Annual report of the

UK National Reference Laboratory

for the testing of

milk and milk products

2016-2017

Contents

Annual report of the UK National Reference Laboratory for the testing of milk and milk products.

The National Reference Laboratory (NRL) for the testing of milk and milk products for the UK is currently based at the Agri-Food and Biosciences Institute (AFBI) in Belfast, Northern Ireland.

The role of this and all other respective NRLs, in other Member States, is to provide monitoring for the enforcement of EU Directive 882/2004 on official controls performed to ensure the verification of compliance with food and feed law, animal health and animal welfare rules. The ultimate aim is to promote fair trade both within and between Member States within the EU.

Report Number:	AFBI/NRLREPORT/2016-2017
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Date:	27th April 2017
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Project number:	PAU/222
NRL Auditor:	Dr David McCleery

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Project Manager:	Mark Linton
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Introduction

This report provides an outline of the work of the UK NRL over the financial year 2016 to 2017. The UK NRL acknowledges the support of the FSA and the help of AFBI in fulfilling its duties. On the top tier in the hierarchy of enforcement authorities within the European Union is the EU Reference Laboratory (EURL) for Milk and Milk Products which is based in Maisons-Alfort, Paris, France and funded directly by the EU Commission. This Laboratory is responsible for monitoring the performance of the reference laboratories in Member States and within the UK the NRL is based in the Agri-Food and Biosciences Institute in Belfast (AFBI), UK. Each of the NRLs is, in turn, responsible for the performance of Official Control Laboratories (OCLs) situated within their jurisdiction. Both the Member State NRLs and OCLs are funded by their respective Government Departments for testing performed under the relevant legislation. An OCL is defined as a laboratory which generates results which can be used by the competent authority for enforcement purposes under the requisite EU Directives. The object of the whole exercise is to facilitate fair trade both within and between Member States of the EU and ultimately to ensure the safety of the public and protect them from fraudulent practices. It also acts as a contact point for those countries outside the EU who wish to export dairy products into the region.

The core functions of the UK NRL include:

- Secretariat Services
- Advice and representation within the UK/EU
- Production of standard operating procedures, codes of practice and guidance documents at the request of the FSA
- Compliance assessment via audits and ring trials
- Co-ordination within the UK of EURL initiatives

- Communication of results and data use
- Additional services and tasks as requested by the FSA

The responsibilities of the UK NRL therefore are:

- Dissemination of information coming from the EU-NRL
- Provision of expert advice to the FSA or OCLs as required
- Monitoring the performance of national OCLs. The majority of these labs within the UK are accredited to ISO17025 by United Kingdom Accreditation Service (UKAS) for the analyses they perform under the requisite EU legislation. This requires internal and external independent audit and satisfactory performance in internal and external quality assurance schemes to assure the laboratories proficiencies in the tests undertaken
- Participation in workshops organised by the EURL on topics of concern
- Dissemination of relevant changes to British Standard (BSI) and International Standard Organisation (ISO) standards to the OCLs
- Participation in ring trials organised by the EURL to ensure the satisfactory performance of the member state NRLs
- Participation in practical assessments to aid the formulation of EU legislation

FSA UK

Provision of reports to the UK FSA

Reports on all UK NRL activities have been provided to the FSA on a quarterly basis. They were sent electronically to the NRL project manager.

Maintenance of UK NRL Website

This website allows a mechanism for disseminating information to all interested parties and has been updated on an on-going basis as new information and reports become available. The annual report for 2015-2016 was loaded onto the website for full access to all interested parties.
The UK NRL web address is given below:

Link to UK NRL Website: https://www.afbini.gov.uk/articles/united-kingdom-national-reference-laboratory-milk-and-milk-products

Official Control Laboratories

Status of OCLs

The status of the Official Control Laboratories was monitored throughout the year and relevant information from the EURL circulated as required. The UKAS schedules for all the OCLs were acquired from the UKAS website and the schedules checked to ensure that accreditation was up to date. The updated list is attached in Appendix 1.

OCL and other requests for advice

The UK-RL provided advice in response to various enquiries from OCLs and other national NRLs throughout the year on a number of topics;

- Freezing point depression to assess adulteration of milk
- Testing for IgG in dairy products
- Bactoscan testing for raw milk

The UK NRL dealt with all these by directly responding to the specific query.

Mark Linton attended the OCL User day at PHE (Colindale) on 12th May 2016.

