

Report on the content and technical structure of the **MORE** Infrastructure

NIFU

Nordic Institute for Studies in
Innovation, Research and Education

RISIS "Research infrastructure for research and
innovation policy studies"

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AIT Austrian Institute of Technology GmbH



Report on the content and technical structure of the *MORE I* infrastructure (Task 1 of WP6)

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1 Basic characteristics

Improving the conditions for researcher mobility is (re)emerging as a central priority of European research and innovation policy. This priority is prominent in the Europe 2020 strategy and in current policy initiatives under the European Research Area. These forward-looking objectives build on an extensive tradition in Europe for the study of researcher mobility patterns, the factors shape them and the effects they have. This tradition traces at least back to the European Human Capital and Mobility program (1992).

The Mobility Survey of the Higher Education Sector (MORE) survey is a key study in this tradition. MORE I (2009) is the first in a family of wide-scale empirical studies that focused on the mobility patterns of European researchers and their career paths. It was followed up in 2013 by the MORE II study. This Report presents MORE1: it will be followed by a report detailing the MORE II dataset, where the projects' original coordinator (IDEA Consult) will provide input as a sub-contractor.

MORE I targeted researchers working in different fields at higher education institutes in all EU27 countries. The study provides measures of flows of international (and sector) mobility, of factors that influence mobility, and of effects that can be linked to researcher mobility. The survey responses provide promising avenues for a range of studies to better understand the career development paths of EU27 researchers. In light of specific cases of researcher mobility, researchers indicate the "push" and "pull" factors that shaped these and assess the effects of the experience on career development. In the context of a non-mobile careers, other researchers indicate factors that have shaped their choice to stay put. Furthermore, mobile as well as non-mobile researchers indicate the preferences and the barriers that shape any plans to become researcher mobility in future.

This Report provides the background information about the MORE I to indicate the type of dataset it is, how it will be opened up, and how it might be combined with other data. In general, the infrastructure will be operated by NIFU¹. Access is foreseen in three forms: On-site access at NIFU, thereafter on-line access, and access during approved RISIS training events.

All accessibility environments will respect privacy/confidentiality issues while attempting to provide maximum analytical possibilities/learning outcomes. The platform will be piloted with MORE I data. In time, this pilot will subsequently be complemented by the micro-data from the MORE II ² survey, which was also carried out by a team led by IDEA Consult (Belgium). Details of the MORE II survey will be provided in a parallel report that builds on this document. See also section 4 (below).

2 Information on substantive content of MORE I

The MORE1 study was initiated before an accurate register of researcher-populations or of universities was available across Europe. It was before ETER/ Eumida provided a proper population frame. However, the situation of surveying populations of unknown size is

¹ NIFU's legal name is Nordisk institutt for studier av innovasjon, forskning og utdanning (NIFU). www.nifu.no

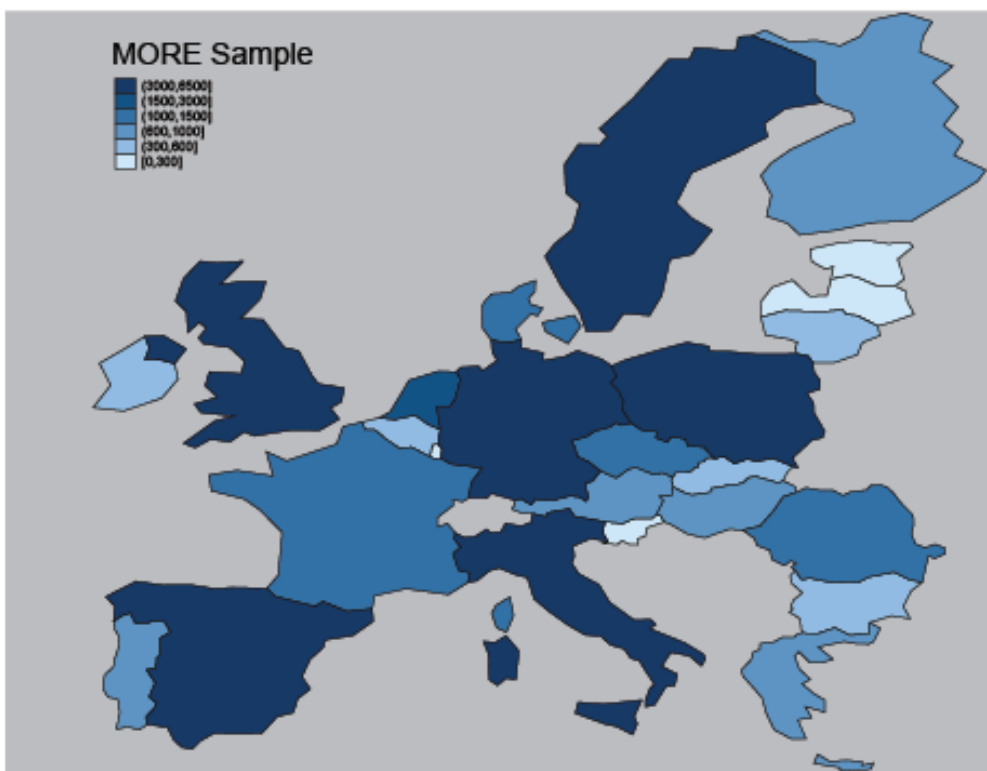
² <http://www.more-2.eu>

common (e.g. census studies). MORE 1 employed a two stage stratified cluster-sampling strategy, which is a standard approach when the overall population is uncertain.. It sampled over 40,000 researchers and yielded 4,548 valid responses. The responses combines information about:

