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GUIDE

STUDY AND DEVOTION TO PUBLICEDITION XIII



Directorate of Research and Community Service
Deputy Field Strengthening Research And
Development
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YEAR 2020

INTRODUCTION

Assalaamu'alaikum Warohmatulloohi Wabarokaatuh,

Regards prosperous for us all,

Come on We climb it praise I'm grateful to God's presence YME Which has bestowed grace, enjoyment And His instructions so that Book Guide Implementation Study And Devotion to Public Edition XIII 2020 This have got it resolved.

Book Guide Edition XIII This arranged in accordance with development regulations related with implementation study in Indonesia as well as happen change nomenclature new, that is Ministry Research, Technology and Higher Education (Ristekdikti) which was separated again, namely Ristek became Ministry of Research and Technology/National Innovation Research Agency (Ristek/BRIN), then Dikti who rejoined the Ministry of Education and Culture (Dikbud). Funding study This use budget fund Help Operational College Tall Country (BOPTN). Based on Regulation Minister Research, Technology, And Education Tall Number 6 Year 2018 concerning Operational Assistance for State Universities which is updated through Regulations Minister Research, Technology, And Education Tall Number 12 Year 2019 about Help Operational College Tall Country, BOPTN used For implementation Study And Community Service at PTN and PTS. BOPTN which is used for research and Community Service can be used to provide research funding incentives and community service in the main work units of the Ministry of Research, Technology and Higher education.

Referring to Law Number 11 of 2019 concerning the National Science System and Technology Article 48 Paragraph (1) which states that the National Research and Innovation Agency (BRIN) own function For operate Study, Development, assessment, And Application, as well as integrated Inventions and Innovations, the Ministry of Research and Technology/BRIN prepared this guide in framework for managing BOPTN funds. The funding in question is permitted for lecturers who is under the Ministry of Education and Culture, while lecturers or researchers outside the Ministry of Education and Culture institutions can participate as a member or research partner. Accountability based research costs outer arranged with refers on Regulation Minister Finance Republic Indonesia about Applicable Output Cost Standards. With expected output-based accountability lecturer can more motivated For fulfil target outer Which promised. In side other, lecturer Also more motivated to optimize the productivity of research outputs by targeting outcomes addition.

Although not completely perfect, this guidebook also provides research directions following the focus areas, themes and research topics contained in the Minister of Research Regulation, Technology, And Education Tall Number 38 Year 2019 about Priority Research National Year

2020 - 2024. More explicitly, this guidebook accommodates *Gender Equity and Social issues Inclusion* (GESI) by adding relevant themes and topics for each focus area. Each funded research proposal must target achieving the Technology Readiness Level (TKT). With gathered 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 Measuring research and service productivity is also optimized using Sinta ID in access funding through Simlitabmas.

Book Guide Edition XIII This experience a number of change substance, among them there is changes to general provisions and changes to focus areas that refer to Priorities National Research 2019-2024. It is hoped that the publication of the XIII Edition of the Guidebook will be effective give guide for para lecturer For participate in funding study And community service Which held by the Deputy Field of Research Strengthening and Development (cq Directorate of Research and Community Service) both competitive in nature national, decentralized, or assignment. Apart from that, the publication of this Guidebook Also expected can in a way effective give guide general for Directorate Research And Devotion Public, institution manager study And devotion to public in universities (Institute for Research and Community Service/Research Institute/Institute Community Service /other similar names), and Higher Education Service Institutions in conducting research and community service. Implementation Guidebook Research and Community Service in Higher Education, 2020 Edition XIII used as reference For perfect management study in accordance with condition Whichhappen on 2020 this is electronically via Simlitabmas.

For the publication of this Guidebook, we express our thanks and appreciation as high as possible to all member team compiler as well as parties Which role on Contributions have been made starting from initiating and compiling to publication. We realize that book guide This Still Far from perfect, so that we welcome to the public to be willing to provide suggestions and input for future improvements. Finally, we would like to thank all readers for their attention. Hope this guide can provide benefits to advance the Indonesian nation and our world of education specifically.

Wassalamu'alaikum Warohmatulloohi Wabarokaatuh

Jakarta, September 2020
Plt. Director Research And Devotion Public,

Heri Hermansyah

WELCOME

DEPUTY FIELD STRENGTHENING RESEARCH AND DEVELOPMENT

Assalaamu'alaikum Warohmatulloohi Wabarokaatuh,

Praise and Gratitude to the presence of Allah SWT, because with His blessing the Implementation Guide book is published Study And Devotion to Public Edition XIII This can arranged And published. The preparation of this Guidebook is intended to carry out Research and Community Service activities to the community can run well and become a basis of reference for all related parties in order to achieve national standards for research and community service as follows stated in the Minister of Research, Technology and Higher Education Regulation Number 44 of 2015 concerning National Higher Education Standards updated with the Minister of Education Regulation And Culture Number 3 Years 2020 about National Standards Education Tall.

Indonesia's achievements in publications in international journals are one of the research indicators Already increase in a way significant, Where in scope ASEAN Indonesia moment This occupy ranking First. Will but effort We No can stop, Because study Also need directed to produce innovative products and respond quickly to community needs. Results research also needs to be directed at obtaining protection of Intellectual Property Rights (IPR), both in the form of Copyright and Industrial Property Rights (Patents, Industrial Designs, Layout Designs Circuit Integrated, Brand, Confidential Trade and Protection Plant Varieties).

Realizing the important role of research and community service in higher education, The Deputy for Strengthening Research and Development continues to strive to improve the quality of research. The strategy carried out by the Deputy for Strengthening Research and Development is to giving broader authority in research management to universities through decentralized research and community service programs, while for issues National issues are accommodated through national competition. Meanwhile, for the issues being looked at Strategic Deputy for Strengthening Research and Development can give assignments to College Tall Which have competence Which tall in field Which concerned throughscheme assignment.

Deputy Field Strengthening Research And Development realize that repair quality study will capable push enhancement Power competitive And confirmed Framework Qualification National Indonesia (KKNI). The Indonesian government has a high commitment to improving quality and quantity of academic publications. Funding support for research is expressly stated in Law Number 12 of 2012 concerning Higher Education Article 89 states that universities receive State University Operational Assistance (BOPTN) of which at least 30% allocated for research activities. In line with increasing funding support Good from government, college tall must manage agenda his research with more

professional, among them with utilise technology information And communication (ICT).

I am pleased to welcome the publication of the Research Implementation Guidebook and This XIII Edition of Community Service and hopefully can further increase productivity lecturer at the university. This Handbook has been harmonized with the management system ICT, so that it can guarantee efficiency, transparency and accountability in research management and community service. I am very value efforts of the Research Director And Devotion The community and all its staff and experts have succeeded in compiling the book This guide.

Wassalaamu'alaikum Warohmatulloohi Wabarokaatuh,

Jakarta, September 2020
Plt. Deputy for Research Strengthening
andDevelopment,

Mohammed Dimyati

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PIG INTRODUCTION

Universities are obliged to provide education, research and service to public as mandated in Constitution Number 20 Year 2003 about National Education Article 20. Research in higher education is directed at developing knowledge and technology, as well as improving the welfare of society and the nation's competitiveness 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 competency and competition paths. Research results must be disseminated by: seminar, published, and/or patented. Results study in level college tallexpected useful for:

1. enrichment knowledge and technology as well as learning;
2. enhancement quality college tall And progress civilization nation;
3. enhancement independence, progress, and power national competitiveness;
4. fulfillment need strategic development national; And
5. change Indonesian society become public based knowledge.

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 carrying out its function of preparing human resources for implementation science and technology, and is responsible for improving the capabilities of the tridharma of higher education. College Higher education also has a strategic role in strengthening the position of science and technology as investment capital period short, term intermediate, and period long development national.

One of the goals of the National Science and Technology System is to increase the nation's independence and competitiveness Which meaningful that college tall Which supported by institution R&D (LPNK, LPK, And Body Business) and skilled higher education personnel so that they can contribute to strengthening economy And enhancement well-being public. College tall must more pushed And facilitated to be able to produce more productive inventions and innovations downstream technology appropriate To use, create mark plus, as well as increase production And use component domestic to reduce dependency towards the product import.

So that trustworthy in on can held with Good, implementation study And devotion to The community in higher education must be directed to achieve certain goals and standards. By general The objectives of research in higher education are:

1. produce study in accordance with Regulation Minister Education And Culture No. 3Year 2020 about National Standards Education Tall;
2. ensure development study superior Specific;
3. increase capacity study;
4. reach And increase quality in accordance target And relevance results study for public Indonesia; And
5. increase dissemination results study And protection riches intellectual nationallyAnd international.

Every university is expected to be able to manage research that meets established standards explained in the Minister of Education and Culture Regulation no. 3 of 2020 concerning Standards National Education Tall related with room scope And explanation Standard National Study as following.

1. **Standard results research** , is criteria minimum about quality results study. Results study directed For develop knowledge knowledge And technology, as well as increase social welfare and national competitiveness. The research results are all outcomes produced through activities that meet scientific principles and methods in a systematic manner scientific autonomy and academic culture. Results study which is not confidential, no bother and/or No endanger interest general or national must disseminated by means of seminars, publication, patenting, and/or other means can used to convey research results to public.
2. **Research content standards** are the minimum criteria that include depth and breadth material study base And study applied. Study base oriented on outer study in the form of an explanation or discovery to anticipate a symptom, phenomenon, rule, new model, or postulate. Applied research is oriented towards research outputs in the form of innovation and development of science and technology that is beneficial to society, world business, and/or industry. Study base And applied covers material study special For interest national, Which must load principles usefulness, sophistication, And anticipate time needs coming.
3. **Research process standards** are minimum criteria which include: a) research activities which consists of planning, implementation and reporting; b) fulfill the rules and methods scientific in a way systematic in accordance with autonomy science And culture academic; And c) considering quality standards, work safety, health, comfort and security researcher, society, and environment.
4. **Research assessment standards** are the minimum criteria for assessing the process and results research, where assessment a) is carried out in an integrated manner with the most assessment principles A little educative, objective, accountable, And transparent Which is evaluation Which procedure And the assessment results can be accessed by all stakeholders; b) must pay attention conformity with results standards, content standards, and research process standards; and c) use methods and instruments that are relevant, accountable, and can represent measures of performance achievement process and achievement of research results performance by referring to provisions And regulations in college tall.
5. **Researcher standards** are the minimum criteria for researchers which include: a) researcher ability For carry out study; b) ability level mastery method study Which in accordance with field science, object study, as well as level complexity And level depth study Which determined based on qualification academic And results study; And c) determining the authority to carry out research is regulated in the detailed guidelines issued by Field Deputy Strengthening Research and Development.
6. **Standards for research facilities and infrastructure** are the minimum criteria facilities and infrastructure necessary to support the content and research process requirements in order to fulfill results study. Means And infrastructure is facility college tall Which used For facilitate study most A little related with field knowledge program studies as well as can

also used for the learning process And activity community service. Facilities and infrastructure must meet standards of quality, work safety, health, comfort, And safety of researchers, the public, and environment.

7. **Standard management research** , is criteria minimum about planning, implementation, control, monitoring And evaluation, as well as reporting activity study. Management The research referred to is carried out by work units in an institutional form on duty For manage study like institution study, institution study And community service, or other similar forms according to needs and provision college tall.
8. **Research funding and financing standards** are the minimum criteria for sources and research funding and financing mechanisms originating from internal research funds universities, government, collaboration with other institutions both inside and outside country, or fund from public. Funding study used For finance planning research, research implementation, research control, research monitoring and evaluation, reporting research results, and disseminating research results. Fund mandatory research management provided by college used to finance research management (selection proposal, monitoring And evaluation, reporting study, And dissemination results study), increasing research capacity, and scientific publication incentives or Intellectual Property incentives (KI). College tall No justified For take *fees* from para researcher.

Objective devotion to public in college height is:

1. carry out devotion to public Which in accordance with the Ministerial regulation Education And Culture No. 3 Year 2020 about Standard National Education Tall;
2. develop community empowerment model;
3. increase dedication capacity to public;
4. give solution based on study academic on need, challenge, or problem Which faced public, well directly or indirectly direct;
5. do activity Which capable empowering public on all level, in a way economy, political, social, and culture; And
6. do switch technology, knowledge, And art to public For development dignity man fair gender And inclusion social as well as sustainability source Power natural.

Like case implementation study, every college tall expected can manage devotion to public based Regulation Minister Education And Culture No. 3 Year 2020 concerning National Higher Education Standards related to scope and explanation Standard National Devotion to Public as follows:

1. **Standard results devotion to public**, is criteria minimum Which results service to society in applying, practicing and cultivating knowledge knowledge and technology to advance general welfare and smarten life nation. The results of community service can be in the form of solving problems faced public with utilise skill civitas academic Which relevant, utilization appropriate technology, science and technology development materials or teaching materials or module training for resource enrichment Study.

2. **The standard for the content of community service** is the minimum criterion about depth And breadth material devotion to public Which refers on standard results devotion to society. The depth and breadth of community service material is sourced from the results of research or development of science and technology in accordance with community needs, which include the results of research or scientific development and technology Which can applied direct And needed by public user, development knowledge knowledge And technology in frame empowering public, appropriate technology that can be utilized to improve living standards and well-being public, model solution problem, manipulation social, and/or recommendation policy Which can applied direct by public, world business, industry, and/or Government, as well as Intellectual Property (IP) which can be applied directly by the community, business world, and/or industry.
3. **Community service process standards** are the minimum criteria regarding activities devotion to public Which consists on planning, implementation, And reporting activity. Community service activities can take the form of service to the community, application knowledge knowledge And technology in accordance with field his expertise, enhancement capacity public; or empowerment public. Devotion to public Which must considering quality standards, ensuring work safety, health, comfort, as well security executor, public, And environment. Activity devotion to public Which carried out by students as a form of learning must lead to fulfillment achievements learning graduate of as well as fulfil provision And regulation in college tall. Activity devotion to public Which must held in a way directed,measurable, and programmed.
4. **Community service assessment standards** are the minimum assessment criteria regarding the process and results of community service. Assessment of service processes and results to the community is carried out in an integrated manner with the principle of assessing the least number of sides educative, objective, accountable, and transparent, as well as must notice conformity with outcome standards, content standards, and community service process standards. Minimum criteria assessment of the results of community service includes the level of community satisfaction, occurrence change attitude, knowledge, And Skills on public in accordance with target program, can use science and technology in society in a sustainable manner, creation enrichment source Study and/or learning as well as maturation civitas academics as results development knowledge knowledge And technology, as well as resolved problem social And policy recommendations that can be utilized by stakeholders. Assessment is possible done with use method And instrument Which relevant, accountable, And can represents a measure of process performance achievement and performance achievement resulting from service public.
5. **The standards for implementing community service** are the minimum criteria for ability executor to implement community service, including mandatory implementation have mastery of scientific application methods that are appropriate to the field of expertise, type activities, as well as the level of complexity and depth of activity targets determined based on qualification academic And results devotion to public. Ability executor devotion to public determine authority carry out devotion to

community as regulated in detailed guidelines issued by the Deputy for Strengthening Research And Development.

6. **Standards for community service facilities and infrastructure** are the minimum criteria about means And infrastructure Which required For support process devotion to community in order to fulfill the results of community service at the university high level to facilitate community service related to field applications knowledge from study programs managed by universities and target areas of activity. Facilities and infrastructure devotion to public is means college tall Which utilized also for the learning process and research activities and must meet quality standards, safety work, health, comfort, and security.
7. **Community service management standards** are the minimum criteria regarding planning, implementation, control, monitoring and evaluation, as well as reporting activities community service carried out by work units in institutional form Which on duty For manage devotion to public with form Institution devotion to public, or institution study And devotion to public, or other similar forms according to the needs and provisions of the university. Institution Community service is required to a) prepare and develop program plans community service in accordance with the community service strategic plan College; b) prepare and develop regulations, guidelines and guarantee systems quality internal community service activities; c) facilitate the implementation of activities devotion to public; d) carry out monitoring, evaluation implementation, And dissemination of service results to the community; e) give awards to implementers devotion to public Which achievement, f) utilize means And infrastructure community service at other institutions through collaboration; f) carry out analysis needs relating to the number, type and specifications of service facilities and infrastructure to the community; and g) compiling and submitting service activity reports to public which it manages to higher education database.
8. **Funding standards and financing of community service** are criteria minimum sources and mechanisms for funding and financing community service through internal university funds, government funding, collaboration with other institutions, both at home and abroad, or funds from the public. Funding is used for finance planning, implementation, control, monitoring And evaluation, reporting, And results community service. Mechanism funding And financing devotion to society that must be regulated based on the provisions in higher education. College is mandatory providing management funds including increasing the capacity of community service implementers public. Universities are not permitted to take *fees* from service providers to public.

So that the goals and standards of research and community service in higher education can be achieved achieved, Deputy for Strengthening Research and Development, cq Directorate of Research and Community Service Public (DRPM) push And facilitate para lecturer in carry out activity study And devotion to public To use support enhancement quality education tall, Power competitive nation, And well-being people in a way programmed And sustainable. Program study

And devotion to public on DRPM covers grove knowledge as loaded in Attachment 1.

Besides develop various program study And devotion to public direct to universities, DRPM also always builds collaboration with various partner institutions, both at national and international level. At the national level, cooperation is carried out with institution government, like ministry/non-ministerial, government area, And institution society. DRPM also continues to develop cooperation with Indonesian universities institution research international, association science, And institution education in various country.

Apart from the mono-year research funding program, since 1992 DRPM has been in place issued various expected long-term (multi-year) research funding programs can produce outer Which truly quality And beneficial for development And public welfare. Starting in 2011, a partial decentralization program was implemented Management of research activities is delegated to universities. this policy expected can more increase culture research for para lecturer as well as stimulate formation groups of reliable researchers evenly throughout Indonesian universities. College Higher education institutions are also required to develop superior research programs to take advantage expertise, means And infrastructure Which There is in college tall aligned with need local, national and international development. Meanwhile, to answer the challenges more wide And nature strategic, DRPM Keep going develop program Study Competitive National whose management done by DRPM.

Implementation policy decentralization has capable grow superiority study in College. Research excellence in higher education based on focus areas has been achieved mapped. The results of this mapping are used as a basis for providing assignments in accordance with superior areas of research owned by forming a research consortium. Research assignments to college high ones own competence in field Which strategic Also held For support Ministry of Research and Technology/BRIN policy.

The research decentralization policy is essentially the delegation of duties and authority to universities in managing research to create a conducive academic climate for carry out research activities in a quality, programmed and sustainable manner. Giving authority management study to college tall on Finally will produce independence institutional study in college tall in manage study in a way transparent, accountable and objective. To support the program for granting management authority research to universities so that it runs well, DRPM has made various efforts, Which covers things following:

1. research performance mapping that has classified universities into four groups, namely Independent, Main, Intermediate and Assisted groups. This grouping is used as base in giving authority And allocation fund study. Mapping performance research is carried out every three years, with the hope that each university will continues to strive to improve its research performance in accordance with existing indicators set;

2. preparation mechanism authority management study to college tall as baseoperational;
3. preparation System Guarantee Quality Study College Tall (SPMPPT);
4. preparation criteria And mechanism appointment evaluator internal college tall as well as determination system selection proposal; And
5. preparation mechanism monitoring And implementation evaluation study.

In line with the research program, DRPM gives authority to universities to manage funding program devotion to public in a way more autonomy through program decentralization in accordance with cluster performance devotion college tall. With consider institutional capacity and interests, universities can be tasked with carrying out activities devotion to public.

Along with the increasingly complex and broad scope of research and service implementation to the community in higher education, starting in 2012, DRPM (then the Directorate of Research and Community Service Directorate General of Higher Education) develops a research management system and devotion public based technology information And communication (ICT). System the named System Information Study And Devotion to Public Which furthermore called Simlitabmas. With Simlitabmas, the process of submitting and selecting proposals, monitoring and evaluation implementation, report end, use budget, as well as reporting results study And devotion to society can well managed so transparency, efficiency And accountability can guaranteed.

CHAPTER II

MANAGEMENT STUDY AND DEVOTION TO PUBLIC

2.1. Introduction

In line with his role as facilitator, strengthener and empowerer, Deputy for Strengthening Research and Development strives to continue to oversee research and community service in College. Management of research and community service in higher education directed For:

- a. realize research excellence And devotion to public at college tall;
- b. increase Power competitive college tall in field study And devotion to public on level national And international;
- c. increase number participation lecturer in carry out study And devotion to public quality;
- d. increase capacity management study And devotion to public in college tall; And
- e. functioning potency college tall in sustain Power competitive nation.

2.2. Program Funding Study And Devotion to Public

Research programs organized by DRPM for lecturers in tertiary institutions include 3 categories, namely National Competitive Research, Decentralized Research, and Research Assignment. Each category consists on the research scheme as following:

A. Category Study Competitive National

1. Scheme Study Base (PD)
2. Scheme Study Applied (PT)
3. Scheme Study Development (PP)
4. Scheme Study Lecturer Beginner (PDP)
5. Scheme Study Cooperation Between College Tall (PKPT)
6. Scheme Study Postgraduate (PPS)

B. Category Study Decentralization

1. Scheme Study Base Superior College Tall (PDUPT)
2. Scheme Study Applied Superior College Tall (PTUPT)
3. Scheme Study Development Superior College Tall (PPUPT)

C. Category Study Assignment

1. Scheme Consortium Research Superior College (CREW-PT)
2. Scheme Study Strategic Policy (KKS)
3. Scheme *World Class Research* (WCR)
4. Scheme Research Partnership (RK)

Entire scheme study in on directed refers on ten field focus, theme research, And topic priority research. The ten focus areas referred to are presented in Appendix 2. Authority research proposals are carried out based on higher education clusters as in Table 2.1.

Table 2. 1 Proposal Study Based on Cluster College

Category And Scheme Study	Manager	Cluster College Tall			
		Indepen dent	Main	Interm ediate	Built
A. Category Competitive National					
1. Scheme Study Base (PD)	DRPM	√	√	√	√
2. Scheme Study Applied (PT)	DRPM	√	√	√	√
3. Scheme Study Development(PP)	DRPM	√	√	√	√
4. Scheme Study Lecturer Beginner (PDP)	DRPM	-	-	-	√
5. Scheme Study Cooperation Between College High (PKPT)	DRPM	-	-	√	√
6. Scheme Study Postgraduate(PPS)	DRPM	√	√	√	√
B. Category Study Decentralization					
1. Scheme Study Superior Basics College High (PDUPT)	PT	√	√	√	-
2. Applied Research Scheme Higher Education Excellence(PTUPT)	PT	√	√	√	-
3. Scheme Researcha Development Higher Education Excellence(PPUPT)	PT	√	√	√	-
C. Category Study Assignment					
1. Research Consortium Scheme Higher Education Excellence(CREW-PT)	DRPM	√	√	-	-
2. Scheme Study Strategic Policy (KKS)	DRPM	√	√	√	√
3. Scheme <i>World Class Research</i> (WCR)	DRPM	√	√	√	√
4. Scheme Partnership Research (RK)	DRPM	√	√	√	√

Program Devotion to Public Which held by DRPM For lecturer in collegetall covers category and Devotion Program to Public as follows:

A. Category Competitive National

1. Program Partnership Public (PKM)
2. Program Partnership Public Stimulus (PKMS)
3. Program Studying Work Real Learning And Empowerment Public (KKN-PPM)
4. Program Development Entrepreneurship (PPK)
5. Program Development Product Superior Area (PPPUD)
6. Program Development Business Product Intellectual Campus (PPUPIK)
7. Program Development Village Partner (PPDM)
8. Program Regional Partnership (PKW)

B. Category Decentralization

Program Empowerment Public Superior College Tall (PPMUPT)

C. Category Assignment

Program Application of Science and Technology to Public (PPIM)

Authority management And proposal devotion to public based on clustercollege height is set accordingly on Table 2.2.

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

Category And Program Devotion toPublic	Manager	Cluster College Tall			
		Superio r	Very Good	Satisfying	Not enough Satisfying
A. Category Competitive National					
1. Program Partnership Public (PKM);	DRPM	√	√	√	√
2. Partnership Program Stimulus Society (PKMS);	DRPM	-	-	-	√
3. Program Studying WorkReal Learning and Empowerment Community (KKN-PPM).	DRPM	√	√	√	√
4. Program Development Entrepreneurship (PPK);	DRPM	√	√	√	√
5. Development Program Product Superior Area (PPPUD)	DRPM	√	√	√	√
6. Development Program Business Product IntellectualCampus (PPUPIK);	DRPM	√	√	√	√
7. Program Development Village Partner (PPDM);	DRPM	√	√	√	√
8. Program Partnership Region (PKW)	DRPM	√	√	√	√
B. Category Decentralization					
Program Empowerment Superior Society College Tall (PPMUPT)	PT	√	√	√	-
C. Category Assignment					
Science and Technology Application Program to Public (PPIM)	DRPM	√	√	√	√

2.3. Provision General

Implementation of research and community service programs must refer to standards Guaranteeing the quality of research and community service in higher education in accordance with established signs. In this regard, DRPM stipulates provisions general implementation of research and community service programs which are described as following.

- a. The head researcher/executor of the service is a permanent lecturer at a university under the Ministry Education And Culture Which have Number Parent Lecturer National (NIDN) or NumberParent Special Lecturer (NIDK).
- b. Member researcher/executor devotion is lecturer Which have NIDN or NIDK and/orNo lecturer.
- c. Proposal done through Simlitabmas (<http://simlitabmas.ristekdikti.go.id>) And must get agreement from Leader Institution Study And Devotion to Public (LPPM), Research Institute, Community Service Institute or other designation kind where the lecturer serves as a lecturer still.
- d. Every lecturer can propose two proposal study (One proposal as chairman And One proposal as member or two proposal as members) and two proposal devotion to public (One proposal as chairman And one suggestion as member or two proposal as member).
- e. Applicants who have an h- *Index* ≥ 3 in the social-humanities field with a minimum of 3 articles as writer main or *corresponding author* on databases reputable; And h- *Index* ≥ 5 For field science-technology with minimum 5 article as writer main or *corresponding author* on reputable databases, you can submit research proposals up to no more than four proposals (two as chairman and two as members; or one as chairman and three as member; or four as members); or
- f. Applicants who have 1 *granted patent* and/or 5 registered patents both in the social- humanities nor field science-technology, can submit proposal study until No more of four proposals (two as chairman and two as members; or one as chairman and three as member; or four as members); or
- g. The applicant owns monumental works of art/ performing arts in accordance with Regulation Minister of Research, Technology and Higher Education Number 20 of 2017 (point 7) or works Other monumentalists can submit research proposals of up to no more than four proposals (two as chairman and two as members; or one as chairman and three as members; or four as members); or
- h. Proposer Which own script academic For Invite – Invite or Regulation Area (Regional Regulation) or urgent texts for Government Regulations and Presidential Regulations that have been entered discussion holder interest government Which proven with letter sign accept from holder interest, can submit proposal study until No more from four proposal (two as chairman and two as members; or one as chairman and three as members; or four as members).
- i. Specifically for the Postgraduate Research scheme, applicants can submit a maximum of five proposal good as chairman or members do not including provision point e until h.
- j. If study or devotion Which stopped before the time consequence negligence researcher/executor devotion or proven obtain funding double or propose

return study or devotion Which has funded previously, so chairman researcher/executor The service is not permitted to propose research or service that is the source The funding is from DRPM for 2 consecutive years and is required to return the funds Which already received to cash country.

- k. Institute for Research and Community Service (LPPM), Research Institute, Institute Community Service or other similar designations are required to be carried out internal supervision (monitoring and evaluation) of all research and service activities to the community in each PT by referring to the quality assurance system applies.
- l. Researchers and community service implementers are required to keep daily notes during implementation study or devotion to public. Notes Daily containing notes about implementation research or community service in accordance with the stages of the research process or community service. Daily Notes are submitted to Simlitabmas as part of completeness of documents for conducting research or community service. Researcher and implementers of community service are also required to create a *Logbook*. The *logbook* contains notes details about substance study or devotion to public Which covers material, data, method, analysis, results, And etc Which considered important. *Logbook* saved by researcher or executor devotion to public Which can made proof in IP application.
- m. Researchers or service implementers who fail to meet the output according to the target scheme may be subject to sanctions.
- n. Accountability fund study refers on provision SBK year budget Which applies Which determined by the Minister of Finance.
- o. Researchers or service providers are required to include an *acknowledgment* that states source funding (that is: Directorate Research And Devotion Public, Deputy Field Strengthening Research and Development, Ministry of Research, Technology / National Research and Innovation Agency Republic of Indonesia) in every form of research output in the form of scientific publications, papers Which presentations, or posters.
- p. The Research and Community Service Program supports the Independent Learning-Campus program Independent in activity learning study for student with notes in its implementation adapt Book Guide Independent Campus-Learning Independent Which published by Directorate General Education Tall, Ministry Education And Culture.
- q. In order to increase research capacity and research standards in universities as well implement the provisions in Article 54 of the Minister of Education and Culture Regulation Number 3 Year 2020 about Standard National College Tall Which oblige college tall For provide fund study internal, so college Tall must provide fund companion study as big as 10% from fund study Which given by DRPM For allscheme and confirmed on stages approval by LPPM.

2.4. Stages Management Study

By general, stages activity study covers announcement, proposal, selection/appointment, determination, implementation, monitoring And evaluation, reporting, And evaluation output. Timetable all stages activity the be delivered by DRPM through page

http://simlitabmas.ristekdikti.go.id and/or through media other. Distribution authority every stages research based on higher education research performance groups and institutional status arranged as on Table 2.3.

Table 2. 3 Distribution of Authority in Research Stages Based on Performance Groups Study College and Status Higher Education Institutions

No	Stages Implementation Study	CLUSTER AND INSTITUTIONAL COLLEGE TALL									
		INDEPENDENT			MAIN			MADYA		BUILDING	
		PTNBH	PTN BLU / Satker	PTS	PTNBH	PTN BLU / Satker	PTS	PTN BLU / Satker	PTS	PTN BLU / Satker	PTS
1	Announcement	DRPM			DRPM			DRPM		DRPM	
2	Proposal:										
	a. Competitive	√	√	√	√	√	√	√	√	√	√
	b. Decentralization	√	√	√	√	√	√	√	√	There isn't any	
3	Selection / Appointment										
	a. Evaluation Document										
	• Scheme Competitive	DRPM		DRPM And blocks grants	DRPM		DRPM		DRPM		
	• Scheme Decentralization	√	√		√	√	√	√	There isn't any		
	b. Discussion And visitation										
	• Scheme Competitive	DRPM		DRPM			DRPM		DRPM		
	• Scheme Decentralization	√	√	√	√	√	√	√	There isn't any		
c. Recommendation	Proposed institution (special scheme decentralization)		Proposed institution (special scheme decentralization)			There isn't any		There isn't any			
4	Determination	DRPM			DRPM			DRPM		DRPM	
5	Implementation										
	a. Contract	DIRECTOR GENERAL RISBANG - PT	DRPM - PT	DRPM - LL Higher Education - PT	DIRECTOR GENERAL RISBANG - PT	DRPM - PT	DRPM - LL Higher Education - PT	DRPM - PT	DRPM - LL Dikti-PT	DRPM - PT	DRPM - LL Higher Education - PT
	b. Thawing Fund										
	• to Institution	DEPUTY RISBANG	DRPM		DEPUTY RISBANG	DRPM		DRPM		DRPM	
	• to researcher	LPPM	LPPM	PT-LPPM	LPPM		PT-LPPM	LPPM	PT-LPPM	LPPM	PT-LPPM
• Wipe progress	√	√	√	√	√	√	DRPM		DRPM		
6	Supervision (monitoring and evaluation)										
	a. Decentralization										
	• Researcher	√	√	√	√	√	√	DRPM	DRPM	No There is	
	• Institution	DRPM	DRPM	DRPM	DRPM	DRPM	DRPM	No There is		No There is	
	b. Competitive National										
• Researcher	√	DRPM	DRPM	DRPM	DRPM	DRPM	DRPM	DRPM	DRPM	DRPM	
• Institution	DRPM	No There is		DRPM	No There is		No There is		No There is		
7	Reporting										
	a. Decentralization										
	• Researcher	to institution And Simlitabmas			√	√	√	√	√	No There is	
	• Institutional	√	√	√	√	√	√	No There is		No There is	
	c. Competitive National										
• Researcher	to the Institution & Simlitabmas	√	√	√	√	√	√	√	√	√	
• Institutional	√	No There is		√	No There is		No There is		No There is		

8	Output assessment implementation Study	Managed Institution And reported an to DRPM	Institutionally managed And reported to DRPM for decentralization, managed by the institution And DRPM For competitive national	Managed Institution And DRPM	DRPM	DRPM
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Furthermore, each stage of research implementation as shown in Table 2.3 can be explained more carry on with see aspect performance study college tall, status institutional

college tall, And scheme study as following:

2.4.1. Stage Announcement

The research management cycle begins with DRPM announcing acceptance of the research proposal in a way online through Simlitabmas. Announcement reception proposal attached with book guide study along with book guide technical proposal through Simlitabmas. College Height/Institution Higher Education Services informs the acceptance of proposals to lecturers/researchers in the scope it works each each.

2.4.2. Stage Proposal

Proposals are made by lecturers by accessing Simlitabmas according to their authority universities based on higher education research performance clusters. Cluster universities independent, main And intermediate own authority propose scheme competitive national And decentralization, whereas cluster built only own authority propose scheme competitive national. Details procedure proposal through Simlitabmas arranged more carry on on Chapter 3.

2.4.3. Stage Selection/Appointment

2.4.3.1. Stage Selection

Selection proposal done by team evaluator and/or *reviewer* in a way online through Simlitabmas. For scheme Study Development, Good on program competitive national nor decentralization, Which get away on selection online next with discussion And visitation/visit field to institution partner. Authority selection proposal Which owned college tall based on cluster performance study college with the following conditions:

A. College Tall Cluster Independent

Selection proposal lecturer from college tall cluster independent follow provision as following:

1. Independent cluster higher education institution with institutional status as an incorporated higher education institution law (PTNBH cluster Independent) do selection proposal study decentralization And autonomous national competitiveness based on targets and funds allocated by DRPM Ministry of Research and Technology/BRIN in *block form grant* to each PTNBH cluster Independent.
2. Selection proposal study PTNBH cluster You can be independent done by *reviewer* internal.
3. Non-PTNBH independent cluster higher education institutions (PT) carry out research proposal selection independently independent for decentralized research.
4. Selection proposal study decentralization PT non PTNBH can done by *reviewer* internal.
5. Non-PTNBH PTs provide recommendations for proposed decentralized research that will be funded to DRPM based on the selection results.
6. DRPM selects research proposals for proposed national competitive research by PT non-PTNBH.

B. College Tall Cluster Main

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

1. Main cluster tertiary institutions with institutional status as institutional tertiary institutions law PTNBH (PTNBH cluster Main) do selection proposal study decentralization in a way autonomous.
2. Selection proposal study PTNBH can done by *reviewer* internal.
3. Proposal study competitive national Which proposed by PTNBH selected by DRPM.
4. PTNBH's decentralized and nationally competitive research funding is through a *block mechanism grants* .
5. PT cluster main non PTNBH do proposal selection study decentralization in a way independent.
6. Selection proposal study decentralization PT cluster main non PTNBH can done by combined *reviewer* internal and national *reviewer* .
7. PT cluster main non PTNBH give recommendation proposal study decentralization Which worthy funded to DRPM, based on the selection results.
8. DRPM do selection proposal study for research competitive national Which proposed by PT cluster main non-PTNBH.

C. College Tall Cluster Intermediate

Selection proposal lecturer from college tall middle cluster follow provision as following:

1. Selection proposal study scheme decentralization done by combined *reviewer* internal And *reviewer* national (external) Which lifted by DRPM.
2. *Reviewers* external Which appointed by PT with knowledge DRPM.
3. DRPM do selection proposal study For study competitive national.

D. College Tall Cluster Built

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

2.4.3.2. Stage Appointment

The appointment stage is carried out to determine the research and research team that will be appointed with mechanism assignment. Mechanime assignment This earmarked for study Which seen strategic in accordance competence institutions and team researcher with provision as following:

- a. Researcher assigned For do study with base letter assignment from DRPM.
- b. Researcher convey proposal to DRPM in accordance with assignment.
- c. Proposal study with mechanism appointment still assessed by Committee Evaluation and/or *Reviewers* For assess feasibility magnitude budget Which poured in news program.
- d. News program the submitted to DRPM as base consideration determination.

2.4.4. 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 to be funded, based on results selection.
- b. DRPM set proposal study as following:

1. study decentralization PT cluster Independent And Main non PTNBH;
 2. PTNBH cluster Main based on committee recommendation evaluator and/or *reviewers* ;
 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.

