Summaries of the Sesssions

SESSION 1 – New technologies in performance recording

H. Holster NL	B. Fusai F	Current situation- issues and challenges- on data exchange in agriculture in the EU	In the AgriXchange EU project, a system for common data exchange in the agricultural sector is developed. Analyses of the current situation concerning data exchange in agriculture in EU member states is part of the project. Issues and challenges on current data exchange in the EU are discussed. Results are coming from the investigating the state of the art – with a focus on cattle and arable farming – which was carried out in 27 EU nations and Switzerland. The investigating has been done partly by quantitative and qualitative inquiring experts from the European countries or regions. For this 6 focus groups based on European regions had been set up. Agricultural characteristics and farm automation levels are explained to understand some main developments and differences. Data exchange is explained based on the levels of data integration: process, data and physical layer. Conclusions and recommendations for business and policy are given. Where possible special attention to (relation with) the ICAR inventory on data exchange will be made.

L. Marguin Fr		The use of electronic identification for small ruminants in France	To follow the new European rules of identification, all the farmers must identify the new born lambs and young goats. But in France, many farmers want to use this new way of identification with the feeding, weighing, milking automates and also for the performances' controls as soon as possible. So they tag in one time all the mothers of heir flock with electronic ear-tags or pastern tags. The automation to collect data for the management of the herd or for the trade of the products bring more reliable information in real time. A catalog with all the electronic devices available in France can help these farmers to choose their equipment linked with their software. Some advices can also help them to adapt their equipment to the known constraints to get some benefits of the automation.

Pieter H. Hogewerf NL	Cattle RFID opportunities and challenges	Several countries have livestock identification schemes based on radiofrequency identification (RFID) in place, e.g. for cattle in Australia, Canada and Denmark and for sheep and goat in most EU countries. For all mentioned identification schemes, positive impacts on farm management and farm process control are reported. On the SIMA2011 in Paris, DGSanco announced to be working on a proposal allowing the use of RFID in national cattle identification schemes. The introduction of cattle RFID will be an opportunity especially for countries with a low degree of process automation. In those countries, the introduction of RFID can speed up the application of farm automation systems. In countries with a high degree of process automation, the challenge will be to implement regulations in such a way that food safety (traceability) requirements and requirements in relation to process automation are both guaranteed. The biggest challenges will be to modify the identification systems in such a way that it can make use of the RFID devices instead of e.g. neck belt transponders. The following aspects are a challenge: if countries decide to introduce voluntary cattle RFID systems, the farmers might be faced with a mixed population with RFID tagged and visually tagged animals. What to do if farmer wants to use RFID in his farm management and he has bought animals that are not RFID tagged? In mandatory system, it might be that several methods of RFID identification will be allowed. How to manage if farm automation is based upon a certain type RFID device (ear tag, bolus, injectable or leg tag transponder) and the farmer is buying animals that are identified with a different type of RFID device? Even in a situation where only one type of RFID is allowed (e.g. ear tag transponder) the farmer can be faced with the situation that the performance of some RFID tags is insufficient to be used in combination with farm automation equipment. For most of the mentioned problems, there is a solution, but can those solutions be applied without introducing food safety risks?

J. Frandsen DK	P. Nielsen Gert Aamand	Recording claw disorders electronically	Abstract Claw diseases are an increasing and costly problem in Danish and probably many other herds. Danish Cattle found that good information about the "true" claw health status from claw trimmings was a prerequisite for meeting the challenges with increasing claw health problems in the herds. To get the needed registrations, Danish Cattle Federation has developed software to register clinical observations on (dairy) cattle's claws during hoof trimming. The software is developed to be operated from a tablet PC with a touch screen attached to the hoof trimmers box. The Claw Registration offers the following possibilities: . registration of 36 different clinical observations, mild and severe . treatment (done by the hoof trimmer) . Information about latest observation(s) and treatment(s) . Data exchange to the Central Cattle Database . Different kind of outputs and analyses Since the release April 2010, the usage has increased a lot. Now, April 2011, about half of the hoof trimmers in Denmark use the claw recording system, about 290 000 trimmings has entered the Cattle Database. The claw trimmer data is used for daily management of claw health . A joint Nordic Genetic evaluation of claw health started on 2nd May 2011, and the claw health index will be included in the Nordic Total Merit index (NTM) in August 2011.

