul> <li>Documentation n testing (Photoor videos) No There is</li> <li>Description and product</li> </ul>

Daftar Pustaka dan Lampiran

				Documentation testing product (Photo or videos)	There is/ available	nt Actually	•	Certificate nodesign industry (If There is)		field/ environme nt Actually Design draft industry	•	specificationsNo There is Date testing productbefore period study Product isn't itpart of substance study Design draft industry No There is
--	--	--	--	---	------------------------	-------------	---	--	--	---	---	--

#### I1. Product Industry form prototype worthy industry

Transaction outer on proposal						Validation/assessment outer			
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid
Product Industry	Feasibility Study	lity Study Agreed with partner		Document appropriateness market Eligibility documents technical production	There is/ available There is/ available	Document feasibility study that covers market aspects, technical production, finance, managemen t(including appropriate ness partnership investment) , environmen t, social, and law		<ul> <li>Document appropriateness market</li> <li>Document appropriatenes s production technical (manipulation social and empowerment)</li> </ul>	<ul> <li>Document market feasibilityNo There is</li> <li>Document appropriatene ss production technicalNo There is</li> </ul>
				Eligibility documentsfinance	There is/ available		<ul> <li>Name produc t</li> <li>Brand (If There is)</li> <li>Number</li> </ul>		<ul> <li>Documen         <ul> <li>appropria             teness             finance             No There</li> </ul> </li> </ul>
				Eligibility documents management	There is/ available		certificat ebrand (If There is) • Date	<ul> <li>Documen t appropria teness finance</li> </ul>	is • Document appropriat eness managemen this Theorem
				Eligibility	There is/		certificat ebrand (If There is) • Number	<ul> <li>Document appropriat eness managemen t</li> <li>Document</li> </ul>	tNo There is • Document appropriat eness environme ntNo
				documents environment	available		certificat edesign industry (If There is)	appropriat eness environme nt • Document appropriateness social • Documen t appropria	<ul> <li>There is</li> <li>Document social suitabilityNo</li> </ul>
				Document appropriateness social	There is/ available		<ul> <li>Date certificat edesign industry (If There is)</li> </ul>		There is • Document legal feasibilityNo There is
				Document appropriateness law	There is/ available			<ul> <li>Document business plans</li> </ul>	<ul> <li>Document business plan No There is</li> <li>Document feasibility study and Documents</li> </ul>

				Document business plans	There is/ available				<i>business plan</i> not aresearch result Which funded
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#### I2. Product Policy

	oposal			Validation/assessment outer					
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid
		N	Number 1	Results document advocacy policy	There is/ available	Manuscrip t policy, consists top: backgroun dbehind,	<ul> <li>Type script policy (PP, Presidential Decree, Candy, Regional Regulations, Governor Regulations, City Government Regulation, District Government Regulation, Perwalkot, Regional Regulation or Policy organization national/ international)</li> <li>Institution/ that institution discuss</li> <li>Date discussion (intervals)</li> </ul>	<ul> <li>Document advocacy resultspolicy</li> <li>Process documents discussion</li> </ul>	<ul> <li>Document script policyadvocacy results No There is</li> <li>Process documents discussion policy No There is</li> </ul>
	Easter policy which will confirmed in the form of: • Law Invite • Regulation Governmen t • Presidential Decree			Process documents discussion	There is/ available	analysis related existing, sociology, law, academic			<ul> <li>Timetable discussion by organizer No There is</li> <li>Contents of the script policy does not in accordance with substance study</li> </ul>

Policy	<ul> <li>Regional Regulation,</li> <li>Governor Regulation, City Government Regulation, District Government Regulation, Perwalkot, Regional Regulation or</li> <li>Policy organization national/ international</li> </ul>	invited	2nd And 3	Results document advocacy policy	There is/ available	Manuscrip t policy, consists top: backgroun dbehind, analysis related existing, sociology, law, academic	<ul> <li>Type script policy (PP, Presidential Decree, Candy, Regional Regulations, Governor Regulations, City Government Regulation, District Government Regulation, Perwalkot, Regional Regulation or Policy organization national/ international)</li> <li>Institution/ that institutionset</li> <li>Date</li> </ul>	<ul> <li>Document script results policy advocacy</li> <li>Process documents determination policy</li> <li>Timetable determination byorganizer</li> <li>Manuscript policy Which Ready set</li> </ul>	<ul> <li>Document script policyadvocacy results No There is</li> <li>Process documents determination policy No There is</li> <li>Timetable determination byorganizer No There is</li> <li>Policy textwho is ready set No There is</li> <li>Contents of the</li> </ul>
							process determina tion (intervals)	documents determination	policy set _No in accordance with substance study

