

Documentation

Agricultural Market Price Information System (AMPIS) for cereals

❖ The characteristics, methodological parameters of AMPIS An introduction

AMPIS is principally of public interest, its objective is to provide price information for the agricultural market players, which in a market economy separated from each other need actual and representative price data in order to assist their daily decision making. The information of the domestic and market organizations enables these higher knowledge about market processes so these can make better decisions that result in a more balanced functioning of the market, while the market regulator organizations may be assisted in developing the appropriate economic environment. Its other purpose is to provide the National Institutions with price information pursuant to decrees related to the National Market Regulation, but usually in alignment to greater country or Community regulations.

Clearly the system has a multi level function providing the price data for the national need, this means that the whole agricultural administration, the Agricultural Economic Institute, the State Statistic Institute, the provincial governments, the producer organizations will be provided with objective and actual price data by a compact and independent price information system.

The establishing of the AMPIS for cereals in the relevant county:
The aim of the establishment of the new organisation for delivery relevant price data of cereals will be the statement that in the Country the established or to be established AMPIS at the Ministry or at another public organisation at present and the future is the most suitable organization for operating an objective price information system.

We see that the agricultural market price information system in a country has a dual function it means that for AMPIS are requirements which are stated by the country itself and on the other side they are the fulfillments of international organisations, international market players for cereals.

In the course of the developing of the system, the most important criteria are the following:

- *Correct definition of the commodities observed*, to secure that the system covers the important products for the dual need, for the products subject to market observation, important and careful work will be required for precisely defining the given product and determining quality parameters in order to ensure comparability of the collected prices with other sources,
- *Determination of the data providers* who belong to the representative markets. The list of the data providers will be set for each individual product. AMPIS has two ways for the data collection. The data are partly

directly coming from the market participants and on the other side from the data reporters, the prices collected in the AMPIS constitute primary data collection,

- *Correct definition of the marketing stage* where the price information will be collected. In the dual benefiting system operated by AMPIS the monitoring of the prices in an individual vertical system for each product groups are subject to alterations. This allows for more transparent market processes, recognizing intervention points and determining the means for market regulation measures. AMPIS does not collect prices at the farm gate. The AMPIS principle is to collect the price data at the so called "bottle necks". AMPIS collects prices on 3 different marketing levels corresponding to the individual products that are clearly distinguished according to their contents along the product's life cycle:
 - Prices belonging to the farm gate will not be collected by AMPIS.
 - FGATE – to collect price at farm gate is principally possible but mostly not practicable, this is the reason why the most practicable way will be used at AMPIS generally and it means that the prices will be collected at the first marketing stage.
 - Prices belonging to the first marketing stage, at which basis material produced in agricultural holdings, are transferred directly for storage or processing. These prices collected in the system exclude VAT but include the transportation costs from the farms to the markets or silos or the processing plants.
 - In this category are falling the cereal prices as defined the DELFIRST – delivered to the first consumer – silo or processing plant – on truck or other transport means,
 - DEPPROD – Departure from farm or from production area – loaded on truck or other transport means,
 - DEPSILO – departure from silo – after some storage – on truck or other means,
 - DELPROC – Delivered to processor after one intermediary,
 - FOB – Free On Board,
 - CIF – Cost, Insurance and Freight,
 - CIF-IMP – CIF for imported grain,
 - DEPPORT – Shipped to the place (port), unloaded, on truck leaving port,
 - DEPPORT-IMP – Shipped to the place (port), unloaded, on truck leaving port – For imported grain – Duty paid (to be confirmed)
 - DDP – Delivered Duty Paid for imported grain.To this point see the working document of the European Union which is attached to this elaboration on the end.
 - Prices belonging to the second marketing stage. This is the price of major semi – finished or finished products produced from agricultural basis materials. This is the price at which the processing organization sells the products produced by it, it means ex factory price. The prices collected by AMPIS exclude VAT.

- Finished fodder feeds,
 - Flour produced in the milling industry,
 - Bread produced at the pastry industry.
- Prices belonging to the third marketing stage. These are the consumer prices including VAT and all other costs and taxes. These prices have greater significance for the public benefit system.
- Flour marketed at a supermarket or on the market,
 - Bread marketed at a supermarket or on the market.
- To maintain the objectivity criteria: In developing the system, it is fundamental to collect and disseminate information with objective contents; this has to be implemented by taking into account two basis requirements related to the system development. One of them will be the appropriate selection of the system development methodology. Collecting information on a daily, weekly, bi-weekly or monthly basis does not allow for comprehensive price monitoring for each product, and nearly all price monitoring can be mentioned therefore "only" as representative. On the other hand, market participants, subjects to be included among the data providers should be selected in a way that the representative information for regional and national relevant products and the price information derived from more comprehensive and timely on other basis (mostly monthly price information system of farm gate prices collected by the State Statistic Institute) price monitoring systems should coincide to the maximum extent possible. The reality (objectivity) of price information may be achieved by collecting information on products subject to price monitoring with as great coverage as possible.
Mathematical – statistical parameters:

- ✓ The Assumption of the observed price, which is only a sample observation at AMPIS is that the middle value is identical with the value on the complete market $\bar{x} = \bar{X}$ (\bar{x} (x cross) = \bar{X} (X cross)), it means that with higher number of observed prices the value of \bar{x} (x cross) is going assumptatively to \bar{X} (X cross)), and in the case of the total market observation we receive \bar{X} (X cross)), our target is to maximalise the number of the observed objects, we want reach \bar{X} (X cross)),
- ✓ The other highest significant mathematical – statistical value is the variance (σ) (sigma). Our target is that the variance (σ) (sigma) of the observed prices will be minimized (minimum = 0). In the case that the variance (σ) (sigma) would be 0, the observed price would be identical with the correct price of the whole market volume $\bar{x} = \bar{X}$ (\bar{x} (x cross) = \bar{X} (X cross)), this would be exactly only in the same case as we described above,
- ✓ The value $\bar{x} = \bar{X}$ (\bar{x} (x cross) = \bar{X} (X cross)), and $s = \sigma$ (the variance in the total market observation $s =$ the variance in the random sample (σ) (sigma)) is only possible in the same case and it is in the case if we observe the complete market,