I. Andonovic UK	T. Craven A. Mac Dougall	Silent Herdsman: the heat detection system for the 21st century	As a result of the low cost and wide availability of digital processing, storage and communication technologies, it has now become cost effective to monitor and capture representations of the condition of individual animals, to a level of detail that has been previously unknown. This presentation reports on the development of the…Silent Herdsman…platform, a new generation of animal monitoring system….

D. Saunier Fr		FCEL at the heart of the development of performance milk recording	The breeding environment is changing at all levels, expanding herd size, cost control records or control measures of performance, traceability of the data, immediate valuation in the farms. France Conseil Elevage network has implemented more efficient practices to meet and to prevent new expectation of farmers, using advanced technologies. (Electronic milk meter, PDA, GPRS, RFID, computer interfaces…) - Implementation of the sampling and measure of milk with milk-meter electronic type Lactocorder of WMB and EMM Trutest. - Use of Personal Data Assistant for the control of performance, elimination of the manual seizure, Identification of animals and vials by RFID, dematerialization of the exchanges. - Integration of multiple data sources through data bases (farmers, other shakeholders in livestock), refunds faster results to farmers through various electronic channels. - Exchange with the software Breeders robot, parlor, others and Livestock Organizations Council via the interface Ori-Automate. - The presentation will describe these new organizations working on cattle but also goats in the France Conseil Elevage network.

SESSION 2 : Phenotyping of complex traits

JF Hocquette	C.Capel M.Barbezant PL.Gastinel PY le Bail P.Monget JL Peyraud	Global perspectives on trait ontology and phenotyping of livestock : examples from functional genomics and modeling in beef-producing animals	We are entering a period where large-scale projects in life science are being developed, driven by the desire to explore biology as a whole rather than in pieces, to establish reliable relationship between genotype and phenotype, in a perspective of sustainable livestock breeding. This implies the use of the latest methods and technology for phenotyping and the development of large databases for modeling. In this context, accurate, precise, and comparable phenotypic information is critical for gaining an indepth understanding of the relationship between genes and phenotypes including the development of genomic selection. So far, it is indeed difficult or extremely difficult to combine genotype-phenotype data from multiple databases due to variability in phenotyping procedure and lack of breeding environmental data. As a consequence, it is necessary to define a common language developing an ontology which to univocally define traits and phenotypes, and later on, associated methods to capture relevant and comparable differences between animals. The ATOL (Animal Trait Ontology of Livestock) project is contributing to provide the organization and knowledge necessary for engaging livestock communities in the process of creating comprehensive phenotyping resources. This also implies a network of coordinated, advanced,and standardized phenotyping infrastructures, such as facilities for measuring well-known or new relevant traits by classic approaches, imaging techniques, and/or comprehensive description of molecular and metabolic patterns to develop strategies for multi-level data integration. Examples of such projects in functional genomics and in modeling will be given for meat-producing cattle.

C.Egger-Danner AUT	K.Stock J.Cole A.Bradley J.Pryce N.Gengler L.Andrew E.Strandberg	Registration of health traits – strategies of phenotyping, aspects of data quality and possible benefits	Health traits have become increasingly important worldwide based on economics, animal welfare concerns and consumer demands for healthy and natural products. The limited availability of reliable phenotypes for health traits often constrains breeding for disease resistance under both traditional and genomic selection schemes, the latter of which requires high-reliability breeding values of bulls as inputs. Experiences from several countries show that acquiring good phenotypes of health traits is challenging. Two different approaches are generally used for registration of health traits: the Scandinavian countries and Austria focus on diagnostic data from veterinarians, whereas other countries work mainly with producer-recorded health information. In both cases, the standardized recording of health events is important. However, the level of detail of recording and methods of analysis may differ between involved parties, including farmers, veterinarians, and breeders. International comparisons of health data analyses can be facilitated by using a common standard for diagnosis and recording. Furthermore, data quality is crucial and requires careful attention to detail. A precondition for the establishment of a successful phenotyping standard is the continuing motivation and commitment of all partners involved. To achieve this, participation in the recording system should require little additional effort and bring about obvious benefits. Compilation of health reports allows monitoring and improvement of herd management in the short term, and breeding values for health traits provide the basis for general health improvement in the long term. Significant progress with regard to animal welfare, and production of high-quality food will be positively recognized by the public, and is in line with the EU animal health strategy, stating that prevention is better than cure. Successful approaches to phenotyping of health traits, recommendations for data validation,and an outlook of the possible benefits of comprehensive recording of health traits will be presented and discussed. The presentation outlines the draft of the ICAR guidelines for recording, evaluation and genetic improvement of health traits.

