

POLICY ISSUE  
INFORMATION

SECY-00-0133

June 22, 2000

FOR: The Commissioners  
FROM: Stuart Reiter Acting  
Chief Information Officer  
William D. Travers  
Executive Director for Operations  
SUBJECT: RESPONSE TO SRM M000120 RESULTING FROM THE JANUARY 20, 2000 BRIEFING ON STATUS OF CIO PROGRAMS,  
PERFORMANCE, AND PLANS

## **PURPOSE:**

To inform the Commission of the status of Item 5 of SRM M000120 concerning basic IT skills.

## **BACKGROUND:**

In the staff requirements memorandum on SECY M000120, "Staff Requirements - Briefing on Status of CIO Programs, Performance, and Plans," the Commission directed "the CIO, in conjunction with other offices, to propose basic IT skills that are required for NRC staff to perform common job functions effectively. The CIO and EDO should assess whether there is a gap in the staff's skills, provide that information to the Office of Human Resources for use in planning necessary training to close the gap, and establish a framework for future IT skills levels for agency staff."

## **DISCUSSION:**

The process for responding to the direction in the SRM was as follows. With input from OCIO staff and EDO offices, a survey was designed as a low cost, rapid, and anonymous way to encourage responses. This survey was utilized for informally assessing the staffs' basic IT skills.

Representatives from HR and OCIO met and developed an initial list of basic IT skills. The skill list was derived from the desktop IT applications currently available to NRC employees. Using this list, survey questions were developed. OCIO then formed a focus group representing NRR, NMSS, HR, EDO, RES, ADM, OSTP, OIG, OI, OE, and SBCR to test the survey and offer recommendations. Another group comprised of senior managers at Headquarters and the Regions representing NRR, NMSS, OCFO, EDO, HR, OCIO, Regions I, II, III, and IV was interviewed to obtain comments on the proposed basic IT skills and the survey. Incorporating the suggestions of the two groups, the survey to assess basic IT skills was released electronically agencywide.

The survey was designed to be available agencywide via the NRC intranet over a period of 10 days. There were 1228 responses. For each proposed basic IT skill, the survey allowed respondents to indicate: "not applicable to their job," "applicable to their job and need training," "applicable to their job and would like advanced training," and "applicable to their job and totally proficient." The response "applicable to their job and need training" was used as the basis for determining the IT skill gap. The response "applicable to their job and need training" and "applicable to their job and would like advanced training" established a basis for planning the necessary training and establishing a framework for future IT skills.

Once the survey was taken off-line, a video conference with representatives from Headquarters and the Regions was held. Prior to the video conference, participants were supplied with the survey responses. The objective of the video conference was to review the survey responses and refine the list of proposed basic IT skills. The participants went through each survey question to glean only those skills they felt were basic for every employee and new hire in the agency.

The attached table provides a detailed breakdown of the number of respondents who use the basic skills and job-specific skills and the number of respondents who indicated a need for training in those skills. The following identifies the proposed basic IT skills and highlights key findings.

## **IT BASIC SKILLS**

### **Using Windows and logging on the NRC network.**

To be successful using any application in a Windows environment (i.e., WordPerfect, e-mail, Netscape, etc.), users must possess these proposed basic IT skills: using the mouse; changing their LAN password; using the "Start" button to locate applications; and using Windows NT Explorer to locate files.

The respondents of the survey indicated a need for basic training to change their LAN passwords (9%) and use Windows NT Explorer to locate their files (23%).

### **Proficiency in using E-Mail**

Electronic mail (e-mail) has now become commonplace among the private and public sectors. Not only does it allow us quick communication within the agency, but also allows easy access to us by our stakeholders. We have come to rely on the use of e-mail. Therefore, the following has been recognized as the basic skills for using this application: opening messages; sending messages, replying to messages; reading attached messages; sending to non-NRC addresses; attaching files to messages; saving attachments, and archiving messages.

The respondents indicated a need for basic training in sending messages to non-NRC addresses (11%) and archiving messages (22%).

### **Proficiency in using an Internet Browser**

The Internet has become an important aspect in our day-to-day business. NRC's internal Web site has become invaluable to staff, and the public relies on the information they get from our external site. It has become an important means of getting information out to the public quickly and inexpensively. Basic skills in this area include: locating information on the Web; printing Web pages/frames, and bookmarking Web pages.

Training in locating information on the Web (18%) and printing Web pages/frames (17%) were two basic skills respondents felt they needed training.

### **Proficiency in using ADAMS**

ADAMS is now the official agency document management system. The basic skills in the ADAMS environment include logging into ADAMS and finding a document in ADAMS. The review group at the video conference determined that these were the two skills required of everyone in the agency. Additional skills, such as, using ADAMS document manager, saving a document in ADAMS, and using ADAMS templates were determined not to be a part of everyone's basic IT skill set. The review group determined that these additional skills are required only by those who are responsible for document management within each office.

