

## R.I.P. COSICS (1986-1996)

*The following article was written by Paul S. Dunseath. Mr. Dunseath joined the Department in 1978 and retired as Director of the former Operations Division (STO) in 1995.*

On December 6, 1996, the last classified COSICS message from Washington was sent to Ottawa, and the link deactivated. COSICS, a part – at times a controversial part – of the Department for a decade, had passed into history.

In 1986, the Department was emerging rapidly from what has been termed “The Quill Pen Era”. A highly successful “Office Automation” pilot project was nearing the end of its two-year trial; CAIPS (the *Computer-Assisted Immigration Processing System*), which had been conceived and designed in the Department, was being deployed around the world; and WIN Exports was moving strongly into the working life of missions abroad. However, the Internet as we know it was non-existent and personal computers were still little more than toys.

Accurately predicting that severe cuts in person-years were coming in the future, senior management concluded that a massive investment in technology was required to cope with the coming staff reductions, and mandated four people – Doug Woods, Howard Balloch, Bob MacPhee and myself (predictably dubbed “The Gang of Four”) – to develop a plan and budget for doing so.

By the end of 1986, “the Gang” had prepared a multi-volume specification for a “Canadian On-line Secure Information and Communications System,” with a projected total cost, when fully implemented, of well over \$100 million. This was subsequently approved and COSICS, based on the best available “off the shelf” 1986 technology (which was both its strength and its Achilles’ Heel) was born. Bob MacPhee was named Project Manager and established a full-time, interdepartmental project office, which set itself to turning the specification documents into a Request for Proposal to industry. Three bids were received in the summer of 1987, but after detailed evaluation it was concluded that none was fully compliant. A “bid repair” process was undertaken and in 1988 the winning bidder – Fenco Engineers – was selected and a formal contract signed. Fenco then set about designing and delivering Phase I of a working COSICS, covering the US and related elements in Headquarters at a budget of \$54 million. First equipment deliveries to the Department took place the following year.

The requirement for “off the shelf” hardware and software resulted in a rock-solid, highly reliable system which, under the dedicated management of the COSICS operators (the TSSOs), has given yeoman service ever since. However, the demands of high security conflicted in a number of areas with this requirement and, not surprisingly, won out when they did so. COSICS emerged from the design process as a fairly heavily customized system, unable to be updated to match the desktop capabilities that the “PC Revolution,” which had swept the Western world in the interim, was now delivering, and at lower cost. Consequently, at the conclusion of Phase I in early 1991 (achieved within the budgeted cost of \$54 million), it was decided to adopt a different technology, using personal computers and local-area networks connected via a global internetwork. This approach, which we know as SIGNET, would allow coverage to be provided to 8500 members of the Department (vs. the total COSICS target of 4500 people), within the

original COSICS budget and time frame. SIGNET's first operational release was installed in 1992, with the global network essentially complete by early 1995.

But what of COSICS, which some unfairly see as the "ugly duckling" of the Department's information infrastructure? It came in within budget and did exactly what it was designed to do, and did it well. It had more than its share of criticism, most of it uninformed, and none of that in the popular press supported by the facts. COSICS was, if anything, a victim of its own success; it was a superb expression of the technology of its time, that of 1986. Unfortunately, it was overtaken by the astounding march of technology, something that anyone who bought a computer, or even a personal calculator in the mid-80s, will understand. In many ways, it was the Department's first definitive step into the modern era of virtually instant communications, the elimination of time-zones, and the ending of the repetitive retyping of messages that marked the Department as little as a single decade ago. While it has now been bypassed by newer technology (and what, in our modern world, has not been?), COSICS was a genuine success. It was delivered below budget, and did everything it was intended to do, quietly and reliably. Not a bad epitaph, after all. Goodbye, COSICS.