



Republic of the Philippines
Department of Science and Technology
**PHILIPPINE COUNCIL FOR INDUSTRY, ENERGY AND EMERGING
TECHNOLOGY RESEARCH AND DEVELOPMENT (PCIEERD)**

MEMORANDUM

FOR : PMT Members
All Concerned

FROM : *DR. ENRICO C. PARINGIT*
Executive Director

SUBJECT : Standard Reporting of 6Ps Output Project

DATE : 03 June 2021

PCIEERD employs 6Ps to quantitatively assess programs/initiatives' outputs to ascertain their efficiency and productivity. Relative thereto, a guideline on the Standard reporting of 6Ps has been developed. This aims to assess all outputs derived from the project vis-a-vis the approved work and financial plans of the project.

In general, the scoring of every component or P is weighed against the target set in the approved proposal. Thus, if the project has met the target output, the score is "1." Nonetheless, the score will be summed for each component and the output will be reckoned against the committed P. Any excess P of the committed targets will be considered as additional to avoid cases where much Ps are being reported while failing on the rest.

On the timing or basis for scoring, this should be done on periods where progress is required, *i.e.*, renewal or budget-reprogramming. The 6Ps reflected in the Executive Brief should follow the scoring under Item V of the attached Guidelines based on the promised deliverables/targeted outputs of the project.

All concerned are enjoined to comply with the provisions of the Guidelines on the Standard reporting of 6Ps.

Thank you.

/PCMD

Philippine Council for Industry, Energy and Emerging
Technology Research and Development



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DRAFT GUIDELINES

STANDARD REPORTING OF 6PS OUTPUT PROJECT (AS OF April 14, 2021)

I. Rationale

The Philippine Council for Industry, Energy and Emerging Technology Research and Development (PCIEERD) undertakes Science and Technology (S&T) and Research and Development (R&D) initiatives to uphold its mandate enshrined in Executive Order No. 366.

The Council's programs are guided by the principle of science for the people with the end goal of driving economic progress and improving technological innovation for public interest.

The DOST Project Monitoring & Evaluation Protocol (DOST AO 014 s. 2019) covers a set of activities, guidelines, evaluation tools and indicators that are specifically designed to track the performance of the various components or steps in the implementation of its R&D projects. It is intended for the use of DOST and its partners through results-based management.

As such, DOST-PCIEERD employs 6Ps to quantitatively assess its program/project outputs to ascertain their efficiency and productivity. 6Ps pertain to Publication, Patent/Intellectual Property Rights (IPR), Product, People Services, Places and Partnerships, and Policy.

II. Purpose

This guideline on Standard Reporting of 6Ps aims to objectively assess all outputs derived from the project vis-a-vis the approved work and financial plan of the project. The monitoring of the 6Ps will be done on periods where progress is required, *i.e.*, extension, renewal, budget realignment or budget reprogramming. Further, these guidelines shall be utilized as reference during quarter, semiannual, and annual project monitoring and assessment. The 6Ps reflected in the Executive Brief should follow the scoring under Item V of this Guidelines based on the expected deliverables and targeted outputs of the project.

III. Definition of Terms

- A. Commercialization** – is the process of introducing new inventions and products to the market.¹
- B. Copyright** – is the legal protection extended to the owner of the rights in an original work.²
- C. ISI** – International Scientific Information are bibliographic databases containing abstracts and citations for academic journal articles.

¹ Bloomenthal, A. (2020). *Commercialization*. Available at: <https://www.investopedia.com/terms/c/commercialization.asp>

² Intellectual Property of the Philippines. (n.a.). *Copyright*. Available at: <https://www.ipophil.gov.ph/copyright/>

- D. **Patent** – tangible measure of publication. It is an exclusive right granted to a new, inventive, and useful product which can generate potential future profit.
- E. **People Services** – this pertains to addition in the scientific workforce by capacitating, training, and graduating science majors through the project.
- F. **Places** – facilities that enable increased 6Ps output.
- G. **Policies** – adopted science-based guidelines.³
- H. **Product** – commercial value of outputs.
- I. **Project Leader** – a person responsible leading research projects to satisfy a defined scientific objective.
- J. **Prototype** – a preliminary model of product.
- K. **Publication** – contribution to the general body of knowledge through scientific publications.
- L. **Scopus** – is a comprehensive database that helps industry researchers track market innovations, identify key contributors and collaborators, and develop competitive benchmarking.⁴
- M. **Trade Secret** – is an intellectual property right on confidential information which may be sold or licensed. It is a practice or process of an institution not known outside of the institution.⁵
- N. **University Technology Transfer Officer** – a person responsible for technology transfer and other aspects of commercialization of research that takes place in a university.

