



## Western Canadian One Call Centres

# Request for Proposal for One Call Software Solution

**September 2017**

The materials contained in this Request for Proposal are strictly confidential and may not be distributed.

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## ORGANIZATION OVERVIEW AND BACKGROUND MATERIAL

### ABOUT WESTERN CANADIAN ONE CALL CENTRES

This joint Request for Proposal (RFP) is produced on behalf of three western Canadian provincial one contact centres and operations: BC One Call, Alberta One-Call, and Click Before You Dig MB. For the purpose of software procurement licensing, support structure and evaluating vendor response related to this RFP, three provincial centres will act as one entity, identified throughout this document as Western Canadian One Call Centres.

Saskatchewan First Call Corporation is in agreement with the attached Business Rules but is not participating in this RFP. It may contact the successful proponent(s) to provide the services outlined below. The successful proponent(s) would be expected to make the services available to Saskatchewan First Call Corporation on the terms, including pricing, agreed to with those participating in this RFP. Western Canadian One-Call Centres are private, not-for-profit corporations providing a communications service between people who intend to disturb the ground and the infrastructure operators who register their buried facilities (Members).

Western Canadian One Call Centres are primarily concerned with safety and the prevention of damage to underground infrastructure.

Western Canadian One Call Centres provide services to 1232 registered member companies and transmit approximately three million excavation notifications to those members annually.

More information about each centre can be found here:

BC [bconecall.ca](http://bconecall.ca)

Alberta [albertaonecall.com](http://albertaonecall.com).

Saskatchewan [sask1stcall.com](http://sask1stcall.com)

Manitoba [clickbeforeyoudigmb.com](http://clickbeforeyoudigmb.com)

### MISSION

The mission of Western Canadian One Call Centres is to prevent damage to underground infrastructure through education, advocacy, public awareness and dependable, cost-effective communication and exchange of information between members and those intending to disturb the ground.

## PROJECT BACKGROUND

### OBJECTIVE

The Western Canada One Call Centres recently completed a project to align the business rules associated with the use of a one call system. The intent of this alignment is to allow all three provinces to jointly procure one software solution that meets the needs of all stakeholders, and increases automation and process efficiencies.

**The Business Rules for the Use of Western Canada Notification Systems is attached to this RFP for your reference. Review the business rules document carefully and ensure your responses address the required functionality to achieve the operations outlined therein.**



## OVERVIEW OF PRESENT CONTACT CENTRE ENVIRONMENT

Western Canadian One Call Centres are primarily in-bound information collection centres, with 36 seasonally-employed agents based out of a Calgary, AB location, 8 seasonally-employed agents based out of a Burnaby, BC location, and approximately 6 additional permanent work-from-home agents who work in various locations in the province of Alberta. Administration, support and management bring the total number of employees to 64. All employees should be able to work from remote locations (work-from-home) when required.

The current one call centre software solution for each province is provided by a single vendor with each province currently using a different version of the vendor's software. Each province also has a unique mapping database and pays separately for software development and software support. In addition, each centre maintains a unique web portal for online users to submit locate requests into the contact centre.

### Primary function

Excavators performing a ground disturbance contact a provincial Contact Centre to request underground infrastructure be identified, located and marked prior to excavation. Excavators may complete the request online (Click Before You Dig) or by phone (Call Before You Dig). The request is processed by Contact Centre agents and then sent out electronically to underground infrastructure owners with buried assets in the vicinity of the proposed ground disturbance. The Contact Centres require specialized software to process these requests.

The centres' call volumes vary seasonally, with a low of 30,000 average number of requests/month (November to February) and a high of 65,000 average number of requests/month (March to October).

One Call software supports four primary groups of users: Contact Centre agents ("Damage Prevention Associates" or "DPAs"), Contact Centre supervisors, online users, and administrative staff. Each one of these user groups has different requirements of the software.

Most employees are provided with All-in-One units or laptops allowing them to work remotely via secure VPN access.

## OBJECTIVES/SCOPE OF WORK

The Western Canadian One Call Centres wish to engage a vendor who can supply a One Call Software Solution, primarily to provide the following benefits to our organizations:

- Single source, web-based solution to replace multiple versions of legacy software, managed services and support agreements.
- A solution that supports the contact centres' goal of increasing web use and customer self-service options.
- Scalable solution to adjust costs and licensing up or down in conjunction with number of users and peak seasonal volumes



- Geographic redundancy built into system – monitored 24/7, with limited manual manipulation required for failover
- Feature rich component options and support for multi-channel and multi-platform interactions.
- Integration with customer support software and billing software. (API compatible)
- Direct control over configurable options within the software. (Specific components that should be configurable by system administrators will be identified throughout this document with a \*config notation.)
- Solution that provides agents and supervisors the ability to ‘work from anywhere’ as we transition to a virtual centre.
- Feature rich and customizable reporting software solution
- Ease-of-use and easily understood user interface, both internal and external facing; with associated help documentation
- Robust 24/7 Support from Vendor, both during and after the implementation process. Implementation process must include dedicated project management resources.
- State of the art, best in class GIS solutions for location look-up, map base maintenance, map layer controls, and integration between user-drawn polygons and map base dataset.
- Solution that increases the number of automated processes, allowing users to complete a ticket online without the need for manual processing by a contact centre agent and limiting unnecessary notifications to members.
- Engage in a business partnership with a vendor with a plan and proven capability for continuing enhancement and development of the software product suite to take advantage of technological advancements, and to ensure customers have the best tools currently available at their disposal.



## LIABILITY AND RESERVED RIGHTS

This RFP does not commit Western Canadian One Call Centres to pay any cost incurred in the preparation or submission of any proposal, or to procure or contract for any services. Western Canadian One Call Centres may, at its sole discretion, reject any or all proposals received, or waive minor defects, irregularities or informalities therein.

Western Canadian One Call Centres reserves the right to amend this RFP by an addendum issued up to five business days prior to the date set for receipt of proposals. Addenda or amendments will be mailed or emailed to all bidders that have copies of the RFP. If revisions are of such a magnitude to warrant the postponement of the date for receipt of proposals, then an addendum will be issued announcing the new date.

This section outlines specific instructions for proposal submission. A bidder that does not adhere to these instructions may be subject to disqualification without further consideration.

## GENERAL PROCEDURES

### ISSUING AUTHORITY

This RFP is issued on behalf of Western Canadian One Call Centres (comprised of BC One Call, Alberta One-Call Corporation and Click Before You Dig MB) by:

Sher Kirk, Project Manager  
Address: 104, 4242 7 Street SE, Calgary, AB T2G 2Y8  
Phone: (403) 531-3718 Cell: (403) 479-4732  
Email: SLKirk@AlbertaOneCall.com

### PRICE GUARANTEE

Bidder must guarantee its prices for a period of six months, beginning on the date of submission of the response to this RFP. The Bidder must also guarantee their prices will not escalate greater than 5% annually for the first five years of service unless the Bidder and Western Canadian One Call Centres agree in writing.

### PREPROPOSAL QUESTIONS

Bidder must submit questions in writing to:

Sher Kirk, Project Manager  
Western Canadian One Call Centres RFP  
104, 4242 7 Street SE  
Calgary, AB Canada T2G 2Y8  
Email: SLKirk@AlbertaOneCall.com



All questions must be received by September 15, 2017 to allow for Western Canadian One Call Centres' response.

#### RFP QUESTIONS AND CLARIFICATIONS

Vendors shall aggregate their requests for clarification and submit them via email to Western Canadian One Call Centres. **Contact should be no later than 5:00 pm MDT on September 15, 2017.** Such requests for clarification, and Western Canadian One Call Centres' response, will be supplied in writing to all parties that have received copies of the RFP, without identifying the source of the inquiry.

#### RFP RESPONSE TERMINOLOGY

It is important for the bidder to respond in a concise manner to each section of the RFP document.

Indicate the level of compliance with required specifications by replying with the following language:

- "Acknowledge" — Bidder has read and understands the information provided; however, no action is required by the bidder.
- "Comply" — Bidder meets the specifications.
- "Partially comply" — Bidder meets part of the specification; bidder should always explain how or the deviation from the specification.
- "Comply with clarification" — Bidder meets the specification; however, the manner in which the bidder accomplishes this may be different from that specified in the RFP. The bidder should provide clarifying information.
- "Exception" — Bidder does not meet the specification. Please provide an alternative solution when possible.

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#### COVER LETTER

The proposal must be accompanied by a cover letter, signed by an individual authorized to bind the proposed entity.

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#### VENDOR PROFILE AND DEMOGRAPHICS

Provide a statement giving a brief history of your company, how it is organized, and how its available products and resources will be used to meet Western Canadian One Call Centres' requirements. The vendor shall submit the following information:

- The company's official name and address. The vendor shall also indicate what type of entity it is — for example, a corporation or a partnership.



- The name, address and telephone number of the person who receives correspondence and who is authorized to make decisions or represent the vendor. Please state his or her capacity within the company.
- The total number of years the vendor has been in business and, if applicable, the number of years under the present business name.
- The number of years that the vendor has been providing the application(s).
- A description of the vendor's operations: facilities, business and objectives, and the number of employees.
- The total number of clients to which the vendor provides similar / same services. Provide references where available.

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#### FINANCIAL INFORMATION

The vendor shall provide a complete set of audited financial statements for the past three years. All financial statements should be prepared to generally-accepted accounting principles. Each vendor should note that Western Canadian One Call Centres reserves the right to purchase credit reports and additional financial information as it deems necessary. The vendor shall also provide a copy of its corporate annual report.

In the case where the vendor is not a public company, the vendor must provide financial statements that can be used during the evaluation to determine the financial viability of the vendor.

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#### PROPOSAL FORMAT

The complete proposal must include the proposal document with a point-by-point response to the RFP and all other materials requested. Bidder may include any additional materials it feels could assist in the evaluation of its proposed systems; however, the bidder must provide complete responses to each question.

Proposals that do not follow the RFP's format and content requirements will be subject to rejection without appeal.

Proposals may be submitted by mail (hard copy) or by email (soft copy). If the bidder chooses to submit its proposal by mail, four complete and identical copies of the proposal are required.

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#### PROPOSAL DUE DATE

All proposals must be received by 5:00 pm EDT on September 22, 2017, and will be labeled: "Response to One Call Software RFP for Western Canadian One Call Centres".

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#### PROPOSAL DELIVERY

Bidder is requested to submit the proposal to the following contact shown:



Sher Kirk, Project Manager  
Western Canadian One Call Centres  
104, 4242 7 Street SE, Calgary, AB T2G 2Y8  
Email: SLKirk@AlbertaOneCall.com

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#### PROPOSAL INCLUSIONS

All equipment, accessories, database information, training, software, hardware, labour and materials must be furnished for the installation in a bill-of-materials format. Any additional material or equipment necessary for installation, operation and maintenance of the system(s) not specified or described herein will be deemed to be part of the bidder's proposal.

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#### STANDARD AGREEMENTS

Bidder must provide a copy of its standard product agreements.

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#### PROPOSAL MODIFICATION AND WITHDRAWAL

Once the proposal is submitted, bidder may modify or withdraw it only by appropriate notice to Western Canadian One Call Centres. Such notice will be in writing over the signature of the bidder. A bidder may resubmit a withdrawn proposal up to the time designated for the receipt of proposals, provided it then fully conforms to the general terms and conditions of the RFP.

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#### CONFIDENTIALITY

Proposals submitted to Western Canadian One Call Centres for consideration will be held in confidence and will not be made available to other bidders for review or comparison. Proposals submitted and terms and conditions specified in each bidder's bid response will remain the property of Western Canadian One Call Centres

All information in this RFP is confidential and will not be disclosed to anyone other than those responding to this RFP. Bidder may designate the portions of the proposal that are proprietary in nature, and Western Canadian One Call Centres agree not to disclose those portions except for the purpose of evaluating the proposal.



## CALENDAR OF EVENTS

Table 1 reflects the project schedule.

**Table 1. Project Schedule**

<b>Activity</b>	<b>Primary Responsibility</b>	<b>Date (Date Month Year)</b>
RFP released to bidders	Western Canadian One Call Centres	21 Aug 2017
Bidder's acknowledgment of intention to bid	Bidder	1 September 2017
Provide final questions by deadline	Bidder	15 September 2017
Proposal delivery and opening	Bidder/ Western Canadian One Call Centres	22 September 2017
Evaluation	Western Canadian One Call Centres – Evaluation Committee	22 September – 2 October 2017
Finalist Presentations	Bidder	2 October 2017 – 20 October 2017
Western Canadian One Call Centres notifies bidder/provider of its selection as winning bidder	Western Canadian One Call Centres – Selection Committee	27 October 2017
Contract negotiations completed	Bidder/Western Canadian One Call Centres – Selection Committee	10 November 2017
Final contract signed	Bidder/Western Canadian One Call Centres – Selection Committee	8 December 2017
Project planning and sign-off	Bidder and Western Canadian One Call Centres – Implementation Team	15 December 2017
System development and testing	Bidder with Western Canadian One Call Centres Implementation Team	8 January 2018 - 26 October 2018
System cutover (no later than)	Bidder with Western Canadian One Call Centres oversight	02 November 2018

Source: Western Canadian One Call Centres (Sep 2017)

## TREATMENT OF INFORMATION

All information about Western Canadian One Call Centres provided during the RFP process shall remain under nondisclosure and cannot be released without the express permission of Western Canadian One Call Centres.



## SECTION A — ARCHITECTURE AND TECHNOLOGY REQUIREMENTS

### ARCHITECTURE

- Identify whether your solution is cloud-based SaaS (software as a service), premise-based or both. Where both are offered, identify throughout the response wherever a portion of the solution would differ in a SaaS format.
- Provide a description of your proposed solution architecture, including network and component diagrams and quantities. Include a description of the network requirements for line and port sizing.
- Describe the physical, environmental and power requirements of your proposed solution.
- Describe how this solution supports future growth.
- What is the system availability rating of your proposed solutions? (Preferred availability 99.97+)? Describe any specific capabilities of your proposed solution to support high levels of reliability and availability (for example, virtualization methods used, hot/warm/cold standby server and/or application redundancy, distributed processing, support for failover across a WAN environment, and so forth).
- Describe how system and customer data integrity is maintained in the event of a failure in one of the system's components.
- Describe the scalability of system in terms of the number of concurrent agents, volumes of incoming and outgoing notification processing, requests from the clients to the mapping server, etc.
- In a multisite deployment, how long does the system take to react to an outage of:
  - An application failure?
  - A mapping service component?
  - A database server outage?

### TECHNOLOGY COMPONENTS

- For Web-based applications, what browsers are supported, and at what version levels? Describe the thin client technology used, if any.
- Describe the recommended network and endpoint configurations for agents who work from home. Include any specialized agent management tools.
- How will your system interface to our existing environment?
- Provide server and workstation specifications, including minimum workstation requirements for agents, supervisors and administrators. Describe type of virtual machine (VM) environments supported and versions required for both application servers and servers that handle media.



- Describe the information available in your system logs.
- Describe how your system integrates with third-party databases (for example, support for ODBC/JDBC-compliant databases, integration with other web-based applications (examples: VOIP, CRM software) access via Web services and so forth).
- How many database connections can be open at one time?
- What is your system database based on?
- Can our organization access the system database? If so, what data can be accessed?
- How does your system integrate with messaging systems? Does it support standards such as SMTP and IMAP for outgoing transmissions?
- Describe your company's policy for managing system maintenance. Is there a window when the system will be down for maintenance and unavailable to the users? Is this a static time weekly or monthly? How are other periods of unavailability conveyed to our company?
- Describe your solution's system backup and recovery features and the components to consider for disaster recovery.
- Describe your solution's ability to integrate with internal presence support, chat solutions or screen-sharing applications.
- Describe your solution's ability to integrate with virtual contact centre systems. (Example: Link recorded call to ticket number(s))

## SECURITY

- Describe the security integration with multiple firewalls.
- Describe how user logins are authenticated.
- Describe the software security embedded in the proposed solution.
- Describe how your system supports different access security levels. (\*config)
- Describe your system's data encryption capabilities.
- Describe your system's communications transmission encryption capabilities.
- Describe how your solution can provide secure connections to our customers and members.
- Describe how security is managed for at-home agents and remote employees connecting with the central server.
- Describe how your company's security policies are compliant with any relevant industry standards.



