

BRIEFING ON THE TRANSITION TO ICAO NOTAM FORMAT AND NEW NOTAM SERIES

In the fall of 2019, NAV CANADA will transition to the ICAO NOTAM format. As a result, NAV CANADA will distribute all Canadian domestic NOTAMs using this format and international NOTAMs under new NOTAM Series.

The following topics summarize the changes that will occur, and provide a brief overview of the differences between the Canadian domestic NOTAM format and the ICAO NOTAM format:

- [What's changing?](#)
- [Aerodromes with a location indicator containing 3 letters and 1 number in ICAO NOTAM format](#)
- [Bilingual NOTAMs in ICAO NOTAM format](#)
- [Canadian regions for ICAO NOTAMs](#)
- [Series usage for ICAO NOTAM format](#)
- [Summary of changes](#)
- [Stakeholder impact](#)



Runway Surface Condition (RSC) reports (NOTAMJ) will remain unchanged until they transition to ICAO format in the fall of 2020.

What's changing?

There are some differences between the Canadian domestic NOTAM and the ICAO NOTAM; however, the information contained remains the same. The examples below show the same NOTAM using the different formats.

Example of a Canadian domestic NOTAM:

GG CYZZNYOW			
150542	CYHQYNYX		
190234	NOTAMN	CYOW	OTTAWA MACDONALD-CARTIER INT
OW--	NDB 236 U/S	1230-2000 DLY	
1906171230	TIL	1906192000	

Corresponding ICAO NOTAM format that contains the same information as the Canadian domestic NOTAM example above:

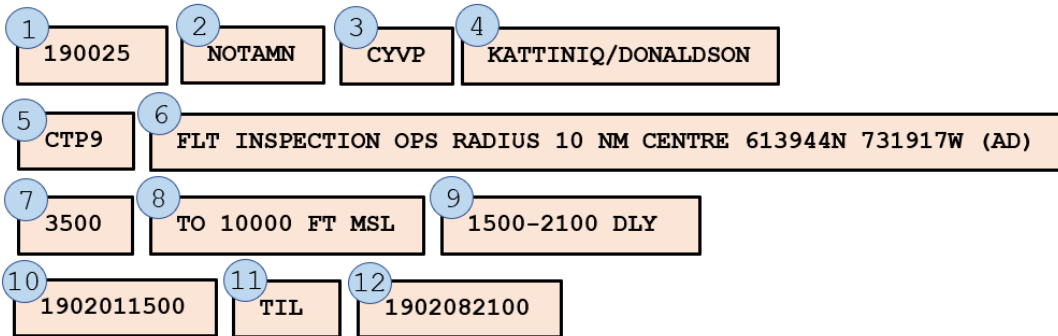
GG CYNOTAMN							
150452	CYHQYNYX						
(N0241/19	NOTAMN						
Q) CZUL/	QNBAS/	IV/	BO/	AE/	000/999/	4521N07334W	025
A) CYOW	B) 1906171230	C) 1906192000					
D) DAILY 1230-2000							
E) OTTAWA OW NDB 236KHZ U/S)							

Differences explained

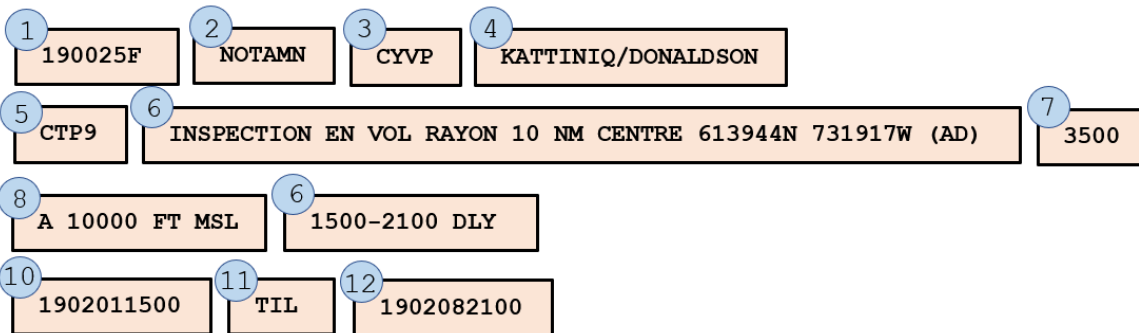
A breakdown of example NOTAMs in English only and in bilingual format (English-French) illustrate the differences between formats:

- An English example of a Canadian domestic NOTAM
- A French example of the Canadian domestic NOTAM
- An English version of the FIR ICAO NOTAM (based on the Canadian domestic NOTAM example)
- An English version of an additional aerodrome ICAO NOTAM
- A bilingual version of the FIR ICAO NOTAM (based on the Canadian domestic NOTAM example)
- A bilingual version of an additional aerodrome ICAO NOTAM

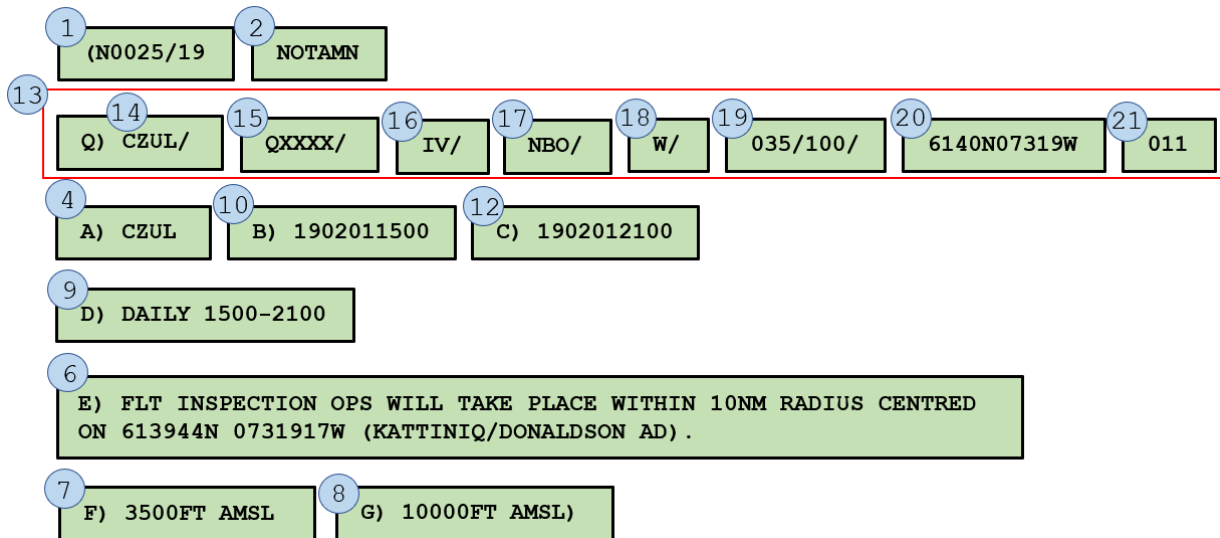
Example of an English version of a Canadian domestic NOTAM:



Example of a French version of a Canadian domestic NOTAM:



Example of an English version of a FIR ICAO NOTAM:



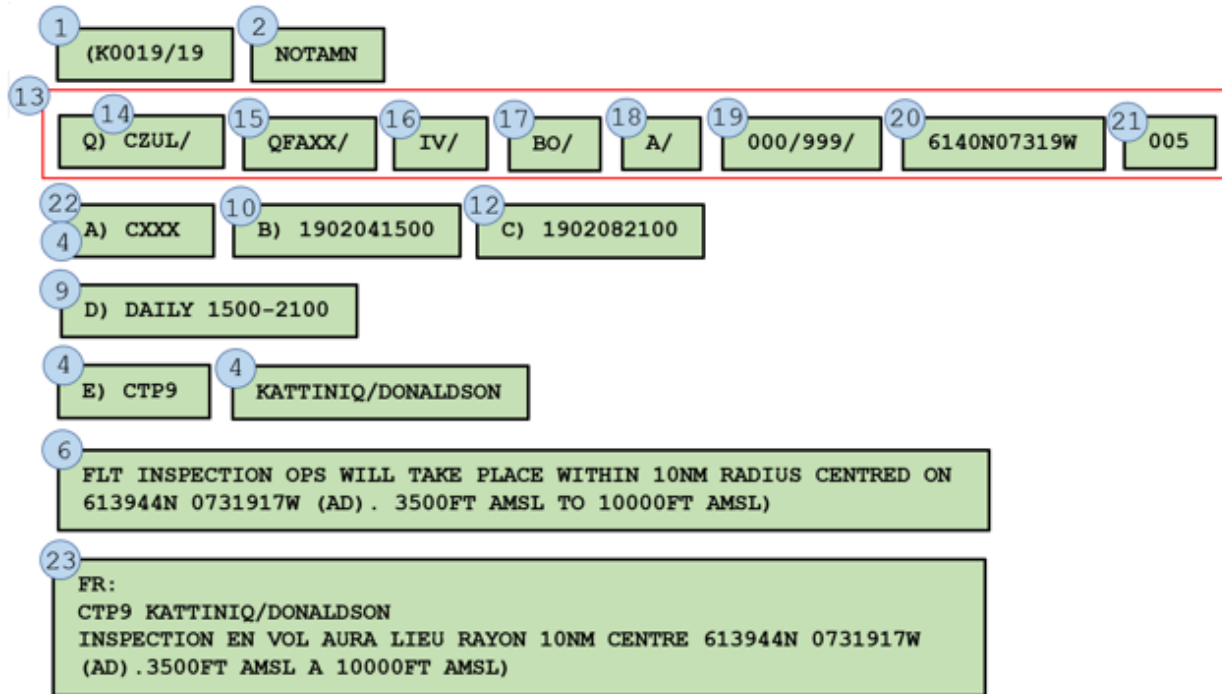
Example of an English version of an additional aerodrome ICAO NOTAM:

1	(K0019/19	2	NOTAMN					
13	14 Q) CZUL/	15 QFAXX/	16 IV/	17 BO/	18 A/	19 000/999/	20 6140N07319W	21 005
22	4 A) CXXX	10 B) 1902041500	12 C) 1902082100					
9	D) DAILY 1500-2100							
4	E) CTP9	4 KATTINIQ/DONALDSON						
6	FLT INSPECTION OPS WILL TAKE PLACE WITHIN 10NM RADIUS CENTRED ON 613944N 0731917W (AD) . 3500FT AMSL TO 10000FT AMSL)							

Example of a bilingual version of a FIR ICAO NOTAM:

1	(N0025/19	2	NOTAMN					
13	14 Q) CZUL/	15 QXXXX/	16 IV/	17 NBO/	18 W/	19 035/100/	20 6140N07319W	21 011
22	4 A) CZUL	10 B) 1902011500	12 C) 1902012100					
9	D) DAILY 1500-2100							
6	E) FLT INSPECTION OPS WILL TAKE PLACE WITHIN 10NM RADIUS CENTRED ON 613944N 0731917W (KATTINIQ/DONALDSON AD) .							
23	FR: INSPECTION EN VOL AURA LIEU RAYON 10NM CENTRE 613944N 0731917W (AD KATTINIQ/DONALDSON)							
7	F) 3500FT AMSL			8 G) 10000FT AMSL)				

Example of a bilingual version of an additional aerodrome ICAO NOTAM



The following table summarizes the differences between the example Canadian domestic NOTAM and the ICAO NOTAM examples above:

#	What's changing?	Existing Canadian domestic NOTAM format	ICAO NOTAM format
1	NOTAM Continuity Number	<p>The format is YYNNNN where:</p> <ul style="list-style-type: none"> YY is the two digits for the calendar year. NNNN is a four-digit number to identify the continuity group. <p>For example: 190025</p> <p>For the French version of a NOTAM, the letter F is appended at the end of the number:</p>	<p>The new format is SNNNN/YY where:</p> <p>S represents the series letter (see Series usage for ICAO NOTAM format).</p> <p>NNNN is a four-digit NOTAM number to identify the continuity number, followed by a stroke character (/).</p> <p>Each series starts on January 1st at 0000UTC of each year with number 0001. ICAO NOTAM numbers are assigned sequentially from 0001 to 9999.</p> <p>/YY is the two digits for the calendar year.</p> <p>For example: N0035/19</p>