C. Ponsart Fr	R.Dalbiès-Tran I.Hue,X.Druart,V.Duranthon,J.Dupont,H.Jammes, S.Uzbekova,F.Nuttinck,G.Charpigny,C.Joly,B.Leguienne, P.Salvetti,A.Capitan,B.Grimard,P.Humblot,O.Sandra,P.Mermillod	Phenotyping the reproduction function in cattle: inputs from functional genomics and epigenetics	The reproductive function consists in a complex mosaic combining different phenotypes from male, female components, interacting together. Following the development of competent gametes, interaction between male and female cells starts with the ability of the female tract to transport, select and prepare spermatozoa to fertilization, then to ensure a maternal environment facilitating fertilization and early embryo development. The cross talk between an embryo and its maternal environment leads then to successfull early embryo development and implantation, coming in a range of space-time continuum, forming a black box in which it is difficult to isolate precise events and functions involved in pregnancy success or failure. In the Holstein breed, recent epidemiological studies confirmed the high prevalence of early embryo death and the impact of genetics, partly due to negative correlation with milk production. At the same time, new approaches of phenotyping such as transcriptomics and proteomics have been applied to gametes, embryos and maternal reproductive tract, which may allow to open this black box and to investigate mechanisms and genes involved in the different phenotypes. “Omics” approaches are completed by studies of epigenetic control of gene expression, indicating that such modifications (not related to genome sequence) influence pregnancy, with long term effects on offspring. Projects funded from ANR agency (GENANIMAL) and APISGENE since 2003 have been dedicated to the early stages of pregnancy, implantation and interaction with energy metabolism. Integrated analysis of the previously described results will improve genomic selection of fertility, allowing to identify the most pertinent genes and events related to the success of AI and to develop different techniques aimed at improving cattle management.

M.P.Coffey	R.Mrode M.Winters	Phenotyping that maximizes the value of genotyping	High density bovine SNP arrays offer immense potential benefits to the entire agricultural industry. In dairy cattle breeding, the immediate benefits arise from utilizing existing phenotypes to train genotypes and create prediction formulae. These so called SNP Keys can be used to predict the genomic breeding value of young animals with no phenotypes. This paper will highlight two keys components which have to be considered when implementing a genomic breeding program. 1°) The ability to speed up genetic change requires careful consideration of the selection objectives As with existing breeding programs, those traits that have the highest accuracy indexes usually progress the quickest. Lower accuracy traits (which can be due to lower heritability or poorer recording quality) progress at a relatively slower rate. If that discrepancy continues under genomic selection, we could end up with health and fertility problems much faster unless selection strategies take account of this. Therefore broader breeding goals, encompassing a wider range of health and fertility traits become even more important in a genomic selection scheme. However, correlated traits with unobserved recording systems (e.g. diseases) will not be able to be considered adequately and may deteriorate faster. 2°) Historically, performance records have been gathered on-farm for management purposes and then utilized afterwards for genetic evaluations. Perhaps in a genomic selection program, a different model should be used to maximize the value of genotypes. For example, performance recording could be paid for by the national body (representing the parties interested in genetic improvement of the national herd) in a small subset of herds that contractually provide the high quality phenotypes required for training the genotypes and creating the next generation of SNP keys. This would especially apply to novel traits that would not normally be recorded generally e.g. feed intake, milk progesterone, mastitis bacteriology, Johnes, methane emissions, etc…Illustration of number of herds and records required for various levels of heritability will be discussed.

SESSION 3 : New genomic tools for selection and management

D. Boichard Fr	F.Guillaume A.Baur P.Croiseau M.N.Rossignol M.Y.Boscher T.Druet L.Genestout L.Journaux V.Ducrocq S.Fritz	State of the art of genomics for selection	Selection could be based on DNA polymorphism information of each animal. Nowadays, this information is obtained through chips providing individual genotyping results for many thousand SNP simultaneously. In the future, sequencing will become more affordable and provide a complete description of each individual genome. This polymorphism information could be used in genetic evaluation. The prediction is based on the genotype-phenotype relationships observed in a reference population and its accuracy depends on two parameters: the accuracy of SNP estimates (depending on the sample size and heritability), and linkage disequilibrium between SNP and QTL. Several genomic evaluation methods have been proposed, with varying underlying assumptions. The most popular, GBLUP, uses SNP information mainly to measure true relationships between animals. Other approaches, particularly Bayesian methods, try to detect the most predictive SNP. The French model for dairy cattle uses haplotypes instead of single SNPs, in order to maximize LD between markers and QTL. For each trait, 300-700 QTL characterized by 3-5 SNP are included in a QTL-BLUP. Large reference populations have been built by genotyping many progeny tested bulls and by sharing information in consortia such as the EuroGenomics initiative. Two major questions, the evaluation for new traits and the across population evaluation, need to be solved for a generalized use of genomic selection in all species and breeds.

