

EMGCP Meeting – Spring 2026

May 12, 2026 | 13:00 – 15:00

Emergency Management Geomatics Community of Practice (EMGCP)

Attendees PS GOC Geomatics, DFO, TC, RCMP, HC, ECCC, CWFIS, PSPC, GAC, CCG, ESDC, DND MCE, RCN, StatCan

Location In-Person - GOC Facility and Online - Microsoft Teams

1. Welcome and Introduction

13:00-13:30

Presenter: Darlene Tran (PS GOC)

Description

Welcome attendees in-person at the GOC Facility in Ottawa, ON. Begin the virtual meeting for those online. Roundtable and an overview of today's meeting agenda.

1.1. Call to Order

Description

The attendance is captured by attendees inputting their name, position, team and department in the meeting chat.

2. National Evacuation Reporting Database (NERD) - Update

13:45-14:00

Presenter: Cameron Bouchard (PS GOC)

What is the National Evacuation Reporting Database (NERD)?

- Information is received from Situation Reports (SitReps) from Public Safety Canada regional offices (ROs), provincial emergency management offices (EMOs), and federal departments like Indigenous Services Canada and Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC).
- The current work involves ingesting and collating information into daily reports and cyclical event common operating picture reports.
- This project was brought about to address a current challenge and gap in data availability:
 - The GOC does not retain evacuation information in a database for further analysis.
 - Requests for detailed evacuation data are difficult to fulfill due to the lack of a comprehensive database.
 - The Geomatics team decided to create a system to standardize and catalog evacuation data.
 - Research was conducted with partners like NRCAN and the Canadian Wildland Fire Information Service to understand their methods.

System, Data Collection and Output

- The system will collect evacuation data from provinces and territories, standardizing it into a single database.
- The system will include automated translation of information between French and English.
- The dataset will be accessible to all members of the GOC and partners for mapping and statistical analysis.
- The system will scrape digital information and manually enter data not available digitally.
- The system will include automated translation and record the source language for accuracy.

NERD Workflow

Input Data

- Information from Province/Territory come in the form of digital feeds, or PDFs, Word documents, or emails;
- Information coming from a digital feed contains evacuation event details and non-jurisdictional shapes, these digital feeds will be scraped by GOC-Geo once per hour
 - The scraped data will be input into a database of non-jurisdictional polygons, making it a dynamic dataset
- Information coming from a non-digital feed, such as PDF or email, is input by GOC Watch staff via an input form using ESRI Survey 123
 - The modified or updated record is added to a Survey 123 database/spreadsheet of evacuations
- GOC-Geo also has a database of StatCan jurisdiction boundaries, a static database.
- GOC-Geo also has a database of First Nations information, text format, a static database.

Polygon Feature Layer Creation, Text Translation, Polygon to Point Conversion

- GOC-Geo Script on ArcGIS Online:
 - Input polygon from GOC-Geo Data of provincial non-jurisdictional polygons (dynamic) or database of StatCan jurisdiction boundaries (static);
 - Retrieves fire cause from CIFFC;
 - Gets First Nation text information from the FN database (static);
 - Uses input data to determine if boundary is jurisdictional (StatCan) or non-jurisdictional (provincial);
 - Merges polygon to text to create or update a feature and add it to an ArcGIS Online hosted feature layer;
 - Initiates translation script;
- Text Translation occurs through a translation script on ArcGIS Online and uses an approved translation database for most fields and/or DeepL API for open text translations, then applies translations directly to the Feature Layer and initiates a polygon to Point Conversion Script;

Output Data

- Created or updated Feature Layer is input into GOC-Geo Hosted Feature Layer (polygons), with a Point Conversion Script, a point representation of the polygon is created and added to the Hosted Feature Layer (points) database.

Example Evacuation Scenario Output for Red Deer, Alberta

Using the National Evacuation Input Form

- Input form was created using ESRI Survey 123
- The GOC Watch team will input information received from reporting, information to fill in includes:
 - First Nation Classification for Evacuation (if applicable)
 - Jurisdiction Assessment (Yes/No): is the boundary based off of an official jurisdictional boundary or was it created ad-hoc by emergency management in the province
 - If Yes: the official boundary is pulled from the GOC-Geo database of StatCan jurisdiction boundaries
 - If No: the ad-hoc polygon is used
 - Location Name: the location of the evacuation
 - Location Type: automatically chosen based on answer in Jurisdiction Assessment
 - Event: what the event type is, for example: wildfire or flooding
 - Fire ID: marries to CIFFC fire ID to extract the cause of the fire
 - Information Source: provincial/territorial, municipal, federal, or Public Safety RO report
 - Active Evacuation (Yes/No)
 - Evacuation Count Source: where the information for the evacuation count is sourced from
 - Evacuation Count: input the number of evacuees indicated within the report, or if no number is provided, put the population count coming from the census division
 - Evacuation Start Date
 - Evacuation End Date
 - Evacuation Type: order or voluntary
 - Evacuation Level: partial or complete
 - General Notes
- Output: All of the information input into the Survey 123 form is kept in a .txt file in a database and used within a script that merges polygon and text to create an output polygon feature and add it to an ArcGIS Online hosted feature layer. After this, the translation script would be initiated to apply translation directly to the feature layer and initiate a polygon to point conversion script, however this part is still in progress.

