# D2N: ACMA Licensing, what does it all mean?

# Who:

## Who are they?

- The ACMA are the federal agency responsible for managing all spectrum related legislation and licensing.
  - Government body
- It is against the law to operate a two-way radio without meeting the licensing conditions pertinent to your application and equipment.
  - Licensing
- It is illegal to sell, hire or operate radio equipment that does not meet the relevant Australian standards with regards to electrical safety and electromagnetic radiation.
  - Compliance

## Where:

Two-way radios are used across a number of frequency bands.

- These include;
  - VHF 148-174MHz, UHF 403-420MHz, 450-520MHz,
  - Licensing is broken into three basic scenarios
    - Class Licence, Site Licence, National Licence
  - Radios operate on different power levels, for the ACMA they all fall into two distinct sets. Up to and including 8.3 Watts (Low Power), and above 8.3 Watts (High Power). As a rough guide, 'most' portable radios sold today operate at between 3-5 Watts. Mobile (vehicle mounted) units operate up to 25 Watts and Repeaters often start at 25 Watts and can go up to Kilowatts (1000+).

## What:

#### What is a licence?

- I licence is a document giving permission to the registered owner that they may use
  a certain frequency (or pair if it is a repeater licence) under a certain set of
  conditions. Depending on the band, power level, location and equipment specified
  there are a range of different licence conditions that need to be met to ensure you
  remain compliant with the licence.
- Most licences are renewed on an annual basis via the ACMA.

## What do the different licences mean?

- Class Licence:
  - The 'Class Licence' dictates that for certain bands and/or frequencies you are permitted to operate under a 'class' licence. In other words, the ACMA 'class' a certain set of channels as a set where a licence is not required. The best example of this is the CB channels. You do not need to hold a ACMA licence to use any of those channels. You do however need to ensure you use a complaint radio and it is programmed according to the class licence conditions (frequency, power, channel labelling)

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#### Site Licence:

- A site licence offers the owner protection from that frequency being re-sold by the ACMA to another licence holder for a given distance.
  - For example, if you own a low powered (<8.3 Watts) site licence for your Warehouse, no one can use that licence within 10kms. For higher powered services that distance grows to a maximum of 140kms. There are a number of permutations to this rule however these are the upper and lower limits.
- By owning a site licence, you also have the ability to call on the ACMA should you get interference on your service. Depending on the scenario, they will either ask you a series of questions or attend your site to undertake an investigation.
- A site licence offers the most protection, but is restricted to that one location and the area around it (area around the site is defined by power level and band) (2km for a low power service)
- Typical owners of site licences are;
  - Telstra, EMS, Defence, HQ buildings, Government agencies, permanent installation or commercial buildings.

### • National Licence:

- This is one of the most challenging licences to own and operate. The ACMA have allowed for a small set of frequencies to be assigned for National use and as the title suggests you can use it anywhere in Australia. However!
  - You must not cause any interference to any site licenced service.
  - You must still meet the licence conditions for your National Licence.
  - If you come across another National Licence operator at your site. neither of you have the power to make a complaint nor ask the other user to change channels (regardless of whether they have other channel options to go to or not). This is called the 'no interference, no protection' caveat placed on all National Licences.
- Typical owners of national licences are;
  - Rental companies, construction companies, business's that operate all over Australia.

# How:

# How can we help our customers be compliant?

- Clear and concise advice not too technical
- We organise the licensing for them (we have the knowledge and experience)
- We provide ACMA compliant documentation to our customers

### Links to read/research:

http://www.acma.gov.au/Industry/Spectrum/Radiocomms-licensing/Apparatus-licences/is-your-two-way-radio-an-outlaw

http://www.acma.gov.au/Industry/Suppliers/Product-supply-and-compliance/Commonly-supplied-equipment/land-mobile-two-way-radios