### Attachment 6.

## Criteria Stages Outer Devotion to Public And Validity Evaluation Outer

The output of all community service schemes consists of eight categories as required. hatt on Table A. Details criteria stages outer And validity evaluation each category outerexplained on Table BI.

#### Table A. Outer scheme devotion to public

No	Category Outer	SCHEME COMMUNITY				S	CHEME TEI	RRITORY	SCHEME ENTREPRENEURSHIP			
				KKN- PPM	PPIM	PPDM	PPMUPT	PKW	РКРК	РРК	PPPUD	PPUPIK
1.	Publication in journalsnational ber ISSN	$\oslash$	-	$\oslash$	$\oslash$	-	-	-	-	-	-	-
2.	Publication in journal national accredited ranking 1-6	-	-	-	-	$\oslash$	$\odot$	$\oslash$	$\bigcirc$	$\odot$	$\oslash$	$\odot$
3.	Publication in proceedings seminar national ber ISBN	$\bigcirc$	$\odot$	$\bigcirc$	$\odot$	-	-	-	-	-	-	-
4.	Publication in proceedings seminar international inin country ber ISBN	-	-	-	-	$\bigcirc$	$\bigcirc$	$\oslash$	$\bigcirc$	$\oslash$	$\bigcirc$	$\oslash$
5.	Publication in media mass print/electronic	$\bigcirc$	$\bigcirc$	$\odot$	$\bigcirc$	$\oslash$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\odot$	$\oslash$	$\bigcirc$
6.	Videos	$\oslash$	$\bigcirc$	$\bigcirc$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\oslash$	$\odot$
7.	Produce businessman new	-	-	-	-	-	-	-	-	$\odot$	-	-
8.	Enhancement empowerment partner	$\oslash$	$\bigcirc$	$\bigcirc$	$\oslash$	$\oslash$	$\odot$	$\oslash$	$\oslash$	-	$\bigcirc$	$\odot$

	Trans	action outer on	proposal	Validation/assessment outer					
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid	
		Accepted	Letter information Accepted from chief editor or	There is/ available	The article hasstatus Accepted	<ul> <li>Name journal</li> <li>Publisher journal</li> <li>Title article</li> <li>Name Writer</li> </ul>	• Letter information Accepted fromchief editor	<ul> <li>Certificate Accepted from chief editor No There is</li> <li>Article or galley (manuscript final from publisheror preprinted article ) No There is</li> </ul>	
Publication in national journalber ISSN	Article in Journal National ber ISSN		<i>Galley</i> (final manuscriptfrom the publisher or preprinted article )	There is/ available		<ul> <li>URLs Article(If There is)</li> <li>DOI (If There is)</li> <li>Institution indexer(If There is)</li> </ul>	<ul> <li>Galleys         <ul> <li>(manuscript</li> <li>final of</li> <li>publisher or</li> <li>preprinted</li> <li>article )</li> </ul> </li> </ul>	<ul> <li>Year Accepted before period activity devotion</li> <li>Substance article no in accordance with the activity topic devotion</li> </ul>	
		Published	Article from publisher	There is/ available	The article hasstatus Published	<ul> <li>Name journal</li> <li>Publisher journal</li> <li>Title article</li> <li>Name Writer</li> <li>URLs Article(If There is)</li> <li>DOI (If There is)</li> <li>Institution indexer(If There is)</li> </ul>	• Article from publisher	<ul> <li>Article from publisher No There is</li> <li>Year Published before period activity devotion</li> <li>Substance article no in accordance with the activity topic devotion</li> </ul>	

