



THE GLOBAL STANDARD
FOR LIVESTOCK DATA

December 2016

ICAR NEWSLETTER

Network. Guidelines. Certification.

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1.0 A WORD FROM THE PRESIDENT

This issue presents a round-up of the 40th ICAR Conference, the major decisions of the ICAR General Assembly and a brief review of ICAR's main achievements in 2016.

The Puerto Varas session was a unique event in ICAR's history, being the first session held in Latin America. More than 85 oral and poster presentations focused on innovations and the application of scientific results in the core business of our members. The session also met the expectations of the 350 participants from 32 countries as an opportunity for networking and exchanges of experience. All participants expressed appreciation to Cooprinsem – the Chilean local organiser – for the session's excellent organisation.

The ICAR General Assembly reviewed ICAR's key achievements since the last General Assembly in June 2015 and decided on the key strategic actions for ICAR's successful adjustment to the challenges of building a sustainable and resilient food supply for tomorrow's world. It elected Daniel Lefebvre (Canada) as a new member of the Board and thanked Marco Winters for his excellent service during his eight-year tenure.

I would also like to take this opportunity to extend season's greetings and my best wishes for a successful and prosperous 2017 to the whole ICAR family.

Hans Wilmink



The ICAR President, Hans Wilmink, introducing the Gala Dinner at the 40th ICAR Conference in Puerto varas (Chile).

The 40th Conference

2.0 THE 40TH ICAR CONFERENCE, PUERTO VARAS, CHILE

'Performance Recording as a Tool for Developing Countries' – the theme of the 40th ICAR Conference – was covered in one plenary session, five open lectures and nine parallel technical sessions. The files of the abstracts and the presentations, as well as documents presented to the General Assembly, are available on the ICAR website.

General Assembly

2.1 GENERAL ASSEMBLY

The ICAR General Assembly received the President's report, approved the financial statements for 2015, approved the 2017 budget, elected a new member of the Board and reviewed activities of sub-committees and working groups. During the General Assembly, the President delivered Distinguished Service Awards to outgoing officials of the ICAR Board, Sub-Committees and Working Groups.

Distinguished Service Awards

- Marco Winters – Board member
- Ken Evers – Chair of the Animal identification Sub-Committee
- Suzanne Harding – Chair of the Parentage Recording Working Group
- Wim van Haeringen – Chair of the Genetic Analysis Working Group
- Badi Besbes – Chair of the Developing Countries Working Group
- Jean-Michel Astruc – Chair of the Performance Recording Dairy Sheep WG
- Zdravko Barac – Chair of the Performance Recording Dairy Goat WG
- Marco Antonini – Chair of the Animal Fibre WG

Distinguished Certificate Award

The Distinguished Certificate Award was given to Hélène Leclerc, member of the Dairy Cattle Milk Recording WG.



From left: Suzanne Harding, Wim van Haeringen, Marco Winters and Jean-Michel Astruc, some of the recipient of the Distinguished Service Award in Puerto Varas.

President's Award

2.1.1 PRESIDENT'S AWARD

During the official dinner Hans Wilmink presented the President's Award to Brian van Doormaal. Brian Van Doormaal has been the General Manager of Canadian Dairy Network (CDN) for the past 21 years, a position he has held since the company was first established in 1995. From 2010 to 2012, he was also the Chief Executive Officer of Holstein Canada. For his entire career, he has been a member of the Genetic Evaluation Board (GEB) in Canada. Brian has been the Canadian representative on the Steering Committee of Interbull for nearly 20 years. During the past two years has played a pivotal leadership role in the development and implementation of a new genotype exchange service for parentage analysis, GenoEx-PSE, recently launched by the ICAR and has been appointed as Chair of the ICAR DNA Working Group.



