

NOX parameters

Add-threshold for short BA Lists

This parameter is the threshold value for the minimum number of times per hundred thousand measurement samples, that the signal strength of a test frequency must exceed the Relative Signal Strength threshold for a specific recording before NOX is allowed to consider adding the associated cell as a new neighbouring cell to a serving cell with a short BA List. This parameter constitutes only a secondary criterion for addition of a neighbouring cell relation and is dependent on the MinCountsDL parameter for a primary criterion.

Type: Integer

Value range: 0 - 100000 per hundred thousand

Installation setting: 1000 (1%)

Add-threshold for long BA Lists

This parameter is the threshold value for the minimum number of times per hundred thousand measurement samples, that the signal strength of a test frequency must exceed the Relative Signal Strength threshold for a specific recording before NOX is allowed to consider adding the associated cell as a new neighbouring cell to a serving cell with a long BA List. This parameter constitutes only a secondary criterion for addition of a neighbouring cell relation and is dependent on the MinCountsDL parameter for a primary criterion.

Type: Integer

Value range: 0 - 100000 per hundred thousand

Installation setting: 2000 (2%)

Add-threshold for dual-band relations in short BA Lists

This parameter is the threshold value for the minimum number of times per hundred thousand measurement samples, that the signal strength of a test frequency must exceed the Relative Signal Strength limit set for a specific recording before NOX is allowed to consider adding the associated cell as a new neighbouring cell to a serving cell, when the serving and neighbouring cells are of different system types and the serving cell has a short BA List. This parameter constitutes only a secondary criterion for addition of a neighbouring cell relation and is dependent on the MinCountsDL parameter for a primary criterion.

Type: Integer

Value range: 0 - 100000 per hundred thousand

Installation setting: 1000 (1%)

Add-threshold for dual-band relations in long BA Lists

This parameter is the threshold value for the minimum number of times per hundred thousand measurement samples, that the signal strength of a test frequency must exceed the Relative Signal Strength limit set for a specific recording before NOX is allowed to consider adding the associated cell as a new neighbouring cell to a serving cell, when the serving and neighbouring cells are

of different system types and the serving cell has a long BA List. This parameter constitutes only a secondary criterion for addition of a neighbouring cell relation and is dependent on the MinCountsDL parameter for a primary criterion.

Type: Integer

Value range: 0 - 100000 per hundred thousand

Installation setting: 2000 (2%)

Remove-threshold for short BA Lists

This parameter is the threshold value for the maximum number of handovers that are allowed to have occurred between a serving cell and a neighbouring cell before NOX is allowed to consider removing the neighbouring cell relation from a serving cell with a short BA List. This parameter constitutes only a secondary criterion for removal of a neighbouring cell relation and is dependent on the CellHOVERCNT parameter for a primary criterion.

Type: Integer

Value range: 0 - ...

Installation setting: 10

Remove-threshold for long BA Lists

This parameter is the threshold value for the maximum number of handovers that are allowed to have occurred between a serving cell and a neighbouring cell before NOX is allowed to consider removing the neighbouring cell relation from a serving cell with a long BA List. This parameter constitutes only a secondary criterion for removal of a neighbouring cell relation and is dependent on the CellHOVERCNT parameter for a primary criterion.

Type: Integer

Value range: 0 - ...

Installation setting: 100

Remove-threshold for dual-band relations in short BA Lists

This parameter is the threshold value for the maximum number of handovers that are allowed to have occurred between a serving cell and a neighbouring cell before NOX is allowed to consider removing the neighbouring cell relation, when the serving and neighbouring cells are of different system types and the serving cell has a short BA List. This parameter constitutes only a secondary criterion for removal of a neighbouring cell relation and is dependent on the CellHOVERCNT parameter for a primary criterion.

Type: Integer

Value range: 0 - ...

Installation setting: 5

Remove-threshold for dual-band relations in long BA Lists

This parameter is the threshold value for the maximum number of handovers that are allowed to have occurred

between a serving cell and a neighbouring cell before NOX is allowed to consider removing the neighbouring cell relation, when the serving and neighbouring cells are of different system types and the serving cell has a long BA List. This parameter constitutes only a secondary criterion for removal of a neighbouring cell relation and is dependent on the CellHOVERCNT parameter for a primary criterion.

