U.S. Department of Justice
Federal Bureau of Prisons

P R O G R A M S T A T E M E N T
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Product Development, FPI

/s/
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1. PURPOSE AND SCOPE

To guide effective decision making in the planning, development, and implementation of Federal Prison Industries (FPI) products and services. A comprehensive product development plan follows the procedures outlined in this policy, with the level of planning and documentation commensurate with the project's size and scope.

Procedures in this PS do not anticipate all unique requirements for all products. Rather, the intent is to define a framework to coordinate development activities effectively and to ensure that development activities at both the Business Group and the factory level comply with this policy. Product ideas are referred to specific Business Group General Managers for consideration for formal development.

a. Summary of Changes

Policy Rescinded
P8260.02 Product Development – FPI (3/6/98)

- References to Program Management have been changed to reflect the new Business Unit organizational structure.
- Business Unit responsibilities include definitions of key performance features and specifications.
- Added to the Business Group's responsibilities the requirement to develop a testing plan that ensures all performance features and specifications are met by the design, and conduct prototype and pre-production testing per the approved plan.
- Added the requirement for review by Health Services Division of issues related to environmental management, safety, and occupational health.

- Added to the Business Group's responsibilities the requirement to conduct regular design reviews throughout the development process and to complete a formal test plan prior to production release.
- References to the PRA/RACS have been updated to reflect the change to Marketing, Research and Corporate Support Branch.
- Deleted references to the Sales and Marketing Group.
- Deleted references to the Product Support Center.

b. **Program Objectives.** Expected results of this program are:

- Resources will be prioritized and expended toward developing new business opportunities that maximize inmate employment and profitability.
- A comprehensive product development and implementation plan will be defined and communicated to ensure timely development and involvement of FPI staff.
- Products will be designed to meet customer requirements, using methods within FPI capabilities.

2. DEFINITIONS

a. **New Product.** A product not currently produced by FPI that requires a significant expenditure of FPI technical resources to develop. **Note**: "New product" as used here is an internal FPI term – not necessarily a separate, specific product as defined for the Industry Involvement Guidelines Process.

b. **Product Development.** A systematic method of defining a product or service and documenting its design and manufacturing processes.

3. RESPONSIBILITIES

a. **Business Groups**:

- Define the product or customer needs.
- Define key performance features and specifications.
- Identify target pricing ranges.
- Define the buy/demand cycle if known (i.e., every five years).
- Screen the product idea for initial feasibility.
- Define the list of specific products to be developed.
- Identify the project team factory and representatives.
- Review prototype and final product test reports.
- Define and develop the customer ordering process.
- Finalize a production site.
- Establish a selling price.
- Comply with Industry Involvement Guidelines.
- Conduct preliminary technical evaluation.

- Schedule product development meetings to determine scope of project and identify staff and outside resources.
- Prepare product development plan and reporting process.
- Prepare product test plan approved by Business Group Quality Assurance Representative that ensures key performance features and specifications are met.
- Coordinate product development activities, including field initiatives and vendor development.
- Conduct regular design reviews throughout the development process to document conformity with the approved plan.
- Develop manufacturing cost.
- Conduct prototype testing per the test plan before release for production tooling.
- Conduct pre-production testing per the test plan, using production samples manufactured using production tooling and techniques, prior to release for manufacturing.
- Approve prototype and final test reports.
- Obtain approval from the Health Services Division for EOH remediation plan.
- Provide design documentation and control.

b. **Marketing, Research and Corporate Support Group (MRACS)**:

- Monitor compliance with Industry Involvement Guidelines.
- Perform market research.
- Assist the General Manager in developing the business plan.
- If applicable, prepare a memo for the Board of Directors requesting approval to proceed.
- Draft and publish "Good Faith" and FedBizOpps notices.

c. **Factory Management** is responsible for tasks assigned in the product development and testing plan developed at the start of Phase II. No factory product development takes place without General Manager approval, outlined below. The status of ongoing activities is sent to the General Manager each month for the monthly report to the Business Groups.

4. INITIAL SCREENING

New product proposals approved by the General Manager are forwarded via memo to the Marketing, Research and Corporate Support Branch (MRACS) for assessment, with a copy to the Senior Deputy Assistant Director. Proposals should contain as much of the following information as possible:

- Description of the item.
- Background information, such as:
  - National Stock Numbers (NSN).
  - Customer requirements.
  - Quantity estimates.
  - Market trends.
  - Vendor.

