

**UNITED STATES OF AMERICA**  
**NUCLEAR REGULATORY COMMISSION**

**Title:**           **BRIEFING ON INFORMATION TECHNOLOGY**  
**STRATEGIC PLAN - Public Meeting**

**Location:**       **Rockville, Maryland**

**Date:**           **Wednesday, September 7, 1994**

**Pages:**          **1 - 63**

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1 UNITED STATES OF AMERICA  
2 NUCLEAR REGULATORY COMMISSION

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4 BRIEFING ON INFORMATION TECHNOLOGY  
5 STRATEGIC PLAN

6 \*\*\*

7 PUBLIC MEETING

8  
9 United States Nuclear Regulatory  
10 Commission  
11 One White Flint North  
12 Rockville, Maryland

13  
14 Wednesday, September 7, 1994

15  
16 The above-entitled meeting convened, pursuant to  
17 notice, at 2:00 p.m., Ivan Selin, Chairman, presiding.

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1 COMMISSIONERS PRESENT:

2 IVAN SELIN, Chairman of the Commission

3 KENNETH C. ROGERS, Commissioner

4 E. GAIL de PLANQUE, Commissioner

5

6 STAFF SEATED AT THE COMMISSION TABLE:

7 JOHN C. HOYLE, Acting Secretary

8 KAREN D. CYR, General Counsel

9 GERALD CRANFORD, Director, Office of Information  
10 Resources Management

11 HUGH THOMPSON, Deputy Executive Director, NMSS &  
12 Operations Support

13 ARNOLD (MOE) LEVIN, Deputy Director, Office of  
14 Information Resources Management

15 FRANCINE GOLDBERG, Director, Policy, Planning &  
16 Acquisition Support Branch, IRM

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## P R O C E E D I N G S

[2:00 p.m.]

CHAIRMAN SELIN: Good afternoon, ladies and gentlemen.

The Commission is meeting today to discuss the NRC Information Technology Strategic Plan. This strategic plan, along with the Five-Year Plan and the Human Resources Plan, these three plans constitute the key elements in our efforts to manage and control those resources available to us to carry out our mission and also to forecast our resource needs for the next five or more years.

Last August we were briefed on the 1994 to '98 IT Plan and the Office of Information Resources Management is committed to provide an annual update. The update is available, as are copies of the viewgraphs.

As we listen to today's presentation, there are a few points that I think we should bear in mind. First, information technology has been evolving faster than most organizations evolve. So, we've been able to keep up with the technology, but it's really been a challenge. On the other hand, we have a long way to go. So, we need to not only listen to the discussion on the Information Technology Plan, but try to picture what implications they have for our organization.

To put it simply, organizations that automate

1 inefficient processes don't do very well. You have to  
2 change the processes in ways that are made possible or  
3 feasible by the availability of automation.

4 Secondly, both the President's National  
5 Performance Review and studies like the GAO Report in May  
6 1994 reporting on strategic information and technology  
7 strongly suggest that the federal government needs to do  
8 much more than it has done in the past to use information  
9 technology to improve performance and there's no reason to  
10 believe that the NRC is exempt from this overall  
11 observation.

12 Third, the point that must always be stressed,  
13 this stuff is really fun but it's not an end in itself. The  
14 objective is to make the agency more efficient and more  
15 effective in dealing with the general public and with our  
16 internal function. So that we need to husband our  
17 resources, financial resources and our people and spend them  
18 wisely, not only to carry out interesting projects and  
19 realizing that a lot of the benefits of information  
20 technology are not really evident when they're carried out.  
21 There always are side benefits that are not so obvious.

22 Nevertheless, we have a lot of objectives for  
23 these resources and we have to put these resources where  
24 they seem most likely to solve the management problems of  
25 the agency as well as in good technology. On the other

1 hand, there really is an awful lot of interesting stuff in  
2 this presentation.

3 So, Mr. Thompson, the floor is yours.

4 MR. THOMPSON: Thank you, Mr. Chairman and  
5 Commissioners.

6 Since Gerald Cranford briefed you last year, we  
7 really have made a lot of success both in the planning and  
8 in the implementation thing in integrating the program  
9 offices and the regional offices in the IT technology, both  
10 the planning, budgeting and execution of the activities, as  
11 well as giving the IT counsel a forum to establish the IRM  
12 agency priorities.

13 We've also begun a very ambitious program of  
14 updating on a five-year cycle the staff's personal  
15 computers, which is an essential element of our ability to  
16 communicate amongst each other, as well as establish the  
17 high performance computing capability that I think each of  
18 you have seen demonstrated in its early stages with the  
19 staff.

20 With me today is Gerald Cranford, the Office  
21 Director, Moe Levin, the Deputy Director, and Francine  
22 Goldberg, who is the Chief of the Policy, Planning &  
23 Acquisition Support Branch. We'll ask Francine, who has  
24 done all of the work in this area and done a lot of work  
25 getting ready for this briefing, to continue.



1 CHAIRMAN SELIN: One worker and three overseers.

2 MR. THOMPSON: That's our three to one ratio.

3 Francine is backed by our cast of thousands.

4 CHAIRMAN SELIN: I see.

5 MR. THOMPSON: Francine?

6 MS. GOLDBERG: Thank you.

7 I would like to mention that there are a lot of  
8 people in this room on the IT Council at IRM who contributed  
9 to this work and who I'd like to personally thank for all  
10 their support and helping getting ready for this briefing.

11 As Mr. Thompson mentioned in his introduction, IRM  
12 completed a major strategic planning effort in FY '93 and be  
13 briefed you about the same time last year. That plan set  
14 the direction for our future information technology programs  
15 and laid out a number of strategic issues. What I'd like to  
16 do today is talk about the progress we made on those  
17 strategic initiatives in 1994, in FY '94, and talk a little  
18 bit about some trends that are having a major influence on  
19 our plans and then finally talk about the course corrections  
20 we made for this year's planning cycle.

21 [Slide.]

22 MS. GOLDBERG: You may remember that the plan was  
23 divided into three major program areas. The first one, IT  
24 program management, basically policy, budgeting, acquisition  
25 and so forth. The second one, infrastructure, was our

1     workstations, our networks, our associated customer support  
2     services and the third one, applications and information  
3     management, dealt with systems development, records  
4     management, information collections. I'll go over the  
5     progress in each of those three areas one at a time.

6             [Slide.]

7             MS. GOLDBERG: The first one, IT program  
8     management, I think we've made some really significant  
9     achievements there. We have the IT Council, which you may  
10    remember is a group of about 11 program office  
11    representatives, customer officer representatives, and as a  
12    result of Commission comments last year we added the small  
13    office representative.

14            The current chairman, it's chaired by a customer,  
15    is Lloyd Donnelly from the Office of Research. This group  
16    continues to provide very valuable input to IRM in planning  
17    and in reviewing new applications and we expect them to help  
18    us in a couple of other areas in the future.

19            The second thing that IRM did in this area is that  
20    we reorganized. That reorganization was effective in  
21    February. We made some changes to our organization that  
22    reflect our strategy, that support our strategy by adding  
23    more staff or different organization of staff for document  
24    systems development, acquisition planning infrastructure,  
25    and technology assessment and support.

1           In acquisition, this was another area where we  
2 really needed to improve. We've reassigned some staff to  
3 work in this area. We dramatically improved our acquisition  
4 planning. We now have branch plans for each of the IRM  
5 branches and this is long-range and short-range plans.  
6 We've been using the bank cards. Thank you to Admin. for --  
7 the Bank Card Program has allowed us to purchase a large  
8 number of the smaller items and speed up getting these items  
9 to the staff in order to do their jobs more effectively.

10           We've increased use of the government-wide  
11 acquisition contracts. We've been using them effectively in  
12 getting high performance computing technology, international  
13 switch voice which we had to get on a short-term basis. We  
14 really have been able to make good use of these government-  
15 wide contracts and we expect more of that in the future.

16           CHAIRMAN SELIN: Is there a measurable improvement  
17 in acquisition as opposed to having better vehicle --

18           MS. GOLDBERG: Well, it's the timing. We can use  
19 their contracts which are already in place. It's like  
20 writing a --

21           CHAIRMAN SELIN: I didn't mean that particularly.  
22 I mean in general. Are we, in fact, making our acquisitions  
23 in a more timely fashion or more economically?

24           MS. GOLDBERG: Yes. Well, the workstation one,  
25 even the internal acquisitions, for example our major

1 initiative on workstations, we accomplished that in nine.  
2 months and it was a large dollar amount. It was about \$18  
3 million over three years. So, that was a significant  
4 accomplishment and a lot of teamwork from DCPM and from OGC  
5 with us on that.

6 CHAIRMAN SELIN: Will I get "Ask the Chairman"  
7 letters congratulating us on our new acquisition policy in  
8 the next year or so?

9 MR. CRANFORD: I'll write it.

10 CHAIRMAN SELIN: But the serious thing is will  
11 this be discernible to our staff?

12 MS. GOLDBERG: We believe it already is.

13 MR. THOMPSON: We've implemented a process where  
14 some of the program offices can purchase some of the  
15 materials directly themselves using the bank card approach  
16 with the general oversight and guidance of IRM as well as  
17 IRM's ability to purchase, for instance, the high capability  
18 computing workstations. Those types of things we were able  
19 to purchase much more quickly using these techniques than we  
20 previously have been which had taken years and years. So,  
21 it really has made a significant improvement and we're  
22 continuing to look for ways, as you talked about others, of  
23 improving our purchase capability.

24 MS. GOLDBERG: As an example, after the reorg. we  
25 had a backlog of small items that we had to buy that we had

1 sort of put on the back burner. In a matter of two billing  
2 periods with the bank cards, essentially using these credit  
3 cards, we were able to fill all of those orders, which would  
4 have taken much, much longer in the past.

5 CHAIRMAN SELIN: Okay. Thank you.

6 MS. GOLDBERG: The last thing on that is that we  
7 have a comprehensive training and certification program for  
8 all IRM project officers and we're going to make that  
9 available to some of the program office staff who are  
10 managing some IT-related contracts.

11 The second area, the second program area is IT  
12 infrastructure and that is just key to everything that we're  
13 doing. This is what IRM is focusing a great deal of  
14 attention on. The number one priority from the customers  
15 during strategic planning was to do a better job of  
16 upgrading and replacing workstations. As I mentioned, we  
17 awarded the contract in nine months on schedule with very  
18 good team effort. We've already replaced over 1300  
19 machines. That is, I guess that will be as of the end of  
20 this month. We will have replaced 1300 of the older  
21 machines, mostly 286s. The Commission machines, by the way,  
22 are scheduled to be upgraded this month. By the end of FY  
23 '95, we expect to replace all of the older machines with  
24 486s or better.

