

Sub-Committee for Recording and Sampling Devices

8-9 November 2017 Amsterdam, The Netherlands

Present: Steven Sievert, Chair Kees de Koning (WUR, The Netherlands)

Danuta Radzio Christian Ammon (ATB Potsdam, Germany)
Richard Cantin Martin Burke (ICAR Chief Executive – day 1)

Clément Allain Andie Dimitriadou (ICAR Secretariat)

Hubert Rothfuss Justin Frankfort Peter Huijsmans Andrew Fear

Apologies: Sandra Rose-Meierhoefer (ATB Potsdam, Germany)

Wednesday, 8 November 2017

1. Welcome and Introductions

Steven opened the meeting at 08.30 hrs, welcomed members and thanked all for their attendance. Steven gave an update from the meeting of the Sensor Devices Task Force held the day before, November 7th. The ICAR website will have a Sensor Devices page with summary tables of measurements, survey of manufacturers, information on Guidelines changes, and links to other organizations working on sensors. Once the Task Force completes its mandate, its work will pass to the Recording and Sampling Devices Sub-Committee. The aim is to do so by the ICAR meeting of June 2019 in the Czech Republic. A dedicated sensor devices section will be included in the ICAR Guidelines, with links pointing to other sections, expected by the end of 2018. The focus will be on milk composition measurement results and a relevant template. Subsequently, additional work will be done together with other ICAR groups for additional guidelines, in an on-going process as new

2. Review of Minutes from 12-13 June 2017 Meeting

The Minutes were approved unanimously.

3. Sub-Committee members

a. Thank you to Snorri

b. Replacement for Snorri from Scandinavian countries

SEGES (Denmark) proposed Jonas Persson (RYK, Denmark) to replace Snorri. The proposal has been submitted to the ICAR Board for approval at its next meeting on November 30th 2017.



c. Other changes

Pascal Savary, formerly employed in Agroscope, Switzerland also resigned from the Sub-Committee due to new employment. Agroscope will propose Pascal's successor.

Action: Cesare to remove Pascal from the Sub-Committee's page on the ICAR website.

4. Website of Approved Devices – Cesare

- a. Certified meters page
- b. Certified AMS page
- c. Certified AMS page
- d. What material is needed yet from RSD-SC
- e. Timeline to go live

Steven expressed appreciation for Cesare's work on finalizing the new webpage of the ICAR certified meters. The default order of the entries will be by year of approval. There is still some information that needs to be filled in/double-checked and pictures to insert. In some cases, defining the year of approval is a challenge, given that some old tests were not really ICAR tests at the time. There are a few meters that would qualify for a grandfather exception. Regarding the mounting position column, all meters were approved in low line by default, except for some that were approved for high line as well – the latter need to be identified. As regards routine procedures, each meter will have its own page with links and documents. The periodic checking documents will be appendices to the new Section 11 of the Guidelines.

Steven showed also the new jars and AMS webpages. The blank cells refer to devices that cannot be used together. The year of certification is not needed. Need to specify that the 'not ICAR certified' AMS devices are those that have not been tested (not those that failed the test). There was discussion around those combinations that have not been tested and the need to put pressure on manufacturers to apply for the test. Martin suggested identifying specific combinations and urge manufacturers to test.

The target audiences of the pages were identified as: i) Milk Recording Organizations and other organizations with direct interest (e.g. breeders' associations); ii) Manufacturers; iii) Occasional users.

Action: Sub-Committee members to check the meters webpage and provide feedback and inputs/pictures (either on Bitrix or directly to Cesare) in the next 30 days. Use the internal reference number for easy reference.

Action: Sub-Committee members to check the AMS webpage and give feedback to Steven by Friday 17 November 2017.

<u>Action</u>: Cesare to publish the new pages by 15 December 2017 and subsequently share with manufacturers for comments.

<u>Action</u>: Steven and Andie to work on the internal reference numbering that Jussi had created for the meters.

Action: Steven to send out request for manufacturer reports in January 2018 using Andrew's template. To review in Auckland in February.



5. Service ICAR Report – Andie

a. Label orders

Andie presented the numbers of label orders to date. To date there has been a 22% increase in the orders of labels in 2017 versus 2016. The question of manufacturers who do not order labels remains. Reminders have been sent and some have replied, while others have not. There is also the issue of meters sold under different brands. The wording about the labelling obligation in the Guidelines is sufficient and will remain as is. The obligation will be extended also to the sensor devices. The Secretariat will need to offer the possibility to customize the labels for AMS, mainly as far as the dimensions are concerned.

Action: Steven to ask manufacturers to include label orders in their annual reports.

Action: Steven to update the list of manufacturers and share with Cesare.

Action: Cesare to add a note on the webpage of certified devices that any certified devices must be labelled.

b. Devices on test

Andie mentioned that in addition to those listed on the table, a new application had been received by Lely for the WMS update.

c. Payments

d. Approval process and flow chart

Action: Cesare to add step 9 in the <u>page</u> 'Steps to submit a device for ICAR testing' about the ordering of labels (include email for orders).

