

Applying for a Temporary Radio Licence for Racing Events in Canada:

1 – SMS Client/Agent Web Profiles and Licensee Account Numbers:

In order to apply for a radio licence, you will require 1) a Spectrum Management System (SMS) Client or Agent Web Profile, and 2) a Licensee Account Number. If you need assistance in creating them, please review [Radiocom Information Circular 66 \(RIC-66\)](#) to contact the closest Spectrum Management district office to your location.

2 – Types of Radio Systems:

- Mobiles (hand-held portables or vehicular mobiles)
- Fixed/Transportable Base Stations or Repeaters
- Telemetry/Data devices
- Wireless Microphone systems
- Electronic/Satellite News Gathering systems
- Studio Transmitter Links

All radios must be **certified** for use in Canada. Enter the radio's IC # into the Certification Number field on the [Radio Equipment List \(REL\)](#) web page in order to know if it is allowed for use in Canada.

3 – How to Apply for a Temporary Radio Licence:

1. Radio licence applications are to be filled-out and submitted through the [Online SMS web portal](#).
2. Applications should be submitted as early as possible; **preferably 4 weeks prior** to your event in order to allow Spectrum Management sufficient time to process it.
3. You can apply for a temporary radio licence that can be valid **up to 11 calendar months**. Radio licensing fees are based upon the number of months (not the number of days) that a radio is in operation.
4. If you will be racing in 1) multiple locations throughout Canada, and 2) the same racing series, then a single radio licence can be produced. **Please attach a list of your scheduled events** in the Attachments section of the application, and we will coordinate with other offices in trying to secure the same set of frequencies at all of your events. Your list should include:
 - Racing series name, the event name, and the racetrack.
 - Location; street address, city, province, and coordinates.
 - Start and End dates of the event where your radios will be in operation.
5. Upon the timely submission of your fully completed application, it will be processed on a **“first come, first served basis”**.
6. You may wish to attach a list of your desired frequency channels in order of preference with their declared use. However, please note that all requests are subject to availability, so you may be assigned an alternative channel. For example:

- “Tx/Rx 450.500 MHz for coordination with race officials”
 - “Tx-only 454.625 MHz for emergencies”
 - “Tx/Rx 455.550/460.550 MHz for pit crew”
7. Additionally, you may attach any other information you believe is relevant to your application for consideration.
 8. If you require VHF (148-174 MHz), UHF (450-470 MHz), and/or Microwave (above 953 MHz) frequency channels for one or more different types of radio devices/systems, then you may need to submit one or more different types of radio licence applications from the [SMS Radiocommunication Licensing Services](#) web portal.

4 – Receiving Your Temporary Radio Licence:

After processing your application:

- An invoice with your radio licensing fee will be made available for you. Payment instructions on printed on the first page.
- Payment can either be made online (credit/debit card), or by mailing-in a cheque or money order payable to the **RECEIVER GENERAL FOR CANADA**. Mailing-in a payment on short-notice could delay in issuing you the licence, as we require sufficient processing time.
- For applications submitted far in advance for races scheduled later in the year, please note that the invoice will be created as early as 60 days prior to your event.
- Radio licensing fees are only payable in Canadian funds.

Once the payment has been processed, your radio licence can be retrieved by going to the [Virtual Licence web portal](#), and entering the licence number into the Authorization Number field, which you can then download a PDF copy.

All members using radios authorized under the radio licence must review all the conditions prior to use. Please retain a copy of your radio licence during your event, either electronically or in print.

5 – Other Information:

Unannounced on-site inspections of your radios by one or more Spectrum Management Officers could occur prior/during your event. Please have a copy of your radio licence readily at hand should a Spectrum Management Officer request to review it.

Operation of your radios must be limited to your own event, and only used as necessary. Your co-operation in the careful use of your radios will help minimize the possibility of harmful interference towards other authorized radio licensees.

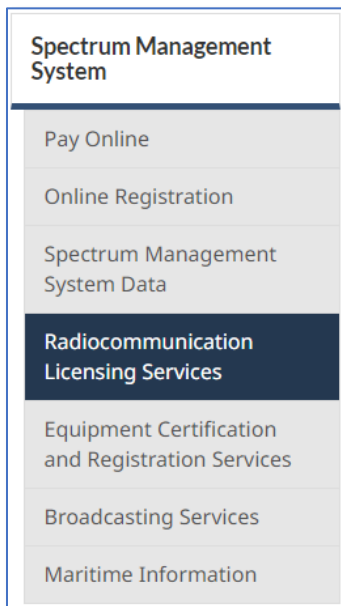
The installation and/or operation of radios without a valid radio licence is prohibited under [Section 4](#) of the Radiocommunication Act, and could result in offences/penalties under [Section 9](#) of the same Act.

