



Republic of the Philippines
Department of Science and Technology
Technology Application and Promotion Institute

TAPI ADMINISTRATIVE ORDER NO. _____
Series of 2023

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**SUBJECT: Amending TAPI Administrative Order 2023-001
GUIDELINES FOR THE IMPLEMENTATION OF GRANTS
AND ASSISTANCE TO LEVERAGE INNOVATIONS FOR
NATIONAL GROWTH (GALING) PROGRAM**

1.0 BACKGROUND:

The Technology Application and Promotion institute of the Department of Science and Technology (DOST-TAPI) was created by virtue of Executive Order No. 128, s. 1987 and its function was expanded by virtue of Republic Act No. 7459 otherwise known as "Inventors and Invention Incentives Act of the Philippines" which provides various forms of assistance to Filipino Inventors. In recognition of the indispensability and ingenuity of the Filipino Inventors in the development of the technology, DOST-TAPI implements programs for the development of the invention through prototype development. Prototypes are improved and tested so that the design or working parameters can be changed to attain sustainability prior to commercial production.

Most of the challenges faced by individual inventors are on how to make their invention-products market-ready. The different stages of developing market-ready inventions can be categorized by its Technology Readiness Level (TRL). GALING will harmonize all the programs of assistance and streamline the activities into one program that will cover iteration up to pilot production to provide a more comprehensive program responsive to the needs of our inventors. This is so far the only program of assistance that Filipino inventors can avail from the government. The program will focus on providing financial and technical assistance to fast-track either local or foreign market-readiness of locally-developed innovations and technologies produced by individual inventors and makers.

This program aims to have a holistic approach of packaged assistance that will harmonize the pre-commercialization programs of DOST-TAPI's Invention Development Division (IDD), in particular the Testing and Analyses Program, Industry Based Invention Development (IBID) Program, and Invention-Based Enterprise Development (IBED) Program. It will also provide financial assistance for iterative prototyping. Compared to these individual programs, GALING shall offer a more comprehensive assistance that aims to shepherd pre-commercialization preparatory works through TRL-based intervention that includes iterative prototyping.

2.0 PROGRAM DESCRIPTION

The program provides support in the development and improvement of an innovation's TRL to improve its technical viability and marketability:

- 2.1 Provision of technical assistance for the fabrication of prototype/s in collaboration with experts from the industry, DOST Regional Offices, State Universities and Colleges (SUCs) or private educational institutions, and Research and Development Institutes (RDIs).
- 2.2 Provision of financial assistance to cover the raw materials, equipment, tools/devices, and labor expenses for the fabrication of prototype/s that will be used in iteration, testing, debugging/refinement, demonstration, and pilot testing of an innovation as placed in the laboratory and real working environment.
- 2.3 Assistance by laboratories and other facilities of RDIs, SUCs or Higher Education Institute (HEIs), DOST Regional Offices, and private institutions in the testing requirements of a prototype.

3.0 OBJECTIVES:

To provide a holistic package of assistance for pre-commercialization activities to improve the TRL of technologies, this program aims to:

- a. Encourage the development of new and working technologies by providing technical and financial assistance in the development of a potential or actual innovation; and
- b. Support the development of commercial prototype/s for technology validation, and pilot-scale/field testing.

4.0 OBJECTIVES BASED ON GENDER EQUALITY GOALS AND OUTCOMES

DOST-TAPI, in recognizing the principles of fairness and equity, demands that everyone in society, whether male or female, has the right to achieve their full potential, realizes the need to provide varying support to men and women, technologists, inventors and researchers. Accordingly, DOST-TAPI aims to:

- a. Increase access of women to all programs and services of the Institute;
- b. Enhanced gender responsiveness in the entire operation of the institute to ensure that services are participatory, fair, empowering and sustainable; and
- c. Enhanced equal opportunity principles of men and women beneficiaries of GALING Program thus, attaining their full potential and enable them to become effective contributors of development.

5.0 DEFINITION OF TERMS:

- 5.1 **Proponent** refers to a natural person applying for assistance and is the one who shall prepare and submit proposal for technical or financial assistance under this Program. If he/she is part of a team of inventors or makers, all other named inventors or makers must provide him/her the authorization to apply for the Program. He/she will be called "**Grantee**" upon approval of the assistance.

