European Foundation for the Improvement of Living and Working Conditions

Measuring the dynamics of organisational change and restructuring

This report is available in electronic format only.

The Meadow project aims to establish Guidelines for collecting and interpreting data on organisational change and restructuring and their economic and social impact. The Guidelines contain two surveys: one for employers and one for employees. The surveys contain a wide range of questions relating to organisational dynamics and organisational change, capturing data from the perspective of both the employer and the employee.

Introduction

Meadow ([MEAsuring the Dynamics of Organisations and Work](#)) is a European project that aims to establish a set of guidelines for collecting and interpreting harmonised data on organisational change and work restructuring and their economic and social impacts at the EU level. The project involves 14 research teams from nine European countries (Belgium, Denmark, France, Germany, Hungary, Italy, Netherlands, Sweden, UK) and is a coordination action funded by the European Commission under Priority Seven (Citizens and Governance) of the [Sixth RTD Framework Programme](#).

The teams had an academic background in a range of different disciplines, such as economics, sociology, management sciences, labour studies, ergonomics and work psychology. The team also had survey development experience from nine European countries. As a result, the Meadow Guidelines reflect a cross-discipline cross-country consensus that matured throughout the three years of the project.

In addition, close interactions with different stakeholders in the advisory board and during the project meetings contributed to the objective of designing an infrastructure which gives an empirical basis on which to ground policy decisions in the fields of sustainable economic growth, innovation and the quality of working life.

The project aims to be a first step towards implementing a harmonised European survey instrument, and to promote comparative research through the development and diffusion of tools, methodologies and research designs which can, in turn, be used to develop large-scale data sets that can be widely applied to comparative research and across disciplines. The guidelines will be disseminated widely among users, stakeholders and national and European data collection institutions

The Meadow [Guidelines](#) provide a framework within which existing European surveys on organisational change and work restructuring could evolve towards comparability, and establishing norms for the construction of new survey instruments in the field. This is a challenging task, not least because most relevant surveys have so far been conducted at national level only, and few of the limited number conducted at international level have addressed the issue of establishing relevant, valid and reliable international comparisons.

They also provide an instrument for improving the empirical basis of research and policy, by focusing on the relationship between organisational change and key economic and social indicators in the knowledge-based economy. These indicators include productivity growth, innovative performance, and sustainable social equality in terms of access to jobs, work environments, and influence at the workplace.

Structure of the Guidelines

The Meadow Guidelines consist of five chapters and an appendix.

The first chapter sets out a framework for the design of surveys on organisations and organisational change to produce data that are relevant for both theory and policy. It develops a measurement framework that considers both existing surveys and a broad set of theories, and this then serves as the basis for selecting relevant indicators for questionnaire design that is consistent with the Guidelines.

Chapter two proposes and justifies a general survey framework for measuring the dynamics of organisations and work, based on the experiences accumulated at international level over the past 20 years. For evidence-based policy and research purposes, a survey that links the interview of an employer with the interviews of their employees is considered to be the richest survey setting. This chapter discusses the two possible methods for administering linked employer and employee-level surveys. Either the employer can be sampled first, while the employee is sampled in a second stage (linked employer/employee survey), or the employee can be sampled and interviewed first, and the interviewed sample of employers then derived from this employee sample (linked employee/employer survey). The most common practice at present is for the employer to be designated as the primary sampling unit, and the Guidelines express a preference for this.

On sampling, the Guidelines recommend broad population coverage, with coverage and sample sizes coordinated at the employer and employee levels. At the employer level, at least a thousand general managers should be surveyed per country; they should represent units with twenty employees or more; and the units should be spread across whole countries and the whole economy, including the public sector. At the employee level, all employees working at the employer unit should be covered; priority should be given to the representativeness of the weighted sample (no over-sampling, several thousands of workers per country); and there should be no restrictions on those chosen to be part of the sample (except possibly a minimum job tenure, if this is necessary because of the constraints imposed by the sampling frame). If the employer is surveyed first, between one and 25 employees per employer should be interviewed (depending upon the size of the units, with a target of two or three per employer on average). If employees are surveyed first, between 2,000 and 3,000 employees per country should be interviewed to reach the target of 1,000 employers per country (depending on country size).

There are suggestions for questionnaire length: around 10 pages for a postal questionnaire; around 30 minutes for a telephone survey; and around one hour for a face-to-face survey. The recommendation is that flexible approach to data collection methods should be used in order to master costs, while securing harmonisation. The employer and employee surveys should consist of a core questionnaire and modules which can be further developed at the national level.