J. Dürr Interbull	R. Reents GER	Plans of the future activities of Interbull in genomics	Genomic tools have made dairy cattle breeding a very challenging activity lately. After decades of well-established progeny testing schemes being the worldwide standard for selection of artificial insemination bulls, affordable genotypes and comprehensive prediction models have mesmerized the industry with the promise of drastically lower generation intervals and reduced operational costs. The adoption of the new technology has been so fast and widespread that research was not able to provide all the answers yet. Interbull has provided a privileged forum for the necessary debates around the theme both in the annual meetings (starting in Niagara Falls) and in three especially organized international workshops. Discussions have included two dimensions of the topic: which are the tools that need to be developed in order to incorporate genomics into the solid genetic evaluation machinery that is already in place both nationally and internationally; and how will the new developments affect international cooperation and consequently the equilibrium between exporters and importers of dairy genetics. Advances in methods have been significant due to an unparallel collective effort within the Interbull community, but there is still a need to clarify the best way of estimating reliability of genomic breeding values (GEBVs), avoiding double counting of phenotypic information when using foreign reference animals, avoiding pre-selection biases, validating prediction equations, estimating SNP effects with high density panels and, of course, providing reliable international comparisons of national GEBVs through Interbull. Main projects already implemented or under development at Interbull are: validation of GEBVs (GEBV test), Simplified Genomic MACE (S-GMACE), joint genomic evaluation of Brown-Swiss populations (Intergenomics) and common repository of international genomic information.
M. Winters UK	MP Coffey	Potential applications of genomic information beyond breeding	The availability of Bovine high density SNP arrays has had a significant impact on the breeding industry over the last two years. With the cost of the technology rapidly reducing, and with higher and lower density SNP chips being marketed, accessibility and information is rapidly increasing. This means that other applications beyond breeding are now being considered. Immediate applications being proposed with the lower density SNP chips are 1) animal identification and parentage validation using around 100SNPs, and 2) female young stock screening using around 3000SNPs. Future applications for herd management will be developed, and might be applied to areas such as vaccine or drug sensitivity and specificity, feeding regimes tailored to the genetic

			profile, product traceability, individual mate selection. Critical to the success of these will be the collection of existing and new phenotypes combined with international standardization of trait definitions. For the ICAR member, it's important to be aware of the potential applications this technology can bring, and start to consider how this can become part of the services provided to farmers.
M. Gaffney IRL	J. Zawadzki R. Murphy	Research and development in nutrigenomics	Over the last decade, nutrigenomics has established itself as the new frontier of scientific research, covering a wide range of technologies, the ultimate aim of which is to elucidate the influence of diet on the genetic programming of cells and tissues. Considering the current global issues that are impacting on animal production, it is evident that a number of major challenges lie ahead. Issues such as the financial crisis, resource and energy strains, population growth and increasing food demand have placed a significant strain on production capacities. Additionally, the threat of viral pandemic, consumer demands for antibiotic-free foods and the increasing consumer desire for functional and value-added foods will require changes in our approaches to production and efficiency. To meet these demands, producers will need to reappraise their approach to animal nutrition. This will not only result in even more maximization of genetic potential through dietary and husbandry practices, but also in the exploitation and maximization of the genetic potential of the animal at a molecular level. Molecular potential exploitation is dependent on advances in the science of nutrigenomics, the main emphasis of which is the prevention o organ and whole-body equilibrium or homeostasis. This requires not only an understanding of, but the ability to manipulate a multitude of nutrient-related interactions at the gene, protein and metabolic levels. These new disciplines and their attendant technologies will redefine animal health and nutrition in the future. By focusing on gene expression and functional genomics, it is very likely that we will soon be able to gain a more definitive understanding of the importance of dietary intervention in nutritional strategies.

