2018 Strategy Forum on Livestock Traceability: Making Standards and Technology Work

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Today’s Topics

• Traceability
• CCIA
• My background
• What is a standard
  – The importance of standards
• Standards for livestock traceability in Canada
  – NIDMAC
  – Framework
• Technology statement
• International Standards Organization
  – Low Frequency
  – Ultra High Frequency
• Value of Standards
What is Traceability

Definition:

“The ability to follow an item or a group of items – be it animal, plant, food product or ingredient – from one point in the supply chain to another, either backwards or forwards.”

*Canadian Food Inspection Agency*
Introduction

• Who is the Canadian Cattle Identification Agency?
  – Responsible administrator for cattle, sheep, bison
    – Goats & Cervids*
  – Data management, data collection
  – Tag program
  – Transceiver program
Who is Paul Laronde

Background

– 25 years in animal ID and trace
– Trace coordinator for OMAFRA
– Tag & Technology Manager at Canadian Cattle Identification Agency
– CA representative at ISO SC19/WG3 – Animal ID
What is a STANDARD

AND, how do standards help?

• Have you ever stopped to wonder why you can use your bank card almost anywhere in the world?

• Or been thankful the dashboard symbols in the Japanese car you have hired in Australia are the same as in your own French car at home in Norway?
What is a **STANDARD**

AND, **how do standards help?**

- *Or* noticed you can watch video footage (**MPEG**) delivered via the Internet on any of the computers and devices you access?

- These and many other examples of convenience for consumers in everyday life show why standards, especially **International Standards**, are **directly relevant to you**.

[https://www.iso.org/sites/ConsumersStandards/1_standards.html](https://www.iso.org/sites/ConsumersStandards/1_standards.html)
What is a **STANDARD**

**ISO/IEC Definition**

“a document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context.”*

[https://www.iso.org/sites/ConsumersStandards/1_standards.html](https://www.iso.org/sites/ConsumersStandards/1_standards.html)
What is a **STANDARD**

**In general terms,**

Standards are *voluntary agreements*, developed within an *open process* that gives all *stakeholders*, including consumers, the opportunity to express their views and have those views considered. This contributes to their fairness and market relevance, and promotes confidence in their use.*

[https://www.iso.org/sites/ConsumersStandards/1_standards.html](https://www.iso.org/sites/ConsumersStandards/1_standards.html)
STANDARDS in Canada

• Approved CCIA Tags
  – 5 manufacturers
  – 8 approved RFID tags
Approved Identifiers in Canada

Cattle, Sheep, Bison (outside Quebec) — **RFID (CCIA)**
Goats* and Cervid* — **RFID** and **VID (CCIA)**

**RFID** = LOW FREQUENCY (134.2 kHz)
**VID** = VISUAL IDENTIFIER
STANDARDS in Canada

Livestock tag/identifier/indicator standards

Canadian system based on ISO standards

- **ISO 11784**
  - Radio Frequency ID of animals: Code structure

- **ISO 11785**
  - Radio Frequency ID of animals: comm. of tag & reader

- **ISO 24683**
  - Radio Frequency ID of animals: testing procedures
    - conformance to 11784/11785
STANDARDS in Canada

NIDMAC = National Identification Device Methodology Advisory Committee

- Joint government and industry committee
- Approval Framework = Animal Identifier Approval and Revocation Framework

The framework is the BASIS for approval of identifiers used in Canada
Standards in Canada

• **