

7.5.2 System layout - reference cell selection

A single cell consists of several MSs connected to their serving BS. The reference cell is a single cell that is surrounded by two tiers of virtual cells to form a 19 cells (or 57 cells for tri-sector deployment) cluster. This cell cluster is then populated with a certain number of MSs. The reference cell is by default at the center of the network, but you can modify it by selecting any cell you want. Part of configuring a CDMA or OFDMA network is selecting the reference cell. In SEAMCAT it is possible to choose between two network configurations (3GPP and 3GPP2, see Figure 176).

The reference cell in Figure 180 is used to calculate the effects of interference and to measure results and all non reference cells are used to provide a proper interference background to the reference cell. You can click on the cell that should be used as reference cell when gathering results. The red cell is the current selection.

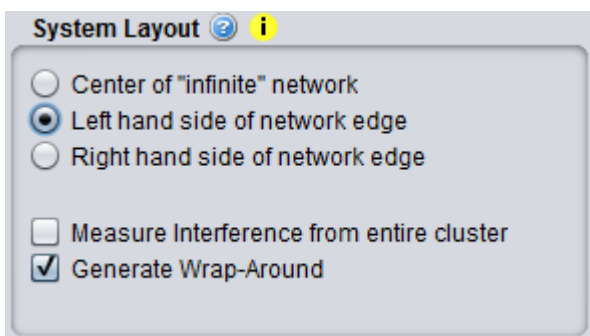


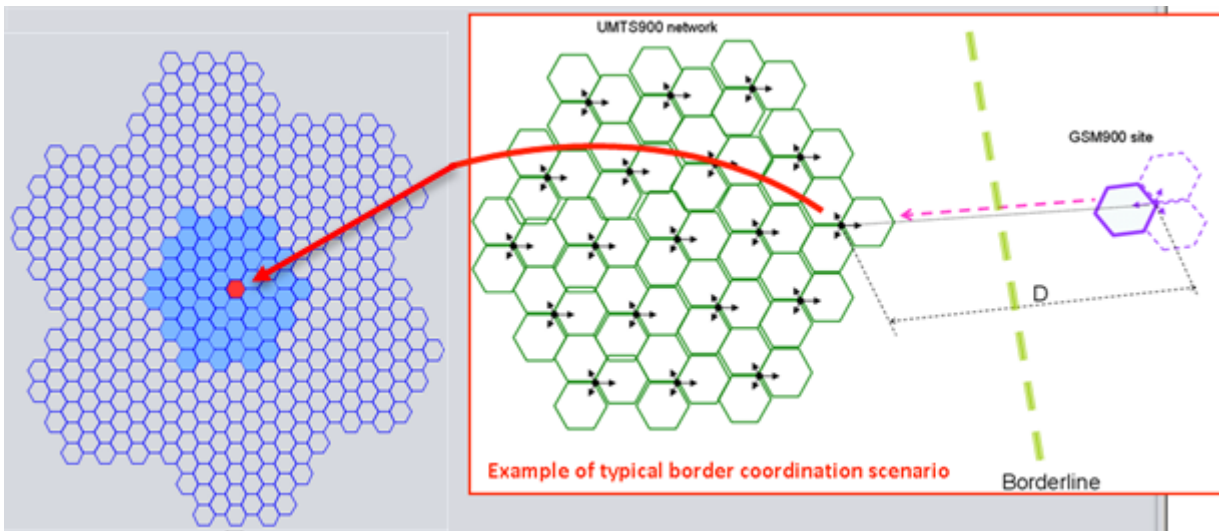
Figure 180: System layout - reference cell selection

Table 23: System layout GUI

Description	Symbol	Type	Unit	Comments
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Center of infinite network	-	Boolean	-	Quick access to predefined selection of reference cell. This only changes the selected reference cell - no other simulation parameter is changed.
Left hand side of network	-	Boolean	-	Position the reference cell on the left hand side of the network. Can be used to reproduce border network layout.
Right hand side of network	-	Boolean	-	Position the reference cell on the right hand side of the network. Can be used to reproduce border network layout.
Measure interference from entire cluster	-	Boolean	-	See section 7.6.2
Generate wrap-around	-	Boolean	-	See section 7.6.3

Normally the considered cellular system (CDMA or OFDMA) is modelled as endless network using the so called wrap-around technique. Alternatively, you may specify that the modelled cellular cell is laying at the edge of the network, in this case the cellular system will be modelled as if extending to one side only. The latter case may be suitable for simulation of geographically separated victim and interfering systems, like in cross-border scenarios as illustrated in Figure 181.



