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WP 2: “Data collection and processing systems (DCPS) for the conventional markets”

and

WP 3: “Data collection and processing systems for organic markets”

Deliverable D2

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List of Abbreviations

CBS ..... Statistics Netherlands
CN ..... Combined Nomenclature
COICOP ..... Classification of Individual Consumption by Purpose
CPC ..... Central Product Classification by Activity
CPI ..... Consumer Price Indices
EAN ..... European Article Number
ECHP ..... European Community Household Panel
EEA ..... Eastern European Accession Countries
ESU ..... European Size Unit
EUROPROMS ..... European Production and Market Statistics
EU-SILC ..... European Union Statistics on Income and Living Conditions
FADN ..... Farm Accountancy Data Network
FAO ..... Food and Agriculture Organisation of the United Nations
FSS ..... Farm Structure Survey
DCPS ..... Data collection and processing system
GIP ..... Gross Indigenous Production
HBS ..... Household Budget Survey
HICP ..... Harmonized Indexes of Consumer Prices
ISIC ..... International Classification of Economic Activities
MS ..... Member States
NACE ..... Classification of Economic Activities in the European Community
NSI ..... National Statistical Institutes
NSO ..... National Statistical Offices
OECD ..... Organisation of Economic Co-operation and Development
SAD ..... Single Administrative Document
SBS ..... Structural Business Statistic
SGM ..... Standard Gross Margin
TF ..... Type of Farming
VAT ..... Value Added Tax
WG ..... Working Group
WHO ..... World Health Organisation
WP ..... Work Package

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1 Introduction

European markets for organic products are developing fast. In Europe, as other parts of the world, more and more farm land is being converted to organic production. In order to adjust production and consumption levels, detailed market information is needed, especially where decisions with a long-term impact need to be taken, for example on converting specific land or livestock enterprises requiring high levels of investment in glasshouses, housing, processing facilities etc. Since public subsidies (regional / national / European) are heavily involved in these investments, valid, accurate and up-to-date information is essential not only for farmers and growers, but also for policy-makers, consultants, processing industry etc.

EU-research projects such as OFCAP (FAIR3-CT96-1794) and OMIaRD (QLK5-2000-01124) have shown that regional or national data gathering takes place in many countries, but often only very basic data are reported, such as certified organic holdings, land areas and livestock numbers. Important market data, e.g. the amount of production, consumption, international trade or producer and consumer prices, do not exist in most European countries. In some European countries there are only rough estimates of the levels of production and consumption. There is no standardization and data are seldom comparable. Furthermore, detailed information on specific commodities is missing. Hence, investment decisions are taken under conditions of great uncertainty. Likewise, if politicians want to support organic agriculture, they do not know whether it would be better to support production or consumption or to address problems in the marketing channel.

The EU concerted action EISfOM (QLK5-2002-02400) (European Information System for Organic Markets) is attempting to take the first steps in solving these problems. The aim of this concerted action is to build up a framework for reporting valid and reliable data for relevant production and market sectors of the European organic sector in order to meet the needs of policy-makers, farmers, processors, wholesalers and other actors involved in organic markets.

In order to reach this aim, this action was split into several workpackages. This report describes the approach and results of workpackages 2 and 3. In this first chapter the objective and general approach of these work packages will be described.

Chapters 2 and 3 provide an overview of international statistics and data collection systems within the food supply chain at the public and the private level. Chapter 4 describes national statistics and data collection systems within the food supply chain. In Chapter 5, an analysis and appraisal is made of the results with regard to organic data collection and processing systems (DCPSs) and their integration into existing common DCPSs. Chapter 6 draws several general conclusions. Two substantial annexes complete the report, one with the country reports on the situation of data collection and processing in all investigated countries and the other with the first and the second stage questionnaires covering the different data collection levels.

1.1 Objectives of work packages 2 and 3

The overall objective of WP2 and 3 could be described as the review of existing systems of data collection and processing for organic as well as conventional markets in order to understand their characteristics and identify opportunities for development and improvement.

This should result in an up-to-date, systematic overview of existing data collection systems for organic markets, with particular attention to production, processing, trade

(imports and exports), prices and links between them. The results are described in this report. It includes a description of existing data collection and processing systems for conventional markets in order to develop reference models or identify possibilities to merge systems. This reports covers all 15 EU countries, all 13 candidate/applicant states and 4 EEA countries.

The specific objectives for WP2 were:

- to collate information on existing data collection and processing systems (DCPSs) for *conventional* markets
- to analyse these systems in order to develop reference models for organic market information systems.

Partner 9 (LEI, The Netherlands) was mainly responsible for this work package with assistance of Partner 5 (ZMP, Germany).

The specific objectives for WP3 were:

- to collate information on existing data collection and processing systems (DCPSs) for *organic* markets
- to compare conventional and organic DCPSs
- to make suggestions for the harmonization of organic DCPSs within existing conventional DCPSs.

Partner 2 (FIBL, Switzerland) was mainly responsible for this work package with assistance of Partner 10 (University of Kassel, Germany).

Workpackages 2 and 3 have been merged for practical reasons since there was a good deal of overlap - it was realised that the same institutions would have been contacted for both WP2 and WP3. Therefore a single questionnaire covering WP2 and WP3 was developed to avoid contacting the same institution repeatedly and thus to burden them as little as possible.

1.2 Approach and methods

1.2.1 Sub-regional approach

A sub-regional approach was adopted, with sub-regional coordinators responsible for the collation of information in their sub-regions and for the production of working (review) papers synthesising the results. They were responsible for liaising with experts, stakeholders and statistical offices or other institutions. They played an active role in communication with national statistical offices and other key players in their region as well as in making proposals for experts to be invited to the European seminars.

Sub-regions are defined as:

West (United Kingdom, France, Ireland)
Coordinator: University of Wales Aberystwyth (UWA), United Kingdom

Central 1 (Germany, Slovakia, Spain)
Coordinator: Zentrale Markt- und Preisberichtstelle für Erzeugnisse der Ernährungs-, Land- und Forstwirtschaft (ZMP), Germany:

Central 2 (Switzerland, Turkey, Liechtenstein)
Coordinator: Forschungsinstitut für biologischen Landbau (FiBL), Switzerland:

Central 3 (Austria, Slovenia, Romania, Bulgaria)
Coordinator: Leopold Franzens Universität Innsbruck (Uni Ibk), Austria:

Central 4 (Czech Republic, Hungary)
Coordinator: University of Kassel (Uni K), Germany:

Mediterranean (Italy, Greece, Portugal, Malta, Cyprus)
Coordinator: Università Politecnica delle Marche (Uni Ancona), Italy:

Scandinavia (Denmark, Norway, Sweden, Finland, Iceland)
Coordinator: Danish Research Centre for Organic Farming (DARCOF), Denmark:

East (Poland, Estonia, Lithuania, Latvia)
Coordinator: Warsaw Agricultural University (WAU/SGGW), Poland:

Benelux (Belgium, The Netherlands, Luxembourg)
Coordinator: Agricultural Economics Research Institute (LEI), The Netherlands:

1.2.2 Questionnaires and actor levels

To collate the required information, questionnaires were prepared. First, an introductory questionnaire (Q1) was sent out requesting general information on the relevant organisations and their data collection and processing activities and offering the opportunity to become a member of the project. In return for collaboration in responding to questionnaires and other requests for information, members are given access to unpublished project reports, e-mail discussion groups and the membernet pages of the project website www.eisfom.org, together with the chance to participate in the two European seminars. The format of Q1 can be found in Annex 2.

Using the information from Q1, a second set of questionnaires (Q2) was sent out, asking for more detailed information about the Data Collection and Processing Systems (DCPSs), which the organisations run. Based on the information from Q1, Q2 was developed for different actor levels relevant to organic agriculture. The actor level is the level on which data are collected, for example directly at the farm on the farm / production level. The DCPS on a particular level does not necessarily provide information only on this level, e.g. a DCPS on the retailer level offers also data on consumer behaviour.

The following levels were defined for the second stage questionnaire (Q2):

Production (Farm) Level

Structural data about agriculture; price data on farm level; farm accountancy data; production volume and value data when gathered on farm level

The farm level is split up into several existing standard systems:

- Farm Accountancy Data Network (FADN)
- Farm Structure Survey (FSS)
- EU Regulation 2092/91
- Production statistics
- Price statistics
- Supply Balance Sheets

Wholesaler / Processor Level

Production volume and value, price data, turnover, market trends / forecasts

Import / Export Level

Import and export volumes

Retailer Level

Data on sales volumes and values at the retailer level

Consumer level

Data about food consumption, household expenditures and consumer prices for food

The set of Q2 questionnaires for each of these levels can be found in Annex 2. All questionnaires, in English, German and French versions, were made generally available through the project website as well as being sent directly to the contacts who had been identified.

The questionnaires could be filled out electronically and most respondents used this option, which made the process easier. The results were collected centrally by LEI and were entered into a database, using the program WinEnquete. From this database it was possible to generate the total output in SPSS or Excel.

1.2.3 Country reports

The results of the Q1 and Q2 surveys were used to compile the country reports, which describe the actual state of the art of data collection and processing with regard to organic farming in each country. The sub-regional coordinators were responsible for compiling the reports on each of their countries.

In the country reports, first the **national relevance of organic farming** is described, for example numbers and percentage of farms and organic areas, market size, import/export market orientation. Further a **rough overview of the structure of national public and private statistic/data providers in the areas of agriculture and food production** is given. The results of the first inquiry (Q1) give the number of surveyed institutions, response rate and response structure, a short introduction to the profile of the main national data providers by actor levels (type and main function of organisation, private or publicly funded, etc.) and the presentation of institutions which run 'organic DCPSs'. Also the results of the second stage inquiry (Q2) are given: the number of institutions surveyed, response rate and response structure, overview of existing DCPSs by actor level and detailed information about DCPSs which include organic data collection. The **conclusions** assess the current national situation of data collection for the organic market, concerning

- data availability
- data quality
- main data gaps by actor level
- strengths and weaknesses of existing DCPS.

The response rate to the two questionnaires was very variable in different countries. It was concluded that more information was available than was apparent from the results of Q1 and Q2. Therefore it was decided that additional information should be gathered by using the expert knowledge of the country coordinators, by additional

desk research, telephone calls, etc., and by updating the country reports with new information identified during the first EISfOM seminar in Berlin in April 2004.

Country reports for all the countries investigated are included as Annex 1.

1.2.4 Country tables

The country reports contain detailed information that can be used to carry out future activities. However, there was a need to have a concise overview of most relevant information for future development of the European information system. Therefore tables were developed for each actor level, ticking the answers to 7 key questions on the existence of DCPSs. The farm level was further split up into several existing standard systems:

- Farm Accountancy Data Network (FADN)
- Farm Structure Survey (FSS)
- EU Regulation 2092/91
- Production statistics
- Price statistics
- Supply Balance Sheets

A further distinction was made by indicating if these systems were *harmonized* to an international system or not.

The format of these tables can be found in the Annex 2. These tables were filled out for each country and provide the basis for working papers which have been discussed internally.

2 International statistical and data collection systems within the food supply chain at the public level

Chapter 2 gives an overview of public international organisations running DCPSs in different countries. It is shown that several DCPSs on international level already exist covering all levels from production to consumption, but in most international DCPSs organic data are not distinguishable or collected separately from total data. Since this shows potential for integration, the institutions running international DCPSs and their data collection and processing systems are presented in the following chapter.

2.1 Food and Agriculture Organisation of the United Nations (FAO)

2.1.1 Codex Alimentarius

The Codex Alimentarius Commission implements the Joint FAO/WHO Food Standards Programme, the purpose of which is to protect the health of consumers and to measure fair practices in the food trade. The *Codex Alimentarius* is a collection of internationally adopted food standards, presented in a uniform manner. It also includes provisions of an advisory nature in the form of codes of practice, guidelines and other recommended measures to assist in achieving the purposes of the Codex Alimentarius.

In view of growing production and international trade in organically produced foods, the *Codex Committee on Food Labelling* developed the *Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods* to facilitate trade and prevent misleading claims. The guidelines are intended to facilitate the harmonization of requirements for organic products at the international level, and may also provide assistance to governments wishing to establish national regulations in this area.

The Codex Alimentarius describes organic production methods as following: *"organic farm system employing management practices which seek to nurture ecosystems which achieve sustainable productivity, and provide weed, pest and disease control through a diverse mix of mutually dependent life forms, recycling plant and animal residues, crop selection and rotation, water management, tillage and cultivation. Soil fertility is maintained and enhanced by a system which optimises soil biological activity and the physical and mineral nature of the soil as the means to provide a balanced nutrient supply for plant and animal life as well as to conserve soil resources. Production should be sustainable with the recycling of plant nutrients as an essential part of the fertilizing strategy. Pest and disease management is attained by means of the encouragement of a balanced host/predator relationship, augmentation of beneficial insect populations, biological and cultural control and mechanical removal of pests and affected plant parts. The basis for organic livestock husbandry is the development of a harmonious relationship between land, plants and livestock, and respect for the physiological and behavioural needs of livestock. This is achieved by a combination of providing good quality organically grown feedstuffs, appropriate stocking rates, livestock husbandry systems appropriate to behavioural needs, and animal management practices that minimize stress and seek to promote animal health and welfare, prevent disease and avoid the use of chemical allopathic veterinary drugs (including antibiotics)."*

The Codex Alimentarius also mentions that labelling products as “organic” implies a duly constituted certification body or authority has certified them. An integral component of certification is the inspection of the organic management system.

This definition of organically produced food provides an international baseline for distinguishing data from the organic sector from data from other food production systems and economic activities.

2.1.2 General Data Approaches

The Food and Agriculture Organisation of the United Nations (FAO), as part of its mandate, compiles information and data on various aspects of food and agriculture from all countries. The data are analysed and interpreted to support FAO's programmes and activities and, in accordance with the basic functions of the organisation, they are disseminated to the public through publications, CD-ROM, diskettes and the Internet (http://faostat.fao.org).

The user interface to the database provides data under eighteen domains. The data can be broadly classified into three groups:

- country-level data referring to items such as agricultural production and trade, producer prices, land use, means of production etc.
- derived data such as agricultural production and trade indices, food supply etc.
- data referring to items such as population and labour force that are derived by, or in collaboration with, other international agencies.

Country-level data are collected through

- tailored questionnaires sent annually to member countries,
- magnetic tapes, diskettes, FTP-transfers and accessing national websites,
- national/international publications,
- country visits made by the FAO statisticians and
- reports of FAO representatives in member countries.

However, many developing countries still do not have an adequate system of statistics pertaining to the agricultural sector. Some of the available agricultural data are incomplete in terms of:

- range of commodities covered (for example, only cash crops for large farms are covered),
- range of variables or data sets covered (for example, in many countries data on agricultural inputs are virtually unavailable),
- national coverage (certain regions of the country are sometimes not covered by the national statistical reporting system).

Furthermore, even when data are available, their reliability may be questionable. When official data from member countries are missing, FAO statisticians estimate the minimum data required to calculate world, continental and regional aggregates and to compile secondary derived statistics such as food supply. These estimates are made

when no other information is available at the national level. This part of the exercise is undertaken within the framework of the *Supply and Utilization Accounts*, for which established preparation guidelines are available. These accounts also help in checking the consistency of various data sets.

Table 2-1: Agricultural data collections of FAO being available on the Internet.

Domain	Data Collections				
Agricultural Production	Crops Primary	Crops Processed	Live Animals	Livestock Primary	Livestock Processed
Agricultural Production Indices	Agricultural Production Indices				
Agriculture and Food Trade	Crops and Livestock Primary and Processed			Live Animals	
Trade Indices	Crops and Livestock Primary and Processed Equivalent				
Commodity Balances	Crops Primary Equivalent		Livestock and Fish Primary Equivalent		
Food Supply	Crops Primary Equivalent		Livestock and Fish Primary Equivalent		
Food Balance Sheets	Food Balance Sheets				
Producer Prices	Crops Primary		Livestock Primary		
Land	Land Use		Irrigation		
Means of Production	Agricultural Machinery	Fertilizers	Pesticides Trade	Pesticides Consumption	
Food Aid (WFP)	Shipments				
Exports of Cereals by Source and Destination	Exports of Cereals by Source and Destination				
Population	Annual Time Series		Long-term Series (quinquennial) Total/Rural/Urban Population	Long-term Series (decennial) Agricultural Population and Economically Active Population	
Fishery Data	Primary Products		Processed Products		
Fish Production	Fishes, crustaceans, molluscs and misc.aquatic animals	Aquatic mammals	Crocodiles and alligators	Pearls, corals and sponges	Aquatic plants
Forestry Data	Roundwood, Sawnwood, Wood-Based Panels			Pulp, Paper and Paperboard	
Forestry Trade Flow	Bilateral Trade Matrices				
CODEX ALIMENTARIUS: Pesticide Residues in Food	Maximum Residue Limits, Extraneous Maximum Residue Limits				
CODEX ALIMENTARIUS: Veterinary Drug Residues in Food	Maximum Residue Limits				

Source: Adapted from FAO (2003): http://apps.fao.org/page/collections, FAOSTAT Agriculture Data - Data Collections

The FAO databases as structured in table 2-1 offer data for several countries and products. The four rows *Agricultural production*, *Agriculture and food trade*, *Food balance sheets* and *Exports of cereals by source and destination* are analysed by items and options for data request. The items for the products and the analysis rows are listed in table 2-2.

Table 2-2: Items for products and analysed rows

Rows	Items
Agricultural production	Seed, Area Harvest, Production, Yield,
Agriculture and food trade	Seed, Area Harvest, Production, Yield
Food balance sheets	Production, Imports, Stock Changes, Exports, Domestic Supply, Feed Seed, Waste Food Manufacture, Food, Supply/Capita, Other Uses, Calories/Capita, Protein/Capita/Day, Fat/Capita/Day, Fat/Capita/Day
Exports of cereals by source and destination	Import countries

Source: FAO (2003): http://apps.fao.org/page/collections, FAOSTAT Agriculture Data - Data Collections

The data can be requested as tables or CVS-files. Data are available for several products and countries for the years from 1961 to 2002.

The following statistics of the data can be requested:

- basic statistics
- mean
- standard deviation
- exponential growth
- three year average
- centre moving average
- per capita
- weighted average.

2.1.3 Organic Data Approaches

In the project *Priority Area for Inter-disciplinary Action on Organic Agriculture (PAIA/ORGA),* FAO tries to reach two aims:

- assisting member countries, including both the public and private sectors, to access rapidly and easily a global and up-to-date picture of the current state of organic agriculture
- providing support to the organic community through the reciprocal exchange of information on organic agriculture in different countries.

Priority Area for Inter-disciplinary Action on Organic Agriculture (PAIA/ORGA) is divided into two phases:

- designing and developing a computerized system for input, storage and analysis of existing country data on organic agriculture.
- updating and maintaining a network of regional and national institutions

"The corporate organic agriculture website (www.fao.org/organicag) is a gateway to FAO and other information resources. […] It is proposed to develop an information system on organic agriculture worldwide". By this organic agriculture website, FAO publishes information about meetings, projects and discussion fora. Also included are a bibliographic search, a list of FAO contacts and FAQs about organic farming.

This information on production and trade in organic agricultural products will be particularly helpful in orienting investments in conversion to organic systems and successful marketing of organic products.

Other homepages with data on marketing and trade or statistical information are linked with the FAO organic agriculture website (e.g. OFMA, FiBL). The Organic Europe site contains links to country reports on organic farming in 25 European countries, EU documents and European organic farming statistics, an address database of organic organisations in Europe and a resources site including links to other organic farming related sites. A section on news also provides information on recent and forthcoming organic events.

FAOs reports are available as documents which can be downloaded.

