



MINUTES SENSOR TASK FORCE MEETING

DATE 06TH FEBRUARY 2019, QLIP, ZUTPHEN, NETHERLANDS

TIME 0900H TO 1600H

Attendees: Steven Sievert (Chair), Martin Burke, Uffe Lauritsen, Reinhard Reents, Harrie van den Bijgaart, Silvia Orlandini, Kees de Koning, Cecilia Bagenvik, Christa Egger Danner.

Apologies: Brian Wickham, Clement Allain, Jeroen van den Ban, Franz-Josef Auer.

1. Welcome and Chairman's remarks

The Chair welcomed all the attendees and thanked Harrie and Qlip for hosting today's meeting. Harrie extended a warm welcome to the group.

2. Call to Order & Approval of Agenda

Under the chairmanship of Steven Sievert the agenda was approved and this meeting was convened with Martin Burke acting as minute taker.

3. Work Group Areas for Guidelines delivery;

3.1 Credibility, Capture, Connectivity – Uffe

Uffe shared his powerpoint presentation on how Cow ID integrity is the most important pre-requisite for any on farm recording. His presentation outlined the typical errors in different set ups and tips for good practice to ensure ID integrity.

Uffe with Kees also produced the word draft of '**Cow ID Topics related to Milk Recording**' which is to be incorporated into the guideline as a pre amble to data capture.

Action 1: TF agreed that Kees and Uffe would finalise the document by adding some more tips / best practices for MRO's to offset or mitigate against the risk of ID error

Action 2: TF agreed that we would include a paper on '**Cow ID Topics related to Milk Recording**' in Sensor Tech session 2 in Prague on Wed June 19th (1600-1730hrs) – see more below.

3.2 Data Description – Steven

Steven shared a draft of the Data Description '**Template**' using the BCS as an example. TF gave live feedback and Steven edited as we spoke. All agreed the template was the correct format to describe the various traits and their measurement criteria.

Action 3: Steven will circulate the amended draft to the TF.



Action 4: By way of a further test of the template, Reinhard and Christa will share that amended draft but with heading of **'Heat Detection'** to some of their colleagues in Germany and Austria respectively and ask them to best fill in the template. Once done circulate their efforts to TF in advance of next meeting.

3.3 Data Usability – Harrie

Harrie presented again the Performance Parameters overview. – *I made some notes about 'standard terminology' ...but can't make sense of it - Steven need some help here what was discussed/decided ??*

Action 5: ??

3.4 Device Validation – Kees

Kees presented a word document **'Sensor Device/system validation (first ideas) seen from the perspective of Test Centres'** which summarised how we would approach an application and do a practical validation from a test centre perspective .

Harrie presented his document on **'Thoughts on Validation Criteria'** with some good discussion on how that may help as a pre-amble in Kees document.

Steven also shared a flow diagram from the **'RSD SC Application Process'** which is for new applications

Further discussions followed on how Section 13 really was not clear or transparent enough to be a useful document in practice. It needs to be reviewed.

Action 6. It was agreed to incorporate some of Harries 'thoughts on validation criteria' into the first part of Kees document. Also it was agreed the flow diagram for applications just as well serves Sensors as Recording Devices. It was agreed to endorse that we will move from a 'device' based validation to a 'system' based protocol with bespoke farm tests as the method of validation depending on each system's application in the field. Kees to modify his document to include some of Harrie's points in the introduction

Action 7. Harrie to begin reviewing Section 13 with the aim of simplifying and bringing it in line with our thinking and terminology – focusing on farmer/user friendly wording.

3.5 Integration into ICAR Guidelines – Martin and staff

Action 8. It was agreed that our guidelines on sensors be as a sub section in Section 11 and would incorporate 3.1, 3.2, 3.3 and 3.4 above. Martin and staff with Steven's oversight will look to incorporate once drafts are finalised at next call.



4. ICAR Coding system for Sensors

Steven got some feedback from members and had discussed with Martin how it would be useful for our members if ICAR were to publish a list of coded sensors on our website. Steven shared an example what such a listing might contain;

What would need to be in the system (just preliminary thoughts)?

- Device code (may be sorted by trait prefix)
- Manufacturer
- Device name
- Cross reference to other names in marketplace
- Software name (i.e. Afilab is the sensor and Afifarm is the software)
- Firmware version if applicable
- Software version
- Data measurement(s)
- Status (complicated as some devices measure more than one metric – for discussion)
- Status Date

TF agreed we should pursue and draft a first view.

Action 9. Martin in the first instance will follow up with Cesare to publish Kees/ Clements list as send to Manufacturers in Nov '18.

Action 10. Reinhard will review with some staff in VIT or Interbull on what a 'Coded List' of Sensors might look like and share some thoughts/ideas on how to present.

5. ICAR Conference 2019 (Prague June 19th 2019)

5.1 Prague Sensor TF Meeting Schedule

Tue June 18th ; 0830am – 10.30am **Closed** Sensor TF Meeting – limited to TF members

Tue June 18th 11am – 1pm **Open** Sensor TF Meeting – open to manufacturers

Action 11. Steven/ Cesare to send invites to manufacturers for Tue June 18th 11am – 1pm **Open** Sensor TF meeting

5.2 Prague Sensor Technical Session



Wed 19th June 4pm – 6pm Technical session 2. 'Integrating Sensor Devices within ICAR Guidelines'

TF discussed and agreed we will have the following 4 papers (working titles) ;

1. **'Cow ID Topics related to Milk Recording'** – Jonas Persson SEGES
2. **'Sensors in the marketplace – a manufacturer's perspective'** – Cecilia Bagenvik, DeLaval
3. **'Integrating Sensors into ICAR Guidelines'** – Steven Sievert, US NDHIA
4. **'Sensor systems based testing & validation'** - Kees de Koning, Wageningen

Action 12. All above to send in abstract by end February or latest 15th March to <https://www.icar2019.cz/abstracts/>

6. 4D4F Presentation – Cecilia

Cecilia shared the learnings and outcome of the 4D4F project which had numerous practical examples/farm visits where sensors or combination of sensors were demonstrated. They also created some SOPs which ICAR could be interested in as we develop more guidelines/tips.

Action 13: Martin Steven to follow up with Cecilia and 4D4F on possibility of sharing and perhaps continuing the work through ICAR 'post project completion' in March 2019

7. D4Dairy Presentation – Christa

Christa is leader for a €5m project in Austria called D4Dairy (Digitilisation, Data Integration Detection and Decision support) which is funded by a mix of Private, Govt and Research Institutions. The project encompasses all parts of the dairy process chain – goal is that one time recording enters the central database and then data to be accessed by appropriate stakeholders from database. Christa as leader of project can share learnings with ICAR as it progresses.

8. Next Meeting 2019

It was decided to hold the next meeting by Zoom at the end of March – we will ask Cesare to send a doodle so we can fix a date between March 19th and March 29th

9. AOB and Adjourn

Steven thanked all participants for their time and work and meeting adjourned at 1615 CET