

## What puts CCTI technology ahead of the wave?

The CCTI is made up of a series of tightly related systems, each based in a different type of technology. Microcomputing information, geomatics, and video, radio and audio information are all reconciled in an easy-to-manage suite. The system was designed to be able to accommodate constantly advancing technology.

### The VIGIE system: a Canadian first

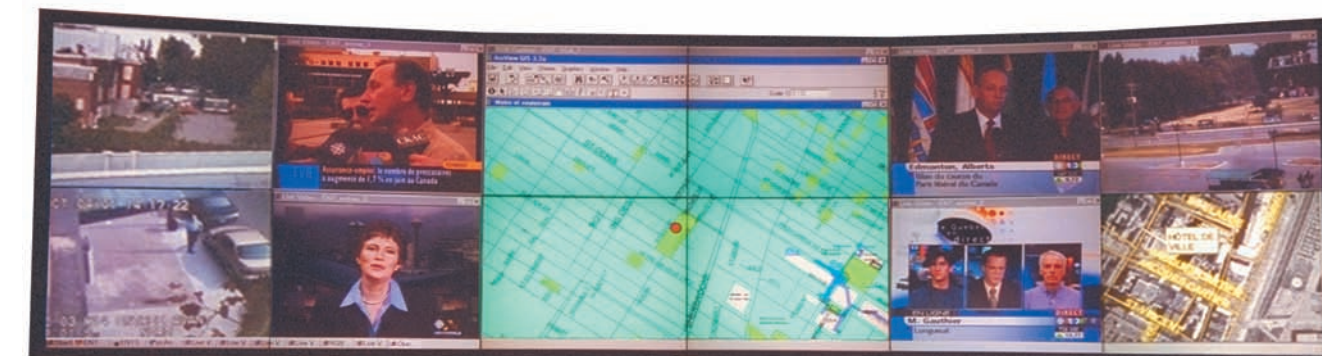
The VIGIE display (*visualisation globale et interactive des événements* or global interactive event visualization) includes twelve 84-inch screens combined on a virtual screen made up of two rows of six screens each, called the **Mosaic**. Each screen can be divided into several subscreens and configured to suit the needs of the event. This technology allows visual information (video and computer) of any size to be projected anywhere on the screen. Touch screens allow commands or groups of commands to be transmitted to the system by touch.

One of the special features of the system is its **ease of interaction** with the other systems that make up the CCTI, such as interactive mapping, voice radio, digital system, SITI dispatch and wireless headset communications.

The VIGIE displays **CCTI microcomputer content** on the Mosaic. But it also does the opposite, channelling video content to the microcomputer workstations, televisions and SPVM directorate conference rooms on the ninth floor.

Moreover, it allows on-site participants to **share information** from a laptop. This function greatly eases the use of information from outside participants. For example, an SIM fire security map can be displayed to show the location of dangerous products, or information from the STM about bus routes and schedules can be posted.

To **maintain a calm environment** in the CCTI, the VIGIE allows all available vocal information to be sent through a wireless headset communications system. Six different audio sources, including TV station and radio sound, can be accessed by each worker, and the system can also be used by the Operation Commander to relay information or instructions.



### What is its useful lifespan?

The Centre was designed to meet operational needs for the next fifteen years. The equipment and systems have a projected technological lifespan of about seven years.

Year in and year out, the SPVM manages over sixty planned events and some thirty impromptu events that all require the CCTI to be activated in *command* mode. Thanks to this leading-edge and highly flexible technology, the efficiency of our operational oversight just keeps on improving.



### Console equipment

Sixteen of the thirty-four consoles are equipped with a work surface and support monitors that can be individually adjusted with the simple touch of a switch. The keyboards and mice can be hidden under the work surface to free up space.

### Networking

The robust, high-performance microcomputer network has the following features:

- Fibre optic backbone with a 1Giga Bit throughput
- 100 megabit transmission over category 5 twisted pairs
- Redundant networking equipment (hardware and cabling)



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# CCTI

ahead of the wave

The Centre de commandement et de traitement de l'information



Montréal

ahead of the wave  
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## What is the CCTI?

The mission of the SPVM *Centre de commandement et de traitement de l'information* (information processing and command centre or CCTI) is to centralize and analyse information in order to provide decision-making support for the Operation Commander during major events such as emergency measures, terrorism, major police operations, crowd control, and major sports or cultural events.

It brings together, in a single, strategic location, all internal and external stakeholders who can contribute to the smooth coordination of operations monitoring in SPVM territory. Events can be monitored in two modes: *command* mode, for planned or impromptu events, or *watch* mode, to observe events as they unfold in the field.



Basically, the CCTI has to be prepared, at all times and for the entire territory, to identify and manage situations that may deteriorate or escalate in connection with other simultaneous events.

### Physical description

The CCTI has been in operation since April 3, 2001. It is on the south side of the new headquarters, on the eighth and ninth floors of 1441, rue Saint-Urbain. The thirty-four workstations and twelve-screen Mosaic are on the eighth floor. From the conference room on the ninth floor, the members of the SPVM Directorate can see the images on the CCTI screens.



## What are its roles and functions?



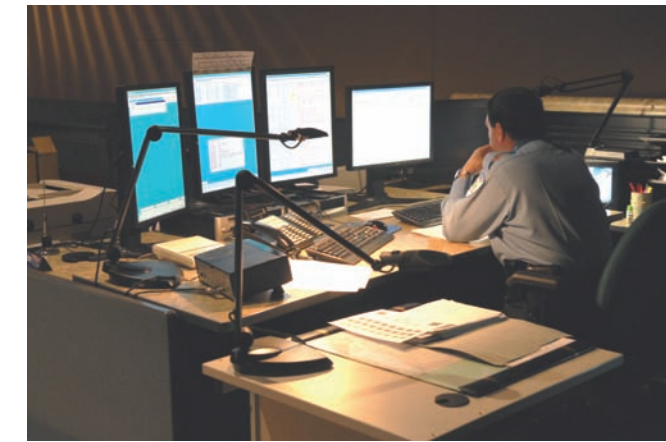
### Operation management

The Centre is under the responsibility of an Operation Commander, who is assisted by an Operation Manager and several advisors. When they are working in *command* mode, the role of the team is to manage the operation, keep the Directorate informed, and give instructions to the officers in the field. An operational log is displayed at all times for the benefit of internal and external partners.



### Operational control

Operational control is the responsibility of the Controlling Officer, whose workstation includes a computer, five monitors and a touch screen. The Controlling Officer coordinates the display of images from various sources, including TV stations, videos, geomatics, security cameras and computers.



### Duty officer

On duty 24/7, the duty officer is responsible for keeping the Directorate informed about major events. The duty officer ensures that events in the territory are monitored through the SITI (integrated computer telecommunications system), provides a liaison between the members of the Directorate and the operation, and informs police participants of any new developments. The duty officer also maintains communications with the media relations officers.



### Internal collaborators

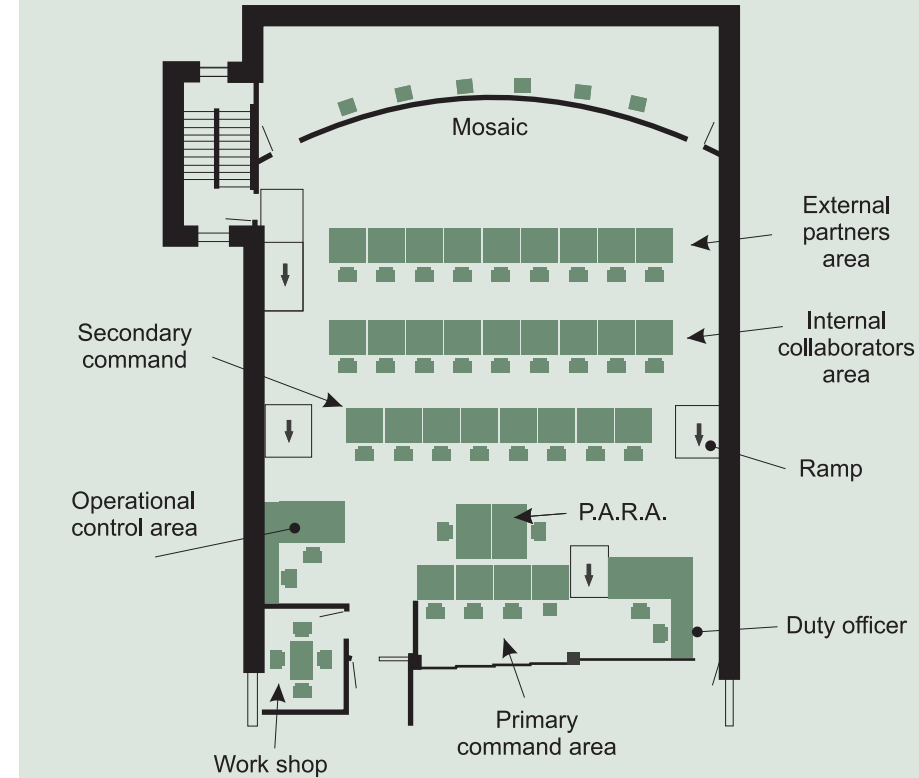
A number of SPVM police and civilian employees work closely on site with the command team. They come from the following units: Renseignement (criminal intelligence, security liaison); Enquêtes criminelles (criminal investigators, detectives); Affaires juridiques; Section technologie; PARA (call analysis and dispatch personnel); secretarial personnel; Section des communications (media relations), etc.



### External collaborators

The SPVM works closely with a number of other services involved in the management of large-scale police operations in Montréal. The CCTI is a unique worksite that allows the SPVM to coordinate with partners such as Urgences-santé, Civil Security, the Montréal fire service, and the Société de transport de Montréal.

Each representative has a workstation equipped with computer communications tools to provide a liaison with their respective services.



### How does the CCTI differ from the old Operational Monitoring Centre?

The need to monitor operational events is nothing new. An operational coordination office was set up for Expo 67. Later, as the number and scope of events, festival and demonstrations in Montréal increased, the most memorable being the 76 Olympics, the various Stanley Cup playoffs and the ice storm in January 1998 the police service created an Operational Monitoring Centre. But by the year 2000, the systems needed to be upgraded, and there was an increasing need to be able to network different technologies, so the SPVM decided to create a leading-edge centre in its new headquarters. The old system had to be reconfigured for each different kind of event, but the new systems include automatic controls that can be easily adjusted to suit varying needs.

The CCTI is also set up in tiers, so more users can simultaneously and harmoniously access more information (video, audio, geomatics and computer information). It is designed to handle three concurrent events, a feat beyond the capacity of the old centre.