



# National ID and Traceability System for the Canadian Hog Sector

## Business Plan - Summary

The Canadian Pork Council is proactively preparing for potential obstacles that could negatively impact the hog sector. As farm animal movements increase, there is a wide recognition that the industry must improve its preparedness in the event of a foreign animal disease outbreak or food safety crisis.

In July 2002, the Canadian Pork Council received the mandate from its members to coordinate the development of a national traceability system for pigs, from birth to slaughter:

*“...the CPC will play a coordinating role within the pork industry in the development of a national strategy and action plan towards ensuring eradication, and a capability for zoning of foreign animal diseases affecting swine. [...] The CPC will also continue to collaborate where possible with its counterparts in other livestock sectors as well as provincial governments, and there will be a particular focus on animal identification and location requirements...” (CPC Annual Board of Directors Meeting July 2002)*

This Summary captures all of the main elements of the national hog identification and traceability strategy that is currently being developed. It describes the swine traceability system, and more specifically, the three components of traceability, including:

- 1) Identification of farms;
- 2) Identification of animals; and,
- 3) Tracking movement of animals.

These three components will not only provide the industry the capacity to trace animal movements backward and forward between all premises, but also the ability to reduce the response time, key in limiting the impacts of a animal disease outbreak or food safety crisis.

The national hog ID and traceability strategy consists of a four-year plan to develop an effective National Hog ID and Traceability System in Canada.

The summary of key aspects of the Business Plan is as follows:

- **Globalization:** We now live in a global village, which can lead to some major setbacks. As people travel internationally as never before, and as animals and animal products trade internationally in unprecedented quantities, there are greater risks of foreign animal disease outbreaks and food safety crises. The 1997 outbreak of classical swine fever in the Netherlands, and the United Kingdom’s 2001 outbreak of foot-and-mouth disease, clearly indicate that even countries with sophisticated foreign animal disease preparedness plans are not immune to outbreaks of this nature. Nonetheless, these incidents showed that a national identification and traceability system could reduce

significantly the impact of a crisis, and allow the industry to resume its normal activities more rapidly. As the Canadian swine industry relies so greatly on exports, it is highly vulnerable to these crises.

- **The Impact of a Foreign Animal Disease Outbreak:** In 2002, a Canadian Animal Health Coalition study indicated that in the event of a Foot-and-Mouth disease outbreak in Canada, losses from \$13 to \$45 billion would likely occur; 41% of which would be trade losses; 14% would be direct processing impact; 11% would be direct farm impact; and 9% would be tourism impacts. The “medium-scale” and “large-scale” scenarios of the study indicate that it would take six and ten months, respectively, to regain OIE disease-free status in Canada, and four to six years, respectively, to regain market share.

A food safety crisis in the Canadian swine industry would lead to significant economic losses without an efficient national traceability system.

- **Goals:** A national identification and traceability system will fulfil the following goals:
  - 1) To help minimize the impacts of a foreign animal disease outbreak or a food safety crisis by:
    - a) Correctly identifying the source of the disease or contamination, and correctly establishing the control area;
    - b) Reducing the response time;
    - c) Helping to zone Canada in accordance with the guidelines of the *Organisation internationale des Epizooties* (OIE, or World Animal Health Organization), and meeting our trading partners' expectations; and,
    - d) Ensuring that the national traceability system is compatible with systems developed by other Canadian livestock sectors and packers.
  - 2) To reinforce our domestic and export market access by:
    - a) Responding to the growing desire of consumers to know the origin of their food;
    - b) Assisting in the eradication of domestic animal diseases and in the containment and elimination of foreign animal disease incursions.
    - c) Responding to the development of traceability systems developed by pork-exporting countries; and,
    - d) Supporting our CQA® on-farm food safety program.
  - 3) To improve the competitiveness of our industry.
- **Canadian Food Inspection Agency (CFIA):** From a CFIA regulatory perspective, an identification and traceability system is a risk management tool, where consideration must be given to the benefits, costs, effectiveness, trade rule consistency, as well as the industry's capacity to implement, manage and maintain such a system. CFIA continues to work with the hog industry to establish greater clarity around traceability.
- **Pork Pilot Study Recommendations:** Following the results from the pork pilot study, released in January 2005, the CPC National Hog Identification and Traceability Working Committee proposed a series of steps and recommendations.
  1. To support the creation of a national livestock premises registry;
  2. To ensure that shoulder slap tattoos for Canadian hogs going to slaughter are unique and associated to a premises;
  3. To ensure that swine movement information from the packing plants are aggregated into a central database for traceability purposes; and,
  4. To develop a national hog identification and movement reporting system that fulfils the

identification and traceability needs of the Canadian hog sector.

