bics
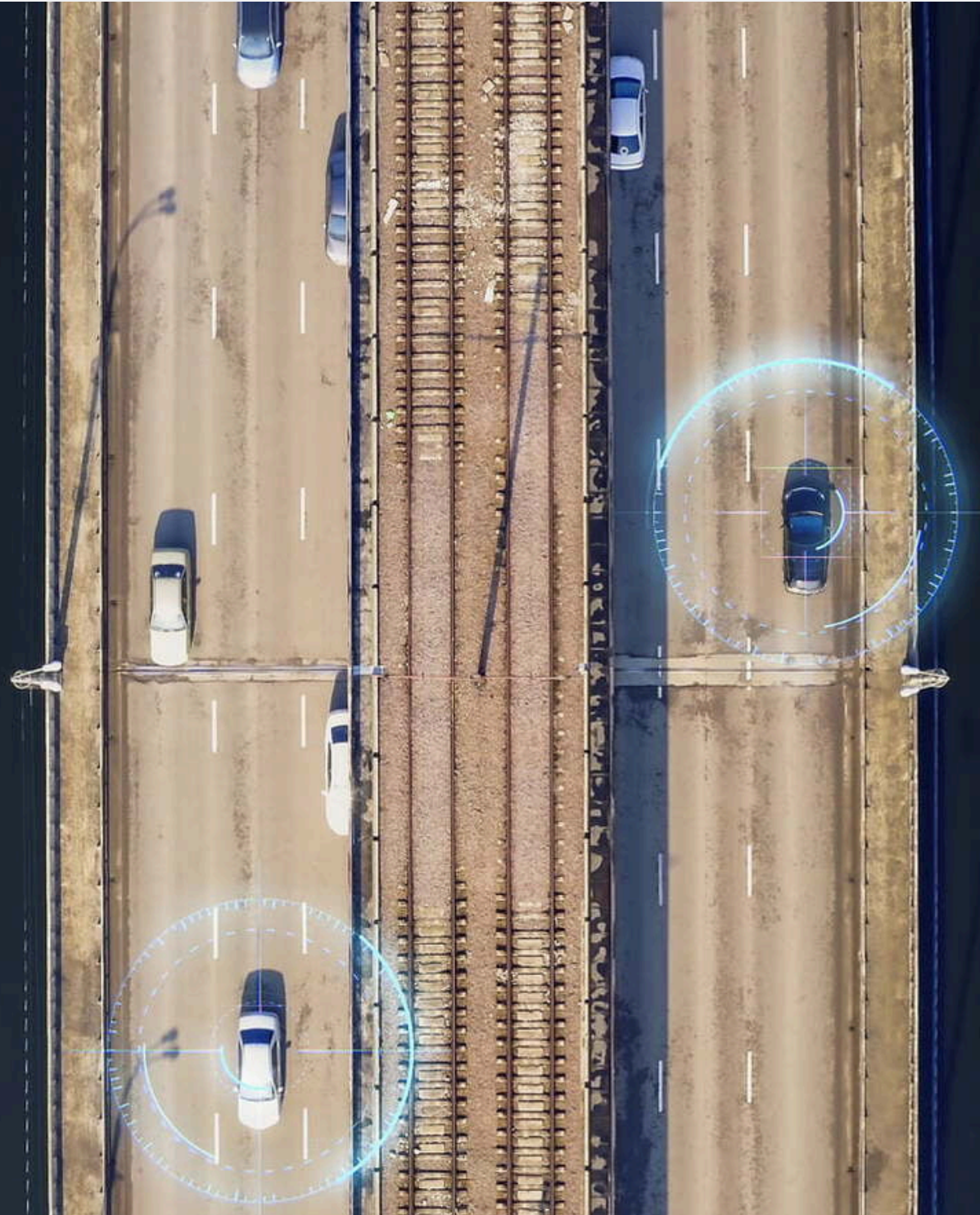
IoT solutions for government agencies

Governmental organization | MENA

Context

Our client is a governmental organization, with agencies in several locations. Their top priority is sharing mission-critical data securely. Apart from looking for a highly reliable network, they needed a robust and extra-safe private network to exchange information between locations preventing leaks, eavesdropping, and other threats from using public internet.


Challenge

- **Reliable and global connectivity:** The embassy's connectivity solutions had inconsistent quality and did not provide complete coverage in all their operating areas as they relied on often unstable satellite connectivity. They needed a reliable solution to meet their increasing bandwidth and latency requirements.

- **Real time analytics:** Governmental security requirements are some of the strictest due to the sensitivity of their data and the rigid compliance standards and regulations in place (which may change from one country to another). Regardless of location, the client sought flawless compliance and data security.

- **Cost management:** As the agencies operate in several locations worldwide, the client needed a strategy for streamlining different services and building a cost-effective and robust ecosystem to lower communication expenses.

Solution

- **Reliable global coverage:** BICS guaranteed spotless connectivity worldwide by granting the client access to their global network, which was the backbone for building a secure private network between the organization branches.

