

Strategic Case for a UK Time Use Survey 2013-14 or 2014-15

**J Gershuny, for Centre for Time Use Research (CTUR)
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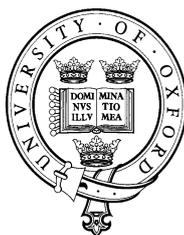
Executive Summary

The paper requests ESRC support for a new UK national time use survey, collected according to the Eurostat Harmonised European Time Use Study (HETUS) guidelines. Though embodying the latest methodological advances, this provides the highest level of backwards compatibility with the 2000-1 UK study (also HETUS compliant), and high levels of compatibility with the other European studies contributing to the 2008-13 HETUS data collection round. France, Italy and Germany have completed their fieldwork, and we expect that at least 16, and possibly more, national studies will ultimately be available from this round.

On the basis of usage of the 2000-1 study, we may expect in excess of 1000 academic users of the new study, fairly evenly divided between economics and sociology, with a growing number of psychologists, but including also, medical, environmental, management and other specialists. Applications include investigations of economic and technological change, national accounting, labour market studies and the work-life balance, transport planning, gender issues and the domestic division of labour, sociability, caring of children and adults, physical exercise and health, environmental and energy demand issues.

Participation in the HETUS requires use of the diary instruments specified by Eurostat. A small “light diary” sample for calibration and linkage with the ESRC-funded Understanding Society (US) panel survey is also proposed. And new high technology approaches (involving GPS and other devices) will be explored (though not funded under the present proposal) in preparation for use in subsequent large scale time use studies.

The cost of a study on the same scale as the 2000-1 collection (20,000 diary days) would be £1.5 - £2M. It would be *preferable* for the ESRC to fund the whole study. Changes in the Office of National Statistics mean that co-funding will be much more difficult to arrange than was the case in 2000-1.



Strategic Case for a UK Time Use Survey 2013-14 or 2014-15

Background

The core of a Time Use Survey (TUS) is a *time diary*, which continuously registers an individual's sequence of activities over a specified period (normally a day or a week). The diary records various aspects of each event in separate *fields*. In the international standard Harmonised European Time Use Study (HETUS) instrument used in the UK 2001 national survey, there were "*main activity*", "*other simultaneous activities*", "*location*" and "*others present*" fields (Figure 1 shows an example diary page). The UK, despite its leading role in time-use research worldwide, is now alone among large developed countries in having no recent time diary survey of its own (Table 1).

The simplest calculation from a time diary is a "time budget", consisting of simple totals of time devoted to the recorded main activities, analogous to the money budgets calculated from expenditure diaries. But increasingly important applications of time diaries involve the analysis of the additional fields available in the HETUS and similar data and of *activity sequences*, revealing phenomena such as the times of day that activities are undertaken, the consequentiality of successions of activity (eg shopping requiring travel, which may be interrupted by childcare responsibilities), or co-presence (parents supervising children, couples taking leisure together).

The main alternative method for measuring individual time use is the "stylised estimate" questionnaire item "How much time did you spend doing... over the last (specified period)?" or the close but inferior alternative "How much time do you *usually* spend...?". The diary approach to time use measurement is to be preferred to the widely used stylised method, *firstly* because of problems caused for respondents. Which sub-activities are to be included? How should respondents operationalize the specified reference period? How in practise do respondents calculate total times? The consequences of these problems are: overestimation of desirable activities, underestimation of undesirable and in particular, exaggeration of the length of paid work weeks, and suppression of "unusual" activities. Such approaches typically produce 26-28 hours/day totals when applied to comprehensive activity lists, and are prone to both systematic and random errors. *Secondly* stylised questions fail to provide any evidence whatsoever about activity sequences and timings, multiple simultaneous activities (eg childcare in parallel with leisure or domestic work) activity locations and co-presence, which are all fast-growing focuses for time use research.