2.4.5. 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 announced through Simlitabmas by DRPM.
- c. Signing contract study done quick after announcement determination reception proposal.
- d. The process of signing contracts and disbursing research funds based on institutional status college tall based on pattern management finance, that is PTNBH, PTN-BLU, PTN Satker, or PTS.
- e. Signing contract PTNBH held between Minister Research and Technology/BRIN And Leader PT.
- f. Leader PT PTNBH or LPPM or designation other make contract assignment to chairman researcher.
- g. Contract signing PT non PTNBH held between DRPM with College Tall(For PTN)/Institution Higher Education Services (for PTS).
- h. Implementation study refers on contract study.
- i. Contract Study at least containing:
 1. Official signatory contract
 2. Base creation/space scope contract
 3. Amount fund And mechanism melting fund study
 4. Period the contract applies
 5. Target Outer
 6. Right And obligation
 7. Reporting study
 8. Monitoring And evaluation
 9. Change team executor And substance study
 10. Tax
 11. Riches Intellectual
 12. *Force majeure*
 13. Penalty
 14. Dispute

2.4.6. Stage Monitoring And Evaluation

Target monitoring And evaluation covers researcher And organizer study (institution), each each comply with the following provisions;

a. Monitoring And Evaluation Researcher

1. Implementation study must supervised by PT in form activity monitoring And evaluation.
2. PTNBH cluster Independent do monitoring And evaluation scheme decentralization And competitive national in a way internal.
3. Mandiri cluster non-PTNBH PTs carry out monitoring and evaluation of decentralization schemes in a way internal.
4. PTNBH And non PTNBH cluster Main do monitoring And evaluation scheme decentralization in a way internal.
5. Monitoring and evaluation is carried out by *reviewers* , and implementation of each research title must be monitored and evaluated by 2 certified *reviewers* or in accordance with applicable regulations set by DRPM.
6. Monitoring And evaluation by PT can done by *reviewer* internal.
7. *reviewers* are appointed by the Chancellor by following the requirements explained on section 2.9.
8. DRPM monitors and evaluates national competitive schemes for non-PTNBH PTs cluster Mandiri and PTNBH apart from the Mandiri cluster.
9. Implementation of monitoring and evaluation of PT's national decentralization and/or competitive schemes cluster Intermediate And Built done in a way external with *reviewer* external Which liftedby DRPM.
10. DRPM facilitate needs *reviewer* PT, especially For *reviewer* external for PTcluster Intermediate and Building.
11. Results monitoring And evaluation be delivered to DRPM through Simlitabmas.

b. Monitoring And Evaluation Institution

1. DRPM organize monitoring And evaluation institution For implementation study inPT cluster Independent or Main.
2. Monitoring And evaluation institution done on PTNBH cluster Independent on implementationscheme decentralized research And nationally competitive.
3. Monitoring And evaluation institution done on PT cluster Independent non PTNBH on implementation decentralized research scheme.
4. Monitoring And evaluation institution done on PTNBH And non PTNBH cluster Main on implementation decentralized research scheme.
5. Activity monitoring And evaluation institution done by team monitoring And evaluation institution appointed by DRPM.
6. Form Evaluation Monitoring And Evaluation served in Book research guide
7. Team monitoring And institutional evaluation must report to DRPM through Simlitabmas.
8. DRPM must give feedback to institutions For enhancement guarantee qualityWhich sustainable.

2.4.7. Stage Reporting

Researcher obliged give report progress, report end year, And report end study comply with the following conditions.

- a. The Research Team Leader is required to report on the progress of research output and diary research activities in accordance deadline specified through Simlitabmas.
- b. Chairman Team Researcher must make Progress report And Report End Study.
- c. The Head of the Research Team is required to make a Statement of No Assets (for those who do not exist assets)/News Program Hand it over Accept Asset (For Which own asset) follow format Which determined (appropriate report format with Guide Study applicable).
- d. PT cluster Independent And Main must report performance study the institution through Simlitabmas.

2.4.8. Stage Evaluation Results Study

Stage evaluation results study follow provision as following:

- a. Researcher must convey report results study Which is report end implementation research and other research outputs that have been promised to LPPM or designation other.
- b. The assessment is carried out by the Assessment Committee and/or Research Output *Reviewers* to assess feasibility of conducting research based on reports of research results and output achievements results other research.
- c. Committee Evaluation and/or *Reviewers* Output Study give recommendation to LPPM or other designation/DRPM form results assessment consisting of:
 1. percentage level success study in accordance with proposal Which promised; promised;
 2. suggestion And input related suitability budget study Which has given to resultsstudy;
 3. suggestion And input related to sustainability study; And
 4. recommendation For get cost outer addition.
- d. Implementation contract study Which in accordance with rule scientific And provision contract research cannot be declared a failure. Assessment of the fulfillment of the scientific principles of the contract study done based on recommendation output *reviewer* study.
- e. Results evaluation And recommendation poured in news program For be delivered to LPPM or other designation/DRPM.

2.5. Management Devotion To Public

In general, the stages of research implementation as described above also apply to implementation devotion to public. Activity devotion to public managed directly by DRPM Deputy for Strengthening Research and Development for national competitions and assignments and managed by PT for a decentralization scheme. Management of community service funding follows research funding patterns, namely by grouping universities based on on service performance to public each college.

A tentative schedule for all stages of research management and community service is presented on Table 2.4. Table 2.5 serve summary condition proposal, selection, And implementation

research based on funding schemes. Table 2.6 provides a summary of proposal requirements from every scheme funding devotion to 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. Funding Scheme, Implementation Team, Time and Service Funding to Society presented on Table 2.9.

Table 2. 4 Timetable Tentative Implementation Program Study And Devotion to Public

No	Description Activity	Month to											
		1	2	3	4	5	6	7	8	9	10	11	12
		Proposal New											
1	Announcement Proposal			■	■								
2	Proposal				■	■							
3	Evaluation proposal						■	■	■				
4	Discussion proposal and visits field team expert to proposer/proposing unit(If There is)								■	■	■		
6	Determination of the proposal Funded											■	■
		Funding Activity walk											
7	Announcement of proposal funded	■											
8	Contract		■										
9	Implementation			■	■	■	■	■	■	■	■	■	
10	Report progress								■	■	■	■	
11	Monitoring and evaluation internal PT								■	■	■	■	
12	Monitoring and evaluation external									■	■	■	
13	Final report											■	■
14	Seminar Results /Evaluation outer											■	■
15	Submission of proposals Advanced											■	■

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

STAGES MANAGEMENT		CATEGORY STUDY											
		COMPETITIVE NATIONAL					DECENTRALIZATIO N			ASSIGNMENT			
		PD	PT	PP	PDP	PKPT	PPS	PDUPT	PTUPT	PPUPT	KRU-PT	KKS	WCR
Proposalin a way online	Charging identity proposer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Charging identity proposal study	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Fill in completeness proposal in accordance scheme	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Agreement leader units	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Selection	Evaluation proposal	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Discussion proposal And visit field			✓					✓				
	Determination winner	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Implementati on	Charging notes daily, logbook And Report progress	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Monitoring And evaluation internal	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Monitoring And evaluation external	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Reporting	Final report	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Evaluation results	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Charging And evaluation proposal advanced	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓

Information:

PD = Basic Research; PT= Applied Research; PP = Development Research; PDP = Beginner Lecturer Research; PKPT = Inter-University Collaborative Research; PPS = Postgraduate Research; PDUPT= Basic Research of Higher Education Excellence; PTUPT = Applied Research of Higher Education; PPUPT = Development Research Superior College Tall; CREW-PT= Consortium Leading Research College Tall; KKS = Study Policy Strategic; WCR = *World Class Research* ; R.K = Research Partnership .

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

Funding Stages in each Scheme Devotion to Public		PKM	PKMS	KKN-PPM	PPK	PPPUD	PPUPIK	PPDM	PKW	PPMUPT*	PPIM
Proposalin a way online	Charging identity proposer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Charging identity proposal	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Fill in completeness proposal according to the scheme	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Agreement leader units	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Selection	Evaluation proposal	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Discussion of proposals and visit field				✓	✓	✓	✓	✓	✓	
	Determination winner	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Implementati on	Charging notes daily, logbook and Reports progress	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Monitoring and evaluation Internal	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Monitoring and evaluation External	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Reporting	Final report	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Evaluation results	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Filling and assessment proposal advanced				✓	✓	✓	✓	✓	✓	

Information:

PKM = Program Partnership Public; PKMS = Program Partnership Public Stimulus; KKN-PPM = Program Studying Work Real - Learning And Empowerment Public; PPK = Programs Development Entrepreneurship; PPPUD = Program Development Featured product Area ; PPUPIK = Program Development Business Product Intellectual Campus ; PPDM = Partner Village Development Program; PKW = Regional Partnership Program; PPMUPT = Leading Higher Education Community Empowerment Program; PPIM = Program Application of Science and Technology to Public.

*) Evaluation proposal, discussion proposal, And visit field held by college tall proposer

Table 2. 7 Summary Scheme Funding, Team Researcher, And Time Study

Scheme Funding	Condition Team Researcher	Time (year)
A. STUDY COMPETITIVE NATIONAL		
1. Basic Research Scheme (PD)	<ul style="list-style-type: none"> • Chairman proposer educated S3 with minimum position functional Assistant Expert, or educated S2 with position functional at least Lector. • The head of the proposer has a track record of at least two publications article in databases indexed reputable and/or journal national accredited ranking 1-2 as writer First or <i>corresponding author</i> ; or three books resulting from research ISBN as writer First Which published by publisher member IKAPI/ equivalent or publisher international. • Member proposer 1-2 person. 	2-3
2. Research Scheme Applied (PT)	<ul style="list-style-type: none"> • The chairman of the proposer has a doctoral degree with a functional position Minimum Expert Assistant, or Master's degree with position functional minimum Lector. • The head of the proposer has a track record of at least two publications article in databases indexed reputable and/or journal national accredited ranking 1-2 as writer First or <i>corresponding author</i> ; or three books resulting from research ISBN as writer First Which published by publisher member IKAPI/ equivalent or publisher international ; or have at least one KI (patent/patent simple minimum registered And other certified) . • KI Which intended points b is KI Which protect substance research results but do not include book copyright not the result of research, articles, reports, theses, theses, dissertations,guide, And document the like. • Have potential user partners who are relevant to the product study; Which proven with letter statement (support) which contains willingness to be a user of the results study. There is funding support from partners mark plus from proposal. • Member proposer 1-2 person. 	2-3

Scheme Funding		Condition Team Researcher	Time (year)
3. Research Scheme Development (PP)		<ul style="list-style-type: none"> The chairman of the proposer has a doctoral degree with a functional position Minimum Expert Assistant, or Master's degree with position functional minimum Lector. The head of the proposer has a track record of at least five publications article in databases indexed reputable as writer Firstor <i>corresponding author</i> . Chairman proposer must own patent/ patent simple registered or <i>granted</i> or KI other Which certified with related substances proposal study. Especially for the arts sector, the chief proposer must have rights copyright, excluding copyright of books not the result of research, article, report, thesis, thesis, dissertation, guide, And documentthe like. Own partner investors Which proven with letter statement Which containing commitment fund participation by partners in the form of <i>in cash</i> at a minimum of 10% of the funds Which submitted. Member proposer 2-3 person. 	3
4. Lecturer Research SchemeBeginner (PDP)		<ul style="list-style-type: none"> Chairman proposer educated S2 with position functional maximum Expert Assistant or does not yet have a positionfunctional. Member proposer 1-2 person. Proposer only can get scheme PDP as much twotimes as chairman. 	1
5. Job Research Scheme Same Between Universities High (PKPT)		<ul style="list-style-type: none"> Team Researcher Proposer (TPP) consists on chairman And maximumtwo members. Chairman TPP educated maximum S-2 with position functional maximum Lector. Cluster performance study College tall TPM minimum from klister main. TPM consists on a chairman and one member, both of them educated S-3. Chairman researcher TPM minimum have 5 publications on internationally reputable journal as first author or <i>corresponding author</i> or one KI registered. Proposal study made in a way together between TPP And TPM. 	2
6. Scheme Study Postgraduate (PPS)	Study Master's Thesis (PTM)	<ul style="list-style-type: none"> Proposer is lecturer still college high, titleddoctor (S-3). Member proposer consists on lecturer mentor servant(If There is) And One student master his guidance. 	1
	Study Dissertation Doctor (PDD)	<ul style="list-style-type: none"> The applicant is a permanent university lecturer, with a degree doctorate (S-3), and has program student guidance doctor from in and/or outside country, Good program <i>doctor by course</i> nor <i>doctor by research</i> . The lead proposer has a minimum of two publication experiences article as the first author or <i>corresponding author</i> in journal international reputable. Member team consists on <i>co-promoter</i> And One students doctor his guidance. 	1-2
	Study Education Masters	<ul style="list-style-type: none"> Chairman proposer is promoter from student program PMDSU Which Still active And Already stated passed lectures Semester 1, And currently go through studying in 	

Scheme Funding		Condition Team Researcher	Time (year)
	Going to Doctor Bachelor Superior (PMDSU)	<p>Semester 2 as well as will start study in year Which currently walk.</p> <ul style="list-style-type: none"> • The head of the proposer has $h\ index \geq 2$ which is obtained from institution indexer international reputable And own record research trail Which very Good. • Member proposer is <i>co-promoter</i> And student program PMDSU , with Division of tasks clear between team proposer Which involved as well as Approved by Which concerned. 	3
	Study Post Doctorate (PPD)	<ul style="list-style-type: none"> • Chairman proposer is lecturer senior educated doctor with position academic minimum Lector Head And own $h\ index \geq 5$ For field science And technology, $h\ index \geq 3$ For social sector ($h\ index$ from international indexing agencies reputable). • Post-doctoral researchers must already have publications in journals international reputable And passed most long 3 year on momentproposal. • Post-doctoral researchers obtain permission from the head of the institution place of work as proven by a certificate of receiptpermission For carry out post research doctor. • The proposing researcher must not be from the same institution as post researcher doctor. • The proposed research topic should be related to the field knowledge researcher post doctor And expertise researcher proposer. 	2
B. STUDY DECENTRALIZATION			
	1. Basic Research Scheme Higher Education Excellence(PDUPT)	<ul style="list-style-type: none"> • Chairman proposer educated S3 with minimum position functional Assistant Expert, or educated S2 with position functional at least Lector. • The head of the proposer has a track record of at least two publications articles in reputable indexed databases and/or two articles in journal national accredited ranking 1-2 as writer First or <i>corresponding author</i> ; or three book results study has an ISBN as writer First Which published by publisher member IKAPI/ equivalent or publisher international. • Member proposer 1-2 person. 	2-3
	2. Applied Research Scheme Higher Education Excellence(PTUPT)	<ul style="list-style-type: none"> • The chairman of the proposer has a doctoral degree with a functional position Minimum Expert Assistant, or Master's degree with position functional minimum Lector. • The head of the proposer has a track record of at least two publications article in databases indexed reputable and/or journal national accredited ranking 1-2 as writer First or corresponding author; or three books resulting from research ISBN as writer First Which published by publisher member IKAPI/ equivalent or publisher international ; or have at least one KI (patent/patent simple minimum registered And other certified) .. • KI Which intended points b is KI Which protect substance results study However No including Right Create book not the result of research, articles, reports, theses, theses, dissertations,guide, and similar documents. 	2-3

Scheme Funding	Condition Team Researcher	Time (year)
	<ul style="list-style-type: none"> • Have potential user partners who are relevant to the product study; Which proven with letter statement (support) which contains willingness to be a user of the results study. There is funding support from partners mark plus from proposal. • Member proposer 1-2 person. 	
3. Research Scheme Flagship Development College Tall (PPUPT)	<ul style="list-style-type: none"> • The chairman of the proposer has a doctoral degree with a functional position Minimum Expert Assistant, or Master's degree with position functional minimum Lector. • The head of the proposer has a track record of at least five publications article in databases indexed reputable as writer First or <i>corresponding author</i> is proven by including URLs article intended. • Chairman proposer must own patent/ patent simple registered or <i>granted</i> or KI other Which certified with related substances proposal study. • Especially for the arts sector, the chief proposer must have rights copyright, excluding copyright of books not the result of research, article, report, thesis, thesis, dissertation, guide, And documentthe like. • Own partner investors Which proven with letter statement Which containing commitment fund participation by partners in the form of <i>in cash</i> at a minimum of 10% of the funds Which submitted. • Member proposer 2-3 person. 	3
C. STUDY ASSIGNMENT		
1. Research Consortium Scheme Higher Education Excellence(CREW-PT)	<ul style="list-style-type: none"> • Chairman team KRU-PT compile <i>work breakdown structures</i> (WBS) and <i>work packages</i> and integrating components product each member team. • The chairman of the proposer has a doctoral degree with a functional position minimum Lector. • The head of the proposer has a track record of at least five publications article in databases indexed reputable as writer Firstor <i>corresponding author</i> . • Chairman the proposer must own patent registered or <i>granted</i> related substance proposal study. • Especially for the arts sector, the chief proposer must have rights copyright, excluding copyright of books not the result of research, article, report, thesis, thesis, dissertation, guide, And documentthe like. • Own partner investors Which proven with letter statement Which containing commitment fund participation by partners in the form of <i>in cash</i> at a minimum of 10% of the funds Which submitted. • The minimum number of proposing members is 3 people who come from at least 2 consortium member universities (minimum 1 member originate from college tall Which The same with chairman proposer). 	3
2. Policy Study Scheme Strategic (KKS)	<ul style="list-style-type: none"> • Chairman proposer educated S3 in accordance skill in grove knowledge field assigned strategy with minimumposition Lector Head. • Chairman proposer own record footsteps publication form article 	1

Scheme Funding	Condition Team Researcher	Time (year)
	in databases indexed reputable at least two article as writer first or <i>corresponding author</i> . <ul style="list-style-type: none"> Member proposer 2-5 person. 	
3. <i>World Class Scheme Research</i> (WCR)	<ul style="list-style-type: none"> The proposer has an <i>h-index</i> ≥ 5 with publications in the form article in journal indexed on databases reputable as <i>first author</i> or <i>corresponding author</i> of at least one article in Q1 or five article on Q2. Chairman proposer educated S3. The proposing member has a doctoral degree, comes from a university tall chairman proposer, College other, or institution R&D. Member proposer minimum 2 person. 	1-3
4. Partnership Research Scheme (RK)	<ul style="list-style-type: none"> Chairman proposer educated S3 with minimum position Functional Expert Assistant, or Master's degree with position functional at least Lector. Member proposer 1-2 person. Get assignment from Ministry of Research and Technology/BRIN 	1-3

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

Scheme Funding	Reference SBK Research	Time (year)	
A. STUDY COMPETITIVE NATIONAL			
1	Scheme Study Base (PD)	SBK Research Base	2-3
2	Scheme Study Applied (PT)	SBK Applied Research	2-3
3	Scheme Study Development (PP)	SBK Development Research	3
4	Scheme Study Lecturer Beginner (PDP)	SBK Research Coaching/Capacity	1
5	Scheme Study Work Same Between College Tall (PKPT)	SBK Research Base	2
6	Scheme Study Postgraduate (PPS)		
	- Study Thesis Masters (PTM)	SBK Research Base	1
	- Study Dissertation Doctor (PDD)	SBK Research Base	1-2
	- Study Education Masters Going to Doctor Bachelor Superior (PMDSU)	SBK Research Base	3
	- Study Post Doctor	SBK Research Base	2
B. STUDY DECENTRALIZATION			
7	Scheme Study Base Superior College Tall (PDUPT)	SBK Research Base	2-3
8	Scheme Study Applied Superior College Tall (PTUPT)	SBK Applied Research	2-3
9	Scheme Study Development Superior College Tall (PPUPT)	SBK Development Research	3
C. STUDY ASSIGNMENT			
10	Scheme Consortium Research Superior College Tall (CREW-PT)	SBK Development Research	3
11	Scheme Study Policy Strategic (KKS)	SBK Study Actual Strategic	1
12	Scheme <i>World Class Research</i> (WCR)	SBK Research Base	1-3
13	Scheme Partnership Research	SBK Basic Research or SBK Applied Research	1-3

Table 2. 9 Funding Schemes, Implementation Team, Time, and Service FundingPublic

Scheme Devotion to Public	Team Executor	Time (year)	Cost (million Rp)		
			DRPM*	PT**	Partner* *
A. COMPETITIVE NATIONAL					
1. Community Partnership Program(PKM)	Chairman with maximum 2 member	1	50		
2. Community Partnership Program Stimulus (PKMS)	Chairman with maximum 2 member	1	25		
3. Program Studying Work Real - Learning and Empowerment Public (KKN-PPM)	Chairman with maximum 2 member	1	50		
4. Development Program Entrepreneurship (PPK)	Chairman with maximum 3 member	3	150	20	
5. Product Development Program Superior Area (PPPUD)	Chairman with maximum 3 member	3	150		10
6. Business development program Product Intellectual Campus (PPUPIK)	Chairman with maximum 3 member	3	200	30	
7. Partner Village Development Program(PPDM)	Chairman with maximum 3 member	3	150	10	
8. Program Partnership Region (PKW)	Chairman with maximum 3 member	3	150		100
B. CATEGORY DECENTRALIZATION					
Community Empowerment Program Superior College Tall (PPMUPT)	Chairman with maximum 3 member	3	150		
C. CATEGORY ASSIGNMENT					
Science and Technology Application Program to Public (PPIM)	Chairman with maximum 3 member	1	150		

Information:

* Cost Which proposed to DRPM minimum 60% from fund maximum set each scheme

** Contribution minimum in the form of *in cash* or *in kind*

2.6. Authority Management Study And Devotion to Public

In carry out management study And Devotion to public, need There is guidelines authority Which clear. Guide This required as reference for college tall in formulate research management planning and community service public.

2.6.1. Obligation DRPM Deputy Field Strengthening Research And Development

Obligations of DRPM Deputy for Strengthening Research and Development in managing research and community service to College communities are as follows:

- Develop and establish research and community service norms at the level nationally in the format of a Research Quality Assurance System and Community Service College Tall.
- Develop and determine Key Performance Indicators (IKU) for Research and Service public.
- Set allocation budget study And devotion to public.
- Organize funding study competitive national, study decentralization, And study assignment.

- e. Organize funding devotion to public competitive national, decentralization, And assignment.
- f. Compile And set procedure operational standard (POST) For implementation funding study And devotion to public Which held by DRPM.
- g. Carry out monitoring And evaluation implementation study And devotion to public as arranged on part 2.2.
- h. Carry out coaching And facilitate enhancement quality study And devotion to public so that capable compete in level national And international.
- i. Carry out management complaint in level national.
- j. Compile and manage research and community service *databases* start from proposal, evaluation proposal in a way online, determination winner, monitoring And evaluation, And achievements performance study And devotion to public in accordance with indicator performance main (IKU) and activity performance indicators (IKK) that are relevant to research activities and devotion to public Which done in a way online through <http://simlitabmas.ristekdikti.go.id>.

2.6.2. Obligation College Tall

Obligation college tall in management study And devotion to public cover things following:

- a. Carrying out research management and community service as regulated on section 2.2.
- b. Develop a research strategic plan (research strategic plan) and community service (strategic plan devotion to society) in order to improve quality And quantity study and devotion to public.
- c. Determine research and community service performance indicators that are in accordance with IKU Which determined by DRPM.
- d. Compile guidelines development And management study And devotion to public with reference to standard norm SPMPT.
- e. Encourage the formation of groups of researchers and implementers of community service Empower national competitiveness and international.
- f. Develop system base data study And devotion to public Which covers achievements performance research and community service in level college tall.
- g. Carry out contract study And devotion to public between college tall And researcher/executor devotion.
- h. Report results activity to DRPM through Simlitabmas.

2.6.3. Obligation Institution Service Education Tall

Obligation Service Agency Education Tall in management study And Devotion to community in higher education includes things following:

- a. Carry out management study And devotion to public in accordance authority Which is given by DRPM.
- b. Represent DRPM in contract study And devotion to public with college tall private (PTS).
- c. Help DRPM in coordinate activity coaching And money study And

devotion to public For PTS Which need coaching.

- d. Carrying out assignments from DRPM for managing research schemes and devotion to public certain.

2.7. Indicator Performance Study

Research control is carried out through determining key performance indicators that are determined regularly national. Every university is required to prepare a plan to achieve key research performance with reference to the KPI which is measured based on performance mapping results, as shown in the table 2.10.

Table 2. 10 Indicators Performance Study

No	Outer Type		Indicator Achievements			
			TS**	TS+1	TS+2	TS+n
1	Article scientific loaded in journal	International				
		National accredited				
		National No accredited				
2	Article scientific loaded in proceedings	International				
		National				
		Local				
3	(<i>Keynote Speaker/Invited</i>) in meeting scientific	International				
		National				
		Local				
4	Keynote speaker/guest(<i>Visiting Lecturer</i>)	International				
5	Riches Intellectual (KI)	Patent				
		Patent simple				
		Copyright				
		Trademark				
		Trade secrets				
		Design product industry				
		Indication geographical				
		Protection varieties plant				
		Design system location circuit integrated				
6	Book (ISBN)					
7	<i>Book-chapter</i> (ISBN)					
8	Amount of Cooperation FundsStudy	International				
		National				
		Regional				
9	Number participation lecturer*					
10	Document <i>feasibility study</i>					
11	<i>Business plan</i>					
12	Academic texts (<i>policy briefs</i> , policy recommendations, or modelspolicy strategic)					

* Amount lecturer Which involved in study shared total lecturer stay in 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. Indicator Performance Devotion To Public

Control activity devotion to public done through determination indicator performance main ones determined nationally. Every university is required to prepare an achievement plan the main performance of community service by referring to the KPI which is measured based on results mapping performance, as stated on Table 2.11.

Table 2. 11 Indicators Performance Devotion To Public

No	Type Outer	Indicator Achievements	Year			
			TS**	TS+1	TS+2	TS+n
1	Publication in journal scientific print or electronic	Article in Journal International				
		Article in National Journal Accredited				
		Article in National Journal No Accredited				
2	Scientific articles published in printed proceedings or electronic	International				
		National				
		Local				
3	Article in media printing period or electronic	National				
		Local				
4	Documentation on implementation	Videos activity				
5	(<i>Keynote Speakers / Invited</i>) in meeting scientific	International				
		National				
		Local				
6	Guest speaker (<i>Visiting Lecturer</i>)	International				
7	Intellectual Property (KI)	Patent				
		Patent Simple				
		Protection Variety Plant				
		Copyright				
		Brand Trade				
		Confidential Trade				
		Design Product Industry				
Indication Geographical						
8	Book	Book ber ISBN				
9	<i>Book chapters</i>					
10	Non-Productive Partners Economy	His knowledge increase				
		His skills increase				
		His health increase				
		His income increase				
		The service increase				
11	Productive Partners Economics/Education Tall	His knowledge increase				
		His skills increase				
		Quality the product increase				
		Amount the product increase				
		Type the product increase				
		Capacity production increase				
		Succeed do export				
		Successfully carry out intermarketing Island				
Amount asset increase						

	Amount turnover increase				
--	--------------------------	--	--	--	--

No	Type Outer	Indicator Achievements	Year			
			TS**	TS+1	TS+2	TS+n
		Amount power it works increase				
		Management abilities increase				
		The advantages increase				
		<i>Income generating</i> PT increase				
		Product certified				
		Product standardized				
		Units business body law				
		Amount businessman new independent				
12	Number participation lecturer*					

* Number of lecturers which are involved in devotion to public shared total lecturer still college tall

** T.S = Current year

Study in a way Specific Also must mention level readiness or maturity outer Which produced in accordance with Minister of Research, Technology and Higher Education Regulation Number 42 of 2016 about Measurement And Determination Level Readiness Technology And Decision Director General Strengthening Research and Development Number 603/E1.2/2016 concerning Guidelines for Achievement Indicators Level Technology Readiness as described in Attachment 3.

2.9. Committee Evaluation and/or Reviewers Study And Devotion to Public Internal College

Committee Evaluation and/or *reviewer* Study And Devotion to Public internal college High level selects proposals in accordance with the provisions set by DRPM. Committee internal higher education research and community service assessment/ *reviewers* must fulfil a number condition. Condition *reviewer* study internal college tall intended includes:

- have responsibility, integrity, Honest, obey code ethics *reviewers* , And capable carry out tasks as *reviewer* ;
- educated doctorate;
- have position functional as low as possible Lector;
- Experienced in the field of research at least twice as head of research scale national And or ever get scale research international;
- Experienced in scientific publications in reputable indexed international journals and/or national accredited ranking 1/2 as writer main (*first author*) or writer correspondence (*corresponding author*) minimum in two article title;
- Experienced as a speaker in international scientific seminars and/or scientific seminars national; And
- takes priority Which own h- *index* from institution indexer international Which reputable, experience in writing teaching materials and having KI.

Condition *reviewer* Devotion to Public internal college tall includes:

- have responsibility, integrity, Honest, obey code ethics *reviewers* , And capable carry out tasks as *reviewer* ;
- educated doctor with position functional as low as possible Lector; or S2 with position functional Associate Professor

- c. experienced in field Devotion to Public at least Once One time as chairman executor activity multi year and once in the activity mono year;
- d. experienced in publication scientific on journal international And or national 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. takes priority Which own h- *index* from the indexing agency international Which reputable, experience in writing teaching materials and holding KI.

Mechanism appointment *reviewer* study And devotion to public internal college all are as follows:

- a. Institution study And devotion to public announce in a way open reception prospective *reviewers* study and devotion to public.
- b. Candidate *reviewer* register self or registered by party other to institution study And devotion to public.
- c. Selection candidate *reviewer* based on criteria the in on in accordance with field skill Which required.
- d. Institution study And devotion to public announce results selection *reviewer* internal in a way open.
- e. Internal research and community service *reviewers* are determined through a Decree Chancellor/Director/Chairman of higher education with a term of service of one year and can be extended in accordance with needs.
- f. Universities are required to submit the names of research and service *reviewers* to Public internally to DRPM with upload SK determination *reviewer* to Simlitabmas.

2.10. Financing Study And Devotion to Public

Research funding refers to the Minister of Finance Regulation (PMK) concerning Cost Standards Output (SBK), Which load policy unit cost For SBK Sub-Output Study. Regulation the arrange budgeting activity study with consider type, field research, and the resulting sub-outputs. Basically research funding consists of two financing, namely SBK Research and SBK Addition.

SBK research For scheme study through funding BOPTN consists on SBK Research Development/Capacity, Basic Research SBK, Applied Research SBK, Development Research SBK, and SBK Actual Strategic Study as shown in Table 2.8. Research SBK is the maximum limit cost Which can Approved For reach target outer must. SBK Research must explained follow Current Input Cost Standards (SBM). Additional SBK is the maximum limit cost that can be approved for each additional outcome.

Proposer required make plan budget cost (WED) study with refers on SBK Research. Justification WED made based on need study in accordance with the characteristics, category, scheme, and research focus areas. The RAB details contain components for material purchases, collection data, data analysis, equipment rental, reporting, mandatory external and additional output.

CHAPTER III MANAGEMENT THROUGH SIMLITABMAS

As explained in CHAPTER II, the stages of research management and community service public covers stages announcement, proposal, selection /appointment, determination, implementation, monitoring and evaluation, reporting, and output assessment. Each stage is managed through Simlitabmas. Process proposal, evaluation, monitoring And evaluation, And reporting study And community service through Simlitabmas explained as following.

3.1. Proposal Study

I. IDENTITY

- a. Identity Chief Proposer
 1. NIDN/NIDK
 2. Name researcher
 3. Rank And Position
 4. E-mail proposer
 5. Stuffing *curriculum vitae* (CV) with show history data study proposer form stuffing data publication And acquisition KI (title, type And status KI, as well as include URLs If there are). The researcher's data history is in the form of a researcher ID or a *link / URL* containing it researcher's track record listed in national or international indexing institutions online (Sinta, Scopus, Thompson, Google Scholar, Microsoft Academic, etc.). Record footsteps researcher can also shown in online form others, for example personal webpage.
 6. Stuffing ID Sinta
 7. Stuffing h- *Index*
 8. Stuffing member researcher Lecturer/Non Lecturer like stuffing 1-7 in on
- b. Identity proposal
 1. Clump Knowledge
 2. Group Macro Research
 3. Field/Research Focus Study
 4. Theme study
 5. Topic Study
 6. Title Study
 7. Status Level Readiness Technology (TKT) study And target Which want to achieved
 8. Scheme study
 9. Year proposal And long study
 10. Cost Which proposed in year walk
 11. SBK study
 12. Total cost study
- c. Institution Proposer
 1. Name institutional units proposer,
 2. Mention position units.
 3. Name leader
 4. NIP/NIK leader

II. SUMMARY

A research summary of no more than 500 words containing the research background, objectives and stages method study, outer Which targeted, as well as description TKT study Which proposed. In summary Also written down maximum 5 words key.

III. BACKGROUND BEHIND

The research background is no more than 500 words containing the background and problems what will be researched, specific objectives, and urgency of the research. In this section it is necessary to explain the description about specification specifically related to scheme.

IV. REVIEW REFERENCES

Overview References No more from 1000 say with put forward *state of the art* And map road (*road map*) in field Which researched. Chart And *road folder* made in form JPG/PNG Which Then inserted in stuffing This. Source library/reference primary Which relevant And Prioritize research results in scientific journals and/or the latest patents. Recommended use library sources last 10 years.

V. METHOD

Methods or ways to achieve the stated goals are written in no more than 600 words. This section is accompanied by a research flow diagram that illustrates what has been done held And Which will done during time Which proposed. Format diagram flow can in the form of a JPG/PNG file. The research chart must be made in its entirety with clear stages, starting from the beginning, what the process and outcomes are, and the targeted achievement indicators. In This section must also fill in the duties of each proposing member according to the research stages Which proposed.

VI. OUTDOOR AND TARGET ACHIEVEMENTS

In this section, the Applicant is required to fill in the mandatory and additional outputs, year of achievement, and status his achievements. Complete the publication output in the form of an article by stating the name of the journal and Name publisher Which aimed For outer 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 Sub-Output SBK Applicable research. Furthermore, the details of these costs must refer to the SBM Which applies. The size of the proposed budget depends on the scheme and research focus area The proposed. Details of costs in the proposal must include research SBK (these costs are already including cost achievement mandatory external and cost additional output Which will achieved).

VIII. TIMETABLE

Timetable study arranged based on timetable implementation study.

IX. LIST REFERENCES

List References arranged And written based on system number in accordance with order quotation.

Only References Which cited on proposal study Which be included in List References.

X. AGREEMENT OR STATEMENT PARTNER

Free-form partner agreement or statement that has been ratified by the partner with sign hand leader partner And stamp in on duty stamp Rp. 6000,- Then saved And uploaded in file form PDF with no more size from 1MB.

XI. AGREEMENT PROPOSAL

Proposal ended with confirmation delivery (*submission*) by proposer Which furthermore done agreement (*approval*) by leader units (LP/LPPM or designation other). Proposer will receive confirmation from Simlitabmas if the proposal has passed administration and approved by the unit leader. Unit leaders can form a team to carry out verification appropriateness administration intended. If the proposal is considered no worthy with reason Which Enough strong for example happen duplication proposal, No in accordance with strategic plan PT For scheme decentralization, or plagiarism of the proposal, then the unit leader may not approve the proposal by providing reason which was reported through Simlitabmas.

3.2. Proposal Devotion to Public

Lecturers who will submit proposals for community service activities must have account at Simlitabmas. Next, the proposer must log in to fill in the data online as following stages.

I. IDENTITY

a. Identity Chairman Proposer

1. NIDN/NIDK
2. Name executor
3. Rank And Position
4. Stuffing curriculum vitae (CV) with show history data proposer form stuffing data publication and acquisition of KI. The proposer's data history can be in the form of the proposer's ID or link/link/URL Which containing record footsteps proposer Which listed in institution online national or international indexers (Sinta, Scopus, Thompson, Google Scholar, Microsoft Academic, etc.). The applicant's track record can also be shown inform other online, for example personal webpage.
5. Stuffing ID Sinta
6. Stuffing member proposer, like stuffing 1-5 in on

b. Identity proposal

1. Title devotion to public
2. Scheme devotion to public Which chosen by proposer
3. Year proposal And long devotion to public
4. Cost Which proposed in current year
5. Total cost devotion to public
2. Targets achievements outer devotion to public

c. Institution Proposer

1. Name institutional units proposer
2. Mention position units

3. Name Leader
4. NIP/NIK leader

II. SUMMARY

A maximum proposal summary of 500 words containing the problem, solution and output target will be achieved in accordance with each community service scheme. Summary It also contains a careful and concise description of the proposed and written activity plan with one space apart.

III. INTRODUCTION

The introductory section is a maximum of 2000 words containing a description of the situation and problem analysis. Description complete part introduction on each scheme devotion to public described in Simlitabmas.

IV. SOLUTION PROBLEMS

This section consists of a maximum of 1500 words containing a description of all the solutions offered to solve the problems faced systematically. Full description of parts solution problem For each scheme devotion to public outlined on Simlitabmas.

V. METHOD IMPLEMENTATION

The maximum implementation method consists of 2000 words explaining the stages or steps. steps in implementing the solutions offered to overcome partner problems. Complete description of the implementation method section for each community service scheme community is described at Simlitabmas. In this section it is mandatory to fill in a description of your expertise and task each member of the service team to public.

VI. OUTDOOR AND TARGET ACHIEVEMENTS

In this section, the proposer is required to fill in the mandatory and additional outputs, year of achievement, and status his achievements. Just like research outputs, community service publication outputs Public articles in the form of articles are required to state the name of the journal for which they are intended and for outer form book must include name intended publisher.

VII. BUDGET

The budget justification is prepared in detail according to the format that is filled in directly via Simlitabmas.

VIII. TIMETABLE

Timetable devotion to public arranged in accordance stuffing on proposal in Simlitabmas.

IX. LIST REFERENCES

The bibliography is arranged and written based on a number system in the order of citation. Only literature cited in the community service proposals listed in List References.

X. AGREEMENT OR STATEMENT PARTNER

Free-form partner agreement or statement that has been ratified by the partner with sign hand leader partner And stamp in on seal Rp. 6000 Then saved And inserted in file form PDF with a size of no more than 1MB.

XI. DESCRIPTION SCIENCE AND TECHNOLOGY

Part This containing description maximum 500 say explain description science and technology Which will heldon partner.