1. The researcher (country of birth, citizenship(s), gender, age, children),
2. Education (degrees, graduation year, country, field of highest degree)
3. Current position (university/college, faculty, field, position level, seniority)
4. Mobility events (up to five mobility events, countr(ies), duration, type)
5. Assessment of mobility among mobile as distinct from non-mobile researchers:
 - a. Detailed focus on most recent mobility event (motivations, push and pull factors, assessment)
 - b. Plans/aspiration to work in another country: (country, rationale and background for choice of destination)

The responses provide a snapshot of mobility patterns and career paths of EU27 researchers (in 2009). The sample is distributed across EU27 countries. The geographical distribution of the sample is presented below.

Figure 1: Sample distribution across Europe



2.1 Definition and description of observations

- a. Units and definition of observations:

MORE 1 employed a two stage stratified cluster-sampling strategy, which is a standard approach when the overall population is uncertain. HEI researchers in EU-27 were selected based on the FRASCATI manual definition. The definition covers professionals

with tertiary (or higher) education and not “technicians and equivalent staff” or “other supporting staff”. The accuracy of the definition was confirmed by a question in the survey.

Using this definition, the sampling strategy stratified by country (27) and broad fields of science (3 – Natural Sciences and Technology, Medical Sciences and Agriculture, and Social Science and Humanities): the ‘clusters’ from which the sample was taken were individual university departments. Following this methodology, 1660 HEIs were identified across EU27 countries. University department websites were checked for researchers’ email addresses. After cleaning, 41,857 individual researchers were identified as targets. The online survey was launched by email in June 2009 and closed at the end of September 2009. After cleaning, 4,538 valid responses were yielded.³

b. Population:

At the time of the survey, the size of the population had not been adequately measured. The population of researchers was estimated using Eurostat’s headcounts for 2006, supplemented where necessary by estimates (based on earlier years or from other statistics).⁴ The total population in the frame of the study was estimated in 2009 to be roughly one million researchers of this type. The ETER effort (and its predecessor, Eumida) have since helped to refine the population, standardize the names and location, and provide a map of the distribution of researchers in Europe. As noted, HEI names in the MORE data will be linked to the ETER designations. These can be used to improve the accuracy of the responses via post-stratification techniques (see also sections 2.4 and 5, below).

On this background, a dataset of universities was created on the frame of members of the European Universities Association (EUA members Directory) in the EU27 countries. This dataset was enriched with information on HEIs found in a variety of sources such as the national HEIs’ associations, web sites of ministries of education, national statistical offices and other sources⁵.

c. Cluster:

The clusters consist of the individual departments of EU27 HEIs. A university department is defined as a “degree conferring unit of the university” and it will usually correspond to a particular field of science. The precise definition of a cluster is “Department A of University B in Country C and Field of Science D.

It is important to note that a two stage stratified cluster-sampling strategy is distinct from a standard random sample survey. Within the each country and field of science (the strata), the MORE1 sample grouped the population units not on researchers on faculties of HEIs.

³ For more information, consult MORE I synthesis report, 2010 on which this presentation is based.

⁴ For details, see the MORE1 Synthesis report: p 22.

http://ec.europa.eu/euraxess/pdf/research_policies/MORE_final_report_final_version.pdf

⁵ In the case of one country, only, France, the lack of information on websites made it necessary to supplement the results of this Mobility Patterns and Career Paths of EU Researchers April 2010 search activity with additional emails (5,250) derived from the EC FP6 and FP7 databases

Faculties may also be called departments in the documents. A primary sampling unit (psu) is thus a faculty of a given university in country x and field of science y .

2.2 Data acquisition and processing

a. Where are the data retrieved from:

The MORE I survey was carried out in 2009 under the aegis of the MORE project. The University of Manchester, Logotech and NIFU carried out the survey while IDEA Consult coordinated the MORE project. The project documentation about the project is available on line⁶. The data-owner is the European Commission.

b. How are the data processed in terms of data cleaning (e.g. harmonisation of organization names, etc.):

The dataset have been cleaned. Weights are included for the population and for the strata. Complete details of the dataset is found in Chapter 3 of the report: MORE (2010), *Study on mobility patterns and career paths of EU researchers, Technical Report 2 - Part I: Mobility survey of the higher education sector*, Report from the MORE project, Work package 3 & 4, EU Commission Report, April 2010. We foresee further harmonization of HEI names with ETER as indicated in section 5 of this report and further developed in the Activity Sheet 2.4.

To implement this survey, the member organizations of the European Universities Association (EUA members Directory) was used. A dataset of universities in EU27 countries was created and was enriched with information on HEIs found in a variety of sources such as the national HEIs' associations, web sites of ministries of education, national statistical offices and other sources. Further, we have identified, through web search all the faculties or departments. Following the cluster sampling methodology (for more details see MORE HEI report) 1,660 HEIs units were selected as our cluster sample, with responses from 450 of these.