How to Apply for a Temporary Mobile-only Radio Licence

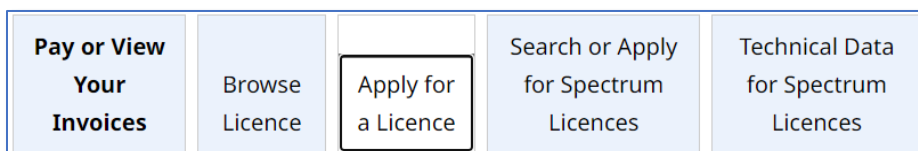
Please note:

- Please read through the guide once prior to filling-out the online application form.
- The term “Mobile” for radio licensing purposes can refer to either hand-held **portables** or vehicular **mobiles**.
- You will lose all of your work progress if you quit or shutdown the application midway through the application session. **The only way to save your data is by clicking the [Save] button at the ‘Application Summary’ page, which is mentioned near the end of this guide.**

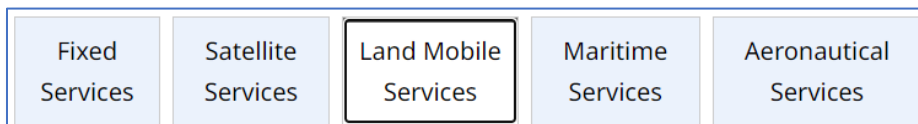
In the [Spectrum Management System \(SMS\)](#) home page, click on ‘[Radiocommunication Licensing Services](#)’ on the left-hand side menu bar:



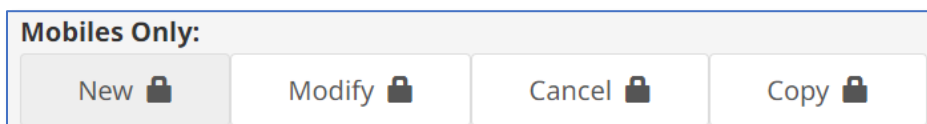
In the ‘Radiocommunication Licensing Services’ page, at the first set of menu tabs please select [Apply for a Licence]:



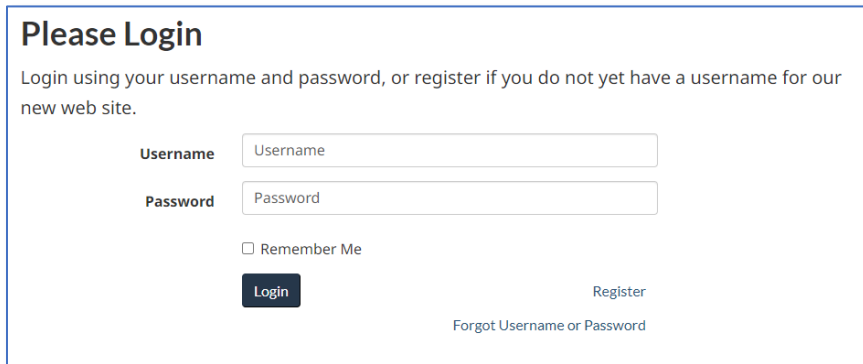
Scroll down the page until you reach the second set of menu tabs, and then select [Land Mobile Services]:



Under the ‘Mobiles Only’ heading, please click on [New] to start the application process:



You will be prompted to log into the Web Profile that is linked to the Licensee Account. Please note that a **Client Web Profile** is used if you are applying for your team/organization, and an **Agent Web Profile** is used if you are applying on behalf of a team/organization:



Please Login

Login using your username and password, or register if you do not yet have a username for our new web site.