19th Workshop of the NRLs for milk and milk products

The UK NRL Project Manager Mark Linton attended the 19th Workshop on 5-7th October 2016 at the headquarters of the EURL at Maisons-Alfort in Paris.

A meeting of the working group on the harmonisation of conversion factors was held before the main workshop. Most of the discussions in this working group meeting focussed on how the unified conversion factor would affect member states, compared to their national conversion factor. This topic was also brought to the workshop for

further discussion. For further details of the topics discussed at the workshop see the agenda and the UK NRL report on the workshop, which are attached in Appendix 2 and 3. The EURL has also recently published a full report of this workshop on its website. The date of the next workshop was agreed as early June 2017 to allow the EURL to submit a new work programme to DG Sante in July.

BSI and ISO standards

On 29th May - 3rd June 2016 Nicolae Corcionivoschi attended the IDF/ISO analytical week in Copenhagen, Denmark

During the year several reports regarding international standards were received from the EURL and BSI for information and comment.

Alkaline Phosphatase

Proficiency Trials (PT) on the determination of the Alkaline Phosphatase activity in cheese

In November 2016 the UK NRL participated in a trial to determine alkaline phosphatase activity in five samples of cheese sent by EURL. These were one sample of soft cheese, three samples of semi-hard cheese and one sample of hard cheese. The preliminary report of this trial was circulated by the EU-NRL in January. The Z-scores for the UK NRL results were satisfactory.

Proficiency Trials on the determination of the Alkaline Phosphatase activity in cow's milk

The final report on the PT trial for ALP in cow's milk carried out in November 2015 was received from the EURL. The UK NRL results were satisfactory with z values of 0.4 and 0.5. For a full report see Appendix 4.

Setting a European legal limit for the alkaline phosphatase activity in cow's milk cheeses

In 2015 A survey was conducted by several NRLs (including the UK NRL) on alkaline phosphatase activity (ALP) in cheeses made from pasteurized milk. The EURL have sent the report of this study to DG SANTE, together with a recommendation to set a regulatory limit of 10 mU/g which is generally applicable (except for some smear ripened cheeses). A copy of this report is in Appendix 5.

Based on the report of this survey and the EURL recommendation, DG SANTE has prepared two draft EC regulations, one setting the ALP limit in cheeses, and the other one defining the reference method associated with the limit, Standard EN ISO 11816-2. These drafts were discussed at the meeting of Competent Authorities' WG Implementation of food hygiene regulations on 27th March 2017. The EURL have sent no further correspondence on this.

Reference material for ALP

A paper was circulated by the EURL describing the production and validation of an alkaline phosphatase reference material in lyophilised milk. This paper was produced by the Italian reference laboratory using, amongst others, data generated in the EURL proficiency trials. The lyophilised milk sample proved to be extremely stable making it particularly suitable for large proficiency trials where transport over large distances is required. It is anticipated that other lyophilised dairy products will also be produced and tested for suitability.

Somatic Cell Counts

Proficiency Trials

The final report for the PT trial for somatic cell counts in raw cow's milk (June 2015) was received from the EURL. The UK NRL results were satisfactory at the low level (z-scores of -1.5, -1.5) but at the medium level had a warning signal, as the z scores were -2.5 and -2.1. For a full report see Appendix 6.

Critical points for the implementation of the reference method for counting somatic cells

A report highlighting the critical points in the microscopy method for counting somatic cell counts was circulated by the EURL. This identifies the stages in the procedure, and the items of equipment (including the associated measurement tolerances) that are deemed critical for accurate enumeration of somatic cells.

Enumeration of microorganisms

Proficiency Trials

The UK NRL participated in a PT trial for total count in cow's milk in Dec 2016. The preliminary report has been received from the EURL. The UK NRL results were in the satisfactory category (z-scores of 1.2 and 0.6).

Establishment of conversion factors between alternative methods and reference methods for total viable count in raw milk

Establishment of a conversion factor for the UK

The final report has been completed and has been sent to FSA for peer review.

EU Harmonisation of conversion equations

The EURL circulated a report on the harmonisation of conversion equations between instrumental methods and the reference method for the determination of total flora in raw cow's milk. The findings of this report were discussed at the annual workshop as described elsewhere. All NRLs were requested to complete a questionnaire regarding this report. The UK NRL submitted a response as requested.