IV. Coverage

These guidelines shall cover the standard reporting of 6Ps output of project as of March 24, 2021. This will cover all projects funded and monitored by the Council.

V. 6Ps Project Output

A. Publications

Publication refers to a research, or an aspect of it, that is published in a peer-reviewed scientific journal. The main output is the contribution to the general body of knowledge through scientific publications.

³ Intellectual Property of the Philippines. (n.a.). *What is Intellectual Property?* Available at: <https://www.ipophil.gov.ph/what-is-intellectual-property/>

⁴ Elsevier. (n.a.). *Scopus*. Available at <https://www.elsevier.com/solutions/scopus>

⁵ World Intellectual Property Organization. (n.a.). *Trade Secrets Basics*. Available at: https://www.wipo.int/tradesecrets/en/tradesecrets_faqs.html.

1. Types of Publications

- a. Indexed Conference presentation (e.g. Scopus or ISI)
- b. Local publication
- c. International non-ISI/Scopus publication
- d. Scopus publication
- e. ISI indexed publication
- f. High impact factor journal publication (with three (3) or more citations)

2. Valuation

A publication shall be given ratings of 0.50, 0.80, or 1.00. The rating shall be prorated according to number of publications targeted in the proposal. The criteria in scoring shall be categorized by the following:

- a. A publication is scored 0.50 upon submission to PCIEERD by the Project Leader of the full paper manuscript.
- b. A publication has a score of 0.80 if it is accepted in a peer-reviewed journal even if undergoing ongoing revisions in response to comments. The Project Leader should provide proof of acceptance of manuscript by the Journal Editor/s as evidence.
- c. A publication has a score 1.00 if it is fully accepted in peer-reviewed journal, as evidenced by (i) print-ready proof submitted by the Project Leader and (ii) notice of final proof by the Editor/Publisher or a Digital Object Identifier (DOI) link.

B. Patents/Intellectual Property

1. Patent

Intellectual property refers to creations of the mind. It covers patent which is an exclusive right granted to a new, inventive, and useful product which can generate potential future profit. Patents are scored based on the extent or status of the patent application.

a. Valuation: R&D

A patent shall be given scores of 0.50, 0.80, or 1.00. The scores shall be prorated according to the number of patents targeted in the proposal. The score shall be based on the progress of the application.

- i. A patent is scored 0.50 if Project Leader meets with University Technology Transfer Officer as evidenced by the Minutes of the Meeting.
- ii. A patent is scored 0.80 if accomplished Invention Disclosure Form (IDF) is successfully submitted to University Technology Transfer Officer evidenced by Certification Letter of completed IDF.
- iii. A patent is scored 1.00 if Researcher or University Technology Transfer Officer accomplishes the Patentability Assessment Report.

b. Valuation: Technology Transfer

Technology transfer is the process of commercializing/transferring a patent. Technology transfer of a patent shall be given scores of 0.50, 0.80, or 1.00. The scores shall be prorated according to the number of technology transfers targeted in the proposal. The score shall be based on the progress of the application.

- i. In terms of technology transfer, it is scored 0.50 if University Technology Transfer Officer obtains the recommendation of the IP Committee evidenced by the Letter to the Chancellor/President and Letter to the Researcher.
- ii. It is scored 0.80 if the University Technology Transfer Officer is able to prepare IP Application documents evidenced by IP Update Report.
- iii. It is scored 1.00 if the University Technology Transfer Officer is able to file the IP evidenced by the IP Application Number and Acknowledgement receipt of IPOPHL.

2. Copyright

Copyright is the legal protection extended to the owner of the rights in an original work. "Original work" refers to every production pertaining to scientific and other works.² Copyright laws retroactively applies from the moment the invention is created. Similarly, copyrights are valued depending on the progress of its application.

a. Valuation: R&D

A copyright shall be given scores of 0.50, 0.80, or 1.00. The scores shall be prorated according to the number of copyrights targeted in the proposal.

- i. A copyright is scored 0.50 once the Project Leader meets with University Technology Transfer Officer evidenced by the Minutes of the Meeting.