- 5.2 **Proposal** refers to the formally submitted request for assistance indicating the clear and complete details of the request as well as complete documentary requirements. Receipt of complete proposal shall be the basis for the determination of the receipt of the request in accordance with the Citizen Charter of the DOST-TAPI.
- 5.3 **Co-Implementor** refers to the person assigned by the Proponent who will have equal responsibility to the Project if the Proponent is below 18 years old or 60 years old and above. The Co-Implementor will execute the Deed of Undertaking once the Project is approved and shall be a signatory in the Memorandum of Agreement (MOA) or Conforme. The Co-implementor is preferably the potential heir of the intellectual property (IP) of the Proponent or if below 18 years old, could be any of the immediate members of the family/next of kin of legal age who can be technically equipped to finish the Project in the absence, death or disability of the Proponent/Grantee. If the Proponent is below 18 years old, the Co-Implementor shall be any of the parents, or the legal guardian in the absence of the parents.
- 5.4 **Financial Grant** refers to the funds provided to the Proponent (Grantee) on a particular Project for a specified period that does not require repayment.
- 5.5 **Project** refers to a granted request for assistance under this Program.
- 5.6 **Technical Evaluation Committee (TEC)** may be composed of experts from DOST-TAPI and/or other DOST agencies, other government departments (i.e. - Department of Energy), Intellectual Property Office of the Philippines (IPOPHL), educational institutions, industry or other organizations whose technical expertise and/or background is relevant to the request. If the TEC is composed of at least one member outside of DOST-TAPI, it shall be called an **Inter-Agency TEC (IATEC)**. The TEC/IATEC shall be created through a Special Order (SO).
- 5.7 **Researcher** is a person who carries out academic or scientific research.
- 5.8 **Intellectual Property (IP)** refers to patent, utility model that was filed by or granted to the Proponent. The IP claims the distinct features that will be the subject matter of the request for assistance.
- 5.9 **Line-Item Budget** refers to the detailed breakdown of financial assistance requested.
- 5.10 **Partner Institution** refers to a juridical entity in and out of the country that can be tapped as source of experts, facilities or laboratories, and other services that can assist in the implementation of this Program. It may be an R&D institution under the DOST or other departments, a higher education institution, a public or private fabricator, designer, or laboratory who may be tapped or commissioned by DOST-TAPI to assist

the Proponent to conduct the proposed activities. It may provide the necessary facilities or expertise that can be used by the Proponent/Grantee or that can implement the Project.

- 5.11 **Technology Readiness Level (TRL)** refers to the tool that was initially developed by the National Aeronautics and Space Administration (NASA) to assign a stage where a particular technology being developed can be categorized in accordance to DOST Administrative Order No. 11 s. 2020. DOST-TAPI or IDD may adopt its own TRL assessment tool, subject to issuance of its internal guidelines.
- 5.12 **Raw Materials** refer to materials, devices, substances, and other components used in the primary production or manufacturing of the prototype and/or product.
- 5.13 **Tools and apparatus (P50,000 and below)** refer to, devices such as but not limited to hand tools, electrical electronics and ICT devices that are necessary in the development and production of the prototype and/or product
- 5.14. **Equipment/Machineries (Above P50,000.00)** refers to equipment/machineries that are necessary in the development and production of the prototype and/or product
- 5.15 **Working Prototype** refers to first unit(s) of a product / device / machine or preliminary version of the technology or innovative idea that can clearly demonstrate the value and functionality of the concept. Working prototypes are tested so that the design or working parameters can be changed if, necessary prior to commercial production or fabrication.

6.0 PROGRAM COVERAGE:

The following assistance shall be covered by this Program which may be given up to two (2) phases depending in the stage of development of the technology. Only those projects with TRL 5 and below may be implemented in two (2) phases provided that implementation per phase shall be made within one (1) year. Additional funding for only one (1) iteration of prototype per phase may be allowed.

6.1. TRL Upgrading.

Funding support in a form of a GRANT up to Five Hundred Thousand Pesos (P500,000) per technology/innovation per year subject to the following:

For technologies on food and health – maximum of **P350,000.00**.

For highly technical/specialized technologies on energy, robotics, electronics and Information and Communication Technologies – maximum of **P500,000**.

Maximum assistance for technologies under the categories not mentioned above shall be determined by the Executive Committee (ExeCom).

6.1.1. Technology Validation/Product Development: Improvement of the prototype to make it readily available for deployment to actual environment.

- Technical consultancy/advisory assistance from local or international experts, if applicable for the design and development of the existing prototype;
- Fabrication of one (1) to two (2) units of prototype that includes provision for:
 - raw materials, tools, apparatus, device, equipment;
 - payment of fabrication services including the use of laboratories & facilities;
 - Payment for outsourced professional services such as CAD/AutoCAD, 3D printing;
 - tools, apparatus, device, equipment;
 - packaging of the product;
 - testing fee; and
 - cost in the deployment of a prototype in the actual environment.

6.1.2 Market Validation/pilot testing: Improvement of the prototype to make it ready for pilot testing and validated in the market.