Brian van Doormaal receiving the President's Award for its commitment and leading expertise in the Parentage SNP Exchange Task Force

New Members

2.1.2 NEW ICAR MEMBERS

The President welcomed the new members since the last General Assembly. These are:

Full members

- Dairy Cattle Improvement Center (South Korea)
- Sistema Nacional Información Ganadera (Uruguay)
- Sheep and Goat Breeders Central Association (Turkey)
- Intelligent Systems of Business Control (Russia)
- Beef and Lamb New Zealand Genetics (New Zealand)

Associate members

- DigiDelta Software Analise e Programação Unipessoal (Portugal)
- Shearwell Data (UK)



María Nela González, representative of the "Sistema Nacional Información Ganadera", a new ICAR Member from Uruguay.

President's Report

2.2 FROM THE PRESIDENT'S REPORT

Hans Wilmink in his report to the General Assembly presented the main achievements in 2016. One of the key developments was the new ICAR brand project which delivered a new logo, strapline and descriptor which together define ICAR's mission in providing global standards for livestock data through networking, production of guidelines and certification in animal identification, recording and evaluation.

The Groups

2.2.1 THE ICAR GROUPS

During this year some working groups (WG) and task forces (TF) were refreshed or consolidated:

- The new DNA WG, made up of former Genetic Analysis + Parentage Recording WGs.
- The new Sheep, Goats and Small Camelids WG, made up of former Performance Recording Dairy Sheep + Performance Recording Dairy Goat + Animal Fibre WGs.
- The new Feed & Gas WG with new guidelines for recording dry matter intake and methane output.
- Under the remit of the Functional Traits WG, the Animal Care group with a link to the IDF Sub-Committee Animal Health and Welfare.
- The new Global Reach, with a sub-group for Latin America, which will start in Chile, to replace the previous Developing Countries WG.
- The new ICAR-Interbull TF to harness synergies so we provide 'one voice' to members.
- The new Sensor Devices TF as next generation of the Accuracy TF to classify sensors and sensor data in recording.



Participants to the ICAR General Assembly in Puerto Varas

Services

2.2.2 SERVICE TO MEMBERS

Since the last General Assembly the association has conducted the following services for its members:

- New 5 Year Certification for Identification Devices to ensure up-to-date and certified product listing and availability for members and users.
- New Identification Device Change Notification (DCN) to aid manufacturers as product change occurs.

- New Identification Field Validation for Competent Authorities for quality assurance in the field.
- New Milk Analysis Proficiency Test (PT) now under ICAR with global coverage.
- Revamp of the Certificate of Quality (CoQ) process with introduction of Consultative Review (CR), which keeps ICAR in touch with members.

The establishment of new and consolidation of existing technical bodies and improvements in the management of the ICAR system and in ICAR services included changes in ID certification and validation, Proficiency Testing of milk laboratories and Certificate of Quality. Future plans focus on updating and restructuring the ICAR Guidelines, supporting the Global Reach programme and on the provision of new services (DNA Data Centres Accreditation, GenoEx PSE).

CoQ

2.1.3 CERTIFICATE OF QUALITY

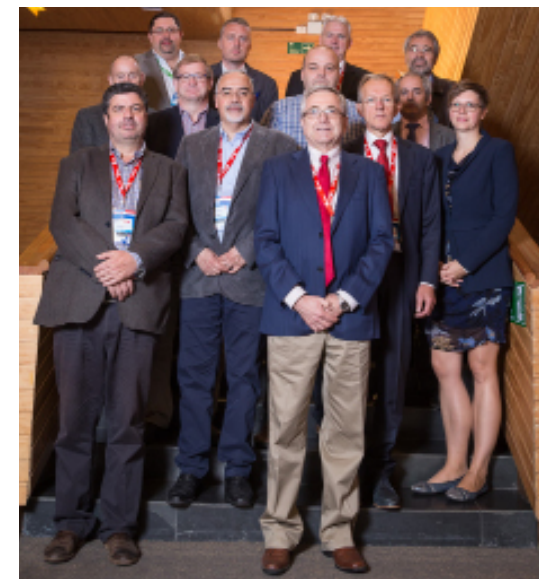
The CoQ has now a frequency of audit of five years and the previous non-visited audit has been replaced by the Consultative Review (CR) two to three years after the audit. During the past year the rules of CoQ have been formalised, the administrative processes reviewed, and the audit events rescheduled.

