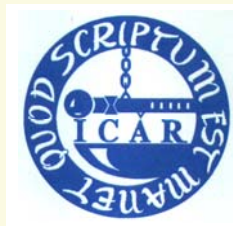


Sub-Committee on Milk Analysis



- Report of activities in 2006-2008 -

Ch. Olivier Leray

NAME

From Kuopio 2006

Working Group on Milk testing Laboratories

MTL WG



Sub-Committee on Milk testing Laboratories

MTL SC



Sub-Committee on Milk Analysis

MA SC

MA SC membership

10 members

MA SC members	Country
Christian BAUMGARTNER	Germany
Egil BRENNE	Norway
Roberto CASTAÑEDA	Argentina
Marina GIPS	Israël
Olivier LERAY (Chair)	France
Silvia ORLANDINI	Italy
George PSATHAS	Cyprus
John RHOADS	USA
Gavin SCOTT	New Zealand
Harrie VAN DEN BIJGAART	The Netherlands

MA SC membership

1- Retirement : ***Ugo PAGGI (AIA-LSL, IT)***

2- New member from 2006:

> ***Silvia ORLANDINI (AIA-LSL, IT)***

> ***Roberto CASTANEDA (INTI -LACTEOS, AR)***

3- Extension (under consideration)

to African & Asian areas

MA SC meeting(s) since ICAR Session 2006 :

- ✓ Kuopio (Finland) : 6 June 2006
⇒ 35th Biennial ICAR Session
- ✓ Munich (Germany) : 23 May 2007
⇒ IDF/ISO Analytical Week 2007
- ✓ Montreux (Switzerland) : 22 May 2008
⇒ IDF/ISO Analytical Week 2008
- ✓ Niagara Falls (USA) : 17 June 2008
⇒ 36th Biennial ICAR Session

Project meetings (special issues):

✓ Rome (IT) : 18-19 October 2007

⇒ Project groups : [Reference system](#) ; [Education & Training](#)

✓ Rome (IT) : 27 November 2007

⇒ OMA WP : [1st meeting](#) ⇒ [Guidelines on On-farm MA](#)

✓ Berlin (DE) : 20-21 January 2008

⇒ Project group Reference system : [Joint ICAR/IDF meeting on SCC](#)

✓ Niagara Falls (USA) : 17 June 2008

⇒ OMA WP : [2nd meeting](#)

Terms of reference

1. Contribute to **adequate analytical performance quality** for milk recording purposes world wide that does allow **valid comparisons between ICAR countries**.
2. Monitor the development of **reference document and standards** on methods of milk analysis and quality assurance in laboratories applicable to milk recording.
3. Maintain a **frame for analytical quality assurance of milk testing laboratories** through **recommendations to ICAR** member organisations and an **international network of reference laboratories**.
4. **Monitor the development of instruments for milk analysis** of interest for milk recording and **equipment related to milk recording analysis** (sampling, in-farm analysis, data capture/transfer). In doing so the Group should keep in contact with, manufacturers, ICAR Sub-Committees and Working Groups in those areas.
5. **Advise ICAR on new developments** in the field of analytical methods, analytical quality assurance and milk testing laboratories.
6. Establish and **maintain liaisons with international organisations / bodies** involved with respect to milk analysis issues dealt by ICAR, in particular IDF and ISO.

Current **programme** of work

- ✓ Guides & protocols
- ✓ Standardisation of methods of milk analysis (IDF/ISO)
- ✓ Laboratory harmonisation
- ✓ Prospect on analytical methods/systems and connected devices
- ✓ Communication