The database on organic agriculture will be developed by the PAIA/ORGA. FAO's role will be to initially develop a data collection and retrieval system on organic agriculture. In a second stage, FAO will coordinate data processing and information management to assist collaborating institutions who will maintain and update their country information in the long term.

The strategy is based on the implementation of a single global information system that, in its second phase, will promote the development of national information systems with similar structures, linked by a communication network. In the long term, end users (producers, operators, traders, researchers and institutions) will access the network through their own national system. Each national system will be fed by sources already existing in the country. National systems will communicate with each other through regional centres, which will act as the hub station. Regional centres will connect the national systems with remote systems, such as the FAO system.

2.1.4 FAO's Data Collection

The aims of FAO in organic farming are described as "*launching a cross-sectoral programme on organic agriculture. FAO's activities will cover the provision of information and cost-effective discussion on organic production and trade, institutional support and policy advice to members, facilitation of research, extension and networking, technical assistance for developing skills, organic standards and certification capacities and pilot projects that explore and promote feasible organic agricultural techniques*."

"*FAO has recently begun developing a questionnaire to collect information from its member countries. After a testing phase, this questionnaire will be reviewed in order to establish a standard system for data collection on organic produce and trade. Awaiting data generation and dissemination in the form of FAO statistical yearbooks on organic agriculture, Country Profiles on Organic Agriculture are being compiled (expected release date: 2004*)."

The objectives of the questionnaire are introduced as:

- developing standards for collection of data
- preparing country profiles on the state of organic agriculture
- collecting statistics on organic agriculture production and trade

FAO tries to facilitate establishing and/or strengthening national public-private dialogue, as most organic agriculture information is to be found with non-governmental organisations and other private and civil society organisations.[1]

[1] References in this chapter:

- *FAO (2003): Organic Agriculture at FAO – Country data, http://www.fao.org/organicag/doc/Questionnaire.doc, Chpt. Objectives of the questionnaire last retrieved at 22. 12. 2003*
- *FAO, 2003: Organic Agriculture at FAO - Country data, http://www.fao.org/organicag/frame6-e.htm, last retrieved 22. 12. 2003*
- *FAO (2003): http://apps.fao.org/page/collections, FAOSTAT Agriculture Data - Data Collections*
- *Nadia El-Hage Scialabba, 28 January 2003, DATABASE ON ORGANIC AGRICULTURE*
- *Organic Europe 2003: http://www.organic-europe.net/default.asp, last retrieved 22. 12. 2003*
- *The questionnaire on organic agriculture of the FAO can be found in the Annex.*

2.2 Organisation of Economic Co-operation and Development (OECD)

The Organisation of Economic Co-operation and Development (OECD) groups 30 member countries sharing a commitment to democratic government and the market economy. With active relationships with some 70 other countries, NGOs and civil society organisations, it has a global reach. The work covers economic and social issues from macroeconomics, to trade, education, development and science.

The OECD runs agreements with almost all other international organisations regarding data transfer. It monitors developments in member countries and in key non-member countries by comparable statistics. The OECD disseminates a very large amount of statistics to external users. The comparability and reliability of these statistics is ensured by the continuous development and adoption of international statistical standards and best methodological practice. The OECD also develops new types of statistics, new statistical standards and statistical systems itself, mostly in co-operation with national statistical offices, central banks, government agencies and other international organisations. Statistical activities vary from data collection, transformation and dissemination to development.

In co-operation with Eurostat, OECD has developed a glossary of statistical terms with the main statistical definitions.

Some of the core values of the OECD in producing statistics are to guarantee impartiality, to co-operate with national statistical agencies and other international organisations and to ensure quality by a quality management system including coverage, timeliness, comparability, accessibility, use of modern methods and standards for data and metadata collection, storage and dissemination. Therefore dialogue and cooperation with stakeholders and others are improved, together with the visibility of and access to OECD statistics, the tools for collection, storage and management of data and metadata and the interrelationships with national data providers and other international organisations.

IMF (International Monetary Fund), Eurostat, Statistics Canada and other NSOs (National Statistics Offices) have identified various sets of data quality components and have adopted quality frameworks to improve their organisations and the quality of data produced. Based on this, the OECD developed a framework, in which quality and its dimensions are defined (relevance, accuracy, credibility, timeliness, punctuality, accessibility, interpretability, coherence). Further the procedures for assuring the quality of proposed new statistical activities and for evaluating the quality of existing statistical activities on a regular basis are defined. Internal quality guidelines have been developed covering all phases of the statistical production process.

The OECD co-operates with the United Nations Statistical Commission, the Conference of European Statisticians, the Statistics Committee of the UN Economic Commission for Asia and the Pacific and the Eurostat Statistical Programme Committee. In addition data sharing exists with Eurostat, the European Central Bank, the Bank for International Settlements, the International Monetary Fund and the Statistical Division of the United Nations.

As Eurostat reinforced its role in developing the European Statistical System, the OECD has a key role to improve co-operation and co-ordination between different developed geo-economic areas (mainly EU, North-America, Asian and Pacific

countries) and to support the development of statistics in transition, emerging and developing countries, together with the UN Statistical Division and other international organisations.

The organisation of statistical activities in the OECD is based on a "decentralised model", which means that various statistics are developed both by the Statistics Directorate (STD) and by directorates responsible for analytical studies and policy analyses. STD is responsible for macroeconomic statistics (e.g. international trade) and for some social and business statistics. Most other statistical activities within the OECD are carried out in eight directorates:

- ⇒ Economics (ECO)
- ⇒ Employment, Labour and Social Affairs (ELSA)
- ⇒ Education (EDU)
- ⇒ Science, Technology and Industry (STI)
- ⇒ Financial, Fiscal and Enterprise Affairs (DAF)
- ⇒ Environment (ENV)
- ⇒ Public Governance and Territorial Development (GOV)
- ⇒ Development Co-operation (DCD).

The statistical information is disseminated by paper or electronic publications, the *Statistical Portal* on the website (www.oecd.org), by statistical press releases, by the *OECD Statistical Newsletter* and the new publication *Statistics Brief*. All OECD methodological publications and documents are freely available on the *Statistical Portal*, as well as the *OECD Glossary of Statistical Terms*. In addition, a wide selection of data is freely available. All other publications have to be paid for.

The OECD identifies four main categories of users for its statistics. Each category has different rights and tools for accessing OECD data. The general public has free access to basic statistics through the *Statistical Portal*, can purchase data from the on-line bookshop or purchase subscriptions to published data files from *SourceOECD* or selected OECD data from commercial data resellers. The media has privileged access to *SourceOECD* and gets information from the public relations office. Officials in member countries and in other international organisations have access to all published OECD data through OLISnet (*OECD Online Information Services*) and the OECD Secretariat Staff members have general access to OECD internal databases.

Most data are collected and processed on an aggregated level, for example average prices for a commodity such as beef and veal.

2.2.1 Statistics on Agriculture and Fisheries

The OECD keeps several statistical databases on agriculture and fishery, which are described in the following. The most important ones are the *Agricultural Commodities Outlook Database (1970–2008)*, the *Agricultural Policies in Emerging and Transition Economies (1990-2002)*, the *Agricultural Support Estimates (1986-2002)* and the *Economic Accounts of Agriculture (1995-2001*).

The Agricultural Commodities Database

The *Agricultural Commodities Database* provides an annual update of statistical information and projections by country to 2008 for production, consumption, trade, stocks and prices for temperate zone agricultural products in OECD countries and selected information on other countries, including Argentina, Brazil, China, Russia and the other independent states of the former Soviet Union. Aggregate results are also provided for the OECD and non-OECD areas as well as for the world. Supply and use balances for cereals, oilseeds, meat and dairy products are presented.

Most series cover the period from 1970 to the most current year and include updated annual projections for up to five years in the future. The database also includes the results of analysis looking at the impacts on these medium-term projections of alternative assumptions on important markets and policy variables.

The results are published in the OECD Agricultural Outlook where data on economic assumptions, world prices, main policy assumptions for cereal markets, world cereal projections, main policy assumptions for oilseed markets, world oilseed projections, main policy assumptions for meat markets, OECD meat projections, main policy assumptions for dairy markets, world dairy projections (butter and cheese, powders and casein), OECD trade projections, main policy assumptions for sugar markets and world sugar projections (in raw sugar equivalent) are included. The data are collected annually by a questionnaire.

Agricultural Market Access

The *Agricultural Market Access Database* contains a common data set on tariffs (scheduled and applied), tariff-rate quotas (scheduled and applied) and imports so that researchers, policymakers and others can analyse the levels of tariff protections in agriculture among WTO members. The development and use of a common data set can assist in improving international transparency of agricultural trade as covered by multilateral rules and disciplines.

The database has been placed on the worldwide web where it has been accessed by over 7,000 users in the first year. The data has been used to provide tariff profiles of several countries by co-operative effort with Agriculture and Agri-Food Canada, the EU Commission – Agriculture Directorate-General, the Food and Agriculture Organisation of the United Nations (FAO), the World Bank, the United Nations Conference on Trade and Development and the United States Department of Agriculture (Economic Research Service).

Agricultural Policies in Emerging and Transition Economies

The *Agricultural Policies in Emerging and Transition Economies* database provides a unique collection of internationally comparable and policy-relevant macroeconomic and key agricultural indicators covering 21 emerging and transition economies. The data includes a set of comparative PSE (producer support estimate)/CSE (consumer support estimate) data for Russia and six other transition economies for the period 1986-2001 applying the same internationally recognised methodology as for OECD members.

The database aims to provide data for calculations of support (PSE/CSE), for papers and meetings of the Global Forum on Agriculture, for the annual flagship publication *Watch on Support* concerning Agricultural Policies in Emerging and Transition

Economies and for various technical meetings. Besides publication in the *Watch on Support*, the database is freely available on the OECD public website.

The PSE database is widely used internally by the IMF (International Monetary Found), WTO (World Treaty Organisation), researchers, universities and governments of both OECD member and non-member countries. It is of particular interest in the context of EU enlargement.

Economic Accounts for Agriculture (EAA)

The *Economic Accounts for Agriculture* contains internationally comparable data for 30 OECD countries as well as area totals for the euro area and EU-15. It provides a coherent and detailed framework for quantifying agricultural activities in monetary terms using the new accounting methodology adopted following SNA 93. Besides detailed output (amount, structure, composition) and input data, different value-added and income measures as well as capital formation data are shown. Inter alia, EEA allow the remuneration of production factors and of agricultural income to be determined.

The EAA database has undergone a profound methodological review for EU countries and extension to better meet future analytical needs. The methodology of the *Economic Accounts for Agriculture* has been reviewed with member countries to implement necessary changes and the addition of capital stock measures is to be investigated for possible inclusion. OECD has included smaller agricultural units in its questionnaire to take better account of the needs of some of its newer member countries.

Producer and Consumer Support Estimates

The *Producer and Consumer Support Estimates* provides detailed information on producer support estimates and consumer support estimates for the following products: wheat, maize, other grains, rice, oilseed, refined sugar, milk, beef and veal, pig meat, sheep meat, wool, poultry meat, eggs and other commodities. It includes the complete data series on PSE/CSE, the reference prices used, the exchange rates used and a complete documentation of definitions and sources provided on a country and commodity basis.

The data are used to calculate the various indicators of support to agriculture to evaluate agricultural and other policies in OECD countries, mainly in the annual *Monitoring and Evaluation Report*. In addition the data are also freely available on the OECD public website.

The data collected and the method used to calculate the indicators of support are reviewed both internally and externally by the Working Party on Agricultural Policies and Markets on an annual basis. These review processes improve the data quality as well as the methodology used in the calculations.

The data are collected on an annual basis. Some countries provide all information on support estimates, whilst others deliver only a few data.

2.2.2 International Trade Statistics

International Trade by Commodity Statistics

Data on foreign trade of OECD countries and China, Hong-Kong and Taipei, as well as export and import data on commodities and partner countries (260 in total) in

terms of value (at current prices: thousand of USD) and quantity are collected annually and processed in the *International Trade by Commodity Statistics*. Data are also provided for OECD main country groupings (OECD-Total, NAFTA, OECD-Asia and Pacific, OECD-Europe, EU-15, etc.). Some data derive directly from the Statistical Office of the European Communities (Eurostat) and are published under the name EU15 - Extra EU, which excludes Intra-EU trade.

Data on agricultural products are also collected: live animals and food (meat, dairy and eggs, fish, cereals, vegetables and fruits, sugar and honey, coffee, tea, fodder and more), beverages and tobacco. Production, manufacture, wholesale and retail trade are all covered.

The database is available in a paper version and on CD-ROM or on-line. The paper version of the database is released annually in five volumes. On the electronic versions (CD-ROMs or on-line), the data are classified at the most detailed level and updated quarterly.

2.2.3 Statistics on Organic Agriculture

OECD does collate organic land area statistics as part of its agri-environment indicator work, but this indicator is still under development. Regarding other statistics OECD does not differentiate organic products in data collection and processing.[2]

[2] *References:*
- www.oecd.org
- www.sourceoecd.org

2.3 Eurostat

In its DCPSs, Eurostat covers a broad spectrum of the sectors along the food chain. The following chapter is mainly related to those levels of data collection which are being studied in the EISfOM project.

2.3.1 Agriculture

Within the agriculture, forestry and fisheries sector, the following themes are covered by single DCPSs.

- agricultural incomes and prices
- agricultural structures, land use and landscape
- production
- agri-industry statistics

Agricultural incomes and prices

FADN

The **F**arm **A**ccountancy **D**ata **N**etwork (FADN, or RICA in French) is an instrument for evaluating the income of agricultural holdings and the impacts of the Common Agricultural Policy**.** The Farm Accountancy Data Network of the European Union (FADN) has been established since 1965.

The aim of the network is to gather yearly accountancy data from a sample of farms that is representative for all (commercial) farms for the determination of incomes and business analysis of agricultural holdings.

An annual survey is carried out by the Member States of the European Union. Member States are responsible for assembling the data in their own country and sending the data to Brussels. Although Member States have different ways of assembling the data, the bookkeeping principles are harmonized across all the countries. In Brussels data are checked and entered into a database.

The methodology aims to provide representative data along three dimensions: region, economic size and type of farming. While the European Commission is the primary user of analyses based on FADN-data, aggregated data can be found in the standard results database. The variables described in a farm return refer to:

- physical and structural data, such as location, crop areas, livestock numbers, labour force, etc.
- economic and financial data, such as the value of production of the different crops, stocks, sales and purchases, production costs, assets, liabilities, production quotas and subsidies, including those connected with the application of CAP measures.

The Farm Accountancy Data Network (FADN) collects accountancy data from a sample of agricultural holdings in the Community. Holdings are selected to take part in the survey on the basis of sampling plans established at the level of each region in the Union. The survey does not cover all the agricultural holdings in the Union but only those which, due to their size, could be considered commercial, i.e. farms which market the bulk of their production and which exceed a minimum level of economic

activity defined in terms of economic size (see the definition of the European size unit below). This means that the very small farms are not represented. In the most recent accounting years there were almost 58,000 holdings (Community of Fifteen) representative of commercial farms in the FADN sample. Together they represented on average 90% of total production in the EU.

The terms used in the tables relate to the following definitions.

Some definitions of FADN:

- The accounting year is a 12-month period starting between 1 January and 1 July, the exact date varying from one Member State to another.
- The European size unit (ESU) is a unit of measurement of the economic size of the agricultural holding. A farm has an economic size of 1 ESU if its total standard gross margin is ECU 1,200 of 1990 SGM (standard gross margin). The standard gross margin for each enterprise corresponds to the average value, over a three-year period and in a given region, of production minus certain variable costs.
- The type of farming (TF) of a holding is determined by the relative share in the holding's total standard gross margin of each of the enterprises of the holding. The holdings in the FADN sample are selected in such a way as to be representative, for each division, of the holdings belonging to each cell formed by the combination of TF and economic size class. The populations to be represented are derived from the Community farm structure surveys.

While the European Commission is the primary user of FADN-data, aggregated data can be found in the standard results database (http://europa.eu.int/comm/agriculture/rica/dwh/index_en.cfm). More information on the FADN can be found at: http://europa.eu.int/comm/agriculture/rica/index_en.cfm

Prices

Producer price indices cover sales of crop and animal products (output) from agriculture to the rest of the economy. Purchase price indices cover purchases of means of agricultural production (input).

There is a system of EU agricultural price indices (input and output) supplemented by a system of absolute prices for the principal agricultural products and means of production on a monthly and annual basis.

Land use and landscape

Farm Structure Survey (FSS)

In the *Farm Structure Survey* (FSS) about 600 characteristics in 13 different sections are surveyed. Data can be presented in a large number of different dimensions, depending on the characteristics. The information can be presented on several geographical levels, e.g. countries, regions and districts at different NUTS-levels.

Each member state of the European Union is required to collect information for the EC Structure Survey. Data are available at standard region, county and, under certain conditions, district level. The FSS is carried out every two or three years and

a full census survey is carried out every ten years. It was first conducted in 1966/67 and covered land use, tenure, livestock, cropping, machinery and labour force.

The FSS is able to measure the size (both physical and economic) of holdings. The survey also yields information, which allows farms to be classified on their type of production. The standard gross margin (SGM) allows different agricultural products to be measured on a common basis. It is basically the difference between the production value and direct proportional costs of production and is measured for each type of crop and animal production. The farm structure survey also contains information about farm labour.

The results from 1975 onwards are held on a computer databank in the form of standard tables. The main results can take up to three years to be published, but some results are released about two years after data are collected on the farm.

Production

Crop production

Data are collected four times a year and updated, on an ongoing basis, over the year. In combination with annual estimates the database provides annual data on area, yield and production of cereals, other crops, fruit, vegetables, fodder and wines on a national level.

It offers a combination of information on production, imports and exports, domestic use, variations in stockage and human consumption result annually in supply balance sheets on a national level for cereals, other crops, fruit, vegetables and wines.

Animal production

Animal production statistics provide monthly slaughtering figures and quarterly forecasts of the GIP (Gross Indigenous Production) of bovine, pig, sheep and goat meat for human consumption. Monthly statistical surveys provide data on milk and milk products and on the production and trading of eggs. The information is based on data from slaughterhouses plus estimates of slaughtering on farms. The production forecasts are based on livestock surveys and other sources (e.g. exhaustive surveys). Figures which account for at least 95% of cow's milk are collected.

The data combine information about usable production, total import (from both EU-countries and from non-member states), supplies, uses, total exports (to both EU-countries and to non-member states), initial stocks, final stocks, domestic use, losses, animal feed, industrial use and human consumption. Results are collected and published annually in supply balance sheets for animal products on a national level. Annually supply balance sheets are presented for the following product groups: meat (adult cattle and calves, pork, sheep and goats, horses, poultry, offal and other) and dairy products (fresh production excl. cream, milk and buttermilk, cream, concentrated milk, whole milk powder, skimmed milk and butter milk powder, butter, cheese, total eggs, eggs for hatching and other eggs).

Supply balance sheet

The supply balance sheet statistics, referred to in more simple terms as balance sheets and which in the majority of cases relate only to food products, are one of the instruments used in setting up and managing agricultural markets under the common agricultural policy. The various types of data shown in these balance sheets are an indispensable aid to assessing the guidance and development of these markets, and

the results that can be drawn from them are one of the elements on which those responsible for agricultural policy base their decisions.

Supply balance sheets are drawn up for all important agricultural products and comprise comprehensive, summarised tables showing the quantities for the components of resource and use (balance sheet headings) taken from various statistical sources or estimates, for a clearly defined type of products, for a given period, and for a given geographical area. They can be regarded as an extension in physical units to the overall accounts - expressed in terms of value - for the agricultural sector, although in this case the figures are broken down by reference to individual products.

Organic farming

(The information given in the organic farming sub-chapter is based on the document: Eurostat, Unit F-5: Food safety, rural development and forestry, Directorate F: Agricultural, environmental, food and regional statistics, Working Group 'FOOD SAFETY' Meeting of 13 and 14 November 2003 in Luxembourg: *Agrobiology data*).