Figure 3 presents an overview of the stratified responses in terms of the country stratum (1-27 on the left)⁷. The number of 'units' corresponds to individual university faculties (the primary sampling unit) within the strata. It indicates that on average 10 researchers responded for each cluster. In three cases (*), there are 'singletons', where there was only one response for a given country x field of science cell.

⁶ ec.europa.eu/euraxess/pdf/.../MORE_final_report_final_version.pdf

⁷ i.e. this is output from the `svydescribe` command in stata. It takes account of the survey design. See also below.

Table 1: Distribution of responses by strata and cluster units

Stratum	#Units	#Obs	#Obs per Unit		
			min	mean	max
1	5	109	1	21.8	61
2	9	82	1	9.1	19
3	9	52	1	5.8	20
4	1*	2	2	2.0	2
5	12	89	1	7.4	16
6	5	166	3	33.2	53
7	11	71	1	6.5	22
8	25	224	1	9.0	35
9	6	43	2	7.2	22
10	82	536	1	6.5	50
11	15	68	1	4.5	14
12	5	46	7	9.2	10
13	8	77	3	9.6	27
14	31	590	1	19.0	67
15	4	21	2	5.3	13
16	7	53	2	7.6	15
17	1*	7	7	7.0	7
18	1*	14	14	14.0	14
19	14	261	1	18.6	50
20	34	300	1	8.8	62
21	11	76	1	6.9	16
22	18	95	1	5.3	15
23	6	49	3	8.2	21
24	3	16	2	5.3	9
25	32	570	1	17.8	66
26	24	343	2	14.3	43
27	72	578	1	8.0	41
27	451	4538	1	10.1	67

2.3 Information on all variables/indicators

a. Description of all variables and/or indicators:

The results are organized into the following sets of variables:

1. The researcher (country of birth, citizenship(s), gender, age, children),
 2. Education (degrees, graduation year, country, field of highest degree)
 3. Current position (university/college, faculty, field, position level, seniority)
 4. Mobility events (up to five mobility events, countr(ies), duration, type)
 5. Assessment of mobility among mobile as distinct from non-mobile researchers:
 - Detailed focus on most recent mobility event (motivations, push and pull factors, assessment)
 - Plans/aspiration to work in another country: (country, rationale and background for choice of destination)
- b. Information on the sectorial classifications used (e.g., economic sectors, technological fields, organizations types, etc.), and listing of all categories for each classification scheme:

The researchers in the higher education sector are categorized by standard fields of science (FoS): Natural Sciences and Technology, Social sciences and humanities, Medical Sciences and Agriculture. Further refinement of the type of HEIs can be accomplished by linking to ETER.

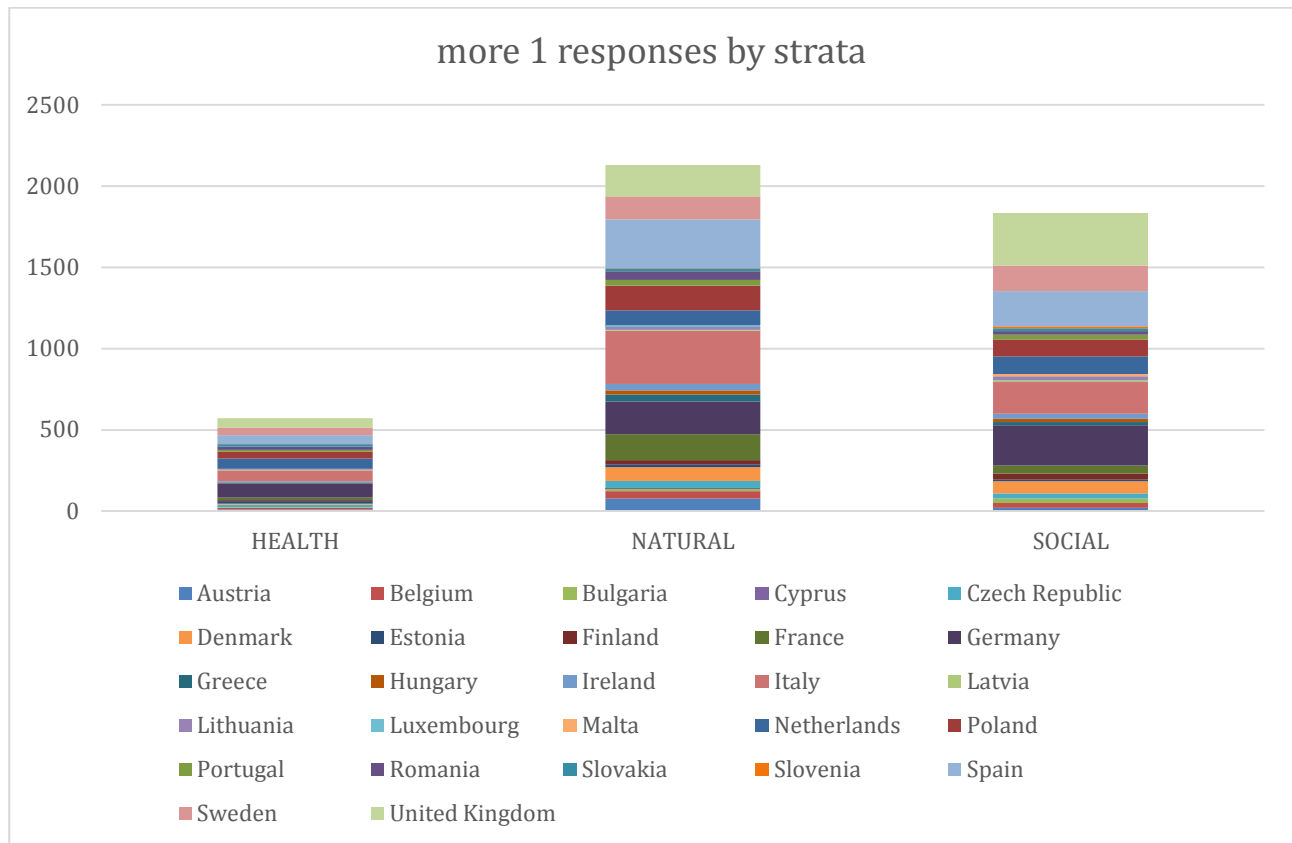
- c. Information on the temporal coverage used (e.g. annual data from 1990-2010, etc.): The survey was carried out in the period June - October 2009.
For 'researcher mobility' variables, the reference period was either the whole researcher career or the last three years 2006-2008
- d. Information on the geographical coverage and classifications used (e.g. EU-27 member states, regional breakdown using NUTS classification revision 2010, etc.): 27 EU Member States