Conversion equation calculation tool

The EURL circulated a calculation tool so that member states could assess the impact on quality payments of moving to a harmonised EU conversion equation. Comments were requested from all NRLs. The tool was assessed by the UK NRL using some of the data submitted for the calculation of the UK conversion factor. The tool worked well with our data and this was reported to the EURL.

Surveys and questionnaires

A number of enquiries, surveys and satisfaction questionnaires were received from the EURL throughout the year. The UK NRL responded to these as appropriate.

Appendix 1

England OCLs

Lab Type/ Code No	OCL Name and Address	Contact details	Milk and Milk Product Tests	Main Contact	UKAS No	UKAS Issue Date
AA PA FE	Hampshire Scientific Service Hyde Park Road Southsea, Hampshire PO5 4LL	02392829501	**Micro** – Pathogen testing, food spoilage testing **Chem** – Trace contaminants, chemical additives analysis	jss@hants.gov.uk	UKAS 0024	24-02-17
AA PA	Kent Scientific Services 8 Abbey Wood Road Kings Hill West Malling Kent ME19 6YT	03000415100	**Chem**	Jonathon Griffin jonathon.griffin@kent.gov.uk	UKAS 1398	10-03-17
AA PA FE	Lancashire County Scientific Services Pedders Way Preston Riversway Docklands Preston PR2 2TX	01772 721660	**Micro -** Dairy not specified **Chem -** including phosphatase	Andrew Smith AndrewC.Smith@lancashire.gov.uk	UKAS 0625	28-01-16
AA PA FE	Eurofins Food Testing UK Ltd i54 Business Park Valiant Way Wolverhampton WV9 5GB Eurofins London Lab 28 - 32 Brunel Road Acton London W3 7XR	01902627200 0208222 6070	**Micro** -Dairy not specified	info@publicanalystservices.co.uk web: www.publicanalystservices.co.uk Carol Giles CarolGiles@eurofins.co.uk Inderjit Bhamra InderjitBhamra@eurofins.co.uk Graeme Jardine graemejardine@eurofins.co.uk	Micro UKAS 0342	10-03-17
FE	PHE, FWEM Laboratory Birmingham Good Hope Hospital Rectory Rd Sutton Coldfield Birmingham B75 5RR	0121 424 9241	**Micro -** Pathogens only	Debbie Fenelon deborah.fenelon@phe.gov.uk	UKAS 1375	10-02-16
FE	PHE, FWEM Network London Laboratory 61 Colindale Avenue London NW9 5EQ	02083276500/ 02083276549	**Micro** **Chem** - Phosphatase only	Nicola Elviss Nicola.elviss@phe.gov.uk	UKAS 4063	23-08-16
FE	PHE, FWEM Laboratory Porton Salisbury Wiltshire SP4 0JG	01980616766	**Micro** **Chem** - Phosphatase only	Caroline Willis Caroline.Willis@phe.gov.uk	UKAS 1645	17-02-17
FE	PHE, FWEM Laboratory Preston Royal Preston Hospital Sharoe Green Lane Fulwood Preston PR2 9HT	01772522759	**Micro** **Chem** - Phosphatase only	Prof A Fox andrew.fox@phe.gov.uk Trudie Allen trudie.allen@phe.gov.uk	UKAS 1496	06-10-15
FE	PHE, FWEM Laboratory York The National Innovation Campus Sand Hutton York YO41 1LZ	01904468948	**Micro** **Chem** - Phosphatase only	Kathryn Tomlinson Kathryn.Tomlinson@phe.gov.uk	UKAS 2724	14-03-17
FE	PHE, FWEM Princess Royal Hospital Lewes Rd	0144440996	**Micro**	Clare Reynolds Clare.reynolds@bsuh.nhs.uk	UKAS 1970	19-12-16

	Hayward Heath West Sussex RH16 4EX					
AA PA	Staffordshire Scientific Services County laboratory and Scientific Services 14 Martin street Staffordshire ST16 2LG	01785 277810	**Chem -** including phosphatase	Michelle Evans michelle2.evans@staffordshire.gov.uk	UKAS 1692	18-04-17
AA PA	West Yorkshire Analytical PO Box 11 Nepshaw Lane South Morley Leeds LS27 0JQ	0113 393 9712	**Chem only** – including antibiotics Phosphatase and SCC not UKAS	M. Bowden analyst@wyjs.org.uk www.analyst.wyjs.org.uk	UKAS 1696	01-11-16
AA PA	Worcestershire Scientific Services Unit 5 Berkeley Business Park Wainwright Road Worcester WR4 9FA	01905 751300	**Chem only**	Paul Hancock phancock@worcestershire.gov.uk scientificservices@worcestershire.gov.uk www.worcestershire.gov.uk	UKAS 0627	21-12-16
	ALS Food and Pharmaceutical Medcalfe Way Bridge St Chatteris Cambridgeshire PE16 6QZ	01354 697028	**Micro** **Chem** Raw milks for drinking only under Food Hygiene (England) Regulations 2006 SI 2006/14 The Food Hygiene (Wales) Regulations 2006 (SI 2006/31 (W.5)) Micro food	Adam Rush adam.rush@alsglobal.com	UKAS 1282	12-10-16