- ✓ But this is in the most cases not possible and we have to make compromise. The compromise will be that we observe so much market participants as possible to secure the objectivity criteria.
- The level of coverage is subsumed in a separate table, which indicates the proportion of quantities purchased of agricultural products involved in price monitoring compared to the total quantity of agricultural products at the same marketing stage. For processed products, it indicates the proportion of processed products involved in the price monitoring against total sales. It is obvious that the rate of the coverage is a fundamental criterion for developing of a representative market for each product because the accuracy of the price monitoring increases almost in parallel with increasing of the coverage. In general terms we can believe that it is sufficient to have about 50 % of market coverage for the products. The number of organizations, our partners for the price reporting involved in the system and the rate of the market coverage are different for the products. For products marketed by a very limited number of organizations only it is possible to achieve significant coverage with a relative low number of data providers. While only a relatively low coverage may be achieved by observing a greater number of operators in the case of the plant products traded by more market players, especially the cereal silos which are spread commonly in a greater number in the countries. On the other hand, the accuracy of price monitoring is for this reason not worse in the case of lower coverage than in less crowded markets for the ability of more homogenous market players to represent their interests may be deemed to be the same. The coverage of price monitoring shall be investigated permanent (year after year) to ensure homogeneity of the available database. To guarantee for publishing objective price data can be given only by an institution, which is not interested in the content of the prices collected. With other words the institution has to be an authority. This makes it capable of preparing the official price reports required by Country's Competent Authority, which price reports serve as the basis for the administration of the market Organisation of cereals. The dissemination of objective price information beneficial for the public in the County is normally more extended as the Competent Authority's requirements but clearly they possess the same highest objectivity criterion.
- To be up-to-date with the delivering of the information
The delivery of the information has to be permanent. The time difference between delivering the data by the partners and the publication has to be kept as little as possible. AMPIS collect regularly and continuously in a systematic way market price information and makes the processed data available for the market players in order to make use of them in their decision making process.

- **The commodities observed, the product categories**

The price observation of the products are characterized that it is based on the one side at markets (whole sale markets or consumer markets) and on the other side at the storages (silo) or at the processors of the agricultural raw products. In this way both the national benefit and the requirements of the international requests can be covered.

The commodities included in AMPIS are generally the following as summarised in the table:

This table will make transparent the complete range of the Agricultural Market Information System. As regards our scope now, we are dealing with the cereal prices only, but the system is principally analog to all agricultural products.

Regarding to the animal products:

- Milk and milk products, observed at the milk processing industry plants,
- Livestock of cattle, pig, sheep, goat, horse observed on the livestock markets,
- Carcass weight of slaughtered animals, beef, pig meat, sheep meat, observed directly at the abattoirs,
- Poultry carcass weight, observed at the poultry slaughtering plants,
- Eggs, observed at the packing stations,

Regarding to the plant products:

- Cereals and oilseeds will be observed mostly at the silos and the milling industry, DELFIRST system - delivered to first consumer (silo or processing plant) - on truck or other transport means, and DEPSILO – departure from silo – after some storage – on truck or other means as well as the other reporting possibilities as subsumed in the chapter above,
- Fresh fruit and vegetables including potato, observed at whole sale markets,
- Fresh fruits and vegetables observed at direct transactions between producers in the production area (mostly producer organizations) is at present not relevant,
- Fresh fruits and vegetables including potato, observed on the so called green markets (consumer markets),
- Wine (table wine) will be observed at the wine cellars,
- Tobacco will be observed at the first processing enterprises, tobacco processing industry plants,
- Olive oil will be observed at the processing enterprises, the oil pressers,
- Sugar will be observed at the processing enterprises.

- **The representativity of the data collected**

The best way is to include so much as possible of the processing plants in the price reporting system. To ensure the anonymity of the price data deliverers (data confidentiality) the dissemination of regional data will be limited to regional conglomerates in the county concerned.

This kind of the division of the country into regions is not only very reliable as regards the data confidentiality but in the same time it possesses enormous benefits for the publication because of the enrichment of data in the cells of the tables. At the same time the readability of the tables will increase, too, because of the reduced number of tables on each side of the publication. The comparison of the recent week/month with the former week/month is easy to see as well as the comparison with the week/month in the former year. On the other side the reliability of the price information will be ensured. The level of the representativity of the prices of the various commodities achieved must to be high, more suitable very high. The level of the representativity of the collected prices means the proportion of the quantity covered by the price information system to the total quantity marketed at the same marketing stage.

Number of the processing plants (potential partners for price data supplying):

It has to be known the volume of the market for cereals in the different marketing channels. We have to know what is the part of the cereal which is marketed and what part of the cereals will be directly used for household consumption or animal feed. The transparence and the knowledge of the marketing structure is the basis for the reliable price collection and accumulation on the different marketing levels.

All enterprises in the country (all enterprises, market players, silos, milling industry, fodder industry) which are dealing with cereal marketing or processing:

Firms they are dealing with cereal marketing or processing	Volume of the cereal marketed or processed in the country

Number of data supplying partners:

The basis for a high degree of representativity is a high coverage of the weighted average prices. We have to look that we will construct a friendly but legal underpinned contact with our data suppliers.