- Price information.
- Potential competitors.
- Buying/demand cycles, if known (i.e., every five years).

5. **PHASE I: INITIAL ASSESSMENT**

a. **Initial Competitive Risk Assessment (MRACS)**. Upon receiving the request from the General Manager, MRACS determines if the product or service is "new" for purposes of the Industry Guideline process, and whether there are implications for significant expansion of current production levels. If there are such implications, MRACS identifies the issues and conducts a preliminary market assessment. Next, MRACS performs a preliminary examination of the potential impact on private industry, including assessing competition with the National Institute of the Blind/National Institute of the Severely Handicapped.

b. **Preliminary Technical Evaluation**. The General Manager conducts a preliminary analysis, including the following:

- Analyzes product specifications and design requirements.
- Defines manufacturing processes.
- Identifies machinery/technological requirements.
- Estimates investment required for materials and capital equipment.
- Identifies inmate employment opportunities.
- Prepares preliminary cost estimate or analysis to assess whether FPI can be competitive.
- Determines minimum feasible production levels.
- Estimates time and resources to conduct full product development (Phase II).
- Estimates return on investment for capital expenditures.
- Through the Health Services Division, evaluates processes and materials to identify potential issues related to environmental management, safety, and occupational health.

At the conclusion of Phase I, a written determination of findings and recommendations (including risk assessment and technical evaluation) is submitted to the Senior Deputy Assistant Director by the General Manager.

c. **Corporate Management Review**. The Senior Deputy Assistant Director reviews the written assessment from the General Manager and determines whether to move forward with product development via memo to the General Manager.

The General Manager prepares a detailed business plan, including market analysis, sales plan, financial projections, capital equipment costs, and environmental/occupational health (EOH) issues. Financial projections include a five-year estimate of sales, earnings, and production costs. The EOH review includes a written analysis from the Health Services Division. The business plan is presented to Corporate Management by the General Manager for approval before proceeding with any development efforts or expenditures on equipment or materials.

6. **PHASE II: PRODUCT DEVELOPMENT**

Upon receiving written approval of Phase I from Corporate Management, the General Manager prepares a product development schedule, including a testing plan approved by the Business Group Quality Assurance Representative that ensures key performance features and specifications are met. The project plan identifies the project manager and factory responsibilities for all tasks and timelines**.**

The Business Group identifies target pricing ranges on product schedules and the FPI factory site(s) and representative(s) to coordinate development efforts. In addition, the Business Group coordinates with MRACS as needed to address an advertising promotion plan and develop a web store plan.

The General Manager provides an update on product development projects at quarterly financial reviews.

The Business Group develops a comprehensive design package that includes:

- Schedule of products.
- Construction methods.
- Material requirements.
- Prototypes.
- Quality and test requirements.
- Items for make/buy determination.
- Material master numbers.
- Specification text.
- Manufacturing process.
- Packaging requirements.
- Item standard routings.
- Production standards.
- Equipment requirements.
- Design documentation.
- Approved prototype and final test reports.
- Work measurement standards.
- Standard cost estimate.
- Vendor sources.
- Bill of materials.
- Training plan.
- EOH remediation plan approval

Concurrent with product development, MRACS, if applicable, initiates the Industry Involvement Guideline Process.

Prior to release for production and sale, samples are tested using the test plan approved by the Business Group Quality Assurance Representative. Those samples are produced using production methods, equipment, and processes. A test report demonstrating compliance with all requirements of the test plan must be approved by the Business Group Quality Assurance Representative and General Manager before release of the product for production and sale. Written approval must also be obtained from the Assistant Director, Health Services Division, before production start-up confirming that applicable EOH issues have been satisfactorily addressed.

7. PHASE III: PRODUCT IMPLEMENTATION

Once product development is complete, the Business Group provides the designated factory with technical support to implement the product, including:

- Development/data package.
- Technical assistance in establishing production processes.
- Support in establishing local production routings.
- An evaluation of pre-production samples to ensure production procedures are adequate.

REFERENCES

Program Statements

P8053.02 Engineering Bulletin, FPI (2/28/97)
P8264.03 Product Design Control, FPI (2/17/12)
P8340.07 Quality Program Manual, FPI (1/14/00)

18 U.S.C. §§ 4122-4126.

Interim Definitions FPI Expansions Guidelines, March 12, 1997, Federal Register.

ACA Standards
None.

Records Retention Requirements
Requirements and retention guidance for records and information applicable to this program are available in the Records and Information Disposition Schedule (RIDS) on Sallyport.