



**Recommendation WG 2.89.016**

**CONTRIBUTION OF TREES AND VEGETATION  
IN  
OHLOSS ANALYSES**

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Source: Working Group 2

## RECOMMENDATION

**Subject Area:** OHLOSS

**Title:** Contribution of Trees and Vegetation in OHLOSS Analyses

### *Synopsis*

This recommendation provides guidelines under which trees and other vegetation may be included in OHLOSS analyses. Emphasis is placed on the blocking effects and permanence of any trees that are not included Measurements and individual negotiations are encouraged in marginal or questionable cases.

### *Recommendation*

As a general rule, incidental vegetation such as scattered trees, scrub vegetation, or ornamental shrubbery found along interfering signal paths cannot be considered permanent contributing factors to the predicted OHLOSS.

However, profile modification can be considered for wooded areas (in the far field) composed mainly of evergreen trees, particularly if they are located in a controlled territory such as a state park. Tech Note 101 indicates that significant absorption can occur "...where a radio path extends for a long distance through trees. Studies made at 3000 MHz indicated that stone buildings and groups of trees so dense that the sky cannot be seen through them should be regarded as opaque objects around which diffraction takes place." Such being the case, the tree heights could be added to the ground elevation in the terrain profile for study. This consideration shall be acceptable only if the trees are considered permanent (a controlled environment) and are non-deciduous (i.e., evergreens).

Additional losses attributable to evergreen shrubbery planted on earth stations berms, for the multiple purposes of soil stabilization, aesthetic enhancement and improved attenuation, may need to be determined via on-site measurement.

It should be recognized that trees and vegetation are not necessarily permanent features of the environment, and that interference problems resulting from subsequent changes in the environment should be dealt with on a case-by-case basis by the affected parties.

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Notes: