# E INTER TALK

# CASE STUDY

When the Regional District of Fraser-Fort George (RDFFG) needed to upgrade their radio dispatch system, InterTalk was ready to assist. Providing coverage to remote areas of Northern BC called for a unique approach.

# **Fraser-Fort George**

The Regional District of Fraser-Fort George (RDFFG) is a vital hub for emergency services in Northern British Columbia (BC), anchored by the Prince George Fire/Rescue Services (PGFRS). As the primary 911 call taker for fire and rescue services, PGFRS not only serves local calls but also extends its reach to neighboring districts including Cariboo, Central Kootenay, Bulkley-Nechako, and Kitimat-Stikine, creating a crucial network for emergency response across the region.

This project centered on the replacement of the previous generation radio dispatch console system with a new console system, designed to cater to the unique challenges of the region. The initial proposal to leverage satellite communications for dispatching to these rural areas was ultimately deemed insufficient. Instead, InterTalk leveraged their existing Radio-Telephone Interconnects (RTIs) to effectively communicate with remote fire and rescue agencies, treating telephone calls as if they were radios. This innovative solution required considerable ingenuity and highlights the creativity and resourcefulness involved in addressing the specific needs of these districts in Northern BC.

#### Scope

RDFFG had several pressing requirements to support the transition to their new InterTalk Dispatch Console System (DCS):

- Interface to analog and digital telephone lines (POTS, T1 PRI), and provide the ability to treat telephone calls as radios (i.e., PTT, paging)
- Providing a resilient, reliable, geo-redundant radio dispatch console system.
- Provide the ability to set up an Emergency Operations Center (EOC) to remotely dispatch if an evacuation was ever necessary.
- Interfacing to a 911 telephone system to utilize headset sharing between the 911 and console systems.
- Utilize existing communications infrastructure. Many of the areas within these regional districts, owing to their rural nature, lack sufficient broadband coverage.

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# **System Overview**



#### Challenges

**Leveraging Radio-Telephone Interconnects (RTIs):** Given that some service agencies were in areas without broadband connectivity, InterTalk had to allow the console system to treat telephone calls as radios, making use of the existing RTIs. This challenge required an innovative approach to communicate effectively with these remote fire and rescue agencies.

**Non-negotiable Timeline:** As part of this project, it was imperative to deliver a robust and reliable system that could meet the strict timeline of the project. RDFFG dispatch facilities were scheduled for demolition and implementing their system at the new site required prudent time management from all stakeholders.

**Console UX and Workflow Design:** Ensuring a smooth transition for dispatchers was crucial. Therefore, the console graphical user interface (GUI) and workflows were designed to minimize changes in the dispatchers' daily operations and ensure they could easily adapt to the new system by blending the old with the new.



# **System Features**

Integrated Instant Recall Recorder (IRR); replays both radio and telephone calls	8 analog FXO circuits at Primary site
Fully redundant radio interface gateways	24 analog FXO circuits at Backup site
Web-based system configuration	Call priority configurable on a per-line basis
Redundant Radio controllers (QRLI)	Searchable contact list that is administrable by internal staff through a web application
2 T1 PRI spans at Primary site	Logging Recorder SIPREC interface

### Outcomes

**Upgraded Dispatch:** With the move, the dispatchers were equipped with the latest technology, including a new radio dispatch console system (DCS), a modern 911 phone system, and an advanced logging recorder solution (NICE). These upgrades significantly improve their operational efficiency and responsiveness.

**Improved Services:** The new IP-based system allows the dispatchers to provide superior services to their customers and remote agencies. It also facilitated better collaboration with new agencies, enabling them to serve a wider audience and establish stronger partnerships.

**Regular Updates:** With DCS, the dispatchers now receive regular updates addressing performance, security, and other concerns. This ensures that they always operate with the latest features and security measures, enhancing their effectiveness and the safety of the communities they serve.

**Easier Expansion:** The new facility and systems have streamlined the process of expanding to new agencies and onboarding new customers. Additionally, utilizing analog and digital phone lines dispatching to remote agencies has become much simpler, allowing them to serve a broader range of partners with ease.

