

Errata: Appendix E

1. On 13th August 2020, the CMA published its [Final Price Determination](#) for NATS En-route Limited (NERL).
2. In [Appendix E: Estimating historical returns](#), footnotes 35 and 36, we set out the formulae for calculating non-overlapping and overlapping averages of historical returns. However, we note that the formulae as described in this appendix were erroneous due to type-setting issues. The averaging formulae that were, in fact, applied are:

Non-overlapping average:
$$\left[\frac{\sum (R_{t+h}/R_t)}{(120/h)} \right]^{(1/h)}$$

where h is holding period, R_t is value of returns index at the end of year t and the expression is summed for 120 h values of t for which non-overlapping data is available.

Overlapping average:
$$\left[\frac{\sum (R_{t+h}/R_t)}{(120-h+1)} \right]^{(1/h)}$$

where h is holding period, R_t is value of returns index at the end of year t and the expression is summed for 120 h values of t for which overlapping data is available.

3. This error was limited to how the formulae were presented in the Appendix. There are no changes to our analysis, ie the numbers calculated and set out in Table E- 1: CMA estimates of real returns, 1900 to 2019 are not affected, nor do our conclusions change as a result.