Note: An exploratory study of PROs (MORE PROs) was conducted simultaneously as a separate module. This produced low response rates and other (reliability) issues. Modes to investigate this module can also be explored.

2.4 Quality and accuracy of data

- a. Information on the number of missing values: details of the survey including the extent of missing values is provided in the project work. In the dataset, 88 responses are dropped due to comprehensive item non-response. There are 'singletons' in three of the clusters (see above). There was only one response for a specific field of science for Malta, Luxembourg and Cyprus. Adjustments will have to be made for these and potentially for France as described in the material from the study. Figure 3 presents the responses by strata.

Figure 2. Distribution of responses by strata (country x field of science). Nominal response rate=11 percent.



- b. Estimation of data quality issues with respect to data acquisition, reliability of retrieving system:

The nominal response rate was 11 per cent overall. However, there are responses for 20 percent of the PSUs. The coverage varied, with lower response-rates in individual countries. Complete information about data-quality issues is found in Chapter 3 of the project report: MORE (2010), Study on mobility patterns and career paths of EU researchers, Technical Report 2 - Part I: Mobility survey of the higher education sector, Report from the MORE project, Work package 3 & 4, EU Commission Report, April 2010. Problems with coverage were originally identified in the study include the responses from France. The study recommends that France be dropped from the dataset. When this was done, robustness checks were run that indicated that removal of France does not affect the results as extrapolated in that study⁸. Further tests will be conducted to deal with design and misspecification effects.

The selection of clusters based on inexact information about the total population of universities and research can introduce coverage concerns. Data that is now available

⁸ http://ec.europa.eu/euraxess/pdf/research_policies/MORE_HEI_report_final_version.pdf p 41.

through ETER and Eumida can be used to reevaluate coverage and to more accurately measure standard errors.

3 Legal issues encountered and access conditions

- a. Legal issues concerning access of the database: Access to the micro-data is currently restricted to the MORE I project group.
- b. Owner of raw data (at the time of contract): European Commission DG Research (Directorate C – European Research Area, Universities and Researchers)
- c. Current practice for opening up of the database to external users: External users are directed to the project team-leader (IDEA Consult) and the Commission Scientific Officer (Peter Whitten)
- d. Legal necessities for potential opening procedures: Permission from the data-owner (EU Commission) has been promised. Further clearance from the respective part of the Commission may be necessary.

Steps to ensure opening have already been made. We have got a green light from the Commission about the opening of MORE 1 and MORE 2. We have also made an agreement with the project team-leader (IDEA Consult) about the provision of a separate report on MORE 2.

4 Technical structure of *MORE I (HEI)*

4.1 Information on the data base system

The data are stored at NIFU as in Stata (13) format. The weighting, clustering, and stratification of the survey design is preserved (using svyset). This ensures that analysis run on the dataset will factor this important information in.

The MORE I dataset is currently set up in six tables linked by a unique key (see below). The architecture will become more complicated when MORE II data are introduced, depending on how closely these can be integrated. We will house the two datasets in Stata, using Stata's project manager. We will revisit the question of how best to house and grant access to the mobility data when more is known about these two datasets line up for analytical purposes. The MORE I union MORE II datasets will can easily be moved to Access or MS SQL if deemed useful.

