



Title **Role of CESSDA in brokering contracts for International macro-data (D10.2)**

Work Package WP10

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Abstract

The survey of PPP members contained questions relating to gaps in the collections of CESSDA members and asked them to identify data which are currently not available to researchers but would lead to improvements in the quality of social scientific research were they to be made available via CESSDA.

Other reports from this work package focus on the need for official statistics and qualitative material, this report concentrates on the need for international macro-data, much of which are currently only available with a price tag.

Summary of activity

Work was undertaken as follows:

1. Initial information was gathered from the survey of CESSDA members, followed by desk research which considered the availability and costs for access to high profile international macro-datasets;
2. Models were then considered under which CESSDA might acquire access to these data for the European Research Area;
3. Recommendations were made to enable future access.

1.1 Key datasets identified

The following organisations were identified as suppliers of data of interest:

- OECD
- International Monetary Fund
- World Bank
- United Nations
- International Labour Organisation
- International Energy Agency
- Eurostat

In addition to these organisations, several other smaller international organisations were identified alongside some of the UN their sub-bodies which produce data that are of lesser demand but which CESSDA might wish to consider approaching once an international data service is operational.

1.2 Availability and cost

In all countries except the UK, availability of these data for research purposes is dependent on the researcher, their organisation or a collaborative group, being able to pay the data owners for access to their data. These costs tend to be high, prohibitive for individual researchers and therefore result in restricted access to the data.

In the UK, the Economic and Social Research Council (ESRC) has negotiated a series of similar licences with data producers which enable researchers in any UK Higher Education Institute to access data from these sources via ESDS International.

2 Models

The cost of licences has resulted in limited access for researchers and in consequence, therefore, there are limited models for access to these data.

There is some evidence to suggest that large research groups or well-funded research institutes or universities have been able, singly or in collaboration, to negotiate access to such data for their own use. The promotion of this model within CESSDA was discounted as does not achieve equal access to resources for all researchers.

The UK model is both inclusive and cost effective and could be extended to include researchers in other European countries.

2.1 The UK model: ESDS International

2.1.1 Data

ESDS International is a facet of the Economic and Social Data Service (ESDS) which is managed by the UK Data Archive at the University of Essex. It is hosted in Manchester by Mimas, a nationally designated data centre which hosts a number of the UK's research information assets and builds applications to help researchers make the most of this rich resource.

The service provides UK researchers and university students with web-based access to a number of major socio-economic macro-databanks produced by (currently) eight inter-governmental organisations including the World Bank and the United Nations. Data provided by the World Bank (World Development Indicators and Global Development Finance and more recently the Africa Development Indicators) are the most the popular and the IMF databanks (International Financial Statistics (IFS), World Economic Outlook (WEO), Direction of Trade Statistics (DOTS) and Government Finance Statistics (GFS) in descending order of popularity) also heavily used. These are followed in popularity by the thirteen databanks provided by the OECD (in third place) and the International Energy Agency (IEA)'s nine databanks rank 4th in terms of usage. Full information since 2005 on usage can be found at www.mu.jisc.ac.uk/servicedata/esds/trend/index.html.

2.1.2 Access and support

The data are freely available to the UK academic community at the point of access (due to top-sliced funding from the UK ERSC). Access to the data has enabled research that would otherwise not have been possible without each institution signing up (and paying) separately to the data licensing agreements and researchers having to learn multiple access and download methods to acquire the data.

In the UK system, strict licensing conditions apply and are enabled through federated access management (via Shibboleth, run from the UK Data Archive), both of which are compatible with CESSDA's goals.

Having agreed to the terms of service and any special conditions relating to the dataset, the researcher is granted access to that data by login to the service software, Beyond 20/20. They are then able to search for, display, select and download data. The software runs in a browser window and no additional plug-ins are required. Step by step guides to accessing the data are available with easy to follow instructions on how to find, visualise and extract data.

The ESDS International website is an open-to-the-web service providing quality information and online support for macro-data users. A comprehensive dataset user guide is provided with each dataset in the portfolio, including details about the topics and countries included the periodicity and time range of the dataset, access

requirements, and links to useful documentation. Guides are available in html and PDF format.

A specialist user helpdesk is also available (UK time: 09.00-17.00 Monday-Friday) through email or by phone. It offers front line support, dealing with queries about, for example, registration, access and how to find data, as well as more specialist support on, for example, the structure of the data, how it is used in research, and methodological issues.

Training courses are arranged regularly at universities. The ESDS International service also has its own channel on YouTube which is successfully used to disseminate recordings from conference presentations.

2.1.3 Use and research potential

The service is widely used in UK academic research and teaching. In 2009 the 20,000th user registered to use the data. This figure has increased from approximately 200 users in 2003, the first year of operation. Over 200 academic institutions currently use the service.

Although it is not always possible to gather direct citations evidence from researchers who use data acquired from the service, ESDS goes some way to addressing this. The publications database, held at UK Data Archive, can be searched to find research undertaken using data from the service. In addition, using Google Scholar and other online methods one can identify articles that have used data from the service.

As an example of the type of research that has been enabled by ESDS International one such example is offered: NGO macro-data have been used as input to a large-scale, sophisticated econometric model (E3MG) developed at Cambridge Econometrics. The model is being used to assess the impacts of binding global climate agreements made at the Copenhagen UN Climate Change conference in December 2009 and was used in the paper presented by Dr Terry Barker at the Avoiding Dangerous Climate Change international symposium in 2005. A major outcome from that symposium was the contribution to the discussion of the economic benefits to carbon emission stabilization. The change in limit on the 'safe' atmospheric concentrations of greenhouse gases that followed this event also fed into a subsequent change in greenhouse gas emissions targets in the UK Climate Change Bill (which became an Act in Nov 2008), from 60% to 80% below 1990 levels by 2050. Dr Terry Barker sits on the Intergovernmental Panel on Climate Change (IPCC) which in 2007 shared the Nobel Peace prize with Al Gore.

3. Recommendations

1. CESSDA should negotiate and maintain a budget for European-wide licences for academic use of key macro-datasets. Based on the experience of these data having been made available to researchers in the UK since 2003 this would lead (a) to the creation of a new large European-wide network of social science researchers for whom such data are currently largely unavailable, and (b) to significant cost savings due to centralised licensing and access.

2. Negotiations for licences should be led by the UK, to capitalise on their existing networks and expertise.
3. CESSDA should fund technical development and ongoing maintenance of a European-wide service for international macro-data similar to that in place in the UK: both Mimas and the UK Data Archive would be willing to discuss expansion of the current service for European researchers.