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USDA Pushes Plan to Move NAIS Forward

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The U.S. Department of Agriculture's seven-point plan is aimed at getting 70 percent of all cattle in the country enrolled in the National Animal Identification System by 2010.

By Claire Swedberg

April 3, 2008—The U.S. Department of Agriculture (USDA) is moving closer to adopting a seven-point business plan for the National Animal Identification System (NAIS) program, with a goal of making it possible to trace back an animal's history to its point of origin within 48 hours. The public has until April 15 to review the seven-point draft plan, which was published in December 2007, and to respond to recommendations.

Although the report covers all species of livestock, its emphasis is on the 104 million cattle in the United States, located on 1,000,000 premises including ranches and packing plants. The department's goal is to reach a critical mass of enrolling 70 percent of all cattle into the NAIS program by the end of 2009.

David Wiklund

The NAIS program is an information system developed by the USDA to protect the health of U.S. livestock by tracking the animals as they pass through various premises, and, in the event of an emergency, by making that data available to the producers involved, as well as the appropriate animal health officials. Participation in the program is voluntary at the federal level.

Livestock producers and packing plants that choose to participate are asked to provide information regarding each transaction in which an animal is moved from one site to another, says David Wiklund, project manager for NAIS software development. The NAIS program does not require participants to employ RFID technology, though it does offer recommendations with regard to specific RFID standards and ID numbers. Some producers are using a visible numeric tag, for instance, to allow animal tracking.

The seven-point plan is intended to advance U.S. animal traceability and provides several strategies to further that effort. These include increasing collaboration with the livestock industry, states, tribes and territories, as well as standardizing the way data is collected.

One of the plan's major points calls for the adoption of standardized Animal Identification Numbers (AINs). This would require the elimination of proprietary AINs that are not ISO-compliant, instead using only 15-digit ID numbers that begin with the U.S. country code (840) and comply with the ISO 11784 and 11785 RFID standards for animal tagging, rather than the three-digit manufacturer's code that exists with tags bearing private AINs.

The USDA allocates and maintains records about standardized AIN numbers, beginning with when they are initially provided to an authorized label manufacturer. Tags utilizing proprietary AINs will be

grandfathered in until they can be phased out.

With the official "840" AINs, when a livestock owner purchases tags from a supplier, the vendor first validates the premises identification number of the receiving location. The order will be processed only if there is a valid premises ID number. When a vendor ships an approved ear tag or injectable transponder imprinted or encoded with an AIN, the company reports the AIN, tag type, date shipped and premises number for the producer that received the tag—or the non-producer participant number if the device is sent to a reseller.

If the tags are distributed through resellers, those companies are responsible for reporting the distribution records to the AIN-management system, a USDA database that tracks the movement of tags encoded or printed with official AINs. In that database, the USDA maintains a complete listing of which particular AINs went to which premises. During an investigation into a sick animal or contaminated meat, this information would then provide a starting point for determining an animal's birthplace, or the location where that animal was first tagged.

With the RFID tags encoded with private AINs , tag manufacturers maintain their own records. When animal health officials find an animal that is sick or poses a risk to public health, they inspect the animal's tag, call the tag's manufacturer and ask the firm to identify the premises to which the tag was originally shipped. The manufacturer, however, is not required to keep or provide such a record.

If the tag was shipped to a distributor, the animal health official calls the distributor and requests information regarding where the tag was shipped. The distributor is not required to keep or provide this record either. "The record they provide may be a P.O. box with no good physical location," Wiklund says.

In addition, the USDA has been working with some major animal-traceability IT companies, such as AgInfoLin and Micro Beef Technologies, to develop the Animal Trace Processing System (ATPS) that would allow faster data acquisition by the USDA in the event of a disease outbreak.

The ATPS includes a messaging system with IT companies' networks that allows the USDA to go directly to a particular company for four points of information about a specific animal—the animal ID number, the premises ID number, and the date and event for each RFID tag read. The IT company will be required to provide that data to the USDA, and could also provide other information, such as the animal's breed or health issues, though they will not be required to do so.

All seven points are intended to make the system fully operational, Wiklund says, by providing data quickly to health officials and encourage maximum use. Thus, in the event of an emergency involving a diseased animal, officials and animal producers can quickly trace back the entire history of where an animal has been. The long-term goal of the NAIS program is to complete a trace-back within 48 hours.

The NAIS program's overall strategy is also to develop a critical-mass level of participation. In order to

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reach that critical mass, the USDA estimates it needs to have identified 70 percent of cattle with traceability to their origin of birth. The department also hopes to improve traceability for other types of livestock—primarily swine, horses, poultry, goats, deer and elk.

Subsequent to the 2004 launch of the NAIS program, cattle producers in all 50 states have begun registering their livestock premises on a system based on the one in use by the Wisconsin Livestock Identification Consortium (see Wisconsin Ups RFID-Adoption Incentives for Cattle Growers), modified for use in their particular state. Of those states, eight chose to continue using their own statewide tracing system. In 2005, several hundred cattle producers joined the NAIS system, Wiklund says, and millions of records have been stored in the data repository.

According to Wiklund, the NAIS program next hopes to sign up as many premises as possible, and to take steps to integrate livestock electronic data capture and reporting technologies into existing disease programs. Such technologies include PDAs, RFID handheld interrogators and tablet PCs.

By 2007, 420,000 premises had been registered, representing about 30 percent of all those throughout the United States. The full business plan can be accessed at the NAIS Web site.