US REGISTRY

3 MAR 1988

ROUTING AND RECORD SHEET

SUBJECT: (Optional)					
Strategic Planning for Information Technology					

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FROM: Executive Director 7D55 HQS		EXTENSION	NO. ER 0802-88		
			DATE 1 March 1988		

TO: (Officer designation, room number, and building)	DATE		OFFICER'S INITIALS	COMMENTS (Number each comment to show from whom to whom. Draw a line across column after each comment.)
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MEMORANDUM FOR: Information Systems Board

FROM: Executive Director

SUBJECT: Strategic Planning for Information Technology

1.   During our offsite meeting last November, we heard from each of you about your long-range plans for information technology. It was evident that considerable effort had gone into planning. I was especially encouraged by both the quality of these efforts and the forthright discussions during the presentations. Overall, we have made a good start in getting more directorate involvement in the critical issues relating to management of information technology.

2.   I was struck by the consistency of the goals and challenges across the directorates that were reflected in the plans. Some of the common themes were:

-- the need for specific, workable proposals which will significantly enhance the security of our information processing systems.

-- the commitment to reducing technological barriers to the sharing of information.

-- the need to provide better and easier-to-use tools throughout the network for the acquisition, processing and management of information. Particularly, the need for tools which will integrate textual information with image, graphics and other forms.

-- the need to continue integration of the paper and data worlds.

-- the trend towards distribution of information and processing capabilities so as to improve the reliability and responsiveness of our systems.

-- the commitment to move towards standards and commercial "off-the-shelf" technology to promote consistency, and portability within the network.

-- the great importance to each of you of gateways which would allow the secure exchange of information between networks.

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Commitment to these goals is significant because they carry forward the Agency policy that we published a year ago.

3.   An analysis of the strategic plans has highlighted seven issues requiring further attention by the Board. These topics will dominate our agenda for 1988. To focus attention on these problems, I plan to:

-- provide more detailed guidance for the next cycle of strategic planning.

-- charter three working groups to study specific, cross-directorate issues and to develop strategies or recommendations for dealing with these problems.

-- explore some of these topics further with presentations to the Board by members or by bringing in an outside speaker to stimulate discussion.

-- ask the Deputy Comptroller's Special Assistant to meet with some of the people who put together our plans to highlight areas deserving further thought.

In this memorandum, I would like to share with you my specific plans for encouraging progress on each issue and to provide guidance for your planners.

4.   It's clear that each of you see the need to provide our employees with a fundamental and consistent set of information processing tools, such as word processing and electronic mail. Most of us are having difficulty deciding how to achieve this goal, in part, because we have not clearly defined the desired end state for our information processing systems in the 1990s. We must first define the architecture of our networks by understanding the extent to which we will distribute our information and systems within the directorates. The DO has described their information architecture in the concept for DOLPHIN. It is now up to the technologists to take these concepts and make them real. The DS&T and the DI have also begun to articulate where they want to be. These decisions about how we will distribute our information technology will provide the foundation upon which much of our planning is based. We will address this issue by:

-- asking each of you to set forth in your next plan the desired end state for your information processing systems in the 1990s, and to describe the architecture needed to attain those goals.

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5. We have implicitly assumed that we will push information processing systems out towards the customer. This is the trend throughout Government and the private sector. Yet we haven't really come to grips with the implications of this decision. We haven't planned for the development of the infrastructure needed to support distributed information processing systems. We will address this issue by:

-- asking each of you to describe in your plans how you will manage the distribution of information processing, including the implications for the central services and the development of expanded support infrastructure within your components.

-- bringing in an outside speaker who can tell the Board how the process of decentralization was managed in the private sector.

6. Increased demands for telecommunications services are another clear implication of distribution. We haven't articulated our long-term requirements for telecommunications bandwidth and connectivity, thus making it difficult for the central services to make the investments today so that the needed capabilities will be there in the future. We will address this issue by:

-- forming a group to examine how the imagery community's approach to telecommunications might be applicable to other Agency problems.

-- asking each of your to identify in your plans where and how our existing communications systems are expected to fall short in providing the necessary connectivity and capacity within Headquarters, within the metropolitan area, and with the foreign and domestic field.

7. We have recognized that a shortage of information technologists is likely to be a severe constraint. A "creative solution" is sought, but no one has offered any concrete proposals. We will address this issue by:

-- forming a group to determine how many technologists with what skills we will require in the 1990s, and we can get there.

-- asking an outside speaker to tell the Board how a large company is dealing with this issue. Also, by asking OIT to discuss its experience with rotational assignments, including the distributed office support program.

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8. The planning process suggests that we need to do more to integrate everyday activities into the electronic world. Progress towards this laudable goal is impeded by bureaucratic underbrush which must be cleared away so we can move towards the integration of our paper and electronic cultures. We will address this issue by:

-- forming a group to determine the policy and procedural prerequisites to increasing our reliance upon electronic records.

-- asking each of you to list goals in your plans for converting everyday manual processes to electronic form, and to identify specific demonstration projects.

9. We have invested staggering amounts in our information processing systems during the past five years. Nevertheless, portions of this technology are aging and are, in some cases, on the verge of obsolescence. Most of us lack a systematic plan for recapitalization. As we enter an era of austerity, we need to establish a consistent and reasonable level of investment, and then stick with it. We will address this issue by:

-- asking each of you to describe in your plans how you intend to deal with an aging technology base, including goals for identifying and replacing obsolete information processing systems.

-- asking OIT to tell the Board about its program for recapitalization of mainframe systems, asking OIR to describe its program for recapitalization of workstations, and asking OC to review plans to modernize the foreign network.

-- asking the DS&T, the DO and the DA to tell the Board about their strategies for replacing the Wang Alliance systems.

10. While we have moved forward in computer security, our progress in developing an information security strategy continues to be outpaced by advances in technology. The most immediate example is the network gateway. As we reduce technological barriers to sharing of information, we pose risks to the security of our information. Yet, we do not have a comprehensive security policy for interconnections among networks. We will address this issue by:
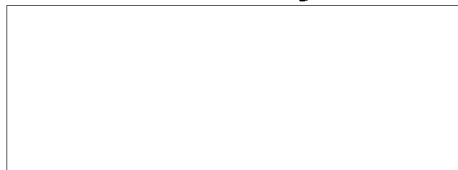
-- asking each of you to define in your plans your goals for establishing connections among our systems as well as between Agency and outside systems.

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-- asking OD&E to tell the Board about plans to establish connections between the DS&T Wang network and contractor systems. Also, by asking OS to discuss the security policy for gateways.

11. You will be see these actions reflected in our agenda for 1988 and in the terms of reference for the working groups. I expect that much of the Board's time at our next offsite meeting will be devoted to a review and discussion of your strategic plans. We have made a good start in focusing management attention on where we are going with information technology in the Agency, and I'm pleased with the modest progress to date. We hope to see considerable progress, particularly in the areas which I have highlighted, when we see the revised plans in

STAT   November.

James H. Taylor

cc: DDA