During the General Assembly the following CoQs granted since June 2015 were presented:

- Quality Milk Management Services (UK)
- United Dairy Farmers (UK)
- University of Novi Sad (Serbia)
- Vereinigte Informationssysteme Tierhaltung (Germany)
- Polish Federation of Cattle Breeders and Dairy Farmers (Poland)

The following CoQs have been submitted for a CR since June 2015:

- Laboratorium Oceny Mleka (Poland)
- National Milk Records (UK)
- Association of ProAgria Centres (Finland)
- Deutscher Verband für Leistungs- und Qualitätsprüfungen (Germany)
- SA Studbook Association (South Africa)
- Eesti Põllumajandusloomade Jõudluskontrolli As (Estonia)
- Agricultural Data Centre (Latvia)
- Zentrale Arbeitsgemeinschaft Österreichischer Rinderzüchter (Austria)
- Czech-Moravian Breeders' Corp. (Czech Republic)
- Associazione Italiana Allevatori (Italy)
- Breeding Services (Slovak Republic)



The Local Organising Committee (Jorge Lama, Carlos Trejo and Sergio Niklitschek - front line from the left) with the ICAR Board

Representatives of the Organisations receiving the Certificate of Quality

From the left:
University of Novi Sad Agricultural Faculty
Vereinigte Informationssysteme Tierhaltung
National Milk Records
Association of ProAgria Centres



From the left:
Deutscher Verband für Leistungs- und Qualitätsprüfungen
SA Studbook Association,
Eesti Põllumajandusloomade Jõudluskontrolli As



Polish Federation of Cattle Breeders
and Dairy Farmers,

From the left:
Agricultural Data Centre
Zentrale Arbeitsgemeinschaft Österreichischer Rinderzüchter
Czech-Moravian Breeders' Corporation



ICAR Board

Hans Wilmink re-election

Daniel Lefebvre new member

Board and Chairs of the Groups

3.0 FROM THE ICAR BOARD

3.1 HANS WILMINK RE-ELECTED ICAR PRESIDENT

The ICAR Board at its meeting on 26 October 2016 re-elected Hans Wilmink as ICAR President.

The Board re-elected Jay Mattison and Kaivo Ilves Vice Presidents, and Laurent Journaux Treasurer. In November the ICAR Board appointed Bianca Lind as the new ICAR Board Secretary.

3.2 DANIEL LEFEBVRE NEW MEMBER OF THE BOARD

Dr Daniel Lefebvre is the General Manager of Valacta, a Canadian-based milk recording organisation that provides complete herd milk recording and herd advisory services to 5500 dairy farms in the eastern half of Canada.

In addition to extensive business management experience, acquired as the leader of an organisation employing more than 300 employees, Dr Lefebvre is also a renowned researcher, dairy nutrition expert and Adjunct Professor at the Universities of McGill and Laval in Quebec.



Daniel Lefebvre participating to his first ICAR Board Meeting

4.0 ICAR BOARD AND CHAIRPERSONS OF SUB-COMMITTEES AND WORKING GROUPS REVIEWED ICAR TECHNICAL ACTIVITIES

Members of the ICAR Board, Chairpersons of Sub-Committees and Working Groups and members of the ICAR Staff Team met during the 40th Conference and exchanged views and experiences in the implementation of ICAR programmes and activities.

Participants noted that substantial progress has been made in addressing the priorities agreed. Chairpersons of the ICAR technical bodies presented achievements of their respective Sub-Committees and Working Groups in 2016 and their priorities and programmes for the next year.