Type: Integer

Value range: 0 - ...

Installation setting: 50

Preferred length of BA List

This parameter specifies the preferred length of BA List. Cells with a BA List shorter than or equal to Length is considered to have Short BA Lists, and cells with longer BA Lists have Long BA Lists. All system types shall be included.

Type: Integer

Value range: 0 - 32

Installation setting: 15

Preferred number of "other" band BA List freq. in dual band

This parameter specifies the preferred number of "other" band BA List frequencies in dual band systems. In a dual band system a BA List is considered long, if the total length is longer than 'Length' and the BA List contains more than 'LengthDB' frequencies of another system type, than that of the cell owning the BA List.

Unless both criterias are met, the BA List is considered short.

Type: Integer

Value range: 0 - 32

Installation setting: 5

Maximum BA-List length

This is the parameter giving the maximum length of the BA List.

Type: Integer

Value range: 0 - 32

Installation setting: 32

Minimum Counts of Downlink Measurements for Additions

This is the parameter giving the minimum required samples for a cell to be regarded as a candidate for adding new neighbouring cell relations. A secondary criterion is determined through the parameters AddShort, AddLong, AddShortDB, and AddLongDB.

Type: Integer

Value range: 0 - ...

Installation setting: 10000

Cell Handover Count for Removals

This is the parameter giving the minimum required total number of handover attempts from a serving cell, and sets a primary criterion before NOX is allowed to consider removing a neighbouring cell. A secondary criterion is determined through the parameters RmvShort, RmvLong, RmvShortDB and RmvLongDB

Type: Integer

Value range: 0 - ...

Installation setting: 1000

Required Handover Success Rate

This is the minimum percentage of the handover attempts that results in a successful handover, that is required to keep a neighbouring cell relation.

This parameter constitutes only a secondary criterion for removal of a neighbouring cell relation and is dependent on the CellHOVERCNT parameter for a primary criterion.

Type: Integer

Value Range: 0 - 100 (%)

Installation Setting: 10 (%)

Remove-relative-threshold for short BA Lists.

Is the threshold value for maximum

$((\text{number of handovers})/(\text{total number of handovers}))$

that are allowed to have occurred between a serving cell and a neighbouring cell before NOX is allowed to consider removing the neighbouring cell relation from a serving cell with a short BA List.

This parameters percentage value is given per hundred thousand.

This parameter constitutes only a secondary criterion for removal of a neighbouring cell relation and is dependent on the CellHOVERCNT parameter for a primary criterion.

Possible values: 0-100000 per hundred thousand.

Installation setting: 100 (0.1 %)

Remove-relative-threshold for long BA Lists.

Is the threshold value for the maximum

$((\text{number of handovers})/(\text{total number of handovers}))$

that are allowed to have occurred between a serving cell and a neighbouring cell before NOX is allowed to consider removing the neighbouring cell relation from a serving cell with a long BA List.

This parameters percentage value is given per hundred thousand.
This parameter constitutes only a secondary criterion for removal of a neighbouring cell relation and is dependent on the CellHOVERCNT parameter for a primary criterion.
Possible values: 0-100000 per hundred thousand.
Installation setting: 200 (0.2 %)

Tells the NOX algorithm which layer combinations that are not allowed when adding new neighbouring cell relations.
The parameter is in the form "X1:Y1 X2:Y2 ... Xn:Yn", that is pairs of layer:layer separated by a SPACE.
For example "1:3" means that suggested new neighbouring relations between layer 1 and layer 3 should not automatically be implemented into the network. They will however show up in the recommendation report unmarked for addition, so the user is able to mark and implement these into the network if running NOX in recommendation mode.
Observe that giving "1:3" will only prevent relations from level 1 to level 3, the relations from 3 to 1 are still allowed.
The value "1:3 3:1" will prevent new relations between layer 1 and 3 in both directions.
Installation setting: ""