XII. MAP LOCATION

This section contains a map of partner locations which is equipped with an explanation of the distance between partners and PTproposer.

XIII. PROCESS AGREEMENT PROPOSAL

Proposal ended with confirmation delivery (submission) by proposer Which furthermore done agreement (approval) by leader units (LPM/LPPM or designation other). Proposer will get confirmation from Simlitabmas if his proposal Already get away administration And Approved by leader units. Leader units can form team For verify the feasibility of the administration in question. If the proposal is deemed unfeasible with reason Which Enough strong for example happen duplication proposal, No in accordance with strategic plan PT for decentralization schemes, or plagiarism of proposals, the unit leadership may not approve proposal by giving reasons reported via Simlitabmas.

3.3. Evaluation

In accordance stages management study And devotion to public as has described in Chapter 2, assessment is carried out at the selection, implementation and reporting stages. On In the selection stage, proposals are assessed and discussions and assessments are carried out in the field. In stages implementation monitoring and evaluation assessments are carried out.

At the time of implementation and at the end of the implementation year, recipients of research and service funds to public required report progress implementation study And devotion to public. Report progress And report end year done with access And fill in achievements outer in accordance Which planned, use budget (For Devotion to Community), seminar results files at Simlitabmas by the head researcher/service implementer. On This stage assesses the results and assesses further proposals for the multi-year scheme. Evaluation selection, implementation, and reporting refers on Appendix 4.

CHAPTER IV STUDY COMPETITIVE NATIONAL

4.1. Scheme Study Base

4.1.1. Introduction

Based on Minister of Research, Technology and Higher Education Regulation Number 42 of 2016 about Measurement And Determination Level Readiness Technology, Study Base categorized as in research that produces basic principles of technology, concept formulation and/or applications technology, to proof *-of-concept* of important functions and/or characteristics analytical And experimental. Target from study This is it produces theory, method, or principle new policies used for scientific development. Basic Research can be oriented to an explanation or discovery (invention) in order to anticipate a symptom/phenomenon, rule, model, or postulate new Which support something process technology, health, agriculture, And etc in order to support applied research. This Basic Research Scheme can be carried out for collaborative research from within or outside the country. Overseas collaborative research can be carried out multilaterally or in the form of a consortium. In the process of measuring TKT, research results Base will is at in level 1 to with level 3 as explained on Attachment 3.

4.1.2. Objective Study

Objective Study Base as following:

- a. increase And push acceleration study base in college tall so that produce invention, Good method, theory new or principle policy new Which Not yet Once There is previously, on TKT measurement 1-3;
- b. improving the quality and competence of researchers in conducting basic research in universities tall;
- c. increase quality results study base And produce publication scientific in journal scientific international reputable; And
- d. increase And push ability researcher in college tall For cooperate with institution partner inside or outside country.

4.1.3. Outer Study

Outer must Study Base per year can in the form of:

- a. One article in journal international Which indexed on databases reputable; or
- b. One book results study with ISBN; or
- c. three article in proceedings Which indexed on databases reputable; or
- d. three book chapters Which published by publisher reputable And has an ISBN. Study This Alsoexpected can produce output addition according to Table 2.10.

4.1.4. Criteria Study

Criteria Study Base follow guidelines as following:

- a. study nature multi year, period time study 2–3 year And the outside will evaluatedevery year; And
- b. financing study For every the year follow provision funding based on fieldfocus referring to SBK Basic Research.

4.1.5. Condition Proposer

Condition proposer Study Base as following:

- a. chairman proposer educated S3 with minimum position functional Assistant Expert, or educated S2 with position functional at least Lector;
- b. chairman proposer own record footsteps publication minimum two article in databases indexed reputable and/or accredited national journal ranked 1-2 as first author or *Corresponding author* is proven by including the URL of the article in question; or three books results study has an ISBN as writer First Which published by publisher member IKAPI/ equivalent or international publishers; And
- c. member proposer 1-2 person.

4.2. Scheme Study Applied

4.2.1. Introduction

Study Applied is study Which addressed For get solution from something problem Which There is in public, industry, government as continuation from research base. Study Applied is model study Which more directed For create innovation And development science and technology. Study This oriented product science and technology Which has validated in environment laboratory/field or environment Which relevant. In process measurement TKT, results Study Applied will be at levels 4 to level 6.

Scheme Study Applied This can done For study cooperation from in or outside country. Study cooperation overseas can done in a way multilateral or in form consortium.

4.2.2. Objective Study

Objective Study Applied as following:

- a. increase ability researcher in environment college tall For produce productknowledge knowledge, technology, arts and culture;
- b. strengthen map road study Which nature multidisciplinary;
- c. build collaboration between college tall And partner user results study;
- d. increase And push ability researcher in college tall For cooperate withinstitution partner domestically or abroad; And
- e. get ownership KI product Science, technology, art, and culture.

4.2.3. Outer Study

The mandatory output of Applied Research can be in the form of Patents, Simple Patents, Copyrights, Protection Plant Varieties, Integrated Circuit Layout Design, or policy text with criteria each output stage as set out in Appendix 5. This research is also expectedcan produce additional output according to Table 2.10.

4.2.4. Criteria Study

Criteria Study Applied follow guidelines following:

- a. study nature multi year, period time study 2-3 year And outer will evaluated everyyear; And
- b. financing study follow provision funding based on field focus refers SBKStudy Applied.

4.2.5. Condition Proposer

Condition proposer Study Applied as following:

- a. chairman proposer educated S3 with position functional minimum Assistant Expert, or educated S2 with functional minimum Lecturer;
- b. chairman proposer own record footsteps publication minimum two article in databases indexed reputable and/or accredited national journal ranked 1-2 as first author or *Corresponding author* is proven by including the URL of the article in question; or three books results study has an ISBN as writer First Which published by publisher member IKAPI/ equivalent or publisher international; or minimum own One KI (patent/ patent simple minimum registered and others certified);
- c. KI Which intended points b is KI Which protect substance results study However No including Right Create book No results study, article, report, thesis, thesis, dissertation, guide, And similar documents;
- d. have a partner as proven by a statement (support) containing willingness as a user of research results. Having funding support from partners is an added value from the proposal;
- e. The partner institutions referred to in point d are potential user partners who are relevant to product study;
- f. member proposer 1-2 person.

4.3. Scheme Study Development

4.3.1. Introduction

Study Development addressed For reach development more carry on on stages model/product/prototype that has been tested try in the real environment. Study development is model study Which more directed For develop product commercial. In study This required involvement partner as investors. In process measurement TKT, results study development is at in levels TKT 7 until 9 (Attachment 3).

The Development Research Scheme can be carried out for collaborative research from within or outside country. Study foreign cooperation can done multilaterally or deep form consortium.

4.3.2. Objective Study

Objective Study Development as following:

- a. produce product knowledge knowledge, technology, art, And culture Which Ready applied Which characterized with TKT 7-9;
- b. realize map road technology or results research Which nature multidisciplinary Which produce product commercial;
- c. build partnership Academic, Business, Government, and Community (ABGC); And
- d. increase And push ability researcher in college tall For cooperate with institution partner domestically or abroad.

4.3.3. Outer Study

The mandatory output of Development Research can be in the form of industrial products or policy products with the criteria for each output stage are as set out in Appendix 5. This research also expected can produce output addition according to Table 2.10.

4.3.4. Criteria Study

Criteria Study Development follows provision following:

- a. Study Development nature multiyear with period time study 3 year.
- b. The output will be evaluated every year; And
- c. Financing study For every the year follow provision funding based on fieldfocus referring to SBK Development Research.

4.3.5. Condition Proposer

Condition proposer Study Development as following:

- a. chairman proposer educated S3 with position functional minimum Assistant Expert, or educated S2 with minimum functional position Lector;
- b. chairman proposer own record footsteps publication minimum five article in databases indexed reputable as writer First or *corresponding author* proven with include URLs the article in question;
- c. chairman proposer must own patent/ patent registered or *granted* or KI other Which certified with substance related to the research proposal;
- d. special For field art, chief proposer must have right create;
- e. right create Which intended points d is KI Which protect substance results study However does not include Copyright of books not the result of research, articles, reports, theses, theses, dissertations, guide, and similar documents;
- f. has an investor partner as proven by a statement letter containing a commitment participation of funds by partners in the form of cash at a minimum of 10% of the funds submitted; And
- g. member proposer 2-3 person.

4.4. Scheme Study Lecturer Beginner

4.4.1. Introduction

The Beginner Lecturer Research Program (PDP) is intended as an in-depth research activity in order to foster and direct novice researchers to improve their abilities in carry out study And publish results his research in journal scientific Good national and international.

In line with the research decentralization policy by the Deputy for Strengthening Research and Development, PDP is a research scheme intended for permanent lecturers Assisted cluster universities. It is hoped that this scheme can initiate map preparation avenues of research for the proposer. The research results for this scheme are at TKT levels 1 to 3 (Attachment 3).

4.4.2. Research purposes

Objective PDP as following:

- a. For build And increase ability research lecturer beginner;

- b. become a training tool for novice lecturers to publish the results of their research in either a national scientific journal, or an article in an international journal, or seminar proceedings international; And
- c. initiate preparation map road his research.

4.4.3. Outer Study

PDP's mandatory output is the publication of one scientific article in an accredited national journal ranked 1-6, or One article in journal international, or One article in proceedings seminar international. Study This expected to produce results additionally refer to Table 2.10.

4.4.4. Criteria Study

Criteria PDP follow provision following:

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

4.4.5. Condition Proposer

Condition proposer PDP as following:

- a. chairman proposer educated S2 with maximum position functional Assistant Expert or Not yet own functional;
- b. member proposer 1-2 person; And
- c. proposer only can get scheme PDP as much two time as chairman.

4.5. Scheme Study Cooperation Between College Tall

4.5.1. Introduction

Moment This, almost in all regency city Already stand institution education tall. Condition This very encouraging because higher education will be more accessible to the public. However thereby, there is a gap the quality of implementing the Tridharma higher education.

DRPM Deputy for Strengthening Research and Development has implemented various coaching programs for increase quality lecturer specifically field study. The result can seen with has development of research centers and leading research groups in various areas universities in Indonesia. These research groups, laboratories and research centers have have the ability and academic atmosphere that is conducive to development and implementation research well. However, the quality of results achieved by most universities is still poor relatively low.

DRPM endeavor For zoom out gap quality between college tall in field study by facilitating research collaboration between relatively newly developing research groups through the Inter-University Collaborative Research (PKPT) scheme. Proposing research team (TPP) PKPT originate from college tall cluster Intermediate And Built. TPP partner with college tall which has research centers and superior research groups (Team Researcher Partner/TPM). Expected through Work The same This quality study TPP can more improved. PKPT grouped into basic research with TKT 1-3.

4.5.2. Research purposes

Objective PKPT as following:

- a. give receptacle for lecturer/group researcher TPP so that can utilise means, skill,

- adopt, And imitate culture study TPM;
- b. intertwined cooperation between TPP And TPM in management study; And
- c. give TPP opportunities For do preparations continue studies S3 in institution TPM.

4.5.3. Outer Study

Outer must PKPT per year in the form of:

- a. One article in journal international Which indexed on databases reputable; or
- b. One book results study ber ISBN; or
- c. three article proceedings Which indexed on databases reputable; or
- d. three book chapters Which indexed on databases reputable And has an ISBN. Study This Alsoexpected can produce output addition according to Table 2.10.

4.5.4. Criteria Study

Criteria PKPT follow provision as following:

- a. proposal study is study Which can held And developed in institutionTPP after this research program is completed;
- b. institution TPM must own program S3 Which relevant with proposal study;
- c. period time study two year And done evaluation in end of year First; And
- d. financing PKPT refers on SBK Study Base.

4.5.5. Condition Proposer

Condition proposer PKPT as following:

- a. TPP consists on chairman And maximum two person member from college tall cluster Intermediate orBuilding;
- b. chairman TPP educated maximum S-2 with position functional maximum Lector;
- c. cluster performance college research tall TPM minimum from Cluster Main;
- d. TPM consists on a chairman And a member, both of them educated S-3;
- e. TPM's chief researcher has a minimum of 5 publications as first or *corresponding author* on journal of international reputation or one KI registered;
- f. proposal study made in a way together between TPP And TPM;
- g. proposal TPP must get agreement TPM through Simlitabmas; And
- h. No currently took office.

4.6. Scheme Study Postgraduate

4.6.1. Introduction

Study Postgraduate is study Which based institution And can followed by lecturer To use improving the quality of research, supervision (master level promoters and *co-promoters* and/or doctor), as well as For enhancement aspect competence And quality science graduate of as well as power lecturer at postgraduate institutions. One indicator of increasing the competence of graduates and staffteacher in institution postgraduate is ability For can write And publish results his research through articles in journals internationally reputable.

As its publication Letter Circular Director General Education Tall 152/E/T/2012 about enforcement obligation publication for graduate of until with level doctoral is step

strategically improve the quality of graduates. This is confirmed by the Minister of Research Regulation, Technology And Education Tall Number 44 Year 2015 about Standard National Education Tall as stated in Article 44 Paragraph (5) which requires "Research results that are not confidential, non-intrusive and/or non-harmful to public or national interests must be disseminated by means of seminars, publication, patenting, and/or other means can used For convey results study to public". Still in fill regulation minister namely in section Eight regarding Standards

Research Management, especially in Article 51 Paragraph (2) point b, one of which explains that "evaluation study most A little concerning aspect enhancement amount publication scientific". As the basis of the above policies and regulations, DRPM through a research scheme that emphasizes on productivity study And publication reputable international, acceleration solution master's and doctoral level final project research, as well as further research after the doctorate. Efforts to increase productivity study And the consequences with publication work scientific in higher education is providing assistance in carrying out research for postgraduate students. Wrong One method Which chosen is giving support funding study in program postgraduate covers Study Thesis Masters (PTM), Study Dissertation Doctor (PDD), Study Masters to Doctoral Education for Excellent Undergraduates (PMSDU), and Post-Doctoral Research (PPD).

Along with the increasing complexity of research management and in order to increase efficiency quality of research management in the future, the four schemes are integrated into Postgraduate Research. Themes in the Postgraduate Research scheme must refer to ten focus areas as in Appendix 2. Postgraduate Research is in ResearchBase with TKT targets 1-3.

4.6.2. Study Thesis Masters

4.6.2.1. Research purposes

Objective PTM as following:

- a. produce graduate of master Which capable compile idea, results thinking, And argument scientific or technical in a way responsible answer And based on ethics academic, as well as communicate it through media to public academic and public wide;
- b. increase amount And quality publication scientific Good in level national nor international;
- c. accelerate the completion of master's studies so as to increase the number and competence graduate of master's program; And
- d. creating a more dynamic and conducive academic climate in the higher education environment, so that connection between lecturer and student become more interactive and quality.

4.6.2.2. Outer Study

Outer must PTM is One article Which loaded in journal scientific national accredited ranks 1-3 or One article in international journal or One article on seminar proceedings internationally indexed reputable as first author student supervised and chair researcher as *corresponding author* . This research is also expected to produce results addition according to Table 2.10.

4.6.2.3. Criteria Study

Criteria PTM follow provision as following:

- a. proposal study is part from umbrella study mentor as material student master of guidance for proposers;
- b. student master intended on points a is student Which currently studies in college chairman's height proposer; And
- c. period time study during 1 year with magnitude cost maximum Rp. 40,000,000.

4.6.2.4. Condition Proposer

Condition proposer PTM as following:

- a. chairman proposer is lecturer still college tall, degree doctor (S-3) Which currently guide at least one student full-time master's degree; And
- b. member proposer consists on lecturer mentor servant (If There is) And One student master his guidance.

4.6.3. Study Dissertation Doctor

4.6.3.1. Research purposes

Objective PDD as following:

- a. produce doctoral graduates who are able to discover or develop theories/conceptions/ idea scientific new, give contribution on development, as well as practice knowledge knowledge and/or technology that pays attention to and applies humanities values in the field expertise, by producing scientific research based on scientific methodology, thinking logical, critical, systematic and creative, or produce capable applied doctoral graduates find, create, And give contribution new on development, as well as the practice of science and/or technology that pays attention to and applies values humanities in their field of expertise, by producing design work, prototypes or innovations technology worth plus or can used For solution problem based on thinking logical, critical, creative and wise;
- b. increase amount And quality publication scientific in level international;
- c. accelerate the completion of doctoral studies so as to increase the number and competence graduate of doctoral program; And
- d. create climate academic institution postgraduate Which more dynamic And conducive in environment universities, so that the relationship between lecturers and students becomes more interactive and quality.

4.6.3.2. Outer Study

The mandatory output of PDD per year is the publication of one scientific article per year as first author student Which guided And chairman researcher as *corresponding author* in journal internationally reputable. This research is also expected to produce additional appropriate outcomes Table 2.10.

4.6.3.3. Criteria Study

Criteria PDD follow provision as following:

- a. research proposal is part of the umbrella study as material dissertation minimum One student doctoral guidance for the proposer; And
- b. period time study 1-2 year with magnitude cost maximum Rp. 60,000,000 per year For finance student dissertation research his guidance.

4.6.3.4. Condition Proposer

Condition proposer PDD as following:

- a. The chairman of the proposer is a permanent university lecturer, holds a doctorate (S-3), and has guidance of doctoral program students from within and/or abroad, both doctoral programs by course or doctor by research;
- b. chairman the proposer has publication experience minimum two articles as first author or *corresponding author* in journal international reputable; And
- c. member team consists on *co-promoter* And one person student doctor his guidance.

4.6.4. Study Education Masters Going to Doctor Bachelor Superior

4.6.4.1. Research purposes

Objective PMDSU as following:

- a. finalize superior graduates so that the person concerned can complete the program doctor more quickly;
- b. produce doctoral graduates who are able to discover or develop theories/conceptions/ idea scientific new, give contribution on development, as well as practice knowledge knowledge and/or technology that pays attention to and applies humanities values in the field expertise, by producing scientific research based on scientific methodology, thinking logical, critical, systematic, and creative; And
- c. grow capacity postgraduate as center study producer innovation technology in line with progress science and technology.

4.6.4.2. Outer Study

PMDSU's mandatory output per year is the publication of one scientific article in an international journal reputable as writer First student Which guided And chairman researcher as *corresponding author* . This research is also expected to produce additional appropriate outcomes Table 2.10.

4.6.4.3. Criteria Study

Criteria PMDSU follow provision as following:

- a. proposal study is part from umbrella study as material dissertation student guidance proposer; And
- b. period time study 3 years with magnitude cost maximum Rp. 60,000,000,- per year.

4.6.4.4. Condition Proposer

Condition proposer PMDSU follow provision as following:

- a. chairman proposer is promoter from student program PMDSU Which Still active And Already

stated passed lectures Semester 1, And currently go through studying in Semester 2 as well as will start research in the current year;

- b. chairman proposer own *h-index* ≥ 2 Which obtained from institution indexer international reputable And own record footsteps study Which very Good; And
- c. member proposer is *co-promoter* And student program PMDSU, with distribution task Which clear between team proponents involved as well as approved by concerned.

4.6.5. Study Post Doctor

4.6.5.1. Research purposes

Objective PPD as following:

- a. facilitate lecturer senior For increase capacity study in the institution with give chance recruiting doctor young For carry out study And produce publication at the applicant's university;
- b. grow capacity postgraduate as center study producer innovation technology in line with advances in science and technology;
- c. facilitate formation Work The same research And publication between doctor young with lecturer senior Which has an excellent track record; And
- d. the formation of an academic atmosphere in postgraduate institutions so that it can increase the number and quality publication scientific at international level.

4.6.5.2. Outer Study

Outer must PPD per year form publication One article scientific in journal international reputable And One article scientific in proceedings international reputable as writer First researcher post doctor Which guided And chairman researcher as *corresponding author* . Study This Also expected can produce additional output according to Table 2.10.

4.6.5.3. Criteria Study

Criteria PPD follow provision as following:

- a. study proposed by lecturer senior together with researcher postdoctoral;
- b. study post doctor form study basic (TKT 1-3); And
- c. period time study 2 year And financing refers on SBK Study Base.

4.6.5.4. Condition Proposer

Condition proposer PPD follow provision as following:

- a. The head of the proposer is a lecturer with a doctorate degree with a minimum academic position of Lector Heads who have an *h-Index* ≥ 3 for the social-humanities field with a minimum of 3 articles as main author or *corresponding author* ; and *h-Index* ≥ 5 for the science-technology field with a minimum of 5 articles as the main author or *corresponding author* obtained from institution international indexer reputable;
- b. Post-doctoral researchers must already have publications in reputable international journals and graduate most long 3 years on at the time of proposal;
- c. Post-doctoral researchers obtain permission from the head of the institution where they work to be proven letter information about obtaining permission to carry out research post doctorate;

- d. researcher proposer No may come from institution Which together with researcher postdoctoral;
And
- e. topic study Which proposed must related with field knowledge researcher post doctor And
expertise proposing researcher.

CHAPTER V STUDY DECENTRALIZATION

5.1. Scheme Study Base Superior College Tall

5.1.1. Introduction

Based on Minister of Research, Technology and Higher Education Regulation Number 42 of 2016 about Measurement And Determination Level Readiness Technology, Study Base categorized as in research that produces basic principles of technology, concept formulation and/or applications technology, so that proof of concept (*proof-of-concept*) functions and/or important characteristics in a way analytical And experimental. In line with regulation minister the, scheme Study Base Higher Education Excellence (PDUPT) which is based on the superior fields contained in The Higher Education Research Strategic Plan (Renstra) has the target of producing theory, new methods, or policies used for scientific development. Basic Research can oriented towards explanation or discovery (invention) in order to anticipate a symptom/phenomenon, new rules, models, or postulates that support a technological, health, agricultural, etc. process others in order to support applied research. This PDUPT scheme can be used for: collaborative research from within or outside the country. Overseas collaborative research can be carried out in a way multilateral or in form consortium. In process measurement TKT, results PDUPT willis at at level 1 to level 3.

5.1.2. Research purposes

Objective PDUPT as following:

- a. increase And push acceleration study base in college tall so that produce inventions, whether methods, new theories or new policies that have never existed before previously, on TKT 1-3;
- b. improving the quality and competence of researchers in conducting basic research in universities tall;
- c. increase quality results study base And produce publication scientific in journal scientific international reputable; And
- d. increase And push ability researcher in college tall For cooperate with institution partner domestically or abroad.

5.1.3. Outer Study

Outer must PDUPT per year can in the form of:

- a. One article in journal international Which indexed on databases reputable; or
- b. One book results study has ISBN; or
- c. three article in proceedings Which indexed on databases reputable; or
- d. three book chapters Which published by publisher reputable And has an ISBN. Study This Alsoexpected can produce output addition according to Table 2.10.

5.1.4. Research Criteria

Criteria PDUPT as following:

- a. study nature multi year, period time study 2-3 year And the outside will evaluatedevery year; And

- b. financing study PDUPT refers SBK Study Base.

5.1.5. Condition Proposer

Condition proposer PDUPT as following:

- a. chairman proposer educated S3 with minimum position functional Assistant Expert, or educated S2 with position functional at least Lector;
- b. chairman proposer own record footsteps publication minimum two article in databases indexed reputable and/or accredited national journal ranked 1-2 as first author or *Corresponding author* is proven by including the URL of the article in question; or three books results study has an ISBN as writer First Which published by publisher member IKAPI/ equivalent or international publishers; And
- c. member proposer 1-2 person.

5.2. Scheme Study Applied Superior College Tall

5.2.1. Introduction

In line with the research decentralization policy, one of the objectives is to create research excellence in higher education through sustainable implementation of the Strategic Plan (Renstra) Study Which has owned each PT, Directorate Research And Devotion Public (DRPM) Deputy Field Strengthening Risbang looking need For provide Leading Higher Education Applied Research Program (PTUPT) as a forum for college tall For can carry out Strategic Plan The research. Study This oriented product science and technology that has been validated in a laboratory/field or relevant environment. In process measurement TKT, results PTUPT is located at level 4 up to you level 6.

Target end from study This is it produces innovation technology on fields superior (frontier) and socio-cultural engineering to improve sustainable development at the level local and national. The PTUPT scheme can be carried out for collaborative research from within or overseas. Overseas collaborative research can be carried out multilaterally or in the form of consortium.

5.2.2. Research purposes

Objective PTUPT as following:

- a. increase ability researcher in environment college tall For produce productknowledge knowledge, technology, arts and culture;
- b. strengthen map road study Which nature multidisciplinary;
- c. build collaboration between college tall And partner user results study;
- d. increase And push ability researcher in college tall For cooperate withinstitution partner domestically or abroad; And
- e. Get ownership KI product Science, technology, art, and culture.

5.2.3. Outer Study

Outer must PTUPT can in the form of a patent, Patent Simple, Right Create, Protection Variety Plants, Integrated Circuit Layout Design, or policy texts with their respective criteria stages outer as arranged on Attachment 5. Study This Also expected can produce additional outcomes according to Table 2.10.

5.2.4. Criteria Study

Criteria PTUPT follow guidelines following:

- a. study nature multi year, period time study 2-3 year And outer will evaluated every year;
- b. financing study PTUPT refers SBK Research Applied.

5.2.5. Condition Proposer

Condition proposer PTUPT as following:

- a. chairman proposer educated S3 with position functional minimum Assistant Expert, or educated S2 with functional minimum Lecturer;
- b. chairman proposer own record footsteps publication minimum two article in databases indexed reputable and/or accredited national journal ranked 1-2 as first author or *Corresponding author* is proven by including the URL of the article in question; or three books results study has an ISBN as writer First Which published by publisher member IKAPI/ equivalent or publisher international; or minimum own One KI (patent/ patent simple minimum registered and others certified);
- c. KI Which intended points b is KI Which protect substance results study However No including Right Create book No results study, article, report, thesis, thesis, dissertation, guide, And similar documents;
- d. have a partner as proven by a statement (support) containing willingness as a user of research results. Having funding support from partners is an added value from the proposal;
- e. The partner institutions referred to in point d are potential user partners who are relevant to product study;
- f. member 1-2 people proposing.

5.3. Scheme Study Development Superior College Tall

5.3.1. Introduction

Policy decentralization study expected capable create superiority study college higher education (PT) not only in terms of conducting basic or applied research but Also study development Which ends on downstream results study. Study Higher Education Excellence Development (PPUPT) is designed to facilitate development results study PT Which has done (basic/applied) so that can applied on user community. The PPUPT proposal must be able to explain its relationship to the Strategic Plan university research. This research must be focused and can be top-down or bottom-up. PPUPT addressed For reach development more carry on on stages model/product/prototype which has been tested in a real environment. Development research is a model research that is more directed towards developing commercial products. Partners can come from legal entity unit owned by the proposing university. In this research it is necessary involvement of partners as investors. In the process of measuring TKT, the results of development research is at TKT levels 7 to 9.

Development research schemes can be carried out for collaborative research from within or outside country. Study foreign cooperation can done multilaterally or deep form consortium.

5.3.2. Research purposes

Objective PPUPT as following:

- a. produce product knowledge knowledge, technology, art, And culture Which Ready applied Which characterized with TKT 7-9;
- b. strengthen map road study Which nature multidisciplinary Which produce product commercial;
- c. build partnership Academic, Business, Government, and Community (ABGC); And
- d. increase And push ability researcher in college tall For cooperate with institution partner domestically or abroad.

5.3.3. Outer Study

PPUPT mandatory outputs can be industrial products or policy products with respective criteria. each output stage is as set out in Appendix 5. It is also hoped that this research can produce additional outcomes according to Table 2.10.

5.3.4. Research Criteria

Criteria PPUPT as following:

- a. study nature multi year, period time study 3 year And outer will evaluated every year;
- b. financing PPUPT refers SBK Study Development.

5.3.5. Applicant Requirements

Condition PPUPT as following:

- a. chairman proposer educated S3 with position functional minimum Assistant Expert, or educated S2 with functional minimum Lecturer;
- b. chairman proposer own record footsteps publication minimum five article in databases indexed reputable as writer First or *corresponding author* proven with include URLs the article in question;
- c. chairman proposer must own patent/ patent simple registered or *granted* or KI other Which certified with substance related to the research proposal;
- d. special For field art, chief proposer must have right create;
- e. right create Which intended points d is KI Which protect substance results study However does not include Copyright of books not the result of research, articles, reports, theses, theses, dissertations, guide, and similar documents;
- f. has an investor partner as proven by a statement letter containing a commitment participation of funds by partners in the form of cash at a minimum of 10% of the funds submitted; And
- g. member proposer 2-3 person.

CHAPTER VI STUDY ASSIGNMENT

6.1. Scheme Consortium Research Superior College Tall

6.1.1. Introduction

The Deputy for Strengthening Research and Development has carried out research performance measurements college tall with see achievements all aspect on Standard National Study as arranged on Regulation Minister Research, Technology, And Education Tall Number 44 Year 2015 about Standard National Education Tall. Results evaluation performance This map college tall to in four groups, namely Independent Group, Main Group, Middle Group, and Group Built. From evaluation performance study This Also can mapped superiority field study every College. Based on the results of the strength analysis that has been identified in each universities, can then be given assignments to carry out research according to their strengths field of higher education research in the form of a consortium. Furthermore, funding this research called as Schema Research Consortium Higher Education Excellence (KRU-PT).

The KRU-PT scheme is a form of research funding program directed at increasing the productivity of commercialization/downstreaming of research products protected by Wealth Intellectual.

6.1.2. Objective Study

Objective KRU-PT as following:

- a. form or strengthen cooperation research consortium college tall with institution researchor industry on a field of 10 focal planes (Appendix 2);
- b. produce product knowledge knowledge, technology, art, And culture Which Ready applied Whichcharacterized with TKT 7-9.

6.1.3. Outer Study

KRUPT's mandatory output can be in the form of industrial products or policy products with respective criteria. each output stage is as set out in Appendix 5. It is also hoped that this research can produce additional outcomes according to Table 2.10.

6.1.4. Criteria Study Criteria

KRU-PT as following:

- a. research is proposed by one university as the lead proposer and involves each One proposing member each from at least two other universities and other outside institutions college tall;
- b. study nature multi-year, term research time 3 year;
- c. financing study KRU-PT refers SBK Study Development; And
- d. study must refers to ten Focus Plane Research (Attachment 2).

6.1.5. Applicant Requirements

Condition KRU-PT as following:

- a. DRPM determines universities that meet the requirements to be invited to take part in the selection on a superior field;

- b. KRU-PT chaired by College Tall Which own portfolio output results research bestbased on mapping superior research in higher education;
- c. chairman team KRU-PT compile work breakdown structures (WBS) And work packages as well asintegrate each team member's product components;
- d. chairman proposer educated S3 with functional minimum Lector;
- e. chairman proposer own record footsteps publication minimum five article in databases indexed reputable as writer First or *corresponding author* proven with include URLs the article in question;
- f. chairman proposer must own patent registered or *granted* related substance proposal study;
- g. special For field art, chief proposer must have right create;
- h. The copyright referred to in point g does not include the copyright of books, articles, reports, theses, theses, dissertation, guides, and similar documents;
- i. has an investor partner as proven by a statement letter containing a commitment participation of funds by partners in the form of cash at a minimum of 10% of the funds submitted; And
- j. member proposer minimum 3 person Which originate from minimum 2 college tall member consortium (minimum 1 member originate from college tall Which The same with chairman proposer).

6.2. Scheme Study Policy Strategic

6.2.1. Introduction

Policy making and implementation process at the Ministry of Research and Technology / Research Agency and National Innovation requires support from policy studies. This is intended as a policy taken can effectively answer existing problems in environmental dynamics strategies faced both internally and externally. Against this background, DRPM facilitate through scheme Study Policy Strategic (KKS). Scheme This expected can give academic foundation strong in determination strategic policy.

Study policy strategic can form study to policy Which executed or study to policy Which will taken. Study to policy Which Already There is and/or Which Already It is hoped that the implementation will provide a strong scientific basis for improvements Which required. Study to policy Which will taken expected can give base strong scientific in the process, context, and policy substance.

6.2.2. Objective Study

The aim of KKS is to find a solution to a problem that is considered important And urge For support performance Ministry Research And Technology / Body Research And InnovationNational.

6.2.3. Outer Study

The output of KKS is in the form of academic texts which can be in the form of policy briefs, policy recommendations, or model policy strategic towards something problem in accordance with the field assignment.

6.2.4. Research Criteria

Criteria KKS as following:

- a. DRPM pointing And give assignment to college tall as executor study

- with consider competence And resource Which owned;
- b. DRPM pointing a lecturer in college tall Which appointed as chairman team;
- c. chairman team Which appointed can form team Which originate from college tall other or institutionin outside college;
- d. team proposer submit proposal;
- e. period time KKS during 1 year; And
- f. financing Study Policy Strategic refers to SBK Study Strategic Actual.

6.2.5. Condition Proposer

Condition proposer KKS as following:

- a. chairman proposer educated S3 in accordance skill in grove knowledge field strategic Whichassigned with a minimum position of Associate Professor;
- b. chairman proposer own record footsteps publication form article in databases indexed reputableat least two article as a writer first or *corresponding author* ; And
- c. member proposers 2-5 person.

6.3. Scheme *World Class Research*

6.3.1. Introduction

Ministry Research And Technology / Body Research And Innovation National has endeavor hard push And facilitate college tall Indonesia so that enter group college tall elite world. Quacquarelli Symonds (QS), Wrong One institution rating university world, use six indicator main in determine ranking something university Which in a way objective represent reputation university. Sixth indicator the along with weight his assessment is as following: 1) reputation academic (40%); 2) reputation employee/employee (10%); 3) ratio faculty/students (20%); 4) citation per faculty (20%); 5) ratio student international (5%), ratio staff international (5%).

Amount citation is indicator Which get weight evaluation Enough big in ranking the. Therefore, improving the quality of article publications in reputable international journals is effort strategic For increase citation. In frame support ranking college tall Indonesia enter on 500 Quacquarelli Symonds World University Rankings (QS WUR 500) world's best, Deputy for Strengthening Research and Development provides research funding through a scheme *World Class Research* (WCR).

6.3.2. Research purposes

Objective WCR as following:

- a. increase quality And productivity publication article scientific academics college tall onjournal international reputable; And
- b. produce knowledge knowledge And technology Which superior.

6.3.3. Outer Study

WCR's mandatory output per year is the publication of one article in 200 reputable international journals best (Q1). Study This Also expected can produce outer addition in accordance Table 2.10

6.3.4. Research Criteria

Criteria WCR as following:

- a. period time study 1-3 years;
- b. financing study WCR referring to SBK Study Base; And
- c. study must refer to the Focus Plane Research as loaded on Attachment 2.

6.3.5. Condition Proposer

Condition proposer WCR as following:

- a. DRPM determines researchers who meet the requirements to be invited to take part in the selection process field focus;
- b. Proposer have $h\text{-index} \geq 5$ with publication form article in journal indexed on databases reputable as *the first author* or *corresponding author* of at least one article in Q1 or five article on Q2;
- c. chairman proposer educated S3;
- d. the proposing member has a doctoral degree, comes from the proposing chairman's university, college tall others, or institutions R&D; And
- e. member proposer minimum 2 person.

6.4. Scheme Research Partnership

6.4.1. Introduction

In Law Number 11 of 2019 concerning the National System of Science and Technology Technology in Article 71 and Article 72, the obligations of the institutional elements of Science and Technology are written Technology carries out partnerships in the implementation of Science and Technology for develop network Knowledge Knowledge And Technology. In line with mandate Invite – The Ministry of Research and Technology/National Research and Innovation Agency is responsible for this law answer on activity research in college taller than facet quantity and especially in terms of the quality. Until 2020 there were many competitive, decentralized and assignment research activities Which done by lecturers everywhere college high country and private. Based on data issued by the Intellectual Property Directorate, that 19.8% of research in Indonesia was conducted through international collaboration, 19.9% is collaboration between institutions in Indonesia, 53.2% cooperation between departments in one institution and the rest is done without involving the unit Work other. Impact citation Which generated Also Enough significant, Where study with cooperation internationally has a greater impact than what is done nationally. Likewise, the impact of research results that are collaborated nationally is more than international collaboration units in one institution and independent research.

To date, the Minister of Research and Technology/BRIN has collaborated with R&D or several ministries government And produce program study Work The same, Work The same And program Which Already generated until moment This among them is French -Indonesian Science and Technology Cooperation Program (SAME Nusantara), Newton Institutional Links (IL), Newton Fund Indonesia Impact Schemes (NFIIS), The Southeast Asia-Europe Joints Funding Schemes for Research and Innovation (SEA-EU JFS), Cooperation Indonesia – The Netherlands (NWO), eAsia Joint Research Program (eAsia JRP), Indonesia -Belarus Research Link- Joint Research Funding Scheme (ReLink JRFS), etc.

Based on this background, DRPM facilitates this collaborative research through the Partnership Research scheme. This assignment scheme is expected to facilitate research- study Cooperation in college tall with institution executor study Good in in nor outside country, use produce integrated research.

6.4.2. Objective Study

Objective Assignment Collaborative Research as following:

- a. form or develop cooperation research in college high with implementing institution research Good in the or outside country on something field of 10 fields focus (Appendix 2);
- b. increase And push ability researcher in college tall For cooperate with institution partner at home or abroad.
- c. produce product knowledge knowledge, technology, art, And culture Which Ready applied Which characterized with TKT 1-6.

6.4.3. Outer Study

Outer study determined after TKT measurement.