## Table B. Outer form One article scientific Which published through journal national ber ISSN

Table C. Outer form One article scientific V	ich published through journa	al national accredited ranking 1-6
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	Trans	action outer on	proposal		Validation/assessment outer					
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid		
Publication in national journal accredited ranking 1-6	Article in national journal accredited ranking 1-6	Accepted	Letter information Accepted from chief editor or Galley (final manuscriptfrom the publisher or preprinted article )	There is/ available There is/ available	The article hasstatus Accepted	<ul> <li>Name journal</li> <li>Publisher journal</li> <li>Title article</li> <li>Name Writer</li> <li>URLs Article(If There is)</li> <li>DOI (If There is)</li> <li>Institution indexer(If There is)</li> </ul>	<ul> <li>Letter information Accepted fromchief editor</li> <li>Galleys (manuscript final of publisher or preprinted article )</li> </ul>	<ul> <li>Certificate Accepted from chief editor No There is</li> <li>Article or galley (manuscript final from publisheror preprinted article ) No There is</li> <li>Year Accepted before period activity devotion</li> <li>Substance article no in accordance with the activity topic devotion</li> </ul>		
			Article from publisher	There is/ available	The article hasstatus Published	<ul> <li>Name journal</li> <li>Publisher journal</li> <li>Title article</li> <li>Name Writer</li> <li>URLs Article(If There is)</li> <li>DOI (If There is)</li> <li>Institution indexer(If There is)</li> </ul>	• Article from publisher	<ul> <li>Article from publisher No There is</li> <li>Year Published before period activity devotion</li> <li>Substance article no in accordance with the activity topic devotion</li> </ul>		

	Transa	action outer on	proposal	Validation/assessment outer					
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid	
Publication in proceedings National Seminarber ISBN	Article in proceedings National Seminar ber ISBN	Published	<i>Covers</i> , list content, Andprinted articlesin proceedings	There is/ available	Proceedin gsseminar ber ISBN	<ul> <li>Seminar name</li> <li>Time implementa tionseminar</li> <li>Title Article</li> <li>Name Writer</li> <li>Publisher</li> <li>Proceedings URL(If There is)</li> <li>Institution Indexer(If There is)</li> </ul>	• <i>Cover</i> , list content, And articlein proceedings	<ul> <li>Cover , list content, And article)No There is</li> <li>Proceedings nober ISBN</li> <li>Year implementation seminar before period activity devotion</li> <li>Substance article no in accordance with the activity topic devotion</li> </ul>	

Table D. Outer form One article scientific Which published in proceedings seminar national ber ISBN

Table E. Outer form One article scientific Which published in proceedings seminar international ber ISBN in in country

	Transa	ıksi luaran pada	proposal		Validasi/penilaian luaran					
Kategori Luaran	Jenis Luaran	Status	Bukti Luaran	Target Capaian	Kriteria Kelayakan	lsian Peneliti	Bukti Pendukung	Tidak Valid		
Publikasi di prosiding seminar internasional ber ISBN di dalam negeri	Artikel di prosiding seminar internasional ber ISBN di dalam negeri	Published	<i>Cover</i> , daftar isi, dan artikel yang tercetak dalam prosiding	Ada/ tersedia	Prosiding seminar internasional ber ISBN	<ul> <li>Nama seminar</li> <li>Waktu pelaksanaan seminat</li> <li>Judul Artikel</li> <li>Nama Penulis</li> <li>Penerbit</li> <li>URL prosiding (jika ada)</li> <li>Lembaga Pengindeks (jika ada)</li> </ul>	• <i>Cover</i> , daftar isi, dan artikel di prosiding	<ul> <li>Cover, daftar isi, dan artikel) tidak ada</li> <li>Prosiding tidak ber ISBN</li> <li>Tahun pelaksanaan seminar sebelum periode kegiatan pengabdian</li> <li>Substansi artikel tidak sesuai dengan topik kegiatan pengabdian</li> </ul>		

