RTE to improve FM coverage in north

How the technology works

1. **Medium wave and long wave** are two frequency bands used to broadcast amplitude modulation (AM) radio.

- Invented in the early 1900s, AM radio allows an audio signal to be sent over the air.
- Due to the relatively long wavelength, AM stations can cover large areas with few transmitters.
- Medium-wave radio transmissions are those between the frequencies of 300 kHz and 3,000 kHz.
- In most of the world, medium wave is the most common broadcasting band.

2. **Long-wave radio frequencies** are those below 500 kHz, which correspond to wavelengths longer than 600 metres.

- They follow the curvature of the earth, making them ideal for communication across continents.

3. **FM** is in the very high frequency (VHF) part of the radio spectrum.

- FM signals do not carry as far as AM ones but their reception quality is better.

Broadcasters are required to maintain a high standard of coverage and quality.

Amid mounting criticism of its decision to drop medium-wave radio services, RTE has revealed it intends to improve its patchy FM coverage in Northern Ireland. Valerie Robinson and Claire Simpson report.

RTE has moved to defend its controversial decision to scrap its medium-wave service next month which will effect thousands of Radio 1 listeners in Northern Ireland.

The state-funded body also revealed that it is reviewing its patchy FM coverage north of the border to ensure radio listeners have full access to its services.

Politicians and the public have expressed concern about RTE’s plans to drop its Radio 1 medium-wave (MW) transmission on March 24.

Considered by many in the north as their national station, Radio 1 has traditionally been picked up on MW by many listeners.

Opponents of RTE’s plans to axe its MW service have argued that it contradicts the 1998 Good Friday Agreement, in which both the British and Irish governments agreed that nationalist culture would be given “parity of esteem” with its unionist equivalent.

The Republic’s Broadcasting Act 2001 says RTE’s public service remit is to “provide a comprehensive range of programmes in the Irish and English languages that reflect the cultural diversity of the whole island of Ireland”.

An RTE spokeswoman said Radio 1 fans in the north would not be left out in the cold next month.

She said that in the run-up to the March 24 deadline the station would let MW listeners know how they can continue to tune in on alternative platforms.

Defending the decision to drop MW transmission, the spokeswoman said the broadcaster was “obliged to deliver value for money for the public monies it receives”.

“This means that with changes in technology RTE Radio cannot sustain three national radio frequencies,” she said.

“We have been reviewing how we might significantly improve FM reception for the nearly 600,000 people living in this area,” she said.

The review will conclude by early next month with RTE intending to make improvements to its Radio 1 FM reception before MW broadcasting ends.

The spokeswoman added that Radio 1’s FM signal covered just 75 per cent of the north and was weakest in and around the Belfast metropo-

The Republic’s minister for communications, energy and natural resources, Eamon Ryan, said RTE’s decision to abandon MW was “in line with the upgrade and modernisation of its services.”

However, in a statement to The Irish News the minister said the broadcaster was legally obliged to provide free-to-air radio to the whole community. He urged it “to ensure that no listener loses access to existing services.”

“RTE has a public information campaign underway and has assured the minister that they are making every effort to inform medium-wave listeners of closure and to help the switch to other forms of receptions,” the statement read.

“According to RTE, improvements to FM and LW broadcasts will mean that RTE... Radio 1 will continue to be easily available to Northern Irish listeners and at a higher quality.”

Acknowledging the role of northern radio listeners in Irish culture, Mr Ryan said he had been assured by RTE that it would take steps to ensure no loss of coverage to listeners in Northern Ireland.

The How the technology works column adds that medium-wave and long-wave frequencies are those below 500 kHz, which correspond to wavelengths longer than 600 metres. They follow the curvature of the earth, making them ideal for communication across continents. FM is in the very high frequency (VHF) part of the radio spectrum. FM signals do not carry as far as AM ones but their reception quality is better. Medium-wave and long-wave radio signals can bend around obstacles such as mountains and buildings better than FM waves and can travel greater distances before the signal fades. However, they are more prone to interference from static and their reception can vary from day to night because of changes in the atmosphere.

Although MW/LW broadcasting remains popular with speech-based radio stations, most music and FM radio programmes are broadcast in FM because it offers better sound quality.