25 These higher capacity machines are going to be

1 crucial to our move, as you'll see later in the  
2 presentation, to the Windows environment. It's very  
3 important that we have machines with enough memory, enough  
4 speed and capacity so that Windows will run properly. So,  
5 that really was an important element of our strategy.

6 [Slide.]

7 MS. GOLDBERG: The second area, what I'm talking  
8 about here in general is workstations and customer service.  
9 The second point here is that we've established a customer  
10 service support center. This is a single phone line where  
11 everyone in the agency can call a single line and get  
12 answers to any questions dealing with IRM services,  
13 microcomputer-related services primarily. Previously, the  
14 contract that handles this consolidated seven different  
15 contracts that we had in the past doing different pieces of  
16 this. So, this is a real consolidation and was a big help  
17 during the move to resolve problems for people. We're  
18 planning to enhance that too over the next year with some  
19 additional features.

20 The last bullet refers to the workstations and  
21 customer support specifically for high performance  
22 computing, and I'll talk about the networking in a minute.  
23 But specifically on workstations, we have been very  
24 successful in rapidly acquiring workstations using some of  
25 these government-wide contracts, as a matter of fact, and

1 another one of the government-wide contracts is being used  
2 for support, the Navy CAD II contract. We've already  
3 acquired 76 workstations and we have another 26 that are in  
4 the pipeline, workstations or servers that are in the  
5 pipeline. I'll show you a picture on that in a minute. So,  
6 I feel that we've really made some good progress there.

7 [Slide.]

8 MS. GOLDBERG: The second aspect of infrastructure  
9 I'd like to talk about is networking. Again, I think this  
10 has been an area where our customers have seen some real  
11 progress. First of all, we've established an NRC Internet  
12 node and we've installed a special security machine to  
13 protect our network from any contamination from the  
14 Internet. This has allowed us to offer E-mail to all NRC  
15 users directly into the Internet. So, it's very, very  
16 simple now for the NRC staff to send a message on the  
17 Internet, right from their AUTOS menu.

18 Right now I've been told we're averaging about 530  
19 messages going out and about 425 messages coming in  
20 everyday. Not everybody is using it. Not everyone is  
21 totally aware of it apparently, but we expect that awareness  
22 to increase. We'll be talking more about it in coming  
23 newsletters and so forth.

24 The high performance computing users have full  
25 Internet access capacity. That is beyond mail they have

1 upload and download and able to get in there and get  
2 information however they please. We expect to expand this  
3 to DOS users this year and we have a pilot that is set up  
4 and we expect to have, in addition to all of the high  
5 performance computing users who already have access, we  
6 expect to have using MOSAIC, a method whereby the DOS users  
7 can also access Internet. So, that's the MOSAIC.

8 Now, MOSAIC, for perhaps the people that are here  
9 who aren't aware of exactly what it is, it's a graphical  
10 user interface to the internet where you can point and click  
11 and navigate to get more information very easily, including  
12 graphical information as well as text. You can get even  
13 sound and video information.

14 The main manu of a MOSAIC application is called  
15 the home page. NRC has now designed a home page that will  
16 be accessible to the public and is going to be used by the  
17 Administration as part of their publicity for the Internet  
18 and how government agencies are making it easier to  
19 communicate for the public. So, we expect to offer that  
20 very soon to the public.

21 We have 100 users using MOSAIC now and, as I say,  
22 there will be another 100 under this pilot project between  
23 now and the end of the year. The software is very reliable  
24 in the UNIX world. It's not quite so mature in DOS, but we  
25 -- so, we expect it to be a little rocky at the beginning



1 for the DOS users. Don't be surprised.

2 Last thing I wanted to talk about on this slide, I  
3 think, is extremely important. That is the upgrades we've  
4 made to our local and wide area networks. We first of all  
5 improved communications with the regions. We've added  
6 redundant or alternate circuits in case of failures and  
7 problems so that we can bypass the lines that are not  
8 working. We've upgraded capacity to the regions by 30-  
9 fold. We've gone from 56 kv to 1.6 megabits or T-1.

10 We've also installed a fiber optic link between  
11 White Flint 1 and White Flint 2 which increases the  
12 capacity, the speed that we used to have from Bethesda White  
13 Flint by 2,000-fold. So, we should have no speed or  
14 capacity problems between the two buildings.

15 We have intelligent -- now we have intelligent  
16 components in our network that help us manage and monitor  
17 the network. They're essentially special PCs that are used  
18 for multiplexing. So, this is an improvement as far as our  
19 ability to find problems and look at statistics and how the  
20 network is being used so we can anticipate changes.

21 [Slide.]

22 MS. GOLDBERG: Last item in infrastructure is I'd  
23 like to talk real briefly about high performance computing.  
24 I know that the Commissioners have recently been briefed on  
25 this, so I won't belabor this. You already know most of

1 this.

2 The Technology Advancement Board is continuing to  
3 coordinate the agency's high performance computing needs.  
4 Our upgrades to that environment are continuing. The  
5 members of the Technology Advancement Board, as you know,  
6 are the major program offices and ACRS.

7 [Slide.]

8 MS. GOLDBERG: This next slide gives you a picture  
9 of what the environment looks like today. If you remember  
10 -- I don't know if you remember from last year when we put  
11 up a similar slide. There are some major differences this  
12 year. Firstly, there are more machines. We've gone from  
13 about 65 to over 75 and we are heading towards over 100.

14 We have more networking and resource sharing. You  
15 can now execute a code that Research has from NRR or NMSS  
16 and you can execute a code at the TTC from AEOD. So, those  
17 are real improvements in terms of being able to share  
18 resources.

19 We've added the security fire wall so that we can  
20 have secure communication with the Internet and we have more  
21 conductivity outside the agency now than we did before.

22 A couple of examples I think that really  
23 illustrate the strides that have been made in this area is  
24 that we're now running RELAP in-house on a high performance  
25 computing machine, whereas we used to have to have a lab run

1 that, that code.

2 [Slide.]

3 MS. GOLDBERG: The last slide here on the third  
4 program area, applications and information management,  
5 highlights four different areas. The first one is on work  
6 process redesign.

7 Mr. Chairman, you mentioned the need to reengineer  
8 processes before we automate them and we certainly  
9 wholeheartedly endorse that. We've been attempting to  
10 introduce these concepts and work with the offices to try  
11 them out. The first project that we did was on commercial  
12 contracting and the Office of Administration really has the  
13 lead on that project. That project is near completion and I  
14 believe they found some significant efficiencies and they're  
15 working out the implementation details now for the offices.

16 CHAIRMAN SELIN: Are the project managers of these  
17 projects generally from the client offices?

18 MS. GOLDBERG: Yes.

19 MR. THOMPSON: Right.

20 MS. GOLDBERG: Yes.

21 CHAIRMAN SELIN: The right answer.

22 MS. GOLDBERG: Yes. We view ourselves as really a  
23 facilitator to try to -- what we're trying to do is help  
24 write the statements of work, help get a good contractor in  
25 to support the offices. So, we're providing really a sort

1 of a marriage and not too much in the way of managing the  
2 project.

3 NRR has, with very, very minimal input from us, we  
4 just made some comments on a statement of work that they  
5 originally had, has had a very successful redesign project  
6 in generic communications. I believe that they're talking  
7 to us now about some automation that they'd like to see come  
8 out of that.

9 NMSS is about to begin on material licensing. We  
10 have selected the contractor and that project will be  
11 starting next month. The way we do these is that we have a  
12 core team of staff who are intimately involved with these  
13 programs and then we have a steering board of senior  
14 managers, usually the office directors. And in the case of  
15 NMSS and IRM, Mr. Thompson was --

16 CHAIRMAN SELIN: I'd like to make two comments.  
17 One has to do with this point and what I assume will be your  
18 next point. The other is sort of more generic.

19 The first is that I want to make sure that  
20 someplace in the agency, whether it's in IRM or in the EDO's  
21 office, there's what you might consider to be the public's  
22 ombudsman, to say, "As we're doing this system, what of it,  
23 if anything, would be of interest to the general public?"  
24 You know, maybe an internal licensing -- well, even internal  
25 licensing system, there's a lot of information that might be

1 available outside on where things stand, what progress is  
2 certainly a generic information system, et cetera.

3 So, we have to -- by nature, IRM meets a lot of  
4 customers' needs and the one customer that isn't very well  
5 organized is the general public. So, we have to make sure  
6 that there's somebody looking at these things and saying,  
7 "Which of these pieces should be on the other side or the  
8 fire wall should be available to the general public? How  
9 shall we make them available." If we're going to do all  
10 these good things, which clearly are good things, we need to  
11 make sure that a larger world gets the benefit.

12 The second has to do probably more with the  
13 bulletin board strategy, but still more broadly. We're  
14 doing a whole lot of systems that the potential  
15 beneficiaries don't know anything about. I mean you have to  
16 know that we're on Internet and how to get on Internet to  
17 get to us on Internet. So, in other words, you need to know  
18 an awful lot to get to the menu for instance. We need some  
19 kind of a routine publication not limited to the information  
20 systems but the information system is not a bad place to  
21 start and say, "These databases are available from NRC,  
22 these through Internet, these through other networks, these  
23 through diskettes, et cetera."

24 We had an earlier meeting when we talked about our  
25 new project to review how we communicate and how we deal

1 with the general public in a wide number of areas and we  
2 discussed this point. But we do need to, again, have  
3 somebody who's going to look across these systems and these  
4 informations from the general public's point of view and  
5 say, "What does the public need to know to get access to the  
6 systems?" some of which are designed for the public, not  
7 designed for the staff and many of which would have  
8 ancillary benefits to the --

9 It shouldn't be like finding your way around  
10 China, which is there aren't any signs. If you don't know  
11 where you're going, you have no business being there. We  
12 want to give people some help in navigating these systems.

13 MR. THOMPSON: I think that's an important point,  
14 Mr. Chairman, and I'm not sure exactly how we have -- you  
15 know, we kind of have that as an intuitive element of lots  
16 of our thoughts. I'm not sure we've articulated as crisply  
17 as you have and we'll certainly work to do that as we go  
18 through --

19 CHAIRMAN SELIN: We don't have a publication. You  
20 can't go to something and say, "Here are NRC information  
21 systems available to the public or services available to the  
22 public." Now, that's not a bad place to start.