4.2 Technical variable definition

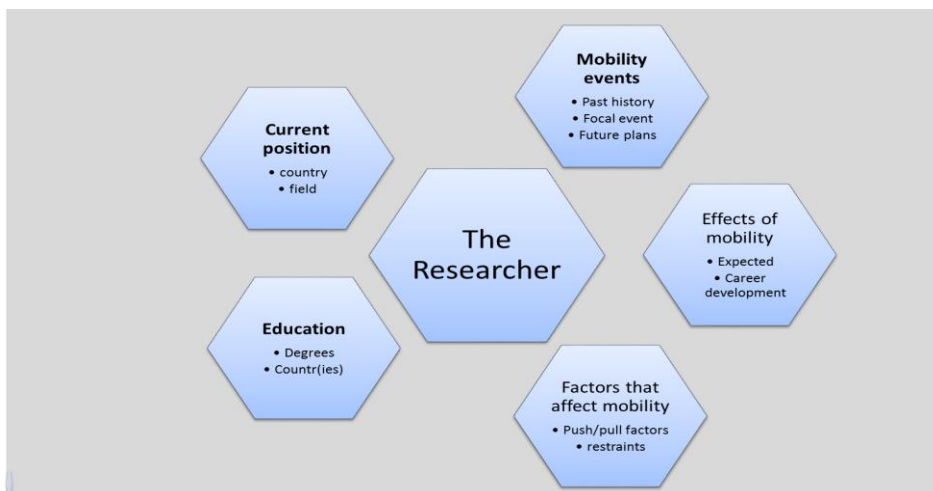
- a. Labelling of all variables: The variables are labelled with information from the question. Information about labels and formatting are found in Annex1
- b. Data type of all variables: The data are saved in the appropriate format (e.g. byte for Likert scale). There are 5 different types of information based on the 110 questions of the full survey. These five types of information are illustrated in the figure below.

- c. Current usage and definition of unique identifiers: The unique identifier currently used is a numeric value (“response”) that has been associated with the response. A time-stamp is also associated. An overview of variables and labelling of variables is provided in Annex 1. The HEI report in the Annex is referred to the following report: MORE (2010), Study on mobility patterns and career paths of EU researchers, Technical Report 2 - Part I: Mobility survey of the higher education sector, Report from the MORE project, Work package 3 & 4, EU Commission Report, April 2010.

4.3 Description of the Entity Relationship Model of *MORE*

- a. Definition of single tables: The dataset currently consists of 6 tables, linked by an identifier. The following figure indicates the constellation of data. The identifier is based on the time code and a surrogate identity for the respondent. It can be collapsed into a single table consisting of more than 250 rows.

Figure 3: Rough presentation of the ERM of MORE



4.4 Interfaces for access and to other infrastructures

The MORE I survey results can be further enriched and complemented by linking to other datasets. In laying open the mobility data, we will identify these potential links. At this point, we foresee two chief steps here: the first involves steps to present the MORE II survey alongside MORE I in a consistent way; the second is to link to the standardized HEI designations in the ETER with HEI affiliation in the surveys.

- a. Interfaces with ETER: the affiliations of respondents will be matched to ETER in the frame of WP6. We will investigate the best way to capitalize on this
- b. The MORE II dataset will be integrated as well as possible alongside the MORE I data. This is a more challenging operation as it involves taking into consideration different aspects of the survey design. Work with MORE II is foreseen after the MORE I facility is underway. A twin report is foreseen in November 2014 with a dedicated activity sheet to integrate the two datasets after that (see below).

5 Further planning of the opening of MORE

The plans to open up MORE I is designed also to act as the template on which to open up MORE II. In addition, activity is foreseen to enrich the data through by interlinking the datasets with the ETER facility in particular. The preliminary plans to pilot MORE I are engendered in the current activity sheet linked to WP 24 on career development and WP6 on facility opening.

- a. Document concrete steps towards opening of the respective dataset

In order to open the MORE I dataset for on-site as well as on on-line visits, a number of steps must be made to accommodate visitors at NIFU. The steps are:

- Definition of basic terms and principles
- guidelines and terms of use of the dataset,
- Rules and procedures governing the access-infrastructure, including the definition of access conditions for RISIS researchers
- Preparation of the dataset
- Documentation of the dataset
- Tests and remedial efforts to address potential coverage and non-response bias
- Tests and remedial efforts to address potential design and misspecification effects.
- Integration with relevant activities, including linking information from ETER (see also below)
- The technical implementation for dissemination.

A first step will involve making the More I accessible in-house. The next step is to make it available on-line. In subsequent steps, the infrastructure that will allow combined analysis with the more recent MORE II data will be explored. MORE I and MORE II are standalone datasets: integration of the datasets will be made where consistency of the survey design of the two surveys allows.

- b. Necessary updates and/or technical changes

To enhance the reliability of the MORE 1 data, it will be necessary to address potential problems due to potential coverage and design concerns. ETER and Eumida will be used to reevaluate coverage and to more accurate measure standard errors. In this light, we will test different post -stratification approaches to improve the accuracy of the survey results. Further tests will be conducted to deal with design and misspecification effects.

Once the work on MORE I is approved and underway, plans to open MORE II data will be started. The dataset will be described in a report which closely follows this one. On this basis an activity sheet will follow based on the one used for MORE I. This activity will involve the input of Idea Consult, via a sub-contract (as originally envisioned). Together the sampling designs of the two studies will be compared to assess the best form and modes of access to the datasets (including the key question of anonymization). We have consulted with the data-owner during this process. The first step is that this report will be replicated for MORE II.

Having got clearance from the Commission, we do not foresee changes in the legal conditions for accessing the datasets.

c. Potential presentation at the RISIS week 2015.