- **Principles:** The principles of a national hog identification and traceability system are separated into four distinct steps. Each step is necessary in order to have an efficient and integral identification and traceability system. These steps are:
  1. A phased-in approach to the livestock premises registry;
  2. A national tattoo numbering classification;
  3. A swine slaughter movement and marketing board database; and,
  4. A national hog ID and movement reporting system and database.
- **National Livestock Premises Registry:** Mandatory premises identification is the critical component of a national hog identification and traceability program. A decision has been taken, under the aegis of the Canadian Livestock Identification Agency that there should be mandatory premises identification of all premises on which farmed livestock are kept, assembled or disposed of and, further, that the other livestock species on that premises should also be recorded in the database.

The CPC approved the following definition of premises, which has been endorsed by the Canadian Livestock Identification Agency:

*A premises is a parcel of land defined by a legal land description or, in its absence, by geo-referenced coordinates, on which or on any part of which animals regulated under the Health of Animals Regulations are kept, assembled or disposed of.*

- **National Tattoo Numbering Classification:** There is currently no national pig tattoo classification. This could lead to confusion and mistakes when addressing a food safety crisis or an animal disease outbreak, as 15% of tattoo numbers are now duplicated in Canada. Depending on operations, an individual premises may be associated with one or more unique tattoo numbers. The national five-character shoulder slap tattoo numbering classification will:

The national five-character shoulder slap tattoo numbering classification will:

- Be associated with a premises location, rather than a pig owner, therefore each premises will have one or more unique tattoo numbers;
- Be associated with a premises ID number;
- Be applied to all market hogs (including sows and boars not for breeding) before leaving a premises for slaughter; and,
- Be integrated into the group movement reporting system.

Provincial bodies will issue, allocate and manage all tattoo numbers. The last number of each tattoo will represent the province from which the market hog is shipped to slaughter. The first four digits will be unique to each premise within a province.

- **Swine Slaughter Movement and Marketing Board Database:** Hog slaughter movement information received from the packing plants and marketing boards will be reconciled with farm records. Aggregating movement information from the packing plants into a central database will provide simple and effective trace back capabilities to last premises prior to slaughter using the information contained in the shoulder slap tattoo. This will be an initial step that will eventually be integrated into the National Hog Identification and Traceability System.
- **National Movement Reporting System:** All hog movement will be recorded (on-farm records) and reported (database system) either by individual identification or group identification. The

database system will meet the traceability needs of both producers and CFIA in capturing animal movement.

A hog “movement” is defined as *“an individual or group of hogs that move (together) in a single movement that begins when they are loaded on a conveyance at a premises and ends when they are unloaded at another premise.”*

It is important to note that the national movement reporting database will capture farm premises-to-another farm premises animal movements at the producer level, including auctions and assembly yards.

- **Registered Linked Premises:** Producers will have the option to automatically report each movement that occurs. When movements of swine between two premises occur frequently (e.g. weekly) and in a predictable pattern; producers have the option to ‘*link*’ their premises. Regular predictable movement would make the health status of both herds effectively the same, and an outbreak investigation would consider both equally infected.

Producers should have a clear understanding that if they are involved in a linked premises scenario, in the event of an FAD or food safety crisis, all premises involved in this scenario will be implicated in any trace back and/or control measure.

- **National Movement Reporting Database:** From a policy perspective, the structure of the movement reporting data base has not yet been established. However, it is of paramount importance that the system be instantly responsive to queries from CFIA officials in the event of an apprehended disease or food safety situation. All movement information will be reported directly into a centralized or regional movement database. The database would allow provincial pork organizations to access provincial movement information reported from operators in their province.
- **Movement Reporting:** In order to collect hog movement information in a central database, reporting of all animal movements will be performed through automated means, i.e. Internet, file uploads, telephone. Initially, reporting through fax will be permitted, but will be eventually phased out, due to cost and human resources requirements.
  - All hog movements, including hogs going to slaughter, must be reported both as shipping and as a receiving movement.
  - All movements must be reported *within less than 2 days* of when the actual movement occurred. Furthermore, information for traceability purposes must come directly from the premises where the event took place, or from the farm’s administrative offices.
  - All hog mortalities during transportation must be captured and reported.

Discussions are taking place with the Canadian Food Inspection Agency in order to gather export animal movement data. Further, it is important to note that semen and embryos will be handled as animal movements. Provincial pork organizations (or designate agents) will perform all verification and follow-up duties related to the reported movement data provided by producers. In the event that shipping and receiving movement data does not reconcile, the provincial pork organization (or designate agents) will follow up with producers in order to reconcile the event.

- **Individual Identification:** Particular animal movements require that individual animals be identified with a visual ear tag bearing a unique identification number associated to a premises and reported for optimal traceability of pig movements. The following cases require the use of national individual animal identifiers:
  - Breeding Stock
  - Commingled Destination

Assembly yards, where market pigs are commingled just prior to slaughter, should also require that pigs are identified with a permanent identifier to establish the premises where the animal resided prior to the assembly yard. The five-character shoulder slap tattoo applied at the premises where the pig was finished is suitable for this purpose

The national ear tag systems must meet the following criteria:

1. That the identification be permanent and stay with the animal throughout its life;
2. That it be completely unique across herds, breeds and over time, that it be applicable to any animal, readily accessible and usable by all breeders and potential buyers of seedstock, and;
3. That the identification be easily and reliably readable and associated to the premises of origin.

