

**DETAILED RESEARCH & DEVELOPMENT  
PROJECT DOCUMENT FOR PCIEERD OUTSTANDING R&D  
AWARDS 2018**

**General Instruction:**

PDF copy must be submitted using Arial 11 font, 1.5 spacing, A4-size bond paper, and should have a maximum of 25 pages including figures and table.

**Specific instruction:**

The entry should contain the following and highlight discussion on how the research satisfies the Criteria:

1. **Executive Summary** – one-page, single-spaced, should contain discussion on impact/contribution of the research to national development and claims on originality;
2. **Title** – Research and Development (R&D) title;
3. **Author** – full name and implementing institution;
4. **Abstract** – one page, 1.5 spacing, not more than 350-word summary encompassing the highlight of results of the project;
5. **Introduction** – an overview of the state-of-the-art regarding the R&D undertaken, the significance and the statement of the problem;

The project should have been able to create a value by providing a Solution to Needs, and by Maximizing Its Benefits through Differentiating with Competing Products or Technologies.

• Identify <b>Needs</b>	(N)	} Connect N-S-D-B for Value Creation
• Provide <b>Solution</b>	(S)	
• Make <b>Differentiation</b>	(D)	
• Maximize <b>Benefits</b>	(B)	

6. **Objectives** – statement of the specific purpose to address the problem areas which the project intends to solve;
7. **Review of Literature** – relevant literature and other technical works related to the research;
8. **Scientific basis/framework** – state-of-the-art technology / information from which the project takes-off;

9. **Materials and Methods** – procedures involved, the materials used, sampling procedures, statistical analysis, methodology, and others including scope and limitation, time (seasonality), and place of study;
10. **Output** - means deliverables, product, and services related to project goals and objectives that will be produced or provided over a period of time

PCIEERD's Expanded 6Ps: Tangible and measurable project outputs.

- ◆ *Publications* (in recognized scientific journals)
- ◆ *Patents* (tangible measure of innovation)
- ◆ *Products* (commercial value of outputs)
- ◆ *People Services* (increase in the scientific workforce)
- ◆ *Places* (facilities that enable increased 4Ps output)
- ◆ *Policies* (adopted science-based guidelines)

11. **Results and Discussion** – data gathered, analysis, and interpretation of results supported by tables, graphs, pictures, maps, etc. including the comparison of targeted actual research and development output;
12. **Summary and Conclusion** – the result in brief and the generalization derived from the investigation based on evidence shown;

**13. Implications**

- Immediate or potential impact to national economy
- Mature technologies for dissemination / potential for business incubation
- Research and development breakthrough
- Result for policy and planning, formulation and implementation

**14. Recommendations**

- Findings / results that need further verification
- Result that can be formulated as a solution to a specific problem

15. **Literature Cited** – references listed alphabetically by authors. Each source shall follow the following format: author/s, year, title, edition (if source is a book), place of publication, publisher (or name of journal, if article), page number (if it is an article);

16. **Acknowledgement** – indicate key persons, institution/s, and other entities that contributed to the completion of the R&D;

**Additional submissions:**

- Recognition/Awards Received related to the project
- Curriculum Vitae (CV) maximum of 3 pages only