Respondents indicated a need for basic training in logging into ADAMS (19%) and finding a document in ADAMS (35%).

### **Proficiency in using Word Processing Applications**

Staff at all levels are using word processing to get their jobs done. With resources being reduced, limiting the number of support staff, increasing numbers of staff are responsible for finalizing their own documents. Within this proficiency, the following were chosen as the basic skills: creating a document; saving a document; printing a document; creating outlines or bulleted lists; opening multiple documents and switching from one to another, and marking, cutting and pasting text from one document to another.

Respondents indicated a need for basic training in creating outlines or bulleted lists (21%), opening multiple documents and switching from one document to another (9%).

### **Using Presentations/Slides Applications**

Presentations have become routine in the way we do business. These applications have a "Wizard" feature built in. This feature takes the user step-by-step through the process of creating a presentation. Using this feature, the following were chosen as proposed basic skills: creating a slide show and creating speaker notes.

Respondents indicated a need for basic training in creating a slide show (24%) and creating speaker notes (33%).

## **JOB SPECIFIC IT SKILLS**

During the video conference review of the survey results, it was determined that the use of spreadsheets and databases are not basic IT skills for all employees. However, approximately forty-five percent (45%) of respondents indicated a need for spreadsheet skills in their jobs, and thirty percent (30%) of respondents indicated a need for database skills in their jobs. Basic IT skills within these job-specific applications were established to assure that all employees required to use spreadsheets or databases have the minimum required skills.

### **Using Spreadsheet Applications**

Spreadsheet applications are no longer just the purview of accountants. They have entered the realm of project managers and anyone whose job includes tracking dollars (i.e., training, travel, government credit card holders, etc.). The proposed basic IT skills in this arena include: creating a spreadsheet; calculating formulas in the spreadsheet, and formatting spreadsheets and reports.

Respondents who use this skill indicated a need for basic training in creating a spreadsheet (28%), calculating formulas in a spreadsheet (32%), and formatting spreadsheets and reports (39%).

## Using Database Applications

The database application has a "Wizard" feature built in. This feature takes the user step-by-step through the process of creating a database. Using this feature, the following were chosen as proposed basic skills: creating a database; querying a database; formatting and printing reports; importing and exporting data, and filtering and sorting data.

Respondents who use this skill indicated a need for basic training in all database areas (approximately 40%).

## CONCLUSION

### Basic IT Skills

Proposed basic IT skills that are required for NRC staff to perform common job functions effectively have been developed in conjunction with other offices (see [attachment](#) ). Focus groups, interviews with senior management and video conferencing with the Regions were utilized to develop the basic skills set and evaluate the survey results.

### Basic IT Skill Gaps

An agencywide survey was utilized to evaluate whether there is a gap in the staffs' IT skills. Skill gaps were identified in a number of basic IT skill areas and reflect a need for training to close these gaps. These skill gaps include using Windows NT Explorer, archiving e-mail messages, sending e-mail messages to non-NRC addresses, creating outlines and bulleted lists in documents, using Internet browsers, using ADAMS, and creating presentations. See the attached table for a detailed breakdown of the number of respondents who use the basic skills and the number of respondents who indicated a need for training in the basic skills. Some respondents also indicated a need for special IT skills such as spreadsheet, and database applications. In addition, with eighty-eight percent (88%) of the survey respondents utilizing their computers for three or more hours per day, this level of usage represents an opportunity for productivity improvement based on additional application and task-specific training.

### Potential Follow-on Activities

Survey results, including comments generated in response to the survey, indicate a need to address the obstacles preventing some staff from acquiring the basic IT skills they need. Some staff either have not been able to attend IT training at NRC's Professional Development Center (PDC) or through NRC's Individual Learning Center (ILC), or in the Regional offices, or do not know what training is available. In addition, a number of respondents from the Regions and resident sites noted difficulties in traveling to headquarters for training.

HR will determine ways to improve management and staff awareness of the catalog of PDC and ILC courses maintained on the Employee Training and Development link from the NRC internal home page. HR will also work with staff to ensure that course content continues to respond to changing technology and will continue to pursue flexible delivery methods to make available to the staff the training it needs.

The inventory of basic IT skills and office specific survey results will be made available to offices to allow managers to identify areas where additional training to achieve basic IT skills is appropriate. The overall results of the survey will be made available on NRC's internal Web site. An agency announcement will be distributed advising staff of the site.

Information will be provided to the Office of Human Resources in the form of a database of survey responses, and key findings from the focus and review group discussions for use in planning necessary training to close any gaps and establish a framework for future IT skills levels for agency staff.

*/RA/*

Stuart Reiter  
Acting Chief Information Officer

*/RA/*

William D. Travers  
Executive Director for Operations

Contact: Patricia Wolfe, OCIO  
301-415-6031

Attachment: [IT Basic Skills](#) 