

HISTORY OF THE INFORMATION AND COMMUNICATIONS SERVICES DIVISION

March 2004

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1 INTRODUCTION

This document contains a brief history of the Information and Communication Services Division (ICSD), Department of Accounting and General Services (DAGS) within the State of Hawaii. ICSD is the central organization for Information Processing (IT) and Telecommunications (TC) within the Executive Branch of State Government. However Additionally, ICSD provides advice to the non-covered entities, such as the Judiciary and the Legislature on request if resources are available.

1.1 Purpose

The purpose for this document is to provide background information on the development and use of computers for information processing at the ICSD in the State of Hawaii.

1.2 Scope

This document is presented as a sequential timeline and is limited to information that is directly related to the history of ICSD. Since it is meant to provide an overview to show background, growth and trends, only major events are included.

1.3 Comments and Suggestions

Any State of Hawaii Information Technology Standards document, reference manual or users guide mentioned in this document are available through the departmental user agency data processing coordinator (DP Coordinator). Standards are also accessible on-line by clicking on [Information Technology Standards](#) on the [ICSD](#) home page at:

<http://www.hawaii.gov/icsd/>

Statewide Forms are accessible on-line by clicking on [Forms Central](#) on the [Government in Hawaii](#) home page at:

<http://www.ehawaii.gov/government/html/>

Any comment, recommendation, proposal, or suggestion regarding the contents or presentation of this document may be sent either via internet email to icsd.admin.ppmo@hawaii.gov or in writing to:



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Information Technology Standards

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2 HISTORY OF ICSD

Prior to 1962 the State had no formal computing service and did not use computers in operations, though computers were first installed in 1948 in the private sector experimentally and were very large and limited in features and capacity.

1962: A study authorized by Act 31, SLH, 1962 recommended the development of three computer centers in four phases over four years in the Departments of Accounting and General Services, the Department of Taxation (DOTAX), and the Department of Education (DOE). All three computer centers were to serve the data processing needs of the entire State, excluding the University of Hawaii's Academic-related functions and the Department of Transportation's research and scientific computational needs.

1963: The DAGS upgraded its card-oriented IBM1401 computer system to include magnetic tape processing capability.

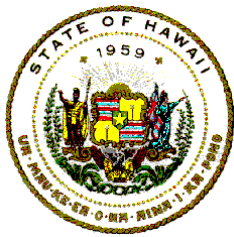
Following a feasibility study of statewide data processing operations authorized by the 1962 Legislature, Governor John A. Burns issued Administrative Directive No. 6 in 1963 establishing the Statewide Data Processing System, an organization for the coordination and integration of data processing activities in the State Government, and containing administrative policies thereto. The directorship of this agency was part of the Governor's Office.

1965: The formal organization of the Statewide Information System (SWIS) was approved as an agency assigned to the Department of Budget and Finance (DB&F) for administrative purposes, with the directorship remaining as a position in the Governor's Office. The SWIS function was known as the Electronic Data Processing Division (EDPD) in DB&F.

1966: Two new computing centers were established. An IBM System 360/30 was installed at the DOE. A Univac 1050, which was originally scheduled for the DOTAX, was installed at the Department of Labor and Industrial Relations (DLIR).

1968: Governor Burns transferred the administrative and functional control of the DOE's computing center to EDPD as the first step towards consolidating the three computing centers into a single facility.

1969: An IBM System 360/65 replaced the 360/30 at the DOE and the 360/30 replaced the IBM 1401 at the DAGS. The Customer Information Control System (CICS) was in use to provide transaction processing for applications.



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1970: Automated counting of ballots and processing of election returns is begun with ballot counting centers on Oahu, Maui, Kauai and the Big Island.

The SWIS Director's position was transferred from the Governor's Office to the DB&F, and SWIS was placed under the direct supervision of the Director of Finance.

1972 SWIS was reorganized formally as a division of the DB&F and given the designation of EDPD.

Between 1972 and 1976 the State's three computer centers were consolidated into a single computer facility under the administration and control of the DB&F.

1974: The database management system, ADABAS was purchased from Software AG and installed in June.