For TKT 1-3, mandatory external study per year can in the form of:

- a. One article in journal international Which indexed on databases reputable; or
- b. One book results study ber ISBN; or
- c. three article in proceedings indexed on databases reputable; or
- d. three book chapters Which published by publisher reputable And has an ISBN.

For TKT 4-6, mandatory external study per year can in the form of:

- a. Patent;
 - b. Patent Simple;
 - c. Right Create;
 - d. Protection Variety Plant;
 - e. Design System Location Circuit Integrated; or
 - f. Manuscript policy with criteria each stages outer as arranged on Attachment 5.
- Study This Also expected can produce outer addition in accordance Table 2.10.

6.4.4. Criteria Study

Criteria Assignment Research Cooperation as following:

- a. The research is multi-year in nature, the research period is 2-3 years and the outcomes will be evaluated every year;
- b. financing study For every the year follow provision funding based on field focus refers to Basic Research SBK (for TKT 1-3) and Applied Research SBK (for TKT4-6).
- c. study must refer to the Field Focus Research (Attachment 2).
- d. partner with institutions outside College proposer

6.4.5. Condition Proposer

Condition proposer Assignment Research cooperation as following:

- a. chairman proposer educated S3 with minimum position functional Assistant Expert, or educated S2 with position functional at least Lector;
- b. member proposer 1-2 person;
- c. get assignment from Ministry of Research and Technology/BRIN

CHAPTER VII DEVOTION TO PUBLIC COMPETITIVE NATIONAL

7.1. Program Partnership Public

7.1.1. Introduction

Directorate Research And Devotion Public (DRPM) Deputy Field Strengthening Risbang Ministry of Research and Technology/BRIN try apply paradigm new in activity devotion to a society that is problem-solving, comprehensive, meaningful, complete and sustainable (*sustainable*) with target Which No single. Things here it is Which become reason developed Community Partnership Program program (PKM).

Audience target program PKM is: 1) public Which productive in a way economy; 2) public Which Not yet productive in a way economical, but desire strong become entrepreneur; And 3) public which is not productive economy (general/ordinary society).

The target audience (partners) of economically productive communities such as: craftsmen groups, fishermen groups, farmer groups, livestock groups, each member of which has character economically productive. Home industry target partners (IRT) with business ownership individuals are required to have a minimum of 4 employees other than members family. Target partners that lead to productive economic fields are required to be group with amount member minimum 5 person, like group dasawisma, pokdarwis, group PKK, religious study groups, housewives groups ladder And etc.

Target partners in economically unproductive communities, for example schools (PAUD, SD, SMP, SMA/SMK), youth organizations, housewives groups, street children groups, RT/RW, hamlet, villages, Community Health Centers/Posyandu, Islamic Boarding Schools And etc.

Types of problems that must be addressed in the PKM program, especially productive communities in a way economy or candidate businessman new covers field production, management business And marketing. For activities that do not focus on the economic sector, detailed disclosure is mandatory problems that are prioritized to be resolved such as improving services, improving peace public, repair/help facility service and etc.

Activities carried out by PKM partners, both economically productive partners, lead to productive economy And partner No productive/social must consists from 2 field activity Which need expertise different.

7.1.2. Objective Activity PKM objectives as following:

- a. form/develop group society which independent in a way economy And social;
- b. help create peace, And comfort in social life; And
- c. increase Skills think, read And write or Skills other Whichneeded (*soft skills* and *hard skills*).

7.1.3. Outer Activity

Outer must PKM as following:

- a. One article scientific Which published through Journal ber ISSN or proceedings ber ISBN from

- seminar national;
 - b. One article on mass media print/electronic;
 - c. videos activity; And
 - d. increasing partner empowerment according to the problems faced referring to Table 2.11.
- Outer additional PKM can be other externals outside mandatory above.

7.1.4. Activity Criteria

Criteria PKM as following:

- a. science and technology Which applied from research result team proposer prioritized to be funded;
- b. PKM is program mono year with time period activity eight month;
- c. proposal fund maximum Rp. 50,000,000;
- d. own One partner target;
- e. involve two student;
- f. problem Which handled on partner minimum two field problem Which need expertise different;
And
- g. distance from college tall proposer maximum 200 km.

7.1.5. Condition Proposer

Condition proposer PKM as following:

- a. proposer own competence multidisciplinary in accordance with field Which proposed, minimum two competence, and it is possible to collaborate with college other;
- b. proposer only can carry out PKM as much three time as chairman; And
- c. team executor maximum three people (One chairman and two member).

7.2. Program Partnership Public Stimulus

7.2.1. Introduction

In line with the PT clustering policy based on community service performance, then DRPM designed a special scheme in an effort to encourage increased involvement of PT lecturers in Unsatisfactory cluster in the form of the Community Partnership Stimulus Program (PKMS) scheme. Scheme PKMS give stimulation PT in cluster Not enough Satisfying For can improve the performance of community service in higher education. Target audience PKMS programs can include: 1) economically productive communities; 2) society which not yet economically productive, but has a strong desire to become an entrepreneur; or 3) society Which not productive at all economy (general/ordinary society).

Partner target public Which productive in a way economy like industry House ladder (IRT), crafter, fisherman, farmer, breeder, And partner productive other. For partner public Which Not yet productive economically but desire strong become entrepreneur, required shaped group with 2-3 members. Community partners who are not economically productive can in the form of schools (PAUD, SD, SMP, SMA/SMK), youth organizations, groups of housewives, group children street, RT/RW, hamlet, village, Community Health Center/Posyandu, Boarding school And Which kind other.

Types of problems that must be addressed in the PKMS program, especially productive communities in a way economy or candidate businessman new covers field production, management or marketing.

Meanwhile, for non-productive partners, activities can take the form of handling health problems, blind literacy, or training according to partner needs.

Activities carried out at PKMS include at least one area of activity, but the proposing team must with at least two different expertise.

7.2.2. Activity Objectives

Objective PKMS as following:

- a. increase independence public in a way economy or social;
- b. help create peace, And comfort in social life; And
- c. increase Skills think, read And write or Skills other Which needed (*soft skills* and *hard skills*).

7.2.3. Outer Activity

Outer must PKMS as following:

- a. One article on mass media print/electronic;
- b. videos activity; And
- c. enhancement empowerment partner in accordance problem Which faced refer on Table 2.11.
- d. Outer addition PKMS can form outer other in outside mandatory external in on.

7.2.4. Criteria Activity

Criteria PKMS follow guidelines following:

- a. science and technology Which applied from results study team proposer prioritized For funded
- b. PKMS is program mono year with period time activity 6 (six) month;
- c. proposal fund maximum Rp. 25,000,000;
- d. own One partner target;
- e. involve two student;
- f. problem Which handled Enough One problem areas; And
- g. distance location partner maximum 100km from College proposer.

7.2.5. Condition Proposer

Condition proposer PKMS as following:

- a. team proposer own competence multidisciplinary in accordance with field Which proposed, minimum two competence;
- b. proposer only can carry it out PKMS as many as two times as chairman; And
- c. team executor maximum three people (One chairman And two member).

7.3. Program Studying Work Real Learning And Empowerment Public

7.3.1. Introduction

Program Studying Work Real (KKN), is activity field for student Which go through the final part of the S-1/D-4/Applied Bachelor's education program. This program is actually mandatory for all students, because this program is able to encourage student empathy and sympathy to community problems, and can contribute to solving problems Which There is in public. Program KKN give chance for student For get learning in field Which previously No obtained in seat studying. Besides That activity

KKN become form real contribution

Higher Education (PT) for industrial communities, local governments and community groups want to be independent economically and socially. This KKN program requires a supervisor Field (DPL) and students play an active role in finding out existing problems and provide solutions to these problems within a period of 1 to 2.5 months field with the concept of "working with the community" as a replacement for the concept of "working for public".

In an effort to improve the image and quality of KKN activities, the implementation of KKN is designed more contextual with change paradigm development become paradigm empowerment. Revitalization Studying Work Real (KKN) become Studying Work Real – Learning And Empowerment Public (KKN-PPM) College Tall (PT) in all over Indonesia very important For done. Matter This pushed by reality that Lots PT Which previously Determining the KKN course to be a mandatory undergraduate level course is now just that elective courses and many universities have even removed KKN courses from the curriculum. With thereby program KKN-PPM specialized only for PT Which requires KKN for students before completing college S-1/D-4/Applied Bachelor, where operational design and implementation methods need to be adapted to individual conditions. each PT.

Program KKN-PPM in period long must can realize achievements results for example increasing empowerment public in a way measurable, like increase income per capita, reducing CO² emissions , increasing the Human Development Index (HDI), Development Index Gender (IPG), decreasing maternal mortality rates, increasing life expectancy and indicator other

7.3.2. Objective Activity

Activity KKN-PPM as following:

- a. maintain subject KKN become subject must on College Tall in Indonesia;
- b. changing the implementation of the KKN-PPM program from a development paradigm to a paradigm empowerment;
- c. develop themes KKN-PPM with draft *co-creation* , *co-financing* And *co- benefits* ; and downstreaming of lecturers' research results that can be applied to society through programs KKN-PPM; And
- d. develop themes KKN-PPM Which partner with government and world business.

7.3.3. Outer Activity

Outer must KKN-PPM as following:

- a. scientific articles published through ISSN journals or ISBN proceedings from seminarsnational;
- b. article on media mass print/electronic;
- c. videos activity; And
- d. enhancement empowerment partner in accordance problem Which faced refer on Table 2.11.

Outer addition KKN-PPM can form outer other in outside outer must in on.

7.3.4. Criteria Activity

Criteria KKN-PPM as following:

- a. prioritized proposal activity is dissemination results study team proposer;
- b. program Which held nature thematic;
- c. period minimum activity time 1 month and maximum 2.5 months;
- d. team executor covers lecturer mentor field (DPL) And student;
- e. amount student Which involved minimum 20 person; And
- f. fund maximum proposal of IDR 50,000,000; And
- g. distance from college tall proposer maximum 200 km or Still in region province.

7.3.5. Condition Proposer

Condition proposer KKN-PPM as following:

- a. team proposer amount maximum three person (One chairman And two member) Which at a timerole As a lecturer Mentor Field (DPL); And
- b. a lecturer only can carry out KKN-PPM as much 3 time as chairman.

7.4. Program Development Entrepreneurship

7.4.1. Introduction

The Directorate of Research and Community Service (DRPM) carries out a program with a mission produce new entrepreneurs from campus, through integrated creative programs method Which submitted fully to college tall through Program Development Entrepreneurship (PPK). Each university has the right to manage more than one PPK program. PPK can proposed by Faculty/department with involve a number lecturer Which experienced entrepreneurship from various scientific disciplines. PPK carries out guidance to tenants through training management business And a number activity creative other For produce businessman new which is independent based on science and technology. Tenants must improve their skills in producing products in each study program. PPK managers are also advised to collaborate with other institutions that institution related to entrepreneurship development, both on and off campus, including the campus intellectual product business development program (PPUPIK) in universities each.

PPK's mission is to guide universities in organizing entrepreneurial service units professional, independent And sustainable, as well as insightful economy based knowledge. PPK must independent and sustainable operations, so that PPK is given the opportunity to be able to become a unit profit.

PPK can be implemented in the form of entrepreneurship training, placing students to carry out internships at established companies/business units/PPUPIK in tertiary institutions the And facilitate student in entrepreneurship. Training held For give knowledge entrepreneurship, push growing motivation entrepreneurship, increase understanding management (organization, production, finance, And marketing) as well as make plan business or studies appropriateness business. Activity apprenticeship on companies/units

business/PPUPIK held For give experience practical entrepreneurship to student with method follow Work daily on units business the. Student Which has start entrepreneurship, student Program Creativity Student Entrepreneurship (PKMK), Program Other Student Creativity (PKM), Entrepreneurial Student Program (PMW), students who interested And currently pioneering business, And alumni Which interested or just starting out business can perfecting entrepreneurial activities that have been carried out previously, to improve his business. Higher education PPK program managers are advised to explore the types of commodities Priority is given to the tenants' business in the form of unique and superior products/services with talent and not only just stuck on his interest.

The PPK service unit fosters 20 selected tenants for 3 (three) years. Every year must produce minimum 5 businessman new independent. Selection tenants new held to replace a number of independent tenants, so that every year the number of tenants There are still 20 people being coached. Tenants can be individuals or groups, if in form The maximum group size is 3 people. From 20 tenants can form maximum 4 groups and the rest are individual. Tenants from alumni are limited to a maximum of 5 people. Tenants may be given assistance to purchase equipment or repair production facilities Which rolling in nature.

It is hoped that the PPK program will also synergize with the field of higher education student affairs recruit students who get PKMK or other PKM, students and alumni who currently starting a business as a tenant.

7.4.2. Activity Objectives

Objective PPK as following:

- a. create businessman new independent Which based science and technology;
- b. increase networking between entrepreneurship college tall with public industry Andinstitution other; And
- c. create method training entrepreneurship Which in accordance for student PKMK/PKM others/PMW/students which is being starting a business/alumni businessman.

7.4.3. Outer Activity

Outer must PPK as following:

- a. per year produce One article scientific Which published through journal national accredited ranking 1-6 or one article in the ISBN proceedings of an international seminar Which carried out domestically;
- b. article on media print/electronic mass each year;
- c. videos activity; And
- d. produces five new independent science and technology-based entrepreneurs per year who are ready to be active in public.

Outer addition PPK can be outer other outside outer must on.

7.4.4. Activity Criteria

Criteria PPK as following:

- a. period time activity is three year in a way sequential;
- b. tenants takes priority student Which Once get Program Creativity Student Entrepreneurship (PKMK) or Program Creativity Student (PKM) other, Program Student Businessman (PMW), student Which interested And currently pioneering business, or student Which Already pioneering business new or alumni Which interested or new pioneering business;
- c. tenants Can operate business in a way individual And can group;
- d. amount tenants Which built as much 20 person (Which selected in year number 1) And can crossprogram studies; Every year must minimal yield five businessman new independent; And
- e. selection tenants new held For replacement Which has independent the, so that amounttenants every year it remains 20 person;
- f. amount business Which executed from 20 tenants, minimum five type business as well as based science and technologytakes priority which is unique and superior; And
- g. proposal fund per year to DRPM maximum Rp. 150,000,000 And contribution college tall minimum IDR 20,000,000 per year for three year.

7.4.5. Condition Proposer

Condition proposer PPK as following:

- a. team executor consists from four person (One Chairman And three Member); minimum from two competence different sciences;
- b. It is preferred that the proposer be a lecturer who is relevant to the scientific and eye field studying Which amputated And own experience entrepreneurship or lecturer entrepreneurship; And
- c. one college may propose more from one PPK proposal. One faculty (for University/Institute), One major (For School College/Polytechnic/Academy) only can submit one suggestion PPK.

7.5. Program Development Product Superior Area

7.5.1. Introduction

Regional superior products are products in the form of services and goods with unique/distinctive characteristics village level, sub-district, district and provincial levels, produced by cooperatives, community business groups, and micro, small and medium enterprises (MSMEs). Business people seeks to utilize and optimize the potential of natural resources, human resources, nor potency culture local, For develop the product so that easy known, easy got, And Empower competitive Which tall. Potency product superior Which there is in various region Indonesia, allows it to be developed further with the help of lecturers at universities, through continuous community service activities for three years in the Program Regional Superior Product Development (PPPUD). Based on the results of the implementation evaluation and substance from scheme PPPE (Program Development Product Export), And Hi-Link Which there is on previous edition of the guide, DRPM took a policy to merge the two schemes become One with the PPPUD scheme.

The criteria for superior products are: a) have local content that stands out and is innovative in sector agriculture, industry, And service, b) have Power competitive tall in market, c) range

extensive marketing both domestically and globally, d) has regional characteristics and involve power Work local, e) availability material standard adequate, f) No damage environment, sustainable as well as No damage culture local. Development product superior Also will more succeed when supported by participation local government.

Partner program PPPUD is cooperative, group business public, And Business Micro Small Medium (UMKM), and with the following characteristics: 1) At least one business has been running year; 2) Represents product/service superior area, like product based results plantation, agriculture, fisheries, processed food, performing arts, crafts and other creative industries; 3) products/services that have local/regional uniqueness/characteristics; 4) domestic market potential or export destination; 5) is environmentally friendly and based on local culture; 6) potential partners totaling one partner; 7) requires the application of science and technology; 8) can potentially be developed further continue through the PPPUD program; and 9) willing to contribute a minimum of IDR 10,000,000 (ten million rupiah) per year, during three year.

7.5.2. Objective Activity

Objective PPPUD as following:

- a. increase knowledge And Skills cooperative, group business public , And MSMEs which plays a role in spurring the growth of regional superior products/services for the domestic market and market global;
- b. improve the quality and quantity of products/services so that they are highly competitive while remaining grounded on uniqueness/characteristics the area;
- c. increase Power pull product/service superior to public area/market, strengthen cooperatives, community business groups and MSMEs to be resilient, develop and provide income for the surrounding community;
- d. role active guard sustainability cultural heritage local;
- e. accelerate the diffusion of technology and management from the university community to society industry; And
- f. developing a link and match process between universities, industry, regional government and the communitywide.

7.5.3. Outer Activity

Outer must PPPUD as following:

- a. per year produce One article scientific Which published through journal national accredited ranking 1-6 or one article in the ISBN proceedings of an international seminar Which carried out domestically;
- b. article on media mass print/electronic every year;
- c. videos activity; And
- d. increasing partner empowerment according to the problems faced referring to Table 2.11.

Outer additional PPPUD can be outer other in external mandatory on.

7.5.4. Criteria Activity Criteria

PPPUD as following:

- a. partner MSMEs Which Already walk minimum a year And Still possible For improved

capacity his business;

- b. The proposer is required to partner with 1 (one) regional superior product/service producer partner and business the with minimum assets Rp. 150,000,000 with turnover minimum Rp. 150,000,000/year, And involve minimum employees 6 person from society around;
- c. period time activity is three years;
- d. proposal fund to DRPM maximum Rp. 150,000,000 per year;
- e. Minimum contribution from partners is IDR 10,000,000 per year for three years. It's possible also For get source fund other for example from government area, institution private, orCSR;
- f. The priority activity to be carried out is the dissemination of the team's research results proposer;
And
- g. distance maximum 200 km or Still in One region province College proposer.

7.5.5. Condition Proposer

Condition proposer PPPUD as following:

- a. team number of proposers 4 people (1 chairman and 3 member);
- b. proposer with competence multidisciplinary in accordance with field Which proposed, minimum 2 (two) competence, and it is possible to collaborate with other universities if the lecturer with competence none required at the applicant's university; And
- c. must involve at least 4 person student per year.

7.6. Program Development Business Product Intellectual Campus

7.6.1. Introduction

In connection with efforts to develop a knowledge-based economic culture, higher education need given access in form *knowledge and technopark* Which utilise knowledge, education and lecturer research results. By organizing a Business Development Program Campus Intellectual Products (PPUPIK), universities have the opportunity to earn income and help create new entrepreneurs. The results of university research are new innovations and has economic value and receives Intellectual Property (IP) protection such as rights create or patent, is asset Which very valuable for growth And development PPUPIK.

The PPUPIK program is expected to be able to encourage universities to build access produce products, services and/or technology of their own creation. The form of PPUPIK in universities high level can be a business unit, for example: production center, consulting center, design center, center training, repair and maintenance center, research and development center, and maintenance center health. PPUPIK can partner with Banks, BUMN, Regional Government, Investors and can also partner with other industry groups. PPUPIK can be managed by a group of lecturers in accordance with competence in levels laboratory, planner pilot, workshop, major/department, faculties/schools, UPT, research and development centers or other institutions located within the college. Once established, PPUPIK is expected to further develop through development of mastery of knowledge, research, perseverance in trying and astuteness in capturing opportunities that exist in the community, both internal and external to the campus. PPUPIK program mission is to create access to the socialization of superior and innovative lecturer intellectual products in environment college tall in framework fulfillment need public Good internal nor

external campus.

7.6.2. Objective Activity

Objective PPUPIK as follows:

- a. speed up process cultural development entrepreneurship in college tall;
- b. help creating access for creation businessman new;
- c. support autonomy campus college tall through acquisition income independent or partner;
- d. give chance And experience Work to student;
- e. push development culture utilization results research college tall for public; And
- f. build cooperation with sector private including parties industry And sector marketing.

7.6.3. Outer Activity

Outer must PPUPIK as following:

- a. per year produce One article scientific Which published through journal national accredited ranking 1-6 or one article in the ISBN proceedings of an international seminar Which carried out domestically;
- b. article on media mass print/electronic every year;
- c. videos activity; And
- d. enhancement productivity PPUPIK Which refer on Table 2.11.

Outer addition PPUPIK can form outer other in outside outer must in on.

7.6.4. Criteria Activity

Criteria PPUPIK as following:

- a. PPUPIK business unit Which proposed priority that effort Already walk and have have structure clearly linked organizations with a PT structure;
- b. product/service PPUPIK takes priority own superiority And uniqueness Which competitive And prospective and does not compete with the product public;
- c. prioritized product/service is results study team proposer;
- d. exists commitment PT For continue PPUPIK after funding from DRPM Already end;
- e. period time activity PPUPIK is three year;
- f. proposal fund to DRPM maximum IDR 200,000,000 per year. Fund from college tall minimum Rp. 30,000,000 per year for three year; And
- g. source fund other can sourced from government area, institution government other or institution private (CSR) is possible to create accompanying;

7.6.5. Condition Proposer

Condition proposer PPUPIK criteria as following:

- a. team proposer maximum amount four person (One chairman And three person member);
- b. field knowledge team proposer related with product/service PPUPIK And There is Which have competence economics/marketing; And
- c. must involve student minimum four person in form apprenticeship or task other Which necessary;

7.7. Program Development Village Partner

7.7.1. Introduction

Much of the economic development of Indonesian society occurs in rural areas. Wealth and Community investment in rural areas is not assessed by the amount of savings in rupiah or dollars, but based on ownership property And treasure (river, land, House, land, mineral) even riches biological (forest, farm, agriculture, fishery, And etc). Of course just potency This, will more exist, Empower competitive, And potential For developed Because related tightly with life And life man as well as environment.

Rural area development has become an important issue in the last 5 years. Rural progress very influence stability national Good from facet ideology, political, economy, social, culture, as well as defense and security. In fact, because of the importance of villages as assets, history, heritage, etc starting point for the development of national civilization, the state has issued Law Number 6 2014 concerning villages implemented by Government Regulation Number 43 of the Year 2014 about Regulation Implementation Constitution Number 6 Year 2014. As follow-up, government rolling out a rural development grant program.

In line with the government program to accelerate the village economy which focuses on handling infrastructure, then universities must have concern by contributing strengthening through the application of science and technology, policy models, and research-based social engineering. Development social economy village will more fast with it was built infrastructure And open access. The touch from higher education is in the form of downstreaming the results of multidisciplinary research provide acceleration in the quality and quantity of village progress in all fields (social, economic, law, health, culture, education, agriculture, resilience food, maritime, energy new And renewable, environmental and others) without abandoning the superior values or characteristics that have been owned village the.

Support from local government/government agencies or related stakeholders (CSR program from industry/institution) will give strengthening for success program. Issues important Which addressed in this program include education, health, environment and conservation, food, energy, tourism, culture, creative industries, regional management/natural resources and resources human resources, morals, character and ethics, maritime, and others. Thus, it will wake up Village Partner universities that have

certain advantages as *an icon* and main driver of village development as well as being wrong One model techno-science and *tourism parks*. A number of example results activity PPDM formation Village Halal Food Center, Bamboo Craft Village, Rare Plant/Animal Conservation Village, Mandiri Village Energy, Village Central Organic Farming, Village Culinary, Village Tour, Village Custom/Art Culture, Village Iodized Salt, Healthy Villages, Sharia Villages, Community Development Villages, Cultural Heritage Villages, Villages Reserve Natural, And etc. Centers on village the become science-techno-park college tall. So that it can be used as an object for service and learning for students and lecturers And indoor and outdoor guests country.

7.7.2. Activity Objectives

Objective PPDM as following:

- a. apply results research superior college tall Which in accordance with urgency needpublic village;
- b. give solution problem public village with approach holistic based researchmultidisciplinary;
- c. help program government in development public And region village;
- d. help succeed implementation program RPJM Village;
- e. increase independence And well-being public village;
- f. speed up development village on various field in a way sustainable;
- g. strengthen synergy college tall (PT) with holder interest related indevelopment village; And
- h. form Village Partner as Wrong One model *science-techno-park* college tall.

7.7.3. Outer Activity

Outer must program PPDM is:

- a. per year produce One article scientific Which published through journal national accredited ranking 1-6 or one article in the ISBN proceedings of an international seminar Which carried out domestically;
- b. article on media mass print/electronic every year;
- c. videos activity; And
- d. enhancement empowerment partner Which refer on Table 2.11.

Outer addition PPDM can form outer other in outside mandatory external in on.

7.7.4. Activity Criteria

Criteria PPDM as following:

- a. prioritized activity Which held is dissemination results study from team proposer;
- b. The proposed village is a village that has partnered with the proposing PT/Team proven with a letter work agreement The same;
- c. the village in question is in accordance with Law no. 6 of 2014, namely traditional villages and administrative villages, No ward;
- d. involving at least two community groups in Mitra Village per year, both those involved in field economy productive (group craftsman, group cattle, group farmer, fishermen groups) or social organizations (Karang Taruna, PKK, Pokdarwis, Dasa Wisma, or other);
- e. group partner Which handled in Village Partner Which The same can change every year;
- f. college tall must give fund accompaniment minimum Rp. 10,000,000 per year;
- g. is program multi year with long activity three year;
- h. proposal fund to DRPM maximum Rp. 150,000,000 per year
- i. on second and third years are recommended to get support funds/facilities from REGIONAL GOVERNMENT/Service and/or third parties other; And
- j. distance location Village Partner from College Tall proposer maximum 200 km or can more from200 km as long as it still works in one province.

7.7.5. Condition Proposer

Condition proposer PPDM as following:

- a. team proposer four in number person (one chairman And maximum three person member);
- b. team proposer own capability (record footsteps science/science) Which in accordance with activity Which proposed/problem Which handled;
- c. team proposer must involve minimum four person student/year; And
- d. team proposer formed institution on recommendation Chairman LPM/LPPM/P3M/DPPM
Where every college high you can suggest more from 1 team for Village Partner Which different.

7.8. Program Partnership Region

7.8.1. Introduction

Program Partnership Region (PKW) background various problem Which is Regional problems that occur in communities within one village or sub-district include, among others, that is:

- a. instability part big public to development life personal, family And inner society era globalization;
- b. science and technology college tall Not yet in a way on purpose addressed for well-being public village or ward;
- c. community potential nor source Power natural The environment has not been exploited properly Good And wise; And
- d. governance physique territoriality Which Not yet proportional And professional.

The mission of the PKW program is to increase independence, comfort in life, at the same time well-being public through involvement active public (initiative And participatory), Municipal/Regency Government based on Regional Medium Term Development Plans (RPJMD), non-RPJMD and universities high (expertise). Initially PKW had 3 forms, namely: PKW-PEMDA, PKW-CSR and PKW-PEMDA-CSR. Difference Which firm in between all three located on source fund his supporters. Funds for the PKW program come from DRPM Deputy for Strengthening Research and Development, LOCAL GOVERNMENT and/or CSR.

The proposed PKW program was prepared together with related parties including: Proposing Universities, College Tall Partner, Regency/Municipal Government and/or CSR. There is college tall Partner considered For build tradition togetherness between college tall at a time intended as perfecter type expertise Which required in implementation PKW. Partner universities can be selected from PKW regional universities. Reference used In preparing the PKW proposal, the Regency/City Government RPJMD and non-RPJMD are appropriate with region PKW. PKW held For give solution to various problem territoriality like field education, health, social culture, economy, tourist, means infrastructure, production (agriculture, livestock, fisheries, creative industries, etc.), environment, administration and village government.

PKW is positioned as a form of real contribution from universities in making the program a success territoriality Which lowered Regency/Municipal Government from RPJMD And non RPJMD. With thereby,

synergism Which built in PKW realized in form Work The same expertise,integration, togetherness in implementation program nor funding contribution.

7.8.2. Activity Objectives

Objective PKW as following:

- a. creating independence, comfort and welfare of the community through a synergy of expertise university community, capabilities and policies of the Regency/Municipal Government as stated inRPJMD, non-RPJMD And potential of village communities or subdistrict; And
- b. find solution on problem Which faced Regency/Municipal Government and/or public as well as in a waydirect or indirect potentially influencing comfort of life public.

7.8.3. Activity Output

Outer must PKW is:

- a. per year produce One article scientific Which published through journal national accredited ranking 1-6 or one article in the ISBN proceedings of an international seminar Which carried out domestically;
- b. article on media mass print/electronic every year;
- c. videos activity; And
- d. enhancement empowerment partner Which refer on Table 2.11.

Outer additional PKW can be outer other outside mandatory external on.

7.8.4. Activity Criteria

Criteria PKW as following:

- a. region on program PKW only consists from One village or One ward, handle minimum two areas of regional problems, for example health and education or agriculture and law or agriculture and economy or field agriculture and tourist And etc;
- b. PKW implementing universities are required to partner with other universities from the region nearest PKW;
- c. program PKW consists on various program And activity during three year Which its implementationNo need to be consecutive, or starting on year the same one;
- d. program And activity Which will held prioritized results study team proposer;
- e. proposal fund to DRPM maximum Rp. 150,000,000 per year;
- f. fund government area or CSR minimum Rp. 100,000,000. Fund contribution from local government/municipal government must Already starting in the 2nd year and funds CSR has begun since number 1; And
- g. location PKW allowed cross province with consideration exists college tall partner on location PKW And there are funds companion Which adequate from local government/CSR since year First.

7.8.5. Condition Proposer

Condition proposer PKW as following:

- a. team proposer consists on four person (One chairman And three member, minimum One person memberfrom partner universities);
- b. team proposer minimum own two competence science Which different;
- c. team proposer own capability (record footsteps science/science) Which in accordance with activity Whichproposed/problem Which handled; And
- d. involving at least four student per year got it from college tall proposer and orcollege partner height.

CHAPTER VIII DEVOTION TO PUBLIC DECENTRALIZATION

Program Empowerment Public Superior College Tall

8.1. Introduction

Based on Regulation of the Minister of Research, Technology and Higher Education and Number 44 of 2015 regarding the National Higher Education Standards, every university is required to have a plan strategic (Renstra) devotion to public. Strategic Plan intended arranged with considering the strength of the resources each university has. DRPM has carried out a performance assessment of service to the higher education community based on parameters refer to Regulation of the Minister of Research, Technology and Higher Education Number 44 of the Year 2015 about Standard National Education Tall. Results evaluation performance devotion to public has succeed map college tall in cluster Superior, Very Good, Satisfactory, and Less Satisfactory. To support the acceleration of achieving the college's strategic plan high in the Excellent and Very Good clusters, DRPM designed a community service scheme as form decentralization program devotion to public that is Scheme Program Community Empowerment for Leading Higher Education Institutions (PPMUPT). Thus PPMUPT must refers to Strategic Plan Devotion to Public which are already arranged by PT.

Management PPMUPT covers selection, implementation program, monitoring And evaluation, And reporting submitted to universities. Universities are also obliged to provide guarantees quality every stage of service to public.

8.2. Objective Activity

Objective PPMUPT as following:

- a. speed up target achievements strategic plan devotion to public PT;
- b. apply results research superior college tall Which in accordance with urgency needpublic;
And
- c. give solution problem public.

8.3. Outer Activity

Outer must program PPMUPT as following:

- a. per year produce One article scientific Which published through journal national accredited ranking 1-6 or one article in the ISBN proceedings of an international seminar Which carried out domestically;
- b. article on media mass print/electronic every year;
- c. videos activity; And
- d. enhancement empowerment partner Which refer on Table 2.11.

Outer addition PPMUPT can form other externals in outside outer on.

8.4. Criteria Activity

Criteria activity PPMUPT as following:

- a. activity Which held must in accordance with strategic plan devotion to society PT;
- b. prioritized activity Which held is dissemination results study from teamproposer;

- c. is program multi year for a long time activity This three year;
- d. own partner form One region village/villages customary/subdistrict Which involve two group public per year;
- e. group public partner Which handled can change every the year;
- f. proposal fund to DRPM maximum Rp. 150,000,000 per year; And
- g. Distance from college tall proposer maximum 200 km or Still in region One province.

8.5. Condition Proposer

Condition proposer PPMUPT as following:

- a. Team proposer originate from PT with performance devotion to public on cluster superior, very good, and satisfying;
- b. team proposer four in number person (one chairman And maximum three person member);
- c. team Proposer own capability (record footsteps science/science) Which in accordance with activity Which proposed/problem Which handled; And
- d. team proposer must involve minimum 4 person student/year.

CHAPTER IX DEVOTION TO PUBLIC ASSIGNMENT

Program Application Science and technology to Society

9.1. Introduction

Kemenristek/BRIN seeks to increase collaboration with other institutions in this effort improve the performance of the Ministry of Research and Technology/BRIN in particular and the performance of the government in general. Ministry of Research and Technology/BRIN with various expertise Which he has obliged succeeding development in all fields by providing support, strengthening and mentoring form cooperation implementation programs priority Which held by institution country/LPK/LPNK especially program Which touching with need public. Implementation cooperation the need accommodated in scheme devotion to public Which nature special And dynamic in accordance need that is Program Application Science and technology to Public (PPIM)

PPIM addressed For can help overcome problem Which faced by publicgeneral like poverty, equality gender And inclusion social, disaster natural, security, health,education, environment, population, social political And problem social other; And problem Whichfaced by productive economic communities such as production, management and marketing problems. Audience target (partner) PPIM can in the form of a group business public (like Bumdes or unitsbusiness village other), Cooperative, And group business economy productive Which formed by institution country/LPK/LPNK. Partner from group public general like coral cadets, dasa guest house, pokdarwis, And group public general other Which There is in village. Partner determined minimum twogroup public general, or two group public economy productive; or One grouppublic general And One group public economy productive. Field activity Whichheld in PPIM it is priority programs Which has been determined.

The implementation of the PPIM scheme is carried out by referring to the results of the PT performance assessment with see the achievements of all aspects of the National Standards for Community Service. Analysis results evaluation performance This, mainly competence college tall For carry out task downstream Science and technology to public, can used as reference For give assignment implementationdevotion to public.

9.2. Objective Activity

Objective PPIM as following:

- a. give support, strengthening, And accompaniment implementation program priority in implementation cooperation with the institution country/LPK/LPNK;
- b. give solution to problem priority in something region;
- c. form/develop group public Which independent economically And social;
- d. help create peace, And comfort in social life; And
- e. increase Skills think, read And write or Skills other Whichneeded (*soft skills and hard skills*).

9.3. Outer Activity

Outer must PPIM as following:

- a. One article scientific Which published through journal ber ISSN or proceedings ber ISBN from seminar national;
- b. One article on mass media print/electronic;
- c. videos activity; And
- d. increasing partner empowerment according to the problems faced referring to Table 2.11.

Outer additional PPIM can form other externals other than mandatory externals in on.

9.4. Criteria Activity

Criteria PPIM as following:

- a. DRPM pointing And give assignment to college tall as executor with consider competence and resources which are owned;
- b. DRPM pointing a lecturer from college tall Which get task as chairman team executor;
- c. college tall Which appointed can form team executor Which originate from college tall other or outside institutions College;
- d. team executor submit proposal activity according to assignment;
- e. science and technology Which will applied to public is product science and technology Which Already tested And in accordance with need public;
- f. activity held For One year budget; And
- g. financing activity from DRPM maximum Rp. 150,000,000 And source financing other from partner cooperation.

9.5. Condition Proposer

Condition proposer PPIM as following:

- a. chairman And member executor as much 2-5 person;
- b. team executor own competence Which in accordance with activity Which held; And
- c. must involve minimum four person student.

CHAPTE R X CLOSING

Completion Book Guide This through process Which Enough long And through stages improvement Which over and over again. Notes implementation study And devotion to the community by using the previous edition of the guide becomes very enriching material valuable. Dynamics development need Work The same study And devotion to communities in various fields have also been accommodated in the Research and Community Service Guidebook to Society Edition XIII Year this 2020 by formulating one scheme new.

Thanks to the hard work of the entire Drafting and Coordinating Team, the Research Guidebook has finally been produced and Community Service Edition XIII 2020 can be completed. For that, taste I'm grateful proper We climb it to Lord Which Maha One on His approval Book Guidelines This has resolved well.

Book guidelines This is reference Which clear in implementation activity study And devotion to public, specifically for para lecturer as perpetrator main activity study and community service. This manual is also a clear reference for managers activity study And devotion to public Good in college tall nor in DRPM Kemenristek/BRIN environment including a team of experts who oversee the start of the selection process up to the reporting stage. With reference to this guidebook, stakeholders (stakeholders) of research activities and community service can carry out their functions with Good.

This guideline has been adapted to the implementation of Information Technology-based management and Communication (ICT) starting from the process of proposal, selection, implementation, monitoring and evaluation until with reporting. With system management based ICT, supported with guidelines Which clear, has proven that study And devotion to public can managed in a way efficient,transparent, and accountable.

Although book guidelines This has arranged with as carefully as possible, However No close possibility Still exists lacking perfection. For That, suggestion And critics very expected sake more perfect this guidebook for the coming period. Hopefully this Manual can escort activity study And devotion to public in college tall so that capable of producing output that can make a significant contribution to lifting power competitive Indonesia.