23 MR. THOMPSON: We'll do that.

24 MS. GOLDBERG: I think a good example of one of  
25 these systems is this new bulletin board. Thank you, Mr.

1 Chairman. The strategy we've adopted for bulletin boards is  
2 to use the NTIS FEDWORLD System to host our bulletin boards.  
3 It has a lot of advantages for us. It can provide  
4 information, receive E-mails, upload and download documents.  
5 People can see the other people's comments if we set it up  
6 that way, if that's something beneficial. They can  
7 communicate with the operator of the system. We can provide  
8 limited access in the case of something like an ACRS  
9 bulletin board, or we can provide open public access. We  
10 ultimately have plans to make all the bulletin boards that  
11 are going to be on FEDWORLD available to the staff so that  
12 they are not left out of this wonderful resource.

13 We already have three bulletin boards in place.  
14 One of them is the enhanced participatory decommissioning  
15 rulemaking system bulletin board, comments on that  
16 rulemaking, status of 10 CFR 2.206 petitions, which I  
17 understand are public questions about anything to do with  
18 our business. We also have one that was put up just in  
19 order to handle the comments on the new enforcement program  
20 policy. Those are the three that are up and running right  
21 now. We have five other new ones that are in the works and  
22 we have four existing systems that we will be moving to  
23 FEDWORLD.

24 CHAIRMAN SELIN: The second and third examples you  
25 gave and maybe even the first are public documents.

1 MS. GOLDBERG: Yes. Yes.

2 CHAIRMAN SELIN: So, those would be available not  
3 only for the public to put their comments in, but to be able  
4 to browse through and find the comments.

5 MS. GOLDBERG: Yes. In fact, anything we put on  
6 FEDWORLD -- most of the things we've been putting on  
7 FEDWORLD will be public access bulletin boards. We're  
8 thinking of having an internal bulletin board for anything  
9 that we want to do in-house rather than using FEDWORLD. So,  
10 we're talking about right now --

11 CHAIRMAN SELIN: Francine, before you get off  
12 that, a general principle. Remember, things that are in  
13 these bulletin boards are available to FOIA generally. I  
14 mean they're communications. If they're available to FOIA,  
15 not only in principle because they're E-mail but because of  
16 the content, they should be available to the public now. We  
17 shouldn't make people have to go through FOIA to get this  
18 information. So, we should have quite an expansive  
19 definition of what's available to the public. There ought  
20 to be good reason for particular things not to be available,  
21 not the other way around.

22 MR. THOMPSON: Right. And I think the initiative  
23 that we need to take is looking at where we need to be  
24 proactive and look up front of these. I think there's no  
25 question that eventually some of this information may make



1 its way to the PDR and currently available. I think this is  
2 just a much more efficient and a prompt way to be able to do  
3 that.

4 MS. GOLDBERG: This vehicle though of the bulletin  
5 board does have limitations. You can't take a whole  
6 database system and put it on the bulletin board. It's more  
7 gears towards documents and --

8 CHAIRMAN SELIN: That wasn't what I meant to say.  
9 What I meant to say is you're talking about internal versus  
10 external bulletin boards. Most of what we do is potential  
11 external anyway and if it's going to be potentially external  
12 it generally should just be external. I mean why make  
13 people go through hoops to get what they're entitled to get  
14 from us anyhow? There may be a cost consideration.

15 MS. GOLDBERG: Well, we were thinking maybe some  
16 of them would just be so routine that it wouldn't be worth  
17 --

18 CHAIRMAN SELIN: Okay.

19 MR. THOMPSON: And some of them may be pre-  
20 decisional type things that we would need to be able to  
21 communicate amongst ourselves. So, those, I think, are  
22 appropriately withheld. But you're correct, those issues  
23 which we are communicating with the public on those are  
24 readily available and we ought to look at ways to do that  
25 very effectively.

1           COMMISSIONER ROGERS: Just on that point, it may  
2 be that very often we find that in responding to a FOIA  
3 request we have to redact a document to some extent, cut  
4 some things out of it that don't get transmitted and then it  
5 has to be done at that time, when somebody asks for it. It  
6 might be worth setting up some kind of a system to make  
7 those decisions right away and then what goes into the  
8 bulletin board or is immediately available already has gone  
9 through that process and we don't have to stop and wait for  
10 a request to make those decisions as to what should be  
11 automatically released and what really shouldn't.

12           MR. THOMPSON: We do that to a certain extent, for  
13 example on some of the enforcement orders where we withhold  
14 the name and address for the thing that we do make publicly  
15 available. So, we do that some of the times. I'll take a  
16 look at if there ought to be more --

17           COMMISSIONER ROGERS: Just a systematic way of  
18 just --

19           MR. THOMPSON: Correct.

20           COMMISSIONER ROGERS: -- handling that now with  
21 this new approach to providing immediate public access to  
22 information.

23           MR. THOMPSON: Right, sir.

24           MS. GOLDBERG: Any more questions on that?

25           CHAIRMAN SELIN: We're just finding more customers

1 for things you're doing already.

2 MR. THOMPSON: If they'll just pay the fees, we'll  
3 love them.

4 MS. GOLDBERG: The third item, the NUDOCs, the  
5 document management initiatives, again you might recall that  
6 the replacement of NUDOCs with a modern text and image  
7 management system was unanimously endorsed by our customers,  
8 both the original strategy team and again this year by the  
9 IT Council as what should be our number one applications  
10 priority. I think this is an area where we feel we could  
11 have -- we would like to have done better. We would like to  
12 be further along than we are, but for a number of reasons  
13 which I'll mention we aren't.

14 CHAIRMAN SELIN: Is it just hard or is it that  
15 there's so many conflicting desires that it's hard to come  
16 with up with just a --

17 MS. GOLDBERG: Well, it's not even that. We just  
18 haven't gotten to it. We began planning for it in '94.  
19 Part of our reorganization was to form a Document Systems  
20 Development Section and that was part of the holdup, to get  
21 the resources in place. That happened in February. Since  
22 February, we have had a rash of document management  
23 requirements that were unanticipated and some of them very  
24 high priority, such as the Commission decision tracking  
25 system. This has really diverted what was a limited number

1 of staff. Coming out of the reorganization, we really did  
2 not have enough resources in this area, not as many as we  
3 would have liked to have. Not everyone was trained in this  
4 particular area. Some were switched from other disciplines.  
5 So, it's going to take us time to get up to speed through  
6 hiring and retraining some of our staff to be able to handle  
7 the needs in this area.

8 So, we are quite a bit further behind on NUDOCS  
9 than we had wished to be. We understand that some of these  
10 other systems are important and we're going to be looking at  
11 the scheduling and trying to make some tradeoffs and  
12 judgments about how we can have them both proceed at a  
13 reasonable pace.

14 The last item on here is the client/server  
15 initiatives. We have really changed our -- since we began  
16 the strategic planning process certainly we've completely  
17 changed our approach to systems development. We are now  
18 fully in a land based development mode using distributed  
19 technologies in client/server. Our first big pilot project,  
20 our big project on client/server systems is for the Office  
21 of Personnel. That is going well and is in system testing  
22 right now. We have a server in Region I and in Headquarters  
23 and we expect that one to be operational during the first  
24 quarter of FY '95. It's being tested now.

25 We're looking at all of the applications that are

1 still running at NIH with a study that we are calling the  
2 right sizing study to see if we can move some of those onto  
3 LANs.

4 CHAIRMAN SELIN: Is there a platform that we're  
5 trying to move to so that you don't have to rewrite all the  
6 applications from scratch but you can just have the  
7 interface with a standard platform or do you have to redo  
8 every one of these?

9 MS. GOLDBERG: I'm not sure what the answer is to  
10 that as far as how much of it we have to rewrite.

11 MR. LEVIN: Well, these applications right now are  
12 basically on NIH mainframes using the proprietary mainframe  
13 operating system. So, it's very hard to port them to some  
14 other kind of smaller platform.

15 CHAIRMAN SELIN: There's no conversion? It goes  
16 from -- what's the --

17 MR. LEVIN: Oh, you mean an automated conversion  
18 tool or something?

19 CHAIRMAN SELIN: Yes.

20 MR. LEVIN: We could look at that.

21 MS. GOLDBERG: Those that are written with some  
22 COBOL, there might be some hope. A lot of them are written  
23 using the WILBUR command language and there's nothing you  
24 can do with that.

25 And we have a number of other client/server

1 projects that are just starting or in the early stages of  
2 development. So, we feel that we've made some real progress  
3 there.

4 That kind of summarizes the progress that we've  
5 made on the major strategic initiatives. What I'd like to  
6 do now is move onto some trends that we see as having a big  
7 impact, continuing impact on information technology. I  
8 don't think any of these will be any great surprise.

9 [Slide.]

10 MS. GOLDBERG: The first two really come out of  
11 the NPR and, in fact, I think the NPR itself is probably the  
12 biggest event, publication, influence on our IT world since  
13 this strategic plan was being developed. I don't think  
14 people realized what the impact would be at the beginning,  
15 but now it's becoming very clear what a key part of the  
16 Administration's vision information technology is.

17 The first thing, putting the customer first. In  
18 order to do that you have to communicate with the customer.  
19 Most agencies are looking at how technology can help improve  
20 their communication and exchange of information with the  
21 public, with licensees in our case, with other stakeholders,  
22 other people who are involved with the agency. The  
23 government-wide bulletin board, the FEDWORLD System and the  
24 information locator that they've planned, is a good example  
25 of an agency -- government-wide effort that many, many

1 agencies are using and taking advantage of in order to do  
2 this.

3 The new OMB Circular A-130, which was just  
4 published, puts a great deal of emphasis on electric  
5 information dissemination and collection. It encourages  
6 agencies to use electronic media in public networks and to  
7 use electronic collection capabilities where these  
8 techniques are cost beneficial.

9 So, this is an area that we need to continue to  
10 work on and prepare for the time when the vast majority of  
11 our communication with the public will be electronic. And  
12 of course this isn't going to happen overnight and there are  
13 plenty of licensees and public members out there who don't  
14 have a computer, don't know what the Internet is and are  
15 going to want paper. So, we are going to be living in a  
16 world of transition which is going to be a little tougher as  
17 we --

18 CHAIRMAN SELIN: I don't think that's the problem.  
19 I think the problem is money, pure and simple. There's just  
20 going to be a great demand for somehow the federal  
21 government subsidizing people who are sophisticated enough  
22 but they don't happen to own a PC, whether it's terminals in  
23 regional public document rooms or what have you. Sooner or  
24 later, as we invest, we're going to have to take a look and  
25 see if that's as far as we want to go. Do we want to

1 actually provide some public facilities and not just the  
2 mechanisms?