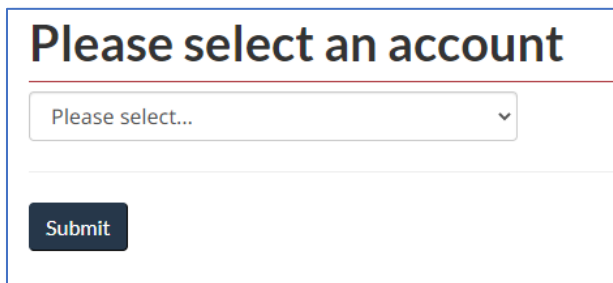
Username

Password

Remember Me

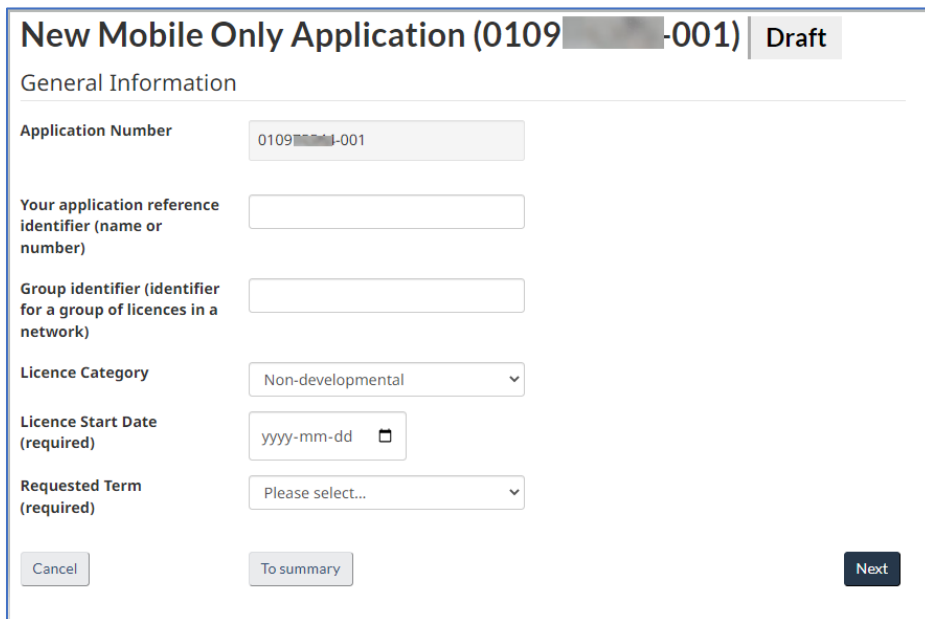
[Forgot Username or Password](#)

If you are prompted to select an account, this just means your Web Profile is linked to more than one Licensee Account. Please select the account you are applying a radio licence for:



Please select an account

At the 'General Information' page, you will see the following:



New Mobile Only Application (0109-001) Draft

General Information

Application Number

Your application reference identifier (name or number)

Group identifier (identifier for a group of licences in a network)

Licence Category

Licence Start Date (required)

Requested Term (required)

- The last 3 digits of the application number refers to the **version** you are working on.
- When the application is fully processed, it receives an 'Authorized' status. When the application is paid for, it receives a 'Granted' status, and will then become a Radio Authorization (i.e. Radio Licence).
- Each time a fully authorized radio licence is modified, then the **version** will increment by one digit.
- The application number is blurred throughout the guide for privacy reasons.

Please use the following screen capture to assist you in filling-out the first page of the application:

General Information

Application Number: 0109-001

Your application reference identifier (name or number): Year + Event (e.g. 2023 Honda Indy)

Group identifier (identifier for a group of licences in a network): Racing Series (e.g. IndyCar Series)

Licence Category: Non-developmental

Licence Start Date (required): 2023-07-14

Requested Term (required): Temporary

Expiry date (for a temporary licence): 2023-07-16

Buttons: Cancel, To summary, Next

- The 'Reference Identifier' field must have the year and event name; e.g. 2023 Honda Indy Toronto.
- The 'Group Identifier' field must have the racing series name; e.g. IndyCar Series.
- The 'Licence Category' field should be left as 'Non-developmental'.
- The 'Requested Term' field must have 'Temporary' in it.

At the 'Account Information' page you will see the following:

Account Information

Account Number: 1000000-

Licensee: [Redacted]

Payment Contact: N/A

Administrative Contact: [Redacted]

Technical Contact: N/A

Buttons: Previous, To summary, Next

- Your 12-digit Licensee Account Number.
- The Client Name (i.e. Licensee Name) of the account.
- If you listed other members to act as either the Payment, Administrative and/or Technical contacts during the account registration process, then here you can select those members as the primary points of contact. Otherwise, you can click [Next] to continue.

The 'Covering Letter' section will appear, and you can use the below screen capture to assist you:

Covering Letter

System description (e.g., base-mobile, point-to-point, point-to-multipoint, etc.) (required)

Nature of service (e.g., taxi dispatching, construction, etc.) (required)

Is an interim authority requested?