Nevertheless the use of stylized estimate question continues (eg in the Labour Force Survey) and will persist for the indefinite future, both because of the respondent burden of, and because of the very considerable time cost imposed by the administration of, an adequate time-use diary. And recent work carried out by CTUR has demonstrated that very significant benefits (chiefly enabling long-term time-use estimates) can be gained by *combining* diary and stylized estimates. For this reason we propose a parallel calibration exercise aligning diary evidence with stylised estimates and other related questionnaire approaches ("Who in your household does the?" and "How often do you...?"), which will additionally permit linkage with the Understanding Society panel study . In the longer term (>10 years) electronic (GPS) tracking and other direct measurement approaches will make a contribution; we discuss these later in the paper.

Figure 1 The Harmonised European Time Study (HETUS) Instrument

| Morning Time, am | What were you doing? <small>Please record your main activity for each 10-minute period.</small> | What else were you doing? <small>Write in the most important activity you were doing at the same time</small> | Where were you? <small>e.g. At home, at friends, in car, on bus, train, cycling, walking</small> | Were you with anybody? <small>Please mark the boxes. See example on page 3.</small> | | | | |
|---------------------|--|--|---|--|---|--|--|--|
| | <small>Enter one main activity on each line.</small> | <small>e.g. Looking after children, listening to the radio or having a drink</small> | | <small>Alone or with people you don't know</small> | <small>Children up to 9 years old in your household</small> | <small>Children aged 10 to 14 living in your household</small> | <small>Other household members</small> | <small>Other persons that you know</small> |
| 7:00 - 7:10 | Sleeping | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7:10 - 7:20 | ↓ | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7:20 - 7:30 | Had a shower | | At home | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7:30 - 7:40 | Made breakfast | | ↓ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7:40 - 7:50 | Ate breakfast | Read newspaper | ↓ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7:50 - 8:00 | Did washing up | | ↓ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 8:00 - 8:10 | Got my son dressed | Talked with my son | ↓ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 8:10 - 8:20 | Walked to school with son | ↓ | Walking | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 8:20 - 8:30 | Dropped son off at school | ↓ | ↓ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 8:30 - 8:40 | Walked to bus stop | | ↓ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8:40 - 8:50 | Travel by bus to work | Read newspaper | On the bus | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8:50 - 9:00 | ↓ | ↓ | ↓ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9:00 - 9:10 | ↓ | ↓ | ↓ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9:10 - 9:20 | Walked from bus stop to main job | | Walking | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9:20 - 9:30 | ↓ | | ↓ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9:30 - 9:40 | ↓ | | ↓ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9:40 - 9:50 | Main job | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9:50 - 10:00 | ↓ | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Table 1 Large national time diary studies from some selected developed states

| | 1961-1969 | 1970-1979 | 1980-1989 | 1990-1994 | 1995-1999 | 2000-2005 | 2006-2012 |
|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Australia | | X | X | X | X | | X |
| Austria | | | X | X | | | X |
| Canada | | X | X | X | X | X | X |
| Denmark | X | X | X | | | X | X |
| Finland | | X | X | | X | | X |
| France | | X | X | | X | | X |
| Germany | X | | | X | | X | X |
| Italy | | | X | | | X | X |
| Netherlands | | X | X | X | X | X | X |
| Norway | | X | X | X | | X | X |
| Slovenia | X | | | | | X | NONE |
| Sweden | | | | | | X | X |
| Spain | | | | X | | X | X |
| UK | X | X | X | | X | X | NONE |
| USA | X | X | X | X | X | X | X |

Meaningful analysis of diary surveys is dependent on the collection of appropriate ancillary materials, in the form of a *questionnaire* containing specific socio-

demographic and other descriptive information (such as frequency of participation in rare leisure activities, expressions of attitudes and practices related to the gender division of labour). The HETUS also has a 7-day *work-schedule instrument*, providing more specific information about work timings through the day, and weekly variation in work times, than that available from questionnaire sources such as the Labour Force Survey.