SESSION 4 : Milk analysis : new technologies, developments, interest criteria for man, breeding and management

F. Dehareng Be	OptiMIR	The aims of the OptiMIR project are to improve the sustainability of the daily sector by providing milk producers with tools enabling them to manage the cows fertility, feeding, health, pollutants, milk quality, etc…Milk records will be used in an innovative way :the entire MIR milk spectrum, including variations in its shape will be used as indicators of the cows'status for a range of characteristics : 1) To reduce the costs of production through improved daily herd management (e.g. costs of feeding with energetic balance indicators, veterinary costs with early diagnosis of mastitis, costs of semen straws with insemination predictor, etc… 2) To bring opportunities to access competitive markets by measuring quality traits linked to higher added value (e.g. low cost measure of food label claims) 3) To improve impact on the environment(quantification of methane and nitrogen production). OptiMIR is a 5 years project who involves 5 research units, 11 milk recording organizations, and 1 labs of 6 countries from the North West Europe (Belgium, France, Germany, Ireland, Luxembourg, United Kingdom), and is co-financed by the European Regional Development Fund interreg IVB program.

O. Leray Fr	M.Ferrand H.Larroque JM Astruc M Douguet M Brochard K Duhem	Harmonisation of milk analysers for fatty acid determination by FTMIR – An essential step prior to collective data use	General objectives of PhénoFinlait program were to establish effective relations between the fatty acid (FA) milk composition of individual cow, goat and sheep, and usual factors influencing milk production (breed, feeding, genealogy) and to relate individual fatty acid phenotypes so-measured to genotypes, so as to establish appropriate levers applicable by farmers to orient milk fatty acid production. Throughout more than a one-year period on 2009-2011, FTMIR analysis were periodically performed using 13 milk analysers located in 9 different laboratories on 1500 selected farms (1152 for cattle, 215 for goat and 160 for sheep) of various regions of France, in order to acquire MIR spectra and build up a national spectrum data base. Fatty acid compositions were then to be predicted from the central data base through specific sets of calibration equations, i.e. one set per species and type of analyser. Since a unique calibration set could be applied to the spectra produced by several Milkoscan FT6000 need was to evaluate how far milk analysers could be comparable in predicting fatty acid composition. Therefore, repeatability and reproducibility were measured through an inter-laboratory study for a selection of 18 fatty acids and fatty acid families, putting in light high reproducibility figures and significant differences between Milkoscan FT6000 milk analysers. To improve the precision performances, the possibility of a central calibration for FTMIR analysers for the future use of individual laboratories was successfully evaluated, and a centralized system based on deep-frozen and liquid control milk samples was implemented to monitor and align FTMIR analysers for fatty acid results during the whole period of the programme. Whereas, for the whole period, raw predictions showed rather large and often multimodal distributions depending on the fatty acid (or fatty acid family), the applied corrections resulted in end in significant squeezes of fatty acid data populations characterized by single dominant modes.

G.Katz ISR	Liubov Lemberskiy -Kusin Eva Ishay	Calibration monitoring and control approach for multi devices analytic system performing in rough environment	A pragmatic viable approach is presented for evaluation, maintenance, surveillance and control of the global system for real time in parlor milk analysis. The approach considers a multiple sensor system (as opposed to the current method, the sensor is not a stand-alone analytic device but part of an automated data collection system) like the milk meter. Since the analysis method is based on multiple sensors, it enjoys the advantage of the system conducting surveyance over itself. Between periodic calibrations, automated quality control can be implemented daily upon analysis of irregularities in the 3D matrix consisting the devices vector, time vector and the cows vector. Self-calibration of devices is achieved by filtering and neutralizing the effects of known built-in factors in the matrix influencing the precision of the measurement.
S. Kold-Christensen DK		Applied FT-IR is a highly potential technology for uncovering new valuable herd management and breeding information	Fourier Transform Infrared (FT-IR) spectroscopy coupled with advanced chemometrics methods has proven a valuable tool, for not only conventional milk parameters, but also providing new information on fatty acids profiling and screening for ketosis and abnormal milk. These findings are promising for uncovering new herd management information for optimizing herd as well as individual cow performance for practical farm procedures and in breeding programs.