- Describe how customer data is protected, including how you ensure that customer data is not available to other customers and/or internal employees.

## SOFTWARE MANAGEMENT TOOLS

- Describe your software's management tools, including:
  - System performance monitoring tools. System performance diagnostics and troubleshooting tools. Tools for monitoring and filtering of alarms, faults and associated logs.
  - Administrative tools for enabling changes to member information, user permissions, etc.
  - Administrative tools for designing work flows – ability to rename or move fields within the interface?
  - Debugging tools
  - Tools for providing real-time statistics regarding system performance, including checking server and process status
- Describe your system's ability to support secure remote access for troubleshooting methodology.
- Describe your system management tools' key performance indicators (KPIs), including any green/yellow/red threshold alarming that is prebuilt into the system and configured with defaults that can be changed. List everything that can be monitored and alarmed on.
- Describe the SLAs supported by your solution.
- Describe the compensation provided if SLAs are missed.
- Describe the reports that are provided so that the user has quantifiable information as to whether the SLAs were met or missed.
- Describe how you report outages — either partial or complete outages.
- Describe how you keep users updated as to expected recovery time in the event of an outage.
- Describe how your company keeps geographically diverse servers synchronized.
- Describe your system's ability to allow remote administration by users. Does the system support re-starting of communication or map services/processes by the contact centre administrator?
- Describe your system's ability to support analog failover – Example: what data can be made available for manual processing if database is unavailable? (Member contact information, list of affected members by geographic area?)
- Describe how your company's solution will enable Western Canadian One Call Centres to easily move or distribute Contact Centre operations to alternative sites in case of a local or regional disaster.



- Describe how your company's system will allow individual Contact Centres to change functionality as needed. How do you isolate each of the Contact Centres from the others for functionality and to minimize the impact of any modifications or downtime?
- Describe how your company's system supports application "version management," such that system managers and supervisors can revert to a previous version of an application call/contact flow, or otherwise "undo" a change made to system functionality.
- Describe how modifications and changes made to a software version can be tested by the customer prior to being activated in the live environment
- Describe the capacities of your system in terms of the number of:
  - Configured agents
  - Customer IDs (to store the contact information for frequent system users)
  - Stored / archived ticket information
- Describe how supervisors and/or agents can access and send archived tickets.

## SECTION B — ONE CALL APPLICATION FUNCTIONALITY

### TICKET PROCESSING

Describe for each subsection below how your software provides functionality to address the required elements.

**Vendor Instruction:** The information that follows in these subsections is not intended to describe in detail all functionality required. The information in the RFP and supporting documentation is provided as an overview of required functions within the software. It is the responsibility of each vendor to provide the detail of the functions that are currently contained within their products and identify whether or not the functions described will be provided.

### DATA ENTRY FUNCTIONALITY

- List any specific features of your software that exist specifically to maximize the user interface for efficiency and usability.
- Describe how a user enters the information for the fields listed below. (Tab In field, auto-populate, drop-down menu, free format, checkbox, etc.). Note where a drop-down list may be configurable (\*config)
- Some fields may be mandatory (\*config)
- Describe how your system supports auto-population of fields based on stored information sources such as customer phone number or email address, company name through database look-up, etc.



## Customer information recorded on each request:

- Full customer name
- Primary contact phone number
- Alternate contact name
- Alternate contact phone number
- On-site contact phone number
- Customer email address
- Customer Type (Homeowner, Contractor or Member)

## Excavation Information recorded on each request:

- Type of excavation
- Work to Begin Date (to be restricted to minimum and maximum dates based on ticket type, and region)
- Whether hand-dig or machine excavation
- Scope of work area (size of dig area, to include maximum depth of excavation)
- Where the dig site is in relation to the given location information (examples: front, rear, 200 meters north of intersection, etc.)
- Property types included in excavation (Public or Private, Residential or Commercial property)
- Indication if site has been pre-marked by the excavator
- Indication if excavator requests an on-site meet
- Indication if there are site restrictions to locator access
- Additional Information – free text area for additional details

## Location Information recorded on each request:

- Place Name (in civic area excavations)
- Address information (civic address, street name(s))
- Rural tickets  
Describe what information may be entered for a 'look-up', or ,preferably, auto-populated from map attributes (examples: Latitude and Longitude, nearest town, rural address, name of Municipal District/County, Rural Subdivision name, Land Grids information)



- Vacant Lot tickets must include Lot, Block and Plan information

#### Ticket Type Information

Each request must be recorded and stored as a 'ticket' with a unique identifying number for the purposes of archiving and identification.

Describe how the user would indicate or choose the ticket type and ticket response category (also called 'priority' or 'lead time' type) (See Ticket Types), as well as whether the ticket is an edit of an existing ticket. (See Ticket Edits)

#### TICKET TYPES

Describe how the application will determine and record the following information for each ticket type listed below. (Example: Drop-down manual selection, Auto-populate based on database information/business rules, etc.)

Ticket Response Category – **Routine** (3-5 full business days' notice)

- Project Ticket – 5 business days' notice, large area or multiple dig sites
- Regular Ticket – 3 business days' notice, single dig site
- Planning and Design notification – request for information for planning purposes

Ticket Response Category – **Short Notice** (between 2 hours' and 3 days' notice)

- Priority Ticket – 2hr to 3 business days' notice, potential threat to life, health or property
- Short Notice Ticket – less than minimum notice is provided on what would usually be a Routine ticket

Ticket Response Category – **Emergency** (less than 2 hours' notice)

- Emergency Ticket – crew is on site or en route to correct a condition that poses an immediate threat to life, health or property
- Damage Information Notification – notification to affected members that a facility has been exposed or damaged.
- Cross-bore Notification – notification to members with gas infrastructure prior to cutting or clearing activity within a sewer.

#### TICKET EDITS

Review Appendix A to ensure your responses below reflect how the software will meet all the requirements for each Edit function.

Confirm that your solution will provide the following 'ticket edit' functions to internal agents and/or online users:



- **Correction**  
A revision to an existing ticket where the location and dig site information remain the same.
- **Cancel**  
Notification that a response to a currently active ticket is no longer required.
- **Update**  
Cancels and replaces a currently active ticket in order to revise location or dig site information.
- **Relocate**  
Request for members to identify the location of underground infrastructure for a dig area where they have been previously identified.

Does your system provide a “COPY” function where all information can be copied from an existing ticket into a new ticket? Can the user configure what information is copied over? Are attachments copied to the new ticket?

## MAPPING

A critical component of one call software is the mapping process. A polygonal representation of the proposed dig area is created over a base map of the geographic location (known as the ‘dig site polygon’). The mapping software must include a layer(s) which contains shape files representing the location of members’ underground infrastructure (known as a ‘member polygon’). Where the dig site polygon intersects a member polygon, the software would identify that member as one that is required to be notified of the ground disturbance.

Provide responses to the following requests for information about how your software mapping process functions:

### MAPPING A TICKET

- Describe the map base attributes that would be included/considered in your software for the purpose of ‘look up’. (Examples: Place names, county or MD, street line data, civic addresses, cadastral, legal land descriptions, addressed polygons)
- Describe any third party base mapping that can be used/integrated with the system. (Examples: orthophotography, Google)
- What projection type does your mapping software use?
- Describe how the map is displayed to an online user and how they can interact with the map.
- Describe the process by which your mapping software looks up the location of a dig site.
- Confirm GIS display is optimized to accommodate multiple screens, multiple map layers, and transition performance while viewing.



- Does the software identify a location by latitude and longitude coordinates?
- Does your mapping software auto populate any ticket fields based on map attributes within the dig site polygon (Example: street, town, latitude and longitude, etc.)
- Describe how the software creates a pre-selected dig site based on map attributes. (Example: pre-select a defined radius circle around a latitude longitude coordinate or pre-select a lot based on address)
- Describe in detail all mapping tools available to the user. (Include any differences there may be between tools available to online users vs agents)
- Describe how a drawn or pre-selected polygon can be altered by the user. (Examples: select and drag nodes, erase and redraw)
- Describe how a dig site polygon drawn by an online user is used by the system. (Example: visual reference, direct look up and member notification by boundary, buffer or exact polygon shape)
- Describe how your software passes location information to the notified member. (Examples: Attach image of map with polygon, includes boundary coordinates on ticket)
- Does the system allow users to turn on and off the display of specific layer data in order to improve performance?