		For example: 190025F	The number remains the same for the bilingual format NOTAM (no “F” appended to it)
2	NOTAM type	Shows the type of NOTAM, where N is for New, R is for Replace, and C is for Cancel.	Shows the type of NOTAM, where N is for New, R is for Replace, and C is for Cancel.
3	NOTAM File	For filtering purposes, a NOTAM file is used to group NOTAMs.	ICAO NOTAMs do not use this concept (or notion).
4	Location	Identification (in plain language) of the name for the closest aerodrome, FIR, ACC, or NATIONAL for a NOTAM issued under the CYHQ NOTAM file.	Item A) contains an aerodrome or FIR (four-letter location indicator(s). For more information about aerodrome indicators that contain numbers, see Aerodromes with location indicators containing 3 letters and 1 number in ICAO NOTAM format .
5	Four character identifier	Appears at the beginning of text for filtering purposes. For example, an AD or FIR location indicator, OBST, or NAVAID identifier.	ICAO NOTAMs do not use this concept (or notion).
6	Text	Can include schedule, and lower and upper limits when applicable.	Item E) shows the English text, and for aerodromes and FIRs identified as bilingual, corresponding French text is also provided.
7	Lower Limit	Appears in the Text area.	The lower limit information now appears in Item F) for NOTAMs referring to navigation warnings and airspace restrictions, otherwise in text area.
8	Upper Limit	Appears in the Text area.	The upper limit information now appears in Item G) for NOTAMs referring to navigation warnings and airspace restrictions otherwise in text area.
9	Schedule	Appears in the Text area. DLY is used to indicate a “daily” occurrence.	When applicable, the schedule appears in Item D). DAILY is used instead in Item D).
10	Start Time	Ten-digit date-time group appearing at the end of the NOTAM text and before TIL or TIL APRX.	Appears in Item B). For cancelling NOTAM, it corresponds to the date-time group at which the NOTAMC is created

11	TIL or TIL APRX	To separate Start Time and End Time. APRX meaning approximate.	Does not exist.
12	End Time	Ten-digit date-time group appearing after TIL or TIL APRX. There is no End Time for NOTAM with permanent information or for cancelling NOTAM.	Appears in Item C). EST is appended to the date-time group when the time is an estimate. The acronym PERM replaces the date-time group when the information is permanent. There is no item C) in a cancelling NOTAM.
13	Q-Line	Canadian domestic NOTAMs do not use this format.	The Q-line contains codes and geographical reference for filtering purposes. It begins with location indicator of the FIR where the subject of the information is geographically located.
14	FIR		Qualifier FIR is the ICAO location indicator of the FIR within which the subject of the information is located geographically or CZXX when more than one FIR is concerned.
15	Q-code subject and Condition		The Q-Code is comprised of a two-letter code for the ICAO Subject and the corresponding two-letter code for the ICAO Condition.
16	Traffic type		Contains the type of traffic (associates the ICAO NOTAM message to a flight rule). The traffic is based on one of the following possible entries: <ul style="list-style-type: none"> • I: IFR traffic only • V: VFR traffic only • IV: both IFR and VFR traffic
17	NOTAM purpose		Includes the purpose of the ICAO NOTAM. The possible values, in order of importance, are NBO, BO, B, M and K, where: <ul style="list-style-type: none"> • N: The ICAO NOTAM is selected for the immediate attention of air operators due to its importance.