Selected enterprises (our partners of all enterprises, market players, silos, milling industry, fodder industry) in the country which are dealing with cereal marketing or processing:

Firms they are dealing with cereal marketing or processing	Volume of the cereal marketed or processed in the enterprises which are selected in AMPIS

o **Global quantity information per product group**

The total quantities are standardized collected and published by the State Statistic Institute (CROSTAT). In this table we can see the total market size. The knowledge about the size of the market is of highest relevance for the assessment and estimation of the representativity of the collected data by AMPIS. Principally can be stated that that we have to know the collateral statistics to receive reliable price data.

Production of crop (basis material for the knowledge of the production potential of crops in a country)/this table compounds of the data of Croatia, it should be staying here as an example:

Category 1	Area in 1000 ha 2	Yield 100 kilogram/ha 3	Harvested production in tons 4 = 2X3
Wheat	175.045	46,40	812.347
Rye	1.731	25,20	4.364
Barley	59.000	38,20	225.265
Oats	28.000	20,00	56.000
Grain maize	288.500	49,40	1.424.599
Triticale	2.705	35,30	9.546
Rape	13.069	30,10	39.330
Sunflower seed	20.615	26,30	54.300
Soya beans	46.500	19,50	90.637

o **Price and quantity information collected per product group**

AMPIS collects information principally on both prices and quantity. This principle depends on the kind of the data collecting.

Cereals and oilseeds observed at the silos and millers, DELFIRST and DEPSILO system or other defined stages	Price and quantity
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- **The frequency of the information collected**

The frequency of the data collection in the case of data reported by the data reporters on the wholesale and green markets follow the market days on these markets. The reporting of data of partners from the processing industry follows the rhythms of the reporting requirements set by the Competent Authority requirements set by the County.

- **The processing of the information collected**

The new web based software will be capable to build a data base and querying the data stored in the database on different criteria.

- **Data confidentiality**

International and national provisions protect the confidentiality of the returns by the respondents. At the authority proper protection measures have to be carried out. Every official has his own responsibility for the data. The password entry system is established in the office, so those individuals are only allowed to view certain data. The next security level belongs to the responsibility of the officials who deal with the information processing (data entry, data processing, data storing, and data dissemination).

We have to discuss the data security as belongs to the respondents, the data processing at the authority and at the data dissemination on national level as well as at completing the questionnaires.

- **The integral parts of AMPIS during working**

The following points are formulated in accordance to the ISO 9000 international standards.

1. Definition of the Rules of Procedures based on the flow diagram,
The rules of procedures within the AMPIS unit describe the process which has to be cast principally by the unit. This document regulates the activities of the AMPIS unit. Within the activities it will be defined the work – flows, roles and responsibilities and establish the procedures in order to operate the price information system to the benefit of public needs as well as to satisfy the requirements set by the Competent Authority. The rules of procedures are relevant to:
 - Head of section,
 - Administrative personal,
 - Product managers,
 - Methodologist,
 - Publication manager
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Documents that form the basis of the procedures are legislations acceptable to AMPIS, these are the relevant national legislations, the national by – law related to the collection of the price data, regulations applicable within the

whole institution, the written procedures within the AMPIS unit that regulates the working process (the written procedures are documented in a separate table in the next pages),

2. Organization Chart,

The organization chart makes for the AMPIS unit as well as for the other units visible which colleagues are working in the AMPIS unit,

3. Application of the Rules of Procedures at the workplace,

The application of the Rules of Procedures on the workplace has to be signed by the Head of Sector and has to be countersigned by each employee within the AMPIS unit,

4. Job description for the colleagues within AMPIS,

The job description for all colleagues they will work within the AMPIS unit will be worked out after the project; the individual job description contents the responsibility and the profile of the work place.

5. Meeting the requirements regarding the development of the system

1) Parameters:

- Collection of data,
- Processing of the information,
- Storage of the data collected and processed data,
- Dissemination of the information,
- Frequency of the information collected,
- System of the data suppliers,

2) Objectivity, representativity and homogeneous database,

3) Coherence with data originated from other statistics

5. Implementation and control of the measurable goals (benchmark, objective verifiable indicators),

6. Rules of supervising the data suppliers of AMPIS:

1) Which documents are available?

2) How are the documents processed?

3) Archives

7. Supervision within AMPIS,

8. Security of the Information Technology,

10 Rules of control of the incoming and outgoing e-mails,

11. Human resources: permanent education, staff training plans,

12. Measures of the satisfactory of the staff, data suppliers as well as data users,

13. Introduction of Quality Management (ISO 900X international series)

○ **The necessary activities to carry out by the staff within the AMPIS unit**

Collecting information provided by enterprises, market participants

- Data checking and approval system is upgraded, automatic and manual control and inspection system,
- Introduction of the periodical control of the data supplier to reach highest quality on the delivered figures,
- Interactive Data Entering System (IDES),

- Proposals for strengthening the technical basis by obtaining necessary equipment and improving human resources capabilities,
- The data transfer system from the respondents to the Ministry has to be developed to modern requirements,
- Additional information determined and collected, aggregated and disseminated which make it possible for all stakeholders of the market to monitor market developments in a comprehensive and meaningful way.