Chapters three and four develop indicators for the employer- and employee-level survey instruments respectively on the basis of the concepts developed in Chapter one. Core employer and employee questionnaires are included in appendices to these chapters. It should be noted that the structure of these chapters reflects the basic measurement framework for the project, which sets out the theoretical background for the project. As a result of this, the structure of the questionnaires does not exactly match the structure of the chapters because of the need to translate the measurement framework into a sequence of questions which are meaningful for the interviewees. The aim of chapters three and four is therefore to make explicit the links between the questions and the underlying indicators and concepts. As a result, it is difficult to fully understand the tables without being able to look at the questionnaires. It should also be noted that

the same question can appear in more than one table because it can be used to capture different concepts.

In the final chapter, the practicalities of administering the general framework for a linked survey of employers and employees are discussed. The feasibility of implementing the project has also been a concern, and this is what lies behind the length of this chapter.One of the recommendations here is to use a linked employer/employee register, if one of good quality is available. Otherwise, using a good-quality workplace-based sampling frame would be sufficient. If neither option is possible, it may be possible to enumerate workplaces from a good-quality enterprise frame, or adopt an employee-first approach. In this way, total coverage of the EU-27 is possible.

The Guidelines recommend that random sampling methods are used. If the employer-first approach is to be used, it is helpful to over-sample large employers and those in small industries, and ensure close control of the second-stage (employee) sampling. If the employee-first approach is used, it is best to stratify the sample if possible. The likely attrition rates should be assessed carefully, in addition to the qualities of the sampling frame, in order to determine the feasibility of a longitudinal survey. The size of sample that researchers should seek is at least 1,000 employers in the employer-first approach and 3,000 employees in the employee-first approach.

To contact interviewees, the recommendation is to make use of advance letters, and to train interviewers to handle gatekeepers. Further, it is useful to set targets for the percentage of failed contacts and seek out best practice in each country to minimise them. In the case of a longitudinal survey, it is useful to adopt clear and comprehensive rules for dealing with workplaces that change structure between survey waves.

Researchers should seek a target response rate of at least 60%, and the Guidelines recommend that the basic pre-conditions for good response rates should be met. Where possible, participation by national statistical offices should be encouraged, and the proposed standards for recording fieldwork outcomes and computing response rates should be followed.

For data preparation, analysis and dissemination, the recommendation is that standardised, pre-validated classifications and coding schemes should be used, where they are available and appropriate. Data edits should be considered during questionnaire design, non-responses should be analysed and, where necessary, advanced methods of imputation should be considered. All data cleaning, editing and imputation processes should be implemented consistently across all national datasets. Weighting for unequal probabilities of selection is essential, and non-response weighting and post-stratification should also be considered, where possible. Any departures from simple random sampling in analysis should be taken into account. The survey data should ideally be made publicly available, in so far as this can be done without compromising the rights of survey respondents. All necessary steps must be taken to ensure that respondents remain anonymous in publicly-available data, preferably by limiting the identifiability of survey materials or restricting the contents of the survey data that may be released, rather than by restricting access.

The appendix synthesises the main results of the cognitive testing of the employer and employee level questionnaires that took place in eight European countries.

Measuring the dynamics of organisations and work

Employer survey

This part of the survey, based on interviews with employers, aims to highlight how organisations use policies, apply management practices, organise work, and how they approach and cope with change. The employer interviewee (as set out in the questionnaire) is the general manager, the owner/proprietor, the human resources or personnel manager, or another specified manager. The questions are based on the following themes:

- drivers of organisational change;
- management techniques and practices, including the use of ICT;
- organisational structure and the organisation of work;
- types of organisational designs;
- employment relations;
- outcomes of organisational change and change in terms of social and economic performance.

Drivers of organisational change

This section focuses mainly on capturing employers' perceptions of how changes in market conditions and technology have had an impact on their operations. This encompasses themes such as globalisation and internationalisation (including global markets, global production and knowledge flows, and global streams of finance).

It also covers perceptions of and reactions to economic downturns or booms; employers need to be able to flexibly react to economic crises that are accompanied by decreasing demand, difficulties in raising capital or increased competitive pressure. Other factors influencing organisational change include government policies and regulations in education, health and safety, the environment, and labour markets.

Table 1: Indicators for drivers of organisational change

Indicators	Survey questions
Globalisation	DMRKT, DMRKTPUB
Economic and market pressure	DMRKTCHNG, DMRKTCHNGPUB
Technological change	DOPCHNG, B3ITUSE
Government policies and regulations: norms and regulations	DOPCHNG

Management techniques and practices

This area of the survey focuses on how management techniques and organisational practices contribute to strategies for greater organisational flexibility and innovativeness. These centre on Total Quality Management (TQM), lean production, ICTs and Knowledge Management (KM).