Council Regulation (EEC) No 2092/91 from 1991 on organic production of agricultural products and indications regarding agricultural products and foodstuffs lays down the requirements for organic farming in all Member States. Since the implementation in 1992, many farms across the EU have converted to organic production methods.

Regulation No 2092/91 was amended by Council Regulation (EEC) No 1804/1999 to include livestock production. Council Regulation (EEC) No 1788/2001 lays down the detailed rules for implementing the provisions concerning the certificate of inspection for imports from third countries under Article 11 of Council Regulation (EEC) No 2092/91.

Obligations on the Member States to provide data and information to the Commission (Regulation No 2092/91)

Article 15 obliges the Member States to communicate to the Commission in particular a list of the operators who, on 31 December of the previous year, had given notification under Article 8 (1) (a) and are subject to the inspection system, and a report on the supervision carried out.

Under the same Article, Member States shall provide the Commission with the list of inspection bodies approved on 31 December of the previous year, their legal and operational structure, their standard inspection procedure, their penalty arrangements and, where appropriate, their mark.

This regulation has established procedures for the Member States to report data on organic farming to the European Commission. Regulation 2092/91 describes in full detail the agricultural practices that are considered at the EU level as organic farming. It covers the activities of growing of crops and farming of animals. Also, operators involved in organic farming supply chains are subjected to inspections in order to verify that they follow the rules set up in the regulation. They must have a certificate delivered by the responsible national authorities before labelling their products as organic.

The requirements set up in the regulation are very close to the requirements in the Codex Alimentarius and imply in depth changes of farm management, from the raw materials involved in the process to a completely different organisation of the farms practising organic farming. The Codex Alimentarius is a collection of internationally

adopted food standards presented in uniform manner. It also includes provisions of an advisory nature in the form of codes of practice, guidelines and other recommended.

Available data concerning organic farming

DG Agri has developed a questionnaire for the collection of organic farming data. There are 7 sections to this questionnaire, 3 of which are obligatory and contain confidential data:

Form A: List of approved operators (confidential data)
Form B: List of approved inspection bodies (confidential data)
Form C: Supervision reports (confidential data)
Form D: Number of operators (producers, processors, importers)
Form E: Area and yield
Form F: Organic livestock numbers
Form G: Industrial output

Forms D to G represent statistical data. There are also data from the *Eurofarm* (structure of agricultural holdings) inquiry concerning the percentage of organic agricultural holdings with regard to the total number of agricultural holdings.

Table 2-3 gives an overview of the data available in each Member State (based on the DG Agri questionnaire).

Table 2-3: Available Data on Organic Farming in the Member States

	2000				2001				2002			
	Form D	Form E	Form F	Form G	Form D	Form E	Form F	Form G	Form D	Form E	Form F	Form G
Belgium	X	X	X	P	X	X	X	P	-	-	-	-
Denmark	X	X	-	-	X	X	-	-	-	-	-	-
Germany	X	T	-	-	X	T	-	-	-	-	-	-
Greece	X	X	-	-	-	-	-	-	-	-	-	-
Spain	X	X	-	P	X	-	-	-	-	-	-	-
France	X	X	-	-	X	X	X	P(T)	X	X	X	P(X)
Ireland	X	X	-	-	-	-	-	-	-	-	-	-
Italy	X	X	-	P	X	X	-	-	-	-	-	-
Luxembourg	X	X	-	P	X	X	-	P	X	X	X	X
Netherlands	P	X	X	-	P	X	X	-	-	-	-	-
Austria	X	X	-	-	-	-	-	-	-	-	-	-
Portugal	X	X	-	-	X	X	-	P	-	-	-	-
Finland	X	X	-	-	X	X	-	-	X	X	X	-
Sweden	X	X	-	-	X	X	-	-	-	-	-	-
United Kingdom	X	X	-	-	-	-	-	-	-	-	-	-

Form D: Number of registered operators (producers, processors, importers)
Form E: Area and yield
Form F: Organic livestock
Form G: Industrial Production

X *Data available in detail*
T *Total only available*
- *No data available*
P *Producers only*

2.3.2 Trade

International trade forms an increasing part of the world economy and, as such, must be measured reliably. The compilation of trade figures is founded on a legal basis which is set out in a series of Council and Commission regulations. The aim of international trade statistics is to record all goods that add or subtract from the stock of material resources of a country by entering or leaving its territory. By their nature international trade statistics are concerned with transportable goods.

In external trade statistics, exports are recorded at their *fob* (free on board) value and import at their *cif* (cost, insurance, freight) value. Therefore, import values include charges, such as transport and insurance, relating to that part of the journey which takes place outside the statistical territory of the importing country. Export values correspond to the value of goods at the time and place where they leave the statistical territory of the exporting country.

External trade statistics are collected on a monthly basis and include information on: the partner country (country of destination for exports and country of origin or consignment for imports), the goods exchanged and the mode of transport. The indicators are the trade value in euros and the quantity expressed in tonnes as well as in the supplementary units when available.

Intra-European Union trade

Statistics on trade between the Member States of the European Union are based on Council Regulation (EEC) No 3330/91 of 7 November 1991 and on the various implementing regulations which lay down or supplement the rules on methodology, thresholds and questionnaires. The Intrastat system, which was created as a means of collection of these statistics, came into operation on 1 January 1993. Its main features are given in the paragraph below.

Intrastat provides for the direct collection of information from companies which send the relevant national administration a summary declaration for the previous month's operations. In France and Italy, these declarations also serve statistical and fiscal purposes. It is based on a close link with the VAT (Value Added Tax) system relating to intra-EU trade. The tax authorities of the Member States are required, at least once every quarter, to transmit to the statistical services a list of operators who have made purchases or sales and the value of these operations, so that the exhaustiveness and quality of the statistical data can be checked.

Extra-European Union trade

Statistics on the European Union's trade with non-member countries are currently based on Council Regulation No 1172/95 of 22 May 1995. Two features of Regulation 1172/95 deserve special mention.

The subject of extra-EU trade statistics and the information which they contain are defined with reference to the legislation and customs procedures, whereas the collection of data is based mainly on the Single Administrative Document (SAD). In order to meet their specific national needs, the Member States collect and process other information which is contained in the SAD but which is not required at

Community level. Similarly, particular requirements governing certain fields exist at national level in the absence of harmonization at Community level.

Distributive trades

The distributive trades publication provides an overview of the importance of the distributive trades sector and its various economic activities (among others wholesale and retail trade) in Europe. It contains an analysis of the data on distributive trades delivered in the frame of the regulation on structural business statistics (Council Regulation n°58/97) by the EEA (Eastern European Accession) countries.

Since 1995, structural business statistics (SBS) have been collected in the area of distributive trades according the SBS regulations harmonized framework. Short-term indicators have been collected at EU level in this area since reference year 1998. One of the basic sets of information provided by structural business is on the relative size of industries and retail trade measured in terms of both turnover and employment.

2.3.3 Consumption

The Eurostat Working Group (WG) on Household Budget Surveys (HBS) was created by a decision of the DGINS conference on 29.11-1.12.1989. The aim was to compile the existing information in the Member States (MS) on household budgets in order to make all this information available at European level as well as to improve harmonisation of surveys in terms of the concepts used, classification of variables, data collection and data processing methods.

So far, this project has not had any legal basis and therefore it was run as a "gentleman's agreement" among the Member States, some EFTA countries and Eurostat. Essentially, each country kept the targets, the uses and the programming of its national HBS and, at the same time, it collaborated with Eurostat in order to compile a Europe-wide data set on household budgets with a frequency of about 5 years[3]. The approach of this statistic is cross-sectional rather than longitudinal.

Available data

One of the features of this statistic, and probably one source of the problems, is the wide variety of uses and users. Traditionally, the main use of this statistic at the national level has been to collect information on household consumption expenditures for updating the 'weights' for the basket of goods used in the Consumer Price Indexes. However, many other uses have arisen either at national or European level: to estimate the household consumption accounts for National Accounting, to carry out a wide variety of analyses on consumers and consumption (i.e. consumption patterns, nutritional studies, etc), to supply complementary information for studies on poverty and social exclusion, to research economic and consumption issues, and so forth.

The key concept of the data collected by the HBS is "household final consumption expenditure". These data are broken down by the COICOP-HBS classification. Together with these data, the HBS collect numerous cross-sectional variables regarding households and household members. These variables allow HBS results to be used in many different ways.

[3] Although several EU countries and many Accession and Candidate countries conduct annual surveys, this is an international comparison exercise and can only proceed at the pace of the slowest participant.

In the WG meeting of October 2001 it was agreed that the next reference year would be 2005. All the candidate countries have promised to participate fully in the next round.

In the first round, the methodologies used by the MS to carry out the HBS were very far from being harmonised. Since then, all the countries participating in this project and Eurostat have made big efforts in order to harmonise their HBS and to improve data comparability.

In order to allow Eurostat to process the data received and to perform an ex-post harmonisation and answer specific user requests, countries deliver micro-data to Eurostat. However, the gentleman's agreement only allows Eurostat to disclose aggregated tables or indicators.

Methodology and characteristics of the HBS

The Household Budget surveys (HBS) in the European Union are sample surveys of private households carried out regularly under the responsibility of the National Statistical Offices (NSIs) in each of the fifteen Member States (European Statistical System). Essentially, they provide information about household consumption expenditure on goods and services, with considerable detail in the categories used; information on income, ownership of consumer durables and cars; basic information on housing and many demographic and socio-economic characteristics. Unlike other European statistics, HBS is voluntary and no EU regulation exists. Therefore each Member State is free to decide the objectives, methodology, programming and resource assignment for their own HBS.

In co-operation with the National Statistical Offices of the Member States, Eurostat has for many years worked on the quality - mainly the comparability of HBS statistics within the EU. In spite of the important progress already made, there is still much room for improvement regarding quality and harmonisation of HBS data.

The current situation of HBS can be summarised as follows:

- HBS is a complex cross-sectional statistic with no legal framework at the EU level. Although there is a common classification (COICOP-HBS), each country has its own targets, survey programming and methodology, which are not totally aligned with other countries. Eurostat carries out an ex-post harmonisation on the data sets delivered by each participating country, but it is not possible to totally eliminate the comparability problems.
- There is a wide variety of uses and users at both the national level and the European level.
- Frequency is long (about 5 years)[4] and timeliness is also long (for certain data, more than 3 years).
- In June 2002, a Task Force (TF) meeting was organised to discuss some problems identified in the current COICOP-HBS nomenclature. More specifically, the COICOP divisions for food, housing, financial services and insurance were analysed. The main problems were of two types: omissions of categories in COICOP-HBS (such as the lack of a specific category for "frozen vegetables"), and problems of classification leading to conflicts at the current level of detail of COICOP-HBS (such as the different way of classifying "pizzas" and other "combined" products and services by different countries). The HBS WG approved

[4] Op.cit. (3)

the modifications proposed by the TF to the COICOP-HBS classification during its meeting in May 2003.

Presently the main points of divergence in the national methodologies creating comparability problems among the MS are as follows.

- There are still some differences in the national definitions of:
  - household and household members,
  - head of household/reference person,
  - child/adult.
- Countries have different uses for COICOP-HBS nomenclature, either in the degree of detail or in the criteria used to solve the borderline cases. Moreover, a few countries continue using national nomenclatures instead of COICOP-HBS. The other countries have carried out national adaptations of COICOP-HBS by adding newer levels of detail. In principle this practice does not cause any problem, provided that these nomenclatures are compatible downwards with COICOP-HBS.
- There are some problem areas in the definition of the concept of household consumption expenditure:
  - "actual final consumption" versus "final consumption expenditure" (although the first concept would be preferable from a theoretical point of view, for the moment it is only possible to implement the second),
  - treatment of goods or services retained for own final consumption,
  - treatment of salaries in kind,
  - rent for housing,
  - recording of consumption expenditure in alcohol, narcotics, prostitution and illegal services,
  - transactions in existing goods,
  - treatment of gifts and transfers,
  - treatment of certain types of insurance and financial services,
  - health and education consumption expenditures.
- Similarly, household income still has some divergences details, definitions and manner of recording.
- Sample definitions and survey organisation are also very different from country to country.
- Formats of data files delivered by the countries to Eurostat are very different.
- With regard to frequency, while there are seven MS with annual or continuous surveys, the other eight perform their HBS every 5 years. However, non-annual surveys are "reasonably" well synchronised.

The methodological divergences among the CC countries are even bigger.

These problems were discussed in the meeting of Directors of Social Statistics held in Luxembourg in April 2003 and during the last HBS working group meeting held in May 2003. The discussions have resulted in a set of recommendations for further

harmonisation to be implemented for the next round of data collection planned for the reference year 2005.

Analysis of the use of HBS data for the study of consumption of organic products

Historically, the prime objective of conducting HBS in all the Member States was to collect information on household consumption expenditures for use in updating the 'weights' for the basket of goods used in the Consumer Price Indices (CPI). The 'weights' measure expenditure on specific goods and services as a proportion of total expenditure. Over the years, the range of uses has grown as the surveys have also had to provide a picture of living conditions in private households in certain areas and at certain periods of time. To this end, the surveys provide detailed descriptions of a private household's total consumption and expenditures by household characteristics such as income, possession of consumer durables, housing and many demographic and socio-economic characteristics. The surveys also provide information on standards of living in terms of income and expenditure. Hence HBS are multi-purpose surveys which cater for a large number of uses and users. In terms of the scope and detail of information supplied, the surveys are an invaluable source of information on the economic and social living conditions of households and individuals in the EU Member States.

The multi-purpose nature of the HBS is one of its strengths, but it also is a source of problems. Each user of HBS data has slightly different information needs and hence there is constant pressure on the HBS managers to include new variables or improve the level of detail in the existing classifications. As a result, the size of the questionnaires to be filled by the participating households has increased enormously. It can be easily inferred that the usual consequence of this practice has been an increased reluctance to collaborate with these surveys and a fall-off in the response rates. Therefore HBS managers have had to find suitable trade-offs between the amount of information collected by the HBS and achieving acceptable response rates.

At the moment, there are three main difficulties for using HBS as a source of information for analysing the consumption of organic products:

1. Organic products are not explicitly covered by the latest version of the COICOP-HBS nomenclature.
2. HBS do not collect quantities of product consumption (in physical units); only data on consumption expenditures (on economic value) are gathered.
3. HBS is not suitable for building time series or analysing the evolution of variables over the time for two main reasons:
    - the frequency of HBS data collections is 5 years.
    - there have been significant methodological changes between all successive HBS data rounds, so that the results of different rounds are not comparable.

For these reasons the possibilities for using HBS data for carrying out studies on the consumption of organic products are limited. If the information needs of these studies are very demanding, the possibility of creating ad-hoc surveys for this purpose should be considered seriously, rather than trying to adapt the existing HBS.[5]

[5] Contact Persons:

Further information on Eurostat and the consumer statistics

The *Classification of Individual Consumption by Purpose* (COICOP) is used to classify both individual consumption expenditure and actual individual consumption. COICOP has been adapted to the needs of *Household Budget Surveys* across the EU and, as a consequence, is compatible with the classifications used in national accounts and price indices. This allows the production of indicators that are comparable across Europe, such as *Harmonized Indices of Consumer Prices* (HICP). Member states have to determine some sub-indices of the HICP on a monthly basis. A sub-index is defined as a price index for every category of expenditures (COICOP-HICP distinguishes 61 categories).

The harmonized consumer price index is developed to compare values for inflation in Member States. They are designed for international comparison of consumer price inflation. The focus is on quality and comparability among the indices of different countries as well as on their relative movements.

Statistics on final consumption expenditure of households come from Eurostat national accounts statistics. Consumption is the value of goods and services for directly meeting human requirements. It covers the purchases of goods and services, the consumption of own production (such as garden production). The consumption purpose 'food, drinks and tobacco' includes all purchases for consumption at home of food excluding specific pet foods and non-alcoholic beverages. It excludes all catering service in or from hotels, restaurants, cafes, catering etc., whether collected by the customer or delivered to the customer's home, and alcoholic beverages.

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3 International statistical and data collection systems within the food supply chain at the private level

In the following chapter international DCPSs at the private level are presented. On the private level, organic data is partly integrated in DCPSs and distinguishable from total data. Also on the private level there is a potential for integrating organic data collection in existing systems.

3.1 ACNielsen

3.1.1 Retail Panel "Market*Track"

General Data Approaches in Germany

The ACNielsen company operates worldwide researching into retail sales to consumers. ACNielsen collects scanning data from a sample of about 750 supermarkets and offers producers and retailers a detailed insight into product sales. Information is collected about retail channels like supermarkets, hypermarkets and discounters. Usually ACNielsen retail panel reports are confined to packaged goods at multiple retailers and drug discounters. Beverage shops are included when necessary. ACNielsen offers information about all kinds of development in retail by area, type of supermarket, size of supermarket. For many product characteristics ACNielsen delivers facts like volumes, sales, prices and distribution level.

Organic Data Approaches

In Germany ACNielsen has no database which includes the EANs of all organic products. They analyse trade texts and manufacturers' price lists to generate organic product information. In addition ACNielsen's field service examines all products of a category in a sample of shops and divides them into organic or not. So far this field research is only in place for milk and yoghurt. In May 2004, shop audits will take place for milk, yoghurt, butter and curd cheese. Next year ACNielsen intends to cover about 10 further product categories.

In the UK ACNielsen is able to generate reports for organic food for the categories margarine, butter, processed cheese, yoghurts, chilled desserts, eggs, UHT- and fresh milk. In France organic yoghurt is available; in Austria organic food reports are available for many dairy categories. Unfortunately there is no information available on the organic food capabilities of ACNielsen Netherlands.

3.1.2 Consumer Panel "Homescan"

General Data Approaches

ACNielsen conducts a consumer panel with 8400 households. These households continuously register data about their product purchase behaviour for fast-moving consumer goods using in-home scanners. In order to register products without EAN (like fresh vegetables) ACNielsen provides their households with a bar code manual where codes for certain product categories are available. The ACNielsen product split for fresh food is not very detailed.

Organic Data Approaches

ACNielsen Homescan and Market*Track use the same product databases, i.e. when the organic product identification is created for Market*Track the information is also

available in Homescan. For fresh food (without EAN), ACNielsen does not distinguish between organic and conventional food.

3.2 GfK

GfK (Gesellschaft für Konsumforschung) is a marketing research company working in many countries all over the world.

3.2.1 GfK Consumer Scan

General Data Approaches in Germany

GfK's consumer scan is a representative sample of the population for the determination of the size and structure of domestic markets of packed fast moving consumer goods, like fresh products and products for personal care.

GfK conducts a consumer panel with 13,000 households. These households continuously register data about their product purchase behaviour for fast-moving consumer goods using in-home scanners. In order to register products without EAN (like fresh vegetables) GfK provides their households with a detailed code book where codes for many fresh products are available. The GfK split for fresh food is much more detailed than that of ACNielsen Homescan. After scanning a fresh food item in the code book the panellists are conducted to a scanner dialogue in order to record further product characteristics like country of origin, package type and organic / non organic classification. The purchase data of the households are collected by GfK via modem once a week.

Organic Data Approaches

GfK have no database with EANs of all organic products. Thus they have to analyse trade texts and price lists of manufactures in order to generate organic product information for EAN-products. For fresh food without EAN, the scanner dialogue asks the panellist to classify between organic and other food products. ZMP is planning to buy GfK Consumer Scan data for the fresh food categories bread, cheese, sausage, meat, fruit, vegetables, potatoes and eggs.

European Approaches

This panel consists of a large number of households (e.g. for the Netherlands 4,400) which continuously register data about retail and product purchase behaviour for certain product categories. It does not matter which member of the household purchases the products. With help of in-home scanning, the purchases are registered. GfK have developed a codebook to register non-EAN coded products (such as fresh vegetables).