#### MEMBER MAP DATA

Describe in detail the file types that can be uploaded into the system in order to install a members' infrastructure location information.

Describe in detail the process by which the one call centre adds, changes or deletes map data on behalf of a member.

Describe in detail the process by which a member can add, change, delete or otherwise manipulate their own registered map data in the system without manual processing by the one call centre. Include a description of how access is limited to authorized users.

Does the software store historical data uploads and can a previous version of the member's data be re-activated in the system?

Describe the process by which a member can verify the accuracy of their data in the system before it becomes activated in the live environment?

Does the member data uploading process allow for more than one database to be uploaded at a time?



## MEMBER NOTIFICATION

- Describe how your system displays the members to be notified, what member information is available on the display, and what tools are available to the user to configure the displayed information.
- Describe the process to manually add a member to a ticket?
- Describe the process to manually remove or 'suppress' a member notified on a ticket?
- Does your system allow members to be automatically suppressed on any or all of the following criteria (if yes, describe the process):
  - Type of property (Public vs Private)
  - Member is the requestor on the ticket
  - Depth of excavation
  - Type of Work

## OUTBOUND TICKETS

- List the format types available for outgoing tickets (Examples: readable format, xml)
- Does your system support multiple ticket formats and the ability for a member to choose the format best suited to their internal operation?
- Does your system support additional instruction information to be added to each customer copy of a ticket? (Example: legal liability statements)
- Does your system support automated attachments to outbound tickets? (Example: include an attachment supplied by the requestor?)
- Does the system support any configuration changes to outbound ticket information by the one call centre administrator? (Example: changing text to instruct callers, including temporary alert messages or external links to information attached to ticket)

## TICKET TRANSMISSION

- List the transmission options available in your system. (Examples: email, SFTP, FTP, etc...)
- Can multiple types of objects, such as FTP, emails and SMS transmissions, be placed in the same transmission queue? Please describe.
- Describe how the system provides a visual indication to the user of the transmissions that are in the queue.
- Describe how the system determines whether a transmission failed or was successfully received.



- Describe how the system notifies the contact centre that a notification has failed.
- Describe how transmissions can be assigned different priority levels in the queue.
- Does the system accommodate different transmission rules by ticket type? By time of day? By region?
- Describe how the system supports multiple destination addresses for a single member
- Describe how the system supports a single destination address receiving for multiple members.
- Describe the process for re-transmitting a ticket to a member.
- Describe the process for re-transmitting a ticket to a customer.
- Describe the process for rejecting a ticket created by an online user back to the customer, and how users can attach files or external links.
- Does the system support manually re-sending a member transmission to a new destination?
- Does the system support manually re-sending a customer copy transmission to a new destination?
- Does the system support the transmission of free-format text messages to members? Describe the process.
- Describe how the system supports an automated (or manual) follow-up process for contacting the members when an emergency or priority ticket has been transmitted.
- Can agents in training be configured to suspend all outgoing tickets for review and editing prior to release?

#### POSITIVE RESPONSE

The system should provide a means for members to record a response to each ticket, and for the requestor to view/retrieve the responses in the system.

- Describe how your system supports 'Positive Response'
- Does the system allow members to include attachments or documentation to their response?
- Does the software support direct integration with member ticket management systems?
- Does the system allow users to retrieve documentation?
- Does the Positive Response software support direct follow-up contact from the requestor to the member?
- Does the Positive Response software remove ticket responses after a defined period of time?



- How does the system archive Positive Response activity?

#### MOBILE APPLICATIONS

- Describe your system's ability to integrate with mobile applications and mobile Web tools.
- Describe how customer interaction data is passed from the mobile environment to the Contact Centre system.

#### SECTION C — CONTACT CENTRE ADMINISTRATION TOOLS

##### AGENT DESKTOP TOOLS

- Describe your system's agent desktop environment, including capabilities such as softphone, CRM or other enterprise application integration; the ability to view tickets or queues; pop-out windows; and the ability to view performance or messaging from supervisors.
- Describe any changes to the agent desktop environment for agents that work from home.

##### SUPERVISOR DESKTOP TOOLS

- Describe the supervisor's desktop application, including how it provides for the monitoring of queues in real time.
- Describe how your supervisor desktop application enables supervisor-to-team messages.
- Describe how thin and/or thick-client interfaces are supported. How can the application be accessed by a tablet or other mobile device? How can the application be accessed from anywhere on the network?

##### REPORTING

- Describe your system's ability to provide real-time monitoring and reporting of agent activity, queue status and overall Contact Centre performance. Include a description of the information available to supervisors regarding workgroup and team performance, as well as the ability to drill down on individual agent activity.
- Describe how access to specific real-time reporting data can be limited to specific users.
- Describe all summary statistics and standard real-time reports available.
- Describe how real-time statistics can be displayed in graphic form.
- Does the system include an external-facing dashboard/display? What information can be displayed?

##### HISTORICAL REPORTING

See Appendix A for a list of required reports.



- Describe how your system will provide access to archived data external to system, i.e. tickets created on a previous software.
- Describe your system's ability to provide historical reporting of overall Contact Centre performance.
- Describe your system's ability to archive and present the history of a ticket (including original version, edited versions, time-stamped events, and agents that have viewed a ticket)
- Describe your system's reporting architecture, including database formats supported.
- Describe how access to specific historical reporting data can be limited to specific users.
- Describe how reports can be scheduled and distributed to a common set of recipients.
- Describe all summary statistics and standard historical reports available.
- Describe how reports can be customized.
- Describe the database structure supporting real-time and historical reports. Indicate how the running of detailed historical reports will not impact real-time reporting.

#### BILLING MODULE

- Does the system have an integrated billing module? If yes, answer the following questions.
- Does the billing module provide billing by month, quarter, or annual options?
- Describe the following processes in the billing module:
  - Configure billing rates by ticket type
  - Configure billing rates by tier based on volume of transmissions
  - Invoice by multiple service areas for a single member / group invoicing
  - Record as 'non-billable' certain transmission types (Example: free format messages, cancels), if the transmission was a system test, or if the member was manually added to a ticket
  - Manually enter a credit by dollar amount or by number of transmissions
- Does the billing module support electronic invoicing? If yes, describe how the process is handled.
- List the reports available that are related to the billing module.



## SECTION D — IMPLEMENTATION AND TRAINING

### SYSTEM INSTALLATION

- Describe your implementation strategy, including:
  - Average time frame of implementation
  - Responsibilities of Western Canadian One Call Centres during implementation
  - Resources required from Western Canadian One Call Centres
- Identify who will be responsible from your organization for the implementation?
- Describe the experience of your company's staff in deploying solutions similar to the one proposed for Western Canadian One Call Centres
- Describe how your company handles change management.
- Describe your company's ability to provide pre-installation and post-installation consulting.
- Describe any services that your company offers to complement the proposed solution.
- Describe your company's project management methodology.
- Describe the key deliverables your project team typically provides.
- Identify and describe the role of any third parties that your company plans to employ to implement all or specific parts of the proposed solution.
- Describe your company's process for documenting the system deployment, including relevant system configuration and customization.
- Describe the best practices that your company employs to realize maximum benefits during initial implementation.
- Describe any abilities to provide load testing to validate that the solution works under peak load.

### TRAINING

- Provide an overview of your company's customer training program. Include:
  - Where and how the training is conducted
  - Courses available
  - Options for customized training



- Train-the-trainer programs
- Online training options

## SYSTEM MAINTENANCE AND SUPPORT

- Does your support include dedicated resources / account manager?
- Describe how your company's customer service is organized and how it operates. Include:
  - Options for help desk availability and response times
  - How the help desk is reached
  - Process for handling escalations
  - Availability and requirements for remote support
- Describe how support will be provided and coordinated for any aspects of your solution that are to be supported by a third party.
- List all training and support documentation that will be provided for online users, agents and administration staff. Indicate if the documentation will be accessible online and how often documentation is updated.
- Describe your company's maintenance offerings. Include:
  - Options for varying levels of support agreements
  - Whether upgrades are included in the maintenance fees
  - How and how often upgrades are conducted
- Describe the responsibilities your company takes to implement software patches or updates. For example, are they tested and certified in your lab?
- Describe test environment resources available for pretesting any proposed changes to the system. How does the test environment support end-to-end testing, including transmissions outside the live environment?