TQM emphasises the importance of involving all the organisation's employees in processes of quality control and improvement. The Guidelines propose indicators for measuring quality monitoring, quality-related problem-solving and customer satisfaction monitoring. Questions are designed to describe these processes, rather than using labels, in order to minimise problems of obsolescence or ambiguity associated with differences in the meanings attributed to organisational labels across nations and over time.

The survey has a single indicator for lean production to capture an organisation's use of systems to minimise inventories, supplies, or work in progress.

The survey aims to capture ICT as an integral component of new business practices or in cases where ICT facilitates organisational change. The Guidelines contain, as a separate module, a series of questions on the use of specialised forms of software. These are not intended to be part of the core questionnaire unless the ICT manager is the main respondent.

KM is seen as a core dimension in bringing about organisational change, and the survey therefore includes a question focusing on the benchmarking and diffusion of good working practices within the organisation. It also includes a question on the monitoring of external knowledge of ideas and technical developments which serves as an indicator of the development of a learning organisation.

Table 2: Indicators for management techniques and practices

Indicators		Survey question
Total Quality Management	Customer satisfaction is continuously monitored	B2CUSAT
	Quality circles	B1CIRCLE, BCIRCLEPER
	Quality monitoring	B1DLGQLT, B2QUAL
Lean production	System to minimise inventories	B2JITP
ICT	Advanced online services	B3IWEB, B3WEBSERV
	Client or customer relationship software	B3ITUSEa
	Performance tracking software	B3ITUSEb
	Enterprise Resource Planning software	IB3ITUSEc
	Collaborative work software	B3ITUSEd
	ICT skills	B3EMPL
Knowledge management	Data bases documenting good work practices	B2KMDBASE

	Monitor external ideas and technical developments	B2KMEX

Organisational structure and work organisation

The design of organisations is crucial in understanding both organisational performance and employee outcomes. Design includes work organisation and organisational structure: how work is divided into job tasks; bundling of tasks into jobs and assignments; interdependencies between workers in job performance; and how work is coordinated and controlled in order to fulfil the goals of the organisation. Organisational structure looks at the internal and external division of labour. It also considers where production processes may be divided between companies, regions and nations by increased use of subcontracting and outsourcing, and by various forms of partnership and alliance.

This part of the survey therefore asks about the use of subcontracting, outsourcing and alliances for different types of business functions. It also asks about the nature of authority relations within the organisation by means of questions about whether it is the organisation's policy to delegate responsibility for specific types of tasks or operations to the employee involved. Questions are also asked about the coordination and control of work, focusing on monitoring through management practices and ICT monitoring.

Table 3: Indicators for organisational structure and work organisation

Indicators		Survey question
Internal division of labour	Multi-skilling	B2CUSAT2007
	Autonomous teams	B1CIRCLE2007, B1CIRCLCHG
	Vertical specialisation	B2QUAL2007
	Horizontal specialisation	B2JITP2007
External division of labour	Alliances and inter-firm collaboration	B3WEBSERV2007
	Subcontracting/outsourcing	B3ITUSE2007a
Authority	Centralisation and decentralisation of authority	B3ITUSE2007b
	Individual responsibility for performance	IB3ITUSE2007c
Coordination and control	Monitoring through management practices	B3USEd
	ICT monitoring	B3EMPL

Types of organisational design

To determine the nature of an organisation – and specifically whether it is a flexible and learning organisation (termed a 'post bureaucractic' organisation), the survey asks a number of questions relating to organisational structure, management techniques and practices, and forms of work

© European Foundation for the Improvement of Living and Working Conditions, 2012

organisation. For example, to determine the presence of high performance work systems, questions are asked about the hierarchical structure, multiskilling, job rotation, autonomous teams, training and employee consultation and participation.

Table 4: Indicators for High Performance Work Systems

Indicators	Survey questions
Flat hierarchical structure	B1HIE, B1STRUC
Job rotation/multi-skilling	B1MULTSK
Autonomous teams	B1TEAM, B1DLGSCHD
Training	CRTNON, CRTNOFF
Employee consultation/participation	CBRFANY, CBRIEFN

In order to determine flexibility, questions concerning numerical flexibility are asked, such as the number of employees with temporary, fixed-term and part-time contracts. Questions relating to functional flexibility concern issues such as job rotation and multiskilling, the hierarchical structure and the presence of autonomous teams.

