

5.2.5 Interference criteria

Section 1.4 presented the concept of interference criteria (C/I , $C/(N+I)$, $(N+I)/N$, I/N) when the victim is a generic system. The consistency between these values falls under the responsibility of the user. It should be noted that only one criterion is used at a time in the final interference calculation.

It is important to remember that these parameters are also used in the evaluation of the two blocking modes (Protection ratio and Sensitivity) as presented in See section 1.4.5.

SEAMCAT performs a consistency checking between the interference criteria as explained in ANNEX 3:.

Table 13: Interference criteria panel GUI

| Description | Symbol | Type | Unit | Comments |
|---------------------------------|------------------------------------------|------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interference criteria | C/I $C/(N+I)$ $(N+I)/N$ I/N | Scalar | dB | At least one of these criteria should be defined: (C/I , $C/(N+I)$, $(N+I)/N$, I/N). Then, one of these criteria is chosen for each interference probability calculation. |
| Calculate interference criteria | - | calculator | - | This feature allows the evaluation of the consistency between the entered interference criteria (C/I , $C/(N+I)$, $(N+I)/N$, I/N) and proposes alternative values that can be selected to ensure consistency between them. |

The “calculate interference criteria” is a user friendly calculator for the interference criteria. It avoids conspicuous calculations, increases the transparency and avoids consistency check warnings because of the use of inconsistent sets of values.

The calculation and selection of a consistent set of interference criteria is implemented. The calculator opens with the existing values in the interference criteria fields of the workspace. A checkbox (default: ON) allows to force the consistency of the C/(N+I) value with the workspace, i.e. the values 'Noise floor' and 'Sensitivity'. The relation between the values is given in the formula $C/(N+I) [dB] = \text{Sensitivity} [dBm] - \text{Noise floor} [dBm]$

The Interference Criteria Calculator displays all possible sets of consistent interference criteria rounded to two decimals. The same set is displayed only once. As a consequence of rounding, the displayed sets are differ at least 0.01 dB in one of the four values.

When you select the column of values you want and click ok, the values are copy/pasted to the "Interference criteria" panel.

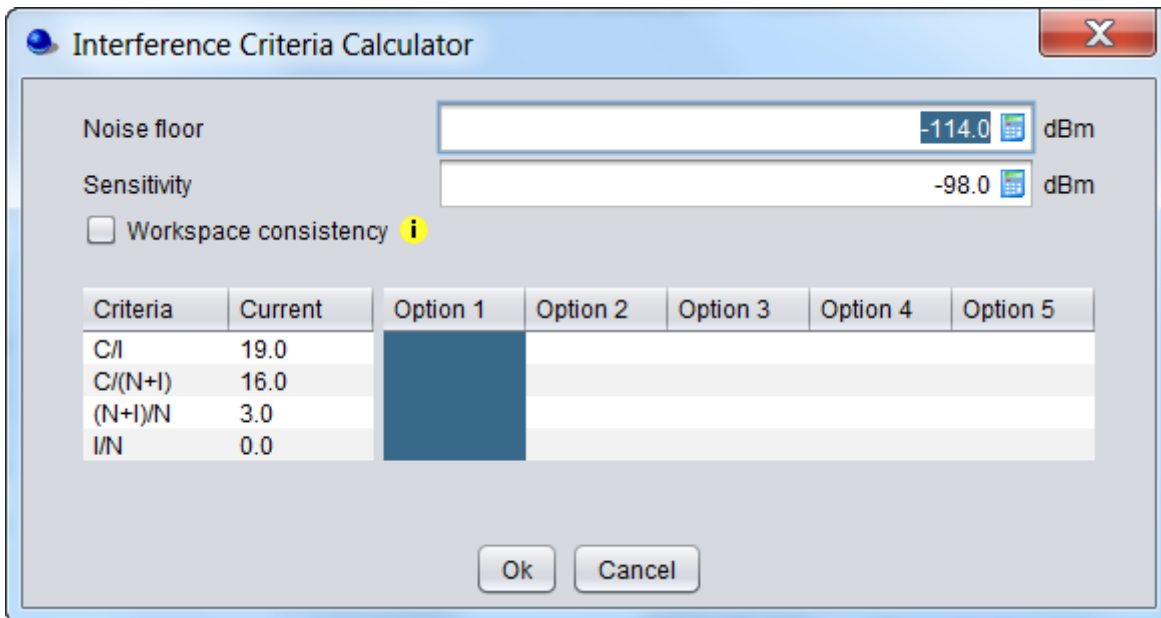


Figure 145: Interference criteria calculator GUI

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