Organisation in projet groups (work items) with pluri-annial programme

Four Yearly Programme of Sub-Committee on Milk Analysis (MA SC) 2007-2010

Work item	1	2	3	4	5	6	7	8	9	10	11
Theme	Analytical QA (toolbox)	Analytical QA (toolbox)	Analytical QA (toolbox)	Analytical QA (toolbox)	Analytical QA (toolbox)	Laboratory network & harmonisation	Laboratory network & harmonisation	Laboratory network & harmonisation	Laboratory network & harmonisation	Laboratory network & harmonisation	International co-ordination & consistence
Title	Guidelines on organising proficiency study	Guidelines on organising centralised calibration	Guidelines on on-farm analytical devices	Reference materials	ICAR approval of new milk analysers	On-line questionnaire on laboratory situation within ICAR	Website data base on laboratories of ICAR countries	International proficiency studies	Reference Laboratory Network meeting	Education & training on analytical matters	Liaison to other (international) groups of experts
Experts	<i>O Leray G Psathas S Orlandini</i>	<i>C Baumgartner O Leray S Orlandini</i>	<i>C Baumgartner H v d Bijgaart M Gips O Leray E Brenne</i>	<i>C Baumgartner O Leray S Orlandini</i>	<i>3 examiners + All</i>	<i>G Psathas G Scott + ICAR HO</i>	<i>O Leray G Psathas + ICAR HO</i>	<i>O Leray S Orlandini</i>	<i>All</i>	<i>C Baumgartner S Orlandini + ICAR HO</i>	<i>H v d Bijgaart O Leray</i>
Objectives	ICAR guidelines and IDF/ISO IS	ICAR guidelines and IDF/ISO IS	ICAR guidelines	To be considered	Eval. report examination / advising ICAR	Two-yearly information	Regular updated information	Evaluation services	Two-yearly information	Improving laboratory testing performances	Information and feed-back / Horizontal work
2007	- Introduction - Outlines	- Introduction - Outlines	- Introduction - Outlines	Consideration for interest : - Provision of information - Guidelines on RM Qualification - Qualifying RMs	On-going process			Annual Programme	Programming	Elaboration of supports for teaching/training (movies on methods)	Setting up of a horizontal ICAR working party on on-farm testing (composition, work programme, meeting) Liaison persons with IDF MCM & QASADS SC
2008	Working draft	Working draft	Working draft		On-going process	Definition of content, structure, reporting	Content & design definition	Annual Programme	Organising	On-going process Video clip project	Meeting of on-farm testing WP
2009	- Reviewed draft - MO draft	- Reviewed draft - MO draft	- Reviewed draft - MO draft		On-going process	- February: Launching the on-line survey - May : Report to ICAR Session	Developing existing RLN part	Annual Programme	Programming	On-going process Video clip project	Meeting of on-farm testing WP
2010	Final draft: - G.A. approval - Inclusion in ICAR guidelines	Final draft: - G.A. approval - Inclusion in ICAR guidelines	Final draft: - G.A. approval - Inclusion in ICAR guidelines		On-going process		Implementing country web spaces and self-maintenance facilities	Annual Programme	Organising	On-going process Video clip project	Meeting of on-farm testing WP

Guides & protocols

⇒ Guidelines on organising interlaboratory proficiency studies :

- **Star-up** : definition of content & structure

⇒ Guidelines on organising centralised calibration :

- **Star-up** : definition of content & structure

⇒ **On-farm milk analysis** : (Jointly with OMA WP)

- ICAR guidelines for the use of **on-farm milk analysers**

⇒ **Frame & Guidance** for milk producers, DHI, device manufacturers

Working Party on On-farm Milk Analysis OMA WP

⇒ **Transversal working group** : 9 members , 6 ICARWP

to establish ICAR guidelines for the use of **on-farm milk analysers**

⇒ **Frame & Guidance** for milk producers, DHI, device manufacturers

Working party	Name	e-mail
SC Milk Analysis	Olivier Leray	o.leray@cecalait.fr
SC Milk Analysis	Harrie van den Bijgaart	bijgaart@qlip.nl
SC Milk Analysis	Marina Gips	hmb-marina@icba.org.il
SC Milk Analysis	Christian Baumgartner	cbaumgartner@mpr-bayern.de
SC Recording Devices	Pierre Billon	pierre.billon@inst-elevage.asso.fr
WG Milk Recording in Sheep	Jean-Michel Astruc	jean-michel.astruc@toulouse.inra.fr
WG Lactation Calculation Methods	Filippo Miglior	miglior@cdn.ca
TF Milk Recording Practices	Reinhard Pauw	pauw@lkv-nrw.de
WG Animal Recording Data	Norbert Wirtz	norbert.wirtz@vit.de

