

PHASE II in the PSAP

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What is Phase II?

- Phase I is what we currently have:
 - Subscribers' cell phone number
 - Address of the cell tower
- Phase II is a new feature that will provide more accurate location information for most cell calls based on X Y coordinates

Phase II Wireless

- Phase II has 2 stages:
 - Stage 1 – location for fully subscribed and active cell phones – must be deployed by Feb. 2010
 - Stage 2 – roamers, unsubscribed, uninitiated, lapsed subscriptions, unregistered and ICLU (in call location update – or – rebid) – report submitted due to CRTC August 2, 2009 – deployment date unknown at this time

Why 2 Stages?

- Push to have it implemented for 2010 Olympics
- Not delay improvements until all features can be deployed
- Many cell phone networks, many different handsets, many different location technologies

When Does It Really Start?

- Testing/Deployment began in Toronto August 13th and August 24th in Peel Region
- 100 calls per day between 0800 and 1700
- Each WSP has been assigned a block of dates to test – almost no overlap
- Testing will end after each cell tower sector for each provider has been turned on and successfully tested
- Afterwards all cell calls placed from that tower sector will provide you with lat/long

The Transition

- It will be a gradual transition
- As each sector is turned on and tested, it remains live
- Calls delivering Phase II Stage I data could begin as each sector is tested – if the caller is on that providers' network and hits a tower which has already been tested
- Phase II Stage I calls will increase as the testing continues

How Will I Know Its Phase II?

- Phase 1 data will come through as voice and cell tower (like today)
- Class of service will display as WL2
- Phase II data will come through as a separate packet – could be up to 50 seconds later
- 4 additional pieces of information will be delivered

Latitude, Longitude, Uncertainty & Confidence

- X / Y – Latitude / Longitude
- UNC – Uncertainty
- CONF – Confidence
- OR Error Messages

LAT/LONG

- **Latitude and Longitude coordinates (LAT/LONG)** - Displayed in degrees, minutes, seconds (heading) format in the Additional Information field.
- All Latitude/Longitude provided will be based on the WGS84 datum.
- “Latitude” means the angular distance, in degrees, minutes, and seconds of a point north or south of the Equator.
- Longitude” means the angular distance, in degrees, minutes, and seconds of a point east or west of the Prime (Greenwich) Meridian.

Confidence Factor (CONF)

- Always 90 % - a fixed level of confidence
- All uncertainty measures are done with 90% confidence as per the CRTC Decision.
- Less than 90% Percent – No information delivered

Uncertainty (UNC)

- **Uncertainty Measure (UNC)** - Using the Lat/Long point and the uncertainty measure (in metres), a circular area can be defined to represent the region within which the wireless caller may be located.

Error Messages

- If the Wireless Carrier is unable to provide this data through their system at the time of the call, there are also a series of ERROR Messages from the Wireless Carriers system such as:
 - WSP Error: 6 POSITION METHOD FAILURE
 - WSP Error: 201 QOP NOT ATTAINABLE

Error Messages

- If the call is from a lapsed handset (i.e. prepaid or contract expired) this message will display.
- WSP Error: 4 UNKNOWN SUBSCRIBER
- Contact the Wireless Provider if you need more information on a call

What Will It Look Like?

- The extra fields will display wherever you choose to put them in your CAD or terminal equipment display
- On your CAD map you could plot where the cell phone is located
- The call does not have to be an at exact street address and can be displayed in a field, golf course

When Will I Use the X Y Coordinates?

- When the caller cannot tell you where they are: 9-1-1 “101” still applies
- When the street address is not the quickest way to access the caller’s specific location, i.e. in an open area, the lake, a parking lot in a large complex
- When the coordinates provide a better location than a street address

Why Use the X Y Coordinates?

- Street addresses and intersections are not always the most accurate location
- When the call is dispatched to a Mobile Data terminal with a map, it could direct the officer to the exact location
- It may be a more exact location than what a street address can provide

Testing Requirements

- When you receive a test call you will be asked to confirm the new information displayed
- *You may ask where they are calling from to confirm the accuracy of our map data*
- The quicker the information is confirmed the less impact on call volumes

Accuracy

- We may be able to validate how accurate your map data is - opportunity
- Phase II Stage I testing does not include the same type of location accuracy as the US
- Only validating based on Confidence and Uncertainty

Tracing

- Tracing **may** be possible – GPS Locate
- Depends on the information available
- Telephone number makes it faster
- Enhanced 24 x 7 Support from all Carriers coming soon

What's Next?

- Phase II Stage 2
 - In-Call Location Update (Re-bid)
 - Roamers
 - Uninitiated
 - Unregistered
 - Lapsed Subscription
 - Unsubscribed
- Timeframes?

Questions

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