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ATTACHMENT

Attachment 1. Clump Knowledge

Code	Clump	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 Another one 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 Plant Diseases	3
154	Cultivation Agriculture And Plantation	3
155	Plantation	3
156	Breeding Plant	3
157	Field Agriculture & Plantation Other Which Not yet Listed	3
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 Science Plant Which Not yet Listed	3
180	KNOWLEDGE SOCIOLOGY AGRICULTURE	2

Code	Clump	Level s
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
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	Sain Veterinary	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 Fish food	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 Veterinary Medicine Other Which Not yet Listed	3
260	KNOWLEDGE MEDICAL	1

Code	Clump	Level s
270	KNOWLEDGE MEDICAL SPECIALIST	2
272	Anesthesia	3
273	Surgery (General, Plastic, Orthopedics, Urology, Etc)	3
274	Midwifery And Gynecological Diseases	3
275	Medical Forensics	3
276	Medical Sport	3
277	Disease Child	3
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 Basic Medicine & Biomedicine	3
308	Knowledge Medical Family	3
309	Knowledge Medical Clinic	3
311	Knowledge Medical Tropical	3
312	Immunology	3
313	Medical Work	3
314	Health Reproduction	3
315	Field Knowledge Other Medicine Which Not listed	3
320	KNOWLEDGE SPECIALIST MEDICAL TOOTH AND MOUTH	2
321	Medical Tooth	3

Code	Clump	Levels
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 has not been 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
371	Knowledge Nursing	3
372	Midwifery	3
373	Administration House 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 & Obstetrics Other Which Not yet Listed	3
390	KNOWLEDGE PSYCHOLOGY	2
391	Psychology General	3

Code	Clump	Level s
392	Psychology Child	3
393	Psychology Public	3
394	Psychology Work (Industry)	3
395	Field Psychology Other Which Not yet Listed	3
400	KNOWLEDGE PHARMACY	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
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	Technique Nuclear (And Or Knowledge Nuclear Other)	3
442	Technique Physics	3
443	Technique Energy	3
444	Sensing Far	3
445	Technique Material (Knowledge Material)	3
446	Field Industrial Engineering Other Which Not yet Listed	3
450	TECHNIQUE ELECTRO AND INFORMATICS	2
451	Technique Electro	3

Code	Clump	Levels
452	Technique Power Electric	3
453	Technique Telecommunication	3
454	Technique Electronics	3
455	Technique Control (Or Instrumentation And Control)	3
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 Science Marine	3
485	Oceanography (Oceanology)	3
486	Field Shipping Other Which Not yet Listed	3
500	KNOWLEDGE LANGUAGE	1
510	SUB CLUMP KNOWLEDGE LITERATURE (AND LANGUAGE) INDONESIA AND AREA	2
511	Literature (And Language) Area (Java, Sunda, Batak Etc)	3
512	Literature (And Language) Indonesia	3
513	Literature (And Indonesian Or Area Other	3
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

Code	Clump	Level s
530	KNOWLEDGE LANGUAGE FOREIGN	2
531	Literature (And 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
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

Code	Clump	Levels
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
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	KNOWLEDGE KNOWLEDGE (KNOWLEDGE) RELIGION	2
641	Religion Islam	3
642	Religion Catholic	3
643	Religion Christian And Theology	3
644	Sociology Religion	3
645	Religion (Philosophy) Hinduism, 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	Art 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

Code	Clump	Level s
683	Anthropology Dance	3
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 Others Yang Not listed	3
699	Tourism	3
700	KNOWLEDGE MEDIA	2
701	Photography	3
702	Television	3
703	Broadcasting (Broadcasting)	3
704	Graphics (And Publishing)	3
705	Field Media Other Which has not been Listed	3
706	DESIGN	2
707	Design Interiors	3
708	Design Communication Visual	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
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

Code	Clump	Level s
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 has not been 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 has not been Listed	3
770	KNOWLEDGE EDUCATION MATHEMATICS AND KNOWLEDGE KNOWLEDGE NATURAL (MIPA)	2
771	Education Biology	3
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 Informatics Engineering	3
787	Education Well-being Family (Cullinary art, Fashion, Makeup Etc)	3
788	Education Technology And Vocational	3
789	Field Pend. Technology And Other Vocations 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

Code	Clump	Levels
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
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	3
815	Education Skills And Craft	3
816	Education Art Craft	3
817	Field Education Art Other Which Not listed	3
900	CLUMP KNOWLEDGE OTHER	1

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

No	Field Focus Research	Theme Research	Topic Research
1	Food-Agriculture	Technology seed breeding crops, livestock, and fish	Utilization technique radiation For search strain mutant superior.
			Breeding plant with technology based biotechnology.
			Breeding plant technique conventional.
			Revitalization and increasing farmer knowledge based community in breeding plant.
			Breeding cattle with technology based biotechnology.
			Breeding cattle technique conventional.
			Revitalization And increased knowledge farmer based community in breeding cattle.
			Breeding fish with technology based biotechnology.
			Breeding fish technique conventional.
			Revitalization And enhancement knowledge farmer basedcommunity in breeding fish.
		Technology cultivation and land usesub-optimal	Modernization system agriculture And land use.
			Agriculture land sub-optimal wet.
			Optimization system agriculture tropical.
			Optimization of tropical farming systems in women's communities For resilience food family based knowledge local.
		Development resource man agriculture	Development identity functional agriculture.
			Transformation between generation worker agriculture.
			Shift work agriculture on Woman farmer.
			Food diversity based on local plant resourcesthrough role of community, women, And family.
		Technology postharvest and technological engineering processing food	Strengthening agro industry made from standard source Power local.
			Management And conservation resource land, water, And biological.
			<i>Precision agriculture</i> .
			Manipulation machines agriculture And processing.
			Technology irradiation preservation of results agriculture.
			Diversification And downstream product agriculture, plantation, farm, And fishery.
			Revitalization And strengthening knowledge local female farmer.
			Supporter independence food (paddy, corn, And soya bean) Andplantation crops.
		Technology resilience and independence food	Independence food commodity ruminant.
			Independence food aquatic commodities.
			Efficiency chain mark results agriculture, plantation, farm.
			Development product food based source Power tropical.
			Development product food functional.
			Development technology For detection forgery product agriculture, animal husbandry, and fishery.
Development technology For testing product halal.			
Development technology For testing product halal.			
2	Focus Integration Energy Research - Energy New And Renewable	Technology material substitutionburn	Technology supporter conversion to material burn gas (BBG).
			Dimethyl ether For energy House ladder And transportation.
			Development component converter kits.
			Development technology And product biogasoline.
			Development And utilization bioenergy For transportation, electricity And industry.
			Development technology And utilization fuel cells.
			Development technology making bio-crude oil.
			Development technology making bioethanol generation

No	Field Focus Research	Theme Research	Topic Research
		Independence technology generator electricity	Design build PLT hot earth. Design PLT micro hydro land And marine. PLT bioenergy (biomass, biogas, biofuel) massive. Design get up PLTB (Bayu).
		Technology conservation energy	Building economical And independent energy. System smart grids And management conservation energy. Technology component saving electricity energy. Development system microgrids in management energy renewable. Technology hybrid in utilization source energetic renewable.
		Technology endurance, energy diversification and strengthening community social	Technology supporter EOR. Setup infrastructure NPP. Technology supporter clean coal. Transfer And adoption innovation diversification energy based community insightful gender And sustainable. Model transformation community independent energy renewable based knowledge local, community And public local. Technology development electrification rural. Technology appropriate To use in utilization energy new And renewable.
3	Health - Drug	Product technology biopharmaceuticals	Mastery production vaccine main (hepatitis, dengue). Mastery cell cause (stem cells). Mastery product biosimilars And product blood.
		Tool technology health and diagnostic	Development in Vivo diagnostics (IVD) For detection disease infection. Development in Vivo diagnostics (IVD) For detection disease degenerative. Development tool electromedicine.
		Technology material independence medicinal raw materials	Development phytopharmaca based source Power local. Medicinal raw materials chemistry. Saintification jamu & herbs, technology production pigment experience. Development drug traditional based SCIENCE AND TECHNOLOGY for diseases tropical (neglected diseases). Development technology biosimilars, biosynthesis, And biorefinery For production material drug.
		Development and strengthening system institutional, policy health, and empowerment public In support independence drug	Strengthening knowledge Woman in development phytopharmaca based local knowledge. Knowledge local For use jamu and herbs in public health, which is gender sensitive and inclusive social. Strengthening knowledge And development habit public in behave Healthy.
4	Transportation	Technology and management safety transportation	Management safety. Means infrastructure supporter safety. Management transportation friendly gender, child, And group need special.
		Technology industrial strengthening transportation	Mode road and rail. Mode water. Mode air.

		national	
		Technology infrastructure	System intelligent management transportation.
		And	Technology infrastructure transportation.

No	Field Focus Research	Theme Research	Topic Research
		system support transportation	System construction infrastructure transportation.
			Management safety Work implementation construction infrastructure.
			Management system control And guarantee quality implementation construction infrastructure transportation.
		Policy studies, social and economic transportation	Research base supporter technology And system transportation.
			System social Which support participation Woman, child, And inclusion social as well as in use means And infrastructure transportation.
		<i>Intelligent transportation system</i>	Management transportation urban/urban.
Management transportation logistics.			
5	Information Technology And Communication	Development Infrastructure ICT	Technology 5G (<i>broadband</i>).
			Telecommunication <i>internet</i> based <i>protocols</i> (IP) And <i>Internet of things</i> .
			<i>Network, data and information security</i> .
			Broadcasting multimedia based digital.
			I.T <i>security</i> .
			Development network sensors.
			Technology antenna And propagation wave radio.
			Development system radio cognitive.
		Development system/platform <i>Open</i> based <i>Source</i>	System ICT e- <i>Government</i> .
			System ICT e- <i>Business</i> .
			<i>Frameworks / Platforms</i> support industry creative And control.
			System information liberal technology supporter industry micro insightful gender And sustainable.
		Technology for Enhancement Content ICT	Technology And content for data information geospatial And senses.
			Technology development <i>big data</i> .
		Device technology tick And supporter ICT	Device ICT For system network.
			Device ICT For <i>smart city</i>
			Device ICT For <i>customers premises equipment</i> (CPE).
			Policy And social humanities supporter ICT.
			Technology device supporter participation Woman, child, special needs groups, as well as safety of use information based ICT.
		Development based system Intelligence artificial	Development application system intelligent.
			<i>Robotic technology vision</i> .
6	Defense and Security	Technology power support motion	Development product tool transport dimension land.
			Development product tool transport dimension sea.
			Development product tool transport dimension air.
		Technology supporter Power thunder	Development product rocket.
			Development product handcuffs.
			Development product system weaponry.
		Technology supporter defense	Command, Control, Communication product development, Computing, Integration, Observation, And Reconnaissance (K4IPP), especially radar, tool communication And satellite.
			Development product material.
			Development source defensive power.
			Development of defense and support social systems security based culture local Which gender-oriented And inclusion social.

No	Field Focus Research	Theme Research	Topic Research
7	Material Proceed	Technology processing mineral strategic raw materials local	Extraction And design build a metal factory land seldom.
			Development cell Sun based non silicon.
			Processing ore mineral strategic local.
		Technology development material functional	Production polymer For application separation in industry.
			Material supporter biosensors And chemosensor.
			Development membrane.
			Development catalyst And biocatalyst (enzyme) For application in industry.
			Innovation technology material local building materials
			Technology extraction asphalt from natural rock (asphalt rock Buton).
			Development material geopolimer.
		Technology potential exploration material new	Innovation technology material local building materials.
			Design And exploration material pigment absorber.
		Technology characterizat ionmaterials andsupport industry	Supporter transformation material rubbish And processing waste.
			Supporter material structure.
			Characterization material based laser and optics.
			Characterization material biocompatible.
8	Maritime	Technology regional sovereignty3T (leading, isolated, backward)	Independence material standard magnet strong
			Development material alloy.
			Resilience social And strengthening economy coast.
			Sovereignty food public coast And island isolated.
			Management border coast from social aspect security and prosperity.
			diversification, And preservation resource marine.
		Technolog y conservati on	Exploration and utilization source Power coast And sea.
			Development technology And island management small And coast.
		environment maritime	Development industry tourist nautical.
			Conservation And rehabilitation ecosystem coast And sea.
		Technology strengthenin g infrastrucur emaritime	Zoning ecosystem And supporter area conservation sea.
			Health And service ecosystem coast And sea.
			Mastery technology survey SDE/SDA sea in.
			Development technology vehicle coast, free beach, And sea in.
		Empowerment and enhancement participation women and social inclusion In the environment maritime.	Mastery technology communication, navigation, security And supervision.
			Development technology infrastructure beach And free beach.
Revitalization wisdom local For endurance, family And preservation source Power marine.			
Participation Woman, group minority, And familyFor endurance, and diversification processing products source Power marine.			
Participation Woman, And inclusion social in reception And utilization tourist nautical.			
	Integration conservation environment maritime in curriculum education Which insightful gender And inclusion social.		
	Participation Woman in development, maintenance,and strengthening beach infrastructure and let go beach.		

No	Field Focus Research	Theme Research	Topic Research
9	Disaster	Technology and management disaster geology	Mitigation subtraction risk disaster geology.
			Prevention And preparedness responsive emergency geology.
			Rehabilitation and reconstruction geology.
			Regulations and culture aware disaster geology.
			Danger And geological vulnerability.
		Technology and applications digital in management disaster geology.	
		Technology and management disaster hydrometeorology	Mitigation subtraction risk disaster hydrometeorology.
			Prevention And preparedness, responsive emergency hydrometeorology.
			Rehabilitation And reconstruction hydrometeorology.
			Regulations And culture aware disaster hydrometeorology.
			Danger And vulnerability disaster hydrometeorology.
		Technology and applications digital in management disaster hydrometeorology.	
		Technology and management fire disasterland and forest	Mitigation subtraction risk disaster fire land And forest.
			Prevention And preparedness responsive emergency fire land and forest.
			Rehabilitation And reconstruction land fire And forest.
			Regulations and culture aware disaster fire land And forest.
			Revitalization of local cultural values and women's participationFor prevention talk fire forest, field herding, And productive land.
		Danger And vulnerability disaster fire land And forest.	
		Technology and management natural disasters: earthquake, tsunami, flood bandang, land landslide, drought (drought), mountain erupted.	Empowerment mitigation based community.
			Technology warning early disaster natural.
			Recovery social life, economy, And culture public post disaster.
			Development model And system information mitigation disaster.
			Disaster mapping as regional and spatial planning informationbuilding design.
		Mitigation, climate change And system ecosystem	Mitigation impact change climate.
			Change cover land And Power support land.
			Contribution And role forest in climate change.
			Process management of the environment Which caused change cover land And change climate.
		Technology and management environment	Study mapping health environment.
			Rehabilitation ecosystem.
			Exploration friendly environment.
			Regulations and culture.
			Technology and applications digital in management disaster land fire And forest.
			Danger, vulnerability, risk And management disaster biology(including distribution disease, insect explosion, explosion population bird, fish etc.).
Biotechnology environment.			
Bioremediation environment.			
Management waste dangerous and poisonous.			
Adaptation environment towards climate change and/or pollution.			
Analysis risk environment.			

No	Field Focus Research	Theme Research	Topic Research
			Conservation resource natural.
			Valuation resource natural.
			Restoration damage environment.
			Technology processing waste congested, liquid and gas.
		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.
		Mitigation sustainable against disasters natural	Region with high vulnerability to disaster natural.
			Evaluation intelligent to facility general which has awakened (smart assessment on existing public facilities).
			Preparedness public face disaster natural.
			Disaster And wisdom local.
		10	Social Humanities -Art and culture - Education
Indigenous studies.			
Global village.			
Identity, mobility, diversity, diversity And multiculturalism			
Culture in an effort to prevent and deal with the consequences of violence, radicalism, based violence gender, children, ethnicity, religion, and identity others, as well in effort develop well-being And superiority performance.			
Soft power diplomacy			
Communication public in era revolution technology information And communication			
Governance And government			
Democracy, political, And general elections			
Connection international			
Sustainable mobility	Urban planning.		
	Urban transportation.		
	Mobility based local knowledge And worker family For industry.		
	Mobility person, mark, And goods as well the implications on transformation of cultural values and consumer behavior in this eraglobal.		
Capital strengthening social	Reform agrarian.		
	Alleviation poverty And independence food.		
	Manipulation social & rural development.		
	Capital social culture for prevention And handling consequence from violence Woman And child, resiliencefamily, And community minority.		
Economics and resource man	Entrepreneurship, cooperative, And MSMEs.		
	Woman in businessman, cooperative, And MSMEs based special knowledge Woman.		
	Art and culture supporter tourist.		
	Grand design riches intellectual local, legacy history, And its preservation in support character nation and tourism Which sustainable		
	Source Power man in scope organization industry		
Mainstreaming gender in development	Patriarchy And domination social in development.		
	Grand design local knowledge and knowledge-based local women, man, Child, community minority, special needs communities to create competitivenessnation.		

No	Field Focus Research	Theme Research	Topic Research
			Mapping, revitalization and transformation of knowledge and Skills based local knowledge for improvement Power competitive economy nation insightful gender, inclusion social, and sustainable.
			Development system social Which push enhancement, distribution, And creation resource man Which creative face sustainable development.
			Education character And Empower competitive insightful justice gender, child, inclusion social sustainable.
		Art, identity, culture, and character nation	Art tradition and inheritance.
			Art ritual.
			Conservation art.
			Revitalization art.
			Art and power national competitiveness.
			Art And equality gender
			Art And ideology nation
			Digital economy/smart economy/economy creative
			Diaspora And power Work migrant international Indonesia
			Civilization values character main
			Curriculum education character based wisdom local
			Enhancement quality Teacher in strengthening education character
			Integration character nation in process learning
			Networking partnership institution organizer education
		Art	Exploration and diffusion technology art.
			Art And environment
			Art And education
			Art And life public
			Art And development economy
			Technology And media art.
		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			

Information:

Theme And that topic listed in the table at top still is dynamic. Change will done If There is strategic and urgent considerations.

Appendix 3. Description of Technology Readiness Level (TKT)

General Type TKT And Hard Engineering

NO	DEFINITION/STATUS	INDICATOR
1	Principle base from technology researched Andreported	<ol style="list-style-type: none"> 1. Assumption And law base (ex.physics/ chemistry) Which willused on technology (new) has been determined; 2. Studies literature (theory/ empirical -research previous) aboutprinciple base technology which will developed; And 3. Formulation hypothesis research.
2	Formulation draft And/ or application formulation.	<ol style="list-style-type: none"> 1. Equipment And system Which will used, has identified; 2. Studies literature (theoretical/empirical) technology Which willdeveloped allows it to be implemented; 3. Design in a way theoretical And empirical has identified; 4. Elements base from technology Which will developed has is known; 5. Characterization component technology Which will developed has mastered And understood; 6. Performance from each element compiler technology which will developed has predictable; 7. Preliminary analysis shows that the main function is needed can work with Good; 8. Models and simulations to test the truth of principles base; 9. Research analytic For test truth principle basically; 10. Components technology Which will developed, in a way separated can work withGood; 11. Equipment Which used must valid And reliable; And 12. Is known stages experiment Which will be done.
3	Proof of concept of function and/or characteristics important in a way analytical Andexperimental	<ol style="list-style-type: none"> 1. Studies analytic support predictions performance element- element technology; 2. Characteristics/traits And capacity show off Work system basehave been identified and predictable; 3. Laboratory experiments have been carried out to test appropriateness application technology the; 4. Models and simulations support capability predictions elements technology; 5. Development of this technology with initial steps using mathematical models is very possible And can simulated; 6. Research laboratory For predict performance each element technology By theoretical, empirical And experiment has is known components systemtechnology the can working with Good; 7. Has done research in laboratory with using data <i>dummy</i> ; And 8. Technology worthy in a way scientific (studies analytic, model/simulation, experiment).

NO	DEFINITION/STATUS	INDICATOR
		9. Process fabrication in a way general has understood with Good 10. Almost all functions can run in environment/conditions operation ; 11. Prototype complete has demonstrated on simulation environment operational; 12. Prototype system has tested on trials field; And 13. Ready For production beginning (low rates initial production-trip).
4	The system is complete and reliable through testing and demonstration in the environment Actually	1. Form, suitability And function component compatible with system operation; 2. Machine And equipment has tested in environment production 3. Diagram end finished created; 4. Process fabrication tried out on a pilot scale (pilot-line or trip) ; 5. Test process fabrication show results And level productivity Which can accepted; 6. Test all over function done in simulation environment operation; 7. All material/ material And equipment available For used in production; 8. System fulfil qualification through test and evaluation. 9. Ready For production scale full (capacity full).
5	The system is truly tested/proven through success operation	1. Draft operational has truly can applied; 2. Estimation investment technology already made; 3. No There is change significant design; 4. Technology has tested on condition Actually; 5. Productivity on level stable; 6. All documentation has complete; 7. Estimate price production compared to competitors; And 8. Technology competitors are known.

TKT Type Software

NO	DEFINITION/STATUS	INDICATOR
1	Principle base from technology researched And reported	1. Represents level Lowest of readiness technology device soft; 2. This is a new and emerging software domain explored by community basic research; And 3. Covers Also development from use level base, characteristic base from architecture device soft, formulation mathematics, draft device Which can realized, study principle base device soft, principle scientific, formulation hypothesis research, And algorithm general.
2	Formulation Draft and/or application technology.	1. Once the basic principles are researched, proceed to manufacturing application Which nature practical; 2. Applications are speculative, and there are possibilities No own proof or analysis detailed For support assumption existing/done; And 3. Examples limited on studies analytic with using synthetic data (artificial). 4. User/customer Already can identified, application system or subsystem has been identified

NO	DEFINITION/STATUS	INDICATOR
		<ol style="list-style-type: none"> 5. Studies appropriateness application device soft 6. Empirical and theoretical design solutions already available/identified 7. technology component is partially complete characterized 8. Prediction performance every element already made 9. impression/interest study has been carried out user/customer towards the device soft
3	Proof of concept of function and/or characteristics important in a way analytical And experimental	<ol style="list-style-type: none"> 1. There is an initiation of the research and development process which is conducted in a way active; 2. Appropriateness scientific showed through studies analytical And laboratory; And 3. Also includes development of the function environment limited For validate characteristic critical And predictions analytical use : 4. A. Non-integrated software components and B. Part that data represent 5. Prediction ability every element technology Already validated through study analytical 6. Outline algorithm device soft available 7. Prediction ability element technology Already validated through modeling And simulation 8. Laboratory experiments have been able to confirm this appropriateness device soft 9. Representative user Already Can included in software development 10. Appropriateness scientific here fully showed 11. Mitigation risk has identified
4	Validation module subsystem in laboratory environment	<ol style="list-style-type: none"> 1. Integrated basic software components work together; 2. Relatively primitive related with efficiency And reliability (robustness) compared to with system/product Finally; 3. Architectural development begins with coverage of issues issue related interoperability, reliability, convenience maintenance, ability enhancement, scalability, And security; 4. There is business adjustment with elements (technology) current; And 5. Prototype Which There is developed For show aspect which different on system/product Finally. 6. Issue "cross technology" (If There is) fully has identified 7. Development architecture system device soft in a way formal start 8. Document need user 9. Algorithm has converted to pseudocode 10. Analysis data requirements format has complete 11. Demonstration device soft Already done in simple environment 12. Estimate size device soft 13. Study integration started 14. Draft design conceptual documented

NO	DEFINITION/STATUS	INDICATOR
5	Validate modules and/or subsystems within environment Which relevant	<ol style="list-style-type: none"> 1. Represents level Where technology device soft developed is ready to be integrated with system which Already There is; 2. Prototype implementation that conforms to environment/interface; 3. Done experiment to problem Which actually (<i>real</i>); 4. Do simulation to interface from system which has existed; 5. Architecture device soft system finished; And 6. The algorithm runs on (multi) processors in the environment operational with characteristics Which in accordance hope 7. The influence of “<i>cross technology</i>” (if any) has been identified And set through analysis 8. Need interface system is known 9. Architecture device soft system Already set 10. Analysis need interface internal has complete 11. <i>Coding</i> function/module has complete 12. Prototype has made 13. Quality And reliability already become consideration 14. laboratory environment has been modified approach environment operational 15. management risk documented 16. Function Already integrated in modules 17. <i>Drafts test and evaluation masters plans</i>
6	Validation module and/or sub system in “ <i>end-to-end</i> ” environment (<i>environment</i>) Which relevant	<ol style="list-style-type: none"> 1. Is the level at which the engineering feasibility of technology software showed; And 2. Covers Also implementation prototype laboratory with problem realistic scale full, Where technology device soft integrated in a way Partial with the hardware/software of the existing system There is. 3. Validation of measurement characteristics and performance “<i>cross technology</i>” has complete 4. Level quality And reliability tea set 5. Environment operational has is known 6. M&S done For simulate performance system In the environment operational 7. Test and evaluation masters plans Already final 8. Analysis structure databases And interface has complete 9. Documentation device soft limited Already There is 10. Device soft version “<i>alpha</i>” released . _
7	Deep system prototype demonstration operational environment or environment accuracy tall	<ol style="list-style-type: none"> 1. Is the level at which the program's feasibility is determined technology software showed; And 2. Covers Also implementation prototype environment operational, where the technical risk functionality is critical nature available to be demonstrated and tested in condition technology device soft the well integrated with hardware/software from system operational. 3. System prototype Already built 4. The algorithm is already running on the processor in the environment operations

NO	DEFINITION/STATUS	INDICATOR
		<ol style="list-style-type: none"> 5. Part big “bugs” device lunak Already No There is 6. Device software version “beta” released 7. Process manufacture device software in a way general Already can understood 8. Plan production has complete
8	The system is actually complete and qualify through testing and demonstration in the environment operations/applications Actually	<ol style="list-style-type: none"> 1. Represents level Where technology device software integrated fully with device hardware And software from system operational; 2. Complete software development documentation; And 3. All function tested Good in scenario simulation nor operational. 4. Device software in a way whole Already in- debugged 5. Diagram architecture end have been completed
9	The system is truly tested/proven through success use operational	<ol style="list-style-type: none"> 1. Represents level Where technology device software the Ready For developed nor used in a way repeated (rapid development/re- use); 2. Completely technology based software integrated with the hardware/software of the system operational; 3. All documentation device software has verified; 4. Own experience success from side operational; 5. There is support sustainable to manipulation device software; And 6. The system is actual (really exists and used) 7. Production device software Already stable 8. All documentation has complete 9. Draft operational has implemented with success

TKT Type Agriculture/ Fishery/ Farm

NO	DEFINITION/STATUS	INDICATOR
1	Principle base from something technology has researched	<ol style="list-style-type: none"> 1. Formulation question research or research hypothesis Already There is; 2. Literature study on basic principles related to research It is already done; And 3. Way/method/process/product Which researched And will developed Already There is And own opportunity success.
2	Technology concepts and applications have been in formulate	<ol style="list-style-type: none"> 1. Means And infrastructure Which will used has identified; 2. Validation results studies literature has done; And 3. Design study in a way theoretical And empirical has identified.
3	Draft And characteristics important from something technology has proven analytically and experimental	<ol style="list-style-type: none"> 1. Design research Already arranged (methodology choice, stages, and data Which needed For study); 2. Theoretically, empirically and experimentally have been known And components system technology the can working with Good; And 3. Technology has worthy in a way scientific (studies analytic, model/simulation, experiment).
4	Component technology has validated in laboratory environment	<ol style="list-style-type: none"> 1. Test laboratory components in a way separated have been done; 2. Performance from each component technology (way/method/process/product) Which will developed has shown results the good one;

NO	DEFINITION/STATUS	INDICATOR
		<ol style="list-style-type: none"> 3. Test function main technology in environment which is relevant has held; 4. Prototype technology scale laboratory has created; 5. Study integration component has started; 6. Analysis beginning show that function main Which needed can work with Good; And 7. Integration component technology And design get up scale laboratory has tested (low fidelity).
5	Component technology has validated in environment Which relevant	<ol style="list-style-type: none"> 1. Prototype technology Ready tested on condition laboratory modified Which approach environment Which indeed; 2. Accuracy/ fidelity increase; 3. The integration of technology components has been tested for accuracy tall (high fidelity).
6	The Model or Prototype has been tested in environment Which relevant	<ol style="list-style-type: none"> 1. Condition something technology has is known (on optimal conditions); 2. Technology Already tested with accuracy tall on simulation environment operational with data Which complete (in accordance with design or research design); 3. Results test prove worthy in a way technical (engineering feasibility); And 4. Draft analysis economy (estimation beginning appropriateness economy) Already available.
7	The prototype has been tested in the environment Actually	<ol style="list-style-type: none"> 1. Condition environment operational / actually for technology has been known; 2. Has done test multi location technology scale field; 3. Results test roomy show performance / performance Which stable; 4. Results test multi location prove worthy in a way technology. 5. Need investment For process production has identified; And 6. Analysis appropriateness economy complete (results validation in environment Actually).
8	System Technology has complete And fulfil condition (qualified)	<ol style="list-style-type: none"> 1. Picture prototype And detail engineering equipment supporters have available; 2. Process cultivation with level productivity Which desired has been mastered; 3. Has standardization is carried out technology; And 4. All material/ material And equipment For used in production has available.
9	Technology truly tested/ proven through successful operation	<ol style="list-style-type: none"> 1. The concept of applying technology really works applied; 2. Estimation investment technology Already created; 3. No There is change significant design; 4. Technology has tested on environment Actually; 5. Has fulfil certification Which needed; And 6. All documentation has complete.

TKT Type Health–Products Vaccines/Biologicals

NO	DEFINITION/STATUS	INDICATOR
1	Principle base from technology researched And reported	<ol style="list-style-type: none"> 1. Studies literature scientific about basic principles technology which was developed Already There is; 2. Surveys beginning market has started and assessed; 3. Potency application scientific For solution problem has depicted.
2	Formulation draft and/or application formulation. (Intensive intellectuals who focus on problems produce literature studies that review and produce idea research, hypothesis And design experiment related issues scientific.	<ol style="list-style-type: none"> 1. Hypothesis has formed; 2. Development design research Already There is; 3. Protocol research For test truth principle Already There is; And 4. Protocol Already reviewed by gathering para expert And Approved.
3	Proving the concept of function and/or characteristics important in a way analytical And experimental. Initiation of <i>Proof of Concept</i> for development product vaccine depicted with study limited both <i>in vitro</i> and <i>in vivo</i> model animals.	<ol style="list-style-type: none"> 1. Studies analytic support predictions performance element-technological elements Already There is; 2. Characteristics/traits And capacity show off Work system base has identified And predictable; 3. Has done test laboratory in a way <i>in vitro</i>; And 4. Has done test laboratory in a way <i>in vivo</i> animal model.
4	<p>Validate components/subsystems in the environment laboratory.</p> <p>Component base technology integrated For show that technology will Work together. Moment This <i>low fidelity</i> (Still possible exists error) when compared to with technology original. Example addition of ad tools hoc in Laboratory.</p> <p>Study laboratory non GLP done For define hypothesis And identify data Which relevant Which required For evaluation technology on design experimental Accurate.</p> <p>Studies explorative from critical technology For its effectiveness integration to in candidate biologics/vaccines (pH, <i>adjuvant</i> , <i>stabilizer</i> , preservative, <i>buffers</i> , method giving, method purification Which proposed, characterization chemistry And physics, results metabolites And excretion/elimination, <i>dose ranging</i> , test challenge (For protection).</p> <p>Candidate vaccines/biologics Already tested in animal models to see potential, effects biology, security, effect side and toxicity. <i>Markers</i> marker For determine <i>end point</i> on preclinical nor test clinical Already identified.</p>	<ol style="list-style-type: none"> 1. Prototype scale Lab has produced; 2. Prototype scale Lab <i>Good Laboratory Practice</i> (GLP) has generated For material test Preclinical; 3. Process 'key' For production has identified And studied in labs; 4. Integration system technology And design get up scale lab has been completed (<i>low fidelity</i>); 5. The Target Product Profile (TPP) has been determined consisting of from description preparation, preparation content, indication, dose, <i>dose ranging</i> , method giving, efficacy, effect side which is possible, type preparation; And 6. The initial preclinical test is in the form of a safety and efficacy test candidate biology/vaccines has depicted And defined in model animals.

NO	DEFINITION/STATUS	INDICATOR
5	<p>Validation components/subsystems in something environment Which relevant. Period intensive studies non clinical And preclinical done involve data parametric And analysis is carried out on validated systems, And production scale pilot from candidate biologics/vaccines. Results research show test appropriate potential, proposed production fulfil rule GMP on scale pilot, identification and proof of PoC in test animals can predict tests in humans, through markers appropriate. Conduct GLP toxicity tests on test animals, establishing markers for test predictions clinical in man, as well as prove immunogenicity And potential, as well as PK and PD and initiation of the study stability preparation.</p>	<ol style="list-style-type: none"> 1. Preparation production And facility GMP; 2. Production biology/vaccines scale pilot has designed Anddone; 3. Formulas parent preparation biology/vaccines has reviewed _by <i>Quality assurance</i> And fulfil rule GMP; 4. Preclinical testing for safety, immunology/biological activity andefficacy preparation GLP has done; 5. Design test clinical on man Already made And registered to Body POM based on test preclinical; 6. Design test stability And test stability limited has done.
6	<p>Demonstration model or prototype system/subsystem in an environment relevant. Discussion pre IND Already started to Body POMand documents have been prepared andentered, Phase 1 CT has done onamount participant small And subject controlled Andevaluated exists symptom clinical in a way intensive.Data immunogenicity And or pharmacokineticsand pharmacodynamics are readily available for predictions CT phase 2 in man.</p>	<ol style="list-style-type: none"> 1. Limited number of phase 1 clinical trials in humans has been carried out and meets security requirements and show results immunogenicity And pharmacokinetics (PK) and pharmacodynamics (PD). expected; And 2. Data results test clinical 1 Which support arranged protocol test clinical phase.
7	<p>Demonstration prototype system in environmentActually. Test CT phase 2 For evaluate security And immunogenicity as well as activity biology done. Final product dosage, <i>dose ranging</i> , method and timeThe award has been determined from the PK/PD results. Data results CT phase 2 documented Andreported to Director General POM For preparation test CTphase 3 (<i>efficacy</i>). Point end sutu test clinical Andthe marker set on agreement BodyPOM.</p>	<ol style="list-style-type: none"> 1. Test clinical phase 2 in man Already held; 2. Product dosage data, ranging dosage, method and time provision as well as pk and pd data are the basis for compile protocol test clinical phase 3 has There is; 3. A phase 3 clinical trial protocol has been created and submitted to body pom; 4. <i>Scaling up</i> the process to commercial scale has been carried out in accordance condition gmp; 5. Process validation at production scale has been carried out; And 6. Production facilities and space for production scale which fulfills gmp has prepared.
8	<p>Complete And reliable through testing And demonstration in a real environment. Results phase 3 CT test meets safety requirements and efficacy from candidate iologic/vaccine.Validation process Already fulfilled, And studies reproducibility/ consistency It is already done. Pre registration Already be delivered to Body POM.</p>	<ol style="list-style-type: none"> 1. Agreement registration from Body POM; 2. Drafting dossier has started related data <i>Chemical</i> , <i>Material</i> and <i>Control</i> , facilities, buildings, workforce, etc; 3. Facility production has Approved by Body POM; 4. Test clinical phase 3 fulfil condition; 5. Dossier has registered to Body POM; And 6. Product has registered to body POM.
9	<p>The system is truly tested/proven through successful operation. Biologics/vaskin Already can distributed And marketed. Post marketing studies designed after There is agreementwith Body POM And did it post marketing surveillance (PMS). Surveillancedone Keep going continuously.</p>	<ol style="list-style-type: none"> 1. Routine production of biological products/vaccines has beendone; 2. Distribution And marketing product biology/vaccines hasdone; 3. Protocol pms on product biology And animal Alreadymade and submitted to body pom; And 4. Pms already implemented

TKT Type Health – Product Tool Health

NO	DEFINITION/STATUS	INDICATOR
1	Proof Principle Base Technology (<i>Basic Principle Report</i>)	<ol style="list-style-type: none"> 1. Level Lowest readiness technology; 2. Explanation theoretical principle base technology; 3. Survey beginning utility technology; 4. Study draft base theory scientific Which underlying technology tool health related; 5. Formulation draft base And proof in a way theoretical; And 6. Overview literature scientific related principles base technology.
2	Formulation of Technology Concepts (<i>Technology Concept Formulation</i>).	<ol style="list-style-type: none"> 1. Formulate topics study, compile hypothesis, And plan design experiment to find solutions to problems with base technology related; 2. Drafting hypotheses scientific. Making research plan and the protocol is reviewed And agreement; And 3. Through study literature And discussions scientific, arranged plan study And studies For identify potency And opportunity target therapy. Documented in form protocol or plan study Which get <i>review</i> And agreement.
3	Study For prove draft technology(<i>Research of Technology Concept</i>).	<ol style="list-style-type: none"> 1. Study base, collection And analysis data experiment, For test hypothesis Which arranged. Examine alternative concepts, and identify and evaluate component technology; 2. Initial testing of design concepts and evaluation various alternative; 3. Verification design, determination specification component; 4. Proof beginning truth draft (<i>proof-of- concept</i>) technology tool health on amount limited And model laboratory; And 5. Documentation of laboratory scale experimental results give proof beginning truth of concept technology tool health.
4	Validation component and/or sequence system scale laboratory (<i>Validation Components in laboratories</i>).	<ol style="list-style-type: none"> 1. Test And testing scale model laboratory to evaluate and review the level of security, effect side And effectiveness; 2. Drafting procedure And method Which used in study non clinical And clinical; 3. Proof truth draft (<i>proof-of-concept</i>) technology And level security; And 4. Publication (<i>peer-reviewed</i>) data proof truth draft technology And level security.
5	Prototype Scale Laboratory (Lab Scale prototype).	<ol style="list-style-type: none"> 1. Determination of classification (class 1, 2 or 3) of tool prototypes health based on equality with medical devices which are already There is; 2. Testing level security prototype scale lab based on standard Which applies (for example: iec60601); 3. Testing validation prototype scale lab about effectiveness And effect side, as well as disturbance towards/from equipment other. (For tool health class 1-2); And 4. Proving the level of safety and effectiveness of the prototypelab scale.