The first HETUS round (1998-2002) had around 20 national participants (including UK, France, Germany, Italy, Spain Portugal, Netherlands, Denmark, Sweden, Finland and others : among non-participants, Ireland, Greece, Luxembourg). The case set out here is for UK participation in the second HETUS round (2008-12).

The 2000-1 survey was the UK's first centrally funded study, whereas most of the other major European countries started this work in the 1970s and 1980s. Nevertheless the UK has a reasonable historical record of time use surveys from other sources, with extant micro-data from 1961 and 1974/5 (culled from the now-defunct BBC Audience Research Department), and smaller national studies funded by the ESRC in the mid 1980s. The 2000-1 study was jointly funded by ESRC and a consortium of Government departments, and run by the ONS.

The HETUS design involves a random sample of households, with all household members including children (from age 8 in the UK) completing two day-diaries (an example diary page is appended to this paper) on the same randomly sampled days. The UK study had an achieved sample of 5000 households, collecting 18,000 day-diaries from 9,000 individuals—approximately the median size of HETUS studies. Belated participation in the 2008-12 HETUS round would yield excellent 12-year, good 30-year, and adequate 50-year views of UK time-use trends, as well as providing the state-of-the-art European cross-national comparisons.

Economic and social impact

TUS datasets have an unusually wide range of current and potential applications, some of which are briefly set out in the following paragraphs.

- *relationships between conventional measures of national product and otherwise unmeasured production.* Time use surveys enable researchers to develop broader assessments of national production and well-being. Self-provisioning outside the money nexus is systematically captured by time diary studies, and virtually invisible to conventional economic statistics. When people switch their activities between the household (painting one's living room or doing one's own gardening) and the market sector (hiring a painter or a gardener), standard statistical measures show spurious changes in measured levels of economic activity.
- *technological change and economic growth.* Economic policy is largely concerned with the pace of economic growth. Growth depends critically on investment, yet conventional measures ignore the substantial investments of time that add to the stock of human capital. Time-use surveys provide information on when people shop, travel to work, time spent on reading, broadcast media and internet—all activities contributing both to the accumulation of paid work skills, and to the cultural and social capitals that determine their consumption patterns.

- *the impact of labour market exclusion.* Time use surveys can tell us how much time is spent searching for work. Are those self-described as unemployed in fact working (for money or not) within or outside their own households? Previous UK time-use studies suggest that a third of all working age non-employed have some paid work in any given week. Does this continue to be the case? Do those who lose their jobs spend more time on cleaning, cooking and other productive household activities, or do they slide into inactivity?
- *transport and travel between locations.* Time diary studies complement the annual National Travel Survey evidence: their continuous registration throughout the day means that short travel episodes frequently missing from the NTS and other sources (walking particularly) can be identified.
- *changes in the domestic division of labour.* It had been argued that women maintained their role of domestic providers despite their growing presence in the labour market through the second half of the 20th century. Historical time diary data is the only source that could possibly have established (1) that there has been a substantial convergence in men's and women's domestic work time totals, and (2) that the gap between men's and women's totals is still sufficiently large to give women a substantial disadvantage in competition for jobs and promotions. The 2011 time use data will tell us about subsequent changes in these balances.
- *sociability, co-presence and care activities.* Activity sequences in time diaries with separate fields recording multiple simultaneous activities and registering who is present during them provide uniquely specific and reliable evidence of the nature of relationships between spouses and the true time devoted to child-care and development, and to elder-care. Any assessment of "family friendly" policies must consider their effects on time use in relation to the total time spent with, looking after and caring for children and elderly relatives.
- *personal activity levels in relation to health objectives.* Diaries provide unprompted evidence of the incidence and duration of episodes of formal exercise (sports participation, going to the gym). They also reveal the extent of informal exercise (eg walking, dancing, "running errands") that is frequently missing from specifically focussed leisure surveys. Single day diaries are not on their own appropriate for estimating population activity distributions, because of the high rates of non-participation in specific activities on diary days. But combined with a small number of activity-frequency questions ("How often do you....(take exercise? go to the pub? go for a walk? etc.) they can be used to estimate long-term population-distribution statistics (eg half- and twice-median exercise levels).
- *individual exposure to environmental risk, and the collective environmental strain imposed by people's daily activity.* There is no alternative source of data: time diaries' continuous and sequential observations provide the only comprehensive source of information on these. Time diary studies are used in the US for estimating exposure to sunlight and environmental toxins by the Environmental Protection Agency, and for predicting fuel demand deriving from private individuals' and households' travel, space heating, cooking and leisure activities.