- Technical consultancy/advisory assistance from local or international experts, if applicable for the design and development of the existing prototype;
- Fabrication of a number of units of the prototype that includes:
 - raw materials, tools, apparatus, device, equipment;
 - payment of fabrication services including the use of laboratories & facilities;
 - packaging of the product; and
 - cost of market testing.

6.2 Testing Assistance.

Technical support in the form of consultancy services for the development of a testing protocol for health-related technologies subject to the following:

- Must have at least an active filed patent/utility model application at the Intellectual Property Office of the Philippines (IPOPHL).
- Must have a working prototype/product.

7.0 ELIGIBILITY OF PROPONENT

The Proponent shall satisfy the following:

- a. A Filipino Citizen who is permanently residing in the Philippines;

- b. If below 18 years old or 60 years old and above, must have a Co-Implementor as defined in this Guidelines; and
- c. Must have no unliquidated account or overdue obligation with TAPI.

8.0 DOCUMENTARY REQUIREMENTS

8.1 The Proponent shall comply/submit the following basic requirements:

- a. Application letter addressed to the TAPI Director (Annex A);
- b. Copy of a Valid Government-issued ID with birth date;
- c. Deed of undertaking of co-implementor, if applicable;
- d. Duly signed Data Privacy Consent Form (Annex B); and
- e. Duly signed Proposal following the prescribed format (Annex C) to include the following:

For Technology Validation/Product Development

- a. Detailed description of the prototype including drawings, if applicable;
- b. Test/s conducted, if available;
- c. Copy of the active and valid patent and utility model application/registration papers:
 - c.1 For pending IP application at the IPOPHL – copy of the patent/utility model application with IPOPHL stamp and a copy of the most recent Office Action from the IPOPHL if applicable, or If IP application was filed through DOST-TAPI's Intellectual Property Rights Assistance Program (IPRAP), a certification from the program that the technology was assisted and the application was being processed for filing at the IPOPHL, already;
 - c.2 For patent/utility model with issued certificate from IPOPHL – copy of the patent/utility model certificate;
- d. Photos and/or videos of the working prototype; and
- e. Identified adoptor of the commercial prototype to be fabricated.

For Market Validation/pilot testing:

- a. Copy of the active and valid patent and utility model application/registration papers:
 - a.1 For pending IP application at the IPOPHL – copy of the patent/utility model application with IPOPHL stamp and a copy of the most recent Office Action from the IPOPHL if applicable, or If IP application was filed through DOST-TAPI's Intellectual Property Rights Assistance Program (IPRAP), a certification from the program that the technology was assisted and the application was being processed for filing at the IPOPHL, already;

- a.2 For patent/utility model with issued certificate from IPOPHL – copy of the patent/utility model certificate;
- b. Photos and/or videos of the commercial prototype;
- c. The technology/innovation must have a commercial prototype with third party test results and/or scientifically proven data on a laboratory scale environment; and
- d. List of client/customer/user with contact information including address, mobile/telephone number, and email.

If the lacking requirements are not submitted within fifteen (15) calendar days from the receipt of the notice from DOST-TAPI, the proposal is considered withdrawn without prejudice to reapplication.

9.0 PROGRAM CRITERIA

9.1 For TRL Upgrading

The technology/innovation shall pass all of the following criteria to be assessed by the Program and the TEC:

- a. **TRL** – shall be at least TRL 4. At the end of the grant there should be an increase in the TRL in order for the Project to be declared successful;
- b. **Claimed IP** – shall cover the technical features of the request. As a general rule, the claim set of the IP must be covered by all working features of the technology being requested for assistance under this Program;
- c. **Technical Viability** – shall include technical soundness of the technology/innovation, workability, sustainability of materials, significant improvements over the existing technologies or state of the art. It shall also be referred to the claimed IP;
- d. **Market Viability** – shall include market potential, competitive advantage over the existing product, marketing strategy;
- e. **Compliance to any regulatory bodies, if applicable** - assessment shall include compliance to legal requirements for commercialization such as but not limited to the Food and Drug Administration (FDA), Department of Environment and Natural Resources (DENR)-for environmental and/or any applicable laws and standards (i.e., TRL 6-7), among others; and
- f. **Socio-Economic benefits, if applicable.**

The program shall implement a yes or no evaluation format wherein the technology must garner a “yes” answer in all applicable criteria to pass the evaluation

10.0 MODES OF ASSISTANCE

The following shall serve as options to provide assistance:

10.1 Fund directly released to the Grantee.

- a. Proponent must show proof of his/her capability to fabricate/manufacture the technology/invention/innovation such as fabrication facility, including counterpart equipment and labor to be validated by the Program.

10.2 Fund released to Partners, subject to the following:

- a. Partner has no unliquidated account or overdue obligation with TAPI; and
- b. Private entity subject to validation of business profile (i.e., business registration, number of employees, others), facilities and equipment/ or machineries, and other applicable requirements.