Table 5: Indicators for the Flexible Organisation

Indicators		Survey questions
Numerical flexibility	Share of employees with temporary contracts	ATEMP
	Share of employees with part-time contracts	APARTPC
	Share of employees from employment agencies	AAGENCY, AAGENNUM
	Subcontracting/outsourcing	B4SUB
Functional flexibility	Flat hierarchical structure	B1HIE, B1STRUC
	Job rotation/multi-skilling	B1MULTSK
	Autonomous teams	B1TEAM, B1DLGSCHD

Questions asked to determine whether the organisation is a learning organisation include those relating to autonomous teams, quality circles, training and skills, employee consultation and participation, performance-based pay and the monitoring of external technical developments.

Table 6: Indicators for learning organisations

Indicators	Survey questions
Autonomous teams	B1TEAM, B1DLGSCHD
Quality circles	B1CIRCLE
Training/skills	B1MULTSK, CRTNON, CRTNOFF
Employee consultation/participation	CBRFANY, CBRIEFN
Performance-based pay	CINCENPAY
Monitoring external technical developments	B2KMEX

Employment relations

This section examines employment security and human resource management (HRM). While employment security issues are best examined by questioning employees, this section nevertheless asks employers questions about the incidence of non-standard employment contracts, such as fixed-term, temporary and part-time contracts.

There are four areas that are of major strategic importance for HRM policies; human resources flow, employee influence, reward systems, and work systems. Employers are therefore asked questions about recruitment policy, investment in training and skills enhancement, reward systems for individuals and groups, performance appraisal and career development, and employee consultation and participation.

Table 7: Indicators for employee relations

Indicators		Survey questions
Contractual arrangements and employment security	Share of employees with temporary contracts	ATEMP
	Share of employees with part-time contracts	APARTPC
	Share of employees from employment agencies	AAGENCY, AAGENNUM
Human Resource Management	Recruitment policies	CRCTSK, CRCTUN,CRTN
	Investments in training	CTRNOFF, CTRNOFFPC
	Investments in skills enhancement	CTRNON, CTRNONPC
	Reward systems for indviduals and/or work groups	CINCENPAY
	Performance appraisal and individual career development	CAPPPC, CAPPPRO
	Employee consultation/participation	CBRFANY, CBRIEFN

Outcomes of organisational change: measuring social and economic performance

Overall, performance is a multi-dimensional concept that covers very different aspects of operation in which a company or public organisation may or may not be doing well. The narrower definitions tend to refer to economic indicators such profits, turnover or market shares or efficiency of resource use. Broader definitions might also be related to growth potential, quality of products and services, the work climate, reaction time, potential for innovation, ability to attract high quality workers, labour turnover and absence. Integrating both strands of definition, the Guidelines distinguish between economic and social dimensions of organisational performance.

Economic performance indicators refer to labour productivity, product or service innovation, process innovation, new marketing methods and marketing growth. Social performance indicators refer to absence, employment growth and reasons for a decline in employment.

The survey includes indicators of both economic and social performance. Social performance indicators are limited to measures of employment growth and absence. Economic performance measures are related to ratios and indicators at the organisational level and encompass all areas of both production of goods and services – such as finance, product and service – and process performance – such as quality, flexibility and productivity.

Table 8: Indicators for organisational performance

Indicators		Survey questions
Economic performance	Labour productivity	ELAB
	Product or service innovation	EINNOVPRD, PRDMRKT
	Process innovation	EINNOVPRC
	New marketing methods	EINNOVMRK
	Market growth	DMKTCHNG
Social performance	Abesenteesim	AABSENT
	Employment growth	AEMPCHG
	Reasons for decline in employment	AEMPCH-CAUSE, AEMPCDOT

Employee survey

The employee survey asked a series of questions based on the following themes:

- occupation and work organisation;

- employee participation;

- job control and job demands;

- wages;

- skills utilisation;

- working time and work-life balance;

- employment security;

- employee well-being.

Occupation and work organisation

The survey uses a range of indicators to determine work organisation and changes in work organisation. These include:

- management practices and techniques, such as HRM, TQM, lean production and knowledge management;

- organisational structure, including questions on occupation (coded to ISCO post-interview), places of work, formal and informal authority over other employees and formal and informal authority of employees over the respondent, working alone, with colleagues and with external collaborators, standardisation of work and output, and mutual adjustment;

- information and communication technologies, such as computer use, self-assessment of computer skills, types of ICT use and changes in ICT use, and ICT monitoring;

- the type of organisation – whether it is classed as a flexible organisation, a healthy work organisation or a learning organisation – assessed by indicators such as job rotation, group work, task complexity, skill development, job demands and workload, job control,

performance targets and incentives, performance tracking, access to information about the organisation and the ability to express views about the organisation.