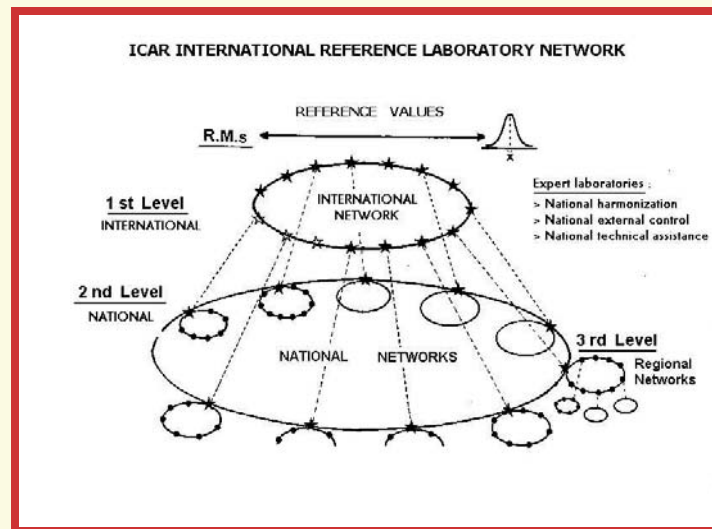
Standardisation of methods of analysis (IDF/ISO)

- ⇒ Cow : Reference methods for lactose & SCC
- ⇒ Sheep and goat : Reference methods for fat, protein, lactose & SCC
- ⇒ All species :
 - Validation Protocol for alternative methods of milk analysis (IDF 128-3 / ISO 8196-3) (deriving from the ICAR Protocol)
 - Infra Red milk analysers : Revision of ISO 9266 | IDF 141.