Data entry

- Automatic routines for cost-saving data entry,

Data aggregation, pooling, storing, processing

- Automatic routines for data aggregation,
- Efficient deal with data algorithms,
- The data acquisition system is developed to modern requirements,
- Data control function implemented, on the spot control of data suppliers strengthened,
- The data basis and network security satisfies the requirements as regards in the Commission Regulation 885/2006,

Preparing reports and their dissemination, reporting to various institutions and recipients, preparing and publishing official bulletins (this chapter performs the example of the AMPIS organisation of the Republic of Croatia)

- Determination of data exchanges internal and external data exchanges prepared,
- Established guidelines for queries from Ministries, Official Institutions and market participants, Research Institutes prepared,
- Links of EC requirements to public needs analysed and updated,
- Data collection, processing and dissemination for the requirements of the EC updated, reporting requirements are proper and in best time functioning,
- Proper connection to the Official Market Information for other authorities on national level as Ministry, National Statistic Bureau and other institutions in modern dissemination form, preparing and publishing official bulletins in modern form,
- Official Market Information of public interest via brochures and internet solution,
- Creation of an informative web-site.

○ **Necessary resources needed belonging to the human capacity**

It has to be stated that the colleagues must be a team and have to be able to work in long term within the institution. The sufficient education and the permanent upgrading of the knowledge of the staff is absolute necessary as a guarantor of the success of the unit.

The comprehensive supporting within the Ministry of Agriculture as an intra – institutional basis for cooperation has to be seen as an assumption

(Information Technology Department, Legal Department, Material supply, Publication and web site specialists).

- **Necessary resources belonging to the Equipments for the staff within the unit for AMPIS**

It has to be stated that for the proper functioning of the AMPIS the for the daily work necessary equipments has to be provided. These equipments compound the following:

- Information Technology,
 - sufficient hardware,
 - printer,
 - efficient software,
 - copy machine,
 - fax machine,
 - telephone lines,
 - Security equipment for the Information Technology and for the documents and printed material,
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- **Necessary resources of the Information Technology, hardware and software needs for appropriate functioning of the AMPIS**

The assessment of the situation outlined in the previous chapters that the implementation of AMPIS faces various, partly basic problems. The aspects related to human capacity in number and knowledge Information Technology equipment (software and hardware) is of course very important and predominant. The conception of a database application strongly depends on the treated information. It is therefore very important that all data requirements and the processes and responsibilities of data collection are well defined before a design of an Information Technology system starts in detail. Otherwise one risks to waste time and resources because the system has to be redesigned once all information are available.

The first steps will be the assisting in the identification of data drafting the possible data flows (data provider) drafting a global database design for AMPIS analysing the transfer protocols and assisting in the design of the templates, drafting data control and backup routines assisting in the integration AMPIS in Information Technology infrastructure of the Ministry.

During the installation and working with the Information Technology Component the following tasks have to be taken into consideration:

- Information Technology administration:
Hardware and software infrastructure,
The software environment of AMPIS Information Technology applications,
Monitoring,
Protection of the stored information

- Properties:
 - Software architecture,
 - Domain model,
 - Programming language,
 - Type of database,
 - Physical size of the database,
 - Database engine,
 - Count of name users,
 - Working environment
- Application level administration:
 - Managing the multidimensional data space,
 - Defining currencies,
 - Defining product chains,
 - Defining data suppliers,
 - Defining input tables and queries,
 - Controlling publication of query results,
 - Defining users and assigning roles to them
- AMPIS maintenance regarding the Information Technology part:
 - Written procedures,
 - Controlling,
 - Two level administration (responding to the institutional structure and autonomous rights and responsibilities)
 - Improving redundancy of the working environment
- Modules of the software supporting; the Information Technology – Software supporting contents 3 modules:
 - Administrative module,
 - User module,
 - Public module

❖ *Administrative module:*

- Development of definition of the commodities,
- Administration of users and eligibility,
- Dimensions,
- Units,
- Definition of input tables,
- Administration of queries.

❖ *User module:*

- Development of automatic routines for cost-saving data entry, development of automatic routines for data entries,
- Data check,
- Data approval,
- Automatic routines for data aggregation,
- Efficient deal with data algorithms,
- Planning of the queries,
- Performance of the queries,
- Styling of the reporting forms,
- Determination of data exchanges,

- ❖ *Public module:*
 - Price information as regards by international organisations,
 - Price information for other authorities on national level, Federal Ministry of Agriculture, Federal Institute for Statistic, Federal Institute for Agricultural Economics,
 - Creation of a informative web-side e. g.
 - Price information of public interest via brochures and Internet solution,
 - Additional information collected, aggregated and disseminated which make it possible for all stakeholders of the market to monitor market developments in a comprehensive and meaningful way.
- Information Technology security system at central and regional level:
 - Equipment
 - Hardware
- **Description of the stages of the main relevant principles that has to be respected within AMPIS**

1. *General information on the price survey*

The price survey at AMPIS is cast for the animal products and for the plant products. Principally the AMPIS unit is the coordinator for the incoming data, for the processing and for the dissemination of the reports.

2. *Principles of the price survey*

2.1 Accuracy

Prices must refer to precisely defined products and geographical areas. They should be average weighted prices, and have to reflect the net amount (not including VAT) that actually is paid for the products on the marketing stages as defined for each product group. In the case of the green markets in the cities the prices are defined as consumer prices and these include the VAT.

2.2 Completeness

The price information received is first checked for completeness. All the partners have to send the price reports f timely or which they are responsible.

2.3 Plausibility

After each price has been compared with the corresponding price of the preceding week/month and/or the corresponding month of the preceding year, price differences have to be analysed. Unless insignificant, price differences which do not appear plausible require further inquiries.