## SECTION E — PRICING

### PRICING

- Note that preference will be given to vendors with a pricing model in Canadian Dollars (CAD)



- Describe the system and user application licensing model for the proposed solution, and provide a table or spreadsheet in editable electronic format with all pricing information showing line-item detail for any item that has a separate price, even if the item is sold as part of a bundle. Specify currency.
- Column headings should reflect:
  - Item description (specify named agent versus concurrent agent pricing models for items based on agent licenses)
  - List price
  - Discount amount
  - Net unit price
  - Quantity
  - Total net price
- Provide pricing for the following components:
  - Software
  - Hardware
  - Install/professional services
  - Training services
  - Support – preference will be given to vendors with a static support fee which does not increase by more than 3% annually.

*Additional questions for SaaS providers:*

- Describe your pricing methodology (for example, functionality priced per agent/per month, per port/per month, per minute of access, and so forth). Specify whether agent license pricing is based on named or concurrent agents, and include volume and term discount tiers.
- Indicate whether your solution includes a combination of SaaS and premises-based technology, and how the individual solution components are priced.
- Describe any front-end costs that may be associated with your deployment.
- How are professional services fees for design and installation charged for? Is there a front-end fee, or are the costs embedded into the monthly charges?
- Describe any system uptime and service response time SLAs and penalty structure for noncompliance.



## APPENDIX A

# BUSINESS RULES FOR THE PROVISION AND USE OF NOTIFICATION SERVICES IN WESTERN CANADA (BRITISH COLUMBIA, ALBERTA, SASKATCHEWAN AND MANITOBA)

### ABOUT THE BUSINESS RULE ALIGNMENT GROUP PROJECT

The Business Rule Alignment Group (BRAG) is comprised of representatives of damage prevention stakeholders from British Columbia, Alberta, Saskatchewan and Manitoba. The purpose of the group is to create a document that will align procedures around the use of the one call system in these four provinces. Once procedures are aligned, it will allow the four provinces to use one software and to share promotion and advertising material, reducing cost, and reducing the risk of ticket errors due to processing differences between provinces.

Questions or comments about this document can be submitted through your regional Common Ground Alliance or sent directly to the project manager, Sher Kirk via [Info@AlbertaOneCall.com](mailto:Info@AlbertaOneCall.com).

### PURPOSE OF DOCUMENT

This document recommends standardized business rules for the provision and use of notification services in the provinces of British Columbia, Alberta, Saskatchewan and Manitoba.

### REFERENCE DOCUMENTS

The following existing materials were considered in the creation of this document:

- Member Agreements for BC One Call, Alberta One-Call, Sask 1<sup>st</sup> Call and Click Before You Dig MB
- [Canadian Common Ground Alliance – National Best Practices v.2](#)
- [Canadian Standards Association CAN/CSA-Z247-15 – Damage Prevention for the Protection of Underground Infrastructure](#)
- [The Damage Prevention Process in Alberta](#)
- Procedure Manuals for BC One Call, Alberta One-Call, Sask 1<sup>st</sup> Call and Click Before You Dig MB

The Business Rule Alignment Group aligned the business rules to these seed documents wherever possible.

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# BUSINESS RULES FOR THE PROVISION AND USE OF NOTIFICATION SERVICES IN WESTERN CANADA (BRITISH COLUMBIA, ALBERTA, SASKATCHEWAN, MANITOBA)

## 1. DEFINITIONS

- a. **Positive Response** - notification to an *excavator* either by a completed locate, or by written/electronic notice indicating that there is no underground infrastructure affected by the ground disturbance.  
**Note:** Positive response can also be called definitive response or 360 notification;
- b. **Agreement** - Agreement between the *notification service provider* and the registered *members* of the notification service;
- c. **Base Map** - a geographic system created and maintained by the *notification service provider* to contain the *data* supplied by the *member* to the *notification service provider*;
- d. **Business days**— every official working day of the week  
**Note:** Typically, these are the days between (and including) Monday to Friday, and do not include statutory/public holidays and weekends, which can vary from province/territory to province/territory;
- e. **Cancel** - an outgoing transmission from the *notification service provider* to the *member* which advises that a *notification* has been cancelled;
- f. **Correction** - an outgoing transmission from the *notification service provider* to the *member* which advises the *member* that the information on a *notification* has been revised;
- g. **Data** - information and material provided from time to time by the *member* to the *notification service provider* as to the location of the infrastructure which are the property of or under the control of the *member*;
- h. **Excavator** — any person, partnership, corporation, public agency, agent, or other entity that is responsible for carrying out a ground disturbance;
- i. **Emergency Ticket** - an outgoing request for locates from the *notification service provider* to the *member* which has a lead time of less than 2 hours, where ground disturbance is required to correct a condition that poses an immediate threat to life, health or property. The *excavator* must be on site or en route to the site to begin the work.
- j. **Homeowner** - the owner or tenant of a residential lot or farm whose *locate request* is restricted to that particular residential lot or farm and who is functioning as an *excavator* on that private property;
- k. **Locate Request** - an incoming communication which advises the *notification service provider* of the *requestor's* intent to disturb the ground at a particular location, and requests that the *member* be notified of this intent and the locations of *members' underground infrastructure* be identified at that location prior to the *requestor* disturbing the ground;

## BUSINESS RULES FOR THE PROVISION AND USE OF NOTIFICATION SERVICES IN WESTERN CANADA (BRITISH COLUMBIA, ALBERTA, SASKATCHEWAN, MANITOBA)

- l. **Member** - any owner or operator of *underground infrastructure* who has entered into an *agreement with the notification service provider*;
- m. **Notification** - an outgoing communication from the *notification service provider* to the *member*;
- n. **Notification Centre** - the premises and/or the infrastructure maintained by the *notification service provider* to provide the service;
- o. **Notification Service Provider** – organization providing a single-point-of-contact service designed to improve public safety by reducing the number of contacts required to trigger the damage prevention process  
**Note:** *provides a single point of contact so that requestors can reach multiple owners of registered underground infrastructure*
- p. **Priority Ticket** – an outgoing request for locates from the *notification service provider* to the *member* which has a lead time of more than 2 hours but less than 3 days, where excavation is required to correct a condition that poses a potential threat to life, health or property;
- q. **Requestor** – the person submitting the *locate request*;
- r. **Service Interruption** – any system issue that prevents the *notification service provider* from receiving or transmitting *locate requests* for more than 30 minutes;
- s. **Short Notice Ticket** – an outgoing request an outgoing request for locates from the *notification service provider* to the *member* where the excavator requests a response prior to the minimum notice period;
- t. **Stakeholders** – Any party whose activity may be affected by the contents of this document;
- u. **System** - the network, hardware and software operated by the *notification service provider* to provide services to *requestors* and *members*;
- v. **Ticket Number** - a unique identifier assigned to each *locate request* for reference and record keeping purposes
- w. **Underground infrastructure** — cables, ducts, equipment, pipes, and vaults buried in public property and/or rights-of-way.  
**Note:** *Other underground infrastructure, such as tunnels, shoring, and/or encroaching structures, are not typically located in the field as part of the locate process.*
- x. **Work to Begin Date** – field on an outbound ticket that identifies when the *requestor* plans to begin the ground disturbance.

# BUSINESS RULES FOR THE PROVISION AND USE OF NOTIFICATION SERVICES IN WESTERN CANADA (BRITISH COLUMBIA, ALBERTA, SASKATCHEWAN, MANITOBA)

## 2. FUNCTION

### 2.1 Notification Services

The *notification service provider's* role is to provide services to support and enhance the damage prevention efforts of *stakeholders*. The primary function of a *notification service provider* is to receive, process and transmit *locate requests* to *members*.

### 2.2 Support Services

The *notification service provider* supports the damage prevention industry by providing omnichannel contact centre support, *member* recruitment, education, awareness and advocacy for *stakeholders*.