Current Status

- 80% of the work is done; generation of polygons, accessing and/or blending jurisdictional and non-jurisdictional polygons from partners and merging with text are all functioning. The translation script is still in progress using a DeepL Developer API.
- Anticipated completion is within the next month to month and a half (mid-June/July). EMGCP members will be notified once NERD is live.

2.1. Q&A

Q: Are you only using Census subdivisions for the jurisdictional boundaries?

A: We are using Census Subdivisions, Designated Place, and Population Centre.

3. DigiDOB

14:00-14:35

Presenter: Darlene Tran (PS GOC)

Why We Modernized

- Daily Operations Brief (DOB) is a report used to share situational awareness with partners and senior leadership of events of national significance;
- Previous DOB was a static PDF produced manually by the GOC Watch team once daily in the morning, provided in both English and French,
- There was a need for real-time updating of information especially during complex events that integrated consistent formatting and avoided duplication of information.

The DigiDOB

- Interactive, near real-time operations brief reporting via ESRI Dashboard on ArcGIS Online;
- Interactive maps, live feeds, and open-source data feeds,
- Available in French and English,
- Scalable design for posture escalation.

DOB Modernization Timeline

- September to November 2025: Development and planning of Version 1 of DigiDOB took place with a focus on requirements, data integration, and consultations
- December 2025: An internal soft launch of Version 1 that included training staff, trials, and troubleshooting any issues
- December 31, 2025: An external launch of the DigiDOB shared with partners alongside temporary continued use of the previous DOB PDF
- January to February 2026: Development and planning of Version 2 of DigiDOB took place to upgrade requirements, data integration, and conduct consultations in preparation for Cyclical Season 2026
- February 2026: The previous DOB PDF is discontinued, relying entirely on the DigiDOB for reporting

- March to May 2026: Version is released, gradual integration of cyclical data and continuous improvements
- May 2026: The name of DigiDOB officially becomes Daily Operations Brief (DOB)

Walkthrough of the DOB

- The DOB is an ESRI Dashboard made using ArcGIS Online

Tab 1: National Summary

- Within the header, there is the GOC activation level, as well as the National Terrorism Threat level, which is pulled from Integrated Threat Assessment Centre (ITAC).
- On the top left side, there is the list of incidents that the GOC is currently monitoring, if an incident is clicked, the map will pan to the incident and pull up the latest entry of incident details. Any text changes between the previous entry and the latest entry is bolded.
- Bottom left shows Upcoming Events that the GOC is monitoring, and beside that is Weather Alerts
- Within the map, visibility range is on, so when zooming into an event, more layers will begin to appear (for example, federal government facilities)

Tab 2: Leadership Location

- Simple map and table that provides a snapshot of where the leaders are located on a given day

Tab 3: National Weather

- Images are pulled from the ECCC site
- On the left side, text information received from ECCC is added by the Watch into a database

Tab 4: Space Weather

- When there is a solar flare or other type of space weather activity, this tab will become similar to the Incidents displayed on Tab 1, only they will be space weather incidents

Tab 5: Flooding

- Flood-focused incidents that the GOC is monitoring;
- When Natural Resources Canada (NRCAN) flood extents are available, they are added to the map, pulled from the NRCAN feed.
- Weather station information is also available.

Tab 6: Special Event (FIFA)

- This tab is available whenever there is a special event occurring that the GOC is monitoring, for example the upcoming FIFA event in Toronto and Vancouver.
- Information can be customized on this tab as needed, for FIFA, GOC information and GOC-Geo static maps are being displayed.

Tab 7: Federal Activities

- This tab is one that embeds Experience Builder into the Dashboard.
- GOC will coordinate with other emergency management offices to get information on their current and projected activities and activation level;
- Each card is catered to a specific department.

Tab 8: Non-Governmental Organizations (NGOs)

- This is another tab that embeds Experience Builder into the Dashboard.
- Similar to the Federal Activities, this tab also shows activation levels and current or projected activities for a specific NGO.