Twice a week all the data about purchases are collected, validated and processed. This processing results in information on a national level, but also information on the level of individual supermarkets is possible. With socio-demographic characterisation of the panel households it is possible to create insights into the purchasing behaviour of the household in a certain country. GfK offers information about all kinds of development in retail by area and shop type. For many product characteristics GfK is able to deliver facts about volumes, sales, prices and penetration, purchase frequencies, loyalty, buyer demographics and attitudes, etc. Using GfK's information, the consumption of food can be divided into product group and retail channel.

GfK can provide the same information for organic products. If the EAN-codes of organic products are identified as organic, the household purchases can be divided into organic and total purchases. For the non-EAN coded products, the GfK panelbook makes a distinction between organic and conventional food products.

3.2.2 IRI Retail Panel

General Data Approaches

IRI is a retail panel research company doing research for retail sales to consumers. The technique is similar to the approach of ACNielsen retail panel “Market*Track”. LEI buys Dutch data from IRI / GfK for, among others, the fresh food categories bread, milk / cheese, meat, fruit, vegetables, potatoes and eggs.

Organic Data Approaches

IRI has no database with EANs of all organic products. They are not planning to build up any organic product classification databases.

3.3 TNS (Taylor Nelson Sofres) / EMNID

TNS is a market information group, located in Europe, America, Asia / Pacific, Africa and the Middle East. Market research is one important task of TNS. They conduct customer research, market analysis, opinion polling and analyse the purchasing behaviour by qualitative and quantitative techniques, household and individual panels, omnibus surveys and depth interviews and new technology for data collecting, analysing and reporting.

3.3.1 Consumer Panel / Superpanel

A consumer panel is a representative sample of the population (representative referring to households, individuals, regions, etc.) which collects and reports regularly and continuously on actual consumer behaviour. TNS runs the *Superpanel*, a consumer panel which offers benchmarking information and specific market information.

The Superpanel covers the total market and provides coherent data sources. All outlets shopped at by the Superpanel respondents are covered, from supermarkets to farm shops and discounters. The consumers collect actual purchases of all main grocery markets by purchase diaries, barcode scanning technology or electronic terminals in the homes. All family members scan all purchases brought into the home by light-pen or palm top. The purchaser code and the shop codes are scanned, as well as the barcodes. Further the total amount spent is registered. For fresh food (products without a barcode) a special product list is used. Whilst organic products are correctly registered at products with a barcode, it is at the panel member's discretion whether to record the fresh food purchase as "organic" or not.

The households are selected from a large database (Claritas) and recruited by post. A primary sample controls the age of the housewife, the size of the household, the socio-economic group (based on occupation), the presence of children and the region.

The Superpanel is constantly being improved, for example by developing class leading panel methodologies, unique specialist panels and superior analysis tools. 28 countries are covered, which is one of the widest networks of all market research companies.

Superpanel data can be useful for trade negotiations, for a professional approach with customers, enhancing national account sales negotiations / presentations, for a pro-active approach as an aid in advertising, PR and other marketing activities or as a strategic tool for developing long term planning within a company. Therefore TNS offers basic and advanced information. Basic information include the general trends in the markets, the market share of the brand or the sector and the performance of retailers, e.g. in expenditures, volumes, average prices, regional trends, category and sector shares and trends, whereas more detailed information describes buyers in particular markets by demographic groups and purchasing frequency, the consumer loyalty of a brand or a sector, the categories presenting opportunities for growth, the most effective in-store promotion, the reaction of consumers to changes in price or packaging and the possibilities to improve the total category management process. Attributes which characterize advanced information are for example consumer penetration, frequency of purchase, average spend or volume per purchase, demographics or consumer trends by retailer.

Beside household panels, TNS also runs individual panels for special “individual” markets (e.g. impulse products, fast food) in UK and Spain. The used sample is representative and offers consistent information. TNS investigates both sector performance (e.g. grocery, fruits and vegetables, dairy) and retailer shares.

3.3.2 Organic data collection

Organic consumption and sales also are covered and reported by TNS. In cooperation with the Soil Association, TNS surveys the retailer shares of organic expenditures and the market value of organic consumption. The TNS Household Panel delivers data on organic products, too. On behalf of the Soil Association, TNS conducted a study on organic products (attitudes, motivation, price premiums, recognising organic, etc.) by an omnibus research. 4,000 adults have been recruited across Great Britain and interviewed to complete and confirm the results of the panel. Consumer purchasing behaviour and consumer characteristics are investigated. The co-operation between the Soil Association and TNS has existed for a number of years now and provides a high quality data set, some published in the annual report and other data published in more specialist documents of the Soil Association.

3.4 EU Projects in regard to Data Collection

3.4.1 OFCAP: Effects of the CAP-Reform and possible further developments on organic farming in the EU (1993-1997)

The aim of the project was to determine the reasons why there are significant differences in the rates of conversion amongst EU countries despite the existence of similar EU regulations. The data was taken from 1985-1997 and combined with qualitative information on the main influences in each country. One project report gives an overview on market growth and development for organic products in 18 European countries - 15 EU countries plus Switzerland, the Czech Republic and Norway.

The main focus of the OFCAP project was the period 1993-1997. A detailed report on production statistics for 1993-1998 by Foster and Lampkin can be found at www.organic.aber.ac.uk (via the statistics or publications (e-library) pages). Another report (Offermann and Nieberg provides price and farm income data.

The methodology used to collect organic data for the market study was based on questionnaires sent to national experts. These national experts summarised literature on their national markets and answered questions about the current situation for different organic products and the developmental trends. The basis for this answers were interviews with key informants in each country who follow the market and / or otherwise have an overview of the national situation. This technique made it possible to obtain estimates or informed guesses from national experts, as otherwise no information would have been available. Collection of information is concentrated on the product groups of highest importance in the national markets. Thus, national experts were requested to choose at least the five most important organic products in the national market, and collect as much information as possible about them.

The questionnaires were completed by the national experts in the first half of 1998, on the basis of the latest information available. This usually covers the situation in the year 1997.

In spite of the methodology the statistical information is incomplete and uncertain for most countries. Furthermore problems with consistency within each country exist, because data are based on estimations given by different persons working under different conditions. The same problem applies to international comparisons.[6]

3.4.2 OMIaRD: Organic Marketing Initiatives and Rural Development

One aim of the project is to analyse all important aspects of the organic market, in order to provide both market actors and agricultural policymakers with reliable advice about the development in Europe, and about general facts that promote or hamper market growth. Therefore data on organic agriculture were collected in 2000 in a style similar to the research conducted by Michelsen et al. (1999) in the OF-CAP project. But as the quality of data was variable and the way of collecting was slightly different, a direct comparison between the two sets of data is problematic.

The data are presented for all 15 EU nations, two EFTA nations (Switzerland and Norway) and two Accession Countries (the Czech Republic and Slovenia). The

[6] References: Michelsen, J., Hamm, U., Wynen, E., Roth, E.: The European Market for Organic Products: Growth and Development, 1999, Stuttgart-Hohenheim

results for the organic market in the year 2000 were published in 2002. A second volume which updates the figures for the year 2001 will be published in 2004.

A detailed questionnaire was distributed by project partners to national market experts in each country examined. Compared with the previous survey in the OFCAP project, the methodology was improved by adding, for example, a calculation section for checking the plausibility of the data collected. This forced contributors to cross check estimates with the data they knew to be reliable. The same survey instrument was used in each country to ensure that the results are comparable on the European level.

The following information on the organic market was requested in the questionnaire for the year 2000:

- organic production levels
- organic consumption
- sales channels
- promotion
- prices
- imports and exports of organic food

In the first half of 2001, the questionnaire was distributed to national contractors (mostly project partners) and subcontractors. If necessary, the questionnaire was translated into the respective national language. Contractors and subcontractors then forwarded the questionnaire to a large number of market experts, such as wholesalers, processors, and key informants of organic producer organisations. The market experts or key informants completed those portions of the questionnaire that related to their special field of expertise (e.g. milk, cereals). Signficant amounts of the data are estimations of the experts or of the contractors of the project.

In most cases, however, the data were not consistently available in any reliable form. To fill these gaps a supplementary literature and internet search for many countries was conducted. In some cases, the production amounts were estimated with the help of acreage, animal numbers and the yields of neighbouring countries.

The data provided by experts were subsequently entered into a calculation section. This section was designed to ensure that the data provided are consistent. Figures which were calculated include organic production as a share of total (organic and conventional) production, organic consumption as a share of total consumption and the market share of organic products. In addition, a further plausibility check was conducted by comparing the surveyed organic data to conventional data taken from official statistics. Additional cross checks between neighbouring countries completed the quality management.

Despite these efforts to check plausibility, the data were not entirely complete. Overall, however, the results are the most accurate set of data on the organic market available. Better data will be possible only when a reliable organic market data information system is established and countries start to collect market data that differentiate between conventional and organic products.[7]

[7] *References: Hamm, U., Gronefeld, F., Halpin, D.: Analysis of the European market for organic food, OMIaRD Volume 1; 2002, Aberystwyth*

Following on from the OFCAP project, EU-CEE-OFP began in 2003 and involves the collection and analysis of production data at regional level, and is aiming to compile a comprehensive data set for the period 1997-2003, building on the earlier OFCAP work.

4 National Statistics and Data collection systems within the food supply chain

According to the results of the analysis of the second stage questionnaire, the farm level is the best covered statistical level in the organic sector. In the majority of the countries investigated there are organisations which collect and process data on organic agriculture and production, including either accountancy, farm structure, production, prices or supply balances. At the other levels (wholesaler / processor, import, export, retail and consumption) there are fewer organic DCPSs compared with farm level. Based on the results of the Q2 inquiry, the number of organic DCPSs for these actor levels is approximately equal.

It has to be recognized that there are several institutions in Europe which did not answer the second stage questionnaire, for example because of time problems. Therefore the results presented for statistics on organic agriculture and products in Europe are not exhaustive.

About half of the known existing organic DCPSs on farm level in Europe are harmonized to an international DCPS and deliver data to it. At all other levels the number of harmonized DCPSs is small. There are clearly more DCPSs on wholesaler / processor, import, export, retailer and consumer level which are not harmonized to an international system.

Most DCPSs on farm level focus on farm structure. Therefore information on the size and the number of organic farms is available in many European countries. Further there are many DCPSs on Farm Accountancy Data Network. All other areas within the farm level are less well covered: structural and control data referring to Reg. 2092/91 or the equivalent national regulation, production statistics, price statistics or supply balance sheets on organic agriculture. Almost all the countries have administrative data (structural 2092/91 data), and some for longer periods than the data derived from farm structure surveys, but there is likely to be only one or two main databases pulling this information together and these may have been missed by the Q2 questionnaires. DCPSs on Reg. 2092/91 on structural and control data or equivalent national regulation are mainly harmonized to an international system; only one DCPS which is not harmonised exists at this level. On the other hand there are only perhaps two harmonized DCPSs on production and price statistics, and several which are not harmonized. There is no harmonized supply balance sheet DCPS.

It is noticeable, especially at the farm level, that there are several DCPSs per actor level in Europe on organic products or production but only in some – perhaps half – are organic data comparable with total data, the method is representative, the data are collected at least once a year, the data are disseminated regularly and a quality management system exists. This is a sign of different qualities between the DCPSs, irrespective of harmonization to an international DCPS. This tendency is also recognizable at other actor levels, but is not as marked as at the farm level.

There is no information about any DCPS on organic production in Cyprus, Greece, and Malta. In all other countries at least one organic DCPS exists.

5 Analysis of the results with regard to organic DCPSs per actor level

This chapter analyses the results of the questionnaires and country reports for each actor level. In section 5.1 the farm level is analysed, in section 5.2 the wholesaler / processor level, in section 5.3 the foreign trade level, in section 5.4 the retailer level and in section 5.5 the consumer level.

5.1 Farm Level

5.1.1 Introduction

This section gives a European overview and analysis of data collecting and processing systems (DCPSs) at farm level with special attention to the potential to include organic data in DCPSs. In section 5.1.2 the information which was already available is described, together with the method of analysis which has been used. Section 5.1.3 outlines the results which are then discussed in section 5.1.4. Finally, some general conclusions are drawn in section 5.1.5.

5.1.2 Material and methods

The following information was available from previous activities and is used for the analysis in this section:

- Basic results of questionnaire 1 and 2 that were sent out in 32 European countries.
- Country reports based on these results and additional research carried out for each country.
- Country tables at farm level, summarizing most important results

Concerning the country tables, questions 1, 2, 4 and 7 were considered to be the most important ones achieve an overview of the current situation in Europe. These questions were:

1. *Does at least one DCPS exist which represents the statistical scopes or methodologies listed at farm level (e.g. FSS)?*
2. *Does at least one DCPS exist where organic data are integrated into a total DCPS and are distinguishable from the total data?*
4. *Does at least one DCPS exist which is based on a census or representative approach (that means the sample represents the total population)?*
7. *Does at least one DCPS exist which runs data quality management systems?*

For each of these questions a table was prepared which gives an overview of all 32 countries that were involved and the total numbers. A summary table was then prepared for the European level.

From the country reports general remarks, problems, strengths, weaknesses and opportunities on DCPSs at farm level are listed.

5.1.3 Results

European overview of DCPSs with organic data

Table 5-1 provides an overview of DCPSs that include organic data and cover the most relevant product groups or farm types, categorized by type.

Table 5-2 provides an overview of DCPSs in which organic data is distinguishable, categorized by type.

Table 5-3 provides an overview of DCPSs based on a census or representative approach, categorized by type, which means that the sample represents the total population of a country.

Table 5-4 provides an overview of DCPSs that run data quality management systems, categorized by type.

Table 5-5 provides the aggregated results of table 5-1 to 5-4 for all the countries.

General remarks, problems, strengths, weaknesses and opportunities

Several issues were mentioned in the country reports that are important for developing a European information system:

- Data is not always made publicly available or is not reported at all.
- In some cases there was no consistent definition of organic farming being used.
- The organisation of organic farming in a country can be difficult and complex. Some parties, especially certifiers, are sometimes unwilling to co-operate in providing data.
- In several systems small farms (usually < 2 ha) are not taken into account, which sometimes means that a substantial part of organic farming activity is left out.
- Some systems do not distinguish many product groups, which makes them less valuable.
- Data is not always very up-to-date
- Representativeness is often a problem, even in harmonized Eurostat systems like FADN; theoretically they should be representative, but in reality this is sometimes difficult to achieve.
- Data quality is also a recurring problem; many systems are only visually checked by experts, and this is not very reliable.
- Data collection is not always consistent because information is sometimes provided on a voluntary basis.
- Some systems are able to make a distinction between converted farms and farms in conversion.
- Many systems are still in a poor electronic format, like Excel sheets. Of course this is often acceptable for their own internal purposes, but is difficult for harmonization.

5.1.4 Discussion

From Table 5-1 it can be seen that:

- FSS is represented most frequently; FADN is second.
- only Sweden has a Supply Balance Sheet system that contains organic data (as far as we know at the moment).
- FADN is mostly harmonized to an international system. This is not surprising, because this is a European standard and, in principle, is obligatory for all EU countries. For FSS, it can be concluded that national standards are frequently used.
- EU regulation 2092/91 is mostly harmonized when it is available as a DCPS. This is also not surprising since the standard is a European one.

From Table 5-2 it can be seen that:

- in most FADN systems, organic data is distinguishable from total data; this is only partially true for FSS.
- there are only a few systems for production and price statistics and supply balance sheets in which organic data is distinguishable.

Table 5-3 shows that:

- again FADN and FSS are the most common systems used to estimate the data for the whole national population.
- for the others, representative systems only exist in a few countries.

From Table 5-4 it can be seen that:

- often it is only FADN which seems to have a quality management system. This is not surprising, because this is strictly managed from the EU FADN office.

Table 5-5 shows that:

- the total number of systems that contain organic data is not very large, although it should be noted that the information is still rather incomplete.
- from all DCPSs that contain organic data, only FADN seems to be a system in which for most cases organic data can be distinguished (except for EU regulation 9092/91), is a representative sample for the whole population and is running a quality management system.

Contents, tools and organisation

Issues which emerge from the country reports can be classified into those concerning contents, tools and organisation.

Contents: Several problems are identified concerning data supply, reporting and level of discernment of data.

Tools: Different software is used and many ‘databases’ lack an appropriate data definition, as they are not harmonized to superior systems.

Organisation: On-going discussions about the definition of organic farming, the size of farm from which data are taken into account, etc. inhibit the development of organic DCPSs. Uncooperative behaviour is also inhibiting. It takes quite some organisational efforts to keep the data up-to-date.

5.1.5 General conclusions

Based on the information available at this time, the following general conclusions can be drawn.

- In comparison with other actor levels, the farm level DCPSs that contain organic data seem to be more developed.
- Within the farm level, FADN is represented most frequently and data quality and representativeness is usually rather good. So, this system seems to be ready for a European information system.
- Harmonization can play an important role as a trigger to improve data quality and representativeness. However, this usually requires high investment in administrative efforts and organisation.
- Probably a large step forwards can be made when organic data is made distinguishable in other total DCPSs. For FSS especially, many data would become available at once.
- Incentives should be created for different parties in order to make them co-operate in developing harmonized information systems.

The main conclusion is that relatively little effort has to be made when developing a European information system based on FADN and FSS, while for the other systems, investments in organic data collection must be done first.

Referring to the overall objective of EISfOM as mentioned in chapter 1, the question remains which information from what system is most valuable in order to set priorities.

Table 5-1: European overview of 32 countries on presence of DCPSs that include organic data and cover the most relevant product groups or farm types, categorized by several types.

A capital 'X' indicates that the DCPS is harmonized to an international system; a small 'x' indicates that it is not harmonized. Both in one column means that harmonized as well as non-harmonized systems exist.

	Farm Accountancy Data Network (FADN)	Farm Structure Survey (FSS)	EU Reg. 2092/91	Production Statistics	Price Statistics	Supply Balance Sheet
Austria	X	X	X	x	x	
Belgium	**X**	x				
Bulgaria		x		x		
Cyprus						
Czech Republic		X				
Denmark	X	X		x	x	
Estonia	X	X	X			
Finland	X	X	X	x	x	
France		x				
Germany	X/x	X/x	X/x	x	x	
Greece		x				
Hungary		X				
Iceland	x	x	x			
Ireland		x				
Italy	X	x			x	
Latvia		X				
Liechtenstein	x	x		x	x	
Lithuania		x				
Luxembourg	X	x	X			
Malta						
Netherlands	X	X/x	X		x	
Norway	x	X		x	x	
Poland			x			
Portugal						
Romania		x				
Slovakia		x				
Slovenia		x				
Spain		x				
Sweden	X	X	X	X	X	X
Switzerland	x	x			x	
Turkey		x		x		
United Kingdom	x	x		x		
Total	**15**	**28**	**9**	**10**	**10**	**1**
Harmonized	**10**	**11**	**7**	**1**	**1**	**1**
Not harmonized	**6**	**19**	**3**	**9**	**9**	**0**

Table 5-2: **European overview of 32 countries on presence of DCPSs in which organic data is distinguishable, categorized by several types.**

EU Reg. 2092/91 is left out because this is by definition an organic DCPS.

	Farm Accountancy Data Network (FADN)	Farm Structure Survey (FSS)	Production Statistics	Price Statistics	Supply Balance Sheet
Austria	x	x	x	x	
Belgium	x				
Bulgaria					
Cyprus					
Czech Republic		x			
Denmark	x	x	x	x	
Estonia	x	x			
Finland	x	x	x	x	
France					
Germany	x	x	x	x	
Greece					
Hungary		x			
Iceland	x	x			
Ireland					
Italy	x	x			
Latvia					
Liechtenstein	x	x	x	x	
Lithuania		x			
Luxembourg	x				
Malta					
Netherlands	x	x			
Norway	x	x	x	x	
Poland					
Portugal					
Romania					
Slovakia					
Slovenia					
Spain					
Sweden	x	x	x		
Switzerland	x	x		x	
Turkey					
United Kingdom	x				
Total	**15**	**15**	**7**	**7**	**0**

Table 5-3: European overview of 32 countries on presence of DCPSs based on a census or representative approach, categorized by several types.