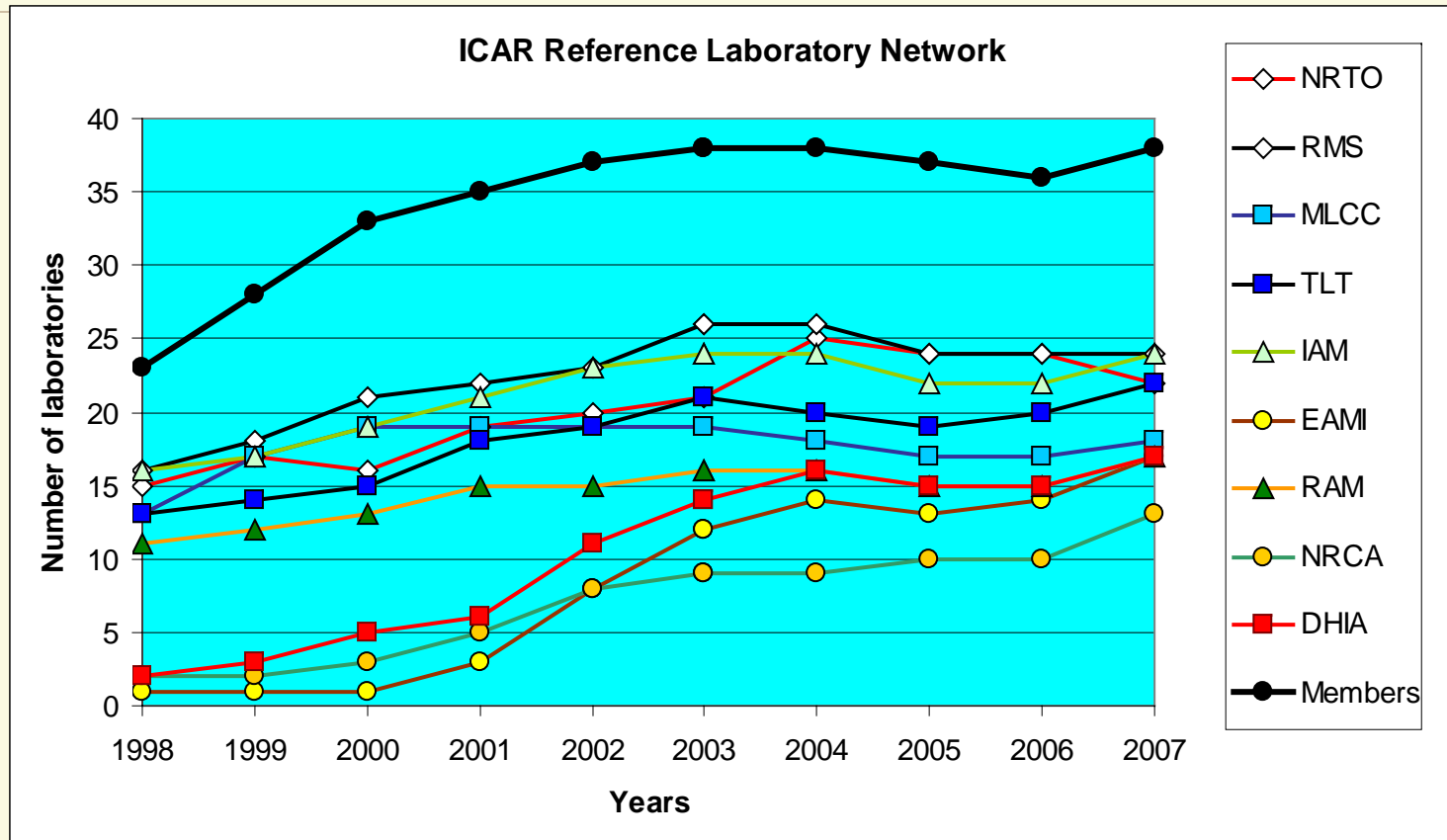
Laboratory harmonisation

⇒ ICAR Reference Laboratory Network :

Maintenance / member list : 38 members of 32 countries
among which : 16 members for goat
14 members for sheep



Evolution of membership and missions/activities from 1998 to 2008



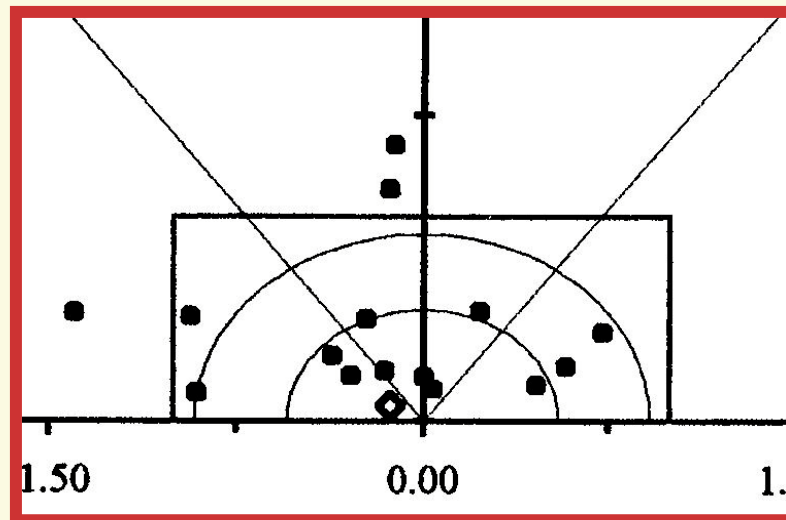
Laboratory performance harmonisation

⇒ ICAR International Proficiency Studies (PTs) :