10.3 For testing assistance, payment of consultancy fees to a local or foreign expert subject to applicable government accounting and auditing rules and regulations, and other applicable requirements such as from the Securities and Exchange Commission and the Department of Trade and Industry.

11.0 MONITORING OF PROJECTS

11.1 DOST-TAPI shall conduct project monitoring on a regular basis, at least once a year. The Proponent and/or partner institution shall submit liquidation documents to include financial and progress reports following the prescribed format. In pursuit to gender-responsive DOST-TAPI, basic Gender and Development (GAD) orientation will be included during the event proper and/or project monitoring.

11.2 The Grantee may be endorsed to other programs for further improvement of his/her technology and/or business.

12.0 Project Completion

12.1 The Project shall be considered complete when the Grantee has complied with all the liquidation and reportorial requirements of the Program subject to audit rules and regulations.

12.2 After the completion, the Project shall be evaluated for purposes of rendering recommendation for succeeding action for the Project in accordance to the following:

- 12.2.1 2nd iteration for the project;
- 12.2.2 Next phase of assistance; or
- 12.2.3 Other action as may be necessary.

12.3 The PM shall determine the evaluator and the process of evaluation provided that the TEC who previously evaluated the project shall be preferred as the evaluator.

12.4 The evaluation shall include determination of TRL level and commerciability of the technology.

12.5 Upon consideration of the evaluation report, the PM shall recommend the next action for the project subject to the approval of the Institute which the Grantee may choose whether or not to avail.

13.0 REPEALING CLAUSE

All previous DOST-TAPI issuances inconsistent with the foregoing provisions are hereby amended or modified accordingly. This Order shall supersede all contrary provisions of any previously issued guidelines on this service.

14.0 SEPARABILITY CLAUSE

In the event that any of the provisions of this Order is held invalid or unconstitutional, the other provisions not affected thereby shall remain valid and subsisting.

15.0 EFFECTIVITY

This Order shall take effect after fifteen (15) days from its publication either to the Official Gazette or newspaper of general circulation. It shall supersede all contrary provisions of any previously issued guidelines.

Taguig City, Philippines, _____2023.


ATTY. MARION W. D. DECENA
Director

ANNEX C

**PROJECT PROPOSAL
Grants and Assistance to Leverage Innovations for National Growth (GALING)
Program**

Project Title: _____

Proponent : _____

Co-Implementor _____

Amount Requested: _____

A. Proponent

Current Address	
Permanent Address	
Contact Number	
Active Email Address	
Present occupation	
Educational Attainment	
Source of knowledge on the proposed technology (i.e. education, work experience, seminars/trainings attended)	
Assistance previously availed of from DOST-TAPI, DOST and its attached agencies and other government institutions	
Do you own/co-own a business? (If YES, proceed to the succeeding questions. If NO, proceed to letter B. Patent/ UM/ ID)	
Name of company	
Address of company	

B. Patent / Utility Model / Industrial Design Protection (if available)

Title of the P/ UM/ ID as filed in IPOPHL	
Patent / Registration No.	
Filing Date	
Applicant (Owner) as indicated in the P/UM/ID	
Product Name or Trade Name, if applicable	
Technical description of the P/UM/ID (i.e. manner of operation, manner of construction)	
Problem or need the P/ UM/ID is addressing	
Existing similar products/ technology/invention found in the market/ Internet, etc.	
Technical advantages over existing products/ technology/invention	
Initial Performance/ Test(s) Results, if applicable	

C. IMPLEMENTATION

Project timeline Indicate the specific activities needed in the fabrication of the prototype and the length of time required (example: procurement - 2 weeks, fabrication of parts – 4 weeks, assembly – 2 weeks, testing – 1 week, etc.)	
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Production area and existing equipment, tools, etc.	
Fabricator/contractor that will be tapped, if applicable	
Supplier of raw materials and equipment	
Specific Adoptors/ End-users/Test customer or testing center of the proposed prototype/s	
Identified potential market	

D. PROJECT BUDGET

Detailed Line-Item Budget (LIB)

Provide estimated cost of production per unit showing itemized materials, tools, devices to be purchased

Unit	Particular/Description	Quantity	Unit Cost	Cost	TAPI	Proponent's Counterpart
TOTAL						

I hereby certify the truth of the foregoing and have no unliquidated account or overdue obligation with DOST-TAPI. Any willful omissions/false statement shall be a basis of disapproval and cancellation of the Project.

I hereby certify as well that I understood and agree with the process and requirements of this Program and that I shall abide by its evaluation requirements as well as its implementation requirements should my Request be granted by the DOST-TAPI.

PREPARED BY:

Proponent/ Project Implementer
Signature over printed name

Date Prepared: _____