(This means that the sample represents the total population.)

	Farm Accountancy Data Network (FADN)	Farm Structure Survey (FSS)	EU Reg. 2092/91	Production Statistics	Price Statistics	Supply Balance Sheet
Austria		x	x	x	x	
Belgium	x					
Bulgaria						
Cyprus						
Czech Republic						
Denmark	x	x				
Estonia		x				
Finland	x	x	x	x	x	
France						
Germany	x	x	x	x	x	
Greece						
Hungary						
Iceland						
Ireland						
Italy		x				
Latvia						
Liechtenstein						
Lithuania		x				
Luxembourg	x					
Malta						
Netherlands	x	x				
Norway	x	x				
Poland						
Portugal						
Romania						
Slovakia						
Slovenia						
Spain						
Sweden		x		x		
Switzerland	x	x			x	
Turkey						
United Kingdom	x					
Total	**8**	**11**	**3**	**4**	**4**	**0**

Table 5-4: European overview of 32 countries on presence of DCPSs that run data quality management systems, categorized by several types.

	Farm Accountancy Data Network (FADN)	Farm Structure Survey (FSS)	EU Reg. 2092/91	Production Statistics	Price Statistics	Supply Balance Sheet
Austria	x	x	x	x	x	
Belgium	x					
Bulgaria						
Cyprus						
Czech Republic						
Denmark	x	x				
Estonia	x	x				
Finland	x	x	x			
France						
Germany	x	x	x	x	x	
Greece						
Hungary						
Iceland						
Ireland						
Italy	x	x				
Latvia						
Liechtenstein	x	x		x		
Lithuania						
Luxembourg	x					
Malta						
Netherlands	x	x				
Norway	x	x				
Poland						
Portugal						
Romania						
Slovakia						
Slovenia						
Spain						
Sweden		x				
Switzerland	x	x			x	
Turkey						
United Kingdom	x					
Total	**13**	**11**	**3**	**3**	**3**	**0**

Table 5-5: Aggregated results over 32 countries, summarized from table 1 – 4.

	Farm Accountancy Data Network (FADN)	Farm Structure Survey (FSS)	EU Reg. 2092/91	Production Statistics	Price Statistics	Supply Balance Sheet
DCPSs that include organic data	**15**	**28**	**9**	**10**	**10**	**1**
Harmonized to international system	**10**	**11**	**7**	**1**	**1**	**1**
Organic data distinguishable	**15**	**15**	**n.a.**	**7**	**7**	**0**
Representative sample	**8**	**11**	**3**	**4**	**4**	**0**
Quality management system running	**13**	**11**	**3**	**3**	**3**	**0**

5.2 Wholesaler / Processor Level

5.2.1 Brief introduction

In this chapter an overview is given about data collecting and processing systems (DCPSs) on the wholesaler / processor level. Total data on this level is available on the national and the European level. Eurostat provides most of the data available on the European level. In section 5.2.2 of this paper the European level is described. In section 5.2.3 national public and private DCPSs are described on the basis of the questionnaires sent to national experts of 32 countries in Europe. The analysis of the questionnaires gives a first insight into organic DCPSs on the wholesaler / processor level.

5.2.2 Results on the European level

Wholesaler and processor data is available on the European level. This data is collected from the national institutions running the official statistics. The information on the country level is sent to Eurostat and is harmonized so that a cross-country analysis can be done. Detailed information can be found on the Eurostat webpages (http://europa.eu.int/comm/eurostat/). Wholesaler data is collected for several branches; agriculture is one of these but there is no organic data available on the wholesaler / processor level. Furthermore, there are no variables collected on this level so that organic data can not be distinguished from total data.

5.2.3 Results of survey conducted in 32 European countries

As detailed information from only 10 countries is available and as in every country some institutions running DCPSs on wholesaler or processor level did not participate, the database is not complete. It is also not representative because some institutions like the ZMP in Germany filled in many questionnaires, in contrast to the institutions in the other countries.

Table 5-6: Public and private DCPS

	Public DCPS	Private DCPS
Bulgaria		1
Denmark	1	
Finland	1	
Germany	28 (24 of ZMP)	
Hungary	1	
Poland	2	1
Slovak Republic	2	
The Netherlands	2	
Turkey	1	
United Kingdom		1
Total	**38**	**3**

Source: Own calculations

Results from 10 countries (Table 5-6) show that most of the DCPSs are public. Only three private institutions run a DCPS on wholesaler / processor level. In general the ZMP is over-represented because about 24 of the 38 public DCPSs come from this institution.

Table 5-7: Total and organic DCPS

	Total	Organic
Bulgaria		1
Denmark	1	1
Finland	1	
Germany	22	10
Hungary	1	
Poland	2	
Slovak Republic	2	
Netherlands	2	
Turkey	1	
United Kingdom		1
Total	**32**	**13**

Source: Own calculations

Table 5-7 shows that on the wholesaler / processor level 32 total and 13 organic DCPSs are run. Four institutions run a total and an organic DCPS at the same time. Most of these systems are in Germany.

Table 5-8: Harmonized / not harmonized DCPSs to a European system

	Harmonized DCPS	Not harmonized DCPS
Bulgaria		1
Denmark		1
Finland		1
Germany		28
Hungary		1
Poland		3
Slovak Republic	1	
Netherlands		2
Turkey		1
United Kingdom		1
Total	**1**	**39**

Source: Own calculations

Table 5-8 shows that almost all DCPSs on wholesaler / processor level are not harmonized to a European system; only one DCPS is harmonized. In general, this table shows that there is a need for further development of the DCPSs regarding harmonization and comparability.

Table 5-9: Integration of organic data

	Separate DCPS for organic data	Integrated organic data; not distinguishable from total data	Integrated organic data; distinguishable from total data
Bulgaria			1 (since 2003)
Denmark			1 (since 2004)
Finland			
Germany	15	2	2 (without date)
Hungary			
Poland	1	2	
Slovak Rep.		1	
Netherlands		2	
Turkey		1	
UK	1		
Total	**17**	**8**	**4**

Source: Own calculations

Table 5-9 shows that of 40 known DCPSs on wholesaler / processor level, 17 are separate DCPSs for organic data. In12 DCPSs organic data is integrated in a total DCPS, but only in four of these is organic data also distinguishable from total data.

Most of the DCPSs are on a national basis. Only three of the German DCPSs are international. Five of the institutions running DCPSs on wholesaler / processor level did not give reasons why organic data is not included and not distinguishable from total data.

Table 5-10: Reasons why organic data is not included and not distinguishable

	Organisational	Different demands from users for data preparation	Little or no demand from users for separate organic data	Other reasons
Bulgaria				
Denmark				
Finland				1
Germany	5		5	14
Hungary		1	1	1
Poland			2	1
Slovak Rep.				1
Netherlands			2	
Turkey			1	
UK				
Total	**5**	**1**	**11**	**18**

Source: Own calculations

Table 5-10 shows the reasons why organic data is not included and not distinguishable from total data. Most often the institutions answered that there was little or no demand from users for separate organic data. Five times in Germany organisational reasons are stated and only the Hungarian institution ticks the box that different demands from users for data preparation are the reason. 18 times other reasons are mentioned, most often that there is no DCPS for organic products and no data about organic markets. Methodological and financial aspects are mentioned as the main barriers to integrating organic data.

Table 5-11: Number of processor and wholesaler DCPSs

	Processor DCPS	**Wholesaler DCPS**
Bulgaria	1	
Denmark	1	1
Finland		
Germany	8	20
Hungary	1	1
Poland		
Slovak Republic	1	1
Netherlands	1	1
Turkey	1	
United Kingdom	1	1
Total	**15**	**25**

Source: Own calculations

Table 5-11 shows that most of the DCPSs (25) collect data at the wholesaler level and 15 at processor level. In four cases the DCPSs deal with both types of data. In 5 cases there was no information available about the kind of DCPS being run. The most important reason to establish total (23) and organic (5) DCPSs was the commercial demand. Administrative demand, policy demand and research demand are of minor importance.

Table 5-12: Types of data collected in the supply chain of total data

	Wholesale market data	Food processing	Packing	Production volume	Distribution/ transport	Stocks/ reserves	Storage volume	Others
Bulgaria					1			
Denmark			1					
Finland								
Germany	14	8	2	5		2	1	13
Hungary	1	1						
Poland								
Slovak Rep.		2		2	1	2	2	1
Netherlands	1			1	1	2		
Turkey		1		1		1		
UK								
Total	**16**	**12**	**3**	**9**	**3**	**7**	**3**	**14**

Source: Own calculations

Table 5-13: Types of data collected in the supply chain of organic data

	Wholesale market data	Food processing	Packing	Production volume	Distribution/ transport	Stocks/ reserves	Storage volume	Others
Bulgaria		1	1	1	1	1	1	1
Denmark			1					
Finland								
Germany	4					1		1
Hungary								
Poland								
Slovak Rep.								
Netherlands								
Turkey								
UK	1		1	1				
Total	**5**	**1**	**3**	**2**	**1**	**2**	**1**	**2**

Source: Own calculations

Table 5-12 and Table 5-13 give an overview of the types of data which are collected in the supply chain. Most often the wholesale market data is collected for total and organic data. For total data also food processing and production volume are important types. For organic data packing and also production volumes are important.

Looking at the criteria used for segmentation of the market, the following table 4-14 gives an overview about differences in the countries.

Table 5-14: Criteria used for segmentation of the market

	Country / region		Quality		Size		Weight		Important markets		Other	
	Tot.	Org.	Tot.	Org.	Tot.	Org.	Tot.	Org.	Tot.	Org.	Tot.	Org.
Bulgaria						1				1		1
Denmark											1	1
Finland												
Germany	18	5	6	1	5	4	6	4			9	2
Hungary												
Poland												
Slovak Rep.											1	
Netherlands	2								1			
Turkey	1											
UK		1						1				1
Total	**21**	**6**	**6**	**1**	**5**	**5**	**6**	**5**	**1**	**1**	**11**	**5**

Source: Own calculations

Most of the DCPSs can be segmented by country or region. Quality, size and weight are further important segmentation criteria. For organic DCPSs in particular, the most important segmentation criteria are country / region, size and weight.

Table 5-15: Levels of data collection on wholesale / processor level

	Large wholesale markets		Small/medium sized whole-sale markets		Processing industry		Farmers		Control institutions	
	Tot.	Org.	Tot.	Org.	Tot.	Org.	Tot.	Org.	Tot.	Org.
Bulgaria						1		1		1
Denmark	1	1	1	1	1	1	1	1	1	1
Finland										
Germany	8	2	5	1	7		9	1		
Hungary	1		1		1					
Poland										
Slovak Rep.	1		1		1					
Netherlands	1		1		1					
Turkey					1					
UK										
Total	**12**	**3**	**9**	**2**	**12**	**2**	**10**	**3**	**1**	**2**

Source: Own calculations

Table 5-15 shows that data is collected at different levels. Control institutions are rarely levels of data collection for wholesale / processor DCPSs. Besides these levels retailers and slaughterhouses are also named. In general large wholesale markets, small / medium sized wholesale markets, the processing industry and farmers are the most important levels for collecting wholesale and processing data both for total and organic products.

Table 5-16 shows that many of the DCPSs are representative because the whole population or a representative sample is used as their basis.

Table 5-16: Representativeness of data

	Whole population		Sample		Representative	
	Total	Organic	Total	Organic	Total	Organic
Bulgaria						1
Denmark	1	1			1	1
Finland						
Germany	7	1	15	5	8	3
Hungary			1			
Poland						
Slovak Rep.	1		1		1	
Netherlands			1		1	
Turkey	1					
UK						
Total	**10**	**2**	**18**	**5**	**11**	**5**

Source: Own calculations

Table 5-17: Data provided for product groups (total)

	Fruit	Vegetable	Meat	Milk	Dry goods
Bulgaria					
Denmark					
Finland				3	
Germany	5	4	3		
Hungary	1	1	1	1	
Poland					
Slovak Rep.			1	1	2
Netherlands			1	2	1
Turkey	1	1	1	1	1
UK					
Total	**7**	**6**	**7**	**8**	**4**

Source: Own calculations

Table 5-18: Data provided for product groups (organic)

	Fruit	Vegetable	Meat	Milk	Dry goods
Bulgaria	1	1	1	1	1
Denmark					
Finland					
Germany	4	3			
Hungary					
Poland					
Slovak Rep.					
Netherlands					
Turkey					
UK		1			
Total	**5**	**5**	**1**	**1**	**1**

Source: Own calculations

Table 5-17 shows that total data is provided for all groups in the same quantity. In contrast Table 5-18 shows that organic data is most often provided in the product groups fruit and vegetables. There is only one organic DCPS in each case for meat, milk and dry goods case in the whole of Europe.

Table 5-19: Representativeness of DCPSs for product groups in percent (total)

	Fruit	Vegetable	Meat	Milk	Dry goods
Bulgaria					
Denmark	100	100	100	100	100
Finland					
Germany	96	100			
Hungary	30	30	43	90	
Poland					
Slovak Rep.					
Netherlands	20	20	20	60	
Turkey	100	100	100	100	100
UK					
Average	**77**	**70**	**53**	**82**	**100**

Source: Own calculations

Table 5-20: Representativeness of DCPSs for product groups in percent (organic)

	Fruit	Vegetable	Meat	Milk	Dry goods
Bulgaria	100	100	100	100	100
Denmark	100	100	100	100	100
Finland					
Germany	24				
Hungary					
Poland					
Slovak Rep.					
Netherlands					
Turkey					
UK		100			
Average	**62**	**100**	**100**	**100**	**100**

Source: Own calculations

Table 5-19 and Table 5-20 show that the representativeness of the DCPSs concerning the main products is on average at least 50 per cent. Nearly all organic DCPSs on wholesale / processor level are representative (for vegetables, meat, milk and dry goods), except for fruits.

Table 5-21: Comparison between organic and total data

	Comparison possible	Comparison not possible
Bulgaria		1
Denmark	1	
Finland		
Germany	9	13
Hungary		1
Poland		
Slovak Republic		2
The Netherlands		2
Turkey		1
United Kingdom	1	
Total	**11**	**20**

(Source: Own calculations)

Table 5-21 shows that with most of the DCPSs a comparison between organic and total data is not possible. Nevertheless there are 11 DCPSs in Europe, 9 of them in Germany where a comparison of organic and total data is possible.

Table 5-22: Frequency of data collection

	Weekly		Monthly		At least once per year	
	Total	Organic	Total	Organic	Total	Organic
Bulgaria		1				
Denmark					1	1
Finland						
Germany	16	4	3	2		
Hungary	1					
Poland						
Slovak Republic			1			
Netherlands			1		1	
Turkey					1	
United Kingdom						1
Total	**17**	**5**	**5**	**2**	**3**	**2**

Source: Own calculations

Table 5-22 shows that most of the total (17) or organic (5) data is collected weekly. In seven cases data are collected monthly and in five cases at least once per year.

Table 5-23: Data quality management

	No		Computerised plaus. check		Visual check by experts		Triangulation		Other	
	Tot.	Org.	Tot.	Org.	Tot.	Org.	Tot.	Org.	Tot.	Org.
Bulgaria						1				
Denmark									1	1
Finland										
Germany	3	1	5	3	15	5		4	2	1
Hungary	1									
Poland										
Slovak Rep.			1		2		1			
Netherlands			2		1					
Turkey			1							
UK						1		1		1
Total	**4**	**1**	**9**	**3**	**18**	**7**	**1**	**5**	**3**	**3**

Source: Own calculations

Table 5-23 shows that most of the data collected and processed are subject to some sort of quality management. The dominant approach for total and organic data is a visual check by experts. Triangulation is more relevant for organic data than for total data where computerised plausibility checks are important.

Table 5-24 shows that the main medium of dissemination is reports. In the Netherlands two DCPSs are disseminated via the Internet. 16 DCPSs are disseminated through other media which cannot be distinguished.

Table 5-24: Main medium of data dissemination

	Report		Internet/Homepage		Other	
	Total	**Organic**	**Total**	**Organic**	**Total**	**Organic**
Bulgaria		1				
Denmark					1	1
Finland						
Germany	17	1			5	5
Hungary					1	
Poland						
Slovak Republic					2	
Netherlands			2			
Turkey					1	
United Kingdom		1				
Total	**17**	**3**	**2**		**10**	**6**

Source: Own calculations

5.2.4 Conclusion

This chapter about DCPSs on the wholesaler / processor level shows that there are already some DCPSs at this level in Europe. Most of these are total DCPSs but some are also organic. Because this survey is not based on a whole or representative sample approach, the results cannot be taken to describe the complete situation of data collection on wholesaler / processor level in the countries, especially for organic products. A cross-country analysis was also limited because information of only 10 of 32 countries was available. As a result this only gives a limited overview of the national situations. In general, it seems that there is a need to develop the DCPSs at the wholesaler/processor level for organic products to a harmonized system. This should be done in all countries to get a European database with reliable and valid data

5.3 Foreign Trade Level

5.3.1 Brief Introduction

International trade forms an increasing part of the world economy and, as such, must be measured reliably. The aim of international trade statistics is to record all goods that add or subtract from the stock of material resources of a country by entering or leaving its territory. The compilation of trade figures in the EU is founded on a legal basis which is set out in a series of Council and Commission regulations.

In external trade statistics, exports are recorded at their fob (free on board) value and import at their cif (cost, insurance, freight) value. Outward flows from a Member State to a non-member country are called "exports" while outward flows from one Member state to another are called "dispatches". Inward flows from a non-member country are called "imports", whereas inward flows from another Member State are called "arrivals".

Monthly European statistics on trade in goods between Member States contains information about among others: nomenclature of goods, member state arrival, net mass, value and mode of transport. Monthly statistics about trade in goods with third countries also contains information about country of origin, country of destination and the nationality of the mode of transport.

5.3.2 Eurostat Foreign Trade Statistics

Eurostat record data on intra-EU trade and extra-EU trade. The arrival and dispatch of goods flowing between Member States are recorded according the rules of the Intrastat system.

The main statistical data published by Eurostat for intra-EU and extra-EU trade are

- the declaring member state,
- the reference period,
- the flow,
- the product, as defined in the Common Nomenclature,
- the trading partner,
- the statistical value,
- the net mass (in tonnes),
- the quantity in any supplementary units (litres, number of parts, etc.),
- the mode of transport.

In addition, for extra-EU trade, data are available on the statistical procedure, the nationality of the means of transport at the frontier, whether or not the goods are transported in container and on tariff data.

Data Sources

The Member States forward the information from the customs declaration (SAD). Several Member States use simplified collection procedures (for example, electronic declarations). For intra-EU trade the information providers, generally enterprises of a

sufficient size, forward their data to the competent national administrations, either using Intrastat forms, the DCPS for intra-EU trade, or electronically. For intra-EU trade (and to a lesser extent for extra-EU trade) there are a number of thresholds, below which the information is either absent or simplified. These have been adopted to limit the burden on information providers while preserving an acceptable quality of statistical information.

Within the framework of Intrastat, Eurostat has developed a number of tools designed to facilitate the various stages of statistics production: completion of the declaration (using electronic forms and software), exchange of data between providers and the national administrations, data processing at national level, exchange of data between the national authorities and Eurostat and, finally, dissemination.

Once the data have been collected, checked and processed by the Member States, they are forwarded to Eurostat via electronic media.