- ii. A copyright is scored 0.80 if the University Technology Transfer Officer accomplishes Disclosure Form evidenced by the Certification Letter of completed Disclosure Form.
- iii. A copyright is scored 1.00 if the University Technology Transfer Officer successfully files the copyright evidenced by the Certified True Copy of the Certificate of Registration.

b. Valuation: Technology Transfer

Technology transfer is the process of commercializing/transferring a copyright. Technology transfer of a copyright shall be given scores of 0.50, 0.80, or 1.00. The scores shall be prorated according to the number of technology transfer targeted in the proposal.

- i. Technology transfer of a copyright is scored 0.50 if the Project Leader meets with the University Technology Transfer Officer evidenced by the Minutes of the Meeting.
- ii. Technology transfer of a copyright is scored 0.80 if the University Technology transfer Officer accomplishes Disclosure Form evidenced by the Certification Letter of completed Disclosure Form.
- iii. Technology transfer of a copyright is scored 1.00 if the University Technology Transfer Officer successfully files the copyright evidenced by the Certified True Copy of the Certificate of Registration.

3. Trade Secret

Trade secret is an intellectual property right on confidential information which may be sold or licensed. It is a practice or process of an institution not known outside of the institution.⁵ It affords advantage to the institution over its competitors and is usually a product of internal research and development. Trade secret is valued on the status of its application.

a. Valuation: Trade Secret

Trade secret shall be given scores of either 0.50 or 1.00 depending on its progress. The scores shall be prorated according to the number of trade secrets targeted in the proposal.

- i. It is scored 0.50 if the Project Leader meets with University Technology Transfer Officer evidenced by the Minutes of the Meeting.
- ii. It is scored 1.00 if the University Technology Transfer Officer accomplishes the Disclosure Form evidenced by the Certification Letter of completed Disclosure Form.

b. Valuation: Technology Transfer

Technology transfer is the process of commercializing/transferring a trade secret. Technology transfer of a trade secret shall be given scores of either 0.50 or 1.00 depending on its progress. The scores shall be prorated according to the number of technology transfers targeted in the proposal.

- i. It is scored 0.50 if the Project Leader meets with the University Technology Transfer Officer evidenced by the Minutes of the Meeting
- ii. It is scored 1.00 if the University Technology Transfer Officer accomplishes the Disclosure Form evidenced by the Certification Letter of completed Disclosure Form

C. Products

This refers to the inventions with potential for commercialization in the end-result of the study. Projects with a product or invention as output are also valued in terms of the product's actual value and how far the product is from commercialization. The process includes prototype licensing, royalty, potential value of the product or earning projections of a new service or process developed.

1. Valuation: Proof of Concept (TRL 3)

A product shall be given scores of 0.50, 0.80, or 1.00. The scores shall be prorated according to the number of products targeted in the proposal.

- a. A product is scored 0.50 when it undergoes formulation evidenced by a developed and approved repeatable process with sound statistical basis and experimental design conducted by the Project Leader.
- b. A product is scored 0.80 when it passes the required lab tests/standardized and optimized processes.
- c. A product is scored 1.00 when it shows advantages based on performance metrics evidenced by Accreditation/certification Filed for Patent.

2. Valuation: Technology Transfer of Translation (TRL 4-5; IRL 1-5)

Technology transfer is the process of commercializing/transferring a translation. Technology transfer of a translation shall be given scores of 0.50, 0.80, or 1.00. The scores shall be prorated according to the number of technology transfers targeted in the proposal.

- a. It is scored 0.50 if any of the Project Leader, University Technology Transfer Officer, TBI Incubator Manager submits a Large Prototype/Problem Solution Fit supported by Market Data/Customer Interviews.

- b. It is scored 0.80 if any of the Project Leader, University Technology Transfer Officer, TBI Incubator Manager obtains Large Prototype with Product Market Fit Report.
- c. It is scored 1.00 if any of the Project Leader, University Technology Transfer Officer, TBI Incubator Manager produces MVP/First Pass Business Model evidenced by its Product Design/Specifications and Business Model.

3. Valuation: Prototype (TRL 4-5)

A product prototype shall be given scores of 0.50, 0.80, or 1.00. The scores shall be prorated according to the number of prototypes targeted in the proposal.

- a. A prototype is scored 0.50 if the Project Leader provides its Technology Specification based on Performance Metrics evidenced by optimized and repeatable process report/approved design of equipment system.
- b. A prototype is scored 0.80 if the Project Leader conducts Functionality/Performance Testing with initial feedback from users. This is evidenced by passed laboratory results, including but not limited to physicochemical, sensory evaluation and shelf-life studies, fabricates system/equipment, and if the prototype is field-tested.
- c. A score of 1.00 is given to a working prototype compliant with laboratory standards and with cost-benefit analysis. Further evidenced by filed patent by the Project Leader.