			<ul style="list-style-type: none"> • B: The ICAO NOTAM is of operational significance, such as briefings or a Pre-flight Information Bulletin (PIB). • O: The ICAO NOTAM is related to flight operations. • M: A miscellaneous ICAO NOTAM that is not the subject of a briefing; however, it is available upon request. • K: A checklist.
18	NOTAM Scope		<p>Includes the applicable scope for the ICAO NOTAM. This qualifier automatically associates the ICAO NOTAM subject to a specific scope to determine its category. Based on user selections in NES, the system will determine the scope selection as one of the following:</p> <ul style="list-style-type: none"> • A: Aerodrome - Associates the NOTAM to the scope of "Aerodrome". • E: En Route - Associates the NOTAM to the scope of "En Route information". • W: Warning - Associates the NOTAM to the scope of "Navigation Warnings", such as events requiring the restriction of airspace. • AE: Aerodrome and En Route - Associates the ICAO NOTAM to scopes A and E. The system will automatically select scope AE whenever an ICAO NOTAM will affect both an aerodrome and en route operations. • K: A checklist
19	Lower Limit/Upper Limit		<p>These qualifiers associate an ICAO NOTAM to a vertical section of airspace by reference to specific lower and upper limits. This allows lower/upper limits to be specified in requests for pre-flight information. The qualifiers "lower" and "upper" represent flight levels, altitudes or heights, expressed as "flight levels" and are inserted as three figures [or numbers] each, separated by a stroke. For example: 000/090.</p> <p>The qualifiers can be derived from item E) or items F) and G) are linked to the Scope. Whenever the</p>

			scope is “A”, the Upper Limit and Lower Limit values will be 000/999.
20	Geographical coordinates		Includes the geographical coordinates that represent the centre of a circle whose radius encompasses the whole area of influence. It is the geographical association of an ICAO NOTAM to a facility, a service, or an area and it is composed of a set of coordinates followed by a radius of influence.
21	Radius of the area of influence		Includes the radius of the area of influence. The radius of influence uses three figures that are always rounded up to the next whole nautical mile, and it encompasses the total area of influence measured from the rounded center coordinates.
22	Aerodromes with location indicators containing 3 letters and 1 number	Aerodromes with location indicators containing 3 letters and 1 number references are permitted.	<p>Aerodromes with location indicators containing 3 letters and 1 number references are not permitted. If an aerodrome has a location indicator with three (3) letters and one (1) number, then Item A) will display as CXXX. Additionally, the alphanumeric location indicator and full name of the aerodrome will display as the first line in Item E).</p> <p>For more information, see Aerodromes with location indicators containing 3 letters and 1 number in ICAO NOTAM format.</p>
23	Bilingual NOTAM	For aerodromes and FIR that require bilingual NOTAMs, a French version NOTAM is created and it has the same NOTAM number as the English version with F appended at the end of the number.	<p>By default, a NOTAM intended for national and international distribution will include English text. If a NOTAM is geographically located where air traffic services are available in English and French, the NOTAM will also be made available with French text for national distribution to subscribers requiring French text.</p> <p>For more information, see Bilingual NOTAM in ICAO NOTAM format.</p>
1	Series	The existing Canadian domestic NOTAM format does not use a series.	<p>Users will subscribe to series applicable to their operational requirements.</p> <p>NOTAM subscriptions will be based on NOTAM Series rather than NOTAM Files.</p> <p>RSC reports will remain unchanged and their subscriptions will continue to be based on NOTAM files.</p>

			For more information, see Series usage in ICAO NOTAM format .
2	NOTAMR	A NOTAM created to replace an existing NOTAM for which the End time has not been reached.	The replacement NOTAM will remain in effect until the Item C) date and time has been reached, or, in the case of PERM or EST, another replacement or cancelling NOTAM is issued.
2	NOTAMC	A NOTAM created with type "C" will cancel the existing NOTAM in effect.	A NOTAM is cancelled, regardless of the date and time that appears in item C) of the NOTAM being cancelled, including PERM.
Retrieval			
Retrieving NOTAMs	The method for lookup and retrieval is based on the Canadian domestic NOTAM format.	Systems that consume and parse Canadian domestic NOTAM format will now parse NOTAMs in ICAO NOTAM format.	

