Preparing our workforce to meet the challenges faced by the aerospace and defense industry

Innovation Economy

Promote competitive markets that spur productive entrepreneurship

1. Promote IT, engineering & aerospace exports
2. Support capital markets that allocates resources to innovative ideas
3. Encourage high-grown and innovation-based entrepreneurship
4. Support regional organization innovation

Invest in building blocks of Puerto Rico's innovation

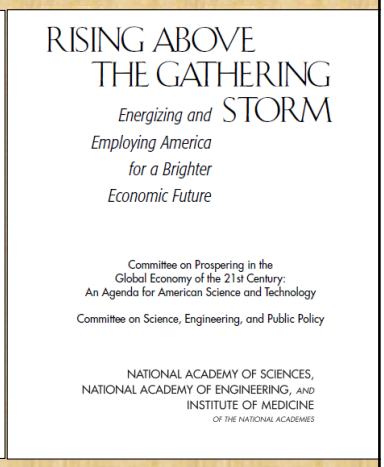
1. Fundamental and applied research
2. Educate the next generation while building a world-class workforce
3. Building a leading R&D infrastructure
4. Develop an advanced IT ecosystem

State of the Aerospace Industry

- $214.1 billion in sales and 641,100 direct employees in 2009
- 43 percent of these employees are engineers, R&D/scientists, program managers and information technology specialists.
- $214.4 billion sales forecast for 2010
- $78.9 billion in export sales; 53 billion in surplus
- Generates 3 dollars in the economy for every dollar in sales, and enables 16 indirect jobs for every employee.

A Talent Shortfall

- U.S. aerospace companies are experiencing a shortfall of qualified professionals to fill important jobs in their industry, and the shortfall will increase as talented employees reach retirement age.



Scientists and Engineers Impact

- Nationally, scientists and engineers make up only a **4%** of the workforce
- but they contribute to the creation of jobs opportunities for the other **96%** of the workforce by generating knowledge, innovation and new companies spin-off.

Job Growth 2004 and 2014

- 2.5 million would be needed to fill vacancies
  - 31% job growth in technology
  - 15% job growth in science
  - 12% job growth in engineering
  - 10% job growth in mathematics
  - 10% job growth in aerospace engineering

Source: Bureau of Labor Statistics

Aerospace Sector in PR

- Aerospace represents an investment of
  - $98 million and
  - employment commitment of 2,900 jobs.

Puerto Rico's Universities

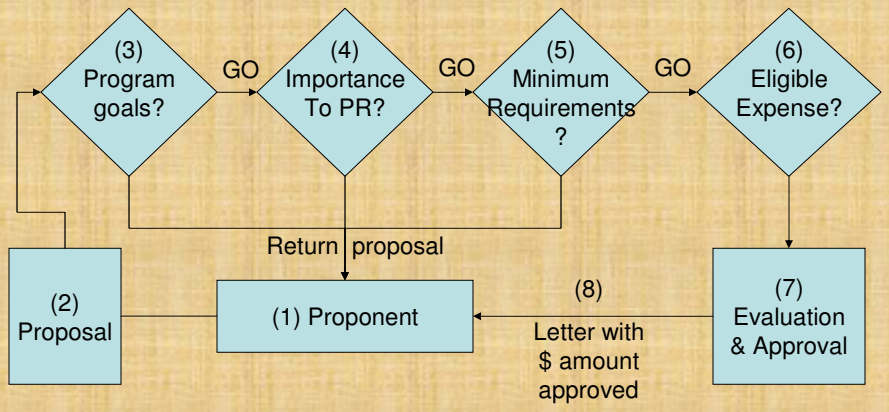
- Enrolls over 225,000 students;
- Conferred over 32,000 degrees;
- Engineering degrees ~ 1,200 students;
- Science & Eng. degrees ~ 2,800 students;
- Graduation rates—dropped from 34% in 2002 to 27% in 2007.

PRIDCO action plan includes:

- To establish, fund and implement a strong innovation and economic competitive agenda.
- To identify, assess, align and strategically coordinate efforts on education toward STEM programs.
- To increase support to local universities providing students with hands-on experience directly transferable to the aerospace workplace.
- To increase support to K-12 math and science teachers and students.