NO	DEFINITION/STATUS	INDICATOR
6	Prototype Scale Industry (Industrial Scale prototype).	<ol style="list-style-type: none"> 1. Industrial scale prototype validation testing on quantities limited about effectiveness And effect side, as well as disturbance towards/from equipment other. (For tool class health 1-2); 2. Phase 1 clinical testing of industrial scale prototypes for know level security And effectiveness on limited quantity (For tool health class 3); And 3. Proving the level of safety and effectiveness of the prototypescale industry on amount limited.
7	Prototype Complete Tested.	<ol style="list-style-type: none"> 1. Industrial scale prototype validation testing on quantities more big For ensure effectiveness And complete data Which required. (For tool health class 1-2); 2. Phase 3 clinical testing of industrial scale prototypes for ensure the level of effectiveness in larger numbers wide (For medical devices class 3); 3. Certification and standardization, as well as licensing applications required; And 4. Proving the level of safety and effectiveness of the prototypescale industry on amount more big.
8	Prototype Tested and Certified.	<ol style="list-style-type: none"> 1. Tool health can distributed And marketedafter getting licensing Which necessary; 2. Setup service And supervision full sell; And 3. Strategy marketing And supervision full sell.

TKT Type Pharmacy

NO	DEFINITION/STATUS	INDICATOR
1	Principle base from technolog y research And reported.	<ol style="list-style-type: none"> 1. <i>Reviews</i> And evaluation invention scientific as Foundation For classification technology new; 2. Has done survey beginning about <i>markets</i> And the assessment; And 3. There has been an explanation of the scientific application potential For problems Which has determined.
2	Concept formulation and/or formulation application. Focus intellectual on problem, Whichproduce study to publication scientific Which review And bring up idea research, hypothesis And design related experiments discourse scientific related.	<ol style="list-style-type: none"> 1. Has it produces hypothesis 2. Has developed, reviewed And he agreed <i>research plans</i> And or <i>research protocols</i>
3	Proof draft function And/ or characteristics important in a way analytical And experimental. Done synthesis beginning drug candidate, identify the location and mechanism of action and Initial characterization of candidate drugs instudies preclinical.	<ol style="list-style-type: none"> 1. Proof of concept has been carried out and proven initial as a candidate drug in in vitro research models and in Vivo in amount limited; And 2. Basic research, data collection and analysis For test hypothesis, explore draft alternative And identify as well as evaluate technology Which support drug development.
4	Validation components/subsystems in somethingenvironment Which relevant.	<ol style="list-style-type: none"> 1. Achieved points decision Where confirmed exists adequacy data related drug candidate in draft technical data package to support continuation process with preparation of Investigational application New Drugs (IND); 2. Has done research non-clinical And clinical in a way tightcovering collection data parameter And analysis

NO	DEFINITION/STATUS	INDICATOR
		<p>in a well-formulated method with pilot lots (prototype Which validated) candidate drugs;</p> <ol style="list-style-type: none"> 3. Results research use pilot lots give the foundation for a cgmpr compliant production process (current Good Manufacturing Practice)- compliant pilot lots production; 4. Has conducted a study security and toxicity using GLP animal model; 5. Has done identification endpoints efficacy clinical (clinical efficacy) or its surrogate; 6. Has done study For evaluate pharmacokinetics And pharmacodynamics drug candidate;And 7. Has started research stability.
5	Demonstration model or prototype system/subsystem in an environment relevant.	<ol style="list-style-type: none"> 1. Test clinical Phase 1 done For prove safety of candidate drugs in humans in quantities small And in supervision Which heart- heart And monitored condition the clinical; 2. Application IND prepared And submitted (submit); 3. Technology production proven through qualification facility cgmpr; And 4. Results from test Phase 1 has done And fulfil condition security clinical And support process to test clinical Phase 2.
6	Demonstration prototype system in environment Actually.	<ol style="list-style-type: none"> 1. Phase 2 clinical trials have been carried out to prove it preliminary efficacy and to obtain safety data and more toxicity carry on; 2. Phase 3 clinical research plan or surrogate test plan has been approved; 3. Activity product (that is proof beginning efficacy) has determined; 4. Has determined dose product end, range dose, timetable, method giving, proven (established) from data pharmacokinetics And pharmacodynamics in a way clinical; And 5. Has done scaling up process For scale commercial Which fulfil GMP requirements.
7	complete And reliable through testing And demonstration In the environment Actually.	<ol style="list-style-type: none"> 1. Process validation has been completed and followed with test lots consistency (consistency product end); 2. An expanded phase 3 clinical trial has been carried out or surrogate test to collect related information security And effectiveness drug candidate. Testing carried out to assess the overall risk-benefit of giving drug candidate And For give base Which Enough For giving label drug (drug labeling); 3. Dossier prepared And submitted to BPOM; 4. Agreement dossier for medicine by BPOM; And 5. Commercial scale production facilities exist and have inspected BPOM.
8	The system is truly tested/proven through successful operation.	<ol style="list-style-type: none"> 1. Pharmaceuticals (drugs) or medical devices have distributed/marketed; And 2. Has done research And supervision post- marketing (non-clinical nor clinical).

TKT Type Social Humainora And Education

NO	DEFINITION/STATUS	INDICATOR
1	Principle base research has observed And reported	<ol style="list-style-type: none"> 1. Background behind And objective R&D has defined 2. There is question R&D (<i>question research</i>) Which want tois known or answered. 3. Fact And argument base Which relevant And support necessity done R&D 4. R&D required For support policy government, knowing phenomena or solutions to problems, etc
2	Support Data Beginning, Hypothesis, Design & Procedure R&D has explored	<ol style="list-style-type: none"> 1. Hypothesis R&D has arranged 2. Preliminary data supports the R&D question want to answered 3. R&D design (<i>research design</i>) that will be carried out has been explored (determining data <i>topics</i> , compiling questionnaire, theme FGD, etc.) 4. Alternative methodology, procedure And stages Which willdone has explored
3	Design And Methodology Study arranged Complete	<ol style="list-style-type: none"> 1. Design methodology Which used For answer question study has arranged 2. Design determination sampling, and/or collection need data And technique collectiondata has arranged 3. Adequacy And completeness data has set 4. Evaluation technical And predictions results has done 5. Scenario And alternative For completeness data has arranged 6. Design R&D has Complete
4	Collection Data, Validation on Environment Simulation or Example /Activity R&D	<ol style="list-style-type: none"> 1. Collection data primary has held (questionnaire/FGD//or in form other) 2. Validation For ensure data Which obtained relevant And related issues have been implemented 3. Secondary data support can complement initial data which has obtained previously 4. Data Which There is tested validity And its reliability. Reliability data And system (relatively) Still low compared to with the expected system
5	Data Completeness and Analysis on Simulation Environment / R&D Activities	<ol style="list-style-type: none"> 1. Reliability data has increase significant. 2. Data has Enough And fulfil condition For analysis advanced. 3. Analysis beginning with data Which complete has done 4. Data integrated For analysis takingconclusion 5. Progress Report (analysis introduction has generated) and design output has been arranged.
6	Results R&D important And significant For decision support and policy	<ol style="list-style-type: none"> 1. Report (conclusion from analysis has generated) has been prepared. 2. Results /output R&D Social Humainora And Education (making recommendations / policy briefs and others) has been completed. 3. Draft recommendations (regulatory alternatives, policies or intervention government) has been produced. 4. List party related with regulations/ policy/intervention recommended has is known. 5. Communication beginning with party related (internal/external) start done.

NO	DEFINITION/STATUS	INDICATOR
		6. Cover Letter for delivering Results/Output R&D has prepared.
7	Utilization results R&D For repair Policies and Governance	<ol style="list-style-type: none"> 1. Letter Introduction And Results / Outputs R&D (recommendations/conclusions/alternatives) have submitted to the parties related; 2. Evidence of receipt of R&D results/output by party related; 3. Results/ output R&D Which be delivered become reference And information for parties related; 4. Part or a number of results/ output R&D Which be delivered become basic consideration For repair application results R&D non Social Humainora, and Education or utilization strategies and application of the results; 5. Part or a number of results/output R&D Which be delivered become basic consideration For regulations / policy or intervention government; 6. Happen communication intensive with party related about R&D results/output.
8	Support For Regulations And Policy related Aspect Social Humainora And Education	<ol style="list-style-type: none"> 1. Most (more than half) of R&D results/output Social Humainora And Education become basis/consideration for improving the application of results R&D non Humanora Social and Education or strategy utilization and application the result; 2. Part big (more half) results/output R&D Social Humanora and Education delivered become the basis/consideration for regulations/policies or intervention government; 3. Happen communication (intensive) with party related about results/output R&D and follow-up; 4. Evidence that the results/output have been utilized R&D by party related.
9	Contribution policy Which recommended For repair Condition Development	<ol style="list-style-type: none"> 1. Recommendation results R&D give contribution in improving Humainora's non-Social R&D results And its implementation 2. Recommendation results R&D give contribution in repair social elements economy public. 3. Results R&D And recommendation truly has succeed repair condition social economy.

TKT Type Art

NO	DEFINITION/STATUS	INDICATOR
1	Principle base from art has observed And reported	<ol style="list-style-type: none"> 1. Background behind And formulation problem has identified; 2. R&D questions (<i>research/creative questions</i>). Already is known or answered For get findings; 3. Objective R&D has defined with see formulation of the problem R&D; 4. Identification problem has done For get base thinking as approach;

NO	DEFINITION/STATUS	INDICATOR
		<ol style="list-style-type: none"> 5. Approach study/ planning/ creation/ airings have been set; 6. Relevant empirical facts and basic arguments and support necessity have been done R&D; 7. There have been previous literature studies, theoretical/empirical research become base R&D; 8. Has There is way/method/process Which researched/created/ applied and will be developed and owned opportunity success.
2	<p>Concept and/or application of the art form formulated and has been explored;</p>	<ol style="list-style-type: none"> 1. Principle base R&D has explored; 2. Has There is principle base R&D Which nature qualitative, unique, particularism (fact, information), interpretation meaning, And narrative-descriptive; 3. Design R&D (research design) has communicated with <i>focused groups discussion</i> (FGD) (specifically art creation and research topics certain) Which refers on chart flow creative, productive, and distributive; 4. Elements base art, that is form (<i>appearance</i>),weight (<i>content</i>), And appearance has set; 5. Characteristics elements aesthetics has mastered Andunderstood; 6. Alternative methodology, procedure And stages Which willdone has traced; 7. Has There is model And simulation process creative Forartistic creation Which can determine results; 8. Has done analysis For test truthbasic principles of creation;
3	<p>Research Methodology/Design/ Creation/display arranged in a way complete.</p>	<ol style="list-style-type: none"> 1. Methodology study /design /creation/ viewing Which used For answer question study And question creative the design / creation / display has been prepared, And use method SMART:S (specific/specific), m (measurable/measurable), A (achievable), R (reasonable), And Q (timeable/scheduled); 2. Has arranged argumentation to question study And question creative planning/ creation/ viewing Which designed in accordance with source creation artand/or collection need And collection techniques data; 3. Identify the problem research/design/creation/display has been set For determine base theory or foundation of thought; 4. Approach study/ planning/ creation/ airings have been mastered And understood; 5. Characterization component aesthetic And elements the culture to be developed has been mastered and understood; 6. Data Enough and complete; 7. Evaluation technical process creative study/ planning/ creation/display; 8. Design research/design/creation/display in a way theoretical And empirical has identified Andset.

NO	DEFINITION/STATUS	INDICATOR
4	Implementation process creative Work studio or laboratory environment in development prototype artworks.	<ol style="list-style-type: none"> 1. Component base method And process creation integrated Work in a way together And sustainable; 2. Originality and uniqueness product art enriches identity national personality; 3. Prototype Which generated in scale studio; 4. A trial has been carried out to obtain an evaluation or critics from circles observer Which competent.
5	Validate prototypes/products/ scale artwork studio (Studio Scale Prototype).	<ol style="list-style-type: none"> 1. Has determined category prototype work art based on equality with the work art similar; 2. A studio scale prototype has been developed as part from innovation and actualization art style. 3. Has done testing level representation prototype scale studio based on standard Which valid national And international. 4. Has done testing validation prototype scale The studio uses the prevailing aesthetics of the time That.
6	Field Testing of Prototypes/products/worksart Studio Scale	<ol style="list-style-type: none"> 1. Testing validation prototype scale studio become strategic part of socializing related arts and culture products with strength Power competitive. 2. Testing prototype scale studio For know level trust or satisfaction public toproduct quality. 3. Proving the level of public trust or satisfaction and the effectiveness of commercial scale prototypes on numbers limited. 4. Prototype has tested with accuracy/fidelity studio /laboratory Which tall on simulation public as base social. 5. Has done test try studio Which analyze appropriateness in a way technical And financial in business creative.
7	Field Testing of Prototypes/products/worksart Which has been implemented in public.	<ol style="list-style-type: none"> 1. Testing validation prototype on A exhibition/performance/display level national followed minimum 3 provinces. 2. Has done testing prototype For ensure level effectiveness on amount more bigNational level. 3. Specification work art has own superiority comparative And competitive.
8	Results product/work art has complete testedon environment actually.	<ol style="list-style-type: none"> 1. Testing validation results work art on A level exhibitions/shows/screenings international (followed minimum 3 country); 2. Has analysis is carried out economic feasibility; 3. Has start done process certification And standardization For guard quality as well as program exhibition/performance/display Which necessary; And 4. It has been proven the level of popularity and effectiveness results work art on exhibition/performance/display.
9	Tested products/ artwork results andCertified.	<ol style="list-style-type: none"> 1. Results work art has accepted in a way national Andinternational through process curatorial; 2. Document certification Already complete 3. Estimate price artworks has been determined

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

A. Evaluation Proposal Study

NO	COMPONENT EVALUATION	COMPETITIV E NATIONAL						DECENTRALIZATI ON			ASSIGNMENT			
		PD	PT	PP	PDP	PKPT	PPS	PDUPT	PTUPT	PPUPT	KRU-PT	KKS	WCR	R.K
1	Record Proposer's Trace													
	a. Quality And quantity publicationarticle in scientific journals	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	b. Quality And quantity publicationin proceedings	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	c. Quality and quantity of books ISBN	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	d. Quantity and acquisition statusKI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	e. Record member trail proposer (concerning points a until d)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	f. Own patent registered or <i>granted</i> and/or copyrighted special for related arts fields substance proposal study			✓						✓	✓			
2	Proposal Study													
	a. The relevance of the research proposalto the focus area, theme, And topic	✓	✓	✓	✓	✓	✓				✓		✓	✓
	b. The relevance of the research proposal towards the Strategic Plan PT							✓	✓	✓				
	c. Quality And relevance objective,problem, <i>state of the art</i> , method, And novelty study	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	d. Linkages proposal study to results study Which obtained previouslyAnd future plans (<i>roadmap</i> study)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
	e. Suitability assignment researcherand division task	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	f. Quality outer must study promised	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	g. Fairness stages target achievements outer must study	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	h. Fairness target TKT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
	i. Suitability timetable study	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	j. Fairness WED proposal	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	k. Contemporary And source primarylibrary references	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	g. Support partner cooperationstudy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
	h. Support funding partner	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓

B. Evaluation Proposal Devotion to Public

NO	COMPONENT EVALUATION	COMPETITIVE NATIONAL								DECENTRALISATION	ASSIGNMENT
		PKM	PKMS	KKN-PPM	PPK	PPPUD	PPUPIK	PPDM	PKW	PPMUPT	PPIM
1	Record Footsteps Proposer										
	a. Quality and quantity publication article in journal scientific	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	b. Quality and quantity publication in proceedings	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	c. Quantity and status acquisition KI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	d. Member track record	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Proposal										
	a. Sharpness of situation analysis problem partner target	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	b. Priority problem formulation partner	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	c. Suitability competence team to complete partner problems	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	d. Method implementation, solution, And activity plan offered	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	e. Suitability of team assignment executor	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	f. The quality of science and technology offered (results study)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	g. Mandatory external quality promised	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	h. Reasonableness of target stages external achievements must	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	i. Suitability timetable	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	j. Fairness WED proposal	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	k. Contribution participation partner	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

C. Evaluation Discussion And Visit Field Proposal Study

NO	COMPONENT EVALUATION	COMPETITIVE NATIONAL	DECENTRALISATION
		PP	PPUPT
1	Ability presentation and mastery of the material proposal	✓	✓
2	Suitability substance proposal with material presentation	✓	✓
3	Readiness And willingness means in institution proposer And partner	✓	✓
4	Readiness results study previous For reach target outer Which proposed (formula, prototype, results study, model, product, etc.)	✓	✓
5	Organization: a. Leadership And team work b. Completeness system organization c. Coordination And distribution task	✓	✓
6	Record footsteps partner	✓	✓
7	Commitment support financial partner	✓	✓

8	Readiness application scale industry or application product other science and technology including proof ownership KI	✓	✓
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D. Evaluation Discussion And Visit Field Proposal Devotion to Public

NO	COMPONENT EVALUATION	COMPETITIVE NATIONAL					DECENTRALIZATI ON
		PPK	PPPUD	PPUPIK	PPDM	PKW	PPMUPT
1	Ability presentation and mastery material proposal	✓	✓	✓	✓	✓	✓
2	Suitability substance proposal with material presentation	✓	✓	✓	✓	✓	✓
3	Readiness And willingness means in institution proposer	✓	✓	✓	✓	✓	✓
4	Commitment fund contribution PT	✓		✓	✓		✓
5	Institutional units entrepreneurship/business in PT	✓		✓			
6	Readiness means building And infrastructure For support program	✓		✓			
7	Readiness implementation program And scheduling	✓	✓	✓	✓	✓	✓
8	Readiness And Appropriateness Team Executor (skill, compactness And experience)	✓	✓	✓	✓	✓	✓
9	Strategy implementation program	✓	✓	✓	✓	✓	✓
10	suitability, quality And mark strategic program	✓	✓	✓	✓	✓	✓
11	Prospect success program	✓	✓	✓	✓	✓	✓
12	Appropriateness partner target (location, supportnatural And environment, equipment, workshop Work, office, means And infrastructure)	✓	✓	✓	✓	✓	✓
13	Commitment contribution fund from partner target and or partner cooperation		✓			✓	

E. Evaluation Monitoring And Evaluation Internal or External Implementation Study

NO	Componen t Evaluation	COMPETITIVE NATIONAL						DECENTRALIZATION			ASSIGNMENT			
		PD	PT	PP	PDP	PKPT	PPS	PDUPT	PTUPT	PPUPT	CRE W- PT	KKS	WCR	R.K
1	Progress achievement mandatory external Which promised	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Progress achievement outer addition Which promised	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Suitability study with propos al	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

4	Integrity, dedication, and compactness team researcher			✓						✓	✓			
---	--	--	--	---	--	--	--	--	--	---	---	--	--	--

NO	Component Evaluation	COMPETITIVE NATIONAL						DECENTRALIZATION			ASSIGNMENT			
		PD	PT	PP	PDP	PKPT	PPS	PDUPT	PTUPT	PPUPT	CREW-PT	KKS	WCR	R.K
5	Realization cooperation (If There is)			✓					✓	✓				
6	Realization contribution partner (if There is)		✓	✓				✓	✓	✓			✓	
7	Potency continuity results study	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	

F. Evaluation Monitoring and Internal Evaluation or External Implementation Devotion to Public

NO	COMPONENT EVALUATION	COMPETITIVE NATIONAL								DECENTRALIZATION	AUDIENCESAN
		PKM	PKMS	KKN-PPM	PPK	PPPUD	PPUPIK	PPDM	PKW	PPMUPT	PPIM
1	Progress external achievements must	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Progress external achievements addition	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Level achievement empowerment	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	Suitability program with plan activity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	Integrity, dedication, compactness and team intensity executor in activities infield	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6	Participation rate partner target	✓	✓	✓	✓	✓		✓	✓	✓	✓
7	Participation rate partner cooperation			✓	✓	✓	✓	✓	✓	✓	✓

G. Evaluation Results Study

NO	COMPONENT EVALUATION	COMPETITIVE NATIONAL						DECENTRALIZATION			ASSIGNMENT		
		PD	PT	PP	PDP	PKPT	PPS	PDUPT	PTUPT	PPUPT	CREW-PT	KKS	R.K
1	Level achievement And quality mandatory external Which promised	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Level achievement and quality outer additional ones promised	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Suitability results study with proposal	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4.	Potency continuity results study				✓	✓	✓	✓	✓	✓	✓		

H. Evaluation Results Devotion to Public

NO	COMPONENT EVALUATION	COMPETITIVE NATIONAL								DECENTRALIZATION	PENUGASAN
		PKM	PKMS	KKN-PPM	PPK	PPPUD	PPUIK	PPDM	PKW	PPMUPT	PPIM
1	Level achievement And quality outer must	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Level achievement and quality outer addition	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Level achievement empowerment	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	Suitability results program with plan activity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	Potency continuity				✓	✓	✓	✓	✓	✓	

I. Evaluation Performance Institutional in Management Study

NO	COMPONENT	EVALUATI ON	Weig ht (%)
1	Quality assurance SOP based on cycle study	Yes/no, implemented/notHeld	5
2	Amount of internal funding incentives forstudy lecturer	Proportion of total internal research funding compared to amount lecturer Which owned	20
3	Budget allocation from PT For management/quality assurance (operate cycle study)	Proportion amount fund management internal research versus numbers lecturer which are owned	5
4	<i>Reviewers</i> internal	The proportions of the number of internal <i>reviewers were compared</i> amount proposal.	5
5	Suitability of each research title with Strategic Plan study PT	Proportion of the number of research titlesin accordance with the field superior PT	25
6	Outer every title study	Proportion of the number of publications (international, national, IPR, other outcomes) comparedby the number of funded research titlesAnd amount Funding	30
7	Downstreaming results study	Proportion of the number of successful research titles downstream compared to the amountfunded research	10
AMOUNT			100

Attachment 5 Criteria Stages Outer Study And Validity Evaluation Outer

STUDY COMPETITIVE NATIONAL

A. Outer Must Study Base

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

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• The 12th, or 3	• Publication in Journal International	• Article in journal international	• <i>Accepted</i>	• Letter informatio <i>naccepted</i> from <i>the chief editor</i>	There is/ available	• There's a letter informatio <i>naccepted</i> from <i>the chief editor</i> • Indexed on the database reputable	• Name journal • Publisher journal • Title article • Writer's name • Article URL (If There is) • DOI (If There is) • Indexing agency	• Letter informatio <i>naccepted</i> from <i>the chief editor</i> • Article or <i>galleys</i> (final manuscript from the publisher or <i>preprinted article</i>)	• Certificate <i>accepted</i> from <i>the chief editor</i> didn'tThere is • Not included article international indexed reputable • Publishers inclin <i>lists predatory</i> • Year <i>accepted</i> before period study • Substance article not in accordance with there search topic
				• Article or <i>galleys</i> (final manuscript from publisher or <i>preprinted article</i>)	There is/ available				

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

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• The 12th, or 3	• Publication in Journal International	• Article in journal international	• <i>Published</i>	• <i>Softcopy</i> article • Article URL from publisher	There is/available There is/available	• Article has <i>published</i> • Indexed on the database reputable	• Name journal • Publisher journal • Title article • Writer's name • URLs Article • DOI • Indexing agency	• <i>Softcopy</i> that article rise in journal	• <i>Softcopy</i> article no There is • Not included article international indexed reputable • Article no can be traced from URLs Which given • Publishers include <i>predatory</i> • Year <i>published</i> before period study • Article substance it is not in accordance with with the topic study

A3. One book results study with ISBN in form print

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• The 12th, or 3	• Book Print Results Study	• Monograph • Book reference • Book Teach	• Published on ISBN	• Letter Information rising from publisher and mention amount copy	There is/ available	<ul style="list-style-type: none"> • There is ISBN • Already published (there is a letter information from publisher) • Type of book in the form of: bookteach, book reference/ monograph • The contents of the book are appropriate with substance study • Publication Year in periodstudy 6. Quantity page minimum 40 page 	<ul style="list-style-type: none"> • Number ISBNprint • Writer's name (Can more from I) • Name Publisher • URLs (If There is) 	<ul style="list-style-type: none"> • Letter Information rising from publisher and mention amount copy • Book <i>Softcopy</i> in format pdf 	<ul style="list-style-type: none"> • No There is ISBN • No letter information from publisher • Contents book No according to title, no complete, or can not be read • Contents book No according to substance study • Publication Year before periodstudy • Number of pages less than 40 page
				• Book <i>Softcopy</i> in format pdf (max20 MB)	There is/ available				

A4. One book results study with ISBN in electronic form

Transaction outer on proposal					Validation/assessment outer				
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• The 12th, or 3	• Book Electronic Results Study	• Monograph • Book reference • Textbooks	• <i>On line</i> ber ISBN	• <i>e-book</i> URL on publisher/distributor	Can accessed	<ul style="list-style-type: none"> • There is ISBN • Own The URL Can accessed • Type of book in the form of: bookteach, book reference/ monograph • Book contents in accordance with substance study • Publication Year in period study 6. Quantity page minimum 40 page 	<ul style="list-style-type: none"> • ISBN number electronic • Writer's name (could be more from 1) • Name Publisher • URLs Book 	<ul style="list-style-type: none"> • Book URL electronic • <i>Softcopy</i> book electronic format pdf. 	<ul style="list-style-type: none"> • No There is ISBN • Contents book No according to title, no complete, or can not be read • URL No can accessed • Contents book No according to substance study • Publication Year before periodstudy • Number of pages less than 40 page
				• <i>Softcopy</i> Book in pdf format (maximum 20 MB)	There is/ available				

A5. Three article proceedings Which indexed on databases reputable

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• The 12th, or 3	• Publication in proceedings seminar international	• Article on <i>conferences</i> / seminar international	• Rise	• <i>Covers</i> , list of contents, and articles Which printed in proceedings 1	There is/ available	• Article complete printed inside proceedings 1. 2, And 3 • Indexed on the database reputable	• Name <i>Conferences</i> / seminar 1. 2, And 3 • Time implementation conference 1. 2, and 3 • Title Article 1. 2, And 3 • Writer 1. 2, And 3 • Publisher 1. 2, And 3 • Proceedings URL (If There is) • Institution Indexer 1. 2, And 3	• <i>Cover</i> , list content, and articles printed in proceedings 1. 2, and 3	• Document supporting (<i>cover</i> ,table of contents, and article) no There is • Not included proceedings indexed reputable • Year implementation <i>conference</i> before period study • Article substance it is not in accordance with with the topic study
				• <i>Covers</i> , list of contents, and articles Which printed in proceedings 2	There is/ available				
				• <i>Covers</i> , list of contents, and articles Which printed in proceedings 3	There is/ available				

A6. Three *Book Chapters* Which indexed on reputable database or has an ISBN in form print or electronic

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
<ul style="list-style-type: none"> • Number 1, 2, or 3 	<ul style="list-style-type: none"> • <i>Book Chapters</i> 	<ul style="list-style-type: none"> • <i>Book Chapters 1</i> 	<ul style="list-style-type: none"> • Rise ber ISBN 	<ul style="list-style-type: none"> • <i>Cover book, table of contents, And chapters book 1</i> 	There is/available	<ul style="list-style-type: none"> • The book is there ISBN or published by the publisher reputable • Already Rise • <i>Book Contents Chapters</i> in accordance with substance study • Publication Year in period study 	<ul style="list-style-type: none"> • Title Book 1 • Title <i>Book Chapter 1</i> • ISBN Book 1 • Publisher NameBook 1 • URLs Book 1 (If There is) 	<ul style="list-style-type: none"> • book cover, table of contents, and book chapters 1 	<ul style="list-style-type: none"> • No There is ISBN or publisher No reputation • Contents of <i>Book Chapters</i> No in accordance with the title, no complete, or No can be read • If Books Electronics, URL Can not accessed • Contents <i>Book Chapters</i> it is not in accordance with substance study • Publication Year before period study
		<ul style="list-style-type: none"> • <i>Book Chapters 2</i> 	<ul style="list-style-type: none"> • Rise ber ISBN 	<ul style="list-style-type: none"> • <i>Cover book, table of contents, And chapters book 2</i> 	There is/available		<ul style="list-style-type: none"> • Title Book 2 • Title <i>Book Chapter 2</i> • ISBN Book 2 • Publisher NameBook 2 • URLs Book 2 (If There is) 	<ul style="list-style-type: none"> • book cover, table of contents, and book chapters 2 	
		<ul style="list-style-type: none"> • <i>Book Chapters 3</i> 	<ul style="list-style-type: none"> • Rise ber ISBN 	<ul style="list-style-type: none"> • <i>Cover book, table of contents, And chapters book 3</i> 	There is/available		<ul style="list-style-type: none"> • Title Book 3 • Title <i>Book Chapter 3</i> • ISBN Book 3 • Publisher NameBook 3 • URLs Book 3 (If There is) 	<ul style="list-style-type: none"> • book cover, table of contents, and book chapters 3 	

B. Outer Must Study Applied

B1. One Science and Technology-Social Culture products form Right Create

Transaction outer on proposal						Validation/assessment outer					
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid		
• Right Create	<ul style="list-style-type: none"> • Program computer • Props For education and knowledge knowledge • Song or music • Drama or musical drama, dance, choreography, puppetry And pantomime • Deep fine arts all forms like art paint, draw, sculpture, art calligraphy, art sculpture, art sculpture, collage And art applied • Architecture • Map • Art Batik or Motif art other • Cinematography • Photography • Translation • Interpretation 	• Has Approved (Certified)	• Number 1	• Copyright Certificate issued Ministry of Law and Human Rights or institution international	There is/ available	• Have Rights Create	<ul style="list-style-type: none"> • Name Creation • Holder Right Create (Can more from 1) • Number recording Copyright • Recording date right create 	<ul style="list-style-type: none"> • Certificate of RightsCreate • Description and specification method 	<ul style="list-style-type: none"> • Copyright certificateNo There is • Year certificate RightCreate before period study • Description and specification No There is • Hqk Cipta yang produced no in accordance with the substance study 		
				• Description and specification creation	There is/ available						
			• 2nd or the 3rd	• Document Results testtry/test expert	There is/ available					<ul style="list-style-type: none"> • Results Document trial/test expert • Documentation testing form Photo or videos • Guidebookuse 	<ul style="list-style-type: none"> • Document results test tryNo There is • Test documentationin the form of photos or videos No There is • Guidebook use No There is
				• Documentation testing in the form of photo or videos	There is/ available						
				• Guidebook usage (<i>manualbook</i>)	There is/ available						

B2. One product technology in the form of Patent

Transaction outer on proposal						Validation/assessment outer			
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
<ul style="list-style-type: none"> Patent 	<ul style="list-style-type: none"> Patent process Patent product 	<ul style="list-style-type: none"> Registered 	<ul style="list-style-type: none"> Number 1 	<ul style="list-style-type: none"> The letter state number registration the patent issued Ministry of Law and Human Rights or institution international 	There is/available	<ul style="list-style-type: none"> Has get The letter state number registration the patent issued Ministry of Law and Human Rights or institution international Have been done test try 	<ul style="list-style-type: none"> Name patent Patent holder (Can more from 1) Number registration patent Date recording patent Test Date 	<ul style="list-style-type: none"> The letter state number registration the patent issued Ministry of Law and Human Rights or institution international Description and specification patent 	<ul style="list-style-type: none"> Letter stating patent registration number which are issued Ministry of Law and Human Rights or international institutions No There is Registration year patent before the periodstudy Description and specificationsno patent Patent Which generatednot in accordance with the substance study
				<ul style="list-style-type: none"> Description And specification onpatent 	There is/available				
			<ul style="list-style-type: none"> To-2 or to-3 	<ul style="list-style-type: none"> Document results test try 	There is/available				
				<ul style="list-style-type: none"> Documentation testing in the form of a photo orvideos 	There is/available				
				<ul style="list-style-type: none"> Instruction bookuse (manual book) 	There is/available		<ul style="list-style-type: none"> Results Documenttest try Documentation testing (in the form of a photo or videos test) Guidebookuse (manual book) 	<ul style="list-style-type: none"> Document results test tryNo There is Documentation testing (in the form of photos or test video) no There is Guidebook use (manualbook) No There is 	

B3. One product technology form Patent Simple

Transaction outer on proposal						Validation/assessment outer				
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid	
<ul style="list-style-type: none"> Patent Simple 	<ul style="list-style-type: none"> Patent product Patent tool 	<ul style="list-style-type: none"> Registered 	<ul style="list-style-type: none"> Number 1 	<ul style="list-style-type: none"> The letter state number registration the patent issued Ministry of Law and Human Rights or institution international 	There is/available	<ul style="list-style-type: none"> Has get The letter state number registration the patent issued Ministry of Law and Human Rights or institution international Have been done test try 	<ul style="list-style-type: none"> Name patent Holder patent (can more from 1) Number registration patent Date recording patent Date Testing 	<ul style="list-style-type: none"> The letter state number registration the patent issued Ministry of Law and Human Rights or institution international Description And specification on patent 	<ul style="list-style-type: none"> Letter Which state number registration patent Which issued by the Ministry of Law and Human Rights or international institutions No There is Year of patent registration before period study Description And specification no patent Patent Which generated No according to substance study 	
				<ul style="list-style-type: none"> Results document test try 	There is/available					<ul style="list-style-type: none"> Results document test try
			<ul style="list-style-type: none"> Documentation testing form Photo or videos 	There is/available	<ul style="list-style-type: none"> Documentation testing form Photo or videos 					
			<ul style="list-style-type: none"> Book instruction use(<i>manual book</i>) 	There is/available						<ul style="list-style-type: none"> Book instruction use(<i>manual book</i>)

B4. One product Protection Variety Plants (PVP)

Transaction outer on proposal						Validation/assessment outer			
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• Protection Variety Plant (PVT)	• Variety of kind or species plant new	Has submitted	• Number 1 And to-2	• Results document testing multilocation varieties covers description uniqueness, uniform, stable, and novelty.	There is/available	• Own document The PVP has submitted	<ul style="list-style-type: none"> • Name species • Name varieties • Name Researcher/Breeder (can be more than 1 breeder) • Institution Breeder • Document number protection temporary • Date its publication document protection temporary 	<ul style="list-style-type: none"> • Document protection temporary • Description varieties • Document results testing multilocation varieties covers description uniqueness, uniform, stable, and novelty. • Document Submission PVP with status accepted • Letter published protection temporary 	<ul style="list-style-type: none"> • Document protection while no There is • Description And specification varieties No There is • Results document multilocation testing varieties include unique description, uniform, stable, and novelty...no There is • Submission Documents PVP with status accepted No There is • Letter published protection temporary No There is • Date its publication document protection while before the year implementation study
			• To-2 or to-3	• Results document testing multilocation varieties covers description uniqueness, uniform, stable, And novelty.	There is/available				
				• Document Submission PVP with status accepted	There is/available				
				• Letter published protection temporary	There is/available				

B5. One product Design Layout Circuit Integrated

Transaction outer on proposal						Validation/assessment outer			
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
<ul style="list-style-type: none"> Tata Design Location Circuit Integrated 	<ul style="list-style-type: none"> Tata Design Location Circuit Integrated Electronic 	<ul style="list-style-type: none"> Certified 	<ul style="list-style-type: none"> To-1 or 2nd 	<ul style="list-style-type: none"> Results document test DTLST 	There is/available	<ul style="list-style-type: none"> DTLST has tested DTLST has certified 	<ul style="list-style-type: none"> Name DTLST Rights holder DTLST (can more from 1) Number Certificate DTLST Date Certificate DTLST Date DTLST Testing 	<ul style="list-style-type: none"> Certificate The DTLST issued Ministry of Law and Human Rights or institution international Description and specification DTLST Results Document test try Documentation testing (in the form of Photo or videos test) Guidebook use (manual book) 	<ul style="list-style-type: none"> DTLST certificate issued Ministry of Law and Human Rights or institution international No There is Year registration DTLST before period study Description and specifications DTLST No There is The resulting DTLST does not in accordance with substance study Document results test try DTLST No There is Test documentation (in the form of photo or videos test) No There is User manual (manual book) No There is
				<ul style="list-style-type: none"> Description and specification DTLST 	There is/available				
			<ul style="list-style-type: none"> To-2 or the 3rd 	<ul style="list-style-type: none"> Results document test DTLST 	There is/available				
				<ul style="list-style-type: none"> Document publication application DTLST 	There is/available				
				<ul style="list-style-type: none"> Certificate DTLST 	There is/available				
				<ul style="list-style-type: none"> Book instruction use (manual book) 	There is/available				