4. Valuation: Technology Transfer for Commercialization (TRL 6-8; IRL 5-8)

Technology transfer for commercialization shall be given scores of 0.50, 0.80 or 1.00. The scores shall be prorated according to the number of technology transfers targeted in the proposal.

- a. It is scored 0.50 if any of the Project Leader, University Technology Transfer Officer or TBI Incubator Manager is able to create a Business Model/Revenue Model evidenced by Business Plan.
- b. It is scored 0.80 if any of the Project Leader, University Technology Transfer Officer or TBI Incubator Manager provides Key Partners provides Key Partners/Supply Chain Profile evidenced by suppliers, distributors, tech support, etc.
- c. It is scored 1.00 if any of the Project Leader, University Technology Transfer Officer or TBI Incubator Manager obtains Licensed Technology evidenced by FOR, TLA, and Purchase Order (PO).

D. People Services

This output quantifies services provided to people according to: (1.) number of trained personnel in specialized fields of studies through workshops conducted; (2.) addition to scientific workforce by graduating science majors through the project (B.S., M.Sc., and Ph.D. degree holders);

1. Valuation: Graduate/Undergraduate Students

This refers to the number of undergraduate and graduate student assisted, as well as to capstone, thesis, dissertation titles provided. Valuation shall be prorated and determined by the resulting percentage relative to target number of students, capstones, theses, and dissertation titles in the proposal.

- a. Rating of 0.50 for 51%-79%.
- b. Rating of 0.80 for 89%-99%.
- c. Rating of 1.00 for 100% and above.

2. Valuation: Trainings/Workshops/Seminars

Valuation is prorated and determined by the percentage of actual number of trained personnel in specialized field of studies through workshops and trainings conducted, as compared to the target number of trained personnel in the proposal.

- a. Rating of 0.50 for 51%-79%.
- b. Rating of 0.80 for 89%-99%.
- c. Rating of 1.00 for 100% and above

E. Places and Partnerships

These are established laboratories, institutions, and training programs that will likely produce publications, patents, products, trained S&T workers, and policies in the future. This includes TBIs, testing facilities, IDPs and training programs. Sustainability of these research facilities is the main considerations.

1. Valuation: Places/Facilities

Places/Facilities shall be given scores of 0.50, 0.80 or 1.00. The scores shall be prorated according to the number of laboratories, institutions, and training programs targeted in the proposal.

- a. Rating of 0.50 if the facility has secured manpower and established facility with operational manual.
- b. Rating of 0.80 if the facility has conducted trial-run(s) such as test results/performance efficiency.

- c. Rating of 1.00 if the facility is a duly operational laboratory/facility.

2. Valuation: Partnerships

Evidence of partnership include copies of Memorandum of Agreement/Memorandum of Understanding and letters of support or commitment. Partnerships are rated 0.50, 0.80 or 1.00. The scores shall be prorated according to the number of partnerships targeted in the proposal.

- a. Rating of 0.50 if a Memorandum of Agreement/Understanding or Letter of Support/Commitment is drafted.
- b. Rating of 0.80 if the Memorandum of Agreement/Understanding or Letter of Support/Commitment is reviewed.
- c. Rating of 1.00 if the Memorandum of Agreement/Understanding or Letter of Support/Commitment is signed by the partner agency/institution.

F. Policies

These pertain to science-based policies that have been institutionalized in the form of congressional laws, executive and administrative orders, policy guidelines for government agencies and local government units (LGUs).

1. Valuation:

Policies are rated 0.50, 0.80 or 1.00. The scores shall be prorated according to the number of policies targeted in the proposal.

- a. Rating of 0.50 if the policy is prepared and drafted by the Project Leader evidenced by any of the following; draft policy paper, policy brief, policy recommendations, draft republic acts, house bills and other laws.
- b. Rating of 0.80 if the policy recommendation is concurred by DOST-PCIEERD Technical Panel.
- c. Rating of 1.00 if the policy, as recommended, is transmitted or submitted to concerned agency, and set for implementation, evidenced by endorsement letter addressed to concerned agencies/beneficiaries/end users. Proof of receipt or acknowledgement of the draft policy by the concerned agency is required.

These Guidelines shall take effect 15 days after filing at the UP-Law Center and remain in force unless revoked in writing. Done this _____, 2021.

Approved by:

A handwritten signature in blue ink, appearing to read "Enrico C. Paringit", is written over the printed name.

DR. ENRICO C. PARINGIT
Executive Director