The meeting reviewed the structure and the presentation of the ICAR Guidelines and identified a number of priorities that are to be addressed in the review of ICAR guidelines in 2017.

ID SC

4.1 ANIMAL IDENTIFICATION SUB-COMMITTEE

The Animal Identification Sub-Committee, together with the ICAR Board, gives a warm welcome to the new Sub-Committee member from Australia, Mrs Jo Quigley from the National Livestock Identification System. Jo is the Chief Operating Officer of the newly formed Integrity and Information System Company, which is a subsidiary of Meat and Livestock Australia. The Sub-Committee is confident that her contribution to the animal ID topics and activities of ICAR will be invaluable.



Jo Quigley, the new member
of the Animal Identification
Sub-Committee

The ID SC Meeting

4.1.1 INFORMAL MEETING IN PUERTO VARAS

The members of the Sub-Committee who were present in the 40th ICAR Session had an informal meeting to discuss the rolling actions related the ICAR ID activities. A meeting with the key manufacturers of ICAR-certified ID devices followed, where issues discussed included the establishment of a Promotion Task Force to promote ICAR's ID work worldwide and stimulate new developments in the animal ID sector.

Field validation for IDs

4.1.2 FIELD VALIDATION FOR ID DEVICES - A NEW QUALITY SERVICE

ICAR has launched a new quality service offered to national Competent Authorities or other institutional purchasers of livestock IDs. The purpose of this field validation service is to ensure that devices available in the relevant markets remain compliant with the appropriate ISO and ICAR test protocols.

In summary, applicant authorities must select samples of certified devices from the field and submit them for testing against the current ICAR Standards to a laboratory assigned by ICAR.

The test report is confidential to the applicant authority. ICAR will not disclose information about which devices are being or have been tested from which countries/markets. ICAR encourages national Competent Authorities to make the most of the field validation service so as to periodically verify that the devices procured under long procurement procedures continue to meet the original ICAR certification criteria. For full information, please visit the ICAR website or contact the ICAR Secretariat.



The ICAR Vice-President, Jay Mattison, at the
last ICAR Conference in Puerto Varas, Chile

ICAR and ISO

4.1.3 MEETING WITH ISO

ICAR participated in a meeting with ISO in September 2016 in Wageningen, The Netherlands. Topics discussed, among others, included ICAR's vital role as Registration Authority for ISO, the revised versions of the ISO standards 11784/11785, and ICAR's ongoing work dealing with cases of ISO registration misuse.

Recording and Sampling Device SC

Website listing

Revision Section 11 Guidelines

Danuta Radzio new member

4.2 RECORDING AND SAMPLING DEVICES SUB-COMMITTEE (RSD SC)

The RSD SC met during the ICAR 2016 meetings in October. In addition to a review of tests in progress, the RSD SC continues to move forward on projects beneficial to ICAR members and the industry. In early 2017 a new website listing of approved recording and sampling devices will be launched.

4.2.1 WEBSITE LISTING OF CERTIFIED RECORDING DEVICES

This website, which includes the ability to filter by manufacturer, species or meter, will also include additional pictures, approval parameters, and direct links to routine calibration procedures. In addition to these revisions, the ICAR website will also contain a separate web page devoted to AMS (robotic) devices and sampling shuttles to help bring clarity of approved combinations for herd recording in AMS systems.

4.2.2 REVISION OF ICAR GUIDELINES SECTION 11

During 2017 the RSD-SC will be undertaking a complete review and revision of the ICAR Guidelines, specifically related to Section 11 and its associated appendices. Initial drafts will be available for review at the ICAR 2017 meeting in Edinburgh, with a final proposal to be presented in advance of the ICAR 2018 meeting in Auckland, New Zealand.

In addition to these revisions, the RSD-SC is working closely with the Sensor Devices Task Force on potential guidelines and standards for calibration, maintenance, and data acceptability from sensor devices. Any recommendations from the Sensor Devices Task Force will be included in the revisions proposed for adoption in 2018.