Changes in work organisation include: changes in the amount of time spent working in teams; changes in difficulties in meeting targets; changes in frequency of work to tight deadlines or at very high speed; changes in the amount of time spent working at places other than employer's premises; changes in the amount of time spent using a computer; changes in the amount of time spent in meetings; changes in the skill needed to do the current job; perception of changes that have occurred at the workplace; impact of these changes on tasks and duties; point of view about the consequences of changes; and involvement in the change process.

Many of the questions asked in this section are similar to those in the employer questionnaire (captured in Table 3 above). Although they have not been duplicated here, it is useful to remember that developing linked employer-employee questions allows optimisation of the information collected at each level. Here, both employers and employees are able to give information on work organisation, albeit with a different view. As a result, a given indicator can be translated into different questions for each questionnaire.

Employee participation and control

Employee participation is deemed to be an important form of labour relations in the context of innovation and organisational change. This section of the survey contains questions in a range of areas, such as: membership of a trade union or staff association; changes in trade union or staff association membership; participation in decision-making about an employee's own duties; involvement in decisions about change; involvement of employees through meetings; changes in involvement of employees through meetings; the use of incentive pay schemes and profit sharing; and involvement in performance appraisal.

Employees are asked retrospectively about their views on the changes that have occurred in the workplace over the past two years. When changes are identified, the survey asks employees about how they have been involved in the process of change. For example: did they personally take part in deciding them or negotiating them? Was a trade union or work council involved? Have they been personally consulted or informed before the changes were introduced? Are they satisfied with their level of involvement in decisions about the changes?

Table 9: Indicators for employee participation and representation

Indicators	Survey questions
Membership of trade union or staff association	CUNIONMEM
Change in trade union membership or staff association	CUNIONMEML
Participation in decision-making regarding own duties	CAUT
Involvement in the decisions about change	BINVOLVE, BINVOLVESAT
Involvement of employee through meetings	CMANMEET, CMEETVIEWS, CEXPVIEWS, CMEETIMPACT
Change in involvement level of employee through meetings	CMEETCHG
Use of incentive pay schemes and/or profit sharing	REMUN
Involvement in performance appraisal	CAPPRAISE, CAPPRES

Job control and job demands

Job demands and job control are two dimensions of the working situation that will have an impact on the well-being of employees. 'Job demands' is a concept that looks at the tasks that need to be completed and in what sort of time frame, and is often referred to as workload. Job control looks at the amount of decision-making a person has in the work they do in a given working day, often described as decision authority, and the ability to use and possibly improve their skills set at the same time, often described as skill discretion. An employee will find their well-being depends on the level of job demands and a certain level of job control. Together, job demands and job control provide an assessment of the quality of the job content rather than of the quality of working life.

The indicators used in this section relate to the following areas: working to tight deadlines or at speed; change in working to tight deadlines or at speed; conflicting demands; learning new things; requirement for high skills levels; task variety; repetitiveness of tasks; freedom to make decisions; and work assistance.

Table 10: Indicators for job control and job demands

Indicators	Survey questions
Working to tight deadlines or at speed	BWEFFORT
Change in working to tight deadlines or at speed	BCHGWEFFORT
Conflicting demands	BTARGETc
Learning new things	BDLRNNEW, DHELPWORKER
Job requires high skills	DEDGETJOB, DEDDOJOB
Task variety	CAUTC
Repetitiveness of tasks	CAUTU, BTASKREC, BWORKPRES
Freedom to make decisions	CAUTC, CAUTS, CAUTU, CAUTH
Work assistance	BWORKASSIS, BWRKASSISa-b

Wages

For most employees, the wage is the primary form of compensation that they receive in return for their labour, and is usually their principal source of income. From an employee perspective, high wages may serve as a motivation to resist organisational change if that change may offer some risk of job loss. Employees may also seek to secure wage increases as a form of compensation for reorganising their working methods, particularly if the new working arrangements are to require greater levels of effort.

This section asks questions related to gross salary and hours of work. However, there are various problems associated with this, such as periods of measurement, and whether employees know their gross wage. There are also issues related to comparing wages across countries: since earnings levels differ markedly across Europe, employing the same absolute bands in different countries would lead to within-country bunching across few bands, and hence too little within-country dispersion would be captured. Currency movements also affect between-country comparisons. Therefore, the survey recommends that questions ask for a respondent's monthly gross salary or wage, using a categorical response list of earning bands determined by country-specific decile ranges, and for the usual hours of work.

