NASA Competency Management System

DIRECTION OF COMPETENCIES IN RELATIONSHIP TO SATERN

September 30th, 2008

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Introduction

Background Information / Overview

Working In SATERN

Next Steps
"Competencies are the common thread that tie the elements of workforce management together. CMS is a relatively new system that we are continually working to improve. By integrating CMS with other workforce planning tools, we are able to not only identify the critical current and future competency gaps and surpluses, but we can weave that competency information throughout the workforce management process."
Competencies define what knowledge, skills, and abilities are needed for current and future mission.
NASA’s Workforce Strategy

Overview

Identify, acquire and sustain the workforce needed to successfully conduct NASA’s current and future missions

1. Understand Mission Requirements
2. Align the Workforce with the Mission
3. Enable Effective and Efficient HR Operations
How NASA Uses Competencies

- **Mission Alignment**
  - Identify Mission and Organizational Skill GAPS
  - Guide staffing, retention, education and training programs
  - Provides feedback and metrics on HR programs

- **Finding & Sustaining Expertise**
  - Employee development
  - Career planning
  - Rapidly locate expertise

- **Working within Professional Communities**
  - Tie to federal communities
  - Succession planning
Asking the Questions

**Senior Leaders**
Can we accomplish our mission with our workforce?

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**Workforce Planning/HR**
Do we have the right people with the right skills?

**Centers**
Do we hire or retrain?
Do we have enough people with the skill and expertise to support our projects?

**Functional Communities**
What competencies and level of expertise is needed within our profession?

**Employees**
How do I prepare for my future at NASA?

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Is NASA’s workforce ready to accomplish the Agency mission?
Measuring Gaps to help answer the questions

- Employee Capabilities
- Succession GAP
- Future Workforce
- Development GAP
- Workforce GAP
- Position Requirements
- Mission Alignment GAP
- Mission Needs

Overview
Example Using Competencies in Workforce Planning

UPN 374 Shuttle Ground Operations
UPN 375 Shuttle Flight Operations
UPN 376 Space Shuttle Projects

Compétency | FTE  | Competency | FTE  | Competency | FTE  |
------------|------|------------|------|------------|------|
INTEGENG    | 78.4 | MISEXC     | 160.8| PROSYS     | 86.2 |
SYSTEMSENG  | 70.1 | GEA        | 19.2 | PROJPROGMT | 61.76|
MISEXC      | 30.4 | BUSMNT     | 16.4 | ROCKETPRO  | 55.56|
LOGSUPTRAN  | 29.0 | PROJPROGMT | 14.45| TESTENG    | 44.9 |
SWENG       | 25.8 | PROJPROGMT | 14.45| MA         | 44.7 |
THERMALSYS  | 22.0 | PROJPROGMT | 13.8 | MATSCIENG  | 43.2 |
ENGSCIUSUP  | 21.0 | PROJPROGMT | 13.8 | SYSTEMSENG | 25.6 |
AEROSEN     | 16.3 | PROJPROGMT | 13.8 | THERMALSYS | 23.35|
CRYOENG     | 14.7 | PROJPROGMT | 13.8 | STRUCTSYS  | 21.55|
INSFACPLAN  | 14.55| PROJPROGMT | 13.8 | ENGSCIUSUP | 21.5 |
CONMME      | 12.55| PROJANALYSIS| 9.03| ENGSCIUSUP | 21.5 |
PWRSYS      | 12.25| CONMME     | 9.03 | ENGSCIUSUP | 21.5 |
BUDGETMNT   | 10.4 | PROJANALYSIS| 9.03| ENGSCIUSUP | 21.5 |
ELSYS       | 10.1 | SYSTEMSENG | 8.9  | SYSTEMSENG | 25.6 |
PROFADMOPS  | 9.0  | SYSTEMSENG | 8.9  | SYSTEMSENG | 25.6 |
COMMTENG    | 6.9  | ADVMIS     | 2.75 | SYSTEMSENG | 25.6 |

Direction of Competencies in SATERN / 2008 SATERN Admin Summit
September 29th, 2008
BRIDGING THE SKILLS GAP

Competencies in SATERN
COMPETENCY DICTIONARY

Astronomy & Astrophysics

**DEFINITION** Knowledge of the Universe.
- **LEVEL 4** Knows the molecular composition of the galaxy
- **LEVEL 3** Knows the zip codes for all of the planets
- **LEVEL 2** Can name a constellation
- **LEVEL 1** Can find the moon
- **LEVEL 0** Can distinguish day from night

COMPETENCY MANAGEMENT SYSTEM

LEARNING MANAGEMENT SYSTEM

Exchange Data
Viewing Your Competencies

Competencies from the Competency Management System

View Competencies

The following competencies are from your personal portfolio in the Competency Management System (CMS). They are provided for your reference and may aid your individual development planning. **Employee Selected Competencies** are those competencies you have selected in the CMS. **Position Required Competencies** have been assigned to you based on your position (job). If you disagree with the **Position Required Competencies** that have been assigned to you, contact your supervisor. If you wish to make changes to your **Employee Selected Competencies**, you can make them in the CMS. For more information on the CMS, go to https://samtool.nasa.gov.

If your supervisor has not entered a required level, or you have not rated your level in the CMS, then the gap information listed below may be incorrect.

### Employee Selected Competencies

<table>
<thead>
<tr>
<th>Type</th>
<th>Competency</th>
<th>Gap</th>
<th>Validated</th>
<th>Required</th>
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<td>Aeronautics</td>
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<th>Competency Profile</th>
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**Function Not Supported**
Capture Courses/Conferences per Competency

Minor change to an existing process/form allowed for 2 big benefits:

- Employees can see training taken by peers in their area of expertise throughout the whole agency.
- Professional Communities and Senior Leadership can see metrics on training time/money spent towards each competency.
Launching the Learner Report

Select a Report from the list below to run a report for yourself or your subordinates.

<table>
<thead>
<tr>
<th>Report Name</th>
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<tbody>
<tr>
<td>Curriculum Status</td>
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<tr>
<td>Individual Development Plan</td>
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<tr>
<td>Item Requests</td>
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<tr>
<td>Item Status</td>
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<td>Learning Hours</td>
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<td>Learning Needs</td>
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<td>Learning Plan</td>
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<td>External Request Turbon</td>
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<tr>
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<td>Learner History Combined</td>
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### Competencies with Related Items

#### Competencies

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<tr>
<th>Competency ID</th>
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<th>Description</th>
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#### Related Items

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Building an IDP with Competencies

Add a Competency as a GOAL on the IDP.

Search for courses related to the Competency, and then add them as planned activities to achieve the goal of improving your expertise.
WORKING WITH THE PROFESSIONAL COMMUNITIES

Competencies & Technical Development & other Next Steps
Working with the Professional Communities

- Procurement – Mary Petkoff
- IT – John Watts
- HR Specialists – Debbie Markham
- Project Managers – Roger Forsgren, Moses Adoko
- System Engineers - TBD
- COTRs – Marilyn Chambers
- CFO - Jean Rayhle
- NASA Leadership – Lauren Leo
Working with the Professional Communities

- Helping them define competency models
- Expanding the CMS Competency Dictionary
- Aligning with Federal models if appropriate
- Formulating training solutions in SATERN to develop employee expertise for the future

Do the people in our community have the right skills and level of expertise?
Other Next Steps

• Career pathing

• Data Cleanup - Competency to Learning Events

• HCIE Dashboards