The livestock industry in the USA appears to be rapidly moving toward the adoption and implementation of a national animal identification plan. The purpose of such a system is to improve the ability of the industry and state/federal regulatory officials to provide satisfactory animal herd health surveillance and respond to outbreaks of significant disease threats. These disease threats may be a result of naturally occurring disease outbreaks or a result of intentional terrorist introduction of disease to the nation’s herds. The goal of the proposed national animal identification program is to enable 48-hour traceback of a foreign animal disease outbreak.

The ability of state and federal regulatory officials to monitor the health of the nation’s livestock herds has been greatly diminished in recent years. National surveillance has traditionally been reliant upon state/federal testing for brucellosis and tuberculosis. With these diseases nearly eradicated and annual herd testing having been greatly curtailed, sufficient sampling is no longer available to regulatory officials.

The need for increased herd surveillance is growing. Animal disease threats (Bovine Spongiform Encephalopathy (BSE), Foot-and-Mouth Disease (FMD), etc.) are very real in today’s world. In addition to the animal health impact of such a disease outbreak, industry is also faced with significant economic impacts through loss of market opportunities. This was vividly illustrated in the recent BSE cases in North America. The diagnosis of a single case of BSE in Alberta, in May, was a strong wake-up call for USA producers. The “other shoe dropped” on December 23, 2003, when a single BSE case was diagnosed in Washington. The resulting loss of key export markets (including Japan, Korea, and Mexico) fueled remarkable price drops and price volatility. This market disruption underscores the economic risk that industries face without traceability that enables identification and containment of product or categories of product. As a result of these incidents, the USA livestock industry now appears to be more supportive of implementing a national livestock identification program.

The USA is not the only country in the world implementing national animal identification. In fact, the USA is behind many of the other major beef producing nations by putting in place traceability systems. Canada began implementation of a national animal tagging program in the late 1990s. This program became mandatory in 2001, and now requires that all cattle be tagged with an approved Canadian Cattle Identification Agency (CCIA) tag before leaving the farm of origin. Beginning in January 2005, the approved tags will all be radio frequency ear tags (RFID). The European Union (EU) has in place a passport system required for the movement of any livestock. Australia has implemented the National Livestock Identification System (NLIS) and is

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working toward its mandatory national adoption. The South American nations of Brazil, Uruguay, and Paraguay are also in varying stages of implementing national identification systems. Mexico is developing a national system as well, and there is a desire to make the CAN-USA-MEX system as harmonious as possible. Japan identifies all animals as well. The key message in the global picture is that mandatory national individual animal identification systems are quickly becoming the de minimus standard. The USA will need an animal identification system to compete effectively in the global marketplace.

**United States Animal Identification Plan (USAIP)**

The framework for this national identification effort has already been developed and is known as the United States Animal Identification Plan (USAIP). USAIP was developed as a public-private collaboration. USDA is now reviewing this plan and formulating an implementation plan for national animal identification. It is anticipated that USDA, in its final implementation plan, will utilize much of the work outlined in USAIP.

**USAIP Executive Summary**

The following is the executive summary from the USAIP plan:

“Protecting American animal agriculture by safeguarding animal health is vital to the wellbeing of all U. S. citizens. It promotes human health; provides wholesome, reliable, and secure food resources; mitigates national economic threats; and enhances a sustainable environment. Essential to achieving this goal is an efficient and effective animal identification program. Building upon previously established and successful animal health and animal identification programs involving many animal industries, an industry-state-federal partnership, aided by the National Institute for Animal Agriculture (NIAA), was formed in 2002 to more uniformly coordinate a national animal identification plan. This resulting plan, requested by the United States Animal Health Association (USAHA) and facilitated by USDA’s Animal and Plant Health Inspection Service (APHIS), was formulated in 2003 for presentation at the October, 2003 annual meeting of the USAHA. More than 100 animal industry and state-federal government professionals representing more than 70 allied associations/organizations collectively assessed and suggested workable improvements to the plan to meet future U. S. animal identification needs.

“Fundamental to controlling any disease threat, foreign or domestic, to the nation’s animal resources is to have a system that can identify individual animals or groups, the premises where they are located, and the date of entry to that premises. Further, in order to achieve optimal success in controlling or eradicating an animal health threat, the ability to retrieve that information within 48 hours of confirmation of a disease outbreak and to implement intervention strategies is necessary. The USAIP is focused on utilizing state-of-the-art national and international standards with the best
available and practical technologies. It is dynamic and flexible, and will incorporate new and proven technologies as they become available. States’ needs in implementing animal identification will receive priority within the uniformity provided by federal oversight.