Table 11: Indicators for wages

Indicators	Survey questions
Gross salary	WAGE, IREMUN
Hours of work	AHOURS, AFULLTIME, EOVERTIME

Skills utilisation

Skill or competence is a key issue both for employees and for employers. The general phrase 'skills utilisation' encompasses three main concepts that are relevant to the employees' experience of organisational change; the level of skills or job competences, their development or

enhancement, and the extent to which the job skills match the skills possessed by employees. The survey attempts to capture all three concepts.

Overall, the measurement of individual employee's skills is largely restricted to indicators for formal educational development and work experience, because direct measures – for instance, by testing respondents' skills – would only be feasible for a narrow range of skills such as literacy, numeracy and IT. Even then, such testing would occupy considerable interview time and be costly.

Considerable progress has been made in recent years, however, in the development of indicators to capture job skills. While job complexity cannot be measured directly, a proxy indicator of complexity can be found in the education level and prior experience needed to acquire the skills to do the job, and this can then be used as an indicator of an employee's broad skills or competence. For generic skills, the idea is to question respondents about what generic tasks they are performing in their jobs. Behaviour-related and factual questions are seen as preferable to items asking about personal competences.

Quite a wide range of indicators are used in this survey, covering the employee's own educational level or achievement, the extent of their prior work experience, the level of educational achievement required for their job, and the extent of prior relevant work experience required for their job. Further questions relate to the use of their computing skills, problem-solving skills and language skills. Also covered are issues such as skills mismatch, learning requirements, participation in and intensity of training and learning, and skills changes.

Table 12: Indicators for skills utilisation

Indicators	Survey questions
Own educational level/achievement	HEDU
Extent of prior work experience	HWEXP
Level of educational achievement required for a job	DEDGETJOB, DEDDOJOB
Extent of prior relevant work experience required for a job	DWKEXPJOB
Use of computing skills	BCOMPLVL
Problem-solving skills	DPROBSOLVE
Language skills	BFORLANG, BFORLANGa-b
Skills mismatch	DOVERSKILL, DUNDERSKILL
Learning requirements	BLRNEW, DHELPWORKER
Participation in, and intensity of, training and other learning	DTRAINED, DTRAINETIME
Skills change	DSKILLCHG

Working time and work–life balance

The survey states that working time and work–life balance is an important component of the majority of people's lives. Therefore, it is important to consider the impact of organisational change on individuals, both on their working hours and on their social and family life (the so-called work–life balance). This section therefore considers those factors of working time that could be affected by organisational change and also the effects of organisational change on work-life balance. However, there is likely to be some level of overlap between the two discussions as working time is a large part of work–life balance for any employee.

In the area of working time, questions are asked about working hours, the working week, overtime working, working outside standard hours, and holiday entitlement. Components of home life that are important when considering work–life balance are also considered, and the survey also includes questions about an employee's partner and whether the household contains any individuals with care needs. Questions are also asked about the flexibility of the working week and childcare arrangements.

Table 13: Indicators for working time and work–life balance

Working time	Working week	AHOURS, AFULLTIME
	Overtime	EOVERTIME, ECHOICE, EREFUSE
	Working outside 'normal' hours	BCONOUT
	Holiday entitlement	EHOLIDAY
Household composition	Partner	HCOHABIT, HSPSEJOB
	People dependent for care	HCARE
Work-life balance	Flexibility of working week	ECHOOSETIME, ECHOOSEDAY
	Childcare arrangements	HCHILDCARE

Employment security

Employment security is affected by factors such as the type of job an employee has (for instance, fixed-term or part-time), and feelings about the likelihood of job loss in the future (in the case of this survey, the time period is the coming 12 months). The cost of job loss is also considered as a factor in employment security.

The survey notes, however, that the cost of a job loss cannot be measured perfectly using survey techniques. One imperfect measure of the cost of job loss is to ask the respondent how difficult it would be to regain employment that is 'as good as' their current employment. The harder an individual believes it would be to find an 'equivalent' job, the higher would be the associated cost of job loss.

This part of the survey therefore asks questions related to employment type, probability of job loss and cost of job loss.

Table 14: Indicators for employment security

Indicators	Survey questions
Employment type	ACONTRACT, AFULLTIME
Probability of job loss	FLOSEJOB, BJOBRISK
Cost of job loss	FGETNEWJOB

Employee well-being

Employee well-being could come from many parts of an individual's life. Therefore, any questions about how employees are feeling should look specifically at how their job has made them feel recently, rather than how they have been feeling in general. While it may be true that stress at work may make them feel differently about many other aspects of their lives, it is also true that feelings from everyday life that have nothing to do with work could be included in answers by employees to this latter indicator. In order to allow for this, this section of the survey includes three questions on depression and three on anxiety, adapted from other scales.

