



How UNIFORM-Agri uses ADE for integrating with
second and third separate systems on farm

UNIFORM-Agri

Software for dairy farmers

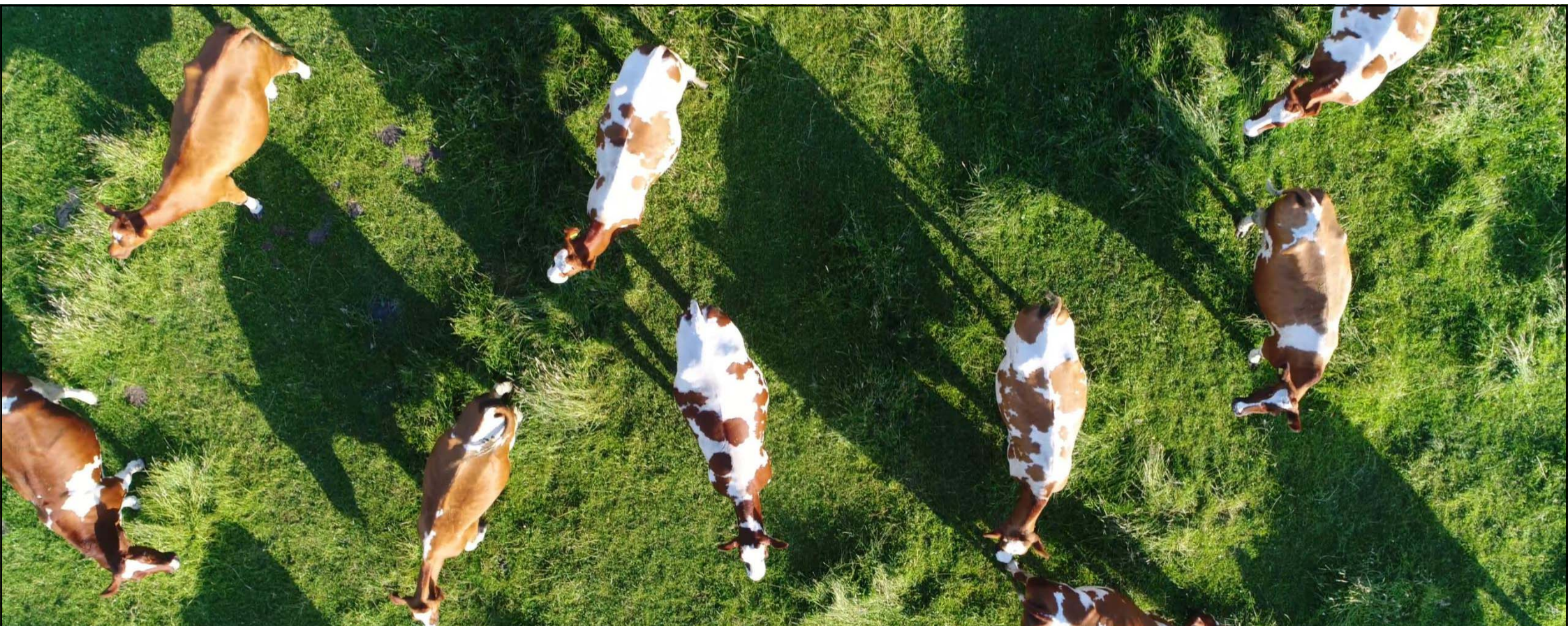
Short introduction

Jasper van der Noord
Born in the province Friesland, The Netherlands
Since 2010 living in Lisbon, Portugal
Married, 2 children

Working for UNIFORM-Agri since 2006
Started at support
Currently product manager

From childhood on always been intested in the dairy industry.
Studied animal husbandry and agribusiness at Van Hall Lareinstein in
The Netherlands





Mission statement UNIFORM-Agri

To support dairy farmers and their suppliers worldwide with the best and most user-friendly software solutions that helps to build a profitable and sustainable business. We want our herd management software to help produce food in a more efficient way, which is key to be able to feed the growing population.