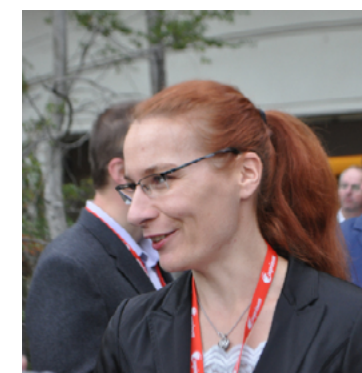
The RSD-SC will also be presenting a session at the ICAR 2017 meeting related to the practical aspects of carry-over in currently approved recording devices and best practices to minimise these effects in routine milk sampling and analysis.

4.2.3 DANUTA RADZIO NEW MEMBER OF THE RSD SC

The RSD SC is pleased to announce that Danuta Radzio, Head of Milk Recording with the Polish Federation of Cattle Breeders and Dairy Farmers, joined the RSD-SC on 1 December 2016. The RSD-SC looks forward to the expertise and leadership that Ms Radzio brings to the Sub-Committee.



Niel Petreny, ICAR Inspector, and Steven Sievert, Chair of the RSD SC



Danuta Radzio, new member of the RSD SC

Interbull SC

Annual meeting

4.3 UPDATE FROM THE INTERBULL SUB-COMMITTEE

4.3.1 INTERBULL ANNUAL MEETING

The 2016 Interbull Annual Meeting was held in conjunction with the ICAR Conference in Puerto Varas, Chile.

During the Interbull Open Meetings the following topics were discussed:

- Methods and practical experiences for parentage analysis.
- New developments in genomic methodologies and evaluations.
- Genetic evaluation of new phenotypes.

PowerPoint presentations of the open meetings are available through the Interbull Centre website www.interbull.org/ib/puerto_varas_presentations.

The Interbull Centre Activity Report was presented to the approximately 150 attendees of the business meetings and can be downloaded for details on personnel, finances, budgets, activities and plans from www.interbull.org/ib/itbcreports.

In addition to the Interbull Open Meeting and Business Meetings on 24 and 25 October, the Interbull Technical Committee and Steering Committee held meetings on 23, 24 and 26 October.

New services

4.3.2 NEW SERVICES

The meetings in Chile saw the launch of two new DNA-based services: Parentage SNP Exchange ("GenoEx-PSE") and Accreditation of DNA Data Interpretation Centres (see www.interbull.org/ib/genoex_pse).

Requests by Interbull Service Users for the following new services/actions were presented and discussed and have since been developed in more detail:

- InterGenomics for Holstein Populations.
- International exchange of information on genetic traits for the World Holstein Friesian Federation (WHFF).
- Improvements to international data and identification exchange.



Toine Roozen, presenting the GenoEx-PSE service in Puerto Varas, Chile



Improvement and adaptations to current services were also announced:

- A new validation test: the Mendelian Sampling Variance Test will be introduced from September 2017.
- A modified GMACE model will be implemented in the GMACE test run in January 2017.
- Ten additional Conformation Traits will be included in the Brown Swiss international evaluations effective from the December 2016 routine run.

Steering Committee

4.3.3 INTERBULL STEERING COMMITTEE COMPOSITION

The following Interbull Steering Committee members have been proposed (and subsequently approved by the ICAR Board meeting on 29 November 2016):

- New term of four years for Enrico Santus and Matthew Shaffer to replace Daniel Abernethy for the remainder of his term (1 year).

2017 Workshop

4.3.4 THE 2017 INTERBULL TECHNICAL WORKSHOP

This workshop will be held in Ljubljana, Slovenia, on 6 and 7 February 2017, addressing the following themes:

- Adapt MACE to genomic selection.
 - Keep validation tests up to date.
- International SNP model.
- R&D Network supporting Interbull services.

