# Broadcast Planning Instruction

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| **Title:** Use of vertical or horizontal polarisation by FM broadcasting services | |
| **Instruction no:** 8 | **Version release:** 2 |
|  | **Date of effect:** Immediate |
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## Background

The use of mixed polarisation is generally preferred for FM services as this provides for optimum reception by fixed, portable and mobile (i.e., vehicular) receivers. Some broadcasters, however, may seek to deploy a subset of mixed polarisation (i.e., either vertical or horizontal polarisation) in order to minimise implementation costs.

This Instruction clarifies the conditions under which vertical or horizontal polarisation may be deployed in lieu of mixed polarisation specified in Licence Area Plan (LAP) Technical Specifications.

## Instruction

Where the use of mixed polarisation is specified in a LAP Technical Specification, the broadcasting licensee is permitted to deploy a subset of mixed polarisation (i.e., vertical only or horizontal only) provided:

1. The radiated power in the vertical or horizontal plane (whichever is applicable) does not exceed the maximum ERP permitted in that plane by the LAP Technical Specification[[1]](#footnote-1); and
2. The polarisation in use is reflected in the transmitter licence(s) issued in respect of the broadcasting service.

For planning purposes (including coverage assessment and coordination with existing and future planned services), the FM broadcasting service will be assumed to operate with mixed polarisation, regardless of the polarisation in use. In the event of interference, the FM broadcasting service will not be entitled to claim protection if the interference is attributable, either wholly or in part, to the use of single-plane polarisation by the interfered service.

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1. The maximum ERP specified in the LAP Technical Specification applies equally to each plane of polarisation. Refer also to Broadcast Instruction No. 2 (Treatment of mixed polarised FM services in broadcast planning). [↑](#footnote-ref-1)