Resource Road Radio Communications Protocol

Updated: November 28, 2013
BC’s Resource Road Radio Communications Initiative

Why?

- No consistency in signage, radio operator procedures or radio channels
  - Coroner’s inquest
  - Increased traffic on many resource roads
  - Increasingly mobile workforce
  - Need to fit more frequencies in already congested range

What?

- Implementation Pilots & evaluations
BC Resource Road Initiative – Key Principles

- Initiative started by FLNRO (BCTS), who brought together a team including IC, FPI and others
- Other key supporters:
  - BC Forest Safety Council
  - TruckSafe
  - WorkSafe BC
- IC is taking on a greater role given post pilot changes required
BC’s Resource Road Radio Communications Initiative – Pilot Projects

- Pilots conducted on FSRs in South Island, Campbell River, Sunshine Coast and Peace Forest Districts.
- Industrial & commercial resource road users and other misc. stakeholders
- Cooperation & collaboration of numerous resource companies in the local areas
Radio Authority Matrix

- Industry Canada is responsible for licensing use of radio frequencies
- FLNRO is responsible for authorizing the use of specific frequencies on FSRs
- Licensees are responsible for authorizing the use of specific frequencies on LOC roads
Objectives of Pilots

1) Develop consensus and establish consistent radio calling procedures
2) Establish standards for consistent signage
3) Trial a group of standardized radio channels with potential to roll-out BC wide
Pilot Evaluation - FPInnovations

- Surveyed 327 road users through Web-based questionnaires about signage, calling procedures and radio channels
- Additional 150 roadside interviews with those travelling resource roads in the Pilot areas
- Site visit to Chetwynd to investigate Pilot-related communication problems found several root issues
- Verified the effectiveness of the RR Channels through interview feedback and extensive field testing
- Project report summarizes key findings from the Pilots
- Creating best practice guidelines for radio equipment installation and maintenance, and for radio use
Radio initiative status

- Pilots and evaluations completed and reported on project website
- RSCs established around BC
- Radio calling procedures introduced in 2009
  - Up/ Down standardized
  - Calling order standardized
  - Default & local calling frequency
Standard FSR Signage

- Sign materials and format standardized
- Signs at road entry points identify road name to be called, RR channel and call frequency
- KM signs reflect calling procedure
- Must call KM signs, where needed
Standardized RR Channels Adopted

- **Resource Road (RR) Channel**
  - One frequency = one channel

- **40 Std Channels**
  - 35 RR channels
  - 5 LD loading channels
  - licensed to Prov. of BC

- Implementation requires IC to “clear” locally
RR Radio Communications Protocol Adoption

1. Engage with major licensees, and other stakeholders to establish communication standards for defined area for buy-in

2. Identify and engage key stakeholders {eg. Road Safety Committee (RSC)}

3. Develop implementation plan

4. Communication is critical and key to success
   - Identify other affected stakeholders
   - Inform staff and contractors, radio shops, and other resource road users (eg. first responders) of upcoming changes
   - Keep stakeholders informed on timing
Securing Buy-in from Key Stakeholders

- Seek stakeholder support for:
  - transitioning of piloted channels
  - standardizing procedures, signage and channels

- Benefits and opportunities:
  - Always having the correct radio channels available with no need to constantly reprogram
  - One less thing for workers, first responders, and the general public to worry about
  - Consistency and standards lead to operational efficiencies & simplified training, and most importantly - increased safety

- Communication is Key!
Transition steps include:

1. Define area and determine transition date
   - Consider engaging adjacent areas
   - Select low road activity time for transition

2. IC free up RR frequencies in area (move current users off of RR channel frequencies)

3. Assign radio channels across the landscape (polygon map)
   - Review road systems and streamline road names
   - Must be reviewed and approved by Industry Canada
Transition steps include:

4. Change signage on resource roads
   - Entry road signs
   - RR channel signs
   - Must call signs

5. Road users re-program radios with standard set of RR radio channels

6. Plan transition date activities
   - Entry road signs
   - System to check users having right channels before entering road
   - Monitor conformance with new calling procedures
- Coast - original piloted RR radio channel assignments map
- Map the land base with proposed channel polygons to avoid interference
Further information:

- Go to **RESOURCE ROAD RADIO COMMUNICATIONS** at:
  [http://www.for.gov.bc.ca/hth/engineering/Road_Radio_Project.htm](http://www.for.gov.bc.ca/hth/engineering/Road_Radio_Project.htm)