6. New application and approved fee changes – Steven & Andie

a. Revised application

Cesare updated the application form with the addition of the website update option and the application fee.

b. Notice to manufacturers

Manufacturers were notified about the application fee. No responses were received.

7. Special Project Report – Air Admission Impacts on Milk Meter Performance – Clement

- a. Project timeline
- b. Initial results

c. Presentation of results - ICAR 2018?

Four meters have been tested with water in order to measure the effect of air inlet on different types of meters, with different water/milk flow rates. The meters include continuous flow, fill & dump, hybrid and proportionate types. The results to be presented in Auckland in February 2018 but Clément will not attend.

Action: Clément to share the updated version of his presentation.

8. Special Project – Comparison of Carryover Determination Methods – Christian

- a. Test results
- b. Presentation of results at ICAR 2018



c. Next steps

Technical problems have been resolved. The tests will be done using low fat skimmed milk with two methods (Løvendahl and MASC). Tests will be done also with AMS. It is complicated to replicate the tests in the lab. The aim is to include in the ICAR Guidelines official carry-over estimation procedures for use by test centres, and also develop best practices for carry-over reduction for manufacturers.

The plan is to send the proposal, do the tests by end 2017 and have the results by mid-January 2018, to be reviewed before Auckland. The final results will be presented in Auckland in February 2018.

9. Certification vs. Approval from ICAR - Steven

- a. Review of proposal
- b. Feedback from manufacturer communications
- c. Inclusion in revised guidelines

10. Guidelines revisions - Steven & Andie

- a. Review of reformatted guidelines
- b. Bitrix platform comments
- c. Timeline for completion

Steven presented the draft flowchart of Section 11 and explained the new structure of the ICAR Guidelines. Each section will be split into i) an overview document, ii) procedures, iii) appendices. The flowchart was updated during the meeting. The Sub-Committee was sceptical about splitting the Section, since the biggest part of it refers to standards and not procedures. The new structure would result in moving most content into the appendices.

Note: include in the revised Section 11 that portable meters need to be tested and certified for both high and low line.

Action: Sub-Committee members to review Steven's edits of Section 11 on Bitrix and i) edit/comment as necessary; ii) check for consistency.

<u>Action</u>: Steven and Andie to discuss with Brian Wickham about adapting the Section to the new structure.

Action: Cesare to add the requested documentation (see revised Section 11) to the steps webpage and the application form.

11. Invited Presentation – Andrew Fear, LIC Automation

Day one concluded at 17.00.



Thursday, 9 November 2017

12. Device Applications - Steven

a. Avgeros Sheep Meter (Greece)

Hokofarm Group Astrea 20.20/SAC/Happel with LMS Pulsameter 2 and Shuttle XY/Ori-Collector

Kees met with Hokofarm – they will test with both Shuttles. Steven will meet them in November.

c. Waikato - Electronic Milk Meter

The test needs to be done on two farms (one low line, one high line), with four meters per farm. Meters are installed in Ireland and in USA. Idele can start testing on the existing one.

d. GEA – expected December 2017

e. Nedap

Nedap will send a new test application. They need to apply to receive the ICAR statistical software.

f. Manufacturers who apply for multiple configuration approval

It was agreed that a complete test is necessary for the major use on the field (i.e. for low line, the device must be tested on 2 farms), but for additional configuration (i.e. high line) only 1 more farm is necessary.

13. Test Centre Reports

a. Dutch Test Centre - Peter & Kees

i. RYK/Lely Nordic - Shuttle B with Lely A3/A4

The report is being finalized. Tests included two farms and two units, A3 and A4. Some tests failed for A4. No carry-over from fat with Shuttle A and B, but with XY. Uffe did test sampling in farm with 74 robots. Some improvements were made by Lely, who do not want to split the test and get approval for A3 for the moment. XY needs to be tested with this version as well. Lely agreed but want to wait. Shuttle B needs to be retested with A4, and with the new version of A4. Shuttle B needs to be re-designed. Lely promised in 2014 to replace shuttle A with XY but it has not done so yet. It might be the case to suspend the ICAR certification. Steven will meet Lely next week.

ii. Afimilk - MPC (high line)

The test is almost complete without any problems. Good routine test and highline test. No test with milk.

iii. Fullwood

b. French Test Centre - Clement

i. WMB - Lactocorder LCS (cattle)

The meter is almost the same meter with the one approved for sheep and goat. It is a portable device and can be used in both high and low positions. It was communicated to Interpuls that for the moment the Sub-Committee cannot grant ICAR certification or for the



meter due to the incomplete nature of the test. Idele will do the high line test (both lab and farm test) in November.

ii. Interpuls - retest

The two versions of the MMV meter (US version and rest of world version) were tested. The first test in February 2017 had failed for fat content. Interpuls did a minor modification but it did not work again for fat content. A new test was done 3 weeks ago and a second farm test will be done in the end of November. The report for high line will be delivered by the end of the year.

c. German Test Centre - Sandra & Christian

i. DeLaval - VMS2018

Some leakage of the milk pump was observed only in the first farm. Regarding the accuracy of milk yield milk recording, the second farm failed. An updated calibration routine procedure is needed. Kees noted that a full test, is needed with two farms, two boxes on each farm, and two Shuttles, making sure that meters are calibrated. DeLaval had requested a modification test - in their application they stated that yield is like in the previous models, but it is not. A new test plan is necessary.