One idea is to present the possibilities to link MORE I data with ETER, via the standardized HEI designations.

Annex 1: labels and values

Information on all variables/indicators:

1. The researcher (country of birth, citizenship(s), gender, age, children),
2. Education (degrees, graduation year, country, field of highest degree)
3. Current position (university/college, faculty, field, position level, seniority)
4. Mobility events (up to five mobility events, countr(ies), duration, type)
5. Assessment of mobility among mobile as distinct from non-mobile researchers:
 - a. Detailed focus on most recent mobility event (motivations, push and pull factors, assessment)
 - b. Plans/aspiration to work in another country: (country, rationale and background for choice of destination)

name	type	value	label
response	long	10.0g	Response ID
stratum_land	byte	10.0g	total_country2
country_sum	long	10.0g	country_sum
fos	byte	10.0g	field of science
fos_sum	long	10.0g	fos_sum
stratum_fos	int	10.0g	
cluster_num	int	10.0g	cluster
country	str14	14s	
organisa	str80	80s	Organisation
departme	str98	98s	Department
p_cluster_size	int	10.0g	the total number of researchers in each of the clusters m_j (B_{ji})
s_cluster_size	byte	10.0g	the number of researchers in each cluster in the sample (β_{ji})
s_n_cluster	byte	10.0g	the number of clusters in each stratum in the sample (m_j)
pop_cluster_c~t	int	10.0g	the number of clusters in each stratum in the population (M_j)
s_count	int	10.0g	number of researchers in each stratum in the sample (n_j)
p_count	long	10.0g	number of researchers in each stratum in the population (N_j)
s_count_tot	int	10.0g	total number of researchers in the sample (n)
p_count_tot	long	10.0g	total number of researchers in the population (N)
within_countr~t double	10.0g		within_country_weight
within_fos_we~t double	10.0g		within_fos_weight
cluster_percent double	10.0g		cluster_percent
overall_weights double	10.0g		overall_weights
fpc1_variable	float	9.0g	finite population correction factor (stratum1)
fpc2_variable	float	9.0g	finite population correction factor (stratum2)
edu_field_of_~e	str1	9s	
gender	byte	10.0g	var8
birthyear	byte	10.0g	var9
cob	int	10.0g	var10
edu_highest_d~e byte	10.0g	var17	Highest Educational Attainment
edu_phd_country	int	10.0g	var18 In which country did you obtain your postgraduate degree PhD or equivalent
edu_phd_year	byte	10.0g	var19

edu_masters_c~y	int	10.0g	var21	In which country did you obtain your graduate degree master degree or equivalent
edu_masters_y~r	byte	10.0g	var22	In which year did you obtain your graduate degree master degree or equivalent
edu_bachelors~y	int	10.0g	var24	In which country did you obtain your undergraduate degree bachelor degree or equ
edu_bachelors~r	byte	10.0g	var25	In which year did you obtain your undergraduate degree bachelor degree or equiva
edu_exchange~y	byte	10.0g	var26	During your postsecondary education ie in further or higher education excluding
edu_internshi~y	byte	10.0g	var27	During your postsecondary education ie in further or higher education excluding
edu_highschool~y	int	10.0g	var28	In which country did you obtain your secondary education ie high school gymnasium
edu_highschool~r	byte	10.0g	var29	In which year did you obtain your secondary education ie high school gymnasium g
edu_2ndmaster~y	int	10.0g	var30	If applicable in which country did you obtain a second educational attainment eq
edu_2ndmaster~r	byte	10.0g	var31	In which year did you obtain this second attainment
edu_discipline	str2	9s		
empl_position~y	byte	10.0g	var35	Which of the following categories do you consider best describes your current st
empl_current_~r	str135	135s		What is the name of your current employer If you are employed by more than one e
empl_country	int	10.0g	var37	
empl_differen~y	byte	10.0g	var38	Is this also your current country of residence
empl_diff_cou~e	int	10.0g	var39	Please indicate your country of residence
empl_duration	byte	10.0g	var40	How long years have you been employed by this principal employer
empl_employer~y	byte	10.0g	var41	Is your principal employer
empl_employer~n	str25	25s		Is your principal employer - Other
empl_contract~y	byte	10.0g	var42	What is your employment contract status
empl_contract~n	str119	119s		What is your employment contract status - Other
empl_duration~t	byte	10.0g	var43	How long years have you been working under this contract status
empl_fulltime	byte	10.0g	var44	Does this contract involve full or parttime work
empl_parttime~n	str244	244s		Does this contract involve full or parttime work - Text
empl_collabor~e	byte	10.0g	var45	Does your current work as a researcher involve some form of formal collaboration
empl_collabor~y	byte	10.0g	var46	Does your current work as a researcher involve some form of formal collaboration
empl_job_sati~n	byte	10.0g	var47	Overall job satisfaction
empl_salary_s~n	byte	10.0g	var48	Salary
total_organisa	str80	80s		Organisation
empl_security~n	byte	10.0g	var49	Job security
empl_funding_~n	byte	10.0g	var50	Accessibility of research funding
empl_future_c~e	byte	10.0g	var51	Overall how confident do you feel in the future prospects for your research care
career_sector	byte	10.0g	var54	Which of the following career paths best describes your situation please conside
career_sector~e	byte	59.0g	var55	Which of the following career paths best describes your situation
career_sector~n	str244	244s		Which of the following career paths best describes your situation - Other
career_multip~s	byte	10.0g	var56	During your employment career as a researcher have you worked for more than one
career_number~s	byte	10.0g		How many times have you moved job from one public research organisation universi
MOBILE_GEOGRA~Y	byte	10.0g	var59	In your researcher career which also encompasses the whole period of your PhDedu