3. *Organisation and execution of the survey*

3.1 Powers

- Management and co-ordination of the price survey,
- Determination of uniform guidelines for the price reporters,

- Definition of the respective products,
- Design of the survey forms,
- Organisation of the receiving of the data,
- Calculation algorithm within AMPIS,
- Publication of the processed price data

3.2 Collection of price - related information

Generally, the price survey is based on a strong legal basis declared by the Ministry of Agriculture but parallel it has to be stressed that the correct co-operation of the partner is of paramount importance:

Depending on the available facilities prices can be forwarded to AMPIS by means of questionnaires, fax, e-mail or directly on the web site

3.3 Survey forms

At present, the following types of questionnaires are used:

- Silos and the processing industry for the storage or/and of cereals and oilseeds,

4. Products, price reporters, calculation scheme

4.1 The products

The products which are involved in the AMPIS were chosen in respect to the requirements set by the Competent Authority in the County.

4.2. The price reporters

The price reporters are the partners of AMPIS. On the one side enumerators from the country offices of the Ministry of Agriculture are going directly to the livestock markets as well as to the so called green markets and collect the price data. On the other side the partners for the price reporting are directly the market participants. AMPIS staff will visit the partners in the near future to perform intensive coordination discussions, which will secure the proper collaboration of the reporting partners.

4.3. The calculation schemes

The calculation schemes are described at each product. Principally it can be stated that the most important part of the calculation is the weighting of the received price information to secure that the price data for the regions and for the country illustrates the really marketing process.

- **Written Procedures to be put in use at the workplace for AMPIS**

These written procedures are the basis for the job description for the colleagues within the AMPIS unit and for the reporter they support the AMPIS with the collection of the prices in the green markets, in the whole sale markets and in the life stock markets, and are obligatory for their daily work.

Scope and effect of the procedures

AMPIS colleagues must comply with the procedures applicable to the workplace of AMPIS. In particular, the colleagues shall assume the obligation to monitor changes in the Procedures and apply such changes in the workflows. The procedures as effective are located in the sector for analysis of the agricultural policy within the Ministry of Agriculture.

The colleagues have to countersign their individual job description to reflect their acknowledgement.

The Written Procedures shall affect the following areas of the work within AMPIS:

- Data Input
- Arrival and receipt of the input,
- Administrative Control of the received data,
- Checking of the received data for completeness
- Data processing
- Data entry in the system,
- Data processing,
- Data storage,
- Data queries,
- Algorithms for the processing,
- Preparation of output
- Performance of the output
- Obtaining the approvals for the publication by the Head of Unit,
- Official reporting to the Competent Authority,
- Public reporting via Brochures and web site performance,
- Archive,

Changes in the Written Procedures

The colleagues within the AMPIS Unit have to monitor the changes to occur their work place that may lead to a change in the Written Procedures. The colleagues have to report such occurrences to the Head of the AMPIS Unit and submit proposals on amending the Written Procedures in force.

- **Administrative control**

Validation should be carried out as soon as data is received from the price data suppliers (milk processing plants, slaughterhouses, packing stations of eggs, silos for the storage of the cereals, whole sale markets for fresh fruits and vegetables, wine cellars...). This will ensure that the data entering the database is correct and accurate regarding to the accountability of the input data. The validations recommended are as to check the reporting time interval, the measurement units, comparing against previous returns, check to completeness. The concrete validation checks at the administrative control are very different and product specific. As an example at Agrarmarkt Austria the administrative control check compounds 150 control steps.

The use of Information Technology tools is essential in the development of mechanism ensuring reliable, timely and transparent data collection and

reporting for the benefit of Member States and the Commission. Information Technology tools also secure to provide appropriate electronic means for enhancing information communication with national authorities.

- **On-the-spot control**

Construction of a structure of on-the-spot controls carried out periodically and systematically at the price data deliverers (in the dairy processing plants, in the abattoirs e.g.).

On-the-spot control comprises the following parts:

- ✓ The preparation and the procedure of on-the-spot control,
- ✓ The documentation requirements after performing of the on-the-spot control,
- ✓ Discussion of the results received during the control,
- ✓ Recommendation and consequence of the results founded during control,
- ✓ Implementation plan of the necessary measures.

- **Background Information to AMPIS, how is AMPIS embedded in Agricultural Market Information System (AMIS) and how is AMIS embedded in Agricultural Information System (AIS)**

Agricultural Market Information Systems (AMIS) are designed for regular collection and processing of agricultural product market and price data to provide relevant information on prices and quantities traded internally and externally continuously, which are of high importance for farmers and Agro-business decision making and policy analysis support. Collection and submission of market and price data in the country is also a request by international organisations.

The system can be organized by a centralized body responsible for all agricultural products including the collection, processing and publishing market data. It can also be delegated to different associations of producers. However, experience in most of the European Union Member States and Candidate Countries has proven that a well-organised centralised system is able to meet all the needs of the various market stakeholders and administration. Separate systems tend to be a "closed shop", only serving selected market participants. However, at the time when the interest organizations of sectoral stakeholders will gain sufficient capacity to be recognized as official producers' organizations according to requirements prescribed by the Competent Authority, the possibility of transfer of collecting, processing and distributing of information of a certain product group within the frame of Interest Association can be reconsidered.

Experience from recent European Union - entrants proves that the establishing of an operational Agricultural Market and Price Information System (AMPIS) requires at least 4 - 5 years.

Agricultural Market Information Systems (AMIS) should perform collection, processing and distribution of information in co-operation with other institutions (Statistical Office, Agricultural extension service, Wholesale market, Agricultural producer association etc.).

Modelling and Research

The economic analysis and modelling unit undertakes impact assessments and medium term outlooks for preparing and evaluating policy decisions.

Most Agricultural Ministries also established such units (inside the Ministries or with related institutions). It is crucial to dispose of sufficient tools and capacities for evaluating policy proposals and to assess impacts and monitor developments inside the own country.

It is crucial to establish effective links with related research institutes (Institute for Agricultural Economics, etc.).

