Implementing Group and Fleet ID's in a MDC-1200 system

MDC-1200 signaling permits targeting groups and fleets of field units for actions like Alert, Radio Disable and Radio Enable. Because these messages are targeting multiple units, receiving units will not acknowledge receipt of the message. There are different ways to implement groups and fleets in the ID scheme of the field units.

Wild Card Addressing
This method does not use separately defined group ID's in the sense that the customer needs to organize unit PTT ID's in a system that would recognize membership in specific fleets and/or groups. Here's an example:

A municipality shares a communications system between Fire, Police and Ambulance. When setting up the ID system, it was decided the following numbering scheme would be used. The first digit (MSD) describes the organization, the next digit describes the group within the organization and the last two digits (LSD's) describes the specific radio within the group.

ID's in the 1000 range would be Fire

ID's in the 2000 range would be Police

ID's in the 3000 range would be Ambulance

In this manner, If it were necessary to alert the entire fire department, the Alert message would be sent to ID 1FFF. Likewise, all police would be alerted with 2FFF and all ambulances with 3FFF. Now, within the organizations, there can be 15 groups (0 through E). To contact group 0, the Alert would target ID 10FF, group 1 would be 11FF etc. There can be 238 individual units in any one group (00 through EE). If you wanted to alert fireman number 25 in group 6, you would target ID 1625.

Group Addressing
Individual ID's are not allowed to have ID's that begin with "E" (range is from 0001 to DEEE with "F" not allowed in any position). This is because an ID that begins with E signifies that the following number is a "Group ID" instead of a PTT ID. Group ID's are programmed into devices in addition to their individual PTT ID. For the purpose of customer perspective and programming, group ID's contain three digits (as the MSD is always "E"). For field units, the programmed group ID is only used to qualify incoming messages. The group ID is never transmitted by the field unit. The manner in which group ID's are assigned determines whether the groupings are fleet based or non-fleet based.

Fleet Based
In a manner similar to Wild Card addressing, fleet based group addressing requires a prepared scheme when assigning group ID's. Group ID's do not consider individual radios, so that a group ID would be defined as "E" + fleet number + group number. To alert all radio's of fleet 1, the alert message would be sent to E1FF.

Non-Fleet (Group) Based
In Non-Fleet based group addressing, there are no defined fleets. Group ID's are assigned from 001 through EEE. To alert group 12, the alert message would be sent to E012.