



## Nordic Cattle Data eXchange – a shared standard for data transfer

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As a common project of the five Nordic countries, a shared interface has been created for data exchange between farm management software and the national databases. Joining organisations only have to build the exchange between their own software and the interface. Main principles of the system are presented.

### Summary

*Keywords: milk recording, data capture, data processing*

With ever-increasing herd size and the rise of advanced dairy technology, especially automated on-farm data capture, nearly all milk recording organisations have noticed the need to create easy and reliable ways to transfer data directly from farm management systems to milk recording. This is especially true for automatic milking where more complex data sets are collected, and with the Nordic countries where the share of cows in automatic milking systems is already around 30 to 40% of the national herds.

Building a data transfer channel between a milk recording organisation and a farm management software programme may sound easy. Considering that there are many different kinds of farm management software each with their own data standards, and a lot of milk recording organisations each with their own specific needs, it is not surprising that some software providers have become reluctant to do much, especially with the smaller milk recording organisations.

Having made each their own approaches at this problem, the milk recording organisations from Denmark, Sweden, Norway and Finland decided in 2013 to start working towards a common system where the demands to farm management software providers would be uniform. The development phase was finalised in 2015, and it

### Introduction

### Nordic cooperation

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was decided to build a common interface that would be able to feed all national databases from all farm software whose providers are interested to join. Mtech Digital Solutions from Finland was selected by the partners to build the interface.

### Present phase of the NCDX

The interface is now ready and working in its primary form where it transfers cow data, recording and milk analysis data, and production related events. The kind of data transferred can be broadened in the future to include whatever the milk recording organisations and farm software providers need and agree to deliver. It is also possible to expand to new farm software providers and milk recording organisations later.

The NCDX working principle includes the idea that the NCDX Provider (Mtech) makes all agreements with both milk recording organisations and farm software providers (Figure 1). In this way, the milk recording organisation only has to take care of its own connection to the interface, and the same applies to the farm software provider. Both parties forgo lengthy discussions and projects with a number of partner organisations. The local milk recording organisation will still have to make user agreements and authorise its own customer farmers, however.

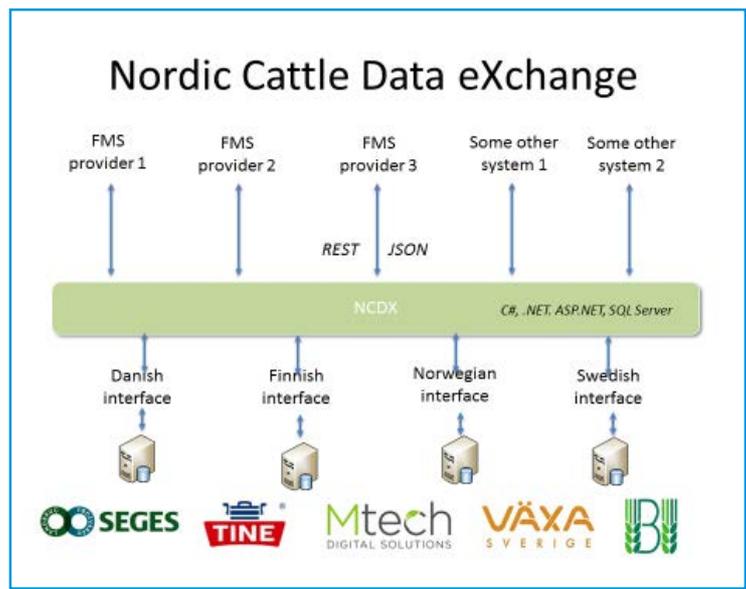


Figure 1. The working principle of the NCDX.

### Conclusions

The NCDX has proved to be an easy tool for automatic data transfer both to the milk recording organisation and to the farm management software. It gives to each stakeholder the advantage of having only one connection and one agreement for data transfer. It can be expanded with new features, new farm software, and also new milk recording organisations.