Inter - Institutional cooperation

Going through the list one can easily understand that in most cases the work is distributed between three institutions:

- the National Institute of Statistics producing statistics
- the Ministry of Agriculture who looks after the subsidy payments,
- while modelling and research is often the task of an Agricultural Research Institute and/or University

In some countries, the Ministry of Agriculture is responsible for (most) agricultural statistics, in other Countries the Statistical Offices are responsible, but we know from countries, too, where a cooperation between the Competent Authority and the Statistical Office is in force. In addition, also private institutes are involved in each of the components and many other options are possible. In cases however, it must be made clear and transparent who is doing what and how avoiding overlaps and white spots. Hence, most important is that one institute (and Ministry of Agriculture is the natural candidate) is supervising, leading and coordinating this process.

In order to achieve this, Ministry of Agriculture must have the full overview of the Agricultural Information System; what are the components, what are their objectives, methods, techniques etc. Staying on track means for Ministry of Agriculture seeking (financial) means to keep the current staff in house (avoiding a brain drain to better paying institutes and organisations) and in parallel mobilise extra staff to reach fulfilling its most important basic obligations. It seems therefore that in this stage, Ministry of Agriculture better concentrates on sorting out its internal organisation and obligations focussing on national coordination rather than taking on new activities, which do not belong to its current core activity and/or business.

But even in a long term strategy (10 years?) one should be very careful bringing activities under one umbrella even if this would rationally speaking be the best solution. Existing infrastructures (also in the regions), experience, networks and know-how easily disappear when changes are imposed on

institutes and its labour force. Again, it is often more efficient and boost the quality of the required output by increasing the coordination.

Coming back to the origin of this report, the Agricultural Market Price Information System (AMPIS) within AMIS, this principle also holds for Ministry of Agriculture's internal organisation although here more flexibility exists.

Organisation of the Agricultural Market Price Information System (AMPIS) as example for an overall strategy

This point is not immediately relevant for our question set now, but we have to take it into consideration for possible future tasks, to receive after a mosaic solution more comprehensive solutions.

Now we understand better the magnitude and complexity of the Agricultural Information System and the place of the Agricultural Market Information System (AMIS) in it of which the AMPIS is *again only a part* (AMIS also covers Import/Export, Intervention measures, Balance sheets, other prices, Subsidies etc), it may be a good moment to see how the process of the Agricultural Market Price Information System (AMPIS) can be organised in the most efficient way. In this respect, we must distinguish three phases:

- Phase I. Development
- Phase II. Piloting
- Phase III. Processing

Phase I covers basically all methodological issues from the national regulation, via the statistical steps to the setting up of the survey. In this stage, the main institutions are the experts from the Product offices having the expert knowledge and overview of the markets, the branch organisations, Ministry of Agriculture's infrastructures and regulations. They are supposed to have the overview what is required, what is in practice expected, have contacts with delegates from other States to learn how they resolved and/or organised their work and communicate this with the Product Office staff. In fact, the position of the Counsellor is an extension of the Product Office and in common practice, their task is carried out by the expert of the Product office responsible for the data collection in a country.

Once the methodology is developed, it is time to move to **Phase II** in which a small scale test of its viability is carried out. In this stage the questionnaire, data management (entry, transmission, calculation) and logistics can be tested and possible changed made. This phase is also entirely in the hands of the Product office although certain activities (e.g. data management) may have been developed and will in the future be managed by another department.

In **Phase III** the real work starts meaning all operators are responding, data up- and downloading, results calculated and checked, data bases filled, data transmitted to beneficiaries and many more. This stage is the start of the process while I and II can be marked as project phases; development has changed into routine and only small adjustments and quality improvement can be made.

Only after a certain period of processing, and provided all other components in the Agricultural Market Price Information System (AMPIS) reached this stage, one may consider increasing efficiency by bringing similar and often specialists tasks under one umbrella; Information Technology, certain data collection activities, database management, dissemination/publication.

Further steps on the way to a Comprehensive Agricultural Information System (AIS)

Ministry of Agriculture should focus on achieving its main objective; being the spider in the web of (timely) policy preparing, implementing and analysing its effects. To achieve this it must have all relevant information available whenever needed with the instruments and tools operational to analyse it.

1. It means the creation of a unit specialised in data collection (either by its own means or from other institutes), analysis and based on this can prepare policy papers; an Agricultural Statistics and Policy Advisory Unit.
2. The structure of this unit is not important, what matters is that Ministry of Agriculture concentrates (or at least strongly coordinates) its own activities in this unit; Institutional setting.
3. In addition, this unit coordinates all relevant activities outside its immediate control; Inter - institutional setting (e.g. the National Institute of Statistics, Agricultural Research Institute, Ministry of Finance, Commodity boards, "Private" agents, Universities, Food industry etc.). The Agricultural Market Price Information System (AMPIS) approach can serve as example for an overall strategy.

Having said all this, the following conclusions can be drawn:

- The AIS is the comprehensive and coherent composition of several systems managed by various institutes
- Ministry of Agriculture should have the lead in the AIS and may but must not necessarily also cover parts of the AIS
- Leading and coordinating the AIS means MARD must have sufficient technical and methodological knowledge of the various components in order to appreciate the output and properly use it as input for its policy purposes
- Ministry of Agriculture should therefore create a strong group of experts (e.g. a unit, office, or department), which can handle this tasks.
- At the same time, Ministry of Agriculture should also consider concentrating its internal information activities in one group (e.g. statistics, MIS, FADN)

The ultimate idea behind this set of measures is to create a robust Agricultural Statistics and Policy Advisory Unit within Ministry of Agriculture in which information collection and production (even research) provides the required input for Policy analysis and advice.