This section of the survey also asks questions in relation to employee well-being, depression and anxiety (adapted from existing scales), job satisfaction, absence, and whether absence is due to work accidents.

Table 15: Indicators for employee well-being

Indicators	Survey questions
Employee well-being	GWELL
Job satisfaction/dissatisfaction	AJOBSAT, BINVOLVESAT
Days of absence	GABSENCE
Whether any days of absence are due to work accidents	GABREASON

Commentary

Meadow project is clearly an important and comprehensive contribution to the development of a standardised method for collecting and interpreting harmonised data on organisational change and work restructuring, and their economic and social impact at the EU level.

The Guidelines should help to deepen researchers' understanding of the dynamics of organisations and their employees on a range of key issues, enabling uniform data to be collected and cross-cultural analyses to be undertaken, thereby complementing existing national surveys. Reliable and harmonised cross-cultural data on issues such as the dynamics and management of organisational change is particularly vital in the current climate, at a time when policymakers in the EU are attempting to find a way to help organisations deal with the economic crisis and mitigate its impact on the labour market.

A final conference on the Meadow project took place in January 2010, at which the guidelines were presented, and the feasibility of producing harmonised statistics on organisational dynamics at the EU level was discussed. In addition, further discussions took place on the subject of building a partnership to carry out a European survey on organisational change and its impacts.

In terms of the development of subsequent national surveys, pilot Meadow surveys have been or are about to be carried out in Sweden, Denmark, Norway and Finland. Sweden has implemented the employer section of the survey, and linked surveys are planned in the other countries. In addition, Luxembourg is planning a survey inspired by Meadow.

Some results for the Swedish survey (9.7Mb PDF) are available.

Andrea Broughton, Institute for Employment Studies

Appendix: Methodology

The Guidelines were created through a series of interrelated tasks and objectives, starting with integrating existing knowledge on organisational change and restructuring, before moving towards the identification of a core set of indicators that were developed into survey questions, as follows:

- integrating existing knowledge on organisational change and restructuring;

- mapping and assessing existing quantitative national and European data sources at the employer and employee level;

- explaining the complementarities between the measures proposed in the Meadow Guidelines and existing measures in OECD and Eurostat survey manuals;

- agreeing on best practices in relation to European survey instruments on organisational change and its economic and social impacts and defining a core set of indicators to be translated into questions;

- testing the Guidelines, which involved designing an employer and an employee questionnaire that translated the core set of indicators into survey questions;

- the exploitation and dissemination of the Guidelines.

Any problems that arose from the cognitive testing of the Guidelines were subsequently resolved.

Results of the cognitive testing

The cognitive testing process was carried out in two phases between April and October 2009 in eight European countries (Denmark, France, Finland, Germany, Hungary, Italy, Netherlands, Sweden, and the United Kingdom). It took the form of face-to-face interviews with a selected group of managers and employees from both the private and the public sectors, giving a total of 247 interviews. Out of these, 156 were conducted in Phase I (73 for employers and 83 for employees) while in Phase II there were 91 interviews (45 for employers and 46 for employees). The number of interviews by country ranged from one in Finland to 43 in Denmark. The majority of the interviews for both employees and employers were in the tertiary sector (179/247), in large firms with more than 250 employees (112/247), and in the private sector (168/247). The interviews were designed to last no longer than one hour. The questionnaires were translated into the national language of seven countries.

The selection process stressed the participation of a diversity of workplaces rather than using a random sample. Employees were drawn from a range of occupational categories and employees and employers were not matched in the same workplace. It was permitted to draw on personal and business contacts, as long as they had not been overused for this purpose, for instance to test several other questionnaires.

The testing was conducted in five stages.

- In the first stage, the questionnaires were tested among the Meadow researchers, and subsequently amended and shortened. Each questionnaire was therefore divided into three parts; questions that had been tested in other surveys and which did not require additional testing, a group 'A' set of logically cohesive questions, and a group 'B' set of logically cohesive questions.

- In the second stage, phase I interviews were conducted on both the 'A' and 'B' groups of questions, and the following types of information were obtained.

1. Did each question get the information it was intended to get?

2. Were all words understood?

3. Were the questions interpreted in the same way by all respondents?

4. Did all closed questions have an answer that applies to each respondent?

5. Were the questions answered correctly and in a way that could be understood?

6. Did any part of the questionnaire suggest bias?

- In the third stage, after the interviews were completed, each interviewer summarised their findings on a question-by-question basis. The comments from all countries were then analysed to provide a complete review of the tested questions. Problematic questions were revised, in part using the suggestions of the interviewees. The revised questions were then sent to members of the Meadow research project for comments.

