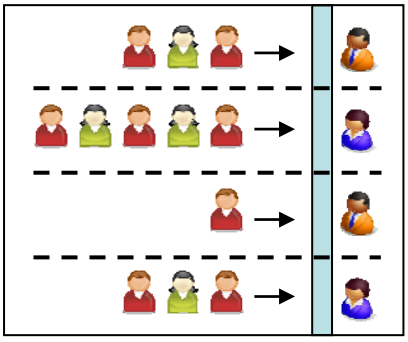
Using "Trunking" to intelligently share resources

info card

Once a community of radio users reaches a certain size the amount of traffic between them can make the system ineffective … and sometimes downright disruptive. Adding other channels whilst setting up sub-groups of users to use those channels can help for a while, but the 'chatter' within each group can still remain disruptive and conversations between members of different groups is difficult.

What is needed is a way to use the entire resources of the radio system much more intelligently so that users can select to communicate with each other on a one-one basis or on a one-many basis as needed.

The problem with channel grouping

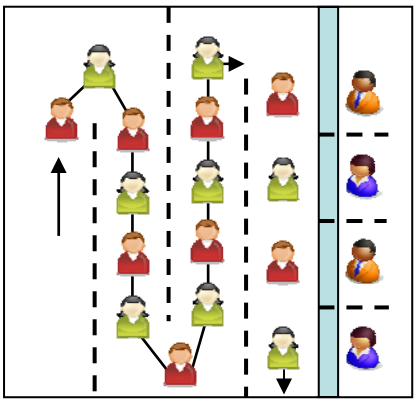


It's all about queuing. Channel grouping is a bit like going to an old-fashioned bank where they had set up individual queues in front of each teller window. You picked a queue and hoped that it's going to be the quickest. And it's Murphy's law that even if you picked the shortest queue, other queues moved faster.

In terms of radio use, the traffic will vary across each of the groups. Some may be light users of their channel and others will be heavy users. The result is an imbalance, with unused capacity on some channels and over-use on others. The temptation is to mix up multiple groups of light users on a single channel and split heavy using groups into smaller sub-groups with a dedicated channel each.

Whilst this can be achieved the outcome is seldom satisfactory. The light users are now sharing a channel and have to listen out through other group's calls for their own traffic. And the heavy users are now split into smaller groups that can't easily communicate with each other.

How trunking makes the difference



Now imagine a more up-to-date queuing approach. Here there is only one queue to join, and people get served as and when the next teller is free. This way, even if you are behind someone who wants to undertake a long transaction at the window, you will still get served quickly as you can go to any of the other windows when they are free.

Looking specifically at a radio situation now, the Trunking technology simulates this managed approach and allocates a speech channel to the next person that needs one regardless of which sub-group they belong too. So, even if a member of your sub-group is already making a call, you can still use the radio to make your own call.

What is even better, is that you are no longer restricted to calling only people using the same radio channel as you, so you can communicate with anyone within the radio system. And even better still, a trunked system works just like a mobile phone system – you 'dial' the person you want to speak to and only their handset 'rings'.

… even better still, a trunked system works just like a mobile phone system – you 'dial' the person you want to speak to and ONLY their handset 'rings'.

And you can dial a specific group or in an emergency … even dial everyone.

It's that flexible!

Resound
intelligent radio communications for business
01296 330568
mail@resound.co.uk
www.resound.co.uk