



ICAR Board Workshop / Break out Session

Nov 30th, 2017 (1430 –1645)

1. Executive Summary of Board feedback on proposed new roles/opportunities for ICAR in the fast-changing landscape of DHI provision;

For discussion in closed ICAR Board session July 24th, 2018. Score each idea/project from 1 to 5 (where 1 is not such a key priority and 5 is top priority) 

Idea #	Idea	Where ICAR translates into Project	Board Priority 24/07/18
1.	Combine sensor data and traditional data to provide new services, phenotypes etc	Sensor TF / Recording Devices SC	
2.	Develop Certification protocols for new technologies; In Line F & P; Bodyscope BCS, Activity Meters etc	Sensor TF / Recording Devices SC	
3.	Develop ICAR project data exchange standards, services	Animal Data Exchange WG	
4.	ID Certifications to have wider scope – to include the 'system' not just the product certification.	ID SC , Co Q	
5.	ICAR provide independent space for High Level Capitalisation Group to facilitate synergies to tackle new challenges as a group.	CE & Board	
6	In ICAR conferences replace Manufacturers Showcase with a 'Hackathon' New Tech/Start-up' forum – e.g. ask a question interesting to ICAR and ask student or start up to solve it 48 h at CAR congress and choose the best one and to offer an amount of money to develop a prototype...for example see http://www.api-agro.fr/	CE & LOCs 2019, 2020	
7	Develop Straw man model for Extension/Consultancy of ICAR work in Latin America, Asia etc	CE + ICAR team	

2. Structure to deliver?;

Currently ICAR output depends on Chairs and experts within SCs, WGs, and TFs. While this model may be good for maintaining guidelines it can be slow to deliver on project deliverable or new services. We are not proposing to eliminate the group structure but supplement it by providing a hybrid project structure to deliver projects and services as discussed in above Table 1.

Action: If Board agrees the CE will come back with proposal and a process by which ICAR can finance and run such a hybrid project resource.

Notes from ICAR Board 24/07/18;

Details of Question/Answers from Board Workshop on Nov 30th, 2017;

a) New Technologies – impact on Traditional DHI and how can ICAR engage more?

- a. Board Questionnaire - Summary of Results - MB will send out short (9 Qts) questionnaire on Fri 17/11 and ask back by Fri 24th
- b. MB to collate results and provide summary on the day to 2 Groups
Group 1. JM, BL, LJ, KI
Group 2. NHN, HW, DL, JK ,JW
- c. Groups to break out and spend 30 mins to review and discuss the summary
- d. Groups to spend 15mins to agree and write down two Projects that ICAR should address – present after coffee.

b) New Technologies – ICAR's Plan to engage/address?

- e. Sub Groups Present Results and recommendations
- f. Board collectively agree how we tackle - within existing Groups or Task Force structure?

6 Respondents to Questionnaire are summarised here;

Q1. What new recording technologies/services have come into your DHI market in last 3yrs?

Q2. Impact? For those New Services in last 3 yrs. please list in order of most impact first (with farmer uptake as the measurement).

New Service Introduced in last 3 yrs.?	Count ?	Impact Rank?
Pregnancy Diagnosis	4, all run by DHI	3 out of the 4 rated the new Preg Diag service had biggest impact of the new services introduced in last 3 yrs.
Fat & Prot	3	2 DHIs run Calibration of F/P Sensors as a service, others reported non DHI directly providing data e.g. Lely impact is more of future threat e.g. 'now why do I need DHI?'
Mobile App Reports/ PDA	3	18% of this DHI herds using (not new – just extra service level). Second DHI reported farmers liking easier to access and timeliness of reports. Third reported 805 farmers now using PDA
BHB	3	While 3 X members reported BHB as a new service its impact was relatively low ranked (some because its newness, too early)
Ketosis	1	40% of this DHI herds using (not new – just extra service level)
Barcode 100%	1	Reduction of the labour cost 12 %

Herd Optimiser	1	Using SNP analysis as a selection tool
Phosphate Planner	1	New Tool to help farmers predict P based on stock size and make recommendations
PCR	1	High Impact as users want to lower impact of antibiotics
Feed Analysis	1	DHI lab service to analyse and report back content value to improve feed quality
Milking Speed	1	Herd management aid
Locomotion Score	1	Herd management aid

Q3. What plans have you re introduction of new services for your DHI operation/ in next 3yrs?