Quality control

The national authorities are responsible for ensuring the accuracy of the published trade data. There are plausibility checks of the data and comparisons with other variables, for example past data. Further Eurostat controls the way of transmission of requested data to the national administrations. Both Eurostat and the Member States are able to carry out a “mirror” comparison of trade flows between two countries measured by each of the partner countries. Despite this quality management, it is impossible to achieve complete accuracy for the published statistics, because of the too high number of individual trade data.

Data on values, quantities and on balances of payments are adjusted. This is necessary because the data provided is not complete, as smaller and medium-sized enterprises do not have to deliver full information and some providers respond too late or not at all.

Dissemination

Eurostat is responsible for disseminating EU and Euro-zone statistics. Since there is a wide range of users with different interests - certain users may be mainly interested in trade value and others only in quantity - Eurostat has designed a system of dissemination which meets most of these needs, while directing the users to appropriate data sources and providing them with the necessary information for the understanding and interpretation of the statistics.

Eurostat runs several databases, which are described in the following.

COMEXT, an on-line database, which is based on the client/server concept, is Eurostat’s reference base for external trade. It provides access to recent and historic data from the EU Member States and to statistics of a significant number of third countries. Users include the European Commission as well as other European institutions and administrative bodies, administrations of Member States belonging to the European Statistical System and those Candidate Countries providing statistics to Eurostat.

Selected parts of the COMEXT database are also available each month on a CD-ROM. The data are recorded by Combined Nomenclature product and intra- and extra-EU partner country.

New Cronos is a numerical database containing macro-economic time series. The main statistical indicators are available such as trade flows by country, partner regions and product groups.

EUROPROMS (*European Production and Market Statistics*) provides information on external trade of Member States and the EU: production, external trade and markets for almost 4,400 industrial products in the EU. The data are available in the New Cronos domain and on CD-ROM.

On the Eurostat website www.europa.eu.int/comm/eurostat data on total imports and exports or the trade balance of the EU and Euro-zone are published.

As paper publications, Eurostat publishes press releases, monthly bulletins with short-term data as pdf-files, up-to-date summaries of the main results of surveys, studies and analyses and the Statistical Yearbook on intra-EU and extra-EU trade which describes long term trends.

Co-operation

Co-operation is a key instrument for improving the quality and comparability of these statistics. The purpose of co-operation is to lay the foundations for real partnerships in trade relations between countries and areas, as well as to permit the measurement of the implications and consequences of projects to create custom unions for different economic areas.[8]

[8] *Reference: Eurostat, Statistic on the trading of goods, Method and Nomenclature, 2002, Luxembourg*

5.3.3 Overview of national DCPS on Foreign Trade Level

Table 5-25 gives an overview of the existing DCPSs on foreign trade, both total and organic.

Table 5-25: Overview of the existing DCPSs on foreign trade in Europe (not complete)

Country	DCPS / Organisation	DCPSs on total trade		DCPSs on organic trade	
		Import	Export	Import	Export
Austria	Statistik Austria	X	X		
	Ministry of Agriculture	X	X		
Belgium	Institute National de Statistique	X	X		
	AWEX (Agence Wallonne à l´Exportation)		X		
	EXPORT VLAANDEREN		X		
Bulgaria	National Statistical Institute	X	X		
	SGS Bulgaria			**X**	**X**
Cyprus	Statistical Service of the Republic of Cyprus	X	X		
Czech Republic	Ministry of Agriculture	X	X	**?**	**?**
	Statistical Office of the Czech Republic	X	X		
	Mendel University of Agriculture and Forestry			**X**	**X**
Denmark	Danish Statistics (DS)	X	X	**(X)**[9]	**(X)**[10]
	The Danish Veterinary and Food Administration			**X**	
	The Danish Plant Directorate			**X**	
	Organic Denmark				**X**
Estonia	Statistical Office of Estonia	X	X		
Finland	Information Centre of the Ministry of Agriculture and Forestry (TIKE)			**X**	**X**
	Statistics Finland	X	X		
	National Food Agency (EVI)			**X**	

[9] Planned for 2004
[10] Planned for 2004

Country	DCPS / Organisation	DCPSs on total trade		DCPSs on organic trade	
		Import	Export	Import	Export
France	National Institute for Statistics and Economy (INSEE)	X	X		
	Agence BIO			**X**	**X**
Germany	Federal Statistical Office	X	X		
Greece	University of Thessaloniki, Dept. of Agricultural Economics	X	X	**?**	**?**
	General Secretariat of National Statistical Services	X	X		
Hungary	Hungarian Central Statistical Office	X	X		
	Biokontroll Hungaria Kht				**X**
Iceland	Statistics Iceland	X	X		
Ireland	Central Statistics Office	X	X		
	Bord Bia (Irish Food Board)	X	X		
Italy	State Institute of Statistics (ISTAT)	X	X		
	Consortium				**X**
	Pragma	X	X		
Liechtenstein	No information available				
Lithuania	Lithuanian Department of Statistics	X	X		
Latvia	Central Statistical Bureau of Latvia	X	X		
Luxembourg	National Statistical Institute	X	X		
Malta	National Statistics Office	X			
Netherlands	Statistics Netherlands (CBS)	X	X	**X**	**X**
	The Dutch Dairy Product Board[11]	X	X		
Norway	Statistics Norway (SSB)	X	X		
	Debio			**X**	**X**
Poland	Central Statistical Office	X	X		

[11] only milk and milk products

Country	DCPS / Organisation	DCPSs on total trade		DCPSs on organic trade	
		Import	Export	Import	Export
Portugal	Instituto Nacional de Estatistica	X	X		
Romania	National Institute of Statistics	X	X		
Slovakia	Stat. Office of the Slovak Republic	X	X		
Slovenia	Stat. Off. of the Republic of Slovenia	X	X		
Spain	National Statistics Institute	X	X		
Sweden	Statistics Sweden	X	X		
Switzerland	Bundesamt für Statistik	X	X		
	BioSuisse			**X**	
	Schweizerische Zentralstelle für Gemüsebau und Spezialkulturen	X[12]			
Turkey	Ministry of Agriculture and Rural Affairs		X		**X**
	State Institute of Statistics	X	X		
	Aegean Exporters` Association		X		**X**
United Kingdom	National Statistics	X	X		
	Soil Association			**X**	
	DEFRA			**X**	

In nearly every country the governmental statistical offices (State Institute of Statistics, National Statistics, Statistical Office, etc.) collect and process data on both imports and exports. Therefore in most countries there is at least one DCPS on foreign trade. The data collection and processing of these Statistic Offices is often harmonized to the Eurostat system, as the information is delivered to Eurostat. Usually data on organic trade is collected too, but is not distinguishable from total data. Statistics Netherlands (CBS) is an exception here: it also works according Eurostat guidelines, but in addition collects data on organic import and export which are distinguishable from total trade. CBS will be described in more detail in the next chapter.

Only Liechtenstein does not have any information on foreign trade. As Liechtenstein is quite small and does not have big imports or exports, the Swiss Federal Office for Statistics covers the territory together with Switzerland. In Malta only import data are covered by the National Statistics Office, because exports are negligible.

[12] only fruits and vegetables

Beside the national governmental statistical offices, there are several institutions, both public and private, which also run DCPSs on total foreign trade. These are mostly the Ministries of Agriculture (e.g. in Austria, the Czech Republic, Turkey) or trade organisations, like AWEX or Export Vlaanderen in Belgium, the Dutch Dairy Product Board in the Netherlands, the Swiss Central Office for Vegetables and Special Crops or the Turkish Aegean Exporters' Association. Some universities (e.g. Mendel University (CZ), University of Thessaloniki (GR)) also collect data on foreign trade together with a few market research offices, like Pragma. In addition certification bodies, producer organisations or export organisations for organic products run DCPSs only on organic foreign trade.

From Table 5-25 it can be seen that most institutions collect either total data on foreign trade or organic data. Few organisations run a DCPS where organic products are distinguishable from total data – and therefore can be compared to the total data and they are Statistics Netherlands, the Aegean Exporters' Union in Turkey and the Turkish Ministry of Agriculture and Rural Affairs (which uses data from the Aegean Exporters' Union and is therefore similar to this DCPS). The Danish Statistical Office plans to establish data collection on organic trade in 2004.

There is no information on whether the DCPSs in the University of Thessaloniki in Greece and the Ministry of Agriculture in the Czech Republic cover organic products.

The DCPSs covering total data are described briefly below by country.

Statistik Austria and the Ministry of Agriculture, Forestry, Environment and Water Management run DCPSs on total import and export in Austria. The Ministry of Agriculture acts more as a coordinator in collecting statistical data rather than collecting primary data itself.

In Belgium the Institut National de Statistique covers both import and export. Other regional export organisations, the Agence Wallonne à l´Exportation (AWEX) and the Export Vlandeere, run DCPSs only on export data.

In the Czech Republic both the Ministry of Agriculture and the Statistical Office collect and analyse data on total trade. The Department of Agriculture, Forestry and Environmental Statistics of the Statistical Office works closely with the Ministry of Agriculture.

At Danish Statistics monthly surveys on foreign trade are carried out, but they do not differentiate between conventional and organic products. These surveys are harmonized to the EU. It is the intention to carry out a survey in 2004 on turnover in 2003 of organic products from retailer shops (3 of the largest supermarket chains in Denmark). It is also the intention to match the information from the Danish Plant Directorate on certified companies marketing organic feedstuffs, fertilisers, plant products, seeds and plant propagation materials and the information from the Danish Veterinary and Food Administration on processors, packers, wholesalers and retailers with the information on foreign trade from Statistics Denmark for the year 2004 in order to calculate the share of organic products involved in foreign trade. Therefore statistics on foreign trade in organic products will be available in 2004.

In Greece, besides the General Secretariat of National Statistical Services, the University of Thessaloniki, Department of Agricultural Economics runs a DCPS on import and export.

In Ireland the Irish Food Bord, Bord Bia, and the Central Statistics Office run DCPSs on total foreign trade. Bord Bia is dedicated to developing export markets for Irish food and drink companies.

The State Institute of Statistics (ISTAT) and the market research institute Pragma collect and analyse data on foreign trade in Italy. ISTAT is a Eurostat partner.

In the Netherlands CBS (Statistics Netherlands), also a Eurostat partner, collect data on foreign trade. The Dutch Dairy Product Board runs a DCPS on import and export, especially milk and milk products.

In Switzerland the Bundesamt für Statistik and the Schweizerische Zentralstelle für Gemüsebau und Spezialkulturen covers import and export, but the latter only collects and processes data on fruit and vegetables.

In Turkey the State Institute of Statistics runs a Eurostat-harmonized DCPS on foreign trade. Further the Ministry of Agriculture and Rural Affairs co-operates with the Aegean Exporters' Union and collects data on total (and organic) exports.

The Statistical Offices run the only DCPSs on total foreign trade in the following countries:

- Bulgaria: National Statistical Institute
- Cyprus: Statistical Service of the Republic of Cyprus
- Denmark: Danish Statistics
- Estonia: Statistical Office of Estonia
- Finland: Statistics Finland
- France: National Institute for Statistics and Economie (INSEE)
- Germany: Federal Statistical Office
- Hungary: Hungarian Central Statistical Office
- Iceland: Statistics Iceland
- Lithuania: Lithuanian Department of Statistics
- Latvia: Central Statistical Bureau of Latvia
- Luxembourg: National Statistical Institute
- Malta: National Statistics Office
- Norway: Statistics Norway
- Poland: Central Statistical Office
- Portugal: Instituto Nacional de Estatistica
- Romania: National Institute of Statistics
- Slovakia: Statistical Office of the Slovak Republic
- Slovenia: Statistical Office of the Republic of Slovenia
- Spain: National Statistics Institute
- Sweden: Statistics Sweden
- United Kingdom: National Statistics

5.3.4 Comparison of existing organic DCPSs on Foreign Trade Level

In Bulgaria, Denmark, the UK, the Czech Republic, Italy, Switzerland, Turkey. France, Hungary, Norway, Finland and the Netherlands organic DCPSs on import and / or export level exist. However, only four institutions collect data on both organic and total foreign trade, i.e. Statistics Netherlands, the Aegean Exporters' Association and the Ministry of Agriculture and Rural Development in Turkey, and from 2004 onwards, Danish Statistics. All the other organisations collect data only on organic trade.

The following institutions run an organic DCPS:

- SGS, Bulgaria: export and import data of organic products
- Mendel University of Agriculture and Forestry, Czech Republic: import and export data on organic products
- Consortium, Italy: export data of organic products
- BioSuisse, Switzerland: import data of organic products
- Soil Association, United Kingdom: import data of organic products
- DEFRA, United Kingdom: import data of organic products
- Aegean Exporters` Association, Turkey: export data both on total and organic products
- Ministry of Agriculture and Rural Affairs, Turkey: export data both on total and organic products
- Statistics Netherlands (CBS), Netherlands: import and export data both on total and organic products
- The Danish Plant Directorate, Denmark: import of organic products
- The Danish Veterinary and Food Administration, Denmark: import of organic products
- Organic Denmark, Denmark: export of organic products
- Information Centre of the Ministry of Agriculture and Forestry (TIKE), Finland: import and export of organic products
- National Food Agency (EVI), Finland: import of organic products
- Agence Bio, France: import and export of organic products
- Biokontroll Hungaria Kht, Hungary: export of organic products
- Debio, Norway: import and export of organic products

There is virtually no information on the data collecting and processing systems of the Mendel University in the Czech Republic, Agence Bio in France, Biokontroll in Hungary, the Soil Association in the UK and Organic Denmark in Denmark as these institutions did not answer the second stage questionnaire. Also there is very little information about "Scanjour", the DCPS of the Danish Veterinary and Food Administration.

As the organic sector in Italy, Turkey and Hungary is export oriented, only data on organic exports are registered there. In the UK and Switzerland it is the other way round: these are organic import countries and the organisations mostly collect data

on organic imports. SGS in Bulgaria, CBS in the Netherlands, TIKE in Finland and Debio in Norway collect both data on organic imports and exports. All DCPSs collect data on EU trade and third country trade.

All export-oriented DCPSs segment the data according to product or product group and country of destination. The import-oriented countries segment data both on product or product group and country of origin. The DCPSs which collect both data on import and export allow a direct comparison between organic and conventional product trade data. Only some of the organisations use a quality management system to ensure the accuracy of data. Mostly experts check the data, and in only one DCPS is there a plausibility check and triangulation. Often the data are collected at least on a monthly basis.

Data are mostly collected at ports and borders. A few organisations also collect data surveys on processor and packer level, farmers' organisations, exporters or experts. Only in one DCPS, CBS in the Netherlands, is it known that a representative approach for data collection on import and export is used. For trade between EU-countries Intrastat is used, the Eurostat method. For trade outside the EU, customs declarations are registered and in addition trading companies fill out questionnaires. Therefore 99% of the markets are covered. Other methods used include export notifications at registration stage and collection of third party surveys, procedures or grey papers.

The data are disseminated mostly on web sites and in reports. Often at least some information is confidential. Data supply networks with other organisations in the country do not exist anywhere. Only one DCPS is harmonized to an international data collection and processing system. This DCPS is presented below as a case study and a good example for organic data collection and processing on import and export level.

The publicly-funded organisation Statistics Netherlands (CBS) collects, calculates and disseminates data on all major businesses. They are responsible for all national and some European official statistics. This DCPS on trade covers both total and organic data, is harmonized to Eurostat and is called Eurostat External Trade Statistics Database: Comext. Data collection started in response to administrative, policy and commercial demand. The statistical method for data collection, used between the EU countries, is called Intrastat. Outside the EU data are collected as a part of the customs procedures and partly by sending questionnaires directly to major trading companies. This covers 99% of the market. There is no data supply network. The data is collected on a monthly base. Some are free, but most are confidential. Import and export types are based on Eurostat and/or FAO. Collection involves EU and other countries. The data are collected at ports, borders and at exporters. The data can be segmented by product, product groups, country of origin and country of destination. Data for all product groups are collected. Dissemination appears through the Internet (www.cbs.nl). Quality management is by a plausibility check, a visual check by experts and by triangulation. The strength of this DCPS is the rapidity and periodicity of the data; the weakness is non response. The plans for the future are to reduce non response and to improve the detail level.

Conclusion

There are several systems in different European countries collecting data on organic import and export. As the method and frequency of data collection is quite similar, the way forward to a harmonized European data collection in several countries is so

difficult. In all countries the Statistical Offices collect data on import and export and nearly all of them deliver data on total trade to Eurostat. CBS also uses Eurostat nomenclature and data collection and processing systems, but in addition has its own data collection for organic products. This DCPS could be a model for other Statistical Offices and Eurostat for collecting organic data on foreign trade.

5.4 Retail Level

There is no Europe-wide public or private sector DCPS reporting on organic markets. The number of countries with a national organic DCPS on retailer level is limited. Only Switzerland, Germany, the Czech Republic, Italy and Denmark report DCPSs on that level.

None of these systems is harmonized to any Europe-wide system. The Swiss systems cover all types of retail food shops. There is one system by IHA-GfK which allows a direct comparison between organic and totals markets for all type of retail food stores. In Germany, a similar ACNielsen system is being tested. The ZMP Handelspanel, which delivered price data, was closed down end of 2003 due to budgetary restrictions. The German Bio Vista panel covers only organic retail shops (Naturkostwarenhandel). Like Bio Vista, the Czech Pro Bio system covers specialised health food store shops. The Italian system covers consumer prices for organic products.

Table 5-26: Overview of DCPSs on the retailer level in Europe

Country / Organisation	Type of organisation	Data
Denmark		
Danish Statistics (DS) http://www.dst.dk/HomeUK.aspx	Governmental data collection and processing	Retailer prices on certain organic food products.
The Danish Veterinary and Food Administration http://www.uk.foedevaredirektoratet.dk/forside.htm	Governmental certifier and inspection body for control of wholesalers, retailers and importers	Retailers covered by "organic" inspection; organic egg laying hens and eggs; Scanjour: both conventional and organic data (organic data distinguishable since 2003-4)
Organic Denmark http://www.organic-denmark.com/	Private non-profit organic interest group	Yes, only organic data, Market surveys.
Germany		
ACNielsen	Private company	Covers a sample of about 750 supermarkets. Data on packaged goods at multiple retailers and drug discounters. In May 2004, shop audits will take place for organic milk, yoghurt, butter and curt cheese.
BioVista	Private company	Data on retail sales, retail volumes per product group, retail volumes per market type, consumption frequencies, market share of single product groups, national consumer prices, panel covers only organic sector data. (Naturkostwarenhandel)
ZMP-Handelspanel	Semi-governmental company	Price data on both organic and total products
Italy		
Azienda Romana Mercati	?	Consumer prices, DCPS covers only organic sector data
Switzerland		
BioSuisse	Private company	Turnover of organic products (retail sales, retail volumes per product group, the market shares of single product groups and national consumer prices). 100% of the retail sector in Switzerland is covered, combination of retailer questionnaires and analysing the data of the IHA-GfK retailer panel.
IHA-GfK AG	Private company	Data on retail sales, retail volumes per product group, retail volumes per market type and the market shares of single product groups are evaluated. Segmentation of the data is possible according sales channels and product groups. Organic data is integrated in the DCPS and distinguishable.
Czech Republic		
PRO-BIO	Members of Pro-Bio	Data on retailer sales, national consumer prices and market shares of organic products in relation to total sales have been collected. The data collection covers only about 40 specialised health food shops selling organic food which are members of PRO-BIO.

5.4.1 Denmark

As certifier and control authority for processors/wholesalers, retailers and importers of organic food products, the Danish Veterinary and Food Administration has the "Scanjour" database. All companies handling food products are registered in this database and all companies covered by organic inspection are registered separately according to the requirements of the EEC 2092/91. No details on organic product quantities, prices etc, are collected except for egg laying hens (average) and number of eggs produced, packed and sold. "Scanjour" data are quality checked currently.

