Radio Frequency Hazard Information

As per Section 1.1310 mobile transmitters are required to be operated in a manner that ensures that the public is not exposed to RF energy levels in accordance with OST/OET Bulletin Number 65.

In accordance with this section and also Section 2.1091, this device has been classified as a mobile device.

In accordance with Section 1.1310 the Maximum Permissible Exposure (MPE) limit for the General Population / Uncontrolled Exposure of 0.2 mW/cm^2 has been applied.

This mobile transceiver will typically be used at emergency incidents requiring temporary extended range communications.

A minimum safe distance has been calculated using the above MPE , a transmit power of 5 watts and a typical antenna gain of 1 (0 dBi):

$E(V/m) = (\sqrt{(30 * P * G)}) / D$

Power density, mW/m^2 = $E^2/3770$

$MPE = E^2/3770$
$MPE = ((\sqrt{(30 * P * G)}) / d))^2/3770$
$$D = (\sqrt{(30 * P * G)}) / (\sqrt{(MPE * 3770)})$$
$$= (\sqrt{(30* 5 * 1)}) / (\sqrt{(0.2 * 3770)})$$
$$= 12.25 / 27.45$$
D   = 44.6 cm

Typically this mobile transceiver would operate in a push to talk mode and therefore a duty cycle of 50% could be expected.

$$D = (\sqrt{(30 * P * G * 0.5)}) / (\sqrt{(MPE * 3770)})$$
$$= (\sqrt{(30* 5 * 1* 0.5)}) / (\sqrt{(0.2 * 3770)})$$
$$= 8.66 / 27.45$$
D   = 31.5 cm

In order to comply with the General Population / Uncontrolled Exposure limits this mobile will need to be installed with a minimum safe distance of 44.6 cm.

The equipment manual for this device will need to be noted accordingly.

Result: Complies