Certificate of Quality

> Introduction, Franck Armitage
> The benefits of the Certificate and lessons learnt, Folkert Onken
> The experiences of an auditor and applicant, Pavel Bucek
> The role of the auditor and lessons learnt, Franz Schallerl
> The benefits of the Certificate to our organization, Martina Rafajova

The ICAR Certificate of Quality evolved out of the old "Special Stamp". It has been developed to reflect the needs of the members of ICAR to demonstrate to their members, customers and peers, on a regular basis, that the services which they provide are in line with the ICAR Guidelines, technical competency and sound commercial practice.

Many of the applicants have used the Certificate process to evaluate their activities dispassionately and it is known that the process has then been used internally to beneficial effect, in terms of management and efficiency. Conversely the auditors have taken back to their organisations lessons learnt and systems seen; this is a true symbiotic relationship.
Certificates of Quality have been granted for the following categories to organisations in 30 countries, with some have received more than 1 Certificate and the originals renewed.

Identification	Production Recording	Genetic Evaluation	Other Certificates which have been awarded where the applicant's activity was specific.
Dairy cattle	Dairy cattle	Dairy cattle	Laboratory analysis
Beef cattle	Beef cattle	Beef cattle	Herdbook activities
Buffalos	Buffalos		Data processing
Goats (dairy and meat)	Dairy goats		Type classification
Sheep	Dairy sheep	Meat sheep	

The role of auditor is crucial to the success of the Certificate of Quality programme. The auditor is not just an inspector, but should also be considered as an independent advisor where appropriate and also a person who will learn from the experiences of the applicant member. Auditors have been recruited from 17 countries.

SESSION 5 : New approaches in management of recording activities : how to demonstrate benefits of herd recording ? how to makeour business attractive ?

JP Lemonnier Fr	?	Farmers requests for new skilled services	The new sensors placed on dairy cows can provide the high data rate monitoring of feeding, rumination, activity and body temperature in order to produce early detection of reproduction events and health disorders. The daily information of the farmer by SMS and Internet applications nevertheless confirms their requests for new skilled service offers.
P. Giacomini USA	?	Herd performance benchmarks: graphic presentations of dairy farm performance relative to cohort herds	AgSource is releasing a new product, the Herd Report Card. It graphically shows herd performance in key areas of dairy farm management relative to selected cohort herds in the AgSource database. This adds further value to AgSource's milk recording services by presenting information available only from a multi-herd data set.
R. Rognant Fr	Erik Rehben	Software offer from French farmers' organizations to support livestock activities	Different kinds of information systems are at the heart of cattle industry: collective data bases, cattle farm management information systems…French cattle organizations are frequently asked by cattle farmers or governmental organizations of other countries to provide them, with or without consultancy, solutions tailored to their needs and context. So they now are concerned to consider such requests, from a new software designing. France Genetique Elevage decided to support the initiatives of their cattle IT providers in order to make them properly address the foreign partners' needs. A survey of available software was made and their indexing is in progress. They may deal

			with bovine, ovine, and goats. They may concern animal identification and traceability, genetics, health and prophylaxis, farm management…For a single need, several specific proven solutions may be proposed. The offering may include prior consultancy services to local management and tools adapted to specific conditions.
A. Barbi It		Feedstuff NIR analysis in farm to growth herd recording activity	Herd recording can be valued in farm with nutrition. It's allowed by the new AgriNIR technology associated with the feeding-software Osmos'Rationneur. AgriNIR is an infrared analyzer for feedstuff, movable in farm. It supplies with immediate reliable nutrient values on the main grains and forages used in cattle breeding. These data and the recorded cow-performance are used by the adviser to establish diet formulations adapted to the breeder's objectives and to the potential of the herd. The moderate cost of analysis, the handiness of the tool and the immediate results facilitate the repetition of analysis. The objective is to fit the diet formulations to the results of every herd recording and to verify their impact with the following herd recording. It is an additional argument to promote herd recording in breeding.
JM. Nicolas		Global management of milk service with FIDOCL	To harmonize their milk recording service, the area FIDOCL (including 15 advice agencies in South-East of France) has developed a global project taking into account the following elements: - Electronic Identification of animals (RFID) - Electronic Identification of washable vials (RFID) - Adaptation of tools for milk recording organization By means of a PDA, the operations of milk control performance will be realized but also the management of the schedules and the agent in the farms. The identification of cattle and the washable vial RFID will be provided in order to have full traceability. The presentation will describe this new harmonization for the milk recording and benefit to the farmer at the heart of this system.