“The USAIP currently supports the following species and/or industries: bison, beef cattle, dairy cattle, swine, sheep, goats, camelids (alpacas and llamas), horses, cervids (deer and elk), poultry (eight species including game birds), and aquaculture (eleven species). Implementation will be in three phases: Phase I involves premises identification; Phase II involves individual or group/lot identification for interstate and intrastate commerce; and Phase III involves retrofitting remaining processing plants and markets and other industry segments with appropriate technology that will enhance our ability to track animals throughout the livestock marketing chain to protect and improve the health of the national herd. Initial implementation will focus on the cattle, swine, and small ruminant industries. In transition, the USAIP recommends that: all states have a premises identification system in place by July 2004; unique, individual or group/lot numbers be available for issuance by February 2005; all cattle, swine, and small ruminants possess individual or group/lot identification for interstate movement by July 2005; all animals of the remaining species/industries identified above be in similar compliance by July 2006.

“These standards will apply to all animals within the represented industries regardless of their intended use as seedstock, commercial, pets or other personal uses. “It is well acknowledged that costs associated with the USAIP will be substantial and that a public/private funding plan is justified. Significant state and federal costs will be incurred in overseeing, maintaining, updating, and improving necessary infrastructure. Continued efforts will be required to seek federal and state financial support for this integral component of safeguarding animal health in protecting American animal agriculture.”

USDA Direction

In comments presented at House and Senate oversight committee hearings in March, USDA indicated that a comprehensive national animal identification program in the USA should meet these goals:

1) Producer flexibility to utilize existing systems and adoption of new systems. Producers should not be burdened with having multiple identification numbers, systems, or requirements.
2) System should be technology neutral so that all existing technologies and emerging new technologies can be utilized.
3) Build upon the data standards developed by USAIP. Provisions to ensure data confidentiality are an essential part of this objective.
4) System must not preclude producers from being able to use the framework with production management systems that respond to market incentives.
5) The system must not unduly increase the role and size of the government.
USDA is proceeding with implementation plans for a national livestock identification program under the existing statutory authority of the Animal Health Protection Act. However, concerns over confidentiality of private business information and accessibility of this information by other agencies or the general public are issues that will likely spur USDA and industry to ask Congress for additional protection.

USDA is proceeding with a phased implementation plan. A national Premises Identification “allocator” is to be completed in 2004. This system will enable state veterinarians, through cooperative agreements with USDA, to issue unique uniform premises identifications to producers. USDA’s next focus would be on setting of standards for data collection and sharing into a national database. USDA would likely attempt to fund some additional infrastructure needs such as reader systems in strategic locations. USDA has said they do not envision use of significant federal funding for purchase of electronic ear tags. Starting in fiscal year 2004, USDA would also focus on identifying and qualifying third parities, such as private industry and trade associations, that have identification products or programs, so they could be integrated into the national system. In early fiscal year 2005, USDA would then be in a position to issue premise and animal identification numbers to third parties and to begin receiving information from third parties into the system.

Industry Solutions

A number of commercial firms today offer various components needed for a national animal identification program. Utilization of these existing pieces in a national plan is essential in order to reduce the burden on producers, quickly put a workable system in place, and to limit the role and size of government. Many of these technologies are already being utilized by producers for improved management and for participation in value driven programs. One challenge that exists today with private systems is a lack of interchange between systems.

In response to that need, the Beef Information Exchange (BIE) has been created as a platform for exchange of information across private, proprietary systems. The founding partners of the BIE (AgInfoLink, APEIS, eMerge, IMI Global, and MicroBeef Technologies) are demonstrating how private firms can cooperate to share information for the benefit of the regulatory community and producers. The BIE offers to their customers a method of data management that meets the requirements of national animal identification for limited information sharing with government while maintaining the confidentiality and privacy of the participating producers.

The private sector should be a significant partner with government in designing and implementing a national identification program. The critical role of government in this process is in establishing standards for data to be collected and shared. Private industry will provide the solutions for meeting those standards.
Conclusion

The USA is likely to implement a mandatory, national animal identification program over the next several years. Such a program will support improved animal herd health surveillance and improve the industry’s ability to access global markets where traceability is a requirement. National animal identification and traceability will not prevent the outbreak of a foreign animal disease. It will, however, enable rapid identification and containment of that disease, with a goal of minimizing animal health impacts and reestablishing trade to limit economic impacts.

Producers have the opportunity to take advantage of the framework enabled under a national animal identification program. Individual animal identification and traceability can create new opportunities for the livestock industry. Identification enabled “individual animal management” coupled with “value traceability” will enable the creation and capture of new values for the food industry. Animal identification solely for the purpose of regulatory compliance will add costs to the industry. When such an identification program is also utilized by industry for improved management, producers can realize a positive return on the investments made in animal identification.

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