Aerodromes with a location indicator containing 3 letters and 1 number in ICAO NOTAM format

The following examples show how the ICAO NOTAM format will address aerodromes with a location indicator containing 3 letters and 1 number:

- For aerodrome CCD3:

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A) CXXX B) YYMMDDHHMM C) YYMMDDHHMM
E) CCD3 WOODSTOCK
<text to be continued on the next line>
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- For aerodrome CAM9:

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A) CXXX B) YYMMDDHHMM C) YYMMDDHHMM
E) CAM9 VANCOUVER INTL (WATER)
<text to be continued in new line>
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Bilingual NOTAM in ICAO NOTAM Format

The following example shows how the ICAO NOTAM format will address the bilingual requirements of some aerodromes:

H1005/19 NOTAMN
 Q) CZUL/QWZLW/IV/M/W/000/030/4519N07541W002
 A) CZUL B) YYMMDDHHMM C) YYMMDDHHMM
 E) MODEL ROCKET ACT 1000FT BFR THR 04 AND 300FT SE
 EXTENDED RCL AT OTTAWA/MACDONALD CARTIER INTL AD

FR:

**ACT MODELES REDUITS DE FUSEES 1000FT BFR THR 05 ET 300FT
 A DROITE DU PROLONGEMENT DE RCL A AD OTTAWA/MACDONALD
 CARTIER INTL**

F) SFC G) 3000FT AMSL

The green highlighting above shows the French text section that begins with “FR:”. If required, the French section will only appear to subscribers requiring French text. Note that the NOTAM number does not contain “F” like in the domestic version.



The requirement for a bilingual NOTAM is based on the location of the aerodrome or the area of influence in cases of FIR.

