**Clarification Questions and Answers**

**Contract Reference: C20-0443-1538**

**Contract Title: Dispersion Model Selection for AERIUS UK**

1. **Q1: What source types are required for modelling: area, volume, line, point and road?**

**A:** The AERIUS tool implementation in the Netherlands allows users to enter area, line and point sources as part of their submission. Surface based volume sources are included in the data entry interface as an area source with a height parameter (eg building height).  Additionally there is ability to predict road traffic emissions. The UK integrated tool should have this same capability and thus will require a dispersion modelling solution that can accommodate these source types. The AERIUS factsheets <https://www.aerius.nl/nl/factsheets> provide more detail about how each source type is treated such as this one on roads – You will need to set the page to translate to English (top right corner) <https://www.aerius.nl/nl/factsheets/emissieberekening-wegverkeer-standaard/15-10-2020>

1. **Q2: What pollutants need to be modelled?**
2. **A:** At a minimum the initial AERIUS Pilot tool will need to be able to predict concentrations of nitrogen oxide, ammonia and sulphur dioxide and resulting nutrient nitrogen and acid deposition as found in SCAIL (Simple Calculator for Atmospheric Impact Limits - <http://www.scail.ceh.ac.uk/index.html>) to compare these to the appropriate critical levels and loads for the receptor area. There are currently no critical levels regularly used for concentrations of ammonium, nitrate and nitric acid in the ecological risk assessment process. However, modelling solutions that investigate expanded capability are welcome.
3. **Q3:** **What is the membership of the UK AERIUS Steering Group, Core Project Team and “UK Experts” mentioned in the tender?**

**A**: The UK AERIUS Steering Group currently includes members from Defra, DAERA-NI and the Inter-Agency Air Pollution Group. It is expected that the Steering Group will gather new membership as the project progresses but will be limited to ca. 10 members. The core project team for the pilot tool is currently comprised of Defra (technical teams, air and nature policy), DAERA-NI, JNCC, with advice from the Defra Cloud Centre of Excellence. The expert groups are also being formed and can be adapted to bring in technical expertise identified as the project progresses and are expected to include regulators, conservation agencies, practitioners/professional bodies as well as potential users and other decision makers such as local authorities or legal advisers.