







## Common Nordic Cattle Database

A pre project study on the possibilities for closer cooperation on ICT development and maintenance

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## **Executive Summary**

This pre-project was launched in September 2011 in a meeting in Oslo between decision makers from Norway, Sweden, Finland and Denmark. Considering the increased demand for information at a local and national level and decreasing number of farms paying for the services, it was seen important to analyze possibilities for closer cooperation on cattle databases and applications.

The analysis of the ICT - situation demonstrated that all countries have systems that fulfill their current needs, but they are of variable age and some are in need of a renewal. It was also recognized that there are many integrations to systems outside the farmer organizations databases (e.g. governmental systems), which need to be considered when planning system wide changes.

From technical perspective there are also considerable similarities. Microsoft SQL Server is the favored database and, apart from Norway with Java, the preferred software development platform is Microsoft .NET. However, all countries have legacy systems using wide range of technologies.

One of the most significant challenges is that despite the on-going harmonization work, there are still major differences in codesets (how information is registered) and identifications (e.g. animals, farms and customer), which have implications on both technical and business processes level.

The analysis from the business perspective showed that approaches to solving the business needs are also quite different due to differences in national rules, structural differences (e.g. farm sizes and different geographic distances), organizational and cultural differences.

The pre-project considered several cooperative strategies and came to the following conclusions:

- There is a significant benefit from pooling our resources (money, data and knowledge) and having common Nordic database and applications. The estimate for yearly savings is circa 1 million euros, which is based on the extrapolation from a report by *Finn Bitsch Bjorklund*
- 2. The development of a common cattle database and applications in a single ("Big Bang") project would be costly, difficult and risky. A conservative estimate is that it would take min. five years and cost 10 15 million euros + un-estimated costs for 3<sup>rd</sup> party integrations. Consequently payback time for the project would be long (min. 10 15 years)
- 3. Valuable cooperation regarding e.g. individual applications can be done, but without a guiding strategic framework, they are unlikely able to take us closer to a common database
- 4. It is preferable to adapt a longer term strategic commitment towards common Nordic database and applications within 10 20 year time frame, but it will require a strategic decision and necessitate e.g. harmonization of business processes and codesets, giving up some national cultural aspects and obviously developing a concrete roadmap and plan

It is the opinion in the project group that with the decreasing numbers of farms, none of the countries will be able to develop a new national cattle database without cooperation in the future. If a strategic decision is not taken there is a risk that 1) Countries will develop less functional systems in the future or 2) one or more of the countries will find other opportunities for cooperation. Considering the existing and historic good cooperation between the Nordic countries, the preproject group thinks it will be a loss of an opportunity not to intensify the cooperation.

To coordinate the development on both short and longer term, the pre-project group recommends setting up a forum to exchange ideas, and to manage the long term strategic roadmap. The pre-project group also recommends the following more minor actions:

- 1. Setting up a common project to improve data exchange with farm management systems
- 2. Conducting a business feasibility study for a Nordic data warehouse
- 3. Conducting an evaluation study on cooperation regarding server hosting