## 3. COMMUNICATION SYSTEM

### 3.1 Outbound Communication Systems

The *Notification service provider* will utilize secure electronic data transmission methods to communicate *notifications* and related documents to the *member* or to a third party authorized by the *member*. The *notification service provider* may utilize the communications system to transmit free-format messages to *members* to provide system updates or other communications related to the provision of services.

The notification service provider may introduce other methods of communicating *notifications* to the *member* to improve efficiency and take advantage of technological advances. Any new methods of transmitting notifications shall continue to provide notifications in a format consumable by parsing software currently in use by the *members*.

It shall be the responsibility of *member* to ensure its equipment is properly maintained and repaired such that it is capable of receiving *notifications*, attachments to *notifications*, and free-format messages.

Transmissions shall be deemed to have been received by the *member* immediately upon release of the ticket from the *system*, unless the transmission is returned as 'undeliverable' or 'failed'.

### 3.2 Inbound Communications System

The *system* shall provide *requestors* access to services via multiple channels.

The *system* shall allow *requestors* to include supporting documentation with an electronic *locate request*.

### 3.3 System Protection

The *system* will incorporate sufficient redundancy to be available 99.9% of time, measured monthly

The *notification service provider* shall maintain a management system to notify *members* and *requestors* of a *service interruption*.

The *notification service provider* shall maintain a business continuity plan.

The *notification service provider* shall maintain a security management system to protect data.

### 3.4 System Changes

The *notification service provider* will provide *members* with not less than sixty (60) days written notice prior to making changes to the electronic data transmission process or sooner by mutual consent.

### 3.5 Test Environment

The *notification service provider* will maintain a current copy of the live software on a separate test system in order to provide the following:

- A training environment for staff and members to access for hands-on practice on the software;
- The option to temporarily activate live communications to create and transmit test tickets to members to check for errors and compatibility when system changes occur or a new member registers;
- The capability to test software updates prior to release on the live environment.

## 4. DATA REGISTRATION

### 4.1 Base Map

The notification service provider shall provide access to a *base map* on which *member data* can be registered and dig site locations can be identified.

The *base map* shall be current, precise and contain the most complete coverage available. The meta-data information should be available to permit two way conversion and exchange of *data*. A single standard geographic reference should be utilized.

The *base map* shall be compatible with a user-friendly interface consistent with current user expectations and readily-available technology.

The *base map* shall be updated a minimum of twice annually.

### 4.2 Data Submission

*Members* shall provide the *notification service provider* with *data* that indicates the location of their underground infrastructure for the purpose of identifying geographic locations where the *member* wishes to be notified of any digging activity on a *locate request*.

*Members* shall provide *data* in a format compatible with the *base map* and software provided in the *system*. The preferred format is digital geospatial *data* to minimize *data* manipulation errors. The *notification service provider* will accept *data* in other formats if the member is unable to provide digital *data*.

The *data* provided by the *member* shall include, at a minimum, all the known underground infrastructure operated or under the control of the User and/or its parent, subsidiaries, affiliates and related companies.

*Members* shall provide notification of any changes in, deletions from or additions to the *data* such that the *data* is current and accurate at all times

### 4.3 Data Verification

After a *data* submission has been loaded into the *system*, the *notification service provider* shall provide the *member* with access to view the loaded *data*, or shall return a copy of the data showing how it has been uploaded in the system. The *member* shall verify, in writing, the *data* is complete and geographically accurate on the *base map*.

## BUSINESS RULES FOR THE PROVISION AND USE OF NOTIFICATION SERVICES IN WESTERN CANADA (BRITISH COLUMBIA, ALBERTA, SASKATCHEWAN, MANITOBA)

The *notification service provider* will activate the *data* in the live system only after it has been verified as correct by the *member*.

The *member* shall verify its *data*, at a minimum, annually.

### 5. OPERATION

#### 5.1 Hours of Operation

During *business days*, the *notification service provider* shall process *locate requests* received by phone between 0800 hrs and 1630 hrs, in the time zone local to the service area.

The *notification service provider* shall accept *emergency locate requests* by phone and any other request type via web site 24 hours/day, 7 days/week.

#### 5.2 Notice Period

##### a. Minimum notice

The *notification service provider* shall accept *routine locate requests* only where the *requestor* has provided a minimum of 3 *Business Days'* notice in advance of the *work to begin date*.

##### b. Advance notice

The *notification service provider* shall transmit notifications to *members* when the *locate request* is received.

The system shall allow transmission rules to be configured by jurisdiction.

#### 5.3 Ticket Response Categories

The notification service provider shall transmit tickets and *notifications* identified with one of the following categories that indicate the notice period being given for a *positive response* from the *member*.

##### a. Routine Response Category

Tickets in the Routine Response category have at least the minimum lead time of 3 full *business days*.

## BUSINESS RULES FOR THE PROVISION AND USE OF NOTIFICATION SERVICES IN WESTERN CANADA (BRITISH COLUMBIA, ALBERTA, SASKATCHEWAN, MANITOBA)

Routine ticket types include:

### I. **Project Ticket**

Any *locate request* where the minimum lead time is 5 *business days*, and the scope of work is larger than a regular ticket, meeting the following defined scope for one Project Ticket:

Inside the boundary of a city, town, village or hamlet, the scope of work for a single project ticket is:

- 45 meters to 1000 meters of continuous excavation (Examples: trenching / pushing / fencing / roadwork), or
- All 4 Corners of an intersection, or
- Up to 10 separate dig locations within 1.6 square kilometers (Examples: tree planting, residential installs, test holes, signs)

In rural areas outside the boundary of a municipality, the scope of work for a single project ticket is:

- 250 meters to 4000 meters continuous excavation (Examples: trenching / pushing / fencing / roadwork), or
- All 4 Corners of an intersection, or
- Unlimited dig locations within 1.6 square kilometers (Examples: tree planting, residential installs, test holes, signs)

Where a single *locate request* must be divided into multiple project tickets, each ticket shall indicate that the tickets are linked to a single project request.

### II. **Regular Ticket**

Any *locate request* with a lead time of 3 *business days*, and which does not have a dig area large enough to be considered a Project. See Project Tickets below.

### III. **Planning and Design Notification**

Planning and Design tickets are requests for information and are not considered to be *locate requests* for digging purposes.

A Planning and Design notification will be transmitted to *members with underground infrastructure* in the proposed dig area if the *requestor* indicates and that location information is required for planning purposes only.

## BUSINESS RULES FOR THE PROVISION AND USE OF NOTIFICATION SERVICES IN WESTERN CANADA (BRITISH COLUMBIA, ALBERTA, SASKATCHEWAN, MANITOBA)

A valid *locate request* will be required before the *requestor* may commence a ground disturbance.

Each jurisdiction shall be able to choose whether it will accept Planning and Design requests.

### b. Short Notice Category

Short Notice tickets have a lead time less than 3 full *business days*, where the *requestor* has not provided the minimum notice.

#### I. Priority Locate Request

Priority *locate requests* have a lead time of more than 2 hours but less than 3 full *business days*. The type of work taking place must be to correct a condition that poses a potential threat to life, health, or property.

The *requestor* must indicate when the crew will be on site to begin the work.

#### II. Short Notice Locate Request

Short Notice *locate requests* indicate the *requestor* has not provided the minimum notice for that ticket type, and is asking for an earlier response if possible.

The *notification service provider* shall advise the *requestor* that *members* may or may not be able to provide a *positive response* prior to the minimum notice date.

Providing *positive response* prior to the minimum notice period is at the discretion of each notified *member*.

### c. Emergency Ticket Category

Tickets in the Emergency category have a lead time of less than 2 hours in a rural area or less than 1 hour in an urban area. Emergency ticket types include:

#### I. Emergency Locate Request

The type of work taking place must be to correct a condition that poses an immediate threat to life, health or property. The *excavator* must be on site or en route to the site to begin the work.

## II. **Damaged (or Exposed) Information Notification (DIN)**

Notification to *member* to advise that a *stakeholder* has contacted the *notification service provider* to report damage to or the exposure of its *underground infrastructure*.

DINs are not a request for locates.

Callers reporting a hit and blowing gas line shall be directed to call 911 or the gas service provider's emergency number directly.

Provinces shall have the option of not accepting DINs

In provinces where DINs are not accepted, the *notification service provider* shall direct the caller to contact underground infrastructure owners directly.

