



# *PROJECT MANAGEMENT PERSONNEL* **CERTIFICATION**

Budget, Finance, and Award Management

Large Facilities Office

May, 26 2016



**Large Facilities Workshop 2016**  
*S. Dillon Ripley Center*  
Washington, D.C.

# NATIONAL ACADEMY OF PUBLIC ADMINISTRATION



*USE OF COOPERATIVE AGREEMENTS TO SUPPORT  
LARGE SCALE INVESTMENT IN RESEARCH  
DECEMBER 17, 2015*

RECOMMENDATION 6.8





## Recommendation 6.8

*“To ensure that award recipients have the requisite project management experience and knowledge to successfully lead a MREFC project . . . .”*



*“NSF should require award recipient project managers to be certified in project management. NSF should also specify minimum project management experience thresholds for project positions.”*



## KEY PERSONNEL

“NSF POs and G/AOs should work together to include **project management certification** and requisite **experience** requirements in cooperative agreements for MREFC projects.”



# NAPA LIKES AND DISLIKES AND NSF PLANS

Likes -	Dislikes -	NSF Plans -
	Agreements do not include certification requirements	Include qualifications requirements in agreements
PO and G/AO review key personnel		NSF would confirm qualifications



# QUESTIONS

- How do training (i.e., certificates) and certification differ in terms of costs and benefits?
- Which roles on a project should demonstrate adequate qualifications?
  - Project manager only?
  - Others?
- When would NSF require experience above and beyond that required by certifications?
- What approach should NSF take to establishing equivalence?



# CERTIFICATES VS. CERTIFICATION

## ▪ Certificates

- Documentation of completion of a short course in a particular subject
- Number of classes prescribed
  - Core &
  - Elective
- Offered through universities
- Online or in person
- High first costs but no ongoing costs



## ▪ Certification

- Designation earned by an individual demonstrating attainment of a standard level of **expertise, experience, and skills** within the subject field.
- Applicants must have certain experience or other qualifications.
- Typically require passing an **examination**.
- Variable first and ongoing costs
  - Prep class?
  - Continuing professional development?



# CERTIFICATES VS. CERTIFICATION

	Certificates	Certification
Pros	<ul style="list-style-type: none"><li>• University-based</li><li>• Customizable</li><li>• Online or in person</li></ul>	<ul style="list-style-type: none"><li>• Uniform requirements</li><li>• Recognizable</li><li>• 2 – 4 months</li></ul>
Cons	<ul style="list-style-type: none"><li>• No experience needed</li><li>• Not standardized</li><li>• Not recognizable</li><li>• 6 months – 2 years</li></ul>	<ul style="list-style-type: none"><li>• General experience accepted</li><li>• Passing a standardized test</li><li>• Test preparation</li></ul>

What else?

Note: The Uniform Guidance (2 CFR § 200.472 Training and education costs) states:

**“The cost of training and education provided for employee development is allowable.”**

# CERTIFICATES

- What must coursework include?
  - Fundamentals
    - Scoping
    - Scheduling
    - Budgeting
  - Accounting
  - Law
  - Managing teams
  - Cost control
  - Risk
  - Performance measurement

A black silhouette of a graduation cap (mortarboard) with a tassel, positioned above the 'NOTE' box.

**NOTE**

NSF will **not** endorse specific providers

What else?



# CERTIFICATION

- What should NSF consider in setting minimum standards?
  - Knowledge Base
  - Experience (quantity not quality)
  - Cost (to obtain and maintain)
  - Time (to obtain and maintain)
  - Reputation and Notoriety



What  
else?

**NOTE**

NSF will **not** endorse  
specific providers



# CERTIFICATION

## *Prioritization Exercise*

	Knowledge Base	Experience	Cost	Time to obtain	Reputation		
Knowledge Base	--	:	:	:	:	:	:
Experience	:	--	:	:	:	:	:
Cost	:	:	--	:	:	:	:
Time to obtain	:	:	:	--	:	:	:
Reputation	:	:	:	:	--	:	:
	:	:	:	:	:	--	:
	:	:	:	:	:	:	--

# WHO? PROJECT MANAGERS & OTHERS?

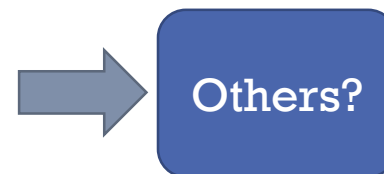


- OR -



Project manager only

1. Project manager
2. Schedulers
3. Cost estimators
4. Systems engineers
5. Project controllers
6. Quality managers
7. Risk managers





# EXPERIENCE AND CERTIFICATION

- Rest assured . . . projects will remain responsible for personnel actions -
  - Selections
  - Releases
- For this slide's discussion, assume that NSF sets a certification requirement without a certificate option.
- Would an **analogous experience** requirement *over and above* the experience required by a certification help projects?



# EQUIVALENCE

Certifications

No equivalence issue. Certification requirements meet NSF requirements or not.

Certificates

No equivalence issue. Classes taken meet NSF requirements or not.

Experience

Equivalence issue. How will NSF establish equivalence?

Professional judgement by -

By whom?

Program Officer?

NSF Internal Panel?

External Panel?

By when?

Stage gate reviews?

Routine reviews?

As needed?



# NEXT STEPS

- Slides posted on the workshop Web page
- Notes from the session included in the workshop proceedings
- NSF will hold internal discussions and may follow up with the community
- **The Large Facilities Manual (18-XX)** will identify options and criteria –
  - NSF will publish a public comment draft in April 2017 with comments accepted for three months
  - NSF will publish the final Large Facilities Manual in October 2017 to take effect in January 2018.

For more information:

Ivan Graff  
Large Facilities Advisor  
(703) 292-4416  
igraff@nsf.gov



# BACKUP

➤ Certification Providers



# PROJECT MANAGEMENT CERTIFICATIONS



Project  
Management  
Professional



Global Association for Quality Management



Certified  
Project  
Manager



Professional  
in Project  
Management



Master  
Project  
Manager



INTERNATIONAL  
ASSOCIATION OF PROJECT  
AND PROGRAM MANAGEMENT

Certified  
Project  
Manager



Certified Construction Manager





# COST ESTIMATING AND ENGINEERING



Certified Cost Estimator/ Analyst



Certified Estimating Professional

Certified Cost Professional



AMERICAN SOCIETY OF  
PROFESSIONAL ESTIMATORS

Certified Professional Estimator



# PROJECT CONTROLS (SCHEDULING & EV)



Scheduling Professional



Project Scheduling Professional

Earned Value Professional



Certified Project Control Officer

Earned Value Management Professional



# SYSTEM ENGINEERING CERTIFICATION



Certified System Engineering Professional



# QUALITY ASSURANCE AND CONTROL

**G A Q M**

Global Association for Quality Management

ISO 9001 Certified Internal Auditor



Certified Manager of Quality

Certified Quality Engineer



# RISK MANAGEMENT CERTIFICATIONS



Risk Management Professional



**GAQM**

Global Association for Quality Management

Certified Risk and Crisis Manager