UNIFORM-Agri

Herd management software for dairy farmers

Established in 1986

> 80 people (13 Nationalities)

5 entities

>15,000 active users

Since 2013 part of the
DeLaval Holding

The head office located in Assen,
The Netherlands

Sales
Aftersales
Backoffice
Development
Product Management

UNIFORM-UK

Sales
Aftersales

UNIFORM-Spain

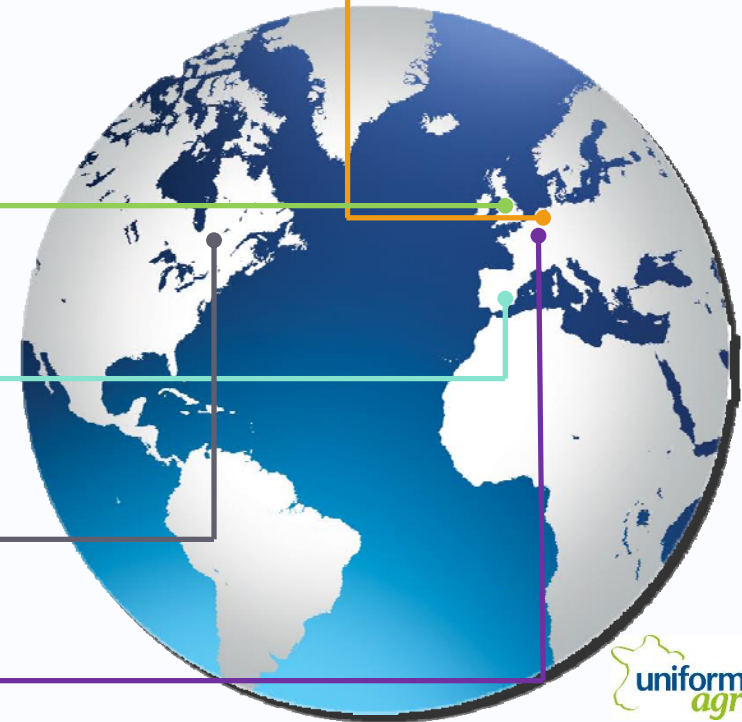
Sales
Aftersales

UNIFORM-Canada

Sales
Aftersales

UNIFORM-Belgium

Sales
Aftersales



Linking on farm automation

Sensors, milking robots, parlors, scales, sorting gates & concentrate stations



afimilk®
Vital know-how in every drop

PANAZOO®

Fullwood

BouMatic®

SCR

GEA

iconix

System
Happel®

AIC
WAIKATO

LELY
— Innovators in agriculture —

GALLAGHER

SAC

TRU-TEST

ENG Systems
Innovative Dairy Solutions

nedap
technology that matters

EDS
EUROPE DAIRY SYSTEMS

INSENTEC

DeLaval

CowManager

SMARTBOW

smaxtec
INSIDE MONITORING

Afimilk
Silent Herdsman

... and others

National interfaces

More than 100 different interfaces in over 20 countries



- Australia
- Austria
- Belgium
- Brazil
- Canada
- Czech Republic
- Denmark
- France
- Germany
- Hungary
- Italy

- Luxembourg
- Portugal
- Russia
- Spain
- Sweden
- Netherlands
- Northern Ireland
- Norway
- Ukraine
- United Kingdom
- United States

