# Initial PI Questionnaire for PRC Meeting #1

## **Context**

For Tran-SET funded projects, it is essential to ***identify the current*** ***readiness level for implementation of the existing practice and also the target readiness level of the project’s expected output\**** using the ***Initial PI Questio*nnaire.**

This Questionnaire is intended ***for use by the research team at the beginning of the technical phase*** of the project ***as a tool for identifying and organizing the specific information that Project Review Committee (PRC) members need to know about the existing practice and the project’s expected output before PRC Meeting #1***.

## **Instructions**

Principal Investigator (PI) and the research team are required to utilize the following questionnaire to provide the requested information that PRC members need to know about the ***current level of readiness for implementation of the existing practice (as a baseline)*** ***and the target readiness level for the project’s expected output for implementation*** before PRC Meeting #1. General requirements and a basic timeline are as follows:

* PI and research team ***complete and*** ***submit the Initial PI Questionnaire*** (utilizing this template) to Tran-SET T2 Coordinator before PRC Meeting #1 and by the due date specified in the award letter (i.e., Reporting Requirements).
* A 60-minute web (or in-person) PRC Meeting #1 facilitated by the T2 Coordinator will be scheduled and conducted within one month of the project start date. The meeting will include:
	+ A PowerPoint presentation (25 min) by the PI to present: ***the project’s objectives and methodology (15 min), the Initial Project-Specific T2 Plan (5 min), and the information identified in the Initial PI Questionnaire (5 min).***
	+ The PRC members will discuss the presented information about the project, the current and expected level of readiness of the output, give feedback, and provide recommendations (25 min).
	+ Wrapping-up and summarizing the main discussed points (10 min).

## **Contact**

Please contact the Tran-SET T2 Coordinator – Dr. Husam Sadek (at transet@lsu.edu or 225-578-0131) if you have any questions or would like additional information.

*\*Project output can be: product, technology, guidelines, technique, approach, concept, tool, or any other kind of output from the project.*

## **Initial PI Questionnaire for PRC Meeting #1**

**Step 0. Project Information**

|  |  |
| --- | --- |
| **Element** | **Information** |
| Project Title |  |
| Project Number |  |
| Principal Investigator(s) |  |
| Participating University/Institutions |  |
| Questionnaire Date |  |

**Step 1. Describe the Existing Practice and the Expected Output of this Project**

*Please succinctly answer the following questions to describe the existing practice and the expected output of your project.*

|  |  |  |
| --- | --- | --- |
| A | What is the output proposed in your project? Please, be specific.*(Project output can be: product, technology, guidelines, technique, approach, concept, tool, or any other kind of output from the project)* |  |
| B | What problem will this output solve or address? |  |
| C | Who would deploy this output? Identify the potential end users of it. |  |
| D | Based on the existing practice, describe and identify its current readiness level for implementation (i.e., select a **current TRL score**) as a baseline for your project.*Please, use the TRL scale shown next page to select the score.* |  |
| E | Based on the current TRL score mentioned in the previous question, what is your **target TRL score** for the project’s expected output?*Using the TRL scale shown next page, identify the level of readiness for implementation that your project output should achieve at the end of the technical phase.*  |  |

**Technology Readiness Level (TRL) Scale**

|  |  |  |  |
| --- | --- | --- | --- |
| **Categories** | **TRL Score** | **Description** | **To achieve the given TRL score, you must answer “Yes” to EVERY question at that level.** |
| Basic Research | 1 | Basic principles & research | * Do basic scientific principles support the concept of the project output\*?
* Has the output development methodology or approach been developed?
 |
|  | 2 | Application formulated | * Are potential framework applications identified?
* Are output components and the user at least partly described?
* Do preliminary analyses or experiments confirm that the application might meet the user need?
 |
|  | 3 | Proof of concept  | * Are output performance metrics established?
* Is output feasibility fully established?
* Do experiments or modeling and simulation validate performance predictions of output capability?
* Does the output address a need or introduce an innovation in the field of transportation?
 |
| Applied Research | 4 | Components validated in laboratory environment | * Are end user requirements documented?
* Were individual components (if any) successfully tested in a ***laboratory environment*** (a fully controlled test environment)?
 |
|  | 5 | Integrated components demonstrated in a laboratory environment | * Are target and minimum operational/functional requirements developed?
* Is component integration demonstrated in a laboratory environment (i.e., fully controlled setting)?
 |
| Development | 6 | Field or full-scale test demonstrated in relevant environment | * Is the operational/functional environment fully known (i.e. user community, physical environment, and input data characteristics as appropriate)?
* Was the field or the full-scale experiment tested in a realistic environment outside the laboratory (i.e., ***relevant environment***)?
* Does the field or full-scale experiment satisfy all operational/functional requirements when confronted with realistic problems?
 |
|  | 7 | Fully integrated output demonstrated in operational environment | * Are available components ready to be fully integrated in the final output?
* Is the fully integrated output demonstrated in an ***operational environment*** (i.e., real-world conditions, including the user community)?
* If applicable, are all output components tested individually under expected conditions?
 |
|  | 8 | Output proven in operational environment | * Is the output proven in an operational environment (i.e. meet target performance measures)?
* Was a rigorous test and evaluation process completed successfully?
* Does the output meet its stated purpose and functionality as developed?
 |
| Implementation | 9 | Output refined & adopted | * Is the output deployed in its intended operational environment?
* Is information about the output disseminated to the user community?
* Is the output adopted by the user community?
 |

*\*Output can be: product, technology, guidelines, technique, approach, concept, tool, or any other kind of outputs.*