CONSULTING SERVICES-SPECTRUM AND TELECOMMUNICATIONS

The Railway Association of Canada (RAC) is the national industry association representing close to 60 freight and passenger railway companies – railways that transport millions of passengers and approximately $380 billion worth of goods across our country each year – as well as a growing number of industrial railways and railway supply companies as associate members.

Canada's railways depend on advanced wireless communications technologies to help them operate a safe and efficient rail system. These technologies—that make use of part of the electromagnetic spectrum known as the "radio spectrum"—play a key role in enabling the rail industry to deliver safe, dependable, and predictable service to its customers. RAC's Consultant Spectrum and Telecommunications is responsible for providing safe, interference-free radio communications for Canadian Railways; works with the federal government in the development of policies and regulations around radio communication, telecommunication and cybersecurity and actively promotes compliance.

The Railway Association of Canada (RAC) is looking to fill the position of **Consultant-Spectrum and Telecommunications** with an anticipated contract start date November 2024.

Interested and qualified candidates are invited to submit their resume in confidence by **October 18, 2024** to skazaka@railcan.ca with a covering letter describing their interest and suitability for the position.

The Railway Association of Canada is an equal opportunity employer committed to the principles of employment equity and inclusion. We welcome applications from all qualified individuals.

We thank applicants for their interest, however, only those advancing in the process will be contacted.

THE RAILWAY ASSOCIATION OF CANADA
POSITION GUIDE – CONSULTANT SPECTRUM AND TELECOMMUNICATIONS

POSITION OVERVIEW

The Consultant, Spectrum and Telecommunications, is responsible for:

1. Providing safe, interference-free radio communications for Canadian Railways;

2. Acquiring new radio frequencies for railway operations as technology evolves;

3. Working with the Federal Government in the development of policies and regulations with respect to radio communication, telecommunication and cybersecurity; and

4. Actively promoting compliance of RAC members to existing regulations to ensure safe and efficient communications.

KEY ACCOUNTABILITIES

1. Represent the Canadian railway industry to various government and Private sector organizations, such as Innovation, Science and Economic Development Canada (ISED), the Canadian Telecommunications Association (CTA), Transport Canada (TC), the Association of American Railroads (AAR) and the Radio Advisory Board of Canada (RABC). The incumbent takes part in the Canadian delegation to the United Nation's International Telecommunication Union (ITU) to promote/defend Canadian railway interests when necessary.

2. Coordinate the use of radio frequencies with the AAR in the U.S. to ensure interference-free communication in the border area.

3. Liaise with Government bodies at all levels to ensure railway interests are protected.

4. Develop and maintain a Railway Frequencies Sub-allocation Plan.

5. Keep RAC members abreast of developing new wireless technologies and Intelligent Transportation System (ITS) technologies and make recommendations on their possible application within the railway-user industry. This includes wayside communications.

6. Ensure coordination of viable communications solution(s), and lead the request for access to Spectrum from the government, to support Enhanced Train Control (ETC) implementation. Collaborate and consult with the ETC Project Management Office, ETC Executive Committee, RAC Wireless Communications Committee, government departments/agencies and other stakeholder groups as relevant.

7. Coordinate radio frequency using Spectrum-E application. Ensure that Spectrum-E is up to date with the latest technologies and reflects the latest government regulations and

requirements. Using Spectrum management tools and databases, manage and process frequency requests from RAC members, ensuring that requests are processed in a timely manner.

8. Promote members' compliance to the Radiocommunication Act, the Radiocommunication Regulations, the Telecommunication Act and the terms and conditions of RAC's spectrum license while highlighting the link between safety issues and clear, interference-free communications.

9. Monitor ISED to identify changes to the regulatory environment and to ensure compliance with the changes.

10. Provide leadership and assistance to member railways with their radiocommunication network deployment strategies. Provide assistance in analysing proposals from third parties on the purchase and deployment of new radio equipment.

11. Provide advice to Member's radio engineers and technicians on radio propagation, interference analysis and interference solving techniques.

12. Manage and coordinate the process to survey RAC member's radio stations in railway yards, as requested from time to time.

13. Manage the RAC Wireless Communications Committee.

14. Manage the RAC Cybersecurity committee.

15. Administer the Standard Point Location Codes (SPLC) process.

STATUS AND SCOPE/AUTHORITY

This position reports directly to the Senior Director Operations and Regulatory Affairs.

The position maintains a broad range of internal/external contacts with all levels in member organizations, government and companies in both Canada and the United States for the purpose of advocating on the industry's behalf and for collecting or providing information.

The position has broad authority and makes decisions and recommendations.

The incumbent will be responsible for developing procedures and rules.

The incumbent exercises discretion and independent judgement in planning, scheduling, and organizing of work assignments. Will exercise initiative in adapting and applying procedures to handle unusual problem situations to resolve conflicts. In the event of interference, it will be necessary to negotiate with the parties to ensure that the problem is addressed in a fair and equitable manner.

QUALIFICATIONS
- University degree in related field.

- Minimum of 8 years' experience in spectrum management or radio engineering.

- Experience with the operation of Geographic Information Systems (GIS) and Radio Network Simulation tools.

- Extensive knowledge of the Radiocommunication Act, the Radiocommunication Regulation, and ITU's Radio Regulation.

- An understanding of the railway environment and how radio frequencies are being used by the railways.

- Minimum supervision in carrying out management duties; incumbent must display initiative and leadership on behalf of the industry.

- Extensive knowledge of the railway industry and government departments/agencies.

- Excellent communication skills, including writing guidelines and strategic presentations to technical, operating, regulatory and international audiences.

- Ability to effectively manage one or more consultants and projects as required.

- Proficiency in both official languages is an asset.

WORKING CONDITIONS

- Headquarters: Ottawa

- Flexible home / office environment

- Occasional travel required

- Manage multiple activities against timelines

- High sensory attention required

- Capable of working on their own at a remote location