DIN tickets formatting shall align to the DIRT requirements

At a minimum, a DIN shall include the following information:

- Requestor's full name
- On-site contact phone number
- Requestor's email address
- Description of the location, depth and type of the damaged infrastructure
- Description of the extent of damage or exposure
- *Locate request* ticket number(s) associated to excavation that may have caused the damage

The *notification service provider* can report the damage into the regional Damage Information Reporting Tool (DIRT) at the request of the *member*. General DIRT information can be found here: <http://commongroundalliance.com/programs/damage-information-reporting-tool-dirt>

## III. **Cross-bore Notification**

Notification to gas utilities to identify a potential cross-bore (where there is potential for gas line to be inside / bored-through a sewer line), prior to sewer clearing or cutting activity.

*Members* may opt to accept cross-bore *notifications* or not.

## 5.4 Ticket Edits

### a. Correction

*Corrections* notify *members* that the information on a previously-transmitted *locate request* has been revised.

*Corrections* are created to revise the following information only:

- Requestor contact Information
- Dig Information – only if the revision does not alter the original scope of the work area or type of excavation.

*Corrections* do not assign a new ticket number to the *locate request*

*Corrections* can only be processed within the minimum notice period.

*Corrections* can only be accepted from the original *requestor* or alternate contact listed on the ticket.

### b. Cancel

*Cancel*s notify *members* that a *requestor* no longer requires a response for a previously transmitted *locate request*.

*Cancel*s can only be processed for *members* that have not yet responded to the request.

*Cancel*s can only be accepted from the original *requestor* or alternate contact listed on the ticket.

### c. Update

*Update*s notify *members* that a previously-transmitted *locate request* has been canceled and resubmitted with new information as a new ticket.

*Update*s are created to revise the following information:

- location or scope of dig site, or
- type of work, or
- *work to begin date*

*Update*s are assigned a new ticket number and issues a *cancel* for the original *ticket number*. *Update* tickets shall contain a reference to the original *ticket number*.

Updates can only be processed within the minimum notice period.

Updates can only be accepted from the original *requestor* or alternate contact listed on the ticket.

d. Relocate

Relocates notify *members* that the *requestor* is asking that the location of *underground infrastructure* in a previously identified dig area be identified again.

Relocates are transmitted when:

- locate marks are no longer visible in the work area, or
- locate marks have been disturbed, or
- excavation not started within 14 calendar days of the original Work to Begin date, or
- excavation is not completed, and locates will expire before work is completed

Relocates are assigned a new *ticket number*.

Relocate tickets shall reference the most recent *ticket number* for that dig area.

Relocates do not preclude the responsibility of the *excavator* to maintain the site and protect the markings.

Relocates can only be processed where the Work to Begin Date is less than 30 days past

## 5.6 Ticket Information

a. Requestor Information

Frequent users' contact information shall be stored by the *system*, and shall be retrieved and auto-populated on the ticket by either entering the email address or customer user name.

At a minimum, each *locate request* must contain the following information about the Requestor:

- full name of *requestor*
- full name of alternate contact (if one is provided)
- company name (unless *requestor* is a *homeowner*)
- *requestor* phone number
- on-site contact phone number

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- *requestor* email address
- company or individual the work is being done for
- *requestor* type (Member, Homeowner, or Contractor)

### b. Dig Location

#### I. Civic Tickets (Inside the boundary of a City, Town, Village or Hamlet)

At a minimum, each *locate request* inside a municipality must contain the following information about the dig site location:

- Place Name
- Civic Address, or Intersection (Note an intersection can be the dig location or a nearest reference point to the dig site location)

Multiple lots require an address range.

#### II. Rural Tickets (Outside the boundary of a City, Town, Village or Hamlet)

Rural ticket location information can be manually entered or be auto-populated from the dig site polygon mapped by the user - based on *base map* attribute available in the dig site area.

Information to be gathered may include:

- Nearest community
- Latitude and Longitude coordinates
- Land Grids where they exist
- Name of Rural Subdivision if dig location is within it
- Rural Address if one exists
- Lot Block Plan
- Name of Rural Municipality, IR or Municipal District

#### III. Vacant Lots

Vacant Lot locations shall require a Lot, Block and Plan

#### IV. Non-gridded centres

Non-gridded centres or unincorporated places shall be treated as rural tickets.

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### b. Excavation Information

At a minimum, each *locate request* must contain at least the following information about the *ground disturbance*:

- I. **Work to Begin Date**  
Indicates when the *requestor* plans to begin the *ground disturbance*  
Date must allow for notification period in accordance with *ticket* priority
- II. **Type of Work**  
Indicates the specific type of ground disturbance taking place.  
Examples: drilling, trenching, building a deck, planting a tree, encroachment check, etc...  
  
Indicate – hand dig vs. mechanical vs hydrovac
- III. **Where in relation to the address information the excavation is taking place**  
Examples: rear yard, 20 M west of intersection
- IV. **Scope of the dig area**  
Indicates the size of the dig site – including maximum depth
- V. **Type of property being excavated**  
Indicates whether the excavation includes public property such as the street, sidewalk or alley or if the excavation is contained within a lot
- VI. **Meet request**  
Indicates if the *requestor* has asked to meet with the locator on site
- VII. **White lining**  
Indicates if the *requestor* has pre-outlined the dig area with white paint or stakes
- VIII. **Additional Information**  
The request form shall provide an area for the *requestor* to include other details relevant to the excavation.
- IX. **Site Restrictions**  
The request form shall provide a means for *requestor* to indicate there may be restrictions on the site that affect a locator's ability to physically mark the *underground infrastructure*.  
Examples: locked gate, site check-in required, traffic restrictions, etc.

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### c. Sketches and Attachments

Web users must indicate the dig area on a map when placing *locate requests* online, or they must attach maps, plans or other attachments that supplement the information on the *locate request*.

## 5.7 Notification Process

### a. Mapping the Dig Site

A geographic representation of the dig area (in the form of a dig site polygon forming a boundary around the dig area) must be created on the system *base map* either by the web user or by a *notification service provider* agent for each ticket.

*Members* will be notified of the *locate request* if their registered *data* intersects with the dig site polygon.

### b. Additional notifications to member

If the *member* is not notified by *data* registration on a *locate request*, but the requestor expresses knowledge that the *member* has *underground infrastructure* in the dig area, that *member* shall be manually added to the list of notified *members*.

If the *member* is manually added per the *requestor's* information, the *member* shall not be charged for the notification.

When the *member* is manually added to a ticket based on information from the *requestor*, the *notification service provider* will follow-up with the *member* to verify the accuracy of the registered *data*.

### c. Notifying Affected Members

The ticket(s) for each *locate request* will be transmitted to affected *members* electronically immediately following the completion of the ticket creation process.

### I. Emergency Tickets, Priority Tickets and Damaged (or Exposed) Infrastructure Notifications

The *notification service provider* shall provide automated follow up on the ticket transmission to confirm that the ticket has been received by the *member*. (via text alert, automatic voice message or other automated follow-up that requests a positive response to confirm receipt)

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### II. Emergency Tickets, Priority Tickets and Damaged (or Exposed) Infrastructure Notifications - Outside of *Business Hours*

Outside of *business hours*, if no confirmation of the automated follow up is received within 15 minutes, the *notification service provider* shall make voice contact with the *member* or their authorized representative to ensure that the ticket has been received by the *member*.

#### d. Filtered Notifications

Each *member* shall be able to choose to not be notified on certain tickets based on any of the following criteria:

- the *member* is the *requestor*
- type of work
- depth of work
- type of property

## 5.8 Outbound Ticket Format

### a. Member Ticket Copy

*Locate requests* shall be transmitted in the form of a ticket.

Each notified *member* shall be able to choose whether to receive a transmission of the *ticket* in either a readable format, or an electronic format. The *notification service provider* shall ensure that electronic formats can be consumed by existing parsing software (Example: xml format)

Tickets shall be transmitted with a copy of any attachments or maps associated with the *locate request*.

Tickets shall contain all information described in Section 5.5, as well as geo-reference (either latitude and longitude or other GIS shape file format) that indicates the boundary of the dig site polygon created by the either the web user or the processing agent.