3 MS. GOLDBERG: Okay. That's a good point. I  
4 think that we are already involved in a number of  
5 initiatives on electronic information exchange, one of which  
6 is to work with NIRMA. We're going to have a meeting with  
7 NIRMA in the fall. We're developing standards for document  
8 exchanges primarily with the electric utilities. We already  
9 have seen rule changes permitting electronic submittal of  
10 data. We have seen a great increase again in the use of the  
11 Internet for this and all of these different methods are  
12 going to be growing.

13 CHAIRMAN SELIN: Would you translate NIRMA to  
14 English?

15 MS. GOLDBERG: Oh, NIRMA, the Nuclear Information  
16 and Records Management Association. It's a group of  
17 primarily nuclear utilities who are interested in this area.

18 A second thing, streamlining. Again, NRP has --  
19 this is a major theme of the NPR. The first two bullets  
20 under that, electronic commerce and government-wide  
21 geographic information system are two examples of  
22 government-wide streamlining initiatives. We are  
23 participating in the Electronic Commerce Committee. Admin.  
24 has the lead on that. We're helping, assisting with that as  
25 well as OC is participating. So, we have a team effort



1     that's attending those meetings. We're the Small Agency  
2     Council representative.

3             The government-wide geographic information system,  
4     this is part of the so-called National Spatial Data  
5     Infrastructure. We have gotten some assistance, an expert  
6     to help us get NRC's requirements in this area and we are  
7     meeting with representatives from the program offices to see  
8     how the NRC's needs might fit in with this initiative. This  
9     could help us with siting and emergency response and some  
10    other similar areas.

11            The last one, of course, we've already mentioned  
12    work process redesign. Many agencies are doing it. Of  
13    course, the commercial sector has been doing what they call  
14    business process reengineering. In OMB Circular 130, it has  
15    now officially been named for the government work process  
16    redesign. So, that's what we're calling it. This is an  
17    area where we agree that IRM really should not have the lead  
18    and I'll be talking a little bit later about some ideas on  
19    maybe some better ways of choosing these projects than  
20    through the IRM strategic planning process.

21            [Slide.]

22            MS. GOLDBERG: The next one is no surprise, rapid  
23    maturation of networking. We learned the hard way in May  
24    how dependent people were on the NRC LAN when the virus  
25    struck the agency. We are very, very dependent on the LAN

1 and we have to make sure that the LAN and the wide area  
2 network are reliable and hopefully impervious to most  
3 viruses and we have made some major improvements to assure  
4 that that's the case.

5 The rapid growth of Internet, it's in Time  
6 magazine. You know that everybody knows now what Internet  
7 is. FEDWORLD was in the Washington Post. The government-  
8 wide E-mail initiative, there's an NPR interagency group  
9 headed by Neil Stihlman from NIH that's working on that and  
10 we expect to see some standards coming out on that soon.

11 Although we can now communicate with other  
12 agencies through the Internet, the government-wide E-mail  
13 would have a central government directory of all of the  
14 people in the federal government that you can just pull up a  
15 name or look up an agency and find someone else and send  
16 them an E-mail. That will be a great help to us.

17 Finally, the National Information Infrastructure  
18 or the information superhighway. Work is proceeding on  
19 that. We need to keep track of what's happening with it.  
20 We expect that will eventually replace the Internet. It  
21 will be faster. It will be better managed, but it's also  
22 going to cost money. So, it's something that we probably  
23 need to plan for. If we start heavily using the Internet  
24 and then we find that it's not the way to go, that we're  
25 going to be going to something that is going to cost money,

1       then we need to plan for that and budget for that.

2                   [Slide.]

3               MS. GOLDBERG: The last trend I wanted to mention,  
4       and this was also mentioned in the NPR with some proposed  
5       initiatives, was the need for greater understanding of  
6       information technology and not just in IRM but outside of  
7       the IRM shop. Not just computer staff, but SES-level and  
8       middle managers as well.

9               Technology is rapidly permeating all aspects of  
10      government. We need to spread these skills around. We need  
11      to improve the capabilities of the staff and look for new  
12      ways to educate managers about IT. We may see some  
13      requirements from OPM. There was some -- in the NPR there  
14      was some recommendations that said that information  
15      technology should be mandated as part of SES candidate  
16      development programs and so forth. So, there may be some  
17      things coming and we are keeping abreast of that and working  
18      with OP to try to make sure we're ahead of the ball on that  
19      one.

20              That's all I have to say about trends. If there  
21      are no questions, I can move on to our plans for '95 through  
22      '99.

23              This covers the results of the recently completed  
24      planning cycle. Since our basic strategy is only a little  
25      over a year old, our planning was in the nature of a course

1 correction. It's really part of the normal IRM planning  
2 process, IRM five-year planning process, and it feeds into  
3 the Five-Year Plan. This is a summary of what happens in a  
4 year when we don't do a major update of the strategy. We  
5 have some internal planning that goes on in IRM in September  
6 and October. The Council provides us input in November-  
7 December. We send that to the controller in January and  
8 it's reviewed by the Steering Committee for Strategic  
9 Planning.

10 Last year for the first time we briefed the  
11 Steering Committee for Strategic Planning with a separate  
12 briefing on IT because it just sort of tended to get lost in  
13 the midst of the whole agency's mission and we would like to  
14 continue that. We sent the Commission our paper in May and  
15 it's unfortunate that we weren't able to brief sooner, but  
16 here we are. I think the same thing happened last year and  
17 we'd like to work on some suggestions and maybe alternatives  
18 sent to the Commission to get the Commission involved  
19 earlier in this process, particularly with the strong  
20 interest in some of the issues like external stakeholders  
21 and some of those items that again you are the primary  
22 proponents of the public out there. They don't really exist  
23 as strongly perhaps in some of the other offices.

24 I think that we began our strategy and we talked  
25 about stakeholders and we focused mainly on the internal

1 stakeholders because the problems at that time were so much  
2 more pressing and evident to people. Sometimes we do lose  
3 track of the external.

4 CHAIRMAN SELIN: I wasn't in any sense  
5 criticizing. If we don't do our job right, there's no sense  
6 in killing ourselves to communicate chaos to the general  
7 public. But as we invest in these systems, since they are  
8 multiuser systems, there just has to be a certain amount of  
9 time spent at the beginning to think about -- you know,  
10 people spend a lot of time trying to figure out what do we  
11 do when things go wrong? We've got to spend a little time  
12 thinking about if they go well, will we get the benefits out  
13 of them that we wish.

14 I think the kind of comments you're going to get  
15 from the Commission really have more to do with objectives  
16 and goals and therefore could more easily be obtained early  
17 rather than trying to set priorities among systems that are  
18 three-quarters defined.

19 MS. GOLDBERG: Yes. That's what we'd like. Yes.  
20 We really would like to get that because that is the focus  
21 of this. The focus of this is to update the goals and  
22 objectives in the Five-Year Plan in the program guidance,  
23 not the planned accomplishments, not what applications we're  
24 doing next year. So, that would be very helpful to us and  
25 we will get back to you on that.

1 [Slide.]

2 MS. GOLDBERG: The next two slides summarize last  
3 year's input from the IT Council and I really do want to  
4 emphasize that the Council is an absolutely critical element  
5 of our process. We believe that having a customer focus is  
6 the difference between success and failure. We have to do  
7 what the customer needs and not what we think the customer  
8 needs. The only way to get that is through direct input.

9 This year -- during last year's planning cycle we  
10 picked two really -- two strategic areas. One was document  
11 and work flow management and the other was customer service.  
12 This first slide on recommendations covers document  
13 management and electronic workflow. These are the  
14 recommendations that the Council made, again reemphasizing  
15 the urgency of replacing NUDOCs and recognizing that NUDOCs  
16 would take a number of years to replace. They asked us to  
17 implement an interim LAN-based system with some very key  
18 frequently used documents so that they could do some text  
19 search and retrieval on those. We have done that. Again,  
20 it's sort of a -- there's the good news and bad news. The  
21 good news is we've been working on that. The bad news is  
22 it's sort of slowed us down on NUDOCs. So, it's a number of  
23 things that have had an impact on NUDOCs.

24 On electronic workflow, I think that the Council  
25 recognized that electronic workflow is really the key to

1 streamlining and that is how we eliminate paper. The main  
2 thing that I think people are interested in initially is to  
3 speed up the concurrence process and be able to send  
4 electronic documents around for concurrence and also have  
5 concurrence going on in parallel with the kind of bulletin  
6 board capabilities where people can see the other  
7 commentors' comments and so that they don't sort of  
8 counteract each other and they resolve them. So, there are  
9 many things that we can do to improve that.

10 Another key to this is electronic forms. In order  
11 to have electronic service requests, which is another aspect  
12 of this, you need to have the electronic form that then you  
13 can launch electronically and avoid having to have some  
14 paper form signed and sent and lost and moving from desk to  
15 desk. There are systems that -- technology that's out there  
16 now that allows you to do all of this electronically with  
17 cues that you set up ahead of time and paths that these  
18 documents go through.

19 So, these are our future plans. We have made some  
20 progress on this interim LAN-based system, but the other two  
21 -- we've made some progress also on electronic forms, but we  
22 are nowhere near doing electronic workflow at the moment.  
23 So, that's something that we need to really work on.

24 [Slide.]

25 MS. GOLDBERG: The second area I'm not going to

1 spend a lot of time on. This was more of an internal thing  
2 for us. We got some very good comments on customer service.  
3 I'd like to mention -- highlight one of these. That is  
4 increase customer's ability to acquire IT products and  
5 services directly. One way, of course, is with bank cards.  
6 They can acquire some relatively at this point small items.

7 We're also looking at putting in place an agency-  
8 wide contract, a systems development contract that could be  
9 used by the offices directly. They would have a project  
10 manager who would have some sort of training. The contract  
11 would have a framework of policies and standards kind of  
12 built into it so that there is some continuity and ability  
13 to interface these systems and so forth and they fit into  
14 our environment, but then the offices could do some  
15 development. So, we have a project now that's in the early  
16 stages of beginning to plan for that contract. And, of  
17 course, we will have customers on that source selection  
18 panel.