### Table F. Outer form One article Which published in media mass

	Trans	action outer on	proposal		Validation/assessment outer					
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid		
Publication in media mass	Article in media print	Published	Article Which rise	There is/ available	The article hashas rise	<ul> <li>Media name print</li> <li>Publishe r publishe r</li> <li>Title article</li> <li>Name Writer</li> <li>URLs Article(If There is)</li> </ul>	• The article has rise	<ul> <li>Articles that have beenrise No There is</li> <li>Publication Year before period activity devotion</li> <li>Substance article no in accordance with the activity topic devotion</li> </ul>		
	Articles in the media electronic	Online / can accessed	Article Which show	There is/ available	The article hasstatus On line	<ul> <li>Name media</li> <li>Title article</li> <li>Name Writer</li> <li>URLs Media</li> <li>URLs article</li> </ul>	• The article has show	<ul> <li>Articles that have beenshow No There is</li> <li>Substance article no in accordance with the activity topic devotion</li> </ul>		

## Table G. Outer form videos activity

	Trans	action outer on	proposal	Validation/assessment outer					
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid	
Videos activity	Videos in media electronic	<i>Online /</i> can accessed	URLs videos Which show	There is/ available	Video has status On line	<ul> <li>Name media</li> <li>Video title activity</li> <li>Name Writer</li> <li>URLs Media</li> <li>URLs video</li> </ul>	• Video URL Which show	<ul> <li>URLs videos No there or not Can accessed</li> <li>Substance videos don't in accordance with the activity topic devotion</li> </ul>	

	Transa	action outer on	proposal	Validation/assessment outer					
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriat eness	Stuffing Researcher	Proof Supporter	No Valid	
			Profile businessma nnew 1	There is/ available	Business has walk	Each profile businessma			
		Has accomplis hed	Profile businessman new 2	There is/ available		n new (1-5) • Name Businessm an		<ul> <li>Profile document every</li> </ul>	
Businessman new	Makes five businessman new		Profile businessman new 3	There is/ available		<ul> <li>Address</li> <li>Field Business</li> <li>Name Business</li> </ul>	AVARV	entrepreneur new No There is • Profile	
			Profile businessman new 4	There is/ available		<ul> <li>Product name(If There is)</li> <li>Brand</li> </ul>	businessmannew	businessman new no fulfil condition	
			Profile businessman new 5	There is/ available		<ul> <li>product(lf</li> <li>There is)</li> <li>Turnover</li> <li>(lf There</li> <li>is)</li> </ul>			

### Table H. Outer form activity Which produce businessman new

### Table I. Outer form enhancement empowerment partner in accordance problem Which faced

	Transa	action outer on	proposal	Validation/assessment outer					
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriaten ess	Stuffing Researcher	Proof Supporter	No Valid	
Enhancemen t	Knowledge partner increase	Achieved	Description of test results/knowledge scorebefore and after activity	There is/ available	Knowledge partner increase	<ul> <li>Name group</li> <li>Chairman group partner</li> <li>Amount member partner</li> <li>Field activity partner</li> <li>Address partner</li> </ul>	<ul> <li>Description test results/score sknowledge before and afteractivity</li> </ul>	<ul> <li>Description of test results/ knowledge score before and after the activity No There is</li> <li>Evaluation documentit is not in accordance with with substance activity</li> </ul>	