- *subjective wellbeing and instantaneous or “objective” utility.* A group of US economists and psychologists, both eminent (ie including the Nobel Laureate Danny Kahneman) and influential (including Alan Krueger, current chair of Obama’s Council of Economic Advisors—which also includes Katherine Abraham who started the American Time Use Study while Commissioner of the US Bureau of Labour Statistics) now advocates the use of the time diaries as a basis for national accounts of the direct utilities generated by all activities. These alternative accounting measures sometimes move in the opposite direction to national product (eg where economic growth is generated by an adverse shift in the work-leisure balance). UK researchers pioneered this field. But the lack of current data prevents us both from exploiting our academic priority, and from contributing this rather well-founded academic material to the otherwise sometimes less-than-convincing national debate on “happiness”.

A few of these applications—the extended national product calculations, and the measures of the domestic division of labour for example—are well developed and quite widely used in Europe. But despite the long history of data collection, and perhaps because of the complex data processing requirements of diary datasets (now much better understood and more manageable in modern statistical packages) their major policy impact is yet to come.

Contribution to ESRC/RCUK Research Challenges and (old) Strategic Priorities

Time use data may thus be used to address key issues among the ESRC’s “research challenges” such as “Understanding and shaping individual decisions”, and “Education and life chances” as well as contributing to such RCUK strategic priority areas in multidisciplinary research as the digital economy, ageing and life-long health and wellbeing, and making a major contribution to research capacity-building and international collaboration.

Contribution to the National Data Strategy

The 'National Data Strategy' (NDS) aims to provide a coherent robust and up-to-date data infrastructure, to address future UK research priorities in the social sciences. It seeks to build on existing strengths, maintaining and continuing existing data series. Data sets should be available at a micro-level, facilitate the monitoring of trends, enable linkages across different spheres of life and cover diverse social groups. Two of the key research challenges (relating to child development and ageing) represent areas where time diaries have special strengths. It is notable, and a matter of some surprise—given how clearly time use data meet these NDS criteria—that time use surveys are not referred to in the current version of the NDS. This omission is all the *more* surprising given the high and growing level of usage of time survey data.

The Data Archive currently registers around 350 downloads of time-use datasets per year. We estimate that that there may be something like 500-1000 researchers worldwide making use of the ONS 2000-1 study (see CTUR's own website <www.timeuse.org>). Moreover the general trend of growth in interest in this area of work implies in turn that the potential market for a UK 2014 study is likely to be larger (perhaps substantially larger) than this. While economics is the largest single discipline, sociology is not far behind. Psychology figures substantially within the

“other social sciences” category.. Business and public policy specialists account for around 15% of all users, and a roughly similar proportion come from the health, engineering and other natural sciences. We are not aware of any category of social survey that has a wider spread across the entire range of academic disciplines.

Since 2004 we have requested that users of CTUR data notify us of publications and other outputs that arise from their work, and we append a list of approximately 100 outputs that we have collected by this means. The (inevitably incomplete) list contains a large number of publications in leading disciplinary and field journals and University presses.

Alternative Diary Design Options

There is a range of diary approaches, at one extreme of which “light diaries”, pre-coded with 30-35 activity categories, are both cheaper and less burdensome, and at the other, the full 7-day own-words instruments of the sort collected by the ESRC in the mid 1980s. The HETUS instrument lies somewhere between these.