Criteria : F, P, L, SCC and urea

2006-2008: 5 trials for cow (2 /year)

⇒ Sheep & goat: **Expectation for more participants**



Prospect on analytical methods/systems and connected devices

⇒ On-farm analysis :

- Collection of information (e.g. analysis in-line, portable anal. devices)
- Consideration of AQA aspects related to **QC Guide** and **validation protocol** of analytical systems/devices
 - ⇒ *Connection with OMA WP*
- Approach on establishing **acceptable limits for precision/accuracy** for on farm analysers and **overall consistency** in milk recording systems

Setting-up of reference systems

New work item

⇒ Reference system for SCC :

- Low precise reference method (DMSCC)

⇒ *collective reference, expert labs, international ref. materials, worldwide recognition*

- New project in IDF with **co-leadership IDF/ICAR**

⇒ *Connection with IDF MSSG*

- ICAR (Service ICAR) foreseen as a **logistic & administrative platform**

Setting-up of reference systems

New work item

⇒ Centralised calibration for routine methods :

- **Effect of geographical origin** of milk on calibration worldwide

⇒ *Extent of overall measurement error*

New project under consideration

⇒ **Support** for trials to be considered by ICAR

Training and education (T&E)

New work item

- Reflection on **tools** and **adequate supports** to implement
- Implementation through **Reference Laboratory Network**
- MA SC
 - > to **promote** national/local action
 - > to **indicate** essential points, **provide** standard tools.
- **Joint ICAR/IDF project on video clips** is considered

Communication

- ⇒ **ICAR Web site:** Regular updating MTL WG web space
- Various information:** Meeting minutes, workshop proceedings, events, PT programmes, list of analytical methods, list of centres for method evaluation, guides, protocol, etc
- ⇒ **Yearly information letter**
& annual programme of activities
- ⇒ **MA SC meetings:** - IDF/ISO Analytical Weeks & ICAR Sessions
- ⇒ **ICAR Biennial Session:** Niagara Falls 2008
- **ICAR Laboratory Network & NALMA joint meeting :** 16 June 2008

Collect of information

Survey on ICAR lab situation

⇒ On-line questionnaire:

Standard questionnaire to be repeated every 2years

Collect of information on :

- national AQA, QC**
- laboratory monitoring,**
- lab anchorage to the international level (network)**
- etc**

Synthetic report (tables) on ICAR website + pdf document

Key points to address to ICAR Board

1. Agreement on **participation of ICAR** (Service-ICAR) in the development of a **SCC reference system**.
2. Agreement on the principle of an **alternative procedure** for simultaneous **milk analyser evaluation directed by ICAR** (Service-ICAR), using expert laboratories appointed by ICAR.
3. **Support for an experimental evaluation** of regional effect on calibration of routine methods within ICAR.

Conclusion & prospect

MA SC has :

- taken over activities of the former MTL WG
- extended its focus onto milk analysis in other locations than laboratories,
- started up to develop adequate tools and future services to be provided to laboratories,
- establish joint actions with IDF on common issues
- IDF/ ICAR collaboration can strengthen / consolidate existing ICAR AQA system and broaden its recognition

Next meetings

- ✓ Kislovodsk (Russia) : 18-22 May 2009
 - ⇒ [IDF/ISO/AOAC Analytical Week 2009](#)

- ✓ Montréal (Canada) : 24-28 May 2010
 - ⇒ [IDF/ISO/AOAC Analytical Week 2010](#)

- ✓ Riga (Latvia) : June 2010
 - ⇒ [37th Biennial ICAR Session](#)

A graphic of a spiral-bound notebook with a brown cover and a cream-colored page. The spiral binding is on the left side. A thin horizontal line is drawn across the page, just above the main text. The text "Thank You for your attention!" is written in a large, bold, orange-to-yellow gradient font, slanted upwards from left to right. The text has a slight drop shadow.

Thank You for your attention!