career_mobile~s str244	244s		Please feel free to provide any additional comments below
MOBILE_GEOGRA~E byte	10.0g	var61	A move to a new employer in another country
MOBILE_GEOGRA~T byte	10.0g	var62	A research visit to another country without a change of employer
MOBILE_GEOGR~3y byte	10.0g	var63	Have you been internationally mobile the last three years
MOBILE_country1 int	10.0g	var64	Please provide the name of the country countries you worked in for 3 months or m
MOBI~1_duration byte	10.0g	var65	Duration of stay
MOBI~1_current byte	10.0g	var66	Are you still located in this country as a researcher
MOBILE_country2 int	10.0g	var68	Country 2
MOBI~2_duration byte	10.0g	var69	Duration of stay
MOBI~2_current byte	10.0g	var70	Are you still located in this country as a researcher
MOBILE_country3 int	10.0g	var72	Country 3
MOBI~3_duration byte	10.0g	var73	Duration of stay
MOBI~3_current byte	10.0g	var74	Are you still located in this country as a researcher
MOBILE_country4 int	10.0g	var76	Country 4
MOBI~4_duration byte	10.0g	var77	Duration of stay
MOBI~4_current byte	10.0g	var78	Are you still located in this country as a researcher
MOBILE_country5 int	10.0g	var80	Country 5
MOBI~5_duration byte	10.0g	var81	Duration of stay
MOBI~5_current byte	10.0g	var82	Are you still located in this country as a researcher
MOBILE_COMMENTS str244	244s		Please feel free to provide any additional comments below
RECENT_VISIT_~n byte	10.0g	var85	Was your most recent instance of international mobility a research visit which d
RECENT_SECTOR~n byte	10.0g	var86	Did this international mobility also involve a change of sector eg from academia
motivators_pe~l byte	10.0g	var87	Personalfamily factors
motivators_li~y byte	10.0g	var88	My quality of life or that of my family
motivators_de~t byte	10.0g	var89	My training and development goals
motivators_pr~n byte	10.0g	var90	My career progression goals
motivators_re~a byte	10.0g	var91	My personal research agenda ie the content and direction of my research
motivators_co~n byte	10.0g	var92	Desire to return to a country in which I have previously livedworked
factors_push~nt byte	10.0g	var93	Lack of access to the facilities equipment necessary to my research
factors_push~at byte	10.0g	var94	Lack of suitable research collaborators
factors_push_~r byte	10.0g	var95	Lack of links with companies and users of research
factors_push~ds byte	10.0g	var96	General level of research funding nationally
factors_push_~d byte	10.0g	var97	Ability to access funding for your own research
factors_push_~y byte	10.0g	var98	Lack of availability of career opportunities
fa~h_salarypack byte	10.0g	var99	Poor salary and incentives
factors_push_w~ byte	10.0g	var100	Poor conditions at work
fa~h_socialpack byte	10.0g	var101	Poor pension and social care provision
f~h_regulations byte	10.0g	var102	Unattractive labour regulations eg working week health and safety laws

factors_push_~n byte	10.0g	var103	Immigration regulations
factors_pull~nt byte	10.0g	var104	Access to the facilities equipment necessary to my research
factors_pull~at byte	10.0g	var105	Access to suitable research collaborators
factors_pull_~r byte	10.0g	var106	Possibility of links with companies and users of research
factors_pull~ds byte	10.0g	var107	General level of research funding nationally
factors_pull_~d byte	10.0g	var108	Ability to access funding for your own research
factors_pull_~y byte	10.0g	var109	Availability of career opportunities
fa~l_salarypack byte	10.0g	var110	More attractive salary and incentives
factors_pull_w~ byte	10.0g	var111	More attractive working conditions
fa~l_socialpack byte	10.0g	var112	More attractive pension and social care provision
f~l_regulations byte	10.0g	var113	More attractive labour regulations eg working week health and safety laws
factors_pull_~n byte	10.0g	var114	Immigration regulations
hindrances_im~n byte	10.0g	var115	Immigration regulations eg getting a work visa
hindrances_fu~g byte	10.0g	var116	Obtaining funding for mobility
hindrances_av~n byte	10.0g	var117	Finding a suitable work-visitor position
hindrances_la~e byte	10.0g	var118	Language
hindrances_so~y byte	10.0g	var119	Social-cultural integration in the host-destination country
hindrances_ne~m byte	10.0g	var120	Integration into a new research system
hindrances_ch~e byte	10.0g	var121	Making child care arrangements
hindrances_so~l byte	10.0g	var122	Other caring responsibilities
hindrances_fr~s byte	10.0g	var123	Maintaining existing personal relationships
hindrances_ho~g byte	10.0g	var124	Finding suitable accommodation
hindrances_pe~n byte	10.0g	var125	Maintaining continuity of transferring pension rights or contributions
hindrances_he~e byte	10.0g	var126	Maintaining continuity of transferring health insurance
effectuated_prog~n byte	10.0g	var127	Overall what effect~n has your time as a mobile researcher had on your career prog
future_mobile~e byte	10.0g	var128	Have you actively considered being internationally mobile in the future
future_mobile~n byte	10.0g	var129	Are you open to the possibility of being mobile in the future
preventors_pe~l byte	10.0g	var176	Personal/family factors
preventors_li~y byte	10.0g	var177	My quality of life or that of my family
preventors_de~t byte	10.0g	var178	My training and development goals
preventors_pr~n byte	10.0g	var179	My career progression goals
preventors_re~a byte	10.0g	var180	My personal research agenda ie the content and direction of my research
factors_rest~nt byte	10.0g	var181	Access to the facilities equipment necessary to my research
factors_rest~at byte	10.0g	var182	Access to suitable research collaborators
factors_restr~r byte	10.0g	var183	Possibility of links with companies and users of research
factors_rest~ds byte	10.0g	var184	General level of research funding nationally
factors_restr~d byte	10.0g	var185	Ability to access funding for your own research
factors_restr~y byte	10.0g	var186	Availability of career opportunities
factors_r~ypack byte	10.0g	var187	Attractive salary and incentives
factors_restr.. byte	10.0g	var188	Attractive conditions at work