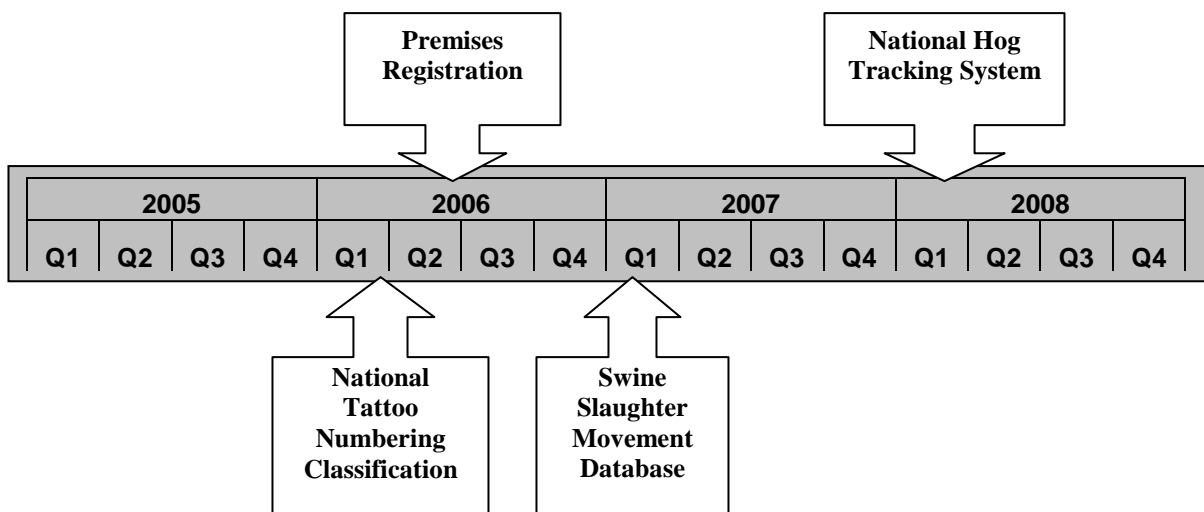
➤ **Group Identification:** Many pig production units keep their group of animals intact by the following means:

- Farrow to finish operations where pigs never leave the premises until market;
- Animals that move from site to site within one production and ownership system; and,
- Animals that change ownership by verifiable contract in groups.

Traceability and hog movement in some production systems can be achieved by tracking groups of hogs rather than individually identifying all animals.

➤ **Implementation Strategy:**

- **Structure:** The swine industry is responsible to design and develop its own ID and traceability system. There must be an entity structured to undertake this program. Such an entity does not yet formally exist, but it is expected that the necessary work will commence immediately to properly define the structure.
- **Timelines:** The implementation of the National Hog ID and Traceability System is a four-year plan. A phased-in approach over time is proposed, with the key components of the system in place well in advance of any requirement for full compliance. Once all systems are functionally in place, the program will become mandatory in the 2008.



- **Communication:** Important to the success of this system will be an effective communications effort to ensure broad industry support. A communications plan will be developed and implemented in partnership with all sectors of the industry.
- **Voluntary or Mandatory National ID and Traceability System:** While the ideal approach would be a voluntary program, it can not prove effective unless it is mandatory. However, there is recognition that the program should not be introduced on a mandatory basis until more of the technical and operational details have been worked out and tested on a voluntary basis, using hog movement reporting data by cooperating producers.

The mandatory features that would necessarily be embedded in CFIA Regulations are as follows:

- It would be mandatory for all stakeholders to register their premises;
- It would be mandatory to identify all market hogs with a unique shoulder slap tattoo on the premises of origin before going to slaughter;
- It would be mandatory to report all animal movements (shipping and receiving) between premises, for example: hog operations, auction barns, commingling yards, testing stations, shows and abattoirs; and,
- It would be mandatory to identify all animals with a physical identifier (visual ear tag), including all hogs used for reproduction, as well as hogs moving through any premises where pigs from multiple premises are housed and the source and/or destination of the pigs are not known.

The recommendation is that the National Identification and Traceability System be mandatory after effective trials have been conducted successfully, and that regulatory process be initiated for 2008 implementation.

- **Compliance:** In order to have an efficient and integral ID and traceability system, industry and CFIA must develop strategies to ensure compliance for producers to effectively participate in a farm animal movement program. The CFIA, in conjunction with industry, will develop the necessary compliance measures in the form of Regulations that will ensure the future integrity of the hog identification and traceability system.
- **Funding:** In the long run, the system must be self-sustainable. Because there is public good involved in this initiative as it relates to an FAD or food safety crisis, there is a place for federal support of this program. CPC and the provinces will continue to look for various sources of funding, and ways to maintain and operate the system.

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*Canadian Pork Council*