See www.interbull.org/ib/2017_technical_workshop for the latest details and registration. Satellite meetings have been organised for Interbull Steering and Technical Committees and InterGenomics Brown Swiss and Holstein.



Enrico Santus, member of the Interbull Steering Committee, chairing a session in Puerto Varas

Milk Analysis SC

4.4 MILK ANALYSIS SUB-COMMITTEE

An ICAR Proficiency Test (PT) Round for milk reference laboratories has been conducted in September 2016 and some forty one (41) laboratories joined the initiative. Each participant received a customised ICAR PT report for reference and routine method.

Examples of PT reports produced for the Proficiency Test Round performed in September 2016 are available at the following links:

- Report for the Reference Method (available [here](#))
- Report for the Routine Method (available [here](#))

At the time of releasing this issue of the newsletter, the call for the PTs in 2017 has been circulated, informing that two PTs are planned in 2017, on 6 March and 4 September respectively.

All the instruction and participation forms are available here

As previously, participation in the ICAR PT in 2017 means compliance with ISO 17043 and with the system of Certification of Quality implemented by ICAR from 2006, which includes a recognition of the competence of laboratories and of analytical systems in ICAR member organisations that requires regular PT participation with international anchorage.

The ICAR PT parameters considered in 2017 are: fat, protein, lactose, urea, somatic cell, beta-Hydroxybutyrate (BHB), pregnancy-associated glycoproteins (PAG) and the microorganism DNA PCR technique in cows' milk.



Geographic participation to the ICAR Proficiency Test in September 2016

Artificial Insemination and Related Technologies WG

4.5 NEW TERMS OF REFERENCE OF THE ARTIFICIAL INSEMINATION AND RELATED TECHNOLOGIES WG (AI&RT WG)

The ICAR Board reviewed the terms of reference for the AI&RT WG and agreed the following priorities:

1. Establishing a routine of meeting by electronic media (telephone conference, webex, ...) and progressing the work of the group.
2. Finalising universal guidelines for bar coding of semen straws for use in international trade.
3. Developing a web-based reference service (to be provided by Service-ICAR as an extension of Interbull Centre services) that enables ready access to the details of bulls whose semen is being exported/imported into herds' recording data with ICAR members.

A call for new members of this working group has been distributed, with a deadline of Friday, 16 December 2016.

Sensor Device TF

4.6 ICAR SENSOR DEVICE TASK FORCE (SD TF)

One key project is that of ICAR Sensor Device Task Force (SD TF). The task force, lead by Steven Sievert, is charged with reviewing the suitability of sensor data for recording programs along with defining sensor approval requirements and data standards. A cross functional task force with representation from the RSD SC, the Subc-Committee for Milk Analysis, the Dairy Cattle Milk Recording Working Group, as well as representation from manufacturing technologist has met three times since its formation in August 2016. The Sensor Device Task Force will deliver an initial report and recommendations at the ICAR 2017 meeting in Scotland. This work is important to the ICAR mission and to ICAR members, and ultimately to dairy producers.

2017 ICAR Annual Conference

5.0 THE 2017 ICAR ANNUAL CONFERENCE

Registration for the 2017 ICAR Annual Conference scheduled for 14–16 June 2017 is now open.

The conference is being held in Edinburgh, Scotland, UK and is organised by AHDB Dairy, a division of the Agriculture and Horticulture Development Board (AHDB). The AHDB is a statutory levy board funded by farmers, growers and others in the supply chain and managed as an independent organisation (independent of both commercial industry and of government).

The conference venue is The Roxburghe Hotel, in Edinburgh, Scotland, UK, where delegates will enjoy a safe, compact city centre ideal for exploring on foot with green spaces, stunning vistas and most of the venues, hotels and attractions all within an easy walking distance. Edinburgh is also the gateway to the Scottish Highlands, so this is a perfect opportunity for delegates to extend their visits and discover Scotland.

To express your interest in submitting a manuscript, please email icar2017@ahdb.org.uk.