empowerme ntpartner	Skills partner increase	Achieved	Description of test results/score Skills before and after activity	There is/ available	Skillspartner increase	•	Name group Chairman group partner Amount member partner Field activity partner Address partner	•	Description test results/score sSkillsbefore and afteractivity	•	Description of test results/score Skills before and after the activity No There is Evaluation documentit is not in accordance with with substance activity
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	Transa	action outer on	proposal			Valida	tion/assessment outer	_
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriaten ess	Stuffing Researcher	Proof Supporter	No Valid
	Partner health increase	Achieved	Description enhancement health beforeand after activity	There is/ available	Health partner increase	<ul> <li>Name group</li> <li>Chairman group partner</li> <li>Amount member partner</li> <li>Field activity partner</li> <li>Address partner</li> </ul>	<ul> <li>Description enhanceme nthealth before and afteractivity</li> </ul>	<ul> <li>Description enhancement health before and after the activityNo There is</li> <li>Evaluation documentit is not in accordance with with substance activity</li> </ul>
Enhancemen t empowerme ntpartner	Income partner increase	Achieved	Description enhancement income before and after activity	There is/ available	Income partner increase	<ul> <li>Name group</li> <li>Chairman group partner</li> <li>Amount member partner</li> <li>Field activity partner</li> <li>Address partner</li> </ul>	<ul> <li>Description enhanceme ntincome before and afteractivity</li> </ul>	<ul> <li>Description enhancement income before and after the activityNo There is</li> <li>Evaluation documentit is not in accordance with with substance activity</li> </ul>
	Partner services increase	Achieved	Description enhancement quantity and service quality before and after activity	There is/ available	Service partner increase	<ul> <li>Name group</li> <li>Chairman group partner</li> <li>Amount member partner</li> <li>Field activity partner</li> <li>Address partner</li> </ul>	<ul> <li>Description enhanceme ntquantity and quality Service before and afteractivity</li> </ul>	<ul> <li>Description enhanceme ntquantity and quality Service before And after the activity No There is</li> <li>Evaluation documentit is not in accordance with with substance activity</li> </ul>
	Product quality partner increase	Achieved	Description quality improvement product before and after activity	There is/ available	Quality product partner increase	<ul> <li>Name group</li> <li>Chairman group partner</li> <li>Amount member partner</li> <li>Field activity partner</li> <li>Address</li> </ul>	<ul> <li>Description enhancement product quality before and afteractivity</li> </ul>	<ul> <li>Description enhancement product quality before and after the activityNo There is</li> <li>Evaluation documentit is not in accordance with with substance activity</li> </ul>

			partner	

	Transa	action outer on	proposal		Validation/assessment outer				
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriaten ess	Stuffing Researcher	Proof Supporter	No Valid	
	Number of products partner increase	Achieved	Description increasing numbers product before And after activity	There is/ available	Amount product partner increase	<ul> <li>Name group</li> <li>Chairman group partner</li> <li>Amount member partner</li> <li>Field activity partner</li> <li>Address partner</li> </ul>	<ul> <li>Description enhancement Number of products before and afteractivity</li> </ul>	<ul> <li>Description enhancement number of products before and after the activityNo There is</li> <li>Evaluation documentit is not in accordance with with substance activity</li> </ul>	
Enhancemen t empowerme ntpartner	Types of products partner increase	Achieved	Description type improvement product before And after activity	There is/ available	Amount product partner increase	<ul> <li>Name group</li> <li>Chairman group partner</li> <li>Amount member partner</li> <li>Field activity partner</li> <li>Address partner</li> </ul>	<ul> <li>Description enhanceme nttype product before and afteractivity</li> </ul>	<ul> <li>Description enhancement types of products before and after the activityNo There is</li> <li>Evaluation documentit is not in accordance with with substance activity</li> </ul>	
	Production capacitypartner increase	Achieved	Description enhancement production capacitybefore and after activity	There is/ available	Capacity production partner increase	<ul> <li>Name group</li> <li>Chairman group partner</li> <li>Amount member partner</li> <li>Field activity partner</li> <li>Address partner</li> </ul>	<ul> <li>Description enhanceme ntcapacity production before and afteractivity</li> </ul>	<ul> <li>Description enhancement capacity production before and after the activityNo There is</li> <li>Evaluation documentit is not in accordance with with substance activity</li> </ul>	
			Shipping Documents product export	There is/ available	Success	<ul> <li>Name group</li> <li>Chairman group partner</li> </ul>	• Document delivery	<ul> <li>Document delivery export productsNo There is</li> </ul>	