Tab 9: Tropical Activity

- Direct feeds from Canada and the United States are used in this map; if there is storm, it will show up here automatically.

New Tab: Wildland Fires

- Wildland fires tab will be released soon.
- It has a map showing fire data from CIFFC, as well as other layers.
- There is also a dropdown section that displays:
 - o Information scrapped from CIFFC, such as statistics and agency preparedness level;
 - o Wildfire weather maps from ECCC;
 - o Air quality and smoke maps from live feeds.

Mobile Version of the DOB

- There is a mobile version of the DOB that shows only a selection of key information and omits any information or elements that are not necessary for a quick high-level view;
- In some instances, maps were omitted, and some tab layouts were changed completely to ensure they were as mobile-friendly as possible

Further Discussion

- In a future EMGCP meeting, GOC-Geo can go over the Incident Approval and History Snapshot Workflow behind the DOB Dashboard.

3.1. Q&A

Q: What is the name of the app? Can we install it on our work cellphone?

A: All of it is developed on ESRI ArcGIS Online, using a combination of Webmaps, Dashboard, Experience Builder, Survey123 (for data entry by the Watch). No installation is required for a mobile user, it can be accessed directly through the browser.

Q: How did senior management get on board with the transition from static to digital and dynamic?

A: There was a desire to reduce workload burden of creating static maps and PDF documents, with this dynamic product leveraging live feeds and input forms that allow for continuous updates throughout the day, there is greater control over EMGCP

maintenance and a lot more can be done with a smaller amount of staff.

Q: Will you be adding a tab for wildfires to the DOB?

A: Yes, it should be released in one or two days from now, in time for cyclical season.

Q: Is all the data shared in the DOB public?

A: The data is DL-1.

Q: Is there a reason for choosing Dashboard over Experience Builder?

A: The main reason was for simplicity and ease of use by all. With Dashboard, the interface is simple for the audience to use and for the team to maintain. Whereas with Experience Builder, it can become complicated to maintain over a whole team. For example, if something breaks in Experience Builder, it's hard to find where it's broken, and there is a lack of documentation to troubleshoot those issues. The build out in Experience Builder is also a lot more complicated than Dashboard, for example the layout of elements is much easier in Dashboard than Experience Builder. However, we do embed some Experience Builder into the DOB Dashboard because we needed that next level of customization for some pieces. We do use Experience Builder exclusively for GOC-Geo Hub maps, but for the DOB, it was easier to do in Dashboard.

Q: Will you be using any other feeds from other departments? For example, Transport Canada Incidents?

A: It depends on the partner connection, reporting demands, and dissemination level. In terms of providing better situational awareness to operators, there are aspect that can be discussed between GOC and partners, maybe not necessarily shared publicly, just for operators. It is worth exploring if there could be a way to federate pieces internally and share information between departments on the backend, such as within ESRI Enterprise or Portal, for provision of situational awareness.

Q: Some of the incidents and information would overlap with other departments, there would be coordination needed to ensure no duplication.

A: The job of the GOC Watch team is to consolidate all information received from partners to ensure no duplication or discrepancy of information. We also want to highlight that the DOB is a GOC-centric app designed to display information and present activities that we are currently monitoring, all in alignment with our mandate.

4. Data Catalogue

14:35-14:45

Presenter: Cameron Bouchard

Introduction to Data Catalogue

- The Data Catalogue was developed primarily for GOC staff to let them know what data we have available, so that they know what products we can potentially create for them.
- It is also available for partners to view, you can find the link on the GOC Emergency Management Hub.

Database and Navigation

- There is an Excel database in the background of the app that lists all of the data used in our desktop and online mapping. It was added to ArcGIS Online as a hosted table.
- Click on a data category and to be brought to a list of data, each data has thumbnail image to give a snapshot of what the data will look like, and all public data has a link to the source.
- Hundreds of layers are available in this catalogue, and we indicate if the data is public or proprietary.

Public Data PDF

- At the bottom of the Data Catalogue main page, you can find a list of all the public data in a downloadable PDF format.

4.1. Q&A

NIL

6. Adjournment

14:45-14:48

Presenter: Darlene Tran (PS GOC)

Thank you to everyone who were able to make it to this meeting! Please note that Naomi Noiseux from the GOC Geomatics team will be chairing EMGCP upcoming meetings.

The next meeting is scheduled to take place sometime in August, more details to come soon.

Please feel free to reach out to Naomi Noiseux or the GOC Geomatics team if you have any topics you would like to present at the next meeting. Looking forward to meeting again soon!