B6. One product Manuscript Policy

Transaction outer on proposal						Validation/assessment outer			
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
<ul style="list-style-type: none"> Manuscript Policy 	Draft Manuscript Policy <ul style="list-style-type: none"> Constitution Regulation Government Presidential Decree Candy, Regional Regulation, Gubernatorial Regulations, City Government Regulations, District Government 	<ul style="list-style-type: none"> Has submitted 	<ul style="list-style-type: none"> Number 1 	<ul style="list-style-type: none"> Draft script policy 	There is/available	<ul style="list-style-type: none"> Draft script policy, consists of: background, related analysis existing, sociology, law, academic 	<ul style="list-style-type: none"> Type of policy text (PP, Presidential Decree, Ministerial Decree, Regional Regulations, Governor Regulations, City Government Regulations, Regency Government Regulations, Perwalkot, Perbup or Organizational policies national/international) 	<ul style="list-style-type: none"> Draft script policy 	<ul style="list-style-type: none"> Draft script policy does not There is Contents Draft policy it is not in accordance with with substance study

	<p>Regulations, Walkot Regulations, Regional Regulation or</p> <ul style="list-style-type: none"> Organizational policies national/international 		<ul style="list-style-type: none"> 2nd or the 3rd 	<ul style="list-style-type: none"> Results document expert test/test public manuscript policy Letter statement that document script policy has received by maker policy 	<p>There is/available</p>	<ul style="list-style-type: none"> Manuscript policy, consists of: background, related analysis existing, sociology, law, academic 	<ul style="list-style-type: none"> Type of policy text (PP, Presidential Decree, Ministerial Decree, Regional Regulations, Governor Regulations, City Government Regulations, Regency Government Regulations, Perwalkot, Perbup or Organizational policies national/international) Institution/institution Which accept script Submission date script policy to maker policy 	<ul style="list-style-type: none"> Manuscript policy Results document expert test/test public manuscript policy Letter/Form submission policy text to the maker policy 	<ul style="list-style-type: none"> Policy text No There is Results document expert test/test public manuscript policy does not There is Letter/Form submission policy text to the maker policy Contents of the policy it is not in accordance with with substance study Year letter/form submission policy text before period study
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C. Outer Must Study Development

C1. Product Industry in the form of prototype worthy industry

Transaction outer on proposal						Validation/assessment outer							
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid				
• Product Industry	• Prototype worthy Industry	• Done	• Number 1	• Description and specification product	There is/available	• Tests have been carried out in field/environment limited	• Product name • Date Testing product	• Description and specification product • Test result document product field/environment limited • Documentation testing (photo or videos)	• Test result document field/environment limited No There is • Test documentation (Photo or videos) No There is • Description and specifications product does not exist • Test date product before period study • Products are not parts from substance study				
				• Document product test results field/environment limited	There is/available								
				• Documentation product testing (photo or videos)	There is/available								
			• 2nd	• Draft design industry	There is/available					• Tests have been carried out in field/environment Actually	• Product name • Date Testing product • Certificate no industrial design (If There is)	• Documentation testing (photo or videos) • Test result document product field/environment Actually • Draft design industry	• Test result document field/environment Actually No There is • Test documentation (Photo or videos) No There is • Description and specifications product does not exist • Test date product before period study • Products are not parts from substance study • Draft design industry No There is
				• Test result document product field/environment Actually	There is/available								
				• Documentation product testing (photo or videos)	There is/available								

External transactions on proposal						Validation/assessment outer			
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• Product Industry	• <i>Feasibility Study</i>	• Agreed ti with partner	• The 3rd	• Document appropriateness market	There is/ available	Document <i>feasibility study</i> which cover market aspects, production technical, finance, management (including appropriateness partnership investment), environment, social, And law	<ul style="list-style-type: none"> • Product name • Brand (if There is) • Number brand certificate (If There is) • Date brand certificate (If There is) • Number certificate industrial design (If There is) • Date design certificate industry (if There is) 	<ul style="list-style-type: none"> • Document appropriateness market • Document technical feasibility production (social engineering And empowerment) • Document appropriateness finance • Document appropriateness management • Document appropriateness environment • Document appropriateness social • Document appropriateness law • Document <i>business plans</i> 	<ul style="list-style-type: none"> • Market feasibility document No There is • Eligibility documents technical production does not There is • Eligibility documents finance nothing _ • Document appropriateness management does not There is • Eligibility documents environment No There is • Social eligibility document No There is • Eligibility documents law No There is • Document <i>business plans</i> No There is • <i>Feasibility study</i> documents and <i>business plan</i> document isn't it is the result of research Which funded
				• Document technical feasibility production	There is/ available				
				• Document appropriateness finance	There is/ available				
				• Document appropriateness management	There is/ available				
				• Document appropriateness environment	There is/ available				
				• Document appropriateness social	There is/ available				
				• Document appropriateness law	There is/ available				
				• Document <i>business plans</i>					

C2. Product Policy

Transaction outer on proposal						Validation/assessment outer							
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid				
• Policy	Post-policy which will confirmed in the form of: <ul style="list-style-type: none"> • Constitution • Regulation Government • Presidential Decree • Candy, • Regional Regulation, • Governor Regulation, City Government Regulation, District Government Regulation, Perwalkot, Regional Regulation or • Policy organization national/international 	• Ready invited	• Number 1	• Document advocacy resultspolicy	There is/ available	• Manuscript policy, consisting top: background back, analysis related to existing, sociology, law, academic	• Type of policy text (PP, Presidential Decree, Ministerial Decree, Regional Regulations, Governor Regulations, City Government Regulation, District Government Regulation, Perwalkot, Regional Regulation or Policy organization national/international) • Institution/institution Which discuss • Date discussion (intervals)	• Results document advocacy policy • Document process discussion	• Manuscript document results policy advocacy No There is • Process documents discussion policy No There is • Discussion schedule by the organizer No There is • Contents of the script policy does not in accordance with the substance study				
				• Document process discussion	There is/ available								
			• 2nd And 3	• Document advocacy resultspolicy	There is/ available					• Manuscript policy, consisting top: background back, analysis related to existing, sociology, law, academic	• Type of policy text (PP, Presidential Decree, Ministerial Decree, Regional Regulations, Governor Regulations, City Government Regulation, District Government Regulation, Perwalkot, Regional Regulation or Policy organization national/international) • Institution/institution Which set • Process date	• Document policy textresults advocacy • Document process determinationpolicy • Determination scheduleby organizer • Manuscript policy which Ready set • Document process determination	• Manuscript document results policy advocacy No There is • Process documents policy determination No There is • Timetable determination bythe organizers did not There is • Manuscript policy Whichready to set no There is • Contents of the policy specified no in accordance with
				• Document process determination	There is/ available								
				• Document policy Which ready set	There is/ available								

						determination (intervals)	tion	the substance study
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D. Outer Must Study Lecturer Beginner

Transaction outer on proposal						Validation/assessment outer							
Category Outer	Type Outer	Sub Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid				
• Number 1	<ul style="list-style-type: none"> • Publication in national journal accredited ranking 1-6 • Publication in journal international • Publication in proceedings 	• Article in Journal National accredited ranking 1-6	• <i>Accepted / published</i>	• Letter information <i>n</i> accepted from <i>chief editor</i> or	There is/ available	• The article has status <i>accepted</i> or <i>published</i>	<ul style="list-style-type: none"> • Name journal • Publisher journal • Title article • Writer's name • URLs Article (If There is) • DOI (If There is) • Indexing agency (If There is) 	<ul style="list-style-type: none"> • Letter information <i>accepted</i> from <i>chief editor</i> • Article or <i>galley</i> (manuscript final of publisher or <i>preprinted article</i>) 	<ul style="list-style-type: none"> • Certificate <i>accepted</i> from <i>chief editor</i> No There is • Article or <i>galley</i> (final manuscript from publisher or <i>preprinted article</i>) No There is • Year <i>accepted / published</i> before period study • Article substance not in accordance with the topic study 				
				• Article or <i>galleys</i> (manuscript final of publisher or <i>preprinted article</i>)	There is/ available								
		• Article in journal international	• <i>Accepted / published</i>	• Letter information <i>n</i> accepted from <i>chief editor</i> or	There is/ available					• The article has status <i>accepted</i> or <i>published</i>	<ul style="list-style-type: none"> • Name journal • Publisher journal • Title article • Writer's name • URLs Article (If There is) • DOI (If There is) • Indexing agency (If There is) 	<ul style="list-style-type: none"> • Letter information <i>accepted</i> from <i>chief editor</i> • Article or <i>galley</i> (manuscript final of publisher or <i>preprinted article</i>) 	<ul style="list-style-type: none"> • Certificate <i>accepted</i> from <i>chief editor</i> No There is • Article or <i>galley</i> (final manuscript from publisher or <i>preprinted article</i>) No There is • Year <i>accepted / published</i> before period study • Article substance not in accordance with the topic study
				• Article or <i>galleys</i> (manuscript final of publisher or <i>preprinted article</i>)	There is/ available								

Transaction outer on proposal						Validation/assessment outer			
Category Outer	Type Outer	Sub Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
		<ul style="list-style-type: none"> Article in proceedings seminar international 	<ul style="list-style-type: none"> <i>Published</i> 	Cover , list content, and articles printed in proceedings	There is/ available	<ul style="list-style-type: none"> Proceedings proceedings seminar international 	<ul style="list-style-type: none"> Name seminar Implementation timeseminar Article Title Writer's name Publisher URLs proceedings (If There is) Indexing agency (If There is) 	<ul style="list-style-type: none"> Cover , list content, and articles in proceedings 	<ul style="list-style-type: none"> Covers , list content, and articles) no There is No including proceedings Year of implementation seminar before period study Article substance not in accordance with the topic study

E. Outer Must Study Cooperation Between College Tall

E1. One article in journal international Which indexed on databases reputable with status *accepted*

Transaction outer on proposal						Validation/assessment outer			
Category Outer	Type Outer	Sub Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
<ul style="list-style-type: none"> The 12th, or 3 	<ul style="list-style-type: none"> Publication in Journal International 	<ul style="list-style-type: none"> Article in journal international 	<ul style="list-style-type: none"> <i>Accepted</i> 	<ul style="list-style-type: none"> Letter information <i>accepted</i> from chief editor 	There is/ available	<ul style="list-style-type: none"> There's a letter information <i>accepted</i> from chief 	<ul style="list-style-type: none"> Name journal Publisher journal Title article Writer's name 	<ul style="list-style-type: none"> Letter information <i>accepted</i> from chief editor 	<ul style="list-style-type: none"> Certificate <i>accepted</i> from chief editor No There is Not included

			<ul style="list-style-type: none"> Article or <i>galleys</i> (final manuscript from the publisher or <i>preprinted article</i>) 	There is/available	<i>editor</i> <ul style="list-style-type: none"> Indexed on databases reputable 	<ul style="list-style-type: none"> URLs Article (If There is) DOI (If There is) Institution indexer 	<ul style="list-style-type: none"> Article or galley (manuscript final of publisher or <i>preprinted article</i>) 	international articles indexed reputable <ul style="list-style-type: none"> Publishers incl in <i>lists predatory</i> Year <i>accepted</i> before period study The substance of the article is not according to the topic study
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E2. One article in journal international Which indexed on databases reputable with status *published*

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• The 12th, or 3	• Publication Science in Journals International	• Article in journal international	• <i>Published</i>	• <i>Soficopy</i> article • Article URL from publisher	There is/available There is/available	• Article has <i>published</i> • Indexed on the database reputable	• Name journal • Publisher journal • Title article • Writer's name • URLs Article • DOI • Indexing agency	• <i>Soficopy</i> article	• <i>Soficopy</i> article no There is • Not included article international indexed reputable • Article no can be traced from URLs Which given • Publishers incl in <i>lists predatory</i> • Year published before period study • Article substance it is not in accordance with with the topic study

E3. One book results study ber ISBN in form print

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• The 12th, or 3	• Book Print Results Study	• Monograph • Book reference • Book Teach	• Published on ISBN	• Letter Information rising from publisher and mention amount copy	There is/ available	<ul style="list-style-type: none"> • There is ISBN • Already published (there is a letter information from publisher) • Type of book in the form of: bookteach, book reference/ monograph • The contents of the book are appropriate with substance study • Publication Year in periodstudy 6. Quantity page minimum 40 page 	<ul style="list-style-type: none"> • Number ISBNprint • Writer's name (Can more from I) • Name Publisher • URLs (If There is) 	<ul style="list-style-type: none"> • Letter Information rising from publisher and mention amount copy • Book <i>Softcopy</i> in format pdf 	<ul style="list-style-type: none"> • No There is ISBN • No letter information from publisher • Contents book No according to title, no complete, or can not be read • Contents book No according to substance study • Publication Year before periodstudy • Number of pages less than 40 page
				• Book <i>Softcopy</i> in format pdf (max20 MB)	There is/ available				

E4. One book results study ber ISBN in form electronic

Transaction outer on proposal					Validation/assessment outer				
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• The 12th, or 3	• Book Electronic Results Study	• Monograph • Book referenc e • Textbooks	• <i>On line</i> ber ISBN	• <i>e-book</i> URL on publisher/distribut or	Can accesse d	<ul style="list-style-type: none"> • There is ISBN • Own The URL Can accessed • Type of book in the form of: bookteach, book reference/ monograph • Book contents in accordan ce with substance study • Publication Yearin period study • Amount page minimum 40 page 	<ul style="list-style-type: none"> • ISBN number electronic • Writer's name (could be more from 1) • Name Publisher • URLs Book 	<ul style="list-style-type: none"> • Letter Information rising from publisher and mention amount copy 	<ul style="list-style-type: none"> • No There is ISBN • No letter information from publisher • Contents book No according to title, no complete, or can not be read • URL No can accessed • Contents book No according to substance study • Publication Year before periodstudy • Number of pagesnot enough from 40 page
				• <i>Softcopy</i> Book inpdf format (maximum 20 MB)	There is/ availabl e				

E5. Three article proceedings Which indexed on databases reputable

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• The 12th, or 3	• Publication in proceedings seminar international	• Article on <i>conferences</i> / seminar international	• Rise	Covers , list of contents, and articles Which printed in proceedings 1	There is/ available	<ul style="list-style-type: none"> • Article complete printed inside proceedings 1. 2, And 3 • Indexed on the database reputable 	<ul style="list-style-type: none"> • <i>Conference</i> name / seminars 1. 2, and 3 • Time implementation <i>conference</i> 1. 2, and 3 • Title Article 1. 2, And 3 • Writer 1. 2, And 3 • Publisher 1. 2, And 3 • Proceedings URL(If There is) • Institution Indexer 1. 2, And 3 	Covers , list content, and articles printed in proceedings 1. 2, and 3	<ul style="list-style-type: none"> • Document supporting (<i>cover</i> ,table of contents, and article) no There is • Not included proceedings indexed reputable • Year implementation <i>conference</i> before period study • Article substanceit is not in accordance with with the topic study
				Covers , list of contents, and articles Which printed in proceedings 2	There is/ available				
				Covers , list of contents, and articles Which printed in proceedings 3	There is/ available				

E6. Three *Book Chapters* Which indexed on reputable database or has an ISBN in printed form nor electronic

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Researcher Entry	Proof Supporter	No Valid
• Number 1, 2, or 3	<i>Book Chapters</i>	<i>Book Chapters 1</i>	• Rise ber ISBN	book cover , table of contents, and book <i>chapters1</i>	There is/ available	<ul style="list-style-type: none"> • The book is there ISBN or published by the publisher reputable • Already Rise • <i>Book Chapters</i> according to substance study • Publication Year in periodstudy 	<ul style="list-style-type: none"> • Title Book 1 • Title <i>Book Chapters 1</i> • ISBN Book 1 • Name of Book Publisher1 • URLs Book 1 (If There is) 	• book cover , table of contents, and chapters book 1	<ul style="list-style-type: none"> • No ISBN or the publisher doesn't reputation • Contents of <i>Book Chapters</i> not in accordance with the title, incomplete, or can't be read • If Books Electronics, URL No accessible • Contents of <i>Book Chapters</i> not in accordance with the substance study • Publication Year before periodstudy
		<i>Book Chapters 2</i>	• Rise ber ISBN	book cover , table of contents, and book <i>chapters2</i>	There is/ available		<ul style="list-style-type: none"> • Title Book 2 • Title <i>Book Chapters 2</i> • ISBN Book 2 • Name of Book Publisher2 • URLs Book 2 (If There is) 	• book cover , table of contents, and chapters book 2	
		<i>Book Chapters 3</i>	• Rise ber ISBN	book cover , table of contents, and book <i>chapters3</i>	There is/ available		<ul style="list-style-type: none"> • Title Book 3 • Title <i>Book Chapters 3</i> • ISBN Book 3 • Name of Book Publisher3 • URLs Book 3 (If There is) 	• book cover , table of contents, and chapters book 3	

F. Outer Must Study Thesis Masters

Transaction outer on the proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• Number 1	<ul style="list-style-type: none"> • Publication in national journal accredited • Publication in journal international • Publication in proceedings 	<ul style="list-style-type: none"> • Article in Journal National accredited ranking 1-3 	<ul style="list-style-type: none"> • <i>Accepted / published</i> 	<ul style="list-style-type: none"> • Letter information <i>naccepted</i> from <i>chief editor</i> or • Article or <i>galley</i> (manuscript final of publisher or <i>preprinted article</i>) 	<ul style="list-style-type: none"> There is/ available 	<ul style="list-style-type: none"> • The article has status <i>accepted</i> or <i>published</i> 	<ul style="list-style-type: none"> • Name journal • Publisher journal • Title article • Writer's name • URLs Article (If there is) • DOI (If There is) • Institution indexer 	<ul style="list-style-type: none"> • Letter information <i>accepted</i> from <i>chief editor</i> • Article or <i>galley</i> (manuscript final of publisher or <i>preprinted article</i>) 	<ul style="list-style-type: none"> • Certificate <i>accepted</i> from <i>chiefeditor</i> No There is • Article or <i>galley</i> (final manuscript from publisher or <i>preprinted article</i>) No There is • Year <i>accepted / published</i> before period study • Article substance not in accordance with the topic study
		<ul style="list-style-type: none"> • Article in journal international 	<ul style="list-style-type: none"> • <i>Accepted / published</i> 	<ul style="list-style-type: none"> • Letter information <i>naccepted</i> from <i>chief editor</i> or • Article or <i>galley</i> (manuscript final of publisher or <i>preprinted article</i>) 	<ul style="list-style-type: none"> There is/ available 				

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
		<ul style="list-style-type: none"> Article in proceedings seminar international indexed 	<ul style="list-style-type: none"> <i>Published</i> 	Cover , list content, And that article printed in proceedings	There is/ available	<ul style="list-style-type: none"> Proceedings indexed on databases reputable 	<ul style="list-style-type: none"> Conference name /seminar Time implementation <i>conference</i> Article Title Writer's name Publisher URLs proceedings (If There is) Indexing Institute 	<ul style="list-style-type: none"> Cover , list content, and articles in proceedings 	<ul style="list-style-type: none"> Cover , table of contents, and articles) no There is Not included indexed proceedings reputable Year of implementation <i>conference</i> before period study Article substance not in accordance with the topic study

G. Outer Must Study Desertation Doctor

G1. One article scientific in journal international reputable with status *accepted*

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• Number 1 or 2nd	Publication in Journal International	Article in journal international	• <i>Accepted</i>	• Letter information <i>accepted</i> from <i>chief editor</i>	There is/ available	<ul style="list-style-type: none"> • There's a letter information <i>accepted</i> from <i>chief editor</i> • Indexed on the database reputable 	<ul style="list-style-type: none"> • Name journal • Publisher journal • Title article • Writer's name • Article URL (If There is) • DOI (If There is) • Institution indexer 	<ul style="list-style-type: none"> • Letter information <i>accepted</i> from <i>chief editor</i> • Article or galley (manuscript final of publisher or <i>preprinted article</i>) 	<ul style="list-style-type: none"> • Letter information <i>accepted</i> from <i>chief editor</i> • Not included article international indexed reputable • Publisher included in <i>lists predatory</i> • Year <i>accepted</i> before period study • Article substance it is not in accordance with topic study
				• Article or <i>galleys</i> (manuscript final of publisher or <i>preprinted article</i>)	There is/ available				

G2. One article scientific in journal international reputable with status *published*

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporting	No Valid
<ul style="list-style-type: none"> Number 1 or 2, 	<ul style="list-style-type: none"> Publication in Journal International 	<ul style="list-style-type: none"> Article in journal international 	<ul style="list-style-type: none"> <i>Published</i> 	<ul style="list-style-type: none"> <i>Softcopy</i> article 	There is/available	<ul style="list-style-type: none"> Article has <i>published</i> Indexed on the database reputable	<ul style="list-style-type: none"> Name journal Publisher journal Title article Writer's name URLs Article DOI Institution indexer 	<ul style="list-style-type: none"> <i>Softcopy</i> article 	<ul style="list-style-type: none"> <i>Softcopy</i> article no There is Not included article international indexed reputable Article no can be traced from URLs Which given Publishers include <i>predatory</i> Year <i>published</i> before period study Article substance it is not in accordance with with topic study
				<ul style="list-style-type: none"> Article URL from publisher 	There is/available				

H. Outer Must Study Education Masters For Bachelor Superior

H1. One article scientific in journal international reputable with status *accepted*

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
<ul style="list-style-type: none"> Number 1, 2nd or to-3 	<ul style="list-style-type: none"> Publication in Journal International 	<ul style="list-style-type: none"> Article in journal international 	<ul style="list-style-type: none"> <i>Accepted</i> 	<ul style="list-style-type: none"> Letter informatio <i>naccepted</i> from <i>chief editor</i> 	There is/ availabl e	<ul style="list-style-type: none"> There's a letter informatio <i>naccepted</i> from <i>the chief editor</i> Indexed on the database reputable 	<ul style="list-style-type: none"> Name journal Publisher journal Title article Writer's name Article URL (If There is) DOI (If There is) Indexing agency 	<ul style="list-style-type: none"> Letter informatio <i>naccepted</i> from <i>the chief editor</i> Article or <i>galley</i>s (final manuscript from the publisher or <i>preprinted article</i>) 	<ul style="list-style-type: none"> Certificate <i>accepted</i> from <i>the chief editor</i> didn'tThere is Not included article international indexed reputable Publishers incli <i>lists predatory</i> <i>Accepted</i> year before period study Substance article not in accordance with theresea rch topic
				<ul style="list-style-type: none"> Article or <i>galley</i>s (manuscrip t final of publisher or <i>preprinted article</i>) 	There is/ available				

H2. One article scientific in journal international reputable with status *published*

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
<ul style="list-style-type: none"> Number 1, 2nd, or to- 3 	Publication in Journal International	Article in journal international	<ul style="list-style-type: none"> <i>Published</i> 	<ul style="list-style-type: none"> <i>Soficopy</i> article 	There is/available	<ul style="list-style-type: none"> Article has <i>published</i> Indexed on the database reputable 	<ul style="list-style-type: none"> Name journal Publisher journal Title article Writer's name URLs Article DOI Indexing agency 	<ul style="list-style-type: none"> <i>Soficopy</i> article 	<ul style="list-style-type: none"> <i>Soficopy</i> article no There is Not included article international indexed reputable Article no can be traced from URLs Which given Publishers incl <i>lists predatory</i> Year <i>published</i> before period study Article substance it is not in accordance with with topic study
				<ul style="list-style-type: none"> Article URL from publisher 	There is/available				

I. Outer Must Study Post Doctor

II. One article scientific in journal international reputable (*accepted*) And One article on proceedings seminar international reputable

Transaction outer on proposal						Validation/assessment outer			
Year	External Category	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• Number 1 And 2nd	• Publication in journals international and in proceedings seminar international	• Article in journal international	• <i>Accepted</i>	• Letter information <i>naccepted</i> from <i>chief editor</i>	There is/ available	• There's a letter information accepted from <i>chief editor</i>	• Name journal • Publisher journal • Title article • Writer's name • URLs Article (If There is) • DOI (If There is) • Institution indexer	• Letter information <i>accepted</i> from <i>chief editor</i> • Article or <i>galley</i> (manuscript final of publisher or <i>preprinted article</i>)	• Certificate <i>accepted</i> from <i>chief editor</i> No There is • Not included international articles indexed reputable • Publishers incl in <i>lists predatory</i> • Year <i>accepted</i> before period study • Article substance not in accordance with the topic study
		• Article or <i>galleys</i> (final manuscript from the publisher or <i>preprinted article</i>)		There is/ available					
		• Article in proceedings seminar international indexed	• <i>Published</i>	• <i>Covers</i> , list of contents, and articles Which printed in proceedings	There is/ available	• Proceedings indexed on databases reputable	• <i>Conference</i> name /seminar • Time implementation <i>conference</i> • Title Article • Writer's name • Publisher • URLs proceedings (If There is) • Indexing Institute	• <i>Cover</i> , list content, and articles in proceedings	• <i>Cover</i> , table of contents, and article) No There is • Not included indexed proceedings reputable • Year of implementation <i>conference</i> before period study • Article substance not in accordance with the topic study

I2. One article scientific in journal international reputable (*published*) And One article on seminar proceedings international reputable

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• Number 1 And to- 2,	• Publication journal international and in proceedings seminar international	• Article in journal international	• <i>Published</i>	• <i>Softcopy</i> article • Article URL from publisher	There is/ available There is/ available	• Article has published • Journal indexed in indexer reputable	• Name journal • Publisher journal • Title article • Writer's name • URLs Article • DOI • Institution indexer	• <i>Softcopy</i> article	• <i>Softcopy</i> article No There is • No including international articles indexed reputable • Article cannot be explored from URLs Which given • Publisher including in <i>lists predatory</i> • Year <i>published</i> before period study • Article substance it is not in accordance with with topic study
		• Article in proceedings seminar international indexed	• <i>Published</i>	• <i>Covers</i> , list of contents, And article Which printed in proceedings	There is/ available	• Proceedings indexed on the database reputable	• Name <i>conference</i> /seminar • Time implementation <i>conference</i> • Title Article • Writer's name • Publisher • Proceedings URL (If There is) • Institution Indexer	• <i>Cover</i> , list contents, and article in proceedings	• <i>Cover</i> , table of contents, and articles) no There is • Not included indexed proceedings reputable • Year of implementation <i>conference</i> before period study • Article substance it is

									not in accordance with with topic study
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STUDY DECENTRALIZATION

J. Outer Must Study Base Superior College Tall

J1. One article in journal international Which indexed on databases reputable with status *accepted*

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• The 12th, or 3	• Publication in Journal International	• Article in journal international	• <i>Accepted</i>	<ul style="list-style-type: none"> • Letter informatio <i>naccepted</i> from <i>chief editor</i> • Article or <i>galleys</i> (manuscript final of publisher or <i>preprinted article</i>) 	<ul style="list-style-type: none"> • There is/ available • There is/ available 	<ul style="list-style-type: none"> • There's a letter informatio <i>naccepted</i> from <i>the chief editor</i> • Indexed on the database reputable 	<ul style="list-style-type: none"> • Name journal • Publisher journal • Title article • Writer's name • Article URL (If There is) • DOI (If There is) • Indexing agency 	<ul style="list-style-type: none"> • Letter informatio <i>naccepted</i> from <i>the chief editor</i> • Article or <i>galleys</i> (final manuscript from the publisher or <i>preprinted article</i>) 	<ul style="list-style-type: none"> • Certificate <i>accepted</i> from <i>the chief editor</i> didn'tThere is • Not included article international indexed reputable • Publishers inclin <i>lists predatory</i> • <i>Accepted</i> year before period study • Article substance No in accordance with topic study

J2. One article in journal international Which indexed on databases reputable with status *published*

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• The 12th, or 3	• Publication Science in Journals International	• Article in journal international	• <i>Published</i>	• <i>Softcopy</i> article • Article URL from publisher	There is/ available There is/ available	• Article has <i>published</i> • Indexed on the database reputable	• Name journal • Publisher journal • Title article • Writer's name • URLs Article • DOI • Indexing agency	• <i>Softcopy</i> article	• <i>Softcopy</i> article no There is • Not included article international indexed reputable • Article no can be traced from URLs Which given • Publishers incline <i>lists predatory</i> • Year <i>published</i> before period study • Article substance it is not in accordance with with topic study

J3. One book results study with ISBN in form print

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• Number 1, 2, or 3	• Book Print Results Study	<ul style="list-style-type: none"> • Monograph • Book reference • Book Teach 	• Rise ber ISBN	<ul style="list-style-type: none"> • Letter Information rising from publisher and mention amount copy 	There is/ available	<ul style="list-style-type: none"> • There is ISBN • Already published (there is a letter information from publisher) • Type of book in the form of: bookteach, book reference/ monograph • The contents of the book are appropriate with substance study • Publication Year in periodstudy • Amount page minimum 40 page 	<ul style="list-style-type: none"> • Number ISBN print • Name writer (canmore from 1) • Name Publisher • URL (if There is) 	<ul style="list-style-type: none"> • Letter Information rising from publisher and mention amount copy • Book <i>Softcopy</i> in format pdf 	<ul style="list-style-type: none"> • No There is ISBN • Nothing _ letter information from publisher • Book contents it is not in accordance with with title, no complete, or not can be read • Book contents it is not in accordance withwith substance study • Publication Yearbefore period study • Amount page not enough from 40 page
				<ul style="list-style-type: none"> • Book <i>Softcopy</i> in format pdf (maximum20 MB) 	There is/ available				

J4. One book results study with ISBN in form electronic

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• The 12th, or 3	• Book electronic results study	<ul style="list-style-type: none"> • Monograph • Book reference <ul style="list-style-type: none"> • Book teach 	• <i>On line</i> ber ISBN	<ul style="list-style-type: none"> • <i>e-book</i> URL on publisher/distributor 	Can accessed	<ul style="list-style-type: none"> • There is ISBN • Own The URL Can accessed • Type of book in the form of: bookteach, book reference/ monograph • Book contents in accordance with substance study • Publication Year in period study • Amount page minimum 40 page 	<ul style="list-style-type: none"> • ISBN number electronic • Writer's name (could be more from 1) • Name Publisher • URLs Book 	<ul style="list-style-type: none"> • Letter Information rising from publisher and mention amount copies, 	<ul style="list-style-type: none"> • No There is ISBN • No letter information from publisher • Contents book No according to title, no complete, or can not be read • URL No can accessed • Contents book No according to substance study • Publication Year before period study • Number of pages not enough from 40 page
				<ul style="list-style-type: none"> • <i>Softcopy</i> Book in pdf format (maximum 20 MB) 	There is/ available				

J5. Three article proceedings Which indexed on databases reputable

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• The 12th, or 3	• Publication in proceedings seminar international	• Article on conferences / seminar international	• Rise	Covers , list of contents, and articles Which printed in proceedings 1	There is/ available	<ul style="list-style-type: none"> • Article complete printed inside proceedings 1. 2, And 3 • Indexed on the database reputable 	<ul style="list-style-type: none"> • Conference name / seminars 1. 2, and 3 • Time implementation conference 1. 2, and 3 • Title Article 1. 2, And 3 • Writer 1. 2, And 3 • Publisher 1. 2, And 3 • Proceedings URL(If There is) • Institution Indexer 1. 2, And 3 	Covers , list content, and articles printed in proceedings 1. 2, and 3	<ul style="list-style-type: none"> • Document supporting (cover ,table of contents, and article) no There is • Not included proceedings indexed reputable • Year implementation conference before period study • Article substanceit is not in accordance with with the topic study
				Covers , list of contents, and articles Which printed in proceedings 2	There is/ available				
				Covers , list of contents, and articles Which printed in proceedings 3	There is/ available				

J6. Three *Book Chapters* Which indexed on reputable database or has an ISBN in the form of print nor electronic

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• Number 1, 2, or 3	• <i>Book Chapters</i>	• <i>Book Chapters 1</i>	• Rise ber ISBN	book cover , list of contents, And <i>chapters</i> book 1	There is/ available	<ul style="list-style-type: none"> • The book is there ISBN or published by the publisher reputable • Already Rise <i>Book</i> contents <i>chapters</i> in accordance with substance study • Publication Year in period study 	<ul style="list-style-type: none"> • Title Book 1 • Title <i>Book Chapter</i> 1 • ISBN Book 1 • Publisher NameBook 1 • URLs Book 1 (If There is) 	• book cover , table of contents, and book chapters 1	<ul style="list-style-type: none"> • No There is ISBN or publisher No reputation • Fill in <i>book chapters</i> No in accordance with the title, no complete, or No can be read • If Books Electronics, URL Can not accessed • Fill in <i>book chapters</i> it is not in accordance with with substance study • Publication Year before period study
		• <i>Book Chapters 2</i>	• Rise ber ISBN	book cover , list of contents, And <i>chapters</i> book 2	There is/ available		<ul style="list-style-type: none"> • Title Book 2 • Title <i>Book Chapter</i> 2 • ISBN Book 2 • Publisher NameBook 2 • URLs Book 2 (If There is) 	• book cover , table of contents, and book chapters 2	
		• <i>Book Chapters 3</i>	• Rise ber ISBN	book cover , list of contents, And <i>chapters</i> book 3	There is/ available		<ul style="list-style-type: none"> • Title Book 3 • Title <i>Book Chapter</i> 3 • ISBN Book 3 • Publisher NameBook 3 • URLs Book 3 (If There is) 	• book cover , table of contents, and book chapters 3	

K. Outer Must Study Applied Superior College TallK1. One product Science and Technology-Social and Cultural Affairs in the form of Right Create

Transaction outer on proposal						Validation/assessment outer					
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid		
• Right Create	<ul style="list-style-type: none"> • Program Computer • Props For education and knowledge knowledge • Song or music • Drama or musical drama, dance, choreography, puppetry And pantomime • Deep fine arts all forms like art paint, draw, sculpture, art calligraphy, art sculpture, art sculpture, collage And art applied • Architecture • Map • Art Batik or Motif art other • Cinematography • Photography • Translation • Interpretation 	• Has Approved (certified)	• Number 1	• Copyright Certificate issued Ministry of Law and Human Rights or institution international	There is/ available	• Have Rights Create	<ul style="list-style-type: none"> • Name Creation • Holder Right Create (Can more from 1) • Number recording Copyright • Recording date right create 	<ul style="list-style-type: none"> • Certificate of RightsCreate • Description and specification method 	<ul style="list-style-type: none"> • Copyright certificateNo There is • Year certificate RightCreate before period study • Description and specification No There is • Hqk Cipta yang produced is inappropriatewith substance study 		
				• Description and specification creation	There is/ available						
			• 2nd or the 3rd	• Document Results testtry/test expert	There is/ available					<ul style="list-style-type: none"> • Results Document trial/test expert • Documentation testing form Photo orvideos • Guidebookuse 	<ul style="list-style-type: none"> • Document results test tryNo There is • Test documentationin the form of photos or videos No There is • Guidebook use No There is
				• Documentation testing in the form ofphoto or videos	There is/ available						
				• Guidebook usage (manualbook)	There is/ available						

K2. One product technology in the form of Patent

Transaction outer on proposal						Validation/assessment outer					
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid		
• Patent	• Patent process • Patent product	Registered	• 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 number registration the patent issued Ministry of Law and Human Rights or institution international • It's been done test try	• Name patent • Patent holder (Can more from 1) • Number registration patent • Date recording patent • Test Date	• The letter state number registration the patent issued Ministry of Law and Human Rights or institution international • Description And specification patent	• Letter stating patent registration number which are issued Ministry of Law and Human Rights or institution international No There is • Registration year patent before the periodstudy • Description And specificationno patent • Patent Which generatednot in accordance with the substance study		
				• Description And specification on patent	There is/ available						
			• To-2 or to-3	• Document results test try	There is/ available					• Results Documenttest try • Documentation testing (in the form of a photo or videos test) • Guidebookuse (manual book)	• Document results test tryNo There is • Documentation testing (in the form of photos or test video) no There is • Guidebook usage (manualbook) No There is
				• Documentation testing in the form ofPhoto or videos	There is/ available						
				• Guidebookuse (manual book)	There is/ available						

K3. One product technology form Patent Simple

Transaction outer on proposal						Validation/assessment outer					
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid		
Patent Simple	<ul style="list-style-type: none"> Patent product Patent tool 	Registered	• Number 1	<ul style="list-style-type: none"> The letter state number registration the patent issued Ministry of Law and Human Rights or institution international 	There is/ available	<ul style="list-style-type: none"> Has get The letter state number registration the patent issued Ministry of Law and Human Rights or institution international Have been done test try 	<ul style="list-style-type: none"> Name patent Holder patent (can more from 1) Number registration patent Date recording patent Date Testing 	<ul style="list-style-type: none"> The letter state number registration the patent issued Ministry of Law and Human Rights or institution international Description And specification on patent 	<ul style="list-style-type: none"> Letter Which state number patent registration issued by the Ministry of Law and Human Rights or international institutions No There is Year of patent registration before period study Description and specifications no patent Patent Which generated No according to substance study 		
				<ul style="list-style-type: none"> Description And specification on patent 	There is/ available						
			• To-2 or to-3	<ul style="list-style-type: none"> Results document test try 	There is/ available					<ul style="list-style-type: none"> Results Document test try Documentation testing (in the form of a photo or videos test) Book instruction use (<i>manual book</i>) 	<ul style="list-style-type: none"> Document results test try No There is Test documentation (in the form of test photos or videos) No There is User manual (<i>manual book</i>) no There is
				<ul style="list-style-type: none"> Documentation testing form Photo or videos 	There is/ available						
				<ul style="list-style-type: none"> Book instruction use (<i>manual book</i>) 	There is/ available						

K4. One product Protection Variety Plant (PVT)