Special requirements of the system

- The 'Interim Authority' field should be left as 'No'.
- You can specify the number of frequency channels and/or list your preferred frequency channels list in the 'Special Requirements' field, however if there is not enough space then please attach a document in the 'Attachments' section mentioned later on in this guide.
- Please also use the 'Special Requirements' field to let us know **if you are using more than one type of radio model**. For example, if the total number of radios you are using are 10, but comprise of 5 Motorola and 5 Kenwood radios, then please let us know.

At the 'Station List' page please click [Unknown] to begin entering in data for where the venue will take place at:

Station List

Type	Station name and address or Area of operation (municipality, province, or region)	Licensee Reference Name	Call Sign	Geographical Coordinates	Radius [km]	Mobiles	Transaction	Action
1 Mobile	Unknown	--	--		--		New	

Number of Records: 1

(Continued on the next page)

At the 'Station' page, please fill-in all the fields, then click [Save] to continue:

Station

Number of mobile stations, all types (required)

Area of operation (municipality, province, or region) (required)

Licensee Station Reference Name

Geographical Coordinates (WGS84)

Latitude of the centre of operation (required) ° ' " N

Longitude of the centre of operation (required) ° ' " W

Radius of Operation [km] (required)

Province(s) of operation (required)

- The 'Number of Mobile Stations' field is the **total** number of radios that will be actively used at your event, **which might comprise of one or more different types of radios**. See the previous note regarding the 'Special Requirements' section in the 'Covering Letter' page up above.
- The 'Area of Operation' field format should be Location/Track Name, Street Address, and City.
- The 'Geographical Coordinates' fields should approximate the center point of the racetrack.
- The 'Radius of Operation' field should be no more than 1 km.
- The 'Province(s) of Operation' field should have the province where the venue is located in.

Back at the 'Station List', now click [Next] to continue:

Station List

Type	Station name and address or Area of operation (municipality, province, or region)	Licensee Reference Name	Call Sign	Geographical Coordinates	Radius [km]	Mobiles	Transaction	Action
1 Mobile	Exhibition Place, 100 Princes' Blvd, Toronto	Honda Indy, IndyCar Series	--	43° 37' 57" North 79° 24' 56" West	1	10	New	

Number of Records: 1

At the 'List of Emissions' page, click [Add Emission] to enter the radio's technical parameters:

List of Emissions

The 'Radio Specifications' page will require the "IC" number (not the "FCC" number) for 'Certification Number' field. Once you have obtained this number, use the 'Lookup' feature and enter this number to help you fill-in some of the parameters. Once completed, click [Save] to continue:

Radio Specifications

Manufacturer (required)	<input type="text" value="Motorola Solutions Inc."/>
Model (required)	<input type="text" value="AAH01JDC9JC2AN"/>
Radio Type (required)	<input type="text" value="Digital"/>
Certification Number	<input type="text" value="109AB-99FT3092"/> Lookup
Low Frequency (0-99999) [MHz]	<input type="text" value="138"/>
High Frequency (0-99999) [MHz]	<input type="text" value="174"/>
Designation of emission (including necessary bandwidth) (required)	<input type="text" value="7K60FXE--"/> Lookup
Occupied Bandwidth [kHz] (required)	<input type="text" value="7.600"/>
RF Output Power [W] (required)	<input style="background-color: yellow;" type="text" value="5"/>
Describe any communications with stations not on this licence and identify any channels to be used for mobile-to-mobile talk-around	<input type="text" value="*Leave this field blank."/>
I certify that the above radio equipment and any other equipment used within these technical parameters are certified or technically acceptable for use in Canada. (required)	<input type="text" value="Yes"/>
If "No", please provide or attach additional radio equipment information	<input type="text"/>

Cancel
Save

- The 'RF Output Power [W]' is the Transmit (Tx) Power (in Watts) emitted out of the Tx port where the antenna is attached. This value should not be confused with the Effective Radiated Power (E.R.P.).
- The radio's antenna has an 'Antenna Gain' value (usually listed in its Dipole value, not Isotropic value), and depending on what the 'Gain' is, it can increase (or in some rare cases decrease) the E.R.P.
- Spectrum Management can only allow a maximum E.R.P. of 5 Watts or 7 dBW.
- For example, if a radio's Tx Power is 3 W, with a 2 dB antenna gain (dipole, not isotropic), and zero dB system losses, then $(10\log 3 + 2\text{dB gain} - 0\text{dB losses}) = 6.77 \text{ dBW E.R.P.}$ To find the power in Watts, divide 6.77 by 10 = 0.677. Then take $10^{0.677} = 4.75 \text{ Watts E.R.P.}$

$$10 \log(3 \text{ W}) + 2 \text{ dB gain} - 0 \text{ dB losses} = 6.77 \text{ dBW E.R.P.}$$

$$10^{\left(\frac{6.77 \text{ dBW E.R.P.}}{10}\right)} = 4.75 \text{ W E.R.P.}$$

Back at the 'List of Emissions' page, click [Assign] to notify us how many radio channels you will require:

List of Emissions										
	Radio Model	Lower Frequency [MHz]	Upper Frequency [MHz]	Emission Classification	Power [W]	Antenna Model	No. of channels	Transaction	Channels	Action
1	Motorola Solutions Inc.-AAH01JDC9JC2AN	138	174	7K60FXE--	5	--	0	New	Assign	

Number of Records: 1

Add Emission Previous To summary **Next**

On the 'Channels' page, click [Add Channel] to continue:

Channels

Add Channel

Back

On the 'Add Channel' page, you have two options available:

1. Only use this example if you attached your desired/preferred frequency list in the 'Attachments' section. The frequency below should match one of the frequencies in your list:

Add Channel

Communication type (required) Simplex

Channel to be selected during application processing/analysis (required) No

Standard Channel (required) Short Term

Frequency [MHz] (required) 154.74

Channel Spacing [KHz] (required) 12.5

Cancel Assign

2. Only use this example if you do not plan on attaching a desired/preferred frequency list in the 'Attachments' section. We will find suitable frequencies based on the technical parameters of the radio(s) you use:

Add Channel

Communication type (required) Simplex

Channel to be selected during application processing/analysis (required) Yes

Standard Channel (required) Short Term

Cancel Assign

Once completed, click [Assign] to continue.

Back at the 'Channels' page, for this exercise we are going to add 2 more channels, for a total of 3 channels for this particular radio device. Click [Add Channel] to repeat the above steps:

Channels

Channel	Communication Type <small>↑↓</small>	Tx Frequency [MHz] <small>↑↓</small>	Rx Frequency [MHz] <small>↑↓</small>	Channel Name	Allocation Name	Channel Bandwidth [KHz] <small>↑↓</small>	Transaction <small>↑↓</small>	Action	Select
1	Simplex	154.74	154.74				New	Remove	<input checked="" type="checkbox"/>

Number of Records: 1

Add Channel (circled in green)

Back ~~Add to emission~~

- Please note under the 'Select' column that the box is automatically checked-off, but if you should see this box unchecked, then please check it off to ensure it is added to the application.

After adding the 2 additional channels, you should see the following screen capture. Now click [Add to Emission] to add the channels to the application:

Channels

Channel	Communication Type <small>↑↓</small>	Tx Frequency [MHz] <small>↑↓</small>	Rx Frequency [MHz] <small>↑↓</small>	Channel Name	Allocation Name	Channel Bandwidth [KHz] <small>↑↓</small>	Transaction <small>↑↓</small>	Action	Select
1	Simplex	154.74	154.74				New	Remove	<input checked="" type="checkbox"/>
2	Simplex	150.95	150.95				New	Remove	<input checked="" type="checkbox"/>
3	Simplex	158.88	158.88				New	Remove	<input checked="" type="checkbox"/>

Number of Records: 3

Add Channel

Back **Add to emission** (circled in green)

Back at the 'List of Emissions' page, if you are planning on using another type of radio (different from the first entry), then click [Add Emission] to enter in the technical parameters of the new radio model. You will also have to assign a radio channel(s) to this new radio unit (similar to previous steps mentioned above). If you don't plan on using a different type of radio, then you can click [Next] to continue:

List of Emissions

	Radio Model <small>↑↓</small>	Lower Frequency [MHz] <small>↑↓</small>	Upper Frequency [MHz] <small>↑↓</small>	Emission Classification <small>↑↓</small>	Power [W] <small>↑↓</small>	Antenna Model <small>↑↓</small>	No. of channels <small>↑↓</small>	Transaction <small>↑↓</small>	Channels	Action
1	Motorola Solutions Inc.-AAH01JDC9C2AN	138	174	7K60FXE--	5	--	3	New		Assign

Number of Records: 1

Add Emission (circled in blue)

Previous To summary **Next** (circled in green)

In the 'Attachments' section, here is where you can attach relevant documents (e.g. letter, e-mail correspondence, list of preferred frequencies, etc.). Please follow the sequence of numbers in order to attach one document/file:

Attachments

Select Attachment: 1

Attachment type (required): 2

Description: 3

4

For this exercise, we are only attaching one document, however if you wish to add more than one then please repeat the above step. Once completed, click [Next] to continue:

Attachments

Select Attachment:

Attachment type (required):

Description:

Manage Attachment(s)

Description	Additional Details	File Name	Size	Type	Action
Document	List of preferred frequencies.	test sample document.txt	20.0 B	Attachment	<input type="button" value="Delete"/>

The 'Channel Details' page summarizes the data entries you have made thus far. Even if you see a discrepancy, for now just click [Next] to continue, as we can amend any errors later on:

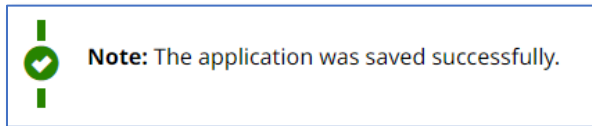
Channel Details

Station	Type	Station name and address or Area of operation (municipality, province, or region)	Licensee Reference Name		Call Sign	Coordinates	Radius	Mobiles	Transaction
1	Mobile	Exhibition Place, 100 Princes' Blvd, Toronto	Honda Indy, IndyCar Series		--	43° 37' 57" North 79° 24' 56" West	1	--	New
		Equipment Name	Lower Frequency [MHz]	Upper Frequency [MHz]	Designation of emission (including necessary bandwidth)	RF Output Power	Antenna	Transaction	
1		Motorola Solutions Inc.- AAH01JDC9JC2AN	138	174	7K60FXE--	5	--	New	
		Channel	Comm. Type	Tx Frequency [MHz]	Rx Frequency [MHz]	Service		Transaction	
		1	Simplex	154.74	154.74	--		New	
		2	Simplex	150.95	150.95	--		New	
		3	Simplex	158.88	158.88	--		New	

At the 'Application Summary' page, click [Save] to save your progress:

The screenshot shows the 'Application Summary' page. At the top left is a 'Download Draft as PDF' button. At the top right is an 'Expand all' button. Below these are seven expandable sections: 'General Information', 'Account Information', 'Covering Letter', 'Station List', 'List of Emissions', 'Attachments', and 'Channel Details'. Each section has an 'Edit' button to its right. At the bottom of the page are four buttons: 'Previous', 'Save', 'Validate', 'Submit to ISED', and 'Delete'. The 'Save' button is circled in green.

You should see the following banner just underneath the application number if you saved your work successfully:



Now click [Validate] to check for any errors:

This screenshot is identical to the previous one, but the 'Validate' button at the bottom is circled in green.

If you see a Validation Error for a particular section of the application, then please click the corresponding [Edit] button to view and correct the error:

The screenshot shows the 'Application Summary' page. The 'Covering Letter' section is highlighted in blue and has a red 'Validation Error' label next to it. The 'Edit' button for this section is circled in green. The 'Validate' button at the bottom is also visible.

Once you have corrected the error in the particular section(s) that were reported, go back to the 'Application Summary' page, and ensure that you first click [Save] to save the correction, and then click [Validate] to see if all Validation Errors have been cleared:

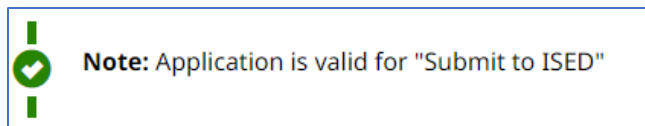
Application Summary

Download Draft as PDF Expand all

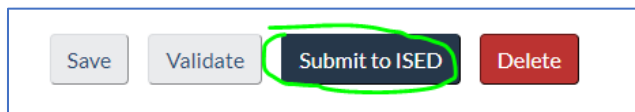
▶ General Information	Edit
▶ Account Information	Edit
▶ Covering Letter	Edit
▶ Station List	Edit
▶ List of Emissions	Edit
▶ Attachments	Edit
▶ Channel Details	Edit

Previous Save Validate Submit to ISED Delete

If no Validation Errors appeared, then you should see the following banner:



You can now click [Submit to ISED] to submit your application:



After clicking the [Submit to ISED] button, **please wait for the system to confirm receipt of the application**, which should appear on your display monitor.

If you require any assistance and/or have questions about your submission, please review the online [RIC-66 guide](#), and contact the respective Spectrum Management office that has jurisdiction of where your event is located. The office processing your request is based on the coordinates of where your racing event is located.