5.4.2 Germany

ACNielsen collects scanning data from a sample of about 750 supermarkets and offers producers and retailers a detailed insight into product sales. Information is collected on retail channels like supermarkets, hypermarkets and discounters. Usually ACNielsen retail panel reports are confined to packaged goods at multiple retailers and drug discounters. Beverage shops are included when necessary. ACNielsen offers information about all kinds of development in retail by area, type of supermarket, size of supermarket. For many product characteristics ACNielsen delivers facts like volumes, sales, prices and distribution level.

ACNielsen has no database with EANs of all organic products. They analyse trade texts and price lists of manufacturers to generate organic product information. In addition ACNielsen's field service examines all products in a category in a sample of shops and divides them into organic or not. Until now this field research has only been conducted for milk and yoghurt. In May 2004, shop audits will take place for milk, yoghurt, butter and curd cheese. Next year it is planned that about 10 further product categories will be included.

Bio Vista-Handelspanel

BioVista operates a DCPS gathering data on retail sales, retail volumes per product group, retail volumes per market type, consumption frequencies, market share of single product groups, national consumer prices. Data are related to brands and are collected for: bread and cereals, fruit, vegetables, beef incl. veal, sheep and goat meat, pork, poultry, fish and fishery products, milk, milk products, cheese, eggs, edible fat and oil, sugar, jam, honey, chocolate and sweets, sauces, salt, herbs, soups, coffee, tea, cocoa, water, lemonade, juice, baby foods, alcoholic beverages, wine, beer. The panel covers only organic sector data and focuses on organic retail shops. (Naturkostwarenhandel). Data collection started in 2003. It is planned to extend the segmentation criteria by differentiating three regions beginning in mid 2004. A differentiation according Nielsen-regions is planned to begin in 2006. This system can be taken into account as a positive reference (case study) for organic data collection for the natural food segment.

ZMP-Handelspanel

The system covers retail prices for conventional as well as organic products. Data are segmented according to sales channel and spatial criteria (ACNielsen). It covers both organic and total data. Data collection is based on a representative sample of German food sales channels: 500 to 600 retail shops are visited weekly. Data for organic products are collected monthly. About 70,000 prices are collected every

week and each price is checked automatically twice (price barriers per product, statistical test). The system is not harmonized to any superior DCPS.

5.4.3 Italy

Price database: Azienda Romana Mercati

The name of the DCPS is **Rilievo consumo**, and it collects data on consumer prices; there are no segmentation criteria. This DCPS covers only organic sector data and they refer to a sample of the population which is not representative. It is therefore impossible to make a direct comparison between organic and total products. The quality management system used is a visual check by experts. Data are collected monthly and are disseminated by Internet/homepage

The main strength seems to be that the system is unique and the main weakness is that it is not representative.

5.4.4 Switzerland

Bio Suisse

Bio Suisse collects data on the turnover only of organic products in the Swiss retail sector. Retail sales, retail volumes by product group, market shares of single product groups and national consumer prices are surveyed. Data segmentation is possible by sales channel and product group. Data collection uses a representative approach, and 100% of the retail sector in Switzerland is covered. The method of data collection is a combination of retailer questionnaires and analysing the data from the IHA-GfK retailer panel. A direct comparison between organic and conventional products is possible but the quality of data is not controlled. The survey is conducted at least once a year. Data are disseminated by newsletters, internet and at the Bio Suisse press conference. All of the information is available, some for free and some on receipt of a payment. The DCPS is not harmonized to an international system In future a harmonization of data collection is planned with regard to the method of data collection. As the DCPS only concentrates on organic products, it is not suitable for a pilot study.

IHA-GfK AG

The IHA-GfK Handelspanel (retailer panel) collects data both on organic and total products in the conventional retail sector in Switzerland. Organic data is integrated in the DCPS and distinguishable. Retail sales, retail volumes by product group, retail volumes by market type and the market shares of single product groups are evaluated. Segmentation of the data is possible according to sales channels and product groups. For all products total data are collected; organic data includes only the relevant product groups. The method of data collection uses a representative approach and allows a direct comparison between organic and total data. The DCPS is not harmonized to an international system. Like the consumer panel of IHA-GfK, this DCPS is a good example for a pilot study.

5.4.5 The Czech Republic

Retailer level: Tom Vaclavik working for PRO-BIO

This DCPS started in 2003 and focuses on research among PRO-BIO members and on a retailer level. Retail sales, national consumer prices and market shares of organic products in relation to total sales have been collected. It is not possible to

segment the different types of data. The data collected is not representative because only 0.01 % of the total population of the retail sector is represented. The data collection covers only about 40 specialised health food shops selling organic food which are members of PRO-BIO. A questionnaire is used for data collection and the data is collected at least once per year. No quality management is used and there is no comparison possible between organic and total data. This DCPS is not harmonised or related to other superior DCPSs. Some data are confidential and most are available free of charge. The main strength of this DCPS is the close contact with retailers. One important weakness is the lack of methodology for data collection and management. Because of limited funds a more fundamental data collection is not possible. At the moment this DCPS cannot be taken as a positive reference for a case study because it is not representative. It may be that it can be developed and on the basis of representative data, it might be a positive case study.

5.4.6 Conclusion

In the UK, DEFRA has also been involved in efforts to identify retailer level data - in particular quantities sold by country of origin - but these attempts have met with little success due to commercial confidentiality issues. This problem seems to be a major drawback in others areas as well and especially for markets, where a few competitors are fighting for their market share (which applies in most European countries in the “normal” food sector). On the other hand, there are some examples of systems in the organic food sector which operate successfully (e.g. Bio Vista in Germany, Pro Bio in the Czech Republic). The system in the Czech Republic uses a basic approach to gather data for a limited area. Even though it is not judged to be a positive case study, it might be a useful for less-developed (Eastern) European markets as a first step towards more sophisticated systems. For the Czech system, the German Bio Vista approach might be a case study to demonstrate how to take further steps.

In Switzerland there are two systems which can be positive examples for data collection on the retailer level in the “normal” retail sector. In Germany, ACNielsen is also developing a system. Bilateral discussions could be helpful for experience / information exchange. As on the consumer level, this entails some co-operation between competitors (GfK and ACNielsen).

5.5 Consumer Level

5.5.1 Consumer DCPSs on the European level in the public sector

On European level there is one public DCPS on consumer expenditure, the Eurostat "Household budget survey" (HBS).

General data approach

The Household Budget Surveys in the European Union are sample surveys of private households carried out regularly under the responsibility of the National Statistical Offices (NSIs) in each of the 15 Member States (European Statistical System). Essentially, they provide information about household consumption expenditures on goods and services, with considerable detail in the categories used; information on income, possession of consumer durable goods and cars; basic information on housing and many demographic and socio-economic characteristics. Unlike other European statistical domains, the HBS is voluntary and no EU regulation exists. There is thus considerable freedom for each Member State to decide the objectives, methodology, programming and resource assignment for their respective HBS.

In co-operation with the National Statistical Offices of the Member States, Eurostat has for many years worked on the quality - mainly the comparability - of HBS statistics within the EU.

As long as the national surveys have a less than annual frequency, the Eurostat reference years will be a composite of national survey years that do not overlap precisely for each country. Of course, the Eurostat reference year should reflect the actual situation in that year accurately. Eurostat uses appropriate national price indices to convert data into 1999 prices in order to give consumption expenditure items the same base for comparisons.

Some countries have a legal framework for conducting the survey, either in terms of a general statistical law governing the collection of statistics (Spain, Italy) or of a specific law laying down the circumstances related to collecting information on the consumption expenditure of private households (Germany). Households' participation in the survey is voluntary in all Member States and the surveys are conducted by the national statistical offices in all the countries. Given that the Household Budget Surveys are output-harmonised, Eurostat does not emphasize use of the same questions, the same survey structure or sample designs in the surveys, but some importance is given to harmonising concepts and definitions. There are two reasons for this: first, it could be argued that the adoption of certain definitions and concepts is not specifically based on national circumstances but has a more universal character in relation to obtaining a valid output; secondly, the use of certain definitions and concepts can often be justified by the general nature of the survey and not the particular circumstances under which it is implemented.

Organic data approach

So far, the HBS does not provide special data on organic markets; only in Switzerland (see below) are organic data also covered. So far, HBS does not even cover harmonized general / total food data on a detailed level. This is due to the fact that the Household Budget Survey is a voluntary system providing data from different kinds of national surveys. HBS methodology uses the four-level COICOP-HBS nomenclature. The basic harmonised nomenclature used to break down the

consumption expenditure is COICOPHBS 1999. This classification is derived from the OECD COICOP of 1993. COICOP-HBS 1999 is identical to the OECD COICOP up to the third level of detail (4 digits) but provides an additional level of detail extending the codes up to 5 digits. COICOP-HBS 1999 is being revised during 2002 by an expert task force in order to resolve certain problems and difficulties of application already detected. It is consequently expected that an improved version of this nomenclature will be proposed before the next round of HBS. The problems mainly concern the classification of some borderline cases (which will be resolved with additional comments for the categories involved) and the lack of suitable categories for some items (which will be resolved by the addition of a few new categories).

It is possible to analyse most of the information in the HBSs by organising the data at micro level according to two types of record. Accordingly, the harmonised database managed by Eurostat is structured in two file types:

- the member file (variables starting with M);
- the household file (variables starting with H).

The HBS uses two kinds of variables. “Basic” variables are provided directly by the country concerned. Re-coding may be a simple assignation, or a more complex calculation. “Derived” variables, on the other hand, are calculated from these.

The household expenditure variables are indispensable. They lie at the heart of household budgets. HBSs focus on consumption expenditure and must provide high-quality information on this subject. Eurostat must assign national variables to Community variables as precisely as possible, while at the same time standardising the aggregation of data as much as possible, which allows Eurostat to construct the upper levels of each function. For food, the variable is: “HE01. Food and non-alcoholic beverages”.

Organic approaches in HBS on the national level – case study Switzerland

According to FiBL, Switzerland is the only European country providing household budget panel data on organic products. In Switzerland, the HBS, called Einkommens- und Verbrauchserhebung (income and consumption survey), collects data on consumer expenditures and purchase frequency for both organic and total products. The data can be segmented by purchasing behaviour (purchase frequency), socio-demographic criteria (age, size of family, household income, gender, socio-economic groups), spatial criteria (statistical regions) and products (all products and product groups), but analysis is not always possible because the sample is sometimes too small. The data covers a sample of the population and represents 97.9% of the population, which is the population living in private households. Therefore it is a representative approach. Participating consumers record their consumption in a household diary. Each month these data are forwarded to the State Statistical Institute and it is possible to compare organic and total data. The quality of data is controlled by a computerized plausibility check and the data are disseminated once a year via reports and the internet. Organic data was disseminated in 1998 but, even where it has been collected between 2000 and 2005, organic data is unlikely to be processed and analysed because currently the Swiss Federal Statistical Office has no plans to use the information. Only a few data are confidential; most are available for paying users (scientists who must sign a confidentiality agreement). The data is

partly harmonised to an international DCPS, for example the nomenclature of private consumption. A national data supply network does not exist. For 2006 a revision of the DCPS is planned. This DCPS could be a positive example for a case study.

Conclusion HBS

The household budget surveys (HBS) is a statistical project with a frequency of 5 years conducted by the Eurostat Unit D2 and managed by Mr. Puente-Rodero (antonio.puente-rodero@cec.eu.int). This project is based on compilations of data gathered from the national HBS. The HBS project is based on a gentleman‘s agreement between the participating countries and Eurostat; it has no legal basis. Although the main goal of HBS at the national level is to determine baskets of goods and services for the elaboration of consumer price indexes, the data collected by HBS have many other uses: analyses of consumption expenditure, economic studies, social studies, marketing research, etc. The questionnaires tend to be rather large, and in some cases they are overloaded, which risks poor response rates. For these reasons the HBS managers are reluctant to add new variables or to increase the level of detail of the information to be supplied by the households. Since this project is based on a gentleman’s agreement, the time frames of the surveys vary between countries. There are 7 countries which collect data every five years, while others do it annually or even continuously. Furthermore, in some countries, besides data on household expenditure, quantities bought are collected as well, but this information is not compiled by Eurostat. The most recent European overview is based on data from 1999 and the next one is planned for the reference year 2005. To integrate data on expenditure for organic products would mean changing the COICOP-HBS nomenclature once again, but unfortunately it will not be possible to introduce these changes for the 2005 round.

5.5.2 Consumer DCPSs in the private sector at the European level

In many European countries, GfK, ACNielsen and TNS operate household panels. In some of these countries, organic products are included in panel reporting and detailed information on organic market data are available. In a lot of countries, classical market research is / was conducted on organic markets. Usually, these data are customized to special purposes and do not exist as time series.

Consumer panel data

In a few countries, GfK as well as AC Nielsen are collecting data on organic markets in addition to data collection on total markets. So far, detailed information is provided for Austria and Switzerland. Furthermore, for Belgium, the UK, France and Spain the existence of panel data collection for organic markets is reported. In Germany, ZMP plans to buy organic data for a number of product groups. LEI buys Dutch data from IRI / GfK for, among others, the fresh food categories bread, milk / cheese, meat, fruit, vegetables, potatoes and eggs. In the reported systems in Austria and Switzerland, organic data are usually integrated within the DCPS and distinguishable from total data.

A segmentation of products is usually possible according to classical panel segmentation data. Normally, household panels do not report on consumption outside the home and therefore, this is not covered by the various panels. The product groups data are collected / reported on the request of (paying) users. In Austria as well as in Switzerland, all major food product groups are covered by the investigation. In the UK, ACNielsen is able to generate reports for organic food for the

categories margarine, butter, processed cheese, yoghurts, chilled desserts, eggs, UHT milk, fresh milk. In France data on organic yoghurt is available. Reporting on organic products is done between one and three times per year. Data are usually not openly available but have to be bought.

Several approaches to data collection are used (household panel, household diary, retailer survey, with or without EAN coding) – usually depending on the general method ACNielsen or GfK collect data in a country. Usually, the data cover a sample of the population which is representative. A comparison between organic and conventional data is possible. The data is controlled by experts. All information is available for paying users.

Table 5-27 gives an overview of organic data collection by GfK and ACNielsen. It is based on the results of the consumer-retailer-workshop in Berlin, April 2004.

Table 5-27: Overview of organic data collection by GfK and ACNielsen by product group

GfK - Bio data	A	B	DK	FIN	F	D	GB	GR	IR	I	LUX	NL	N	P	E	S	CH
milk		X	X		X	X	X		X			X					X
wine		X	X				X					X					X
cheese		X	X			X	X		X			X					X
desserts		X				X	X					X					X
eggs		X	X		X	X	X		X			X					X
spreads		X				X	X					X					X
yoghurts		X	X		X	X	X		X			X					X
fruits		X	X		X	X	X		X			X					X
meat		X	X		X	X	X		X			X					X
poultry		X	X		X	X	X					X					X
vegetables		X	X		X	X	X					X					X
frozen products		X	X				X		X			X					X

AC Nielsen - Bio data	A	B	DK	FIN	F	D	GB	GR	IR	I	LUX	NL	N	P	E	S	CH
margarine							X										
butter	X						X										
processed cheese							X										
yoghurt	X				X		X										
chilled desserts	X						X										
eggs							X										
milk UHT	X						X										
fresh milk	X						X					X					
dairy drinks	X																
curd cheese	X																
cream	X																

Table 5-28: Table with detailed data (where available)

	AC Nielsen	GfK
Austria	ROLL-AMA household panel different product groups using diary, analysing 3x per year	
France	Organic yoghurt	
Germany	Consumer Panel "Homescan" ACNielsen Homescan and Market*Track use the same product databases, i.e. when the organic product identification is realised for Market*Track the information is also available in Homescan. For fresh food (without EAN), ACNielsen does not distinguish between organic and conventional food. ACNielsen has no database with EANs of all organic products: they analyse trade texts and manufacturers' price lists to generate organic product information. In addition ACNielsen's field service examines currently all products of a category in a sample of shops and divides them into organic or not. Up to now this field research is only realised for milk and yoghurt. In May 2004, the shop audits will take place for milk, yoghurt, butter and quark. Next year it intends to cover about 10 further product categories.	ZMP plans to buy GfK organic ***Consumer Scan*** data for the fresh food categories. ZMP has access to ConsumerScan raw data via internet. GfK has to classify EAN-products in these categories, ZMP/GfK have to solve the challenges mentioned above. ZMP will organise the process, examine the data quality, develop methods to classify organic fresh food and join the multiple sources, if the project is supported by the programme for organic food of German government.
Netherlands		LEI
United Kingdom	In the UK ACNielsen generates reports for organic food for the categories margarine, butter, processed cheese, yoghurts, chilled desserts, eggs, UHT milk, fresh milk.	
Denmark		www.gfk.dk Analysis of consumer panel of 2000 households as regards their buying habits concerning organic products
Switzerland		IHA-GfK AG household panel weekly data collection, all product groups

TNS/Superpanel

Besides ACNielsen and GfK, TNS provides household panel data. TNS covers all types of research from qualitative to quantitative work. TNS is a global company - Europanel is part of the business which is a partnership between TNS and other research companies e.g. GfK in Germany. TNS operates among others "Superpanel". This is a UK panel of 15,000 households geo-demographically representative of the mainland UK population. The panel continuously reports on grocery purchasing every week using a hand-held laser scanner. They scan every barcode on all the products they have purchased in a shopping trip and the information is transferred electronically to the Superpanel systems. The data is processed giving details of where they shop (which stores) what they bought (products, brands) and how much, and all this is linked to the knowledge of who is behind the purchasing. All the information on the products comes mainly from the barcodes and also from till receipts sent in by the panel members. For products with

no barcodes (fruit and vegetables etc) there is a codebook for panel members to record their purchases. If the barcode describes the product as organic, it will be tagged as organic in the databases. In the codebook there is an option to record the item purchased as an organic item. This means that in the UK they have a database that groups all organic items together for a 'total organic' read, but by individual database they have the ability to define data-sets as organic also e.g. within the fruit and vegetables database they can look at just the organic fruit and vegetables alone. Or they can group people who are 'organic buyers' and look at their purchasing behaviour, their demographic profile and lifestyle statements to better understand who an organic buyer is.

With regard to the purchasing activities of households in farmers' markets or direct from the farm where there is no barcode, for many consumers it is quite difficult to distinguish between an organic and a conventional farm. For Superpanel in the UK panel members are asked to record any shopping trip they make, whether it is to Tesco, a farm shop or a discounter. For products without a barcode, it is at the panel member's discretion whether they record the purchase as 'organic'. As you can imagine, the pick-up of purchasing for smaller stores and farm shops is not as good (nor as robust) as the pick-up Superpanel has for large retailers like Tesco, Sainsbury etc. The general trend in the UK is that the more specialist stores, such as fishmongers and grocers, are in long-term decline; many of them have already closed because they can no longer compete with the larger retailers in the market place.

Conclusion

The private DCPSs on organic markets are not harmonized on international level. The Austrian as well as the Swiss system can be regarded as positive examples for a case study. In addition, ZMP together with GfK and others are developing a system.

It will be difficult to reach harmonization on the consumer level since this sector is – in regard to sophisticated systems - dominated by private companies competing for the same markets. Nevertheless, the dominant companies should be encouraged to exchange experience and develop a standard for comparing results on an international level, at least within the companies. In the long run, they should be encouraged to develop one common standard. Other industries have shown that this type of cooperation is possible and offer benefits even for global players (e.g. the standardization of transport systems in the automobile sector).

6 Summary and conclusions

The last chapter of the report summarises the general approach and the main findings of the workpackages 2 and 3 based on the results of the analysis of the data collected organic food and farming across Europe. Moreover recommendations are put forward for future activities which promise an improvement in the availability and quality of organic food and farming data.