19 The last two recommendations, one gets back to  
20 what, Mr. Chairman, you said earlier about work process  
21 redesign and integrating with agency plans, the Human  
22 Resource Plan and the plan that Dick Volmer is working on  
23 with his group. We feel it's very important to integrate  
24 what we're doing, particularly in terms of prioritizing  
25 applications and choosing work process redesign projects



1 with the agency's overall strategy and we feel it would  
2 perhaps be more appropriate to choose those projects, at  
3 least the work process redesign projects, in the context of  
4 the agency's overall strategies. Instead of having the IT  
5 Council be the one to prioritize those, it should be part of  
6 this strategic planning process if possible. So, that's one  
7 idea that we had.

8 It will also help us very much in prioritizing  
9 applications if we have an agency-wide strategy. Right now  
10 it is very difficult to decide whether an NMSS project is  
11 more important than an NRR project is more important, and I  
12 don't know that we'll ever totally solve that problem, but  
13 --

14 CHAIRMAN SELIN: You know, that's an entry to  
15 something I wanted to ask you about, so I'll do it here.  
16 You know, centrally planned economies don't work very well.  
17 Basically having a central group trying to set priorities is  
18 very hard to do. What about privatizing a little bit? In  
19 other words, giving customers budgets and let them  
20 allocate --

21 MR. THOMPSON: That's exactly what we're talking  
22 about.

23 MR. CRANFORD: That's divestiture. That's the  
24 exact concept that we're trying to promote.

25 MS. GOLDBERG: Actually, the offices do have their

1 budgets now for systems development. The purpose of the  
2 Council is primarily one of coordination and prioritizing  
3 those projects that are IRM -- that IRM is going to do.  
4 They do prioritize all the others, but that part is more for  
5 coordination because the offices essentially have their own  
6 budgets and they can execute them in the order that they see  
7 fit.

8 CHAIRMAN SELIN: What share of IRM's work is  
9 reimbursed from the offices, any?

10 MS. GOLDBERG: We spend -- our budget is \$40  
11 million a year. The program offices have last year budgeted  
12 in the last cycle \$15 million.

13 CHAIRMAN SELIN: What I was thinking is that would  
14 be sort of the other way around. You might do \$40 million  
15 through IRM but that except for a few agency-wide true  
16 infrastructure projects, most of them or at least a number  
17 of them would be commissioned by the offices. Even if it's  
18 just funny money, it's real money. It goes into real  
19 license fees and real bills. It's an investment decision  
20 that the office is --

21 MS. GOLDBERG: Well, in terms of systems  
22 development, what the offices are spending is much higher  
23 than what IRM is spending because most of IRM's expenditures  
24 are in telecommunications and infrastructure and program  
25 management.

1                   CHAIRMAN SELIN: Not in development?

2                   MS. GOLDBERG: Not in development. So  
3 right now I would say the offices are probably spending  
4 twice what we are on -- well, more than twice what we are in  
5 development because a lot of our development budget is  
6 maintenance.

7                   CHAIRMAN SELIN: I don't really want to get too  
8 deeply, but you're talking about what the Commission is  
9 interested in. Who pays and who makes decisions are the  
10 kinds of questions the Commission is interested in.

11                  MR. THOMPSON: That was one of the prime reasons  
12 behind divestiture and setting up this agency-wide  
13 development contract, and also another bullet that Fran will  
14 be getting to is computer professionals at the office level.  
15 For those very reasons, we've embarked on a program to try  
16 and give them more control over their own --

17                  CHAIRMAN SELIN: That's good. I do think it's  
18 important to distinguish between where is it most efficient  
19 to do work versus where are the resource decisions made. I  
20 don't have an opinion on the first question. I was really  
21 raising it on the second question, that even for those  
22 projects that have multi-users or particularly high  
23 professional content and are efficient to be done through a  
24 supply-oriented organization instead of a demand  
25 organization, how they're commissioned and how they're

1 budgeted and paid for still is an interesting question.

2 MR. THOMPSON: Well, we certainly have opened that  
3 up and I think our thinking is maybe not quite as far along  
4 or our actions might not be quite along as your thinking,  
5 but we certainly are moving in that direction both in the  
6 budgeting and the execution process there. The people who  
7 are really the users are going to be the most interested in  
8 the timeliness and support the development and we want to  
9 make sure though as it's developed it can be run on the  
10 platforms, that it doesn't have cross purposes. So, there  
11 is a kind of coordination and important role that IRM will  
12 play on a number of these activities.

13 CHAIRMAN SELIN: Absolutely.

14 MS. GOLDBERG: The LANs make it very important  
15 that as a new system is installed we're involved somehow to  
16 make sure it doesn't impact on other applications. So --

17 CHAIRMAN SELIN: Nothing I said should be implied  
18 as saying that I have a view on where the work should be  
19 done and whether there should be centralized standards. I  
20 was only talking about the budgeting and accounting, not the  
21 project organization or management.

22 MS. GOLDBERG: The budgeting for systems  
23 development has -- all major offices now have their own  
24 budgets for systems development and IRM is budgeting for the  
25 small offices in agency-wide applications. So, I think that

1 perhaps we could brief you in a little more detail on this  
2 issue, but I think we have done that.

3 We have helped a number of offices with their  
4 hiring of some 334, which is the computer specialist series  
5 and we are working with others on that.

6 [Slide.]

7 MS. GOLDBERG: As I quickly review now some of the  
8 highlights from IRM's Five-Year Plan, I think you'll see  
9 that they do reflect the Council recommendations and the  
10 response to some of the trends that we discussed.

11 First of all, I should say that the objectives and  
12 program guidance for IRM were revised to reflect strategic  
13 plan, the new Council recommendations and the new  
14 organizational structure of IRM. So, there were quite  
15 extensive revisions this year and we feel right now that our  
16 piece of the Five-Year Plan is a very good representation of  
17 our strategy. There's a lot more emphasis on partnership  
18 with customers and customer service. I think it focuses  
19 primarily on internal customers, but could stand a little  
20 more on the external. More emphasis on technology  
21 assessment and transfer.

22 [Slide.]

23 MS. GOLDBERG: We have a continued major emphasis  
24 on the network, making sure it is up to date, reliable,  
25 capable. We're going to be phasing in Windows starting in

1     FY '95. We're going to be adding more applications to the  
2     network. We're going to be expanding the access to  
3     Internet, as we discussed, with MOSAIC and the full access  
4     to Internet. We are expanding remote access to the LAN. We  
5     have a number of people who need to access the LAN from home  
6     or on travel and we have accommodated that requirement. We  
7     expect probably that may grow over the next year.

8             [Slide.]

9             MS. GOLDBERG: The next slide.

10            As we mentioned, we're continuing to aggressively  
11     pursue distributed computing and LAN-based applications. and  
12     we have recognized the importance of the document management  
13     and workflow applications. We've given them considerable  
14     attention in our plans. I think I've mentioned all of these  
15     pretty much. We're going to be looking also into electronic  
16     recordkeeping systems, what are the implications for records  
17     management. That's another area that's important.

18            [Slide.]

19            MS. GOLDBERG: In summary, I have these two slides  
20     to kind of wrap this up. We feel that customer-centered  
21     planning has been very beneficial and has allowed us to  
22     focus on the areas with the greatest payoff for the offices.

23            We've made a fair amount of progress, with the  
24     Council, on our acquisition, with workstations, networking,  
25     our new support center, beginning the work process redesign,

1 the bulletin board strategy. We're going to keep working on  
2 document management, try to speed that up, and again we've  
3 made some progress with the client/server initiatives.

4 [Slide.]

5 MS. GOLDBERG: I think the trends, just to  
6 highlight those again, information technology really is  
7 critical for our responsiveness to our customers, who are  
8 primarily the public and licensees; that technology is the  
9 key to streamlining government operations that is envisioned  
10 by the NPR; that particularly in the networking area,  
11 technology is maturing rapidly. We're hearing about people  
12 having access to Internet through their television sets and  
13 cable lines and assorted variations of that. It could  
14 happen faster than we think. We need to be prepared.

15 Lastly, that the pervasiveness of technology is  
16 such that IRM simply cannot do this alone. We cannot be the  
17 sole provider of information technology systems or skills  
18 for the agency. We've got to work at spreading this  
19 knowledge around and empowering our customers to do more for  
20 themselves.

21 The Five-Year Plan reflects these trends and our  
22 customer recommendations. I think the four key elements are  
23 this partnership with customers, continuing dialogue with  
24 customers, focus on infrastructure. IRM should be focusing  
25 on infrastructure and agency-wide applications. That is

1 really going to be where we're at in the future, whereas the  
2 offices will be more and more doing their own office-  
3 specific applications. They need to be prepared for that.  
4 That is why we would like to work towards, as Moe mentioned  
5 earlier, this concept of divestiture to promote the offices'  
6 activities and help them with that.

7 MR. THOMPSON: That completes our briefing, Mr.  
8 Chairman, and we'd be pleased to answer any questions you  
9 may have.

10 COMMISSIONER ROGERS: Well, I was delighted to  
11 hear your results and progress. I thought the presentation  
12 was absolutely first rate and the progress is very good and  
13 very encouraging. It's something that represents a dramatic  
14 shift from where we were a few years ago. I think there's  
15 no question about that. So, I'd like to compliment  
16 everybody involved because I think it really is starting to  
17 roll now.

18 I do think that the President's and Vice  
19 President's initiatives in performance review and use of  
20 information technology has been a big help to us, I think,  
21 in moving ahead because it links the kinds of things that we  
22 were trying to accomplish into a broader national objective.  
23 I think that my own interest in improving our technology in  
24 this area really had pretty much to do with an internal  
25 focus, but I think we're seeing that the communication with



1 the public is such an important new possibility with this  
2 technology that it's going to move -- that it will move us  
3 much more rapidly in that direction.

4 I'd just say though that I think that that is very  
5 important and I'm very encouraged by the progress we're  
6 making. I would also want to see thought that our internal  
7 use, not necessarily for communication with the public but  
8 just our internal use of new high performance computing, is  
9 encouraged and developed as much as possible. I think the  
10 Chairman's cautionary remarks with respect to the fact that  
11 everybody doesn't have an access to information technology  
12 and everybody doesn't have access to a modem and a computer  
13 to avail themselves of the kinds of information we can  
14 present to them is an important consideration. I think we  
15 have to worry about that.

16 I also think that internally we should try to make  
17 sure we're using it for our own purposes as well to improve  
18 our efficiencies. I'm delighted with some of the activities  
19 that are going on. I think the electronic forms area is one  
20 that is really very important. But again, I think you want  
21 to couple it with the cautions of the Chairman with respect  
22 to don't just produce a rather cumbersome and really  
23 ineffective form electronically now and perpetuate it that  
24 way. Maybe a new approach to the form itself might be  
25 important based on what kinds of information one really

1 wants to have in the form and what perhaps doesn't have to  
2 be there that we automatically were collecting in the past.  
3 So I feel very encouraged by everything that's happening.