Daftar Pustaka dan Lampiran

	Success partnerdo export	Achieved	Product description Which exported	There is/ available	partner do export	•	Amount member partner Field activity partner Address partner	•	product export Product description Which exported	0	Product description Which exported Product name it is not in accordance with with substance devotion	
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	Transa	action outer on	proposal		Validation/assessment outer				
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriaten ess	Stuffing Researcher	Proof Supporter	No Valid	
	Success partner domarketing		Document delivery product	There is/ available	Success partner do	<ul> <li>Name group</li> <li>Chairman group partner</li> </ul>	• Document delivery	<ul> <li>Product description which is marketed No There is</li> </ul>	
	between island	Achieved	Product description Which marketed	There is/ available	Inter-island increase	<ul> <li>Amount member partner</li> <li>Field activity partner</li> <li>Address partner</li> </ul>	product • Product description Which marketed	<ul> <li>Document delivery product No There is</li> <li>Product name it is not in accordance with with substance devotion</li> </ul>	
Enhancemen t empowerme ntpartner	Total assets partner increase	Achieved	Description increasing numbers assets before and after activity	There is/ available	Total assets increase	<ul> <li>Name group</li> <li>Chairman group partner</li> <li>Amount member partner</li> <li>Field activity partner</li> <li>Address partner</li> </ul>	<ul> <li>Description enhanceme nttotal assets before and afteractivity</li> </ul>	<ul> <li>Description enhancement total assets before and after the activityNo There is</li> <li>Evaluation documentit is not in accordance with with substance activity</li> </ul>	
	Total turnover partner increase	Achieved	Description increasing numbers turnover before andafter activity	There is/ available	Total turnover increase	<ul> <li>Name group</li> <li>Chairman group partner</li> <li>Amount member partner</li> <li>Field activity partner</li> <li>Address partner</li> </ul>	<ul> <li>Description enhancemen t amount turnover before and afteractivity</li> </ul>	<ul> <li>Description enhancement total turnover before and after the activityNo There is</li> <li>Evaluation documentit is not in accordance with with substance activity</li> </ul>	

	Total power partner work increase	Achieved	Description of the upgradeamount power work before andafter the activity	There is/ available	Amount labor increase	•	Name group Chairman group partner Amount member partner Field activity partner Address partner	•	Description improvement amount of powerwork before and after activity	•	Description improvement amount of power work before and after the activity No There is Evaluation documentit is not in accordance with with substance activity	
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	Transa	action outer on	proposal			Valida	tion/assessment outer	
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriaten ess	Stuffing Researcher	Proof Supporter	No Valid
	Ability partner management increase	Achieved	Description of test results/ability score management before and after activity	There is/ available	Ability manageme ntincrease	<ul> <li>Name group</li> <li>Chairman group partner</li> <li>Amount member partner</li> <li>Field activity partner</li> <li>Address partner</li> </ul>	<ul> <li>Description test results /scores ability managemen t before and afteractivity</li> </ul>	<ul> <li>Description of test results/ability score management before and after the activity No There is</li> <li>Evaluation documentit is not in accordance with with substance activity</li> </ul>
	Revenue generating partnerincrease	Achieved	Description enhancement Profit before and after activity	There is/ available	Revenue generating increase	<ul> <li>Name group</li> <li>Chairman group partner</li> <li>Amount member partner</li> <li>Field activity partner</li> <li>Address partner</li> </ul>	<ul> <li>Description enhanceme ntProfit before and afteractivity</li> </ul>	<ul> <li>Description enhancement Profit before and after the activity No There is</li> <li>Evaluation documentit is not in accordance with with substance activity</li> </ul>
Enhancemen t empowerme ntpartner	Income generating partner increase	Achieved	Description enhancement Income generating before and after activity	There is/ available	Income generating increase	<ul> <li>Name group</li> <li>Chairman group partner</li> <li>Amount member partner</li> <li>Field activity partner</li> <li>Address partner</li> </ul>	<ul> <li>Description enhanceme ntlncome generating before and afteractivity</li> </ul>	<ul> <li>Description enhancement <i>Income</i> generating before and after the activityNo There is</li> <li>Evaluation documentit is not in accordance with with substance activity</li> </ul>
			Product DescriptionWhich certified	There is/ available		<ul> <li>Name group</li> <li>Chairman group partner</li> <li>Amount member</li> </ul>	• Description	<ul> <li>Product Description</li> </ul>