Northern Ireland OCLs

Lab Type/ Code No	**OCL Name and Address**	**Contact details**	**Milk and Milk Product Tests**	**Main Contact**	**UKAS No**	**UKAS Issue Date**
FE 2	Agri-Food & Biosciences Institute Dairy Technical Laboratory Newforge Lane Belfast BT9 5PX	02890 255662	**Micro** **Chem** – including phosphatase and antibiotics	Prof Nicolae Corcionivoschi nicolae.corcionivoschi@afbini.gov.uk	UKAS 1279	26-10-16
FE 3	Northern Ireland Public Health Laboratory Belfast City Hospital Lisburn Road Belfast BT9 7AD	02895047871	**Micro only**	Ian Wilson Ian.wilson1@belfasttrust.hscni.net	UKAS 2017	26-01-17

Wales OCLs

Lab Type/ Code No	OCL Name and Address	Contact details	Milk and Milk Product Tests	Main Contact	UKAS No	UKAS Issue Date
FE	Public Health Wales (PHW) North Wales Microbiology Service F,W &E Ysbyty Gwynedd Bangor Gwynedd LL57 2PW	01248 384718	**Micro only**	Dylan Evans dylan.evans@wales.nhs.uk Lab manager – Kim Bowden Andy Keen andy.keen@nphs.wales.nhs.uk	UKAS 1817	23-06-16
FE	Public Health Wales (PHW) Microbiology Cardiff Department of Food, Water and Environmental Llandough Hospital Penlan Road Penarth CF64 2XX	02920 716745	**Micro only –** Dairy not specified	Debbie Charles deborah.charles@wales.nhs.uk	UKAS 1591	28-06-16
FE	Public Health Wales (PHW) Microbiology Carmarthenshire Glangwili General Hospital Carmarthen SA31 2AF	01267 237271	**Micro only**	Sharon Williams sharon.williams14@wales.nhs.uk	UKAS 1810	09-08-16
AA PA	HJ Evans Division Minton Treharne and Davies Ltd Unit 5 Llwyn-yr-Eos Parc Menter Cross Hands Llanelli Carmarthenshire SA 14 6RA Minton Treharne and Davies Ltd. Merton House Croescadarn Close Pentwyn Cardiff CF23 8HF	01269 833 990 02920540000	**Chem only**	John Robinson john.robinson@minton.co.uk HJ Evans hjevans@minton.co.uk	UKAS 1946	04-04-17

Scotland OCLs

Lab Type/ Code No	OCL Name and Address	Contact details	Milk and Milk Product Tests	Main Contact	UKAS No	UKAS Issue Date
AA PA FE	Aberdeen Scientific Services Laboratory Aberdeen City Council Old Aberdeen House Dunbar Street Aberdeen AB24 3UJ	01224 491648	**Micro** **Chem**	Steve Appleton sappleton@aberdeencity.gov.uk ASSL@aberdeencity.gov.uk	UKAS 1325	06-05-16
AA PA FE	Tayside Scientific Services Dundee City Council James Lindsay Place Dundee Technopole Dundee DD1 5JJ	01382 307170	**Chem only –** Including phosphatase and antibiotics.	Garry Ahrens garry.ahrens@dundeecity.gov.uk Michael Kierszten michael.kierszten@dundeecity.gov.uk http://www.dundeecity.gov.uk/scientificservs/	UKAS 1639	26-03-17
AA PA FE	City of Edinburgh Council Edinburgh Scientific Services 4 Marine Esplanade Edinburgh EH6 7LU	0131 555 7980	**Micro** **Chem** - Including phosphatase and antibiotics. SCC not UKAS	Robbie Beattie robbie.beattie@edinburgh.gov.uk http://www.edinburgh.gov.uk/scientificservices	UKAS 1005	15-07-16
AA PA FE	Glasgow City Council Glasgow Scientific Services Colston Laboratory 64 Everard Drive Glasgow G21 1XG	0141 276 0658	**Micro** **Chem** - Including phosphatase, antibiotics and Aflatoxin M1	Tracy Macbeth tracy.macbeth@glasgow.gov.uk http://www.glasgow.gov.uk/en/Business/Protection/ScientificServices	UKAS 1278	16-01-17

