Errata

Publications I, II, III

- The antenna radiation loss equations should be corrected as
  \[ A_H(\varphi) = -\min\left[ 12 \left( \frac{\varphi}{\varphi_{3dB}} \right)^2, A_{max} \right] \] and
  \[ A_V(\theta) = -\min\left[ 12 \left( \frac{\theta}{\theta_{3dB}} \right)^2, S L A_v \right]. \]
  The error consists of sub/superscript typos and does not affect the results.

- The transmit diversity term, STTD, refers to the space-frequency equivalence of STTD in LTE FDD. This does not have any effect on the results.

Publication III

- In Figures 9 and 10, the shadowing decorrelation is 0 between the vertical sectors. This illustration error does not affect the numerical results.

Publication IV

- The handover condition should be corrected as \( SINR_{source\ cell} \geq -6 dB. \)
  The typo - due to the missing minus sign - has no effect on the results.

- The similarity equation should be corrected as
  \[
  \text{Similarity}(C, Q) = \frac{1}{\sqrt{\sum_{k=1}^{N} \sum_{j=1}^{M} \left[ W_{i,j} \cdot (KPI_{i,j}^C - KPI_{i,j}^Q) \right]^2}}.
  \]
  The error is comprised of missing brackets and does not affect the results.


Errata
Publications V, VI, VIII

• The SINR equations should be corrected as

\[ \gamma = \frac{P_{tx,s} \cdot L_s - 1}{\sum_{n \neq s} \rho_n \cdot P_{tx,n} \cdot L_n - 1 + N} \]

in [PV], \[ \gamma_{UE}^{s} = \frac{P_{PRB,UE}^{s} \cdot L_{UE}^{s} - 1}{\sum_{n \neq s} \rho_n \cdot P_{PRB,UE}^{n} \cdot L_{UE}^{n} - 1 + N_{PRB}} \]

in [PVI], and \[ \gamma_{c,DL}^{c} = \frac{P_{c} \cdot L_{c} - 1}{\sum_{k \neq c} P_k \cdot L_{c} - 1 + N_{c}} \]

in [PVIII]. The errors are comprised of superscript typos and do not affect the results.

Publication VI

• The PRB BW parameter, \( BW_{PRB} \), is assumed to be 200 KHz in the simulations as the BW efficiency addresses the guard band overhead. This does not have any effect on the results.

• The equations used in the self-optimization methodology should be corrected as

\[ s_p = \arg \max_{s \in I} \left[ \sum_{UE \in s_{req}} PRB_{UE}^{s} + \sum_{UE \in s^{*}} PRB_{UE}^{s^{*}} \right] \]

and

\[ \sum_{s \in S} \sum_{UE \in s_{req}} PRB_{UE}^{s} \leq \sum_{s \in S} \sum_{UE \in s^{*}} PRB_{UE}^{s^{*}}. \]

The equation descriptions are correct in the text, but the satisfied UE ratio erroneously replaces the virtual load in the equations. These typos do not affect the results.

Publication VII

• Self-optimization period, which is given as 300 s in Table I [PVII], should be corrected as 60 s. It is a typo and do not have any effect on the results.

• The following equations regarding CBRA and NCBRA should be corrected as \( n_{C,d} = (1 - DMP_C) \cdot n_C \) and \( n_{NC,d} = (1 - DMP_{NC}) \cdot n_{NC} \). The error is comprised of subscript typos and does not affect the results.

• The AP equations should be corrected as

\[ AP_{C,m} = 1 - \prod_{i=1}^{m} (DMP_{C,i} + (1 - DMP_{C,i}) \cdot CP) \]

and

\[ AP_{NC,m} = 1 - \prod_{i=1}^{m} (DMP_{NC,i} + (1 - DMP_{NC,i}) \cdot BR). \]

The error is comprised of subscript typos and does not affect the results.