

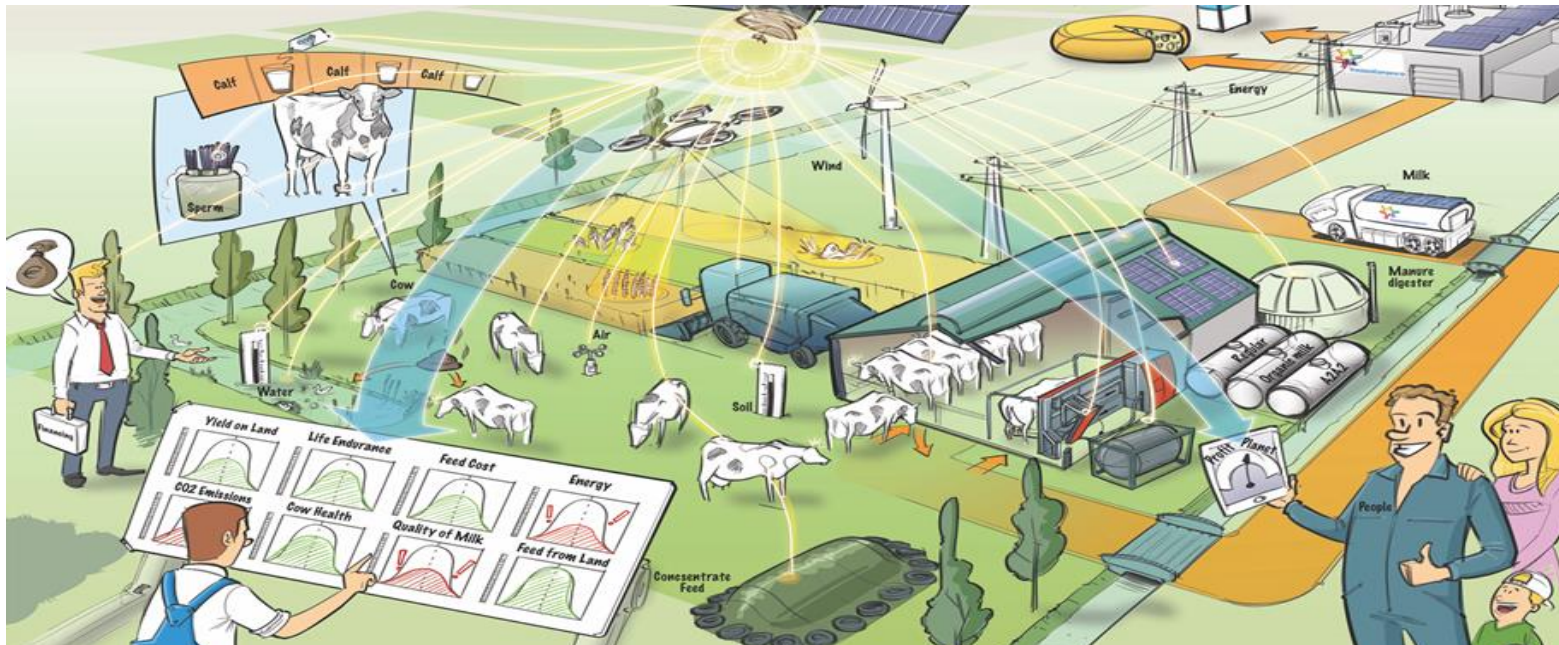


# Animal Data Exchange Working Group Update

Co-Chairs: Robert Fourdraine and Bert van 't Land

# Status of Dairy Industry Technology

- Parlor systems
  - Milk weights, milking times, milk components
- Animal monitoring systems
  - Activity, Rumination, Health
- Milk diagnostics laboratories
  - Components, pathogens, pregnancy, diseases
- Genomic testing laboratories



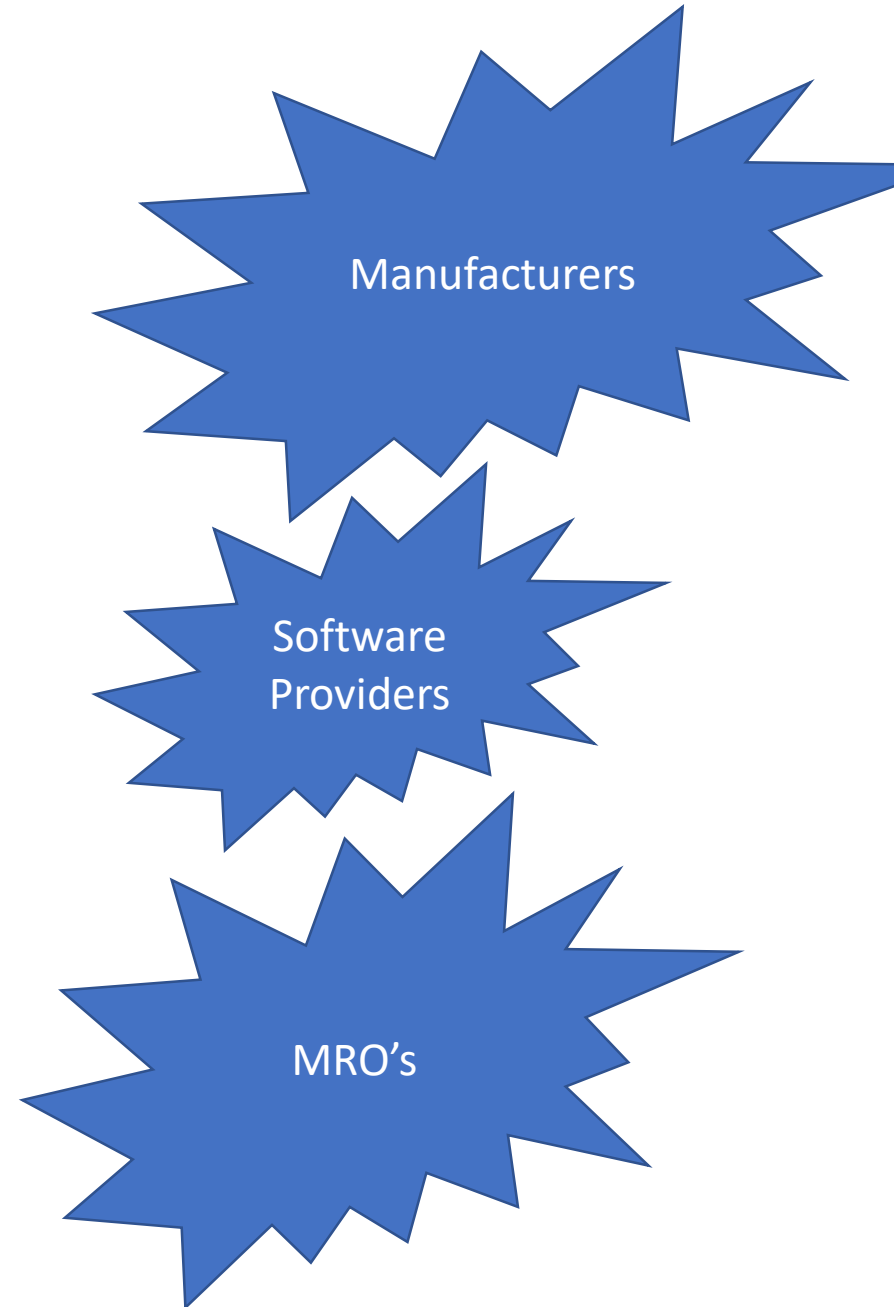
# Data Transfer Needs

- Modernize existing methods for data transfer
  - Volume of data (bigger farms)
  - Frequency of data transfer (monthly to weekly to daily)
  - Increase number of data items
- New data transfer methods
  - New data sources (new technologies)
- Increased user base needing data
- Developments in other groups (Health, sensors,..)



# ADE WG

- Robert Fourdraine, USA CRI (Co-Chair)
- Bert van 't Land, NL CRV (Co-Chair)
- Johannes Frandsen, DK Seges
- Beate Maassen-Francke, GER GEA
- Michael Lynch, IRL ICBF
- Harm-Jan van der Beek, NL Uniform-Agri
- Simon Jenkins, AUS Datagene
- Robert Moore, CAN Valacta
- Damien Pachoud, CH Datamars
- David Bleloch, UK Shearwell Data
- Andrew Cooke, NZ Rezare Systems
- Sarah Goerlich, CH Qualitas Ag
- Sven Schierenbeck, GER VIT
- Juliette Leclaire , FRA Institut de l'Elevage
- Freddie Ruijser, NL, Lely
- Lars Bergmann, SWE, DeLaval
- Mark Doornink, USA, Valley Ag Software



# Sub Groups:

- Semantics/Ontology
  - Responsible for maintaining and enhancing a worldwide data dictionary
- Technical Implementation
  - Standardize data exchange in XML and/or JSON API's
- Outreach
  - Tasked with promoting the standards and make people aware and stimulate new implementation.



# Semantics/Ontology

- Extensive resource developed over the past 5 years
- Request was to update to JSON/REST Interfaces before adding more information
- Request to be flexible to adopt data from for new technologies
- New desired Services:
  - Activity
  - Rumination
  - Feed/concentrate
  - ....



# Technical Implementation

- Milking is finalized and ready to release
- Registration had been discussed, and is soon to be finalized
- Reproduction has been discussed :
  - Investigate heat detection more in detail
  - Parturition and dry off still to be discussed





# Outreach

- Need to cast a wider net and obtain greater participation
  - Understand the current status
  - Understand intentions of the various groups
  - Address any concerns
- Survey of interest groups to determine what the specific concerns are and what can be done to alleviate those.
- From the respondent none indicated they would never implement the proposed standards
  - Early adopters
  - Those waiting for technical standards
  - Phased in approach





# Main concern: Collaboration process

- Innovation & Standardization are often in conflict
  - Agenda ICAR WG not insync with the different projects all over the world
  - We need collaboration instead of long waiting periods
- Seen a positive change in the past year, many realize building proprietary interfaces between systems take time and resources.
- Possible solution: Open source development, sharing the work
  - Efficient handling of expansion proposals/ new branches
    - Users must be able to add concept definitions themselves unofficially until they are merged to the officially validated version and tightened up to the standards
    - contain definitions for sensor data as well as definitions for more static data (transaction messages).
    - have good import and export possibilities (XML,YAML, SENML,..)



# Questions?