Aerospace Challenge Program

Project Critical Path



Accepting proposals 10 days before due dates: January 15, April 15 & September 15

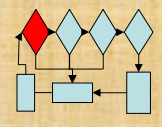
Technologies Encourage

- Communications and Information Technologies
- Manufacturing and Engineering Technologies
- Aerospace Technologies
- Composite and Nano-materials Technologies

Alignment with the Special Fund

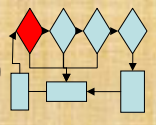
- Article 17-2 (a) Support research and development.
- Article 17-2 (d) Promote the establishment of industries that are strategically important to Puerto Rico.
- Article 17-2 (i)(5) Support organizations and programs that emphasizes STEM education at all levels.
- Article 17-2 (i)(6) Support regional initiatives in company development, R&D, incubator facilities and other related objectives.

Program Goals (p.1)



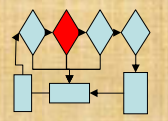
- To increase the number of high school students that are interested in pursuing university studies in science, technology, engineering and mathematics (STEM).
- To increase the number of students earning an engineering, computer science and information technology degree.
- To increase the number participating students in internships and Co-ops at the bachelor and graduate level.
- To increases the number of students that pursuit graduate studies in engineering and computer science disciplines.
- To expand the academic offering to include the aerospace engineering program, system engineering and composite material sciences.

Program Goals (p. 2)



- To increase the number of research and development collaborations in the information technology and aerospace field.
- To create awareness programs among information technology and engineering graduating class about Puerto Rico's value proposition.
- To create repatriation programs of Puerto Rican professionals and scientists to strengthen the aerospace ecosystem.
- To improve the technical skills of workforce as required by the aerospace industry.
- To support the creation, expansion and attraction of Puerto Rico as an investment location for companies in the information technology and aerospace.

Importance to the Economic Development of Puerto Rico

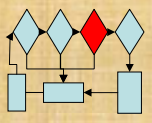


The innovation:

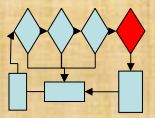
- Creates, increases or retains jobs opportunities.
- Builds competitive advantages for our professional workforce and/or our industry.
- Develops export market opportunities.
- Is of great usefulness to our industry.
- Promotes vertical integration of our industries.
- Adds value to the development of our knowledge-based economy.
- In learning is vital for the advancement of our emerging and incipient industrial sectors.

Minimum Proposal Requirements

- Meets program goals and importance to the economic development of Puerto Rico.
- Promotes industry and academia collaboration.
- Is a PRIDCO-promoted company or University.
- Have evidence of cost sharing (50% or more).
- Have technical and entrepreneurial expertise.
- Have submitted “Provisional Patent” (for R&D projects).
- Have obtained permitting approval (for capital investment projects).

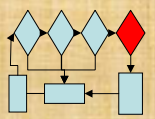


Eligible Expenses (p. 1)



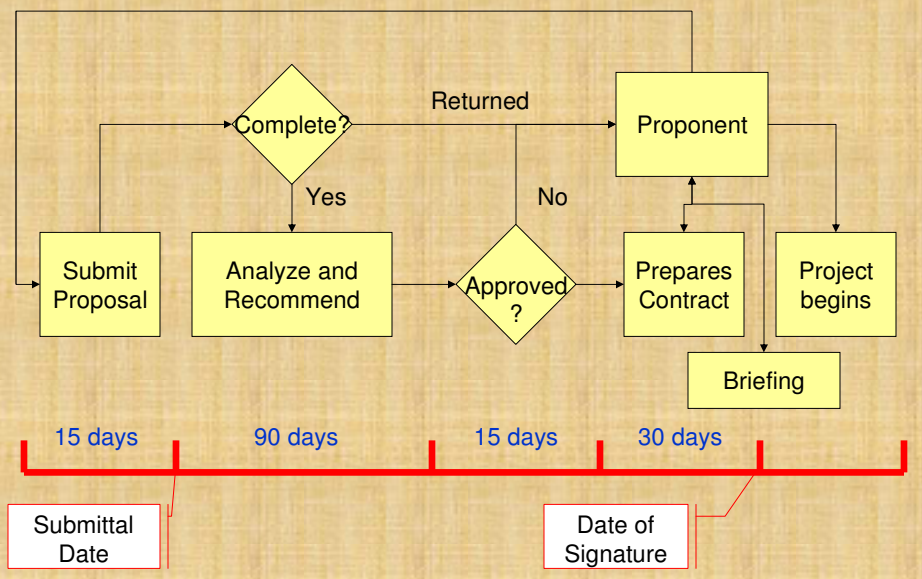
- Purchasing and installation of laboratory equipment and materials for the innovation.
- Construction and installation of innovation prototype and validation of processes.
- Contracting consultants and technical assistants for the innovation. (It allows contracting up to 20% outside of Puerto Rico with private funds).
- Purchasing intellectual property rights for innovation.
- Acquisition, construction or improvements of R&D facilities. Not to exceed 15% of budget.
- Rental of facilities to carry out innovation activities.
- Training of technical and scientific personnel required to carry out the innovation project.