1977: AD 77-2 was issued by Governor George R. Ariyoshi. AD 77-2 assigned to the Director of Finance the responsibility to exercise functional and operational control over all data processing equipment and personnel in the State of Hawaii and to provide technical leadership in the field of data processing, mechanization, and computer use.

The Division replaced the IBM 360/65 with an IBM 370/168.

1978: Memorandum 1978-5 dated April 26, 1978 established the Governor's EDP Advisory Committee to assign statewide priorities for the development of computer-assisted application systems. The Advisory Committee was formed to modulate the demand for available IT/TC resources within the State, then called dp resources.

The Advisory Committee was instrumental in the allocation of appropriated funds to support the implementation of the departmental Distributed Information Processing and Information Resource Management (DIPIRM) Plans (\$1.5 million in fiscal year 1986 and \$1.0 million in fiscal year 1987).

1980: The Division replaced the IBM 370/168 with an IBM 3033 N8 and acquired an IBM 4341 to provide limited backup for the 3033.

1983: The Division installed an IBM 3083 E16 computer system and began dual processing . The Time Sharing Option (TSO) was made available to application system developers.



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1984: The Division replaced the IBM 3033 N8 with an IBM 3081 D32 computer system.

The Division was reorganized from two staff offices and three operating branches to two staff offices and four operating branches to improve communications, accountability, and service as well as to meet changes in information processing technology.

1985: The Division installed a Wang VS 100 computer system as the first increment in the State's goal to implement distributed information processing and information resource management. Installed software included SPEED II from the TOM Group and PACE from Wang Laboratories. Subsequently the Wang system was upgraded to a VS 7010. Over time, a total of four Wang VS systems were installed.

On the IBM mainframe, Natural Programming Language from Software AG was purchased to improve access to ADABAS files. The Distributed Office Support System (DISOSS) from IBM was started as a pilot.

1986 The first release of Data Processing (DP) Standards was published by EDPD and distributed in December.

1987: AD 87-1 was issued by Governor John D. Waihee. AD 87-01 established policies and assigned responsibilities related to the acquisition and utilization of telecommunications services and facilities within the Executive Branch of the Hawaii State Government and superceded Administrative Directive 81-03, dated October 28, 1981.

The DB&F, Administration and Research Office (ARO) was reorganized to centralize services. As part of the reorganization process, the division (then EDPD) transferred its Accountant IV, Account Clerk IV, a Clerk III, and a Key Equipment Operator I positions to ARO, thereby eliminating the fiscal section of EDPD but still requiring EDPD to do the basic functions of budget, expenditure plans, personnel actions inventory control, legislative liaison activities, and purchasing for the division. ARO was to provide services to the division in accounting and personnel to eliminate duplication of effort. This function was modified by the reorganization of ICSD in 1989 and again in the transfer of ICSD to DAGS in 1997 and the reorganization of ICSD in 1998.

1988: The Governor's Advisory Committee was disbanded after its mission of providing initial funding through the legislature was completed.



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The HAwaii Wide Area Integrated Information Access Network (HAWAIIAN) was conceived and implementation begun to address the State's need for high-speed access to share and process information. HAWAIIAN infrastructure supports data, voice, image, video, radio, and signal communication services.

1989: The EDPD was renamed to Information and Communication Services Division (ICSD) and reorganized to provide improved service and to define the functions of eight branches and five staff offices with management provided by three Assistant Administrators. The staff offices managed by the Planning and Project Management (PPMO) Chief as was the operation in all prior years.

The DAGS Telecommunications Division was transferred to the DB&F and merged with the ICSD.

ICSD inaugurated Video Conference Center services on Oahu, Maui, Kauai and the Big Island of Hawaii.

Systems Security was established as a separate and distinct section within the Systems Services Branch to address the growing concerns for secure access and privacy of information.

Data Processing (DP) Standard No. 04.04 was published in manual form to detail the T-205 process - Acquisition of Computer Resources (hardware and software). By 2002, the process had changed to delegate the responsibility to departments for certain hardware and software. The original T-204 form was discontinued and the T-205 form was revised and renamed to ICSD-205 in 2004.