4 I have a couple of little detail questions I'd  
5 just like to explore while we're together. For example, I  
6 didn't hear you mention anything about the Development  
7 Technology Center explicitly. I wonder if you could say  
8 where that stands and what progress is being made on that.

9 MR. THOMPSON: Gerald?

10 MR. CRANFORD: Yes, sure.

11 We've gotten a study back. We've been working  
12 with Lawrence Livermore to basically give us the design on  
13 the center. Unfortunately, we didn't begin the process  
14 early enough to carve out probably as much space as we'd  
15 like to have had, but I think we will have, by locating the  
16 center in several places, we'll have enough space to get  
17 done what it is we need to get done.

18 So the primary space for the center will be on the  
19 second floor of the building, and, as far as the types of  
20 things we're going to be doing, obviously we're going to  
21 concentrate on providing support for the offices for their  
22 advanced high performance computing initiatives.

23 We're also looking at providing shoes for the  
24 cobbler's children as well. So there's a lot of things that  
25 this advanced technology center can do for the Office of

1     IRM. It can help us, particularly when we're looking at  
2     developing systems that can afford to fail. In other words,  
3     you can't do a lot of things with an up-running, up-standing  
4     network, but if you've got an environment where you can do  
5     some testing to make sure that what it is you're trying to  
6     do will work when you move it to the network environment.

7             So, not only do we have plans to help the offices,  
8     but I think it will also help the Office of IRM to further  
9     the things that we need to do from an infrastructure  
10    standpoint.

11            COMMISSIONER ROGERS: When do you expect to have  
12    that operational? Do you have any idea?

13            MR. CRANFORD: I'm going to have to get back to  
14    you. I don't have the specific times or schedules as to  
15    when it would be up and operational, but we'll get that  
16    material back to you.

17            COMMISSIONER ROGERS: I'd be very interested in  
18    that.

19            MR. CRANFORD: Sure.

20            COMMISSIONER ROGERS: With respect to MOSAIC, it  
21    seems to me to be such a powerful concept and tool that  
22    there are many, many applications that one can envision  
23    using the MOSAIC interface. How broadly are we intending to  
24    adopt that internally?

25            For example, while this is a very controversial

1     area, it certainly seems as if the objectives of the LSS,  
2     for example, and the technology that was discussed for the  
3     LSS some years ago seems to be totally out of date today,  
4     and yet MOSAIC looks like it might be a very effective  
5     interface for people to an LSS and I wonder to what extent  
6     we're talking about that with DOE and the users, the group  
7     of people that are interested in the LSS.

8             MR. CRANFORD: Well, I don't think we've had any  
9     dialogue with DOE as far as using MOSAIC, the LSS, but I  
10    know that we do have some meetings coming up and, Moe, you  
11    might want to talk a little bit about that and how this  
12    might figure into your planning.

13            MR. LEVIN: As a matter of fact, the DOE, I think,  
14    has recognized that the original design technology  
15    envisioned for the LSS, things have changed so much, so they  
16    have just recently commissioned a study to readdress the  
17    functional requirements and the technology used for the LSS.  
18    I haven't had a chance to talk to them in any detail because  
19    they're just now doing a study that will be concluded the  
20    first of October, but I agree with your comments.

21            CHAIRMAN SELIN: Since Doctor Dreyfus was here?

22            MR. LEVIN: Pardon?

23            CHAIRMAN SELIN: Is this since Doctor Dreyfus was  
24    here?

25            MR. LEVIN: Yes. Yes.

1           CHAIRMAN SELIN: So we no longer have assurances  
2     that the NUDOCS system will support -- that their document  
3     -- what do they call --

4           MR. LEVIN: Infostreams. That is, in my  
5     understanding, the situation. They are just -- since the  
6     responsibility for -- the project responsibility for the LSS  
7     has been moved to the Las Vegas, to the Yucca Mountain  
8     project office, they are just taking a fresh look at what  
9     technology to be used. They have not precluded the use of  
10    Infostreams is my understanding.

11          MR. THOMPSON: I think they're still committed to  
12    the approach and looking at the approach that we talked  
13    about before where they would do much of the front end work  
14    and leaving the controls, as articulated, to us, whether  
15    it's Infostreams or maybe another generation on Infostreams.  
16    I don't know exactly where that stands, and that's why he  
17    said they are looking at that study now as to how to marry  
18    those two systems would be what we're looking at. I don't  
19    think they have backed away from their kind of approach to  
20    look at it, to effectively utilize the resources that are  
21    available in a cost effective way.

22          CHAIRMAN SELIN: Is that yes or no?

23                 They're still going to use whatever system they  
24    used for entering the documents to support our applications  
25    on the LSS.

1 MR. LEVIN: That's what we believe.

2 CHAIRMAN SELIN: But they're reexamining --

3 MR. THOMPSON: Reexamining precisely what that --

4 CHAIRMAN SELIN: Because, a lot of their documents  
5 will not be specifically entered for the LSS. They'll come  
6 from their --

7 MR. LEVIN: I don't think that has changed. They  
8 may just be looking at some of the underlying mechanisms to  
9 take advantage of MOSAIC or whatever other new technologies  
10 have emerged, but the spirit of it is going to be the same.

11 CHAIRMAN SELIN: But we sent them a letter asking  
12 if that was true. We still don't have an answer to that  
13 letter, is that correct?

14 MR. LEVIN: That's correct.

15 CHAIRMAN SELIN: Commissioner Rogers, excuse me.

16 COMMISSIONER ROGERS: No, no. Fine. It's  
17 certainly relevant to the whole question. But it does seem  
18 as if it's a timely question as to whether -- you know, what  
19 the interface is, the public interface to LSS, and MOSAIC  
20 looks like a, you know, worthy of consideration, at any  
21 rate.

22 Could you say a little bit about REGNET, the  
23 extent of our involvement in REGNET? It is another one of  
24 the national objectives coming out of Vice President Gore's  
25 interests. His home page is up and available and very

1 attractive. I think his picture on there is a lot better  
2 than the pictures of the Commissioners, and maybe we ought  
3 to look at that.

4 CHAIRMAN SELIN: Garbage in, garbage out.

5 COMMISSIONER ROGERS: But I think that there are  
6 some interesting developments in the REGNET area. I know  
7 that some of our folks have been working very assiduously on  
8 that. I didn't hear anything about it. I have been  
9 concerned about some of those initiatives not being linked  
10 closely enough into our overall IRM strategy and I wonder if  
11 you can say anything about that. If you can't, then I think  
12 we have a little bit of a problem.

13 MR. CRANFORD: I think I can say something about  
14 REGNET. As far as the infrastructure that we're developing,  
15 the ability to communicate externally, the MOSAIC, Internet,  
16 these products are all, I think, available. And if given  
17 the project that we would want to perform a REGNET type  
18 operation on, I think that's where we are now. We're really  
19 looking to come up with a project that would be a good  
20 REGNET type exercise.

21 I think as far as the infrastructure, as far as  
22 the tools, as far as the mechanisms, I think they are either  
23 in place or could be in place very shortly, so what we're  
24 really doing now is looking at the opportunity. What's the  
25 best opportunity for us as an agency to participate in this

1 type of an exercise?

2 COMMISSIONER ROGERS: Well, we are very much  
3 involved with it, is my understanding, so, you know, I guess  
4 you're talking about how we particularize --

5 MR. CRANFORD: Exactly.

6 COMMISSIONER ROGERS: -- the first pilot project.

7 MR. CRANFORD: Right.

8 MR. THOMPSON: Selecting the first project and  
9 what its scope would be, how to participate in it, and we're  
10 still working with the various program offices who would be  
11 the participants in that to go forward.

12 Pam Kruzic is our key point of contact on the EDO  
13 staff for the activities associated with REGNET which is in  
14 Gerald's staff for the technology advancement activities and  
15 we are working with the NPR staffs to support their  
16 activities. I don't think REGNET is -- you know, I think  
17 we're keeping pace with it. I don't think we're pushing it  
18 right now at the envelope.

19 COMMISSIONER ROGERS: Well, we are one of the  
20 principal regulatory agencies that can use it.

21 MR. THOMPSON: That we are.

22 COMMISSIONER ROGERS: I'd like to encourage us to  
23 keep connected there and move as expeditiously as we feel we  
24 can.

25 MR. THOMPSON: That's our intent, because, you



1 know, we have a lot on our plate and we want to be  
2 responsive to a large number of demands.

3 MR. CRANFORD: And I believe we are in a position  
4 to do that if we had the project that we wanted to work on.  
5 I think we'd be ready to go.

6 COMMISSIONER ROGERS: I find the external  
7 applications very interesting that may be, you know, further  
8 down the road -- for instance, international communications  
9 on exchange of nuclear data. I know we've talked to the  
10 Japanese about this and perhaps their use of MOSAIC. I know  
11 they are interested in MOSAIC. I know they're interested in  
12 Internet, in using Internet, and I think there are  
13 opportunities there for exchange of nuclear data that might  
14 be of very great use in constructing an overall database  
15 that would be useful not only for us but for the industry  
16 itself. I don't know. I think it might be useful to think  
17 a little bit and talk a little bit about questions of that  
18 sort that are becoming easier and easier with electronic  
19 communications now.

20 I wonder if you could say anything -- you touched  
21 on the virus question. You alluded to the problems that we  
22 had with a virus on the network a few months ago. It is  
23 always the nightmare of us all in this business that there  
24 will be a virus attack and it sure seems to happen. Is  
25 there a problem with your bank card project in the purchase

1     -- does this involve the purchase of software or is it only  
2     hardware? And how do we --

3             MS. GOLDBERG: I can tell you what we're doing to  
4     try to avoid having another virus. We now have a contractor  
5     in place who, first of all, can provide professional help.  
6     The doctor is in when the virus strikes, if you need them.  
7     But to prevent that from happening, we have special anti-  
8     virus software which we are now updating every month with  
9     the new anti-virus software. We have on-line access to  
10    virus alerts from NIST and the labs. We're looking at our  
11    contingency plans and our backup procedures for faster  
12    recovery should another virus actually manage to get into  
13    the network.

14            I think we're much better prepared now than we  
15    were when this virus hit us. We had to go out and get a  
16    contract. We first tried to solve the problem ourselves  
17    with information that we had about this virus and it was at  
18    the point where we needed outside help. We had to go out  
19    and get a contract. Now we have a contract in place if  
20    something should happen and we're taking these preventative  
21    measures also.