Transaction outer on proposal						Validation/assessment outer			
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
Protection Variety Plant (PVT)	• Varieties of type or species plant new	Has submitted	• Number 1 and the 2	• Results document testing multilocation varieties include description unique, uniform, stable, and novelty.	There is/available	• Own document The PVP has submitted	<ul style="list-style-type: none"> • Name species • Name varieties • Name Researcher/Breeder (can be more than 1 breeder) • Institution Breeder • Document number protection temporary • Date its publication document protection temporary 	<ul style="list-style-type: none"> • Document protection temporary • Description on varieties • Results Document test that have been done (aspect novelty, unique, uniform, and stable) 	<ul style="list-style-type: none"> • Protection documents temporary No There is • Description and specifications varieties There isn't any • Document the test result has been done (aspect novelty, unique, uniform, and stable) No There is • Date of publication protection documents temporary before year implementation study
			• To-2 or the 3rd	• Results document testing multilocation varieties include description unique, uniform, stable, and novelty.	There is/available				
				• Document Submission PVP with status accepted	There is/available				
				• Letter published protection temporary	There is/available				

K5. One product Design Layout Circuit Integrated

Transaction outer on proposal						Validation/assessment outer			
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
<ul style="list-style-type: none"> Tata Design Location Circuit Integrated 	<ul style="list-style-type: none"> Tata Design Location Circuit Integrated Electronic 	<ul style="list-style-type: none"> Certified 	<ul style="list-style-type: none"> To-1 or 2nd 	<ul style="list-style-type: none"> Results documenttest DTLST 	There is/available	<ul style="list-style-type: none"> DTLST has tested DTLST has certified 	<ul style="list-style-type: none"> Name DTLST Rights holder DTLST (can more from 1) Number Certificate DTLST Date Certificate DTLST Date DTLST Testing 	<ul style="list-style-type: none"> Certificate The DTLST issued Ministry of Law and Human Rights or institution international Description and specification DTLST Results Documenttest try Documentation testing (in the form of Photo or videos test) Guidebook use (manual book) 	<ul style="list-style-type: none"> DTLST certificate issued Ministry of Law and Human Rights or institution international No There is DTLST registration year before period study Description and specifications DTLST No There is The resulting DTLST does not in accordance with substance study
				<ul style="list-style-type: none"> Description and specification DTLST 	There is/available				
			<ul style="list-style-type: none"> To-2 or the 3rd 	<ul style="list-style-type: none"> Results documenttest DTLST 	There is/available				
				<ul style="list-style-type: none"> Certificate DTLST 	There is/available				
				<ul style="list-style-type: none"> Book instruction use(manual book) 	There is/available				

K6. One product Manuscript Policy

Transaction outer on proposal						Validation/assessment outer			
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• Manuscript Policy	Draft Manuscript Policy • Constitution • Regulation Government • Presidential Decree • Candy, • Regional Regulation, • Gubernatorial Regulations, City Government Regulations, District Government Regulations, Walkot Regulation, Regional Regulation or • Organizational policies national/international	• Has submitted	• Number 1	• Draft script policy	There is/available	• Draft script policy, consists of: background, related analysis existing, sociology, law, academic	• Type of policy text (PP, Presidential Decree, Ministerial Decree, Regional Regulations, Governor Regulations, City Government Regulations, Regency Government Regulations, Perwalkot, Perbup or Organizational policies national/international)	• Draft script policy	• Draft script policy does not There is • Contents Draft policy No in accordance with substance study
			• 2nd or the 3rd	• Results document expert test/test public manuscript policy • Letter statement that document script policy has received by maker policy	There is/available	• Manuscript policy, consists of: background, related analysis existing, sociology, law, academic	• Type of policy text (PP, Presidential Decree, Ministerial Decree, Regional Regulations, Governor Regulations, City Government Regulations, Regency Government Regulations, Perwalkot, Perbup or Organizational policies national/international) • Institution/institution Which accept script • Submission date script policy to maker policy	• Manuscript policy • Results document expert test/test public manuscript policy • Letter/Form submission policy text to the maker policy	• Policy text No There is • Results document expert test/test public manuscript policy does not There is • Letter/Form submission policy text to the maker policy • Contents of the policy it is not in accordance with substance study • Year letter/form submission policy text before period study

L. Outer Must Study Development Superior College TallL1. Product industry in the form of prototype worthy industry

Transaction outer on proposal						Validation/assessment outer							
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid				
• Product Industry	• Prototype worthy Industry	• Done	• Number 1	• Description and specification product	There is/available	• Tests have been carried out in field/environment limited	• Product name • Date Testing product	• Description and specification product • Test results document product field/environment limited • Documentation testing (photo or videos)	• Test results document field/environment limited No There is • Test documentation (Photo or videos) No There is • Description and specifications product does not exist • Test date product before period study • Products are not parts from substance study				
				• Document product test results field/environment limited	There is/available								
				• Documentation product testing (photo or videos)	There is/available								
			• 2nd	• Draft design industry	There is/available					• Tests have been carried out in field/environment Actually	• Product name • Date Testing product • Certificate no industrial design (If There is)	• Documentation testing (photo or videos) • Test result documents product field/environment Actually • Draft design industry	• Test results document field/environment Actually No There is • Test documentation (Photo or videos) No There is • Description and specifications product does not exist • Test date product before period study • Products are not parts from substance study • Draft design industry No There is
				• Test results document product field/environment Actually	There is/available								
				• Documentation product testing (photo or videos)	There is/available								

External transactions on proposal						Validation/assessment			
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• Product Industry	• <i>Feasibility Study</i>	• Agreed with partner	• The 3rd	• Document appropriateness market	There is/available	Document <i>feasibility study</i> which cover market aspects, production technical, finance, management (including appropriateness partnership investment), environment, social, And law	<ul style="list-style-type: none"> • Name product • Brand (If There is) • Number certificate brand (if There is) • Date brand certificate (If There is) • Number certificate industrial design (If There is) • Date design certificate industry (if There is) 	<ul style="list-style-type: none"> • Document appropriateness market • Document technical feasibility production (social engineering And empowerment) • Document appropriateness finance • Document appropriateness management • Document appropriateness environment • Document appropriateness social • Document appropriateness law 	<ul style="list-style-type: none"> • Market feasibility document No There is • Eligibility documents technical production does not There is • Eligibility documents finance nothing _ • Document appropriateness management does not There is • Eligibility documents environment No There is • Social eligibility document No There is • Eligibility documents law No There is • <i>Feasibility</i> document No is research results funded
				• Document technical feasibility production	There is/available				
				• Document appropriateness finance	There is/available				
				• Document appropriateness management	There is/available				
				• Document appropriateness environment	There is/available				
				• Document appropriateness social	There is/available				
				• Document appropriateness law	There is/available				

L2. Product Policy

Transaction outer on proposal						Validation/assessment outer							
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid				
• Policy	Post-policy which will confirmed in the form of: <ul style="list-style-type: none"> • Constitution • Regulation Government • Presidential Decree • Candy, • Regional Regulation, • Governor Regulation, City Government Regulation, District Government Regulation, Perwalkot, Regional Regulation or • Policy organization national/international 	• Ready invited	• Number 1	• Document advocacy resultspolicy	There is/available	• Manuscript policy, consisting top: background back, analysis related to existing, sociology, law, academic	• Type of policy text (PP, Presidential Decree, Ministerial Decree, Regional Regulations, Governor Regulations, City Government Regulation, District Government Regulation, Perwalkot, Regional Regulation or Policy organization national/international) • Institution/institution Which discuss • Date discussion (intervals)	• Results document advocacy policy • Document process discussion	• Manuscript document results policy advocacy No There is • Process documents discussion policy No There is • Discussion schedule by the organizer No There is • Contents of the script policy does not in accordance with the substance study				
				• Document process discussion	There is/available								
			• 2nd And 3	• Document advocacy resultspolicy	There is/available					• Manuscript policy, consisting top: background back, analysis related to existing, sociology, law, academic	• Type of policy text (PP, Presidential Decree, Ministerial Decree, Regional Regulations, Governor Regulations, City Government Regulation, District Government Regulation, Perwalkot, Regional Regulation or Policy organization national/international) • Institution/institution Which set • Process date determination (• Document policy textresults advocacy • Document process determinationpolicy • Determination scheduleby organizer • Manuscript policy which Ready set • Document process determination	• Manuscript document results policy advocacy No There is • Process documents policy determination No There is • Timetable determination bythe organizers did not There is • Manuscript policy Whichready to set no There is • Contents policy Whichset No in accordance with the substance study
				• Document process determination	There is/available								
				• Document policy Which ready set	There is/available								

							<i>intervals)</i>		
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STUDY ASSIGNMENT

M. Outer Must Study Consortium Research Superior College TallM1.

Product Industry in the form of prototype worthy industry

Transaction outer on proposal						Validation/assessment outer							
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid				
• Product Industry	• Prototype worthy Industry	• Done	• Number 1	• Description and specification product	There is/ available	• Tests have been carried out in field/environment limited	• Product name • Date Testing product	• Description and specification product • Test result document product field/environment limited • Documentation testing (photo or videos)	• Test result document field/environment limited No There is • Test documentation (Photo or videos) No There is • Description and specifications product does not exist • Test date product before period study • Products are not parts from substance study				
				• Document product test results field/environment limited	There is/ available								
				• Documentation product testing (photo or videos)	There is/ available								
			• 2nd	• Draft design industry	There is/ available					• Tests have been carried out in field/environment Actually	• Product name • Date Testing product • Certificate no industrial design (If There is)	• Documentation testing (photo or videos)	• Test results document field/environment Actually No There is • Test documentation (Photo or videos) No There is • Description and specifications product does not exist • Test date product before period study • Products are not parts from substance study • Draft design industry No There is
				• Test result document product field/environment Actually	There is/ available								
				• Documentation product testing (photo or videos)	There is/ available								

External transactions on proposal						Validation/assessment outer			
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• Product Industry	• <i>Feasibility Study</i>	• Disepacatty with partner	• The 3rd	• Document appropriateness market	There is/available	Document <i>feasibility study</i> which cover market aspects, production technical, finance, management (including appropriateness partnership investment), environment, social, And law	<ul style="list-style-type: none"> • Product name • Brand (if There is) • Number brand certificate (If There is) • Date brand certificate (If There is) • Number certificate industrial design (If There is) • Date design certificate industry (if There is) 	<ul style="list-style-type: none"> • Document appropriateness market • Document technical feasibility production (social engineering And empowerment) • Document appropriateness finance • Document appropriateness management • Document appropriateness environment • Document appropriateness social • Document appropriateness social • Document appropriateness law 	<ul style="list-style-type: none"> • Market feasibility document No There is • Eligibility documents technical production does not There is • Eligibility documents finance nothing _ • Document appropriateness management does not There is • Eligibility documents environment No There is • Social eligibility document No There is • Eligibility documents law No There is • <i>Feasibility</i> document <i>study</i> is not research results funded
				• Document technical feasibility production	There is/available				
				• Document appropriateness finance	There is/available				
				• Document appropriateness management	There is/available				
				• Document appropriateness environment	There is/available				
				• Document appropriateness social	There is/available				
				• Document appropriateness law	There is/available				

M2. Product Policy

Transaction outer on proposal						Validation/assessment outer							
Category Outer	Type Outer	Status	Year	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid				
• Policy	Post-policy which will confirmed in the form of: <ul style="list-style-type: none"> • Constitution • Regulation Government • Presidential Decree • Candy, • Regional Regulation, • Governor Regulation, City Government Regulation, District Government Regulation, Perwalkot, Regional Regulation or • Policy organization national/international 	• Ready invited	• Number 1	• Document advocacy resultspolicy	There is/available	• Manuscript policy, consisting top: background back, analysis related to existing, sociology, law, academic	• Type of policy text (PP, Presidential Decree, Ministerial Decree, Regional Regulations, Governor Regulations, City Government Regulation, District Government Regulation, Perwalkot, Regional Regulation or Policy organization national/international) • Institution/institution Which discuss • Date discussion (intervals)	• Results document advocacy policy • Document process discussion	• Manuscript document results policy advocacy No There is • Process documents discussion policy No There is • Discussion schedule by the organizer No There is • Contents of the script policy does not in accordance with the substance study				
				• Document process discussion	There is/available								
			• 2nd And 3	• Document advocacy resultspolicy	There is/available					• Manuscript policy, consisting top: background back, analysis related to existing, sociology, law, academic	• Type of policy text (PP, Presidential Decree, Ministerial Decree, Regional Regulations, Governor Regulations, City Government Regulation, District Government Regulation, Perwalkot, Regional Regulation or Policy organization national/international) • Institution/institution Which set • Process date determination	• Document policy textresults advocacy • Document process determinationpolicy • Determination scheduleby organizer • Manuscript policy which Ready set • Document process determination	• Manuscript document results policy advocacy No There is • Process documents policy determination No There is • Timetable determination bythe organizers did not There is • Manuscript policy Whichready to set no There is • Contents policy Whichset No in accordance with the substance study
				• Document process determination	There is/available								
				• Document policy Which ready set	There is/available								

						(intervals)		
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N. Outer Must Study Policy Strategic

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
<ul style="list-style-type: none"> Number 1 	<ul style="list-style-type: none"> Manuscript Academic 	<ul style="list-style-type: none"> <i>Policy briefs</i>, recommendation policy, or models policy strategic 	<ul style="list-style-type: none"> Finished 	<ul style="list-style-type: none"> Manuscript <i>Policy briefs</i>, recommendation policy, or models policy strategic 	<ul style="list-style-type: none"> There is/available 	<ul style="list-style-type: none"> <i>Policy</i> Manuscript <i>briefs</i>, recommendation policy, or model policy strategic fit assignment has resolved 	<ul style="list-style-type: none"> Title of <i>Policy Manuscriptbrief</i>, recommendation policy, or policy model strategic Compiler name script (can more from One) 	<ul style="list-style-type: none"> <i>Softcopy</i> script <i>Policy briefs</i>, recommendation policy, or model policy strategic 	<ul style="list-style-type: none"> <i>Softcopy</i> of the manuscript <i>Policy briefs</i>, recommendation policy, or policy model strategic no There is Substance script <i>Policy briefs</i>, recommendation policy, or model policy strategic no in accordance assignment

O. Outer Must World Class Research

O1. One article scientific on journal international reputable 200 best (Q1) with status *accepted*

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• The 12th, or 3	• Publication in Journal International	• Article in journal international Q1	• <i>Accepted</i>	• Letter informatio <i>naccepted</i> from <i>the chief editor</i>	There is/ availabl e	• There's a letter informatio <i>naccepted</i> from <i>the chief editor</i> • Indexed on the database reputable	• Name journal • Publisher journal • Title article • Writer's name • Article URL (If There is) • DOI (If There is) • Indexing agency	• Letter informatio <i>naccepted</i> from <i>the chief editor</i> • Article or galley (final manuscript from the publisher or <i>preprinted article</i>)	• Certificate accepted from chief editor No There is • Not included article international indexed reputable (Q1) • Publishers inclin <i>lists predatory</i> • <i>Accepted</i> year before period study • Article substanceit is not in accordance with with topic study
				• Article or <i>galley</i> (final manuscript from publisher or <i>preprinted article</i>)	There is/ availabl e				

O2. One article scientific on journal international reputable 200 best (Q1) with status *published*

Transaction outer on proposal						Validation/assessment outer			
Year	Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Researcher	Proof Supporter	No Valid
• The 12th, or 3	Publication in Journal International	Article in journal international Q1	• <i>Published</i>	<ul style="list-style-type: none"> • <i>Softcopy</i> article • Article URL from publisher 	There is/available There is/available	<ul style="list-style-type: none"> • Article has <i>published</i> • Indexed on the database reputable 	<ul style="list-style-type: none"> • Name journal • Publisher journal • Title article • Writer's name • URLs Article • DOI • Indexing agency 	• <i>Softcopy</i> article	<ul style="list-style-type: none"> • <i>Softcopy</i> article no There is • Not included article international indexed reputable (Q1) • Article no can be traced from URLs Which given • Publishers include <i>predatory</i> • Year published before period study • Article substance it is not in accordance with with topic study

P. Outer Must Research Partnership

- a. Mandatory Exodus scheme assignment Research Partnership, if is at on levels TKT 1-3, so follow outer must scheme Study Base.
- b. Mandatory Exodus scheme assignment Research Partnership, if is at on levels TKT 4-6, so follow outer must scheme Study Applied.

Attachment 6. Criteria Stages Outer Devotion to Public And Validity Evaluation Outer

Outer all scheme devotion to public consists on eight category as shown on Table A. Details criteria external stage and validity evaluation each category output is explained in Table BI.

Table A. Outer scheme devotion to public

No	Category Outer	PKM	PKMS	KKN-PPM	PPK	PPPUD	PPUPIK	PPDM	PKW	PPMUPT	PPIM
1.	Publication in journal national ber ISSN	✓	-	✓	-	-	-	-	-	-	✓
2.	Publication in journal national accredited ranking 1-6	-	-	-	✓	✓	✓	✓	✓	✓	-
3.	Publication in proceedings seminar national ber ISBN	✓	✓	✓	-	-	-	-	-	-	✓
4.	Publication in proceedings seminar international in ber country ISBN	-	-	-	✓	✓	✓	✓	✓	✓	-
5.	Publication in media mass print/electronic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.	Videos	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7.	Produce businessman new	-	-	-	✓	-	-	-	-	-	-
8.	Enhancement empowerment partner	✓	✓	✓	-	✓	✓	✓	✓	✓	✓

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

Transaction outer on proposal					Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Executor	Proof Supporter	No Valid
<ul style="list-style-type: none"> Publication in national journal with ISSN 	<ul style="list-style-type: none"> Article in Journal National ber ISSN 	<ul style="list-style-type: none"> <i>Accepted</i> 	<ul style="list-style-type: none"> Certificate <i>accepted</i> from <i>chief editor</i> or 	There is/ available	<ul style="list-style-type: none"> The article has status <i>accepted</i> 	<ul style="list-style-type: none"> Name journal Publisher journal Title article Name Writer URLs Article (If There is) DOI (If There is) Institution indexer (If There is) 	<ul style="list-style-type: none"> Letter information <i>accepted</i> from <i>chief editor</i> <i>Galley</i> (manuscript final from the publisher or <i>preprinted article</i>) 	<ul style="list-style-type: none"> Letter information <i>accepted</i> from <i>chief editor</i> There isn't any Article or galley (manuscript final from the publisher or <i>preprinted article</i>) No There is <i>Accepted</i> year before period activity devotion Substance article No according to the topic service activities
			<ul style="list-style-type: none"> <i>Galley</i> (manuscript final of publisher or <i>preprinted article</i>) 	There is/ available				
		<ul style="list-style-type: none"> <i>Published</i> 	<ul style="list-style-type: none"> Article from publisher 	There is/ available	<ul style="list-style-type: none"> Article has status <i>publisheh</i> 	<ul style="list-style-type: none"> Name journal Publisher journal Title article Name Writer URLs Article (If There is) DOI (If There is) Institution indexer (If There is) 	<ul style="list-style-type: none"> Article from publisher 	<ul style="list-style-type: none"> Article from publisher No There is Year <i>published</i> before activity period devotion Substance article No according to the topic service activities

Table C. Outer form One article scientific Which published through journal national accredited ranking 1-6

Transaction outer on proposal					Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Executor	Proof Supporter	No Valid
<ul style="list-style-type: none"> Publication in national journal accredited ranking 1-6 	<ul style="list-style-type: none"> Article in journal national accredited ranking 1-6 	<ul style="list-style-type: none"> <i>Accepted</i> 	<ul style="list-style-type: none"> Letter information accepted from chief editor or 	There is/ available	<ul style="list-style-type: none"> The article has status <i>accepted</i> 	<ul style="list-style-type: none"> Name journal Publisher journal Title article Name Writer URLs Article (If There is) DOI (If There is) Institution indexer (If There is) 	<ul style="list-style-type: none"> Letter information <i>accepted</i> from <i>chief editor</i> Galley (manuscript final from the publisher or <i>preprinted article</i>) 	<ul style="list-style-type: none"> Letter information <i>accepted</i> from <i>chief editor</i> There isn't any Article or <i>galley</i> (manuscript final from the publisher or <i>preprinted article</i>) No There is Previous <i>acceptance</i> year activity period devotion Substance article No according to the topic activity devotion
		<ul style="list-style-type: none"> <i>Published</i> 	<ul style="list-style-type: none"> Article from publisher 	There is/ available				

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

Transaction outer on proposal					Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Executor	Proof Supporter	No Valid
<ul style="list-style-type: none"> Publication in proceedings seminar national ber ISBN 	<ul style="list-style-type: none"> Article in proceedings seminar national ber ISBN 	<ul style="list-style-type: none"> <i>Published</i> 	<ul style="list-style-type: none"> <i>Covers</i>, list contents, and that article printed in proceedings 	There is/available	<ul style="list-style-type: none"> Proceedings ber seminar ISBN 	<ul style="list-style-type: none"> Seminar name Execution time seminar Title Article Name Writer Publisher URLs proceedings (If There is) Indexing Institute(If There is) 	<ul style="list-style-type: none"> <i>Covers</i>, list contents, and article in proceedings 	<ul style="list-style-type: none"> <i>Cover</i>, table of contents, and articles) no There is Proceedings No ber ISBN Year of implementation seminar before activity period devotion Article substance not in accordance with the activity topic devotion

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

Transaction outer on proposal					Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Executor	Proof Supporter	No Valid
<ul style="list-style-type: none"> Publication in proceedings seminar international with ISBN on in country 	<ul style="list-style-type: none"> Article in proceedings seminar international with ISBN on in country 	<ul style="list-style-type: none"> <i>Published</i> 	<ul style="list-style-type: none"> <i>Covers</i>, list contents, and that article printed in proceedings 	There is/available	<ul style="list-style-type: none"> Proceedings seminar international ber ISBN 	<ul style="list-style-type: none"> Seminar name Execution time seminar Title Article Name Writer Publisher URLs proceedings (If There is) Indexing Institute(If There is) 	<ul style="list-style-type: none"> <i>Covers</i>, list contents, and article in proceedings 	<ul style="list-style-type: none"> <i>Cover</i>, table of contents, and articles) no There is Proceedings No ber ISBN Year of implementation seminar before activity period devotion Article substance No in accordance with

								activity topic devotion
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Table F. Outer form One article Which published in media mass

Transaction outer on proposal					Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Executor	Proof Supporter	No Valid
• Publication in the media mass	• Article in media print	• <i>Published</i>	• Article Which rise	There is/ available	• The article has been published	• Name media printer • Publisher • Title article • Name Writer • URLs Article (If There is)	• The article has been published	• Articles that have been published There isn't any • Year published before activity period devotion • Substance article No according to the topic service activities
	• Article in media electronic	• <i>Online / can accessed</i>	• Article Which show	There is/ available	• The article has status <i>online</i>	• Name media • Title article • Name Writer • URLs Media • URLs article	• The article has been broadcast	• Articles that have been published There isn't any • Substance article No according to the topic service activities

Table G. Outer form videos activity

Transaction outer on proposal					Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Executor	Proof Supporter	No Valid
• Videos activity	• Videos in media electronic	• <i>Online / can accessed</i>	• Video URL Which show	There is/ available	• Video has status <i>online</i>	• Name media • Title videos activity • Name Writer • URLs Media • URLs video	• Video URL Which show	• URLs videos No There is or Can't accessed • Substance videos No according to the topic activity devotion

Table H. Outer form activity Which produce businessman new

Transaction outer on proposal					Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Executor	Proof Supporter	No Valid
<ul style="list-style-type: none"> Businessman new 	<ul style="list-style-type: none"> Produce five businessman new 	<ul style="list-style-type: none"> Has accomplished 	<ul style="list-style-type: none"> Profile businessman new 1 	There is/available	<ul style="list-style-type: none"> Business has walk 	<ul style="list-style-type: none"> Each profile new entrepreneur (1-5) Name Businessman Address Business fields Name Business Name product (if There is) Brand product (if There is) Turnover (if There is) 	<ul style="list-style-type: none"> Document each profile businessman new 	<ul style="list-style-type: none"> Document profile everyNew entrepreneurs don't There is New entrepreneur profile No fulfil condition
			<ul style="list-style-type: none"> Profile businessman new 2 	There is/available				
			<ul style="list-style-type: none"> Profile businessman new 3 	There is/available				
			<ul style="list-style-type: none"> Profile businessman new 4 	There is/available				
			<ul style="list-style-type: none"> Profile businessman new 5 	There is/available				

I. Outer form enhancement empowerment partner in accordance problem faced

Transaction outer on proposal					Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Executor	Proof Supporter	No Valid
<ul style="list-style-type: none"> • Enhancement empowerment partner 	<ul style="list-style-type: none"> • Knowledge partner increase 	<ul style="list-style-type: none"> • Achieved 	<ul style="list-style-type: none"> • Description test results/score knowledge before and after activity 	<ul style="list-style-type: none"> • Yes/available 	<ul style="list-style-type: none"> • Knowledge partner increase 	<ul style="list-style-type: none"> • Name group partner • Chairwoman group partner • Amount member partner • Field activity partner • Partner address 	<ul style="list-style-type: none"> • Description test results/score knowledge before and after activity 	<ul style="list-style-type: none"> • Description results test/score prior knowledge And after activity No There is • Document evaluation No in accordance with substance activity
	<ul style="list-style-type: none"> • Skills partner increase 	<ul style="list-style-type: none"> • Achieved 	<ul style="list-style-type: none"> • Description results test/score Skills before and after activity 	<ul style="list-style-type: none"> • Yes/available 	<ul style="list-style-type: none"> • Skills partner increase 	<ul style="list-style-type: none"> • Name group partner • Chairwoman group partner • Amount member partner • Field activity partner • Partner address 	<ul style="list-style-type: none"> • Description of results test/score Skills before and after activity 	<ul style="list-style-type: none"> • Description results test/score skills before and after the activity No There is • Document evaluation No in accordance with substance activity

Transaction outer on proposal					Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Executor	Proof Supporter	No Valid
<ul style="list-style-type: none"> • Enhancement partner empowerment 	<ul style="list-style-type: none"> • Health partner increase 	<ul style="list-style-type: none"> • Achieved 	<ul style="list-style-type: none"> • Description enhancement health before and after activity 	<ul style="list-style-type: none"> • Yes/available 	<ul style="list-style-type: none"> • Health partner increase 	<ul style="list-style-type: none"> • Name group partner • group leader partner • Number of members partner • Field of activity partner • Partner address 	<ul style="list-style-type: none"> • Description enhancement health before and after activity 	<ul style="list-style-type: none"> • Description enhancement health before And after activity No There is • Document evaluation No in accordance with substance activity
	<ul style="list-style-type: none"> • Income partner increase 	<ul style="list-style-type: none"> • Achieved 	<ul style="list-style-type: none"> • Description enhancement income before and after activity 	<ul style="list-style-type: none"> • Yes/available 	<ul style="list-style-type: none"> • Income partner increase 	<ul style="list-style-type: none"> • Name group partner • group leader partner • Number of members partner • Field of activity partner • Partner address 	<ul style="list-style-type: none"> • Description enhancement income before and after activity 	<ul style="list-style-type: none"> • Improvement description income before and after the activity no There is • Document evaluation No in accordance with substance activity

Transaction outer on proposal					Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Executor	Proof Supporter	No Valid
• Enhancement empowerment partner	• Service partner increase	• Achieved	• Description enhancement quantity and quality Service before and after activity	• Yes/available	• Service partner increase	<ul style="list-style-type: none"> • Name group • Chairman group partner • Amount member partner • Field activity partner • Partner address 	• Description enhancement quantity and quality Service before and after activity	<ul style="list-style-type: none"> • Improvement description quantity and quality Prior service and after the activity There isn't any • Document evaluation No in accordance with substance activity
	• Quality partner products increase	• Achieved	• Description enhancement product quality before and after activity	• Yes/available	• Quality partner products increase	<ul style="list-style-type: none"> • Name group • Chairman group partner • Amount member partner • Field activity partner • Partner address 	• Description enhancement product quality before and after activity	<ul style="list-style-type: none"> • Improvement description product quality before And after activity does not There is • Document evaluation No in accordance with substance activity

Transaction outer on proposal					Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Executor	Proof Supporter	No Valid
• Enhancement partner empowerment	• Amount product partner increase	• Achieved	• Description increasing numbers product before and after the activity	• Yes/available	• Amount partner products increase	• Name group • Chairman group partner • Amount member partner • Field of activity partner • Partner address	• Description enhancement Number of products before and after activity	• Description increasing numbers product before And after the activity No There is • Document evaluation No in accordance with substance activity
	• Type product partner increase	• Achieved	• Description type improvement product before and after activity	• Yes/available	• Types of products partner increase	• Name group • Chairman group partner • Amount member partner • Field of activity partner • Partner address	• Description enhancement type product before and after activity	• Improvement description type of product before and after the activity There isn't any • Document evaluation No in accordance with substance activity

Transaction outer on proposal					Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Executor	Proof Supporter	No Valid
<ul style="list-style-type: none"> • Enhancement empowerment partner 	<ul style="list-style-type: none"> • Capacity production partner increase 	<ul style="list-style-type: none"> • Achieved 	<ul style="list-style-type: none"> • Description enhancement capacity production before And after activity 	<ul style="list-style-type: none"> • Yes/available 	<ul style="list-style-type: none"> • Capacity production partner increase 	<ul style="list-style-type: none"> • Name group • Chairman group partner • Amount member partner • Field of activity partner • Partner address 	<ul style="list-style-type: none"> • Description enhancement capacity production before and after activity 	<ul style="list-style-type: none"> • Description enhancement production capacity before and after activity There isn't any • Evaluation document No according to substance activity
	<ul style="list-style-type: none"> • Success partner do export 	<ul style="list-style-type: none"> • Achieved 	<ul style="list-style-type: none"> • Document Delivery product export 	<ul style="list-style-type: none"> • Yes/available 	<ul style="list-style-type: none"> • Success partner do export 	<ul style="list-style-type: none"> • Name group • Chairman group partner • Amount member partner • Field of activity partner • Partner address 	<ul style="list-style-type: none"> • Document delivery product export • Description product which exported 	<ul style="list-style-type: none"> • Document delivery export products No There is • Description product Which exported • Product name not in accordance with the substance devotion
			<ul style="list-style-type: none"> • Description product which exported 	<ul style="list-style-type: none"> • Yes/available 				

Transaction outer on proposal					Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Executor	Proof Supporter	No Valid
<ul style="list-style-type: none"> • Enhancement empowerme nt partner 	<ul style="list-style-type: none"> • Success partners do intermarketing island 	<ul style="list-style-type: none"> • Achieved 	<ul style="list-style-type: none"> • Document delivery product 	<ul style="list-style-type: none"> • Yes/available 	<ul style="list-style-type: none"> • Success partner do Inter-island increase 	<ul style="list-style-type: none"> • Name group • Chairman group partner • Amount member partner • Field activity partner • Partner address 	<ul style="list-style-type: none"> • Document delivery product • Description product which marketed 	<ul style="list-style-type: none"> • Product description which is marketed No There is • Document product delivery There isn't any • Product name not according to substance devotion
			<ul style="list-style-type: none"> • Description product which marketed 	<ul style="list-style-type: none"> • Yes/available 				
	<ul style="list-style-type: none"> • Total assets partner increase 	<ul style="list-style-type: none"> • Achieved 	<ul style="list-style-type: none"> • Description enhancement total assets before And after activity 	<ul style="list-style-type: none"> • Yes/available 	<ul style="list-style-type: none"> • Total assets increase 	<ul style="list-style-type: none"> • Name group • Chairman group partner • Amount member partner • Field activity partner • Partner address 	<ul style="list-style-type: none"> • Description enhancement total assets before and after activity 	<ul style="list-style-type: none"> • Improvement description amount of assets before and after activity There isn't any • Document evaluation No in accordance with substance activity

Transaction outer on proposal					Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Executor	Proof Supporter	No Valid
<ul style="list-style-type: none"> • Enhancement empowerme nt partner 	<ul style="list-style-type: none"> • Total turnover partner increase 	<ul style="list-style-type: none"> • Achieved 	<ul style="list-style-type: none"> • Description enhancement amount turnover before and after activity 	<ul style="list-style-type: none"> • Yes/available 	<ul style="list-style-type: none"> • Amount turnover increase 	<ul style="list-style-type: none"> • Name group • Chairman group partner • Amount member partner • Field activity partner • Partner address 	<ul style="list-style-type: none"> • Description enhancement total turnover before and after activity 	<ul style="list-style-type: none"> • Description increasing numbers turnover before and after the activity • No There is • Document evaluation No in accordance with substance activity
	<ul style="list-style-type: none"> • Amount workforce _ partner increase 	<ul style="list-style-type: none"> • Achieved 	<ul style="list-style-type: none"> • Description improvement amount labor before and after activity 	<ul style="list-style-type: none"> • Yes/available 	<ul style="list-style-type: none"> • Amount labor increase 	<ul style="list-style-type: none"> • Name group • Chairman group partner • Amount member partner • Field activity partner • Partner address 	<ul style="list-style-type: none"> • Description improvement amount of powerwork before and after activity 	<ul style="list-style-type: none"> • Description increase in numberpower Work before and after the activity • There isn't any • Document evaluation No in accordance with substance activity

Transaction outer on proposal					Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Executor	Proof Supporter	No Valid
<ul style="list-style-type: none"> • Enhancement empowerment partner 	<ul style="list-style-type: none"> • Ability management partner increase 	<ul style="list-style-type: none"> • Achieved 	<ul style="list-style-type: none"> • Description test results/score sability management before and after activity 	<ul style="list-style-type: none"> • Yes/available 	<ul style="list-style-type: none"> • Ability management increase 	<ul style="list-style-type: none"> • Name group • Chairman group partner • Amount member partner • Field activity partner • Partner address 	<ul style="list-style-type: none"> • Description test results/score sability management before and after activity 	<ul style="list-style-type: none"> • Description of results ability test/score management before and after the activity No There is • Document evaluation No in accordance with substance activity
	<ul style="list-style-type: none"> • <i>Revenue generating</i> partner increase 	<ul style="list-style-type: none"> • Achieved 	<ul style="list-style-type: none"> • Description enhancement Profit before And after activity 	<ul style="list-style-type: none"> • Yes/available 	<ul style="list-style-type: none"> • <i>Revenue generating</i> increase 	<ul style="list-style-type: none"> • Name group • Chairman group partner • Amount member partner • Field activity partner • Partner address 	<ul style="list-style-type: none"> • Description enhancement Profit before and after activity 	<ul style="list-style-type: none"> • Improvement description Profit before and after activity There isn't any • Document evaluation No in accordance with substance activity

Transaction outer on proposal					Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Executor	Proof Supporter	No Valid
<ul style="list-style-type: none"> • Enhancement empowerment partner 	<ul style="list-style-type: none"> • <i>Income generating partner increase</i> 	<ul style="list-style-type: none"> • achieved 	<ul style="list-style-type: none"> • Description enhancement <i>income generating</i> before And after activity 	<ul style="list-style-type: none"> • Yes/available 	<ul style="list-style-type: none"> • <i>Income generating increase</i> 	<ul style="list-style-type: none"> • Name group • Chairman group partner • Amount member partner • Field of activity partner • Partner address 	<ul style="list-style-type: none"> • Description enhancement <i>income generating</i> before and after activity 	<ul style="list-style-type: none"> • Description increase in <i>Income generating</i> before and after activity There isn't any • Document evaluation does not in accordance with substance activity
	<ul style="list-style-type: none"> • Product certified partner 	<ul style="list-style-type: none"> • Achieved 	<ul style="list-style-type: none"> • Description Product Which certified • Certificate product 	<ul style="list-style-type: none"> • Yes/available • Yes/available 	<ul style="list-style-type: none"> • Product certified 	<ul style="list-style-type: none"> • Name group • Chairman group partner • Amount member partner • Field of activity partner • Address partner • Name product • Number certificate • Institution giver certification 	<ul style="list-style-type: none"> • Description Products that certified • Certificate product 	<ul style="list-style-type: none"> • Product Description which is certified No There is • Product certificate There isn't any

Transaction outer on proposal					Validation/assessment outer			
Category Outer	Type Outer	Status	Proof Outer	Target Achievements	Criteria Appropriateness	Stuffing Executor	Proof Supporter	No Valid
<ul style="list-style-type: none"> • Enhancement empowerment partner 	<ul style="list-style-type: none"> • Product standardized partner 	<ul style="list-style-type: none"> • achieved 	<ul style="list-style-type: none"> • Description Products that standardized 	<ul style="list-style-type: none"> • Yes/available 	<ul style="list-style-type: none"> • Product standardized ization 	<ul style="list-style-type: none"> • Name group \ • Chairman's name group partner • Amount member partner • Field activity partner • address partner • Aama product • Number document standardization • Institution giver standardization 	<ul style="list-style-type: none"> • Description Products that standardized • Document Standardization 	<ul style="list-style-type: none"> • Product Description Which standardized No There is • Document Standardization is not There is
			<ul style="list-style-type: none"> • Document Standardization product 	<ul style="list-style-type: none"> • Yes/available 				
	<ul style="list-style-type: none"> • Business unit body law 	<ul style="list-style-type: none"> • achieved 	<ul style="list-style-type: none"> • Description Units that effort has body law 	<ul style="list-style-type: none"> • Yes/available 	<ul style="list-style-type: none"> • Business registered 	<ul style="list-style-type: none"> • Name group • Chairman's name group partner • Amount member partner • Field activity partner • Partner address • Name units • Number decision body law • Institution giver status body law 	<ul style="list-style-type: none"> • Description Units that effort has a body law • Document decision body law 	<ul style="list-style-type: none"> • Unit Description efforts that have been made incorporated No There is • Document decision incorporated No There is
			<ul style="list-style-type: none"> • Document decision body law 	<ul style="list-style-type: none"> • Yes/available 				



**Kementerian Riset dan Teknologi /
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