New Service in NEXT 3 yrs.?	Count ?	Comment
Health traits (claw +)	4	Earlier diagnosis is key, using milk recording platform to offer new health diagnostics
DSCC	3	Intro of FOSS 7 – calibration?
Mobile Apps	3	Ease of access, timeliness
Sensor data Integration + Share/Sell data to third party partners	2	
Johnes	1	
TBC by DNA	1	
BHB	1	
Fatty Acid	1	Energy balance reporting
Genomics/GeBI linked to payment	1	
Longevity	1	Herd and Animal metrics
Feed Analysis	1	DHI lab service to analyse and report back content value to improve feed quality
Milking Speed	1	Herd management aid

Q4. Do you expect the numbers of Cows recording to increase or decrease in next 3 yrs. in your market? And any comment to qualify why you believe so?

Increasing	Static	Decreasing
2 – where % market < 65% has scope for increase	4 – same cow numbers year on year or P limiting cow number growth	0

Q5. What is the biggest challenge (threat) to the Recording business in your region for next 3 yrs.

Biggest Threat	Count/Comment
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Sensor Data from Milking or other Equip Manufacturers and 'data rights' control exerted by these e.g. Lely	5 / DHIs see this as major threat
Aggregation of Data from Equip manufactures or Software companies – across countries to provide reports, DSS that traditionally DHI did regionally.	2 / This is a further development/expansion of use of sensors also (in first point).
'Foreign' providers offering competing services	1 / Smaller countries can become a target for bigger service providers who have the service/tools but have outgrown room to expand within their own border
Small Population of cows / milk price	1 / Below feasible critical mass – could also be related to above point
New EU Breeding Regs could end up disassembling existing herd book and recording structures	1 / For discussion - e.g. France impact?
New GDPR regs May 2018 may require high investments for central databases.	1 / Data Protection laws will require database upgrades
Pharma companies entering livestock improvement market	1 / Pharma and other Technologist 'looking' for other uses/markets for their discoveries
Some small labs doing Milk Analysis	1 / Competing with DHI labs

Q6. What is the biggest opportunity for the Recording business in your region for next 3 yrs.?

Biggest Opportunity	Count/Comment
Integration of on farm Sensor Data into our DHI services	2
Value add Milk Analysis – (animal care metrics, reproductive status, nutritional metrics inc. efficiency.	2
ICAR Certification for processing data other than milk records to help us to remain the trusted partner for milk producers (certification tied to ICAR/ DHI records)	2
Using MIR data to create new services	1
Export Recording expertise to neighbouring countries	1

Q7. With respect to the ICAR Guidelines do you think there is some technology/aspects we need to be addressing but currently do not cover?

Aspects missing from ICAR Guidelines?	Count/Comment
Sensors & In line milk measurements, we should cover new phenotypes from sensors	3
Data Exchange (standard file formats)	2
Using MIR data to create new services	1

ICAR Certification for processing data other than milk records to help us to remain the trusted partner for milk producers	1
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Q8. In your opinion, how can ICAR better engage with these technologists? What role should ICAR take?

How can ICAR better engage with Technologists?	Count/Comment
Regular and 'officialise' the Dialogue with the Mfrs & S/W Companies – give them a role as partners in the data validation	3
Offer ICAR Certification for all types of automatic recording of animal traits (weighing, animal movement...) Start small and become big	2
Certify those data collection and data movement processes so to avoid each member having to deal with each company individually	2
Offer Data Exchange standards – promote these to new ICAR standards - so to avoid each member having to deal with each company individually	2
Work with Manufacturers in developing countries as they roll out initiatives e.g. ID projects	1

Q9. What other comments would you like to make/share/discuss with the ICAR Board members with respect to the future of the Recording business?

Misc. comments;

- ICAR needs to get into new areas of Certification – start with existing ones and grow.
- With respect to question of accuracy vs approval of meters we should have one standard either certified or not!
- How do we attract younger generation to recording business (role of (social) media)?
- How to improve visibility of ICAR in South America

Summary from Groups when Back in the room;

Group 1 – Hans Wilmink as rapporteur, they identified following topics ICAR should develop;

1. Combine sensor data and traditional data to provide new services
2. Develop ICAR project data exchange standards
3. Develop Certification protocols for new technologies;
 - a. In Line F & P
 - b. Bodyscope

- c. Activity Meters
- d. etc
- 4. ICAR provide independent space for High Level Capitalisation Group to facilitate synergies to tackle new challenges as a group.
- 5. ID Certifications to have wider scope – to include the ‘system’ not just the product certification.

Group 2 – Laurent Journaux as rapporteur identified following topics that ICAR should develop;

- 1. Develop ICAR project data exchange standards
- 2. Develop Straw man model for Extension/Consultancy of ICAR work in Latin America
- 3. In ICAR conferences replace Manufacturers Showcase with a ‘Hackathon’ New Tech/Start-up’ forum – e.g. ask a question interesting to ICAR and ask student or start up to solve it during 24h or 48 h and to present the solution at the end of ICAR congress and choose the best one and to offer an amount of money to develop a prototype...for example see <http://www.api-agro.fr/>
- 4. Develop Certification protocols for new technologies.