- In the fourth stage, all revised questions from stage three were tested in Phase II interviews to determine if the questions were now easier to understand and answer. Some questions were deleted because no satisfactory solution was found for identified problems.

- In the fifth stage, draft final versions of each questionnaire were circulated among the Meadow group for final comments. A final check was conducted to identify any errors not detected in the previous stages.

Employer questionnaire

In Phase I, interviews were conducted with employers who were owners, CEOs, directors, heads of department, heads of divisions, and managers. The average length of the interviews was approximately 60 minutes. Employers from 73 establishments were interviewed in Phase I, of which 33 responded to questionnaire A and 40 to questionnaire B. The majority of the establishments (68 out of 73) were in Europe and five in the United States. A total of 17 interviews were conducted with employers from public sector organisations and 50 interviews were with employers from private enterprises.

Phase II used only one questionnaire which included all questions from the A and B group that needed to be retested. Interviews were conducted with managers from 45 establishments. The majority of the managers (41 out of 45) were located in Europe and four in the United States.

Following the testing a number of questions were deleted, particularly those relating to ICT, and a number were revised. The main problems requiring revisions included the following.

- Precision of information: several questions asked for precise interval level information. Most respondents did not have this information readily available or would have had to consult their archives. The solution was to provide response categories that covered a range.

- Excessive information: questions with too much explanatory information often confused the respondents. These questions had to be simplified for better understanding.

- Lack of knowledge: several questions involved concepts or terms that were unfamiliar to the respondents. In some cases, including an explanation of the concept solved the problem, but

in other questions the concept was too technical to be clearly explained. These questions were deleted.

- Concepts involving broad definitions: in this case, the problem was not a lack of knowledge but a lack of a focus, requiring further specification, clarification and examples.

- Concepts involving narrow definitions: in contrast to the problem of concepts that were defined too broadly, some concepts were considered by the respondents to be too narrow or the wording was found to be too specific and limiting. The question was changed to allow for broader scope.

- Similar concepts and definitions: two or more questions covered different aspects of the same concept. The questions were either merged or one question was deleted.

- Range: in some cases, the range was inappropriate. The response categories included ranges which were either too high or too low in relation to the respondents' answers, requiring adjustment of ranges either downwards or upwards, to reflect common answers. In others, the response categories did not cover all possible options. The range categories were altered to cover from zero to 100% or different/additional 'yes' categories were included.

- Ill-defined alternatives: in some cases, the alternative response options did not cover related concepts or classes of individuals; in others, the response options were not clearly understood due to wording, requiring changes in the choice of words; the response options for some questions were too broad, requiring further specification/details; some response options missed relevant information, requiring either further specification as above or splitting the question into two or more steps; some response options had some degree of overlap, requiring correction for clear differentiation among alternatives; and, finally, not all common alternatives/answers were included, requiring the addition of new ones.

Employee questionnaire

Phase I interviews were conducted with employees occupying positions such as managers, administrators, coordinators, specialists, scientists, researchers, engineers, teachers, secretaries, clerks, receptionists, assistants, advisors, and consultants. The average length of the interviews was approximately 50 minutes. The completed sample comprised 83 employees, of which 42 responded to questionnaire A and 41 to questionnaire B. The majority of the employees (76 out of 83) were in Europe, four in the United States and three had two or three different countries of origin.

Phase II interviews were conducted with employees occupying positions such as managers, administrators, civil servants, coordinators, researchers, accountants, dental hygienists, architects, graphic designers, engineers, agents, builders, workers, teachers, librarians, planners, clerks, receptionists, assistants, advisors, consultants, and waiters. The completed Phase II sample comprised 46 individuals. Most of them were located in Europe (41 out of 46) and four in the United States.

For the employee questionnaire, three main problems arose.

- Poor precision: the question was not clearly stated.

- Unrealistic questions: scope too broad, concepts poorly defined, reluctance to reply. These questions involved concepts or ideas that did not reflect what actually takes place in the work environment or posed questions that the respondents were reluctant to answer. In these cases,

the respondents found it difficult to identify themselves with the question. The solution involved re-wording to reflect actual conditions.

- Inappropriate response categories: the response options or ranges were not relevant to the respondents' experience. These problems were solved by adding new response options, changing wording, or changing the type of range, for example from a time reference in terms of days or weeks to the percentage of time spent on different tasks.

EF/12/18