Herdbook

Milkrecording

**National
database**

**Quality
control**

**Dairy
factories**

*...and new links
are being
developed as we*



New sensor systems who approached us

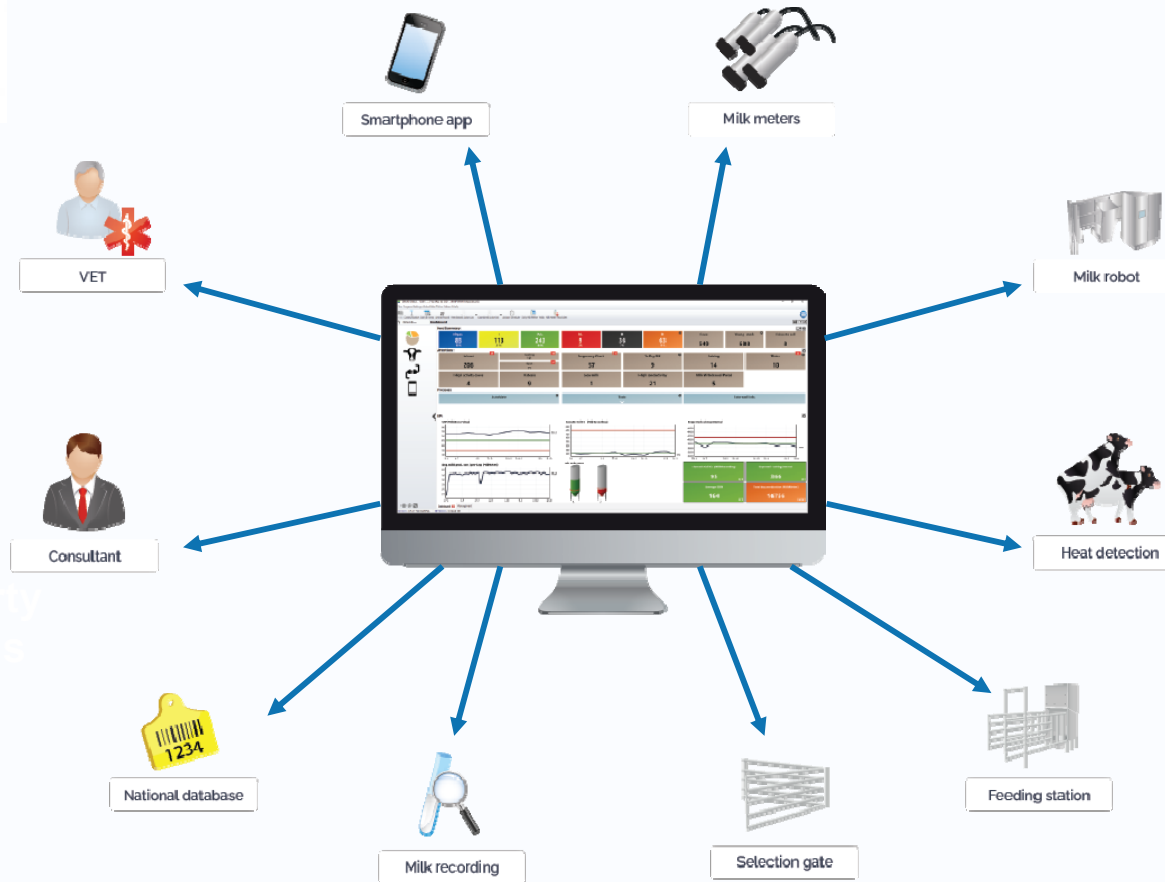


Not all these systems were familiar with the ICAR ADE. We placed ICAR ADE in the picture.

On farm data flow



Third party
solutions



History of interfacing

- UNIFORM-Agri developed the first interface with a milking system in 1987
- In 1998 the first standardisation started.



TAURUS Standard Interface

(Cooperation between Wageningen University and herd management programs)

- Management computer - Process computer
- Dairy farming
- Year 1998 and still used
- File based, ADIS format (AGRICULTURAL DATA INTERCHANGE SYNTAX)

