## March 24, 2001 - NASIRE President Otto Doll testifies to Congress on Federal CIO Position

**STATEMENT OF OTTO DOLL,**
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**REPRESENTING CHIEF INFORMATION**
**OFFICERS OF THE STATES**
**BEFORE THE UNITED STATES CONGRESS -**
**SUBCOMMITTEE ON GOVERNMENT**
**MANAGEMENT, INFORMATION, AND TECHNOLOGY**
**MARCH 24, 2000**

***Executive Summary***

Public sector Chief Information Officers (CIO) can be vital to our public leaders' decision-making on matters of governance. The proper alignment of information technology (IT) to government programs is a key enabler of effective government. A CIO who can support the chief executive's vision - whether of a mayor, governor or the president - facilitates the achievement of government's goals.

To achieve effective use of IT, the states have been gravitating to CIOs reporting to the governor. A survey conducted by NASIRE in February 2000 shows that 27 CIOs report to their governors - up from eight in 1996 (see Exhibits I and II - Download Power Point document). A cabinet-level reporting relationship appears critically important. Technology has become too important to the business of government today. IT is how business is delivered in government; therefore, the CIO must be a party to the highest level of business decisions. This is consistent with private industry's direction as shown by such companies as General Motors, whose CIO is at the board of directors level.

Three variations on this CIO structure exist in state government today: the CIO reports to the governor without an advisory board; the CIO reports to the governor after consulting an advisory board; or the CIO reports to a governing board and then to the governor. The NASIRE survey shows 29 states have some sort of technology commission in a supporting or oversight role.

Separating technology from government programs seems impossible today. State CIOs are responsible for putting their governors' visions and goals into action. As such, a CIO needs to inspire the leaders to dedicate political capital to the IT agenda. One powerful dynamic of IT is that it can enable all government services and initiatives - education, criminal justice, economic development, etc.

State CIO scope of authority is primarily confined to the executive branch of government but has expanded in many states to educational systems, the judicial branch, and to a lesser extent the legislative branch. Based on objectives set by the governor, the state CIO develops a process whereby each agency is learning, within the constructs of their own organization, the breadth of organizational information in a statewide sense while working toward these common objectives. The larger the enterprise view and responsibility of the CIO, the better IT solutions a government achieves. Functional authority of the state CIO is concentrated in enterprise-wide hardware and software systems (as opposed to the desktop world of personal computers) - examples being telecommunications networks, large data processing centers, large information systems, data warehouses, and public access facilities. CIOs are gaining authority over IT purchasing and acquisitions, IT facilities, IT personnel, and office automation. By combining managerial and technical knowledge, the state CIO can contribute significantly by bringing to government economies and efficiencies of scale in procurement, interoperability of systems, elimination of duplicative processes, data-sharing capabilities, and security and privacy.

State CIO scope of approval authority is usually over the setting of statewide IT plans and policies and approving statewide technical IT standards, rate schedules (usually for shared IT services), budgets, personnel classifications, and salaries and resource acquisitions. CIOs are being asked to approve

individual departmental IT rate schedules, personnel classifications, and resource acquisitions. Many states are considering their CIOs for operational control of IT assets. The CIO then is in the best position to ensure that IT investments are meeting the governor's policy goals. This approach matches the private sector where CIOs generally have budget and operational authority.

The NASIRE survey showed that 30 state CIOs have responsibility in at least three of the following four categories: planning, policy, standards and acquisitions. Some 25% of CIOs have minimum dollar thresholds on their authority.

Successful state CIOs spend most of their time offering perspective, context and direction to both technologists and program personnel. Considering the substantial size and rate of growth of IT expenditures by government, the CIO must advocate the wise deployment and use of IT resources to solve business problems or capitalize on opportunities.

Several elements have been found to contribute to successful governor-CIO approaches:

- **Shared IT vision** - by both the governor and the CIO - sets appropriate expectations of what technology can and cannot do;
- **Strong accountability** - begets trust - the capital of governance;
- **Sufficient level of authority** - allows working across agencies and jurisdictional boundaries;
- **Good management skills** - allows CIO to get technologists and program personnel to realize the IT vision;
- **Balance of business and governance orientations** - allows use of appropriate business principles in a public sector context; and
- **Ability to function in public administration** - allows CIO to be effective in the political and civil service spheres.