Action: ATB to circulate new test plan for discussion.

14. Specific Recording Device Issues

- a. Dairymaster Steven
 - i. Weighall with Original Controller
- ii. Weighall with Swiftflo Commander
- iii. New Sensor with Swiftflo Commander
- iv. Planned meeting with Dairymaster on November 14, 2017

Steven to meet them on November 14th.

b. Boumatic - Peter & Steven

- i. Change in installation test after approval
- ii. Swing-over installation
- iii. MR-S1 AMS system

Peter had shared with Steven the issues to discuss with Boumatic. They are developing another meter. There might be IP legal issues.

c. SAC - Peter

i. Routine procedure

Final documents on installation and calibration were delivered by SAC for IDC3. The documents have been approved. A new application for a modified test of MDS Saccomatic IDC3b will be submitted. Steven will meet them next week.

d. GEA - Hubert & Steven

i. Monobox



- ii. Twist & Turn Sampler
- iii. Dairy ProQ
- iv. Planned meeting with GEA on November 15, 2017
- v. GEA has not submitted a test application for Monobox yet. GEA's Turn and Mix sampler should be tested (modified test) in low and high line not sure if GEA will apply. Need to follow up on them, also if they want to test the Dairy ProQ afterwards.

e. Roboleo - Steven

- i. Letter sent in 2016
- ii. Still reported as active use in Ontario, Quebec and marketed as approved

Richard had recommended to wait first for the Shuttle XY to replace A. Since this is not happening, Richard will engage with them. There will probably need to be a modified test, probably to be done in Canada.

- f. DeLaval MM2/27 Peter
 - i. MM27 replacing MM25 in VMS systems
 - ii. Software version confirmation

If they wish to test for sheep and goat, they will need to apply for a modified test.

- g. Lely Steven
 - i. Phase out of Shuttle A and replacement with Shuttle XY
 - ii. Unapproved combinations with Shuttle A
 - iii. Planned meeting with Lely on November 13, 2017
- h. Afimilk (Afilab) Steven
 - i. Update on communications with Gil Katz, Afimilk
 - ii. Concerns related to ICAR certification limitation of scope

Afimilk wants ICAR to modify the standard limits of error for milk yield and fat for sheep and goat. Their problem is with sheep. It was decided that table 11.2a of Section 11 will need to list sheep and goat separately, modifying the limits and sharing with J.M. Astruc for comments.

Action: Sub-Committee to revise Table 11.2a of Section 11.

Action: Clément to share background discussion of 2009 on the issue.

- i. Pulsameter 2 Steven
 - i. Reported use in swing-over installations
 - ii. LMS opinion is Pulsameter 2 approved for high line installations
- j. Ori-Collector Clement
 - i. Multiple models of Ori-Collector in the marketplace
 - 1. Ori-Collector 20



- 2. Ori-Collector 60
- 3. Ori-Collector 90
- 4. Ori-Collector 132
- 5. Ori-Collector Double Crown 72+70
- ii. Current approved combinations
- iii. Website listing or modified testing requirements

The various combinations are marketed as ICAR approved, but not all have been tested. When they will order labels, need to be sure about the combinations.

Action: Clément to contact Sayca to discuss the proposed tests.

- 15. Guidelines revisions continued
- 16. ICAR 2018 Session on Recording Devices
 - a. Saturday, February 10, 2018 Recording Device Testing (4:00-5:30 p.m.)
 - b. Sunday, February 11, 2018 Sensor Devices (9:00-10:30 a.m.)
 - c. Sunday, February 11, 2018 Carryover (11:00 a.m.-12:30 p.m.) Christian's paper.
 - d. Who will present?
 - e. Papers due December 4, 2017

Sessions to be chaired by Steven – not organized by the Sub-Committee. If anyone has something to present, let Steven know.

Action: Sub-Committee members to let Steven know if they have anything to present.

- 17. Member and Manufacturer reports Steven
- 18. Any other business for the good of the cause
- 19. Next Conference Calls and Face-to-Face Meeting(s)
 - a. Conference Call(s)
 - i. December 2017

Action: Cesare to set up a Zoom call for December 13th 2017, 15.30 Rome time.

- ii. January 2018
- b. ICAR 2018, Auckland February 8, 2018 (9 a.m. to 5:30 p.m.)
- c. Berlin/Potsdam late summer/early autumn, 2018

The meeting will be hosted by ATB. The dates need to be decided. Invitations to manufacturers could include GEA and Impulsa.

<u>Action</u>: Sub-Committee members to let Steven know about their preferred dates for the meeting.

20. Adjournment and Thank You

The meeting was closed at 13.40 CET, with thanks to all participants.