Eligible Expenses (p. 2)



- Salaries and wages of project personnel.
- Participants expenses (students stipend or training allowances).
- Administrative expenses directly related to the project (up to 50%). Domestic travel and lodging with PRIDCO's approval.
- University may recover up to 20% of indirect costs or use it as part of its cash contribution.
- Other expenses (recommended by the Director for Business Development and approved by the Executive Director).

Proposal Evaluation and Approval



Proposed Budget Sheet

	PRIDCO	Proponent	Total	Comments
Payroll				
Scientists			0	PI, engineers, scientists, and Postdoctoral associates
			0	
			0	
			0	
			0	
			0	
Specialists			0	Mechanical, electrical and computers specialists
			0	
			0	
			0	
			0	
			0	
Admin			0	Clerical personnel detached to project
			0	
Fringe Benefits			0	% of Total Salaries (social security, retirement, and payroll-related taxes)
Total salaries & wages	$0	$0	0	

Proposed Budget Sheet

Participant Support			0	Student stipend or training allowance
Lab Equipment			0	Includes freight and taxes. Must provides 3 quotations
Installation			0	Submit company quotation
Consumables			0	
Maintenance			0	
Facilities			0	Expenses can not exceed 15% of total project. Must provide 3 quotations.
Administrative Expenses (50%)			0	
Insurance			0	
Travel, Lodging (and Per Diem)			0	Proponent pays 100% of Per Diem. Domestic travel only.
Product Development			0	
Components for Prototype			0	Submit company quotation
Patent Fees and Legal			0	For Securing Intellectual Property
Licensing Fees			0	Submit company agreement (letter)
Testing			0	
Other			0	
Consulting Fees and/or			0	May include Specialists under fee basis.
University Collaboration			0	Submit Scope of Work of University
Computer Services			0	Computer rental and information retrieval
Space rental			0	Submit letter of commitment
Training of personnel			0	Scientific and technical personnel only
Indirect Costs (excluding Fringe Benefits)			0	Requires PRIDCO authorization (Only for Universities) Maximum rate = 20%.
Other expenses related to project			0	Requires PRIDCO authorization
Total Expenses	$0	$0	$0	

Proposal

A. Cover Sheet (PRIDCO Form --1 Page)

B. Project Summary (PRIDCO Form -- 1 Page)

C. Technological Content (~18 pages)

1. Identification of the Problem
2. Background and Rationale
3. Research Background
4. Technical Objectives
5. Methodology
6. Project Milestones
7. Biographical Information of Key Personnel
8. External and Sub-contracted Services
9. Budget and Narrative Description of Uses and Sources of Funds
10. Cost Sharing (50% Minimum) Private/Federal Support

D. Business Content (~5 pages)

1. Industry Analysis
2. Market Analysis
3. Commercialization Objectives
4. Brief Statement on 5 Year Pro-Forma Projections

E. Appendix (No page limit but we suggest no more than 10 pages)

1. Certification for Required Documents (PRIDCO Form)
2. Certified Financial Statements – Proponent (or Investors if Company is a Startup).
3. 5-year Pro-forma Projections (Spreadsheets)
4. Evidence of Early Adopters of Technology (Customer Contracts, Letters of Intent, etc.)
5. Support Letters and Letter from Costs Sharing Organization
6. Evidence of Payment Plan with State Agencies