Header information shall include:

- ticket priority
- ticket type
- *ticket number*

If the ticket is an Update or Relocate, a reference to any previous ticket numbers associated to the same *locate request* shall be included in the ticket header information

b. Requestor Ticket Copy

A copy of the ticket shall be transmitted electronically to the *requestor* in a readable format.

The *requestor's* copy of the ticket shall contain the information transmitted in the *member's* copy listed in 5.7(i)

The *requestor's* copy of the ticket shall contain the full name of all *member* companies being notified.

The *requestor's* copy of the *ticket* shall be transmitted with instructions about how to proceed with a safe excavation, the next steps in the damage prevention process, expected *member* response and a statement of liability.

A copy of the dig site polygon shall be included with the *requestor's* copy for verification.

## 5.9 Positive Response

The *system* shall provide a means for *members* to record a *positive response* to each *locate request* on which they are notified.

A *positive response* to a *locate request* may include a clearance, a copy of a locate document, a meeting schedule or other information regarding the identification of the location of the *member's* infrastructure in the defined dig area.

*Requestors* shall be able to view *positive responses* to their *locate requests* through the *system*.

*Requestors* shall be able to download documentation from the *positive response system*.

*Requestors* shall be able to send a notification reminder through the *positive response system* to any notified *member* that has not recorded a response to the *locate request* after the minimum notification period has passed.

*Positive response* information shall be available to the *requestor* as long as the *locate request* is valid.

## 6. RECORDS

The *notification service provider* shall retain recordings of all calls and electronic records of *locate requests* seven years or according to applicable statutes.

## 7. REPORTING

### 7.1 Ticket Summary Reports

#### a. Daily Ticket Summary

Each *member* shall have the option of receiving a daily Ticket Summary Report.

The daily Ticket Summary Report shall be transmitted to the same destination where the tickets are received.

The daily Ticket Summary Report shall be a list of all transmissions sent to the destination during the previous day between 12:00 h and 23:59 h.

#### b. Monthly Ticket Summary

The *notification service provider* shall transmit a monthly Ticket Summary Report to all *member* receiving destinations on the first day of each calendar month.

The monthly Ticket Summary Report shall be a count of all notification types transmitted to the *member's* receiving destination during the preceding calendar month.

### 7.2 Notification Centre Monthly Operations Reports

The *notification service provider* shall produce monthly operations reports including but not limited to:

- Volume of locate requests and notifications
- Performance level of notification centre
- Origin of *locate requests* by geographic area and *requestor* type
- Percentage and volume of *locate requests* received through each medium
- Membership activity report (indicating new or canceled memberships)
- Attachment type (percentage)
- Suppression Report (where *member* did not receive a copy of the ticket because the *member* is the *requestor*)

### 7.3 Annual Summary Report

The *notification service provider* shall produce an annual report on the following:

- Operational achievements in previous year
- Strategic goals for coming year
- Damage Prevention activity summary

### 7.4 Ad Hoc Reporting

All records pertaining to the *member* shall be made available to the *member* upon request and within a reasonable period of time.

Where the gathering and provision of such information is estimated to require more than 3 hours to produce, the *notification service provider* may charge the *member* for the cost of producing the requested report.

Where possible, the system should allow *members* to log in to the system to produce a report related to *locate requests* on which they were notified.

## 8. NOTIFICATION SERVICE PROVIDER PERFORMANCE LEVELS

The *Notification service provider* shall establish performance standards for the operation of the notification centre for the purpose of promoting a positive customer experience, accuracy, cost-effectiveness and efficiency.

The *Notification service provider* shall measure and report on performance relative to contact centre industry metrics known as Key Performance Indicators (KPIs)

KPIs include, but are not limited to:

- Service Level – percentage of calls answered in a target time-frame
- A.S.A – Average time it takes for a caller to speak to an agent
- Average Handle Time (AHT) – average amount of time it takes to complete a call or process locate requests received online
- Web processing turnaround – amount of time between when a *requestor* submits an online *locate request* and a when the ticket is returned to the customer
- Support Request Response Time – amount of time it takes to respond to a customer support request email
- Customer Satisfaction – percentage of customers who indicate they were satisfied or very satisfied with the service

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The *notification service provider* shall maintain a quality management auditing program which requires that agent transactions be regularly reviewed for accuracy, customer service and adherence to policy and procedure.

### 9. MEMBER RESPONSIBILITIES

#### 9.1 Maintain current information

*Members* shall update contact information and *data* registration immediately following any change to the information, and annually at a minimum.

The *system* shall allow *members* to update their contact information and *data* registration through a secure log in.

#### 9.2 Receiving Notifications

The *member* shall ensure that equipment and software used for receiving notifications from the Notification service provider is operative at all times.

The *member* shall ensure that incoming *locate requests* are monitored regularly during *business hours*.

The *member* shall ensure that after-hours contacts are provided and kept current for the purpose of receiving follow-up contact regarding Emergency notifications.

#### 9.3 Response to Notifications

Within the minimum notice period notification, the *member* shall respond to *locate requests* by one of the following actions:

- Identify the location of their underground infrastructure; or
- Contact the *excavator* to arrange a reasonable time to complete the locates; or
- Provide clearance to proceed with the project; or
- Follow any other method of response to the *locate request* approved by legislation that may be introduced from time to time

Alternate Locate Agreements (ALAs) may be used providing the *member* and *requestor* agree on the terms and conditions.

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For each notification, the *member* shall electronically provide *positive response* to the *notification service provider* identifying the action(s) taken in relation to the request for locates, and the date on which the action was completed.

The *member* shall refer any direct request for locates from a *requestor* to the *notification service provider*.

### 9.4 Education and Awareness

*Members'* education and awareness programs shall promote awareness of the *notification service provider* and shall include contact information where *requestors* can submit *locate requests* to the *notification service provider*, including the national portal: [ClickBeforeYouDig.com](http://ClickBeforeYouDig.com).

## 10. ADDITIONAL SERVICES

### 10.1 Advertising and Promotion

The *notification service provider* has a documented, pro-active public awareness, education, and damage prevention program.

A public awareness program shall

- be current and designed to raise awareness of the presence of underground infrastructure and safe ground disturbance practices, and;
- elicit positive behavioural changes by the public, and;
- Inform, educate, promote, and enhance the safety message to the public

#### **Notes:**

- 1) *The members providing ongoing public awareness programs is a component of damage prevention to all underground infrastructure.*
- 2) *In Canada, a public awareness program should promote awareness of the local notification service provider, and Canada's one-window locate request portal, [www.ClickBeforeYouDig.com](http://www.ClickBeforeYouDig.com)*

### 10.2 Secondary Screening

The *notification service provider* may offer optional secondary screening services to *members* at an additional cost; the fee for which is determined on a cost-recovery basis.

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If a *member* participates in secondary screening, the notifications shall be transmitted to the *notification service provider's* secondary screening department for further analysis and action on behalf of the *member*.

Secondary screening service shall utilize detailed location information and business rules provided by the participating *member* in order to provide a clearance or conditional clearance to the requestor when it is determined that the proposed ground disturbance will not impact the *member's* *underground infrastructure*.

Participation in Secondary Screening service requires a separate Secondary Screening Service Agreement between the *notification service provider* and the *member*.

### 10.3 Emergency Response Transmissions (E.R.T.)

The *notification service provider* may offer E.R.T. notification services to *members* at an additional cost; the fee for which is determined on a cost-recovery basis.

Emergency Response Transmissions are triggered when a live incident is reported within a defined geographic area.

Emergency Response Transmission notifies participating *members* whenever there is a direct or indirect threat to their *underground infrastructure*. This immediate awareness allows the ability to respond accordingly, including the ability to provide mutual aid.

## 11. BUSINESS MANAGEMENT

The *notification service provider* shall be a non-profit organization governed by a Board of Directors with input from *stakeholders*.

The Board of Directors shall appoint a *Member Resource Committee* to receive and consider input from *stakeholders* regarding the operation of the *notification service provider*.

The Member Resource Committee shall be comprised of representatives from regional *members* and the provincial Common Ground Alliance.

The Member Resource Committee shall make recommendations to the Board of Directors based on consideration of input from *stakeholders*.

## 12. DOCUMENT CHANGE PROCEDURES