22            MR. THOMPSON: I think the system is set up that  
23    each morning when you cut your machine on it does a scan.  
24    We have a program that's available to each individual who  
25    would like to go out and purchase a -- he can run the virus

1 check on that equipment before he puts it on, and I think --  
2 don't we have some machines set up just to check --

3 MR. CRANFORD: Clean machines.

4 MR. THOMPSON: The clean machines.

5 MS. GOLDBERG: We have clean machines. Yes, I  
6 think we have clean machines available. I don't know  
7 exactly the details on that.

8 MR. LEVIN: To clarify a little bit, what we  
9 learned from the exercise we went through is that the best  
10 way is not to cure you after you've got the disease. It's  
11 to prevent.

12 COMMISSIONER ROGERS: Absolutely.

13 MR. LEVIN: As a result of researching what to do  
14 about this, we came across a company that provides a product  
15 that is called a virus behavior blocker. It actually  
16 prevents viruses from getting into the system, so it's not  
17 really a scan so much like we used to do because that's  
18 after the fact. You catch it after you already have it. We  
19 have software now that's been proven to work. It's caught  
20 several instances of virus attacks before they ever got into  
21 the system, so we feel like we're in very good shape now.

22 COMMISSIONER ROGERS: Well, I hope so.

23 I wonder if you could say anything about the  
24 languages. We're moving more and more towards use of UNIX.  
25 A few years ago UNIX was not something we even knew much

1 about here, I know, and today we have UNIX machines in  
2 operation. We're moving more and more in that direction.  
3 How receptive are people to learning the UNIX language here?  
4 Can we make that easier? It never was seen as a  
5 particularly user-friendly --

6 MR. THOMPSON: Obviously, we're trying to develop  
7 training systems for the staffs. I think those who use it  
8 frequently are much more receptive to it and much more able  
9 to develop. We're looking at ways to develop training  
10 programs for the various people.

11 I don't know, Gerald, if you've got some other --

12 MR. CRANFORD: I think UNIX is -- I consider it  
13 more of a niche language. You're going to have certain  
14 people -- for example, the folks in the TAG group, plus  
15 we've got some people internal to IRM who are UNIX trained.  
16 I think, Moe, you've got training in UNIX or you're very  
17 familiar with the UNIX language. But I don't really see  
18 that as a language that you're going to get a widespread  
19 number of people who are going to be beating down your doors  
20 to develop, I just don't think, in the type of applications  
21 that we do here. That's not to say that in the high  
22 performance computing area that you wouldn't get a high  
23 demand. That's where I would expect it to happen.

24 COMMISSIONER ROGERS: It's really taking over  
25 there.

1 MR. CRANFORD: Right. So, I don't know.

2 Do you want to add anything to what I've said?

3 MR. LEVIN: Well, what I was going to say is UNIX  
4 -- we may find a lot of UNIX as an underlying technology  
5 that enables some other things to happen, for instance  
6 MOSAIC. MOSAIC is basically a front end for a lot of things  
7 that could be done directly through UNIX, but UNIX was so  
8 obscure and arcane that the casual user could never deal  
9 with it, so they developed an interface in front of it.

10 So I think the question of UNIX or not UNIX is  
11 going to kind of be a moot point. We won't care whether  
12 it's UNIX. We'll be looking at another layer of software  
13 that gives you the access and you won't care whether you're  
14 under UNIX or DOS or WINDOWS and the real focus is going to  
15 be on the real man-machine, human-machine interface and not  
16 the underlying operating systems, so that kind of will solve  
17 itself about making it easier to use.

18 COMMISSIONER ROGERS: That all depends upon lots  
19 of memory cheap and --

20 MR. LEVIN: Exactly.

21 COMMISSIONER ROGERS: -- that's the way things are  
22 happening.

23 MR. LEVIN: It's happening today, yes.

24 COMMISSIONER ROGERS: Just one other question. I  
25 never hear anything about Ada anymore. Do you --

1 MR. LEVIN: Ada Lovelace. Oh, you mean --

2 COMMISSIONER ROGERS: It probably hasn't died,  
3 but, you know, where does it stand? It was really the  
4 standard government issue at one point.

5 MS. GOLDBERG: Only in DOD, though.

6 MR. LEVIN: Well, no, what happened -- that's what  
7 happened. It was never embraced commercially. There've  
8 been very few successes of Ada commercially here in the  
9 United States. In Europe, when Ada first came out they took  
10 to it and I think they've used it quite a bit. But for  
11 several reasons, one, the resources it takes plus the  
12 training it takes. It takes a lot more sophistication to  
13 write in Ada than it does in COBOL, for instance, so the  
14 commercial applications here have just not embraced it.  
15 It's still very widely used within the Department of  
16 Defense, but of course nowhere near as wide as they had  
17 anticipated when it was first designed.

18 COMMISSIONER ROGERS: Yes. And it really -- that  
19 doesn't give us a problem, that we're not --

20 MR. LEVIN: Not in the least bit. Not in the  
21 least bit.

22 COMMISSIONER ROGERS: Well, thank you very much.  
23 Excellent job.

24 COMMISSIONER de PLANQUE: I have to tell you that  
25 on my way down here I noticed that in my office we just got

1 delivery of a brand new paper recycle bin that's larger than  
2 the one we had before. It occurs to me that this project is  
3 somewhat similar to managing waste. Maybe we can measure  
4 progress by the size and numbers of our recycle bin.

5 I did want to thank the group for the demo that I  
6 got recently. I found it extremely interesting and very  
7 helpful.

8 The one element that has been mentioned several  
9 times that I think is extremely important is the training  
10 element. You mentioned the possibility of required training  
11 for SESers. But I think there's training required on all  
12 levels and I'm sure you've talked about this and the  
13 training for maybe higher level managers and folks like us  
14 is going to be of a very different nature than the training  
15 of others who really need to get into the nuts and bolts of  
16 the system.

17 So, some thinking about the types of training  
18 available or that needs to be available for the different  
19 types of people in the agency is extremely important. But I  
20 would carry that one step farther and that is in dealing  
21 with the public and outsiders who want to have access. I  
22 think it's more. It troubles me a little how we're going to  
23 deal with that because I think it's more than just providing  
24 machines and dollars and accessibility of equipment, that  
25 there needs to be some way to provide some simple user

1 friendly training so that people who are much more  
2 intimidated in terms of using this kind of facility than  
3 even some folks here are will indeed find it useful and  
4 accessible. So, I hope you are thinking along those lines.

5 I have one question. I think I know the answer  
6 but I'm not sure. When we get into licensee submittals  
7 electronically, is it clear if and when during any part of  
8 the process actual paper is needed for legal reasons or  
9 otherwise?

10 MR. THOMPSON: We have some special group that's  
11 kind of looking at that as a prototype.

12 MS. CYR: We're still working on developing what  
13 the protocol is for getting an electronic signature. That's  
14 in development. I think we're getting fairly close to  
15 getting a government-wide standard on what will be  
16 acceptable for an electronic --

17 COMMISSIONER de PLANQUE: The signature part is  
18 more of the problem than anything else on these things?

19 MS. CYR: That's right, how you ensure and that  
20 the document that you get is the one that you deal with and  
21 it doesn't change from that point on.

22 COMMISSIONER de PLANQUE: You know, this is common  
23 garden variety procedure in the real estate business. So,  
24 there must be a way to do this.

25 MS. CYR: Right. But the National Archives is in



1 charge of a group developing what the standard is for that  
2 and I think they've agreed on what the standard for that is,  
3 but I don't think it's been finally promulgated yet. But  
4 we're expecting that shortly, which will then give us the  
5 ability to go ahead and establish by rules what the protocol  
6 is that you have to use to be able to accept documents  
7 electronically.

8 COMMISSIONER de PLANQUE: Okay. Thank you very  
9 much. It's been very helpful.

10 CHAIRMAN SELIN: I thought that was terrific. I  
11 don't have anymore questions that I care to make today other  
12 than those that I put.

13 Having said that, and I really do mean that, I  
14 would also like to remind you we spend over 2 percent of our  
15 budget really on data processing, not just the paper  
16 processing, between the IRM budgets. That's generally  
17 considered sort of not expansive but fairly generous budget  
18 for large organizations. So, you're producing really good  
19 things. You've been given a lot of money collectively to do  
20 it, so it shouldn't be surprising that there's progress. We  
21 need to keep this up and make sure that it's reflected in  
22 the various users.

23 As Commissioner Rogers said, this is just head and  
24 shoulders above where we were a couple of years ago. It's  
25 very good.

1 Thank you very much.

2 MR. THOMPSON: Thank you.

3 [Whereupon, at 3:26 p.m., the above-entitled  
4 meeting was concluded.]

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This is to certify that the attached description  
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TITLE OF MEETING: Briefing on Information  
Technology Strategic Plan  
Public Meeting

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Wednesday, September 7, 1994

was held as herein appears, is a true and accurate  
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# **NRC INFORMATION TECHNOLOGY STRATEGIC PLAN UPDATE**

**Office of Information Resources Management  
Francine F. Goldberg**

**September 7, 1994**

# **AGENDA**

**1. PROGRESS ON FY 1994-1998 INITIATIVES**

**2. TRENDS**

**3. IRM PLANS FOR FY 1995-1999**

# **INFORMATION TECHNOLOGY (IT) PROGRAM AREAS**

- **IT PROGRAM MANAGEMENT**
- **IT INFRASTRUCTURE**
- **APPLICATIONS & INFORMATION  
MANAGEMENT**

# **IT PROGRAM MANAGEMENT**

- **IT Council advising IRM**
- **IRM reorganized to more effectively carry out agency IT strategy**
- **IT acquisition improved**

# **IT INFRASTRUCTURE**

## **Workstations & Customer Service**

- **Office automation workstation upgrade begun**
- **Customer support improved**
- **Support for high performance computing environment in place**