- **Combination of SIM For Things (SFT) and IPX Transport:** BICS experts combined two solutions to secure safe communication between agencies bypassing the public Internet. First, BICS supplied SIM cards for their local devices and established a secure connection back to their SFT platform through a local operator, without relying on the public Internet. Additionally, redundant IPX Transport lines were built from the customer homeland data center to the nearest BICS Point of Presence (PoP). By combining BICS' SFT SIM solution with a private IPX network, they were able to create an end-to-end secure VPN that protects each IP address independently from the public Internet.

- **5G:** To utilize the latest technology and enable the fastest possible transfer of data between embassy branches, 5G modems were put in place across countries.
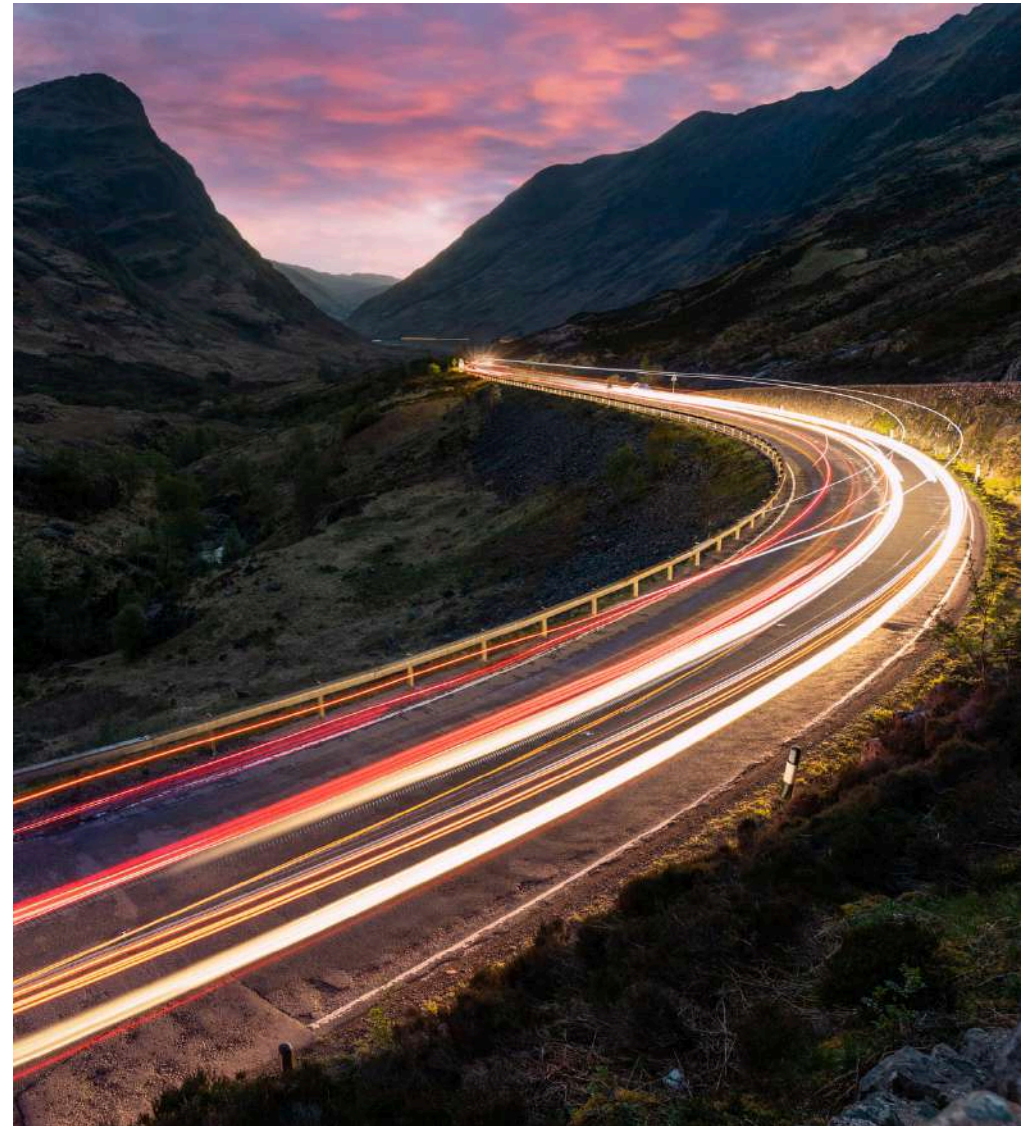
Results

Maximum security: Data breaches or unauthorized access are no longer a concern. The organization now has a highly secure connectivity platform, thanks to BICS' built-in security at the SIM level and traffic safely carried on BICS' wholly-owned global network (segregated from the public Internet).

Increased flexibility: The scalability of BICS SFT allows the organization to expand with agility - instantly launching new locations as needed and continuously matching their evolving requirements.

Optimized costs: A complete infrastructure upgrade led to streamlining and an effective combination of solutions that decreased communication expenses.