Also, not yet fully established but firmly on the research agenda, are new high-tech approaches combining passive measurement of geographical position and movement (using GPS and accelerometer data) with active questioning about activity nature and purposes—sometimes via personal communication or recording devices carried by the respondent/subject—perhaps nearly concurrent with the activities (“What were you doing when the beeper sounded?”) or perhaps later the same day via the internet. These approaches currently suffer from:

- Technological immaturity—particularly shortcomings in GPS technology (not working indoors, city “canyons” where position may be mis-registered).
- System immaturity—there are as yet no well-established small scale working examples of such survey applications, and certainly no large scale nationally representative samples.
- Unknown comparability of results with traditional diary samples.

The CTUR is analyzing exploratory studies in this field at present (as are other groups in Germany, the USA and elsewhere), but the results of this work will not be available until around the end of its current grant in 2013, and we would expect the first large scale applications around the time of the next HETUS round in 2018-22.

Use of the HETUS diary specification is a requirement for participation in the HETUS programme. The original Netherlands contribution to the HETUS was in fact excluded by EUROSTAT because of its use of a fixed activity coding scheme incompatible with the HETUS 3 digit classifications, and the absence of the other mandatory fields (“other activity?”, “with whom?”, “where?”) illustrated in the example diary page Figure 1. This was not an arbitrary exclusion; the detailed activity coding and the multiple reporting fields of the diary are necessary for the flexible HETUS table-generation system maintained by Statistics Sweden (which allow, for example, the breakdown of the primary activity “eating” to the categories “eating while visiting friends”, “eating at the workplace”, “eating in a restaurant with spouse” and so on). These fields are of particular importance for study of child- and dependent adult-care, activities which are often undertaken simultaneously with other

work or leisure, and sometimes only emerge through the analysis of the co-presence field in the diary. The UK light diaries, with their maximum of 35 activity categories and their single reporting field, would certainly not be accepted as a contribution to HETUS. A EUROSTAT committee, meeting between 2005 and 2008 agreed substantial extensions to the classification system (while ensuring backwards-compatibility), but the diary design is largely unchanged.

The HETUS study is the gold standard, necessary for cross-national and long-run historical comparisons, and meeting the objectives of the National Data Strategy. As a HETUS participant the UK would be able to provide its researchers with comparisons with the other 2008-12 European contributors, as well as with the UK and other contributors to the 1998-2002 round. Reliance on a light diary design would lead to the UK's exclusion from the programme, severely compromise our ability to make comparisons with other European countries—and indeed make comparisons with the UK HETUS 2001 rather problematical.

Given this, the main mechanism for cost reduction available at this point would be to reduce the sample size from the 5000 households collected in 2000-1; however, a sample of 2500 households would place the study on the lower boundary (and conflict with the NDS objective of “ample size”). A move to a light diary format would prejudice possibilities for both historical and cross-national comparison. But (as explained below) it would be appropriate to fund a small scale light diary study in parallel to the full HETUS design (see below), and also some pilot experiments with the high-tech approaches.

Timeliness

Substantial population-level changes in time use patterns are in general impossible to identify on an annual basis, hard to descry on a five yearly, but often clearly apparent on a 10 yearly basis. In particular the extent of the diffusion of computing technology into private homes since 2001 suggests the need for a successor study quite soon. There may be a case for more frequent 3-5 year light-diary studies to track short-term shifts (eg spread of internet, effects of shopping or drinking hours deregulation), but the EU decision to go for a 10 year recapitulation of the HETUS seems to be the sensible choice. Other industrialized countries now have national time-use surveys on either a 5-yearly (eg Netherlands, Japan, Korea) or a 10-year cycle (eg Canada, Australia). Time-use patterns change only slowly, but nevertheless the US Bureau of Labor Statistics decided from 2003 to collect a large *annual* study with 15000 diaries/per year. The target date of late 2013 or early 2014 to late 2014 or 2015, is outside the main tranche, but may still allow the UK to be included in some of the international research activities associated with the 2nd HETUS round. (The Netherlands, which collected a second HETUS-compliant time use study in 2005 as contribution to the 1st HETUS round, provides a precedent for this.)

