

# Corrigenda for “Power and resource allocation for orthogonal multiple access relay systems”

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The production of the published version of the paper

Wessam Mesbah and Timothy N. Davidson,  
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consisted of five rounds of galley proofs, and in each round new errors were introduced. Unfortunately, a few of these new errors passed unnoticed into the final version. Fortunately, most of these are fairly easy to spot, but some of them have the potential to be confusing. For that reason I have provided some corrections below. If you spot any errors that are not on this list, or if there are places at which the exposition could be improved, please let me know.

- **Equation (11):** It should be clear that the version of this equation that appeared in the published paper is just a direct copy of equation (8), which is the problem formulation for the NDF case. This was a new error in one of the later rounds of galley proofs, and, unfortunately, we did not pick it up. The correct statement of the formulation is as follows:

$$\begin{aligned} \max_{\tilde{P}_{Ri}, r} \quad & \frac{r}{2} \log \left( 1 + \frac{2\gamma_{10}\tilde{P}_1}{r} + \frac{2\gamma_{1R}\gamma_{R0}\tilde{P}_1(2\gamma_{10}\tilde{P}_1+r)\tilde{P}_{R1}}{r(r^2+2(\gamma_{10}+\gamma_{1R})\tilde{P}_1r+\gamma_{R0}(2\gamma_{10}\tilde{P}_1+r)\tilde{P}_{R1})} \right), \\ \text{subject to} \quad & \frac{\hat{r}}{2} \log \left( 1 + \frac{2\gamma_{20}\tilde{P}_2}{\hat{r}} + \frac{2\gamma_{2R}\gamma_{R0}\tilde{P}_2(2\gamma_{20}\tilde{P}_2+\hat{r})\tilde{P}_{R2}}{\hat{r}(\hat{r}^2+2(\gamma_{20}+\gamma_{2R})\tilde{P}_2\hat{r}+\gamma_{R0}(2\gamma_{20}\tilde{P}_2+\hat{r})\tilde{P}_{R2})} \right) \geq R_{2,\text{tar}}, \\ & \tilde{P}_{R1} + \tilde{P}_{R2} = 2\tilde{P}_R, \\ & \tilde{P}_{Ri} \geq 0. \end{aligned}$$

The error in the paper is purely typographical and does not affect any of the subsequent claims. However, it is rather distracting, and I hope that this correction helps to reduce the amount of confusion.