

Supporting the largest public safety video monitoring project in Brazil

| State of Bahia | *Brazil*

Inaugurated in 2016, the Center for Operations and Intelligence (COI), under the Public Safety Secretariat of the State of Bahia (SSP-BA) gathers military police, local police, the fire department and forensics teams, as well as other federal and municipal agents. Several SSP-BA superintendencies also operate out of the COI, including the Integrated Center for Regional Command and Control (CICC), the Integrated Communications Center (CICOM) and the state public safety secretary. In all, approximately 560 professionals at the center

and more than 6,000 field agents serve approximately 4 million residents.

To improve public safety in Bahia, SSP-BA's Technological and Organizational Management Superintendence (SGTO) invested in the implementation of a video monitoring project called "Video Police," which was considered the largest and most comprehensive public safety technology project in the country.



Proven results from a proven solution

The first pilot test was carried out during the 2019 Carnival in Salvador, capital city of Bahia. During the event, a facial recognition system analyzed videos and compared the images with information stored in a replica of the government database, which was manually updated. When a fugitive was identified, the system created alerts for dispatchers who then contacted field agents through radio. However, the process resulted in a considerable loss in the quality of information and the agility of response.

A few months later, a new pilot test featuring Hexagon was held during the Micareta of Feira de Santana festival in Bahia. During the pilot, facial and license plate recognition devices created alarms within HxGN OnCall Security | Guardian, Hexagon's physical security information management (PSIM) solution, which automatically notified dispatchers and directly forwarded all associated information to the closest field agents, contributing to the arrest of 33 fugitives.

Based on the pilot project results, SSP-BA carried out a bidding process in 2021 to expand the project to 78 other municipalities across the state. In addition to maintaining 821 legacy cameras, it contracted a video surveillance as a service provider to get an additional 3,697 video sources. SSP-BA also contracted a Critical Broadband Mobile Communication Service (SCMC-BL) within an LTE (Long-Term Evolution) private communication network – the first in Latin America. Delivering these services also required the use of multiple antennas and a large fiber optic network.

As part of this process, Hexagon's HxGN OnCall Dispatch and Guardian were selected after a proof-of-concept phase to support Bahia's capital city and municipalities in its metropolitan region. Among the main differentiators were Hexagon's flexibility and adaptability to multiagency operations, configuration capabilities, ease of use and ability to integrate a wide selection of data, devices and systems.

Beyond facial recognition

In January 2022, the expansion of the video monitoring solution began, but it was during the Carnival period of 2023 when the new systems were put to the test. In 40 days leading up to the event, Hexagon's computer-aided

dispatch (CAD) system received approximately 200,000 calls, and over 37,500 events were created. During the event, 79 fugitives were arrested and there was a 49% reduction in cases of bodily injury and a 13% reduction in hate crimes, theft and robberies compared to the last event held in 2020, before the pandemic.

By using Hexagon's mission-critical platform, SSP-BA can monitor the municipalities covered by the video monitoring project through more than 4,000 cameras and 907 facial recognition devices. All videos are analyzed continuously and autonomously based on predefined business rules and different databases of the federal government, the State of Bahia and COI agencies. The video monitoring system helps to identify criminals, suspicious situations, weapons, stolen cars and even missing people.

When an incident occurs, alerts are automatically created on Hexagon's platform. The captured image pops up on-screen in the system and shows all related information for validation by dispatchers who, through the same screen, can identify and dispatch the field agent closest to the individual or incident.

In cases of identification of fugitives with a warrant, in which the accuracy of the analyses is equal to or greater than 95%, all information is sent immediately to the nearest field agent for investigation.

With Hexagon's mobile application, which is installed in 3,561 LTE terminals, field agents interact with the operations center through the same platform, which allows them to provide information and access a wide variety of images, audio and video data, which increases their situational awareness and ability to act.

"In addition to pointing out similarities between the face that is captured by the cameras and information in the fugitive database and identifying vehicles with restrictions by analyzing their plates, the system can also generate alerts based on suspicious situations, behaviors and objects, as well as support investigations much faster," said Colonel Marcos Oliveira, superintendent of technological and organizational management of the COI. "With the system we implemented, one policeman can do the job of 10."

Since the pilot phase of the Video Police project, the COI has arrested more than 850 people with outstanding warrants and recovered more than 40 stolen vehicles.

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