The state CIO also cooperates with local and federal authorities, often serving as the facilitator of cross-jurisdictional initiatives. Governments see the value of sharing information (as law enforcement has for many years), integrating their processes and sharing IT infrastructure (such as networks). Having a key authority figure in the CIO allows states to better coordinate resources across local, state and federal government for the complex information systems required to solve the governance problems of today.

The Y2K issue provided unique insight on the importance of the CIO position in government. Y2K presented the most extensive IT initiative ever undertaken - with coordination being required between governments, business and the public. All aspects of IT were affected. Dealing with such a massive project showed that we cannot rely on the stovepipe models of the past.

Until governors took ownership of the Y2K problem through their CIOs and the federal government took ownership through the President's appointment of John Koskinen, the proper coordination of policy and processes was not possible. Mr. Koskinen, in essence, served as the CIO of the federal government. He brought accountability and action to bear on the Y2K challenge, just as the state CIOs were doing in the states (as were mayor, county, and city CIOs across the country). Mr. Koskinen aligned the numerous federal agencies and provided a single point of contact for the states, just as the state CIOs were providing a single point of contact between the myriad of state agencies and the federal government. Why not have this structure in place to deal with nationwide law enforcement standardization, digital government initiatives, digital divide solutions, and other IT challenges?

In the increasingly technology-reliant world we live in, the CIO serves as the government's information management leader and key strategist to the decision points facing our political leaders. The role of aligning technology to achieve government program goals has never been so crucial to effective government. The CIO plays an essential role in making information technology work for government.

The remainder of this white paper delves into the experiences of state CIO models to identify the elements contributing to successful governor-CIO approaches. The dynamics of state CIO models are shown through the scope of CIO authority and their roles and responsibilities. Finally, the lessons learned from state and federal interactions during the Y2K issue are examined to shed light on the federal CIO model.

***CIO Models Used in the States***

Six basic CIO structures exist which may be ranked very broadly on their relative "strength" as follows:
Reports to governor = strong (+)
Reports to department chief = weak (-)
Has no IT board = strong (+)
Has an advisory IT board = neutral (0)
Has a governing IT board = weak (-)

The resulting CIO models are:
(*analysis of the statutory language for SD, NC, WI and NH is in the Appendix - Download Word documents*)

++ reports to governor but no board (SD)
+0 reports to governor after consulting an advisory board (VA)
+- reports to a governing board and then the governor (NC)
-+ reports to department chief but no board (WI)
-0 reports to department chief after consulting an advisory board (SC)
-- reports to a governing board and then department chief (NH)

A more complete accounting of authority would take into evaluation budgeting (submits directly/indirectly to governor/legislature or governing board), procurement (review/approval), and philosophical judgements such as having enterprise-wide authority, including oversight of educational systems, telecommunications networks, etc. Most states seem to be moving toward one of the top three "strong" positions listed above.

Exhibits I and II represent CIO organizational relationships with governors for 1996 and 2000. CIOs are moving closer to their governors. Every state has variations on the six categories.

***Dynamics of State CIO Models***

*Scope of authority.* CIO scope of authority is primarily in the executive branch only, but it has expanded in some states to educational systems, the judicial branch, and to a lesser extent the legislative branch. Functional authority is concentrated in enterprise-wide hardware and software systems (as opposed to the desktop world of personal computers), such as telecommunications networks, large data processing centers, large information systems, data warehouses, and public access facilities. CIOs are gaining authority over IT purchasing and acquisitions, IT facilities, IT personnel, and office automation. Approval authority scope is usually over the setting of statewide IT plans; setting of statewide IT policies; approval of statewide technical IT standards; approval of rate schedules for shared IT services; approval of IT budgets for statewide projects; approval of IT personnel classifications and salaries for statewide IT operations; and approval of IT resource acquisitions for the statewide IT organizations. CIOs are moving into approving individual departmental rate schedules for IT, approving IT personnel classifications for individual departments, and approving IT resource acquisitions for the individual departments.