The European Union Member States concentrate the AMPIS for all products at an institution, mostly at the Agricultural Paying Agency, Ministry of Agriculture or at the Institute for the Agricultural Economists. The scope embraces

principally all products or almost the most important products, which are produced in the country.

- **Transformation of the delivered price data to the processed data: a methodological description about the calculation steps in Austria**

In this Chapter some methodological examples for different products as these are in place at Agrarmarkt Austria will be given.

As a part of the preparation to the accreditation procedure correct methodological descriptions are needed.

For AMPIS product managers it will be the next step to work out these methodological descriptions for all products, this will include the mathematical algorithms for the including or excluding of some parts of the delivered price data (like transport cost adjustments).

Methodenbeschreibung

Erzeugerpreise – Österreich

Getreide, Öl u. Eiweißsaaten

Die Erzeugerpreiserhebung in Österreich wird im Hauptanbaugebiet bei den marktleistungstärksten Aufkäufern vorgenommen. Also die erste Handelsstufe gibt die Preise der AMA bekannt, die sie dem Produzenten für die angelieferte Ware bezahlt. Rund. 40 Aufkäufer sind ausgewählt, wobei die großen Lagerhäuser natürlich das Schwergewicht bilden. Zur Streuung melden nicht nur diese; auch Landesproduktenhändler und andere Aufkäufer werden individuell miteinbezogen. Die Preise werden am Ende des jeweiligen Aufkaufsmonats mittels Meldeformular (siehe Beilage) der AMA. gemeldet. Es wird generell zwischen Brotgetreide und Futtergetreide unterschieden. Bei Winterweizen gibt es noch weitere Differenzierungen nach dem Proteingehalt. Die genannten Produzentenpreise gelten für gesunde, handelsübliche Ware von durchschnittlicher Beschaffenheit, frei Lager des Aufkäufers in €t ohne Umsatzsteuer (ohne Abzug von Aufbereitungskosten). Zwischen Fixpreis und Akontozahlung muß unterschieden werden. Mittels EXCELL- Programm werden die Preise erfasst und mit der Marktleistungsstärke (Weizen + Gerste, Mais) des jeweiligen Aufkäufers des Vorjahres gewichtet. Als Ergebnis erhält man gewichtete FIX-AKONTO-und MISCH-Produzentenpreise bundesländerweise aber auch im Bundesdurchschnitt. Die Bundesanstalt Statistik Austria benötigt die Mischpreise für EUROSTAT. Fix- und Akontopreise finden sich in diversen Übersichten im Marktbericht für Getreide und Ölsaaten der Agrarmarkt Austria (AMA).

In Niederösterreich sollten 21 Aufkäufer ihre Preise melden; im Burgenland sind es 8; in der Steiermark 4; in Oberösterreich 4 und in Kärnten 2. Im Hauptanbaugebiet von Niederösterreich werden großteils Akontopreise gemeldet, erst gegen Ende des Wirtschaftsjahres werden nach Vermarktung die endgültigen Preise der Agrarmarkt Austria (AMA) übermittelt, sodass erst Ende des jeweiligen Wirtschaftsjahres die endgültigen Preise berechnet werden können. In den anderen Bundesländern werden hauptsächlich monatsweise Fixpreise übermittelt. Das dazugehörige Meldeformular liegt bei. Da die Spalte Aufkaufsmenge leider nur selten ausgefüllt wird, muss mit Aufkaufsmengen des vorigen Jahres gewichtet werden. Die AMA meldet der Statistik Austria monatlich Mischpreise aus Akonto- und Fixpreisen.

Agrar Markt Austria

Produzentenpreise

Ermittlung von Einkaufspreisen des Handels, der Genossenschaften und der Verarbeitungsbetriebe für Getreide, Öl- und Eiweißsaaten vom Produzenten für die Monate Januar bis Dezember 2007

Firma

Code

.....

Erhebungszeitraum – Monat:

Die nachstehend genannten Produzentenpreise gelten für gesunde, handelsübliche Ware von durchschnittlicher Beschaffenheit, frei Lager des Aufkäufers in €t ohne MWSt. (ohne Abzug von Aufbereitungskosten). Zwischen Fixpreisen und Akontozahlungen mit den unbedingt erforderlichen Aufkaufsmengen ist zu unterscheiden. Bei keinem Aufkauf im betreffenden Monat bitte Leermeldung zusenden.

	<i>Aufkaufsmenge in t</i>	<i>Akonto €t</i>	<i>Aufkaufsmenge in t</i>	<i>Fixpreis €t</i>
Hartweizen				
Premiumweizen , Protein über 15%				
Qualitätsweizen , Protein 14-15%				
Mahlweizen (Brotweizen) Protein mind.12,5%				
Mahlroggen (Brotroggen)				
Braugerste Basis 90/8/2				
Futtergerste				
Futterweizen				
Futterroggen				
Qualitätshafer				
Futterhafer				
Triticale				
Körnermais				
Körnererbse				
Ackerbohne				
Ölraps				
Ölsonnenblume				
Sojabohne				

Selbstverständlich werden die Angaben über Mengen und Preisen anonym behandelt.

_____ Datum

_____ Unterschrift/Firmenstempel

o **European Union Methodology for the collecting of the cereal prices in the Member States on the different marketing stages**



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR AGRICULTURE AND RURAL DEVELOPMENT
Directorate D. Direct support, market measures, promotion
D.2. Implementation of market measures

Brussels, 11 June 2008
AGRI-D.2/FAL D(2008)

**WORKING DOCUMENT FOR THE CEREALS MANAGEMENT COMMITTEE
EXPERT GROUP MEETING OF 12 JUNE 2008**

Subject: Weekly communications on cereal market prices – Document No 6

This working document contains an update on the discussion concerning price stage "labels", and some details about next steps of implementation.