# **IT INFRASTRUCTURE (Continued)**

## **Networking**

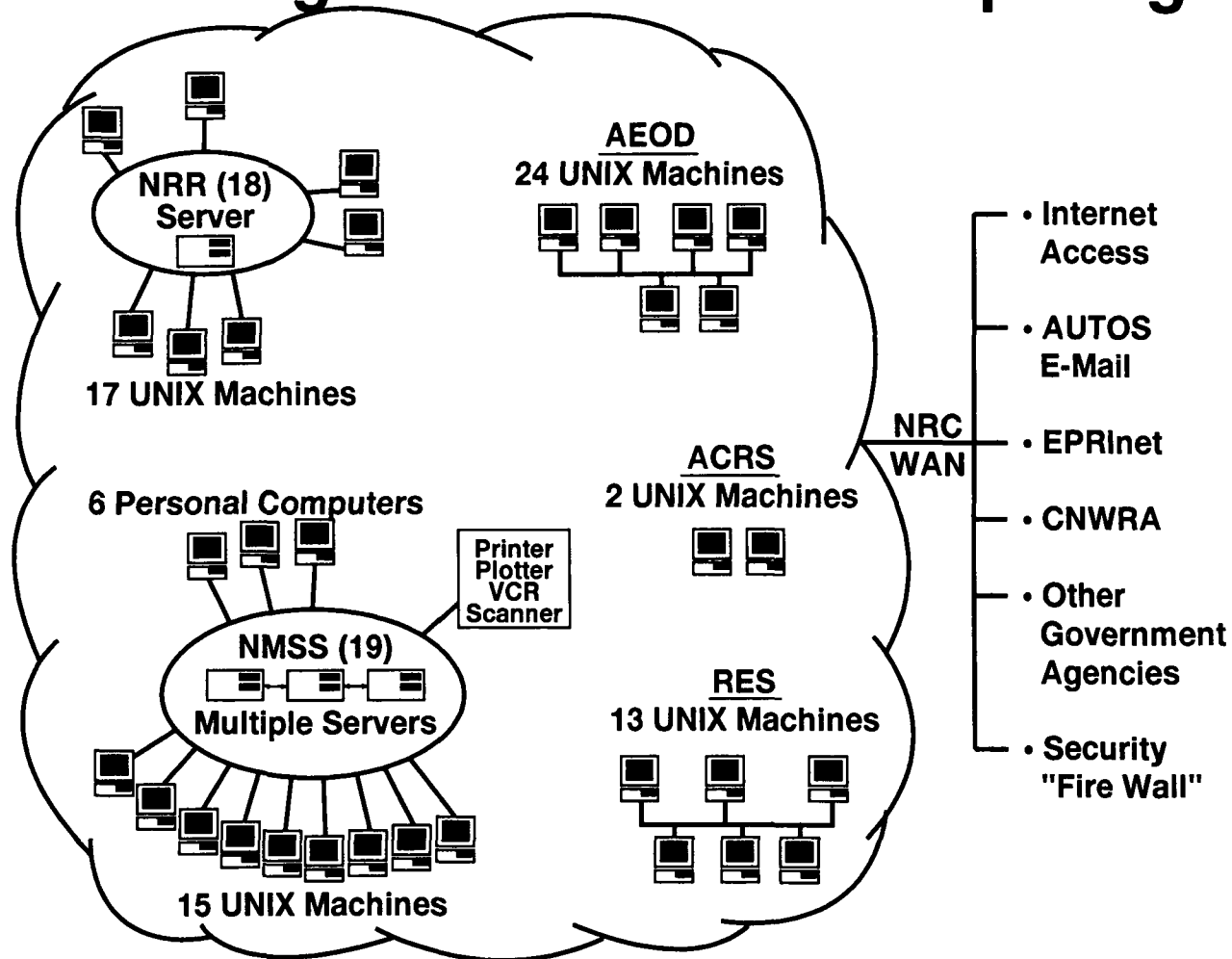
- **Internet provides expanded information exchange with stakeholders**
- **MOSAIC provides graphical interface for more effective information sharing**
- **NRC local/wide area network FY 1994 upgrades increase reliability and capacity**

# **IT INFRASTRUCTURE (Continued)**

## **High Performance Computing (HPC)**

- **Technology Advancement Board  
coordinating agency HPC needs**
- **HPC environment upgrades continuing**

# NRC High Performance Computing



# **APPLICATIONS & INFORMATION MANAGEMENT**

- **Work Process Redesign pilots underway**
- **Bulletin Board Strategy in place**
- **Document management initiatives begun**
- **Client/server initiatives underway**

# **AGENDA**

**1. PROGRESS ON FY 1994-1998 INITIATIVES**

**2. TRENDS**

**3. IRM PLANS FOR FY 1995-1999**

# **TRENDS**

## **PUTTING THE CUSTOMER FIRST**

- **Integrated government-wide electronic bulletin board and information locator**
- **Electronic information dissemination, including FOIA**
- **Electronic information collection**

## **STREAMLINING THROUGH USE OF TECHNOLOGY**

- **Electronic Commerce**
- **Government-wide Geographic Information System**
- **Work Process Redesign**

# **TRENDS (Continued)**

## **RAPID MATURATION OF NETWORKING**

- **Employees increasingly dependent on NRC LAN**
- **Rapid growth of Internet usage**
- **Government-wide E-mail**
- **National Information Infrastructure**

## **TRENDS (Continued)**

### **GREATER UNDERSTANDING OF INFORMATION TECHNOLOGY NEEDED AT ALL LEVELS**

- **SES-level and middle managers**
- **Outside traditional IRM shops**



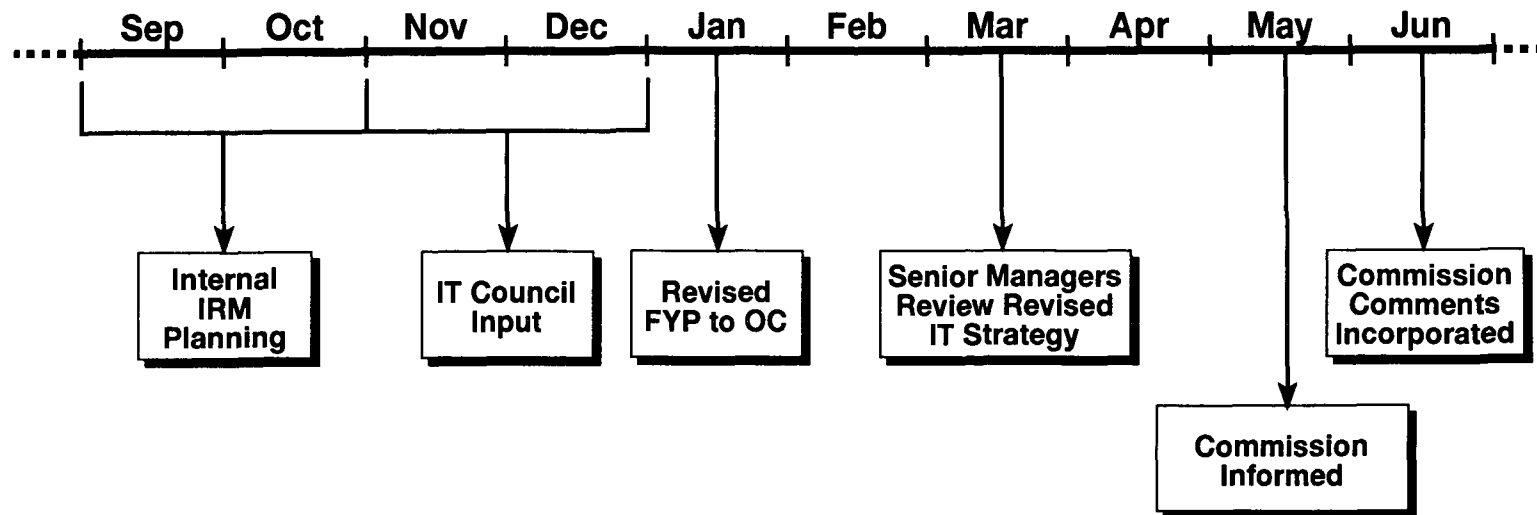
# **AGENDA**

**1. PROGRESS ON FY 1994-1998 INITIATIVES**

**2. TRENDS**

**3. IRM PLANS FOR FY 1995-1999**

# Annual IT Strategy Update Process



# **IT COUNCIL RECOMMENDATIONS**

## **DOCUMENT MANAGEMENT:**

- **Expedientiously develop new agency text and image management system**
- **Implement an interim LAN-based text search and retrieval system**

## **ELECTRONIC WORKFLOW:**

- **Lay the groundwork for electronic processing of internal correspondence**
- **Proceed expeditiously with electronic forms**

# **IT COUNCIL RECOMMENDATIONS**

## **(Continued)**

### **CUSTOMER SERVICE:**

- **Expedite IRM resource acquisitions**
- **Increase customers' ability to acquire IT products and services directly**
- **Expand scope of the IRM Customer Support Center**
- **Increase IRM understanding of customers' needs**

## **OTHER RECOMMENDATIONS**

- **Better integrate agency and IT Strategic Planning**
- **Improve office-level systems development capabilities**
  - **Computer professionals at the office-level**
  - **Systems development contract for agencywide use**

## **HIGHLIGHTS FROM IRM'S FIVE-YEAR PLAN OBJECTIVES AND PROGRAM GUIDANCE**

- **Revised to reflect the IT Strategic Plan and new IT Council recommendations**
- **More emphasis on partnership with customers and customer service**
- **More emphasis on technology assessment and transfer**

## **HIGHLIGHTS FROM IRM'S FIVE-YEAR PLAN (Continued)**

- **Continued emphasis on network upgrade:**
  - **Phase-in of a graphical user interface (Windows)**
  - **Addition of standard graphics, spreadsheet, and communications software to agency networks**
  - **Expanded Internet access**
  - **Access to NRC LAN from home**

## **HIGHLIGHTS FROM IRM'S FIVE-YEAR PLAN (Continued)**

- **Aggressive adoption of distributed computing technologies, such as client/server**
- **Aggressive application of technology to document management and “workflow” applications:**
  - **NUDOCS replacement**
  - **Electronic forms**
  - **Electronic information exchange with licensees and the public**
  - **Electronic bulletin boards**
  - **Electronic recordkeeping systems**



## **SUMMARY**

- **Customer-centered planning has focused the IRM program on areas with greatest payoff**
- **Progress since last year:**
  - **IT Council, acquisition of IT resources**
  - **Workstations, networking, support**
  - **Work Process Redesign, bulletin boards, document management, client/server**

## **SUMMARY (Continued)**

- **Trends show that information technology is**
  - **Critical for responsiveness to the public**
  - **Key to streamlining government operations**
  - **Maturing rapidly in the networking arena**
  - **Requiring broader distribution of IT skills**
- **Five Year Plan reflects trends and customer recommendations**
  - **Partnership with customers**
  - **Network infrastructure upgrades**
  - **Agencywide document management & workflow applications**
  - **Promotion of office-level IT activities**