By combining managerial and technical knowledge, CIOs can contribute significantly, by bringing to government economies and efficiencies of scale in procurement, interoperability of systems, elimination of duplicative processes, data-sharing capabilities, and improvements in security. A common problem that CIOs face is the fragmentation in IT budgeting and the lack of overall budget authority. Many states

still divide IT budgets by agency, even though total state IT spending represents a growing portion of state budgets (2-3% in most states).

Another obstacle facing state CIOs is the lack of operational control. A lack of operational control can ultimately result in the failure of the best budgeting strategies. Coordinated implementation is required to ensure that IT investments are meeting the governor's policy goals. In the private sector, CIOs generally have budget and operational authority.

A survey conducted by NASIRE in February 2000 showed that 30 CIOs have responsibility in at least three of the following four categories: planning, policy, standards, and acquisitions. Some 25% have minimum dollar thresholds on their authority.

CIO salary ranges also vary considerably. The lower end of the salary scale ranges from $61,000 to $80,000, and the higher end ranges from $91,000 to more than $100,000. The salary ranges generally reflect the CIO's position in state government. The lower range reflects primarily bureau- or sub-cabinet level positions; the higher range reflects primarily cabinet-level positions. However, these salary ranges are influenced by state demographics.

*Roles and responsibilities.* CIO roles and responsibilities can include: gaining legislative approval for IT appropriations and general legislative advocacy for IT; approval for all major IT projects; authority to enter into outsourcing arrangements; management of public access to state data; and translation of IT terminology for political appointees. CIOs are being given more authority for managing IT contracts; authority over the state purchasing function; authority to approve sole source IT contracts; responsibility for statewide process re-engineering; and, to a lesser degree, the responsibility for developing economic development policy using IT outside of government.

In almost half of the states, the CIO has responsibility for nearly all IT functions at the cabinet or sub-cabinet level, except for purchasing and contracting. At the bureau level, policy development, purchasing, contracting, business processes, and budget oversight are notably lacking among CIOs' responsibilities. Twenty-seven CIOs report directly to their governor. The others report to their administrative or financial department chief. Also, 29 states responding to NASIRE's February 2000 survey have some sort of IRM commission in a supporting/oversight role. This seems to have no relationship to the CIO's position in the state hierarchy.

***Elements Contributing to Successful Governor-CIO Approaches***

Several elements can contribute to a successful governor-CIO approach to IT management:

- **Shared IT vision** - by both the governor and the CIO - sets appropriate expectations of what technology can and cannot do;
- **Strong accountability** - begets trust - the capital of governance;
- **Sufficient level of authority** - allows working across agencies and jurisdictional boundaries;
- **Good management skills** - allows CIO to get technologists and program personnel to realize the IT vision;
- **Balance of business and governance orientations** - allows use of appropriate business principles in a public sector context; and
- **Ability to function in public administration** - allows CIO to be effective in the political and civil service spheres.

Governors are creating environments that will maximize their CIO's ability to maintain the budget and operational controls necessary to achieve overall state IT goals.

***Federal Y2K Experience***

The Y2K issue provided unique insight on the importance of the CIO position in government. Y2K

presented the most extensive IT initiative ever undertaken - with coordination being required between governments, business and the public. All aspects of IT were affected. Dealing with such a massive project showed that we cannot rely on the stovepipe models of the past.

Until Governor's took ownership of the Y2K problem through their CIOs and the federal government took ownership through the President's appointment of John Koskinen, the proper coordination of policy and processes was not possible. Mr. Koskinen, in essence, served as the CIO of the federal government. He brought accountability and action to bear on the Y2K challenge, just as the state CIOs were doing in the states (as were mayor, county, and city CIOs across the country). Mr. Koskinen aligned the numerous federal agencies and provided a single point of contact for the states, just as the state CIOs were providing a single point of contact between the myriad of state agencies and the federal government. Why not have this structure in place to deal with nationwide law enforcement standardization, digital government initiatives, digital divide solutions, and other IT challenges?