Annex 1 to this document contains a proposal for the new list of price stage labels, hopefully for quick finalisation (updated vs. document No 5 for the label "4-DEPSILO" and with a proposed disclaimer added).

Annex 2 contains an updated situation of the Member States' contributions (updated since document No 5, with thanks to the contributing Member States).

Annex 3 is a draft example of the Excel tables that will be sent by DG AGRI to the contact persons in the Member States, for them to confirm the price stage label for each "product / place" (unchanged vs. document No 5).

Annex 4 is a model of Wusi communication (recent French example, unchanged vs. document No 5). It is added to clarify the potential changes to be made to the weekly electronic communications, once the database has been updated in DG AGRI. As of today, we understand these changes as being null. To avoid disruptions, the dates of the switch from old price stage labels to new ones will anyway be coordinated between DG AGRI and each Member State.

The following steps are foreseen:

- Finalisation of the list of price stage labels, in case there are some last remarks,
- Distribution to Member States of an Excel document with the present situation of the quotations: product, quality, place, with the field "price stage" to be filled in with one of the agreed labels for each product-place. These documents will be prepared as soon as possible, to be filled in by Member States once the new list of labels is agreed. The foreseen model is in Annex 3.
- Update of the database with the price stage for each product-place. As we understand it, this update will not change the format of the weekly communications via Wusi. Member States are invited to check their own situation using Annex 4 as an example.
- Update of the model for the four-week report document distributed to the management committee and published on CIRCA, in order to make the price stage information visible, so that comparisons can be made on a relevant basis.

Considering the delays incurred so far on this file and the request by some Member States to have more time to validate the price stage definitions and to confirm the price stage label suggestions, the updated calendar is the following :

- Final list of labels : before end July,
- Excel document to the Member States before end August, for sending back in August or September,
- Update of the database : not before end September, to allow for proper coordination,
- Update of the published documents : as soon as a majority of Member States have switched to the new labels. On this occasion, the question of changing the format of publication (from present .pdf to other format, Excel for example) will be discussed.

ANNEX 1

PROPOSED LIST OF PRICE STAGE "LABELS"

PENDING AGREEMENT OF THE MEMBER STATES, THE NEW LIST OF PRICE STAGE "LABELS" IS THE FOLLOWING, IN MORE OR LESS (CHRONO)LOGICAL ORDER :

- (1) FGATE – Price at farm gate
- (2) DEPPROD – Departure from farm or from production area – loaded on truck or other transport means
- (3) DELFIRST – Delivered to first customer – silo or processing plant – on truck or other transport means
- (4) DEPSILO – Departure from silo – after some storage – on truck or other transport means
- (5) DELPROC – Delivered to processor after one intermediary
- (6) DELPORT – Delivered to port – French definition : "marchandise livrée dans un silo portuaire par train ou camion ou péniche", "grain delivered to a port silo by train or truck or barge"
- (7) FOB – Free On Board – Incoterm – Official definition at <http://www.iccwbo.org/incoterms/id3040/index.html>
- (8) CIF – Cost, Insurance and Freight – Incoterm – Official definition at <http://www.iccwbo.org/incoterms/id3040/index.html> - For EU grain
- (9) CIF-IMP – CIF for imported grain
- (10) DEPPORT – Shipped to the place (port), unloaded, on truck leaving port
- (11) DEPPORT-IMP – Shipped to the place (port), unloaded, on truck leaving port – For imported grain – Duty paid (to be confirmed)
- (12) DDP – Delivered Duty Paid – Incoterm – Official definition at <http://www.iccwbo.org/incoterms/id3040/index.html> – For imported grain
- (13) Unknown (with the objective not to use this label anymore)

As regards quotations from grain exchanges, although they correspond to a defined price stage, which can be related to one above, the mechanisms for price formation are different. The proposal is to identify quotations from grains exchange using the corresponding price stage, with an additional suffix, such as DELPORT / DELPORT-GEX, the "-GEX" meaning "grains exchange quotation".

A disclaimer will be added to the weekly document on prices, with the above list of price stage codes and their definitions. It could read as follows (preliminary version, to be discussed further) :
 " All prices are wholesale prices, without VAT.

Please note that the price stage "labels" above are an approximation. Two neighbouring stages may overlap. These labels have no legal value. Their only aim is to provide some qualitative information about the costs already included or not in the corresponding price quotations. "

**DRAFT MODEL FOR THE EXCEL FILE TO BE SENT TO THE MEMBER STATES
 TO CONFIRM THEIR CHOICE OF PRICE STAGE LABEL
 FOR EACH PRODUCT - PLACE**

Member State : XYZ

Place		Product		Product Quality		Price Stage Label
In letters	In code	In letters	In code	In letters	In code	In code
These six fields should be pre-filled with present database contents, for Member States to check						For Member States to fill in, using the list agreed beforehand

Example for France :

Place		Product		Product Quality		Price Stage Label
In letters	In code	In letters	In code	In letters	In code	In code
Rouen	ROU	Breadmaking common wheat	BLTPAN	Breadmaking	PAN	? DELP PORT ?
Rouen	ROU	Breadmaking common wheat	BLTPAN	Tout Venant	TVT	?
Rouen	ROU	Feed Wheat	BLTFOUR	Feed	FEED	?

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Establishing of Agricultural Market Price Information System (AMPIS) for all products corresponding to the Acquis Communautaire and to national benefit (AMPIS with dual function),
Agricultural Information System (AIS), Agricultural Markets Information System (AMIS), Agricultural Market Price Information System (AMPIS), pyramidal structure of the information in agriculture, how is AMPIS embedded in AMIS and how is AMIS embedded in AIS,

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