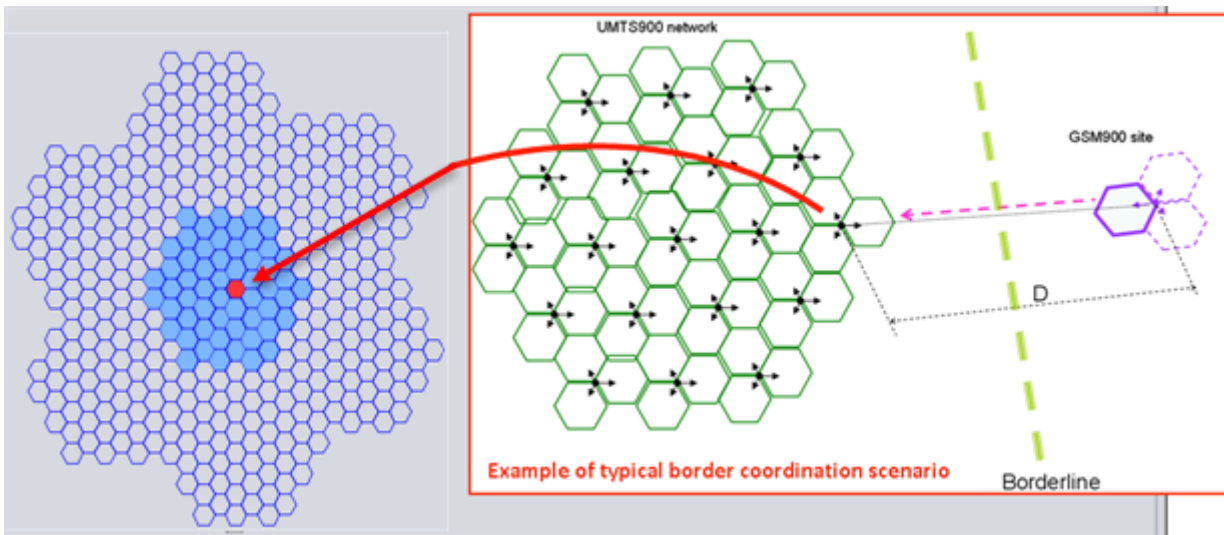
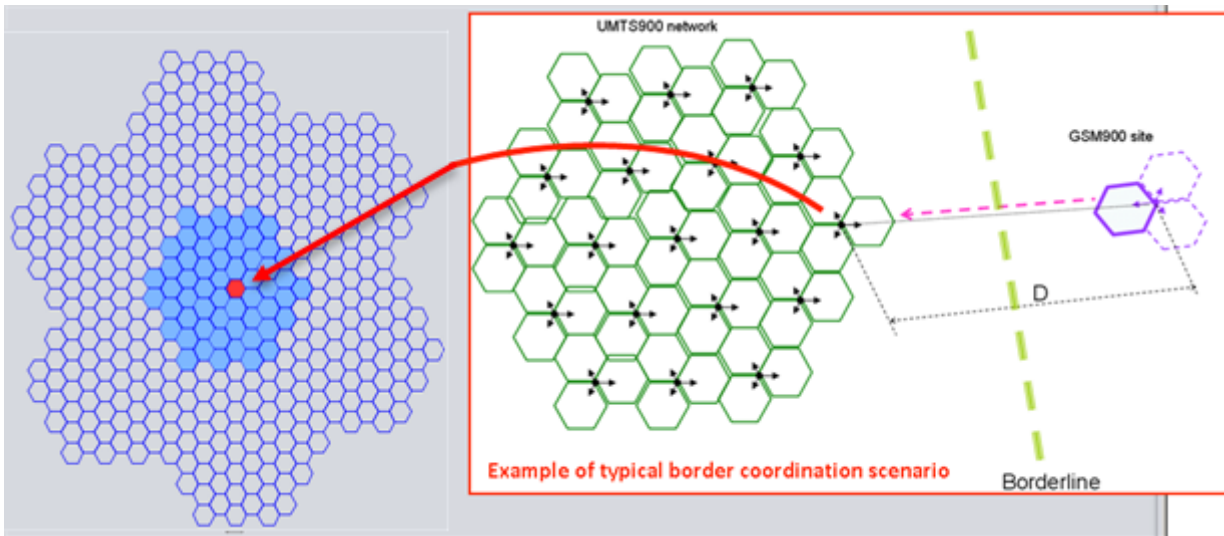


Figure 181: Example on how to set up the system layout to reproduce a border coordination scenario

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