



GSICS Procedure for Product Acceptance (GPPA)

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Products Acceptance Procedure

"Acceptance" procedure is designed to define and document the following about a potential GSICS product:

- ◆ Scope within the GSICS product portfolio?
- ◆ Theoretical basis and implementation strategy?
- ◆ Quality (uncertainty, quality indicators, etc)?

The procedure allows favorable potential products to be implemented on an experimental basis within GSICS without Executive Panel approval

The procedure final acceptance power is given to the Executive Panel, whom need to be given information clear enough to make a decision about the product in a short order of time. For example:

- ◆ If a proposed method of inter-calibration had an across-the-board greater uncertainty than the product it would replace, then rejection is defensible.
- ◆ If the product is more accurate, its methods well documented, the data is compatible with the GSICS information systems, etc ... then that is all we really need to know to accept the product.

Products Acceptance Procedure



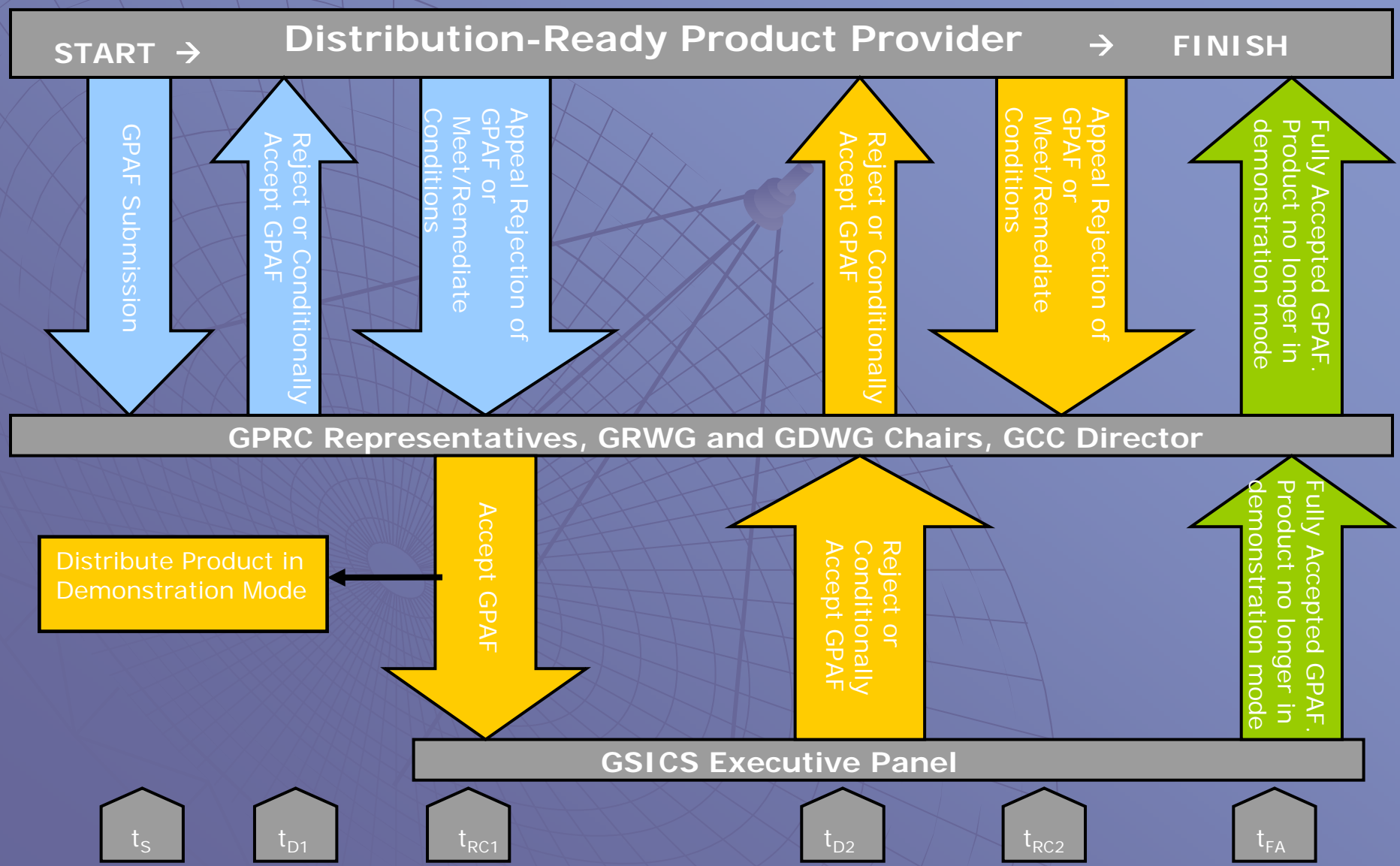
The success of GSICS is intimately linked to the quality and usefulness of its products