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	Product certified partner	Achieved	Certificate product	There is/ available	Product certified	•	partner Field activity partner Address partner Name product Number certifica te Institutio ngiver certificat ion	•	Products that certified Certificate product	•	Which certifiedNo There is Certificate productNo There is	
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	Trans	action outer on	proposal		Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriate ness	Stuffing Researcher	Proof Supporter	No Valid
	Product	Achieved	Product Description Which standardized	There is/ available	Product	<ul> <li>Name group</li> <li>Chairman's namegroup partner</li> <li>Amount member partner</li> <li>Field activity</li> </ul>	<ul> <li>Description Products that standardized</li> </ul>	<ul> <li>Description Products that standardized No There is</li> </ul>
Enhancemen	standardized partner	Achieved	Document Standardization product	There is/ available	Product standardized	<ul> <li>partner</li> <li>Address partner</li> <li>Name product</li> <li>Number document standardizat ion</li> <li>Institution giver standardiza tion</li> </ul>	Document Standardiza tion	Document     Standardiza     tionNo     There is
t empowerme ntpartner	Business unit		Unit Description efforts that have been madebody law	There is/ available	Busines	<ul> <li>Name group</li> <li>Chairman's namegroup partner</li> <li>Amount member partner</li> <li>Field activity partner</li> </ul>	<ul> <li>Unit Description that effort has a bedylaw</li> </ul>	<ul> <li>Unit Description that effort has a body law No There is</li> </ul>
	body law	Achieved	Decision document body law	There is/ available	s registere d	<ul> <li>partner</li> <li>Address partner</li> <li>Name units</li> <li>Number decision body law</li> <li>Institution giver body statuslaw</li> </ul>	a bodylaw • Document decision body law	<ul> <li>Document decision incorporatedNo There is</li> </ul>

J. produce minimum One Product Which ber KI (Right create, patent, And patent simple) (on th to 3);

## Attachment 7. Size Standard Scholarship Education Postgraduate Outside Country For Lecturer Still, Power Education, And Candidate Lecturer College Tall

					Cost Ma	iximum		
No	Countr y	Eye Mon ey	Living Allowance (monthly)	Settlement sAllowance (once)	Book Allowance (annually)	Tuition Fees	Health Insurance (standard individual)	Admission Fees
1.	America							
a.	Boston (MA), New Haven (CT) And New York (NY)	USD	1,900	1,900	600	At Cost	At Cost	At Cost
b.	Berkeley (CA), Chicago (IL), Cambridge (MA), Evanston (IL), Irvine (CA), Los Angeles (CA), And Washington (DC)	USD	1,800	1,800		At Cost	At Cost	At Cost
с.	Davis (CA), Pasadena (CA), Priceton (NJ), San Francisco (CA), Stanford (CA), St. Barbara (CA), And Valencia (CA)	USD	1,700	1,700	600	At Cost	At Cost	At Cost
d.	City other	USD	1,600	1,600	600	At Cost	At Cost	At Cost
2.	Australia							
a.	Canberra, Sydney, And Melbourne	AUD	2,000	2,000	600	At Cost	At Cost	At Cost
b.	City other	AUD	1,850	1,850	600	At Cost	At Cost	At Cost
3.	Austria	EUR	1,000	1,000	500	At Cost	At Cost	At Cost
4.	Dutch							
a.	Amsterdam	EUR	1,300	1,300	500	At Cost	At Cost	At Cost

					Cost Ma	ximum		
No	Countr y	Eye Mon ey	Living Allowance (monthly)	Settlement sAllowance (once)	Book Allowance (annually)	Tuition Fees	Health Insurance (standard individual)	Admission Fees
b.	City other	EUR	1,250	1,250	500	At Cost	At Cost	At Cost
5.	Belgium	EUR	1,200	1,200	500	At Cost	At Cost	At Cost
6.	Czech	EUR	700	700	500	At Cost	At Cost	At Cost
7.	Chile	USD	900	900	500	At Cost	At Cost	At Cost
8.	China	USD	650	650	400	At Cost	At Cost	At Cost
9.	Denmark	EUR	1,300	1,300	500	At Cost	At Cost	At Cost
10.	Finland	EUR	1,000	1,000	500	At Cost	At Cost	At Cost
11.	Hungary	EUR	1,000	1,000	500	At Cost	At Cost	At Cost
12.	Hong Kong	USD	750	750	500	At Cost	At Cost	At Cost
13.	India	USD	600	600	500	At Cost	At Cost	At Cost
14.	English							
a.	London	GBP	1,275	1,275	350	At Cost	At Cost	At Cost
b.	City other	GBP	1,100	1,100	350	At Cost	At Cost	At Cost
15.	Ireland							
a.	Dublin	EUR	1,275	1,275	500	At Cost	At Cost	At Cost