Appendix 2

Agenda: 19th Workshop of the EURL/NRLs for Milk and Milk Products, 2016

Agenda of 19th workshop of the EURL/NRLs for Milk and Milk Products – 5 to 7 October 2016 – ANSES Laboratory for Food Safety, Maisons-Alfort, France

Wednesday 5 October 2016

12:00-13:15 Lunch (optional)

13:15-13:30 Registration

13:30-13:45 Welcome and opening of the workshop (Laurent LALOUX, Head of the EURL for Milk and Milk Products (MMP))

13:45-14:30 Presentation of the workshop (Bertrand LOMBARD, EURL MMP)
Roll call of participants
Evaluation of 2015 Workshop (Adrien ASSÉRÉ, EURL MMP)

General aspects (1/2)

14:30-14:50 risk assessment linked to direct consumption of raw milk (Pauline KOOH, ANSES, DER)

Hygiene of raw milk

(14:50-17:00)
Introduction (Nathalie GNANOU-BESSE, EURL MMP)
Enquiry on condition of transport of milk samples to the laboratories (N. GNANOU-BESSE)

15:30-16:00 Break

2015 PT trial dedicated to SCC in raw cow's milk (J.-A. HENNEKINNE)
2016 PT enumeration of total flora in raw cow's milk (N. GNANOU-BESSE)
Comparison of 40 50 magnification lenses for SCC (N. GNANOU-BESSE)
Critical points for implementation of the reference method for SCC (N. GNANOU-BESSE)

17:00-17:30 Danish cheese tasting
Kindly organised by our colleague from the DK-NRL Erik DAHM

Connect «Open_Anses» WIFI network and in the web browser:
Nom d'utilisateur: wifi-openanses
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Thursday 6 October 2016

Hygiene of raw milk (2/2)

(9:00-13:00)
WG Harmonisation of the conversion characteristic for Total Flora (N. GNANOU-BESSE)
National replies to the enquiry: 5' each per countries

10:30-10:45 Break

Revision of the ISO 21187/IDF 196 and applicability of conversion factor (Vesela TZENEVA, QLIP, NL)
Microval certification of flow cytometers for Total Flora and somatic cells (V. TZENEVA)
IDF ICAR reference system for SCC (Thomas BERGER, Agroscope, CH-NRL)
IDF ISO work for a new SCC method (T. BERGER)
Development of CRM for SCC in raw milk (R. HENNEKINNE & Reinhart ZELENY)

13:00-14:00 Lunch

Pasteurisation tracers 1/2

(14:00-16:30)
Introduction (Hanène GHEZZAL, EURL MMP)
2015 PT trial: ALP in cow milk (H. GHEZZAL, EURL MMP)
2016 training session and PT: AP in cheese (AC. BOITELLE, EURL MMP)

15:15-15:30 Break

Alkaline phosphatase in cream: A preliminary study (Luisa PELLEGRINO, invited expert)
ALP in cream: Progress, problems, and prospects (H. GHEZZAL)

Social event

Visit of Fragonard Museum (17h – 18h15)
A common dinner is organized on Thursday evening

Restaurant « Au Bistro de la Montagne » (19h30)
common departure from Ecole Veterinaire d'Alfort Metro line 8 Station at 18h30

Friday 7 October 2016

General aspects (2/2)

9:30-9:45 Update from DG SANTE (Sylvie COULON, EC G4)

9:45-10:15 Follow up of NRL participation and performance to NRLs PTs (A. ASSERE)

Pasteurisation tracers 2/2

(10:15-11:45)
Validation of an Alkaline Phosphatase Fluorometric Microwell Assay (T. BERGER)
Microwell fluorometric method for ALP: Preliminary comparison assays, (H. GHEZZAL)

10:30-10:45 Break

Update of the standardization work - outcome of 2016 IDF ISO analytical week (H. GHEZZAL, EURL MMP)

Conclusion of the workshop

Update 2016-2017 programme of work

Any other items

Closure

13:00-14:00 Lunch optional

Lunches
Thursday (13:00-14:00)
On demand for Wednesday (12:00) and Friday (13:00)
Payment by cash at our cafeteria (around 10€ per meal)

Important
Note that the meeting will be held at the laboratory:
14, rue Pierre et Marie CURIE, MAISONS-ALFORT
Copernic Building – Snow meeting

European Union Reference Laboratory for Milk and Milk Products - ANSES Laboratory for Food Safety, 23 avenue du Général de Gaulle, 94706 Maisons-Alfort cedex http://eurl-milk.anses.fr/

Appendix 3

Report of the 19th Workshop of the EURL/NRLs for Milk and Milk Products (Oct 2016)

The 2016 workshop was held at ANSES - Food Safety Laboratory, 23, Avenue du Général de Gaulle, Maisons-Alfort, France, on 5-7th October. The UK NRL was represented by Mark Linton of AFBI.

Prior to the workshop a meeting of the Working Group on harmonisation of conversion factors was held, chaired by Dr Betrand Lombard. The working group meeting was updated on the current situation regarding the implementation of the EU conversion factor, the details of which were previously circulated in a report. No factors affecting the conversion factor (e.g. seasonality, year etc.) were shared between all countries, so these were not considered in drawing up the conversion factor. The EURL highlighted the importance of using results from milk with high counts to take account of the fact that geometric means are used for regulatory levels.

Some corrections are to be made to the report and the corrected version will be circulated to all NRLs.

The EURL have assumed that the impact on compliance with regulatory limits would be minimal as compliance is based on geometric means. However, many countries found it difficult to assess the impact of the unified conversion factor compared with their national one, so an excel spreadsheet is to be prepared that will allow all countries to assess the impact at national level. A draft version of this spreadsheet will be circulated to the members of the working group to test before it is circulated more widely.

Concerns were raised about the calculation of the harmonised conversion factor because some countries (around 50%) use preservatives in milk samples for testing by Bactoscan. The EURL was not concerned about this as they found no correlation between the discrepancy from the unified conversion factor and the use of preservatives for any country.

A report from the Swiss showed that the unified conversion factor would slightly favour their milk producers compared to using the national conversion factor.

Italy raised a number of concerns about the way the harmonised conversion factor was calculated, but acknowledged that the use of the harmonised conversion factor would have very little impact in their country as the national equation was very similar.
The harmonised conversion factor was recommended for implementation, but each country would be free to choose whether or not to adopt it.
The issue of maintenance of the equation is to be discussed at the next meeting, which is to be held just before the next workshop.

The Workshop was opened with an introduction by the head of the EURL, Dr Laurent Laloux. Dr Bertrand Lombard chaired the meeting. All of the presentations on the agenda have been made available on the EURL website.

The results of the 2015 PT trial for enumeration of somatic cells counts were discussed.
A magnification of 400× is commonly used instead of 500× (as required in the ISO method). A study was carried out to determine if this has any effect on the counts. The conclusion was that there is no significant difference, so a 400× magnification may be used for any upcoming PT trials and for accreditation purposes. The results of the study are to be sent to IDF ISO for inclusion in a revision of ISO 13366.
A number of critical control points for the determination of somatic cell counts were identified to assist laboratories carrying out the reference method.

The instructions for the upcoming PT trial for the total flora in raw cow's milk were discussed.

The report of the working group meeting on the harmonisation of the conversion factor was presented. Comments on the effects on each country of the introduction of a harmonised conversion factor were requested. Many countries were unable to assess the impact. Mark Linton reported that although the use of the EU harmonised conversion factor instead of the UK one would result in higher counts, in practice the effect would be minimal as quality payments are already based on Bactoscan counts.
Belgium was not keen to implement the EU conversion factor as it would result in a reduction in the number of farms receiving quality payments. In addition they questioned the use of an equation that was derived using results from countries that allowed the use of preservatives.

A calculator is to be sent to all NRLs which will allow them to assess the impact of the conversion factor and the answers will be used for an impact statement which will be discussed at the next workshop in June. For those countries wishing to do so, the EU conversion factor may be implemented at national level from Jan 2017.

There is an understanding that the reference method (microscopy) for SCC is poor in terms of repeatability and reproducibility and a new reference method may be more appropriate. The other automated methods available may score better for repeatability and reproducibility but are more expensive and not as flexible. Work is on-going to identify a suitable reference method that would allow a well defined measurand.
Work is also ongoing to prepare a source of certified reference materials for labs carrying out SCC in raw milk.

The results of the 2015 PT trial for ALP in cow milk were discussed. A high level of ALP in one of the samples was used to assess how labs manage an unexpectedly high level.
The plans for the upcoming PT trial for ALP in cheese were discussed. The workshop was reminded that the ISO method (ISO11816-2:2016) has recently been updated with details in part 2 for the determination in cheese.

The results from two studies on the determination of ALP in cream were presented. A number of problems have still to be overcome, not least the problem with reactivation of ALP in cream over time.

Sylvie Coulon provided an update from DG SANTE and there was a reminder of the requirement for all NRLs to participate in PT trials for tests relating to regulatory requirements.

The workshop was updated on the progress of trials on a fluorimetric microwell assay to replace the Fluorophos as the reference method for the determination of ALP. If successful, this would allow the use of an open method not linked to a sole supplier of equipment and reagents. Initial results look promising but a larger scale trial will be required. The procedure

has to be further optimised and then it will be sent out for comment. After that participation in the pilot trials will be requested.

Work is ongoing to determine pasteurisation tracers for exotic milks.
A limit of 10 mU/ml ALP has been set for cheese made with pasteurised cow milk. There has not been a legal limit set for cheese made from goat milk. Further work would need to be carried out to assess if the same legal limit is suitable and some breeds of goats may need to be excluded from the legislation.

The meeting ended with a summary of the planned work for 2016-17.

The new work programme needs to be submitted to DG SANTE by summer 2017 so the next workshop will take place in early June 2017.

Appendix 4

Double click on the page below to see a full copy of the report.

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French agency for food, environmental and occupational health & safety
Investigate. evaluate. protect

Laboratory For Food Safety

SBCL Unit /Milk Team
Pasteurization Tracers for MMP

EURL MMP

European Union Reference Laboratory
for Milk and Milk Products
http://eurl-milk.anses.fr

INTERLABORATORY PROFICIENCY TEST
FINAL REPORT EILA / ANSES / LSAL / SBCL / 2015 / 06

DETERMINATION OF THE ALKALINE PHOSPHATASE ACTIVITY IN COW MILK

Date of ILPT: NOVEMBER 2015

Final Report - Version 1

ILPT CODE : EILA / ANSES / LSAL / SBCL / 2015 / 06

	Surname, First Name	Position	Date	Signature
VALIDATION	GHEZZAL Hanène	PT Coordinator	17/03/2016	
APPROVAL (authorization for distribution)	LOMBARD Bertrand	Manager EURL MMP	29/03/2016	

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French agency for food, environnemental and occupational health safety - www.anses.fr
Laboratory for food safety
Boulogne-sur-Mer location : Boulevard du Bassin Napoléon – 62 200 Boulogne-sur-Mer – Tél : +33 (0)3 21 99 25 00
Maisons-Alfort location : 14, rue Pierre et Marie Curie – 94 706 Maisons-Alfort Cedex – Tél : +33 (0)1 49 77 13 00

Appendix 5

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anses
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Laboratory for Food Safety
Maisons-Alfort location

EURL MMP
European Union Reference Laboratory for Milk and Milk Products
http://eurl-milk.anses.fr

Study for setting a European legal limit for the Alkaline Phosphatase activity in pasteurized cow's milk cheeses

European survey, 2008-2015

Report - Version 2 : 09/01/2017

Hanène Ghezzal*, Anne-Cécile Boitelle, Caroline Desbourdes, Marina Nicolas

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Laboratory for Food Safety of ANSES (French Agency for Food, Environmental and Occupational Health Safety)
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Appendix 6

Double click on the page below to see a full copy of the report.

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alimentation, environnement, travail

Maisons-Alfort Laboratory
For Food Safety

SBCL Unit - Team Milk

European Union Reference Laboratory

Milk and Milk Products

INTERLABORATORY PROFICIENCY TEST - FINAL REPORT
EILA / Anses LSAL / SBCL / 2015 / 04

SOMATIC CELL COUNTING IN RAW COW'S MILK BY EN ISO 13366-1 STANDARD METHOD

Date of ILPT: June 2015

Final Report - Version 1 – Date 27/07/2016
ILPT CODE : EILA / Anses LSAL / SBCL / 2015 / 04

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