The GSICS Procedure for Product Acceptance (GPPA) is designed to establish a method by which distribution-ready products from data providers around the world can be first carefully inspected, and then accepted as a GSICS product

The procedure consists of three major steps:

- ◆ *The product provider fills out a GSICS Product Application Form (GPAF);*
- ◆ *The GPAF is scrutinized by GPRC Representatives, GRWG and GDWG Chairs and the GCC Director; and*
- ◆ *If the application is accepted, the product enters into "demonstration mode," and the application is forwarded to the GSICS Executive Panel, who is responsible for the final decision to accept the product application.*

Products Acceptance Procedure



Products Acceptance Procedure



GSICS Product Application Form (GPAF)

The GPAF includes:

- ◆ Information about the provider and nature of the distribution-ready product
- ◆ A checklist of required supporting documentation and materials

GPAF: Provider/Product Info



- ◆ Organization
- ◆ Point of Contact
- ◆ Name of Product
- ◆ Description of Product
- ◆ Purpose and Scope of Product within the GSICS Framework

GPAF: Supporting Docs/Materials



◆ Establishing Product Physical Basis

- *Product Theoretical Basis Documentation* – Discussion of physical principles supporting the product. This could be in the form of references to journal article(s), or stand alone technical information.

GPAF: Supporting Docs/Materials



◆ Implementing Technique(s) to Generate Product

- *Procedure "Best Practices"* – Procedures that meet current "best practices" in regards to establishing analysis software, harnessing radiative transfer models, and making calibration/validation measurements (TBD) that are fundamental to implementing theory to create products.
 - ◆ *Establishing Analysis Software*
 - Algorithm flowchart, including data I/O and logic, and software module descriptions
 - Software that meets GSICS coding, I/O, filename, and documentation standards (TBD).
 - Software verification results
 - ◆ *Harnessing Radiative Transfer Models*
 - Detailed model description
 - User's Guide
 - Description of data or input atmospheric soundings and boundary conditions used by the model
 - Model verification results – Could be references to other test studies.
 - ◆ *Making Cal/Val Measurements*
 - Measurement Procedure Outline – Gives a description of the instruments involved, as well as information needed to know how the measurement(s) was taken and under what conditions. Also, describes the traceability of the measurement to international measurement standards.
- *Version Control Plan* - Describes process of performing software/model/measurement updates and archive.

GPAF: Supporting Docs/Materials



◆ Product Operations/Distribution

- *Operations/Distributions Plan* - Outlines how the data or results are to be stored and shared through GSICS network computers. Statements about the level of access need to be included here.
- *Data Quality Assessment Documentation* - Documents the estimated value and sources of uncertainty in the product.
- *Data User's Guide* – Documents detailed data format, quality flag and parameter descriptions. It must identify how data format meets GSICS standards, and the limitations of product use.

GPPA ... What Next



- ◆ Continue to establish data format templates, variable and file name conventions, computer networks and protocols to exchange information and data
- ◆ Continue to establish format templates for documentation ... what type of information do we need in each document/software package ...
- ◆ Utilize TWiki manuscript generation and archiving system
- ◆ Need to identify GPRC representatives to review applications