

## Data Environment Analysis Service

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For National Statistical Agencies and confidential data users such as the National Health Service, awareness of identification data available to potential data intruders greatly facilitates the task of maintaining the confidentiality of released data. By establishing the parameters of available data it is possible to generate properly grounded scenarios of attack for disclosure risk assessments. Efficient disclosure control contributes to ensuring optimum research value and utility in the data released.

The Data Environment Analysis Service (DEAS) is focused on providing details on, and a measure of, the amount of individual level data available in the public domain and restricted access databases. DEAS is a programme of investigating, cataloguing, categorising and documenting available data including information on variable type, variable categories and coverage and where possible, information on data quality.

DEAS uses the concept of scenario analysis. The central purpose of this analysis is to focus the process of key variable selection in the disclosure risk assessment of dataset releases. This methodology of scenario analysis will be developed to account for the increasingly diverse range of data in the public domain. The scenarios will cover a range of potential target datasets and the focus will be on assessing the risk of identifying an individual.

Meta-database data gathering comprises a multilayer approach: (i) Form field analysis - which involves obtaining and cataloguing data entry fields of paper forms from companies and organizations etc; (ii) Attack resourcing simulation - where a set of search parameters is used to identify as much information in the public domain about variables in a particular target data set; (iii) Consultation with commercial data suppliers and public service data holders. This includes security practices case studies. An on-line data environment tool is also being developed. The DEAS also includes interagency liaison with relevant parties including the ONS, the Information Commissioner and the UK Data Archive.

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