Relationship to the Understanding Society survey

There is a reciprocal relationship between the short-run of activities through the day and long-run of the life-course. Personal resources and capabilities accumulated through the life-course give rise to individual characteristics (class and status) and hence access to specific activities during the day. And conversely the particular activities of the day (both work and leisure) accumulate over the long term to form just those individual characteristics (human, cultural and social capital). So there are clear academic benefits to linkages between diary data and longitudinal (panel) materials. Diary materials might in principle be used as *predictors* of change (eg couples' unequal work shares *prior to* withdrawal from the labour force), or as change *outcomes* (annual changes in domestic work time *following* employment transitions).

The CTUR is working with a group headed by Professor Buck, the Principle Investigator for the Understanding Society group, in the design of a "light diary" (occupying 5-10 minutes of interview time) to be attached to the Wave 7 Innovation Panel subsample, and funded by a special ESRC grant. We include here the costs of a second light diary to be attached to the Innovation Panel Wave 8 or Wave 9, to be used for evaluating the longitudinal performance of the light diary instrument.

Opportunities for Co-funding

For the 2000-1 UK study a consortium involving some 10 Government departments provided the counterpart to the ESRC's 50% funding share. This consortium was put together by the ONS, and would require ONS leadership if it were to be repeated. Our impression is that the ONS' independent status has made this more difficult. Interest in a new study (specifically, concern at the news that no 2008-12 tranche study is currently scheduled) has been expressed by the Equalities Commission. It may be possible to find other co-sponsors, but the ONS is at present unable to provide the management and other resources that it provided for the 2001 study. . We are however considering approaches to other possible cofunders (Equalities Commission, DECC, Department of Health).

Indicative Costs

The HETUS design calls for interviews with all household members, followed by leave-behind self-completion own words diaries covering 2 days by all household members aged >7 years. The aim is 5,000 achieved households, 10,000 diarists (assuming average 2 eligible persons per household), 20,000 diaries.

The 2008 ESRC Large Grant to the Centre for Time-Use Research (CTUR) at Oxford, supported 4 researchers for 5 years, to undertake time use resource, infrastructure and research activities. The CTUR's core resource task is the maintenance and promotion of the Multinational Time Use Study (which provides harmonised data from the HETUS and many other studies stretching back to the 1960s from across the world,). The CTUR is also contracted to manage and direct resource work in the area of survey development (though no funds are currently allocated for pilot survey work in this area). The ESRC grant ends in April 2014 and we are seeking refunding through the 2013 CLG competition. Our draft case for support briefly mentions the proposed new UK diary study. The Centre is willing to provide academic leadership for the new

survey activity from the ESRC resources allocated up to April 2014 (though a new Survey Management post would be necessary from the start of the time use survey piloting phase). We also suggest a training programme with two postgraduate studentships attached to the project.

The HETUS instrument design protocol is comprehensive, though it would be necessary to revise the specifications to conform to UK classifications of some core variables. We would also propose to extend the protocol, with additional “enjoyment” and “for whom” fields for a small subset of cases (a successful innovation in the recent French HETUS study).

The advanced state of preparation of this project means that a call for tenders for the survey fieldwork could be issued 4 weeks after we were notified of a funding decision.

Approximate costings (not revised since 2011):

- £1.25 per interview min*35 mins*14,286 interview respondents (to achieve 10000 diarists assuming 30% attrition between interview and complete diary receipt)
= £625K
- £20 per diary for follow up, transcription and coding* 20,000 diaries = £400K
- £20 per complete respondent for incentive = £200K
- £1.25*8 minutes*2000 light diaries (US costs), £3 transcription per diary
= £26K

Total direct survey cost **£1.251M**

- Senior survey manager, £100K per year (incl. fec for) 2.5 years = £250K
- Studentships £13K per year * 4 years * 2 = £104K.

Total other survey costs **£354K**

Total direct survey and other costs **£1.605M**