New sensor systems are asked to use the ICAR ADE standard

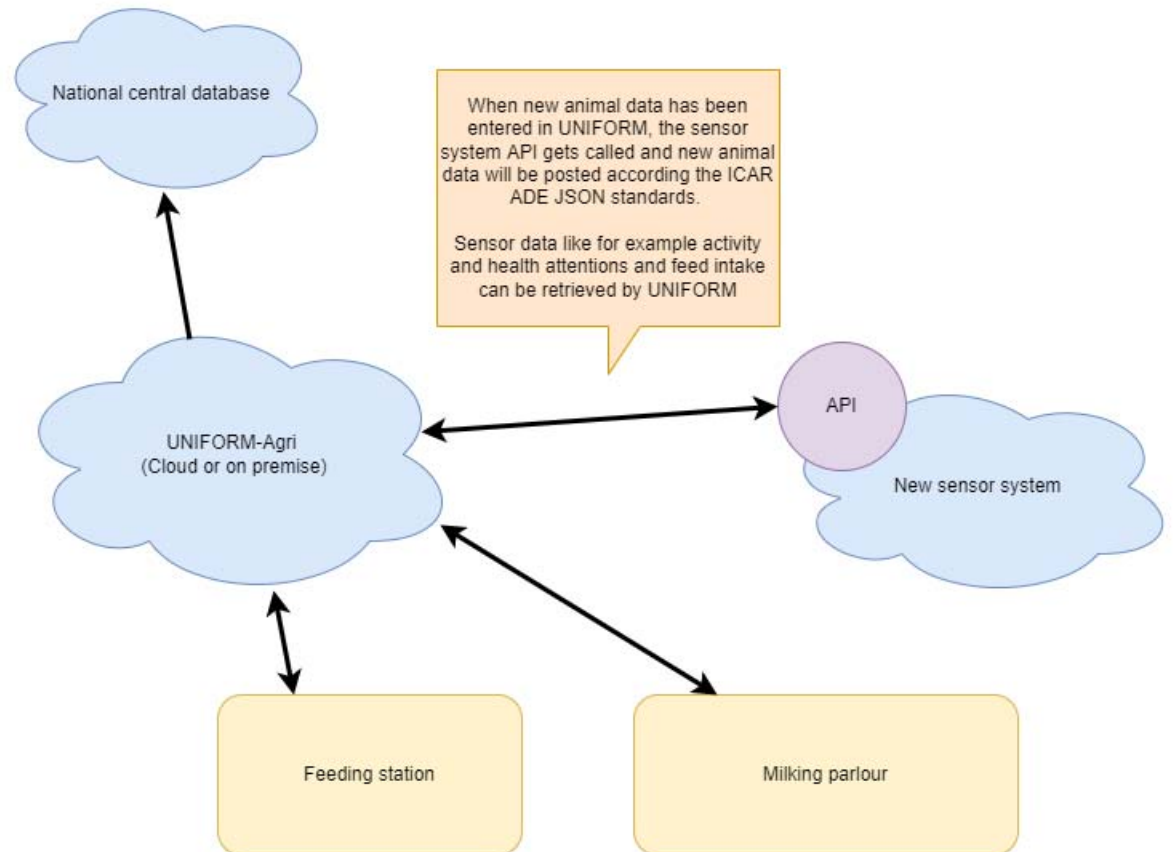
- Phase 1 is a one direction interface from the UNIFORM program to the new sensor system
- First we discuss which items can be exchanged
- Then we direct them to the ICAR github and explain that the data that will be exchanged has to be according to the ICAR ADE JSON standards <https://github.com/adewg/ICAR>
- The other party develops an API based on this.
- The UNIFORM program connects to the API and the data exchange can start. Each individual herd has her own authorisation and identification
- Reasons why we start with a one-way data data exchange in the beginning:
 - New sensor system development might still change/to be finetuned.
 - The animal data that goes from the UNIFORM program to the sensor system is rather stable, so probably no big changes expected from the sensor system side.
 - **Priority one is reduce the administrative tasks of the farmer, data only has to be entered once! No double entry, no mistakes!**

GL 568795421
Claire 150
Calving event



```
[
  {
    "alternativeIdentifiers": [
      {
        "id": "150",
        "scheme": "number"
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        "scheme": "eartag"
      }
    ],
    "birthDate": "2010-09-15T22:00:00.0Z",
    "gender": "Female",
    "identifier": {
      "id": "-2147482952",
      "scheme": "id"
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      "modified": "2020-04-07T09:07:00.436Z",
      "source": "UNIFORM",
      "validFrom": "2020-04-07T09:07:00.436Z"
    },
    "name": "Clair 150",
    "specie": "Cattle",
    "status": "Alive"
  }
]
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Schematic





Software for dairy farmers

www.uniform-agri.com