					Cost Ma	ximum		
No	Countr y	Eye Mon ey	Living Allowance (monthly)	Settlement sAllowance (once)	Book Allowance (annually)	Tuition Fees	Health Insurance (standard individual)	Admission Fees
b.	City other	EUR	1,100	1,100	500	At Cost	At Cost	At Cost
16.	Iceland	USD	1,300	1,300	500	At Cost	At Cost	At Cost
17.	Italy	EUR	1,000	1,000	500	At Cost	At Cost	At Cost
18.	Japan							
a.	Токуо	JPY	160	160	60	At Cost	At Cost	At Cost
b.	City other	JPY	150	150	60	At Cost	At Cost	At Cost
19.	German	EUR	1,100	1,100	500	At Cost	At Cost	At Cost
20.	Canada	CAD	1,400	1,400	600	At Cost	At Cost	At Cost
21.	Korea South	USD	900	900	600	At Cost	At Cost	At Cost
22.	Malaysia	USD	650	650	400	At Cost	At Cost	At Cost
23.	Могоссо	EUR	750	750	500	At Cost	At Cost	At Cost
24.	Mexico	USD	1,100	1,100	500	At Cost	At Cost	At Cost
25.	Egypt	USD	750	750	500	At Cost	At Cost	At Cost

Daftar Pustaka dan Lampiran

No	Countr y	Eye Mon ey	Cost Maximum					
			Living Allowance (monthly)	Settlement sAllowance (once)	Book Allowance (annually)	Tuition Fees	Health Insurance (standard individual)	Admission Fees
26.	New Zealand	NZD	2,000	2,000	800	At Cost	At Cost	At Cost
27	Norway	EUR	1,200	1,200	500	At Cost	At Cost	At Cost
28.	France							
a.	Marseille, Nice, And Paris	EUR	1,300	1,300	500	At Cost	At Cost	At Cost
b.	City other	EUR	1,100	1,100	500	At Cost	At Cost	At Cost
29.	Philippines	USD	600	600	500	At Cost	At Cost	At Cost
30.	Portugal	EUR	900	900	500	At Cost	At Cost	At Cost
31.	Russia							
a.	Moscow	USD	900	900	500	At Cost	At Cost	At Cost
b.	City other	USD	700	700	500	At Cost	At Cost	At Cost
32.	Saudi Arabia	USD	700	700	600	At Cost	At Cost	At Cost
33.	Singapore	USD	1,100	1,100	500	At Cost	At Cost	At Cost
34.	Spanish							
a.	Barcelona, And Madrid	EUR	1,000	1,000	500	At Cost	At Cost	At Cost

No	Countr y	Eye Mon ey	Cost Maximum					
			Living Allowance (monthly)	Settlement sAllowance (once)	Book Allowance (annually)	Tuition Fees	Health Insurance (standard individual)	Admission Fees
b.	City other	EUR	900	900	500	At Cost	At Cost	At Cost
35.	Sweden	EUR	1,000	1,000	500	At Cost	At Cost	At Cost
36.	Switzerland	EUR	1,500	1,500	500	At Cost	At Cost	At Cost
37.	Taiwan	USD	700	700	500	At Cost	At Cost	At Cost
38.	Thailand	USD	600	600	500	At Cost	At Cost	At Cost
39.	Türkiye	EUR	750	750	500	At Cost	At Cost	At Cost
40.	Jordan	USD	700	700	500	At Cost	At Cost	At Cost

Information addition :

- 1. Travel costs are paid once upon arrival and once upon completion of study according to the provisionsWhich applies.
- 2. Allowance family will given For level Doctoral start semester 3 with magnitude maximum 50% fromcost life For 1 person wife And 1 person child (each 25%).
- 3. *Thesis Allowance* And *Special Allowance* will given on semester 4 (four) For level Masters And semes-t er 6 (ena m ) For level Oral doc \_ as big as R p .6 .00 0 .000 For every k components