factors_~ pack byte	10.0g	var189	Attractive pension and social care provision
f~n_regulations byte	10.0g	var190	Attractive labour regulations eg working week health and safety laws
factors_restr~n byte	10.0g	var191	Immigration regulations
could_pull_pe~l byte	10.0g	var206	Personalfamily factors
could_pull_li~y byte	10.0g	var207	My quality of life or that of my family
could_pull_de~t byte	10.0g	var208	My training and development goals
could_pull_pr~n byte	10.0g	var209	My career progression goals
could_pull_re~a byte	10.0g	var210	My personal research agenda ie the content and direction of my research
could_pull_co~n byte	10.0g	var211	Desire to return to a country in which I have previously lived/worked
could_push_eq~t byte	10.0g	var212	Lack of access to the facilities equipment necessary to my research
could_push_co~r byte	10.0g	var213	Lack of suitable research collaborators
could_push_en~s byte	10.0g	var214	Lack of links with companies and users of research
could_push_na~s byte	10.0g	var215	General level of research funding nationally
could_push_fu~d byte	10.0g	var216	Ability to access funding for your own research
could_push_op~y byte	10.0g	var217	Lack of availability of career opportunities
could_push_wo~s byte	10.0g	var218	Poor conditions at work
could_push_sa~k byte	10.0g	var219	Poor salary and incentives
could_push_so~k byte	10.0g	var220	Poor pension and social care provision
could_push_re~s byte	10.0g	var221	Unattractive labour regulations eg working week health and safety laws
could_push_im~n byte	10.0g	var222	Immigration regulations
dreamland	int	10.0g	var141
dreamland_ret~n byte	10.0g	var142	Have you ever worked in or undertaken a research visit to this country
dreamland_con~t byte	10.0g	var149	Would you anticipate
dreamland_equ~t byte	10.0g	var150	Access to the facilities equipment necessary to my research
dreamland_col~t byte	10.0g	var151	Access to suitable research collaborators
dreamland_end~r byte	10.0g	var152	Possibility of links with companies and users of research
dreamland_nat~s byte	10.0g	var153	General level of research funding nationally
dreamland_fun~d byte	10.0g	var154	Ability to access funding for your own research
dreamland_opp~y byte	10.0g	var155	Availability of career opportunities
dreamland_sal~k byte	10.0g	var156	More attractive salary and incentives
dreamland_wor~s byte	10.0g	var157	More attractive working conditions
dreamland_soc~k byte	10.0g	var158	More attractive pension and social care provision
dreamland_reg~s byte	10.0g	var159	More attractive labour regulations eg working week health and safety laws
dreamland_imm~n byte	10.0g	var160	Immigration regulations
could_hin~ation byte	10.0g	var161	Immigration regulations eg getting a work visa
could_hind~ding byte	10.0g	var162	Obtaining funding for mobility
could_hin~ition byte	10.0g	var163	Finding a suitable workvisitor position
could_hinder~ge	10.0g	var164	Language

byte			
could_hinder_~y byte	10.0g	var165	Socialcultural integration in the hostdestination country
could_hinder_~m byte	10.0g	var166	Integration into a new research system
could_hinder~re byte	10.0g	var167	Making child care arrangements
could_hinder_~l byte	10.0g	var168	Other caring responsibilities
could_hinder_~s byte	10.0g	var169	Maintaining existing personal relationships
could_hind~sing byte	10.0g	var170	Finding suitable accommodation
could_hind~sion byte	10.0g	var171	Maintaining continuity of transferring pension rights or contributions
could_hinder~ce byte	10.0g	var172	Maintaining continuity of transferring health insurance
would_affect_~n byte	10.0g	var173	What effects do you think further international mobility would have on your futu
aboutfuture_o~n str244	244s		Could you please provide any other comment or information you wish to share rega