1990: ICS Circular 90-1 was issued in September 1990 in response to Legislative intent via acts and budget provisos issued through 1993: Act 316, SLH 1989, as amended by Act 299, SLH 1990, Section 212A, Section 212B, Section 218 B, and Section 218C for FY 1991; Act 296, SLH 1991, Section 162 and Section 163 for FY 1992; and Act 289, SLH 1993, Section 179 for FY 1994 and FY 1995.

ICS 90-1 required the ICSD (as part of the DB&F until the ICSD was transferred to the DAGS) to participate in the selection of consultants for the purpose of improving the use of funds and consultant contract use for Information Technology (IT) by the State. It also required IT consultant services to be competitively bid through the use of Invitation for Bids (IFB) or Request for Proposals (RFP) solicitations.

The ICSD has performed ICS-90-1 functions by participating in the solicitation for consultants for various departments/agencies, despite resource shortages that



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occurred from 1992 through the present.

DB2 was installed at ICSD for the DOE to improve access to their Financial Management System (FMS) application.

- 1991 The State of Hawaii Electronic Mail (SOHEM) network was implemented for State departments to transparently send and receive email via the State's HAWAIIAN telecommunication infrastructure.

Software and hardware for Geographical Information Systems (GIS) processing was installed at ICSD.

ICSD rolled out its service to Hawaii's citizens with Hawaii FYI, which provided electronic access to government information.

- 1993 Lotus software selected as the Office Automation software to be used for email communication.

- 1995 ICSD collaborated with Department of Business and Economic Development and the Department of Transportation to design and develop the Hawaii State Government Home Page for access via the Internet to wealth of government information and services, including access to statewide forms and standards via the ICSD Home Page.

- 1997: The ICSD was transferred from the DB&F to the DAGS as of July 1997. All directives and circulars were transferred by default from the Director of Finance to the Comptroller as the director of the DAGS.

As part of the transfer process an Accountant IV and an Account Clerk were transferred from the DB&F. ARO to the ICSD. Also a Personnel Specialist was transferred from the ICSD to the DAGS, Personnel Office and an Accountant V position was transferred from the DB&F to DAGS, Administrative Services Office (ASO).

- 1998: The Statewide Information Technology Committee-Hawaii (SWITCH) was formed in March as an outgrowth of the informal group that met to discuss, plan, and set the initial goals for the Next Generation Network (NGN) communication infrastructure. The SWITCH adopted the plan and goals and has progressed toward realization of some of the goals.

The ICSD was again reorganized to account for the many lost positions due to budget cuts, the Reduction in Force (RIF) of 1994, and frozen positions imposed



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each year from the first economic downturn of 1992 to the present. This reorganization re-described the ICSD branches from eight (8) to seven (7), three (3) Assistant Administrators to one (1), and five (5) staff offices in the administration branch to two (2) staff offices. At that time ICSD functions were restructured to improve services with fewer resources.

1999 The SP2 system was installed at ICSD for processing of applications for DOTAX, Hawaii Criminal Justice, and Health Fund.

2000: The title Data Processing (DP) Standards was changed to Information Technology (IT) Standards to better reflect the changes within the ICSD and the industry. Online access via the Internet to IT Standards on the ICSD Home Page was established.

2003: With the advent of server-based technology, applications housed on the Wang systems were migrated off to LANs and Servers. The use of the Wang VS systems was phased out and subsequently discontinued at the end of June.

All forms required for day-to-day interface with ICSD were converted to be electronically fillable and made accessible online via the Internet through the ICSD Home Page.

2004: The IT/TC responsibility and directives are currently being re-evaluated as part of a move to a new beginning for IT/TC with the new governor and State administration. It is envisioned that the AD 77-2 will be replaced with a new directive that improves the IT/TC environment in the State and rescinds all prior directives. This planning is still ongoing at this time.

As part of the planning effort, the ICS 90-1 memo responsibilities and other functions of the ICSD, defined by directives issued over time, are planned to be eliminated or modified with the restructure if IT/TC functions and governance in the State.