European markets for organic products have developed rapidly in recent years. EU-research projects like OFCAP (FAIR3-CT96-1794) and OMIaRD (QLK5-2000-01124) have dealt for the first time with a European approach to gathering, processing and analysis of organic production and market data. The project results have indicated that in many countries regional or national data gathering takes place but there is less systematic collection, processing and publishing of data concerning organic farming. Many published data showed inconsistencies over a specific period (e.g. based on data collection or estimation methods which are frequently changed or an unrepresentative sample) as well as data which are not comparable between countries and product groups. This means the quality of data on organic food and farming data is, in many cases, not directly comparable with a corresponding set of total data. Furthermore, project results from OFCAP and OMIaRD also showed a high public and private demand for organic production and market data.

The experiences of former projects and data users set the frame for this review of conventional and organic data collection and processing systems.

Study approach

Based on this existing knowledge, the EISfOM concerted action aims to build up a framework for reporting valid and reliable data on production and markets in the European organic sector in order to meet the needs of policy-makers, farmers, processors, wholesalers and other actors involved in organic markets.

First a review of existing data collection and processing systems (DCPS) was carried out by surveying the most relevant statistic institutions in 32 countries using a 2-step approach.

In the first step all known statistic providers (private and public statistical bureaux, market research companies, inspection bodies, etc.) were contacted and asked about the DCPSs which cover all or part of the organic sector or provide at least the possibility to incorporate data on organic farming. The results of the first questionnaire should provide answers at least to the following questions:

- Which institutions operate which statistics within the agribusiness sector?
- Which institutions operate data collection and processing systems for organic food and farming data?
- On which actor level (farm, wholesaler/processor, trader, retailer, consumer) are data collected?

In the second step those institutions which work with statistics in the agribusiness sector received more detailed questionnaires with regard to the actor level they cover with their data collection (farm level, foreign trade level, wholesaler / processor level, retailer level, consumer level). From the results of the second questionnaire an inventory of existing European DCPSs was compiled, including information on their statistical backgrounds as well as their individual strengths and weaknesses. It indicates furthermore:

- Which DCPSs include organic data?
- In which DCPS are organic data distinguishable from the total set of data?
- What types of data are collected (sales and production volumes, sales and production values, price data, structure data, etc.)?
- Are there data quality management systems in place which ensure the plausibility of organic food and farming data?
- How frequently are data collected, processed and published?
- Which segmentation variables are used to break down the total data set?
-

Figure 6-1 indicates the project approach to gathering parallel information about existing DCPSs on different actor levels. The results allow a rough categorisation of the studied DCPSs to provide:

- a total data set, which does not differentiate between conventional and organic farming data,
- a total data set, where organic farming data are integrated but distinguishable and
- an exclusive organic farming data set.

Figure 6-1 indicates furthermore that in WP2 and 3 each EISfOM project partner took the responsibility to review the existing DCPS for several countries. For each country the same methodological approach was applied.

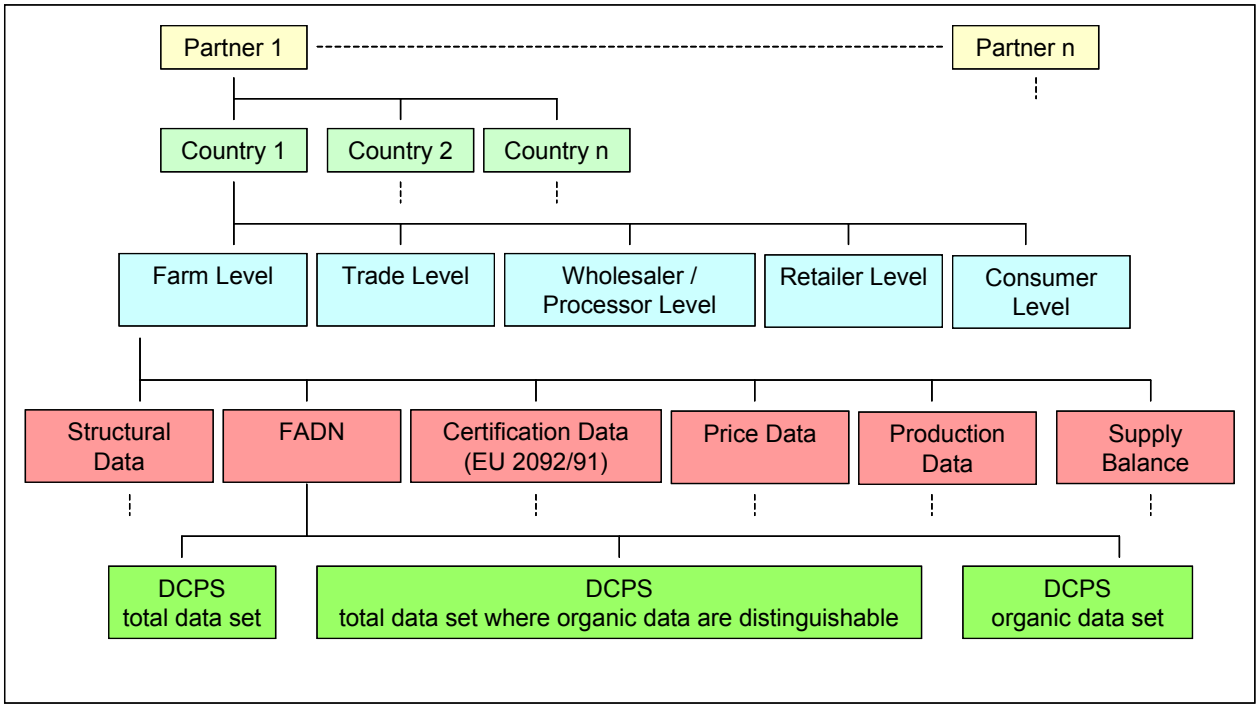

Figure 6-1: Project approach to get information about statistics on existing DCPSs on different actor levels

The results presented in the report reflect the current information available about DCPSs across Europe, which is constrained by the willingness of the contacted national statistical provider to respond to and co-operate with the EISfOM project partners. In some countries either none or very few of the statistic providers who were contacted decided to take part in the survey. This means that in some countries it is likely that more DCPSs for the studied actor levels do exist, but it was not possible within the project resources and structure to obtain this information.

The results of the survey were used to analyse for each country the current situation regarding DCPSs which contain organic farming data by actor level with regard to the following questions:

1. Does at least one DCPS exist per country with organic data collection?
2. Does at least one DCPS exist per country where organic data are integrated into a total DCPS and distinguishable?
3. Does at least one DCPS exist per country which allows a direct comparison between organic and total data?
4. Does at least one DCPS exist per country with organic data based on a census or representative approach?
5. Does at least one DCPS exist per country where organic data collection is conducted at least once per year?
6. Does at least one DCPS exist per country with organic data where data / reports are disseminated at least once per year?
7. Does at least one DCPS with organic data exist per country which runs data quality management systems?

Furthermore the analysis of the results indicates which DCPSs with organic food and farming data can be considered as a European benchmark and focussed upon for the evaluation of pilot applications of DCPS improvements in selected countries in WP5 (see figure 6-2).

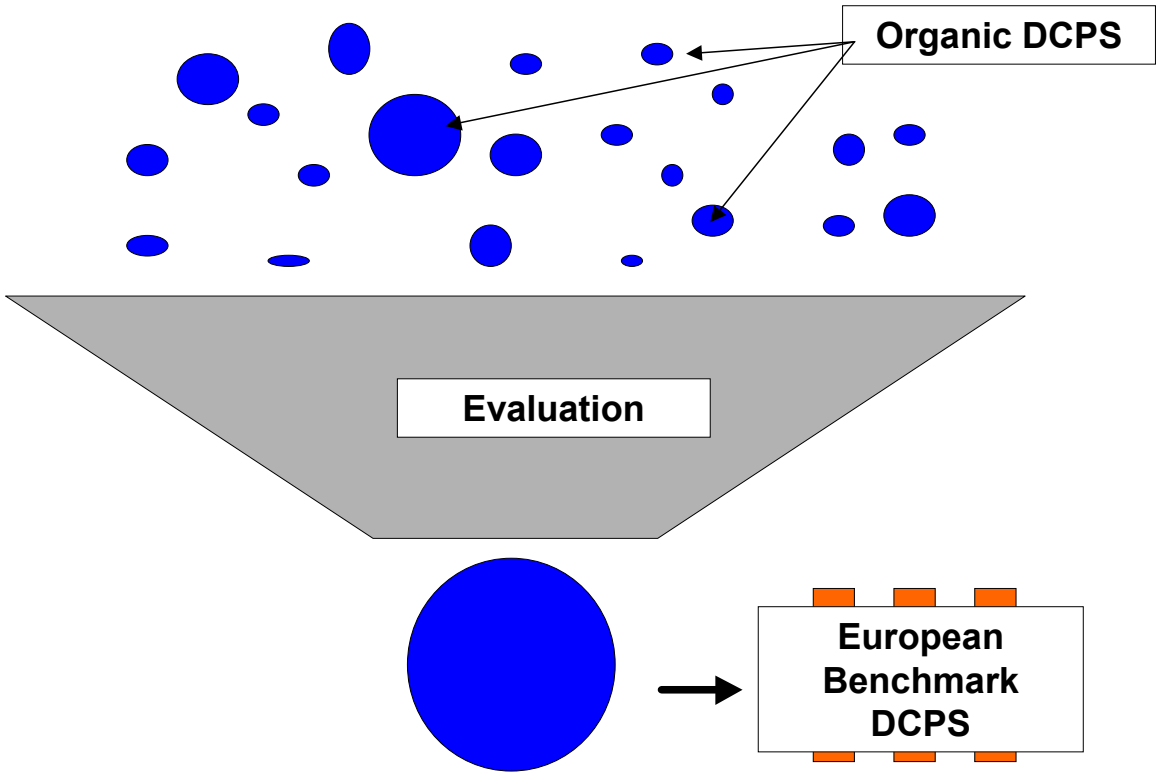

Figure 6-2: Evaluation of existing DCPSs which contain organic farming data per actor level in each country

Summary of results concerning the state of data organic data collection at the international level

Currently few public DCPSs at the international level exist which cover the organic agriculture and food sector. The main statistical activities are initiated by the OECD and FAO on a global level. Within the European context, EUROSTAT co-ordinates all cross-country statistical activities. Furthermore EUROSTAT publications often also include comparisons with selected non-European countries such as Switzerland, the USA or Japan, and thus provide a global data view.

Between OECD and Eurostat there are interfaces between many statistical scopes with regard to the integration and harmonisation of variables and metadata.

At present all three institutions include little or no specific data about organic agriculture. Given the dynamic growth of the organic sector and public support for it in recent years, together with the enormous demand for organic structure, production and market data from policy-makers, market actors, the media, the science and advisory sector and from farmer, consumer and environmental associations (to name only the most demanding groups) there is currently a broad lack of data and information available on the organic sector.

Given the lack of data availability and the demand for it, IFOAM have started several data gathering activities (annual data gathering and reporting for the variables number of organic farms and organic UAA)

Furthermore, various public activities at the European level have begun or will start soon to bring together existing organic data and potential sources which could collect data about organic food and farming in future. Within the “Organic Action Plan” DG Agri is intending to introduce regular organic market information gathering. Within its “Food Safety” task force Eurostat want to implement regular collection of organic farming data, beginning with the production level but also including trade data, and in the longer term, consumption data on organic food (although the collection of organic consumption data probably will not be integrated into the existing Eurostat “Household Budget Survey”). More and more national governments express a wish to support these European activities or at least to collect more data on the national level to enable market and political decisions to be taken on a more informed basis in future.

Summary of results concerning the state of data organic data collection at the national level

1. Many organic food and farming data gaps across Europe

The analysis by country gives a heterogeneous picture across Europe. Both the comparison by actor level between the countries studied and the comparison within the country between the different actor levels indicate that there are many gaps in the data on organic farming across Europe.

2. Few countries with advanced approaches for organic data collection

In countries like Austria, Denmark, Finland, Germany, Italy, The Netherlands, Norway, Switzerland and the United Kingdom, organic food and farming data are available on many actor levels. Therefore in these countries it is now possible to draw a fairly complete picture of the organic sector, at least on the production and consumption side. Mainly in countries with emerging organic markets, like Bulgaria, Hungary, Poland, the Baltic and some Mediterranean countries, there is very little data available about organic farming and the organic market. However in some of these countries activities are now beginning to improve data availability.

3. Organic DCPSs mainly operated by private institutions

The institutions which collect organic farming food and farming data at present are mainly private bodies driven by economic goals. Public data collection focuses mainly on structural data on organic farms (e.g. collecting data via the farm structure survey). Private institutions also collect structural data (mainly organic farming associations and certification bodies) while commercial market research companies are interested in organic consumption and sales volumes and values. In some countries public institutions or farm associations buy data from commercial providers and make them accessible to the public. In other countries these data are bought only by private companies (e.g. retailers, processors or wholesalers) and are not widely disseminated.

4. Organic data collection mainly decentralised on national level

Organic farming data collection in many countries takes place in a number of institutions which are seldom connected to a network. Above all scientists, market consultants and marketing experts in organic farming associations try to collect the data from different sources to compile a national picture of organic farming. The heterogeneous structure of national data providers, which run different methodological approaches, leads to differing data reliability depending on the source and the used methods. The varying data reliability also means that data from different sources cannot be compared directly or used to prepare a supply balance sheet for organically produced products.

5. Most organic DCPSs are operate at the farm level

Regarding the actor level of data collection, most organic farming data are available on the farm level (farm structure data, FADN data, price data) and on the consumer and retailer level. There is very little information about foreign trade and on the processor / wholesaler. Often there are only rough estimates for organic trade, the production and consumption volume in many European countries. Furthermore, detailed information on specific commodities (e.g. berries, pears, tomatoes, etc.) relating to production and foreign trade volume is missing. As a result mainly of the lack of foreign trade data for organic products, it is not possible to derive a supply balance sheet for organic products. This in particular would provide a key set of data which would offer policy makers the opportunity to get specific information about the domestic production and market development as well as import and export activities and the degree of self-sufficiency of organic products.

Most of the data available on organic farming activities relates to the number of certified organic farmers and processors, the utilised organic area and organic livestock numbers. Data are provided mainly by the Farm Structure Survey, or in some countries from certification bodies for organic holdings. Even when certification bodies would be able to provide the most precise figures about the national organic farm structure, they are not obliged to report the data on certified organic farms. Only in few countries do certification companies disseminate the data freely on a voluntary base and they are often restricted by their close relationships with organic farming associations which try to keep their data confidential.

6. Main weaknesses of organic data collection and processing

The main weaknesses of DCPSs which cover organic food and farming data relate to data quality and quality management systems. In addition, organic consumption and retailing data is not publicly available although it could often be extracted quite easily by market research companies. However public budgets to buy these data are not generally available. For the certification bodies, the lack of data availability on organic farm structures is caused by concerns over confidentiality.

Standardization of organic food and farming data at the European level, and often also at the national level, is described as missing and difficult to implement. Therefore published organic data from different countries are seldom comparable. For instance, data on national organic farm structure based on information from the

Farm Structure Survey is difficult to interpret. The results are influenced by the different understanding of organic farming amongst participating farmers: some report organic production but are not always certified organic farms. There is no plausibility check in the Farm Structure Survey which would be able to identify and delete “pseudo” organic farms.

In several countries small farms or foundations which are not entitled to get public payments for organic farming are not taken into account in public statistics, which sometimes means that a substantial part of organic farming activity is left out. In many countries there is no distinction made between organic farms “in conversion” and certified “organic farms”. Taking this kind of distinction into account would improve estimations about the future dynamics of organic supply development.

Another weakness concerns the timeliness of different data collection or processing methods over a longer period on all actor levels. However this is a general problem in statistics and is not specific to the organic sector. A further problem is the date of publication - published organic food and farming data are often not very up-to-date and are sometimes released 2 or 3 years later.

For the farm, processor/wholesaler and trade level, representativeness is often a problem, even in harmonized Eurostat systems like FADN which should in theory be representative, but which in reality may not be.

Mainly for these levels of data collection, the reliability of organic food and farming data suffers from the absence of quality management in the institutions which gather and publish the data. Plausibility tests are seldom carried out or are often just visual checks by experts; triangulation checks are seldom used. The problem is made worse because in many cases in private institutions (e.g. organic farm associations) the staff responsible for the data collection and compilation are not educated in statistical methods.

The results of the second survey also clearly show that the integration of organic data collection within existing “Conventional DCPSs”, where organic data are distinguishable, seldom takes place. Farm structure surveys, FADN and consumer or retailer panel data all provide the opportunity and for the latter two cases the technical pre-conditions for distinguishing organic data often exist, but implementation depends on the national demand from private and public actor groups.

Concerning the production statistics, trade statistics and supply balance sheets the technical, financial and organisational pre-conditions do not exist in most European countries to enable organic food and farming data to be distinguished within the “Conventional DCPSs” operated by public statistical providers.

Last but not least, the method of data storage partly leads to problems. Many systems are still in a poor, less structured electronic form, such as Excel spreadsheets or Word tables. Whilst this is often acceptable for the institution’s internal purposes, data dissemination and harmonization are made more difficult.

Consequences of the results

The results of the review in WP2 and 3 demonstrate the current “blind decision making” by market and policy actors. For instance, politicians often do not know whether it would be better to support production or consumption or to solve problems

in the organic supply chain Furthermore, in the most countries there is information available on the volume of organic products which have to be sold as conventional products in a situation of over-supply. Increasingly policy-makers need access to reliable organic sector data.

However, it is not always clear how to finance gathering more reliable data or purchasing data from market research companies, introducing better systems. National statistic offices are often subject to cuts in their budgets. Nevertheless, there is a high demand for organic food and farming data and in view of the lack of reliable data there is a clear requirement to improve the quality and availability.

General recommendations

The following recommendations emerge from WP2 and 3:

1. A public European initiative to coordinate all national organic data collection and compilation activities, led by Eurostat and/or DG Agri, should begin as soon as possible. Both institutions have started or are about to focus more on organic food and farming data collection. It is important to emphasise that information about all parallel actions should be exchanged and the activities coordinated to cover all relevant aspects which support the enhancement of organic food and farming data collection, the harmonisation of existing systems, and measures which would lead to an improvement in data quality.
2. A framework on each actor level (farm, wholesaler/processor, trader, retailer, consumer) should be built for a regular exchange of information between national and international statistics experts and people with the know-how about specific aspects of organic food and farming data collection. Co-operation and information exchange is a key instrument for improving the quality and comparability of these statistics.
3. Because the political will to access more data on organic farming is a little vague and there are huge costs involved in collecting or buying organic food and farming data, it is recommended that policy actors at the international level should define a set of organic sector data which they need most urgently.
4. Given these variables, the effectiveness and cost efficiency of either to implementing an organic data collection and processing using existing DCPSs, using private market research companies, or developing new public DCPSs should then be evaluated. Harmonising organic data collection could act as a trigger to improve data quality and representativeness. However, this will require a high investment in administrative effort and organisation.

Action points for WP4 and 5

The results also indicate the scope of study for the following workpackages. Above all, data quality evaluation issues and the definition of key criteria for the establishment of a data quality management system should be the focus and should into consideration aspects specific to the organic sector.

Data quality must be ensured by implementing a quality management system which includes coverage, timeliness, comparability, accessibility. Further, the procedures for assuring the quality of proposed new statistical activities and for evaluating the

quality of existing statistical activities within the organic sector should be defined for the different types of DCPSs. The existing Eurostat framework, in which quality is defined in terms of relevance, accuracy, timeliness and punctuality, accessibility, clarity, comparability and coherence, could be used as a general guideline for data quality management.

The requirements identified for data quality management systems should guide the analysis of European benchmarks for DCPSs which include and distinguish organic data in WP5.