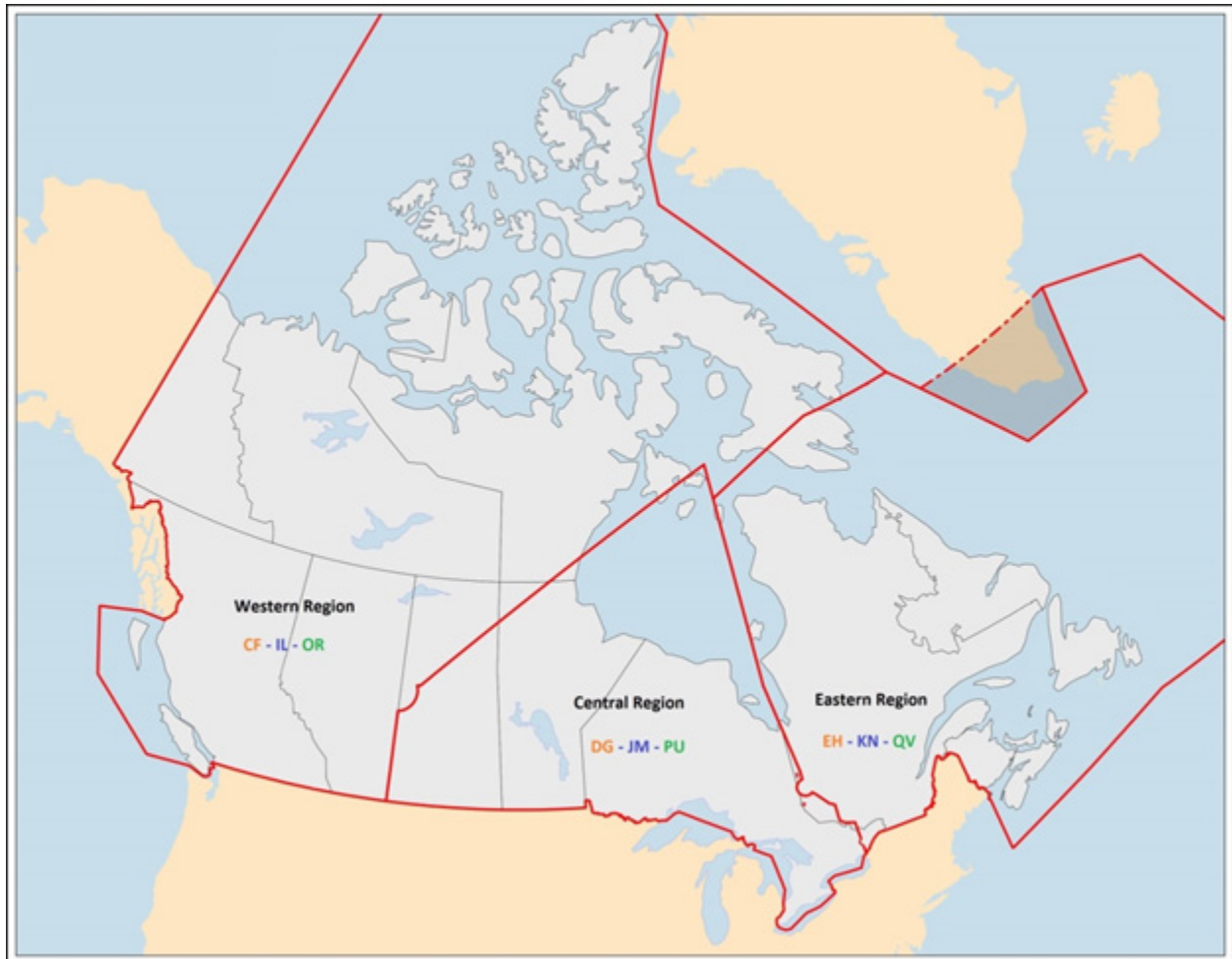
Canadian regions for ICAO NOTAMs

The regions in the Canadian [series](#) model are as follows:

Region	Description
Western	Consists of the Vancouver and Edmonton FIRs. NOTAM Series C, F, I, L, O and R.
Central	Consists of the Winnipeg and Toronto FIRs except for three locations where services are available in English and French: CNC9-Perth (Great War Mem Hosp) (Heli), CTA4-St-Bruno-de-Guigues, CSR8-La Sarre. NOTAM Series D, G, J, M, P and U.
Eastern	Consists of Montreal, Moncton and Gander FIRs in addition to the three locations in Toronto FIR where services are available in English and French: CNC9-Perth (Great War Mem Hosp) (Heli), CTA4-St-Bruno-de-Guigues, CSR8-La Sarre. NOTAM Series E, H, K, N, Q and V.

For detailed information about the meaning of the series letters, see [Series usage for ICAO NOTAM format](#).

The following image shows the boundaries for each of the regions in Canada:



Series usage in ICAO NOTAM format

The ICAO NOTAM series is assigned in accordance with the ICAO NOTAM regions, dissemination categories, and subject categories. There are 18 series letters used in Canada: C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, U, V.

The ICAO NOTAM series will differentiate NOTAMs that are distributed for only national distribution, or both national and international distribution.

The following table identifies the series letter used for distribution within the three Canadian regions:

Series	Disseminated to Regions	Description
Series disseminated internationally, and within USA and Canada		
C	Western	

D	Central	These series pertain to hazards and outages associated with aerodromes identified by international stakeholders, to include: Lighting facilities (L); Movement and landing areas (M); Facilities and services (F); Air traffic procedures (P) (scope A or AE) except ADIZ procedures (PZ); Instrument landing systems (I); Obstacle to air navigation (OB) within 5 NM of aerodromes
E	Eastern	
F	Western	
G	Central	
H	Eastern	These series pertain to NAVAIDs, airspace and warnings requiring international distribution: Communications and surveillance facilities (C), GNSS services (G), Terminal and En Route navigation facilities (N); Airspace organization (A), Air Traffic and VOLMET Services (S), Air Traffic Procedures (P) (scope E) and including ADIZ procedures (PZ); Navigation Warnings – Airspace restrictions (R), Warnings (W), and groups of obstacles to air navigation (OB) (wind farms, cable crossings, etc.) with an area of influence intersecting the 5NM radius circle of more than one aerodrome.
Series disseminated within USA and Canada		
I	Western	
J	Central	
K	Eastern	These series pertain to hazards and outages associated with aerodromes identified for distribution to the USA and Canada only, to include lighting facilities (L), movement and landing areas (M), facilities and services (F), Air traffic procedures (P) (scope A or AE) except ADIZ procedures (PZ), Canadian instrument flight procedures (PI) using an altimeter setting source located in the USA, Instrument landing systems (I) and Obstacles to air navigation (OB) within 5 NM of aerodromes in this category.
L	Western	
M	Central	
N	Eastern	
Series disseminated within Canada		These series pertain to communication, NAVAIDs, airspace and warnings identified for distribution to the USA and Canada only: Communications and surveillance facilities (C), Instrument and landing systems (I), GNSS services (G), Terminal and En Route navigation facilities (N); Airspace organization (A), Air Traffic and VOLMET Services (S), Air Traffic Procedures (P) (scope E); Navigation Warnings – Airspace restrictions (R), Warnings (W) and groups of obstacles to air navigation (OB) (wind farms, cable crossings, etc.) with an area of influence intersecting the 5NM radius circle of more than one aerodrome.
O	Western	
P	Central	
Series disseminated within Canada		These series pertain to hazards and outages associated with aerodromes not listed in the two (2) above categories to include lighting facilities (L), movement and landing areas
O	Western	
P	Central	

Q	Eastern	(M), facilities and services (F), Air traffic procedures (P) (scope A or AE) except ADIZ procedures (PZ), Instrument landing systems (I) and Obstacles to air navigation (OB) within 5 NM of aerodromes in this category.
R	Western	These series include obstacles to air navigation (cranes, antennas, etc.) located beyond 5 NM of any aerodrome, and all light outages.
U	Central	
V	Eastern	

Summary of changes

Current	After fall 2019
All Canadian NOTAMs are disseminated in Canadian domestic NOTAM format using NOTAM files.	All Canadian domestic NOTAMs will be disseminated in ICAO NOTAM format. Domestic NOTAM files will no longer be used.
Canadian NOTAMs requiring international distribution are converted in the ICAO format and issued by International NOTAM Office (NOF).	
Series A, B, Y and Z are used to identify and sequence NOTAMs in ICAO NOTAM format.	Series C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, U, and V will be used to identify and sequence NOTAMs. The new ICAO NOTAM Series model will be based on subjects and selective dissemination by regions and will be promulgated in advance.
RSC reports are disseminated using domestic NOTAMJ format.	RSC will continue to be disseminated in Canadian domestic NOTAMJ format until fall 2020. NOTAM files will continue to be used only for RSC reports.

Stakeholder impact

The impact of the transition will differ for each stakeholder depending on their level of interaction with Canadian NOTAMs. The table below describes the expected impact for common stakeholder types.

Stakeholder Types	Summary of impact
NOTAM originators	Users who create NOTAMs will need to provide the required information to complete the Q-line. For example, provide the center coordinates as well as the radius of the area of influence.

<p>Data integrators, flight information service providers, governmental organizations and ANSPs who receive Canadian NOTAMs in <u>ICAO NOTAM format</u> via AFTN.</p>	<p>The NOTAM series will change.</p> <p>Existing NOTAMs in ICAO NOTAM format will be transferred to new NOTAM Series. NOTAM continuity number will differ.</p>
<p>Data integrators, flight information service providers, governmental organizations and ANSPs who receive NOTAMs in <u>Canadian domestic NOTAM format</u> via AFTN.</p>	<p>The unique Canadian domestic NOTAM format will be discontinued. Systems that consume and parse Canadian NOTAM domestic format will need to parse NOTAMs in ICAO NOTAM format.</p> <p>Users will subscribe to series applicable to their operational requirements.</p> <p>ICAO NOTAM subscriptions will be based on NOTAM Series rather than NOTAM Files.</p> <p>RSC reports will remain unchanged, and their subscriptions will continue to be based on NOTAM files.</p>
<p>Flight training organizations and publishers who publish or relay information related to Canadian NOTAM policy.</p>	<p>Training content and publications will require changes to reflect the transition to ICAO NOTAM format.</p>
<p>General aviation pilots and NOTAM users who read NOTAMs in Canadian domestic NOTAM format from the NAV CANADA Website.</p>	<p>NOTAM format and lookup method will change. The NOTAM file concept to retrieve NOTAMs will no longer apply. New retrieval guidelines will be provided.</p>
<p>Pilots and NOTAM users who read NOTAMs using a third party (non-NAV CANADA) system.</p>	<p>Level and type of impact will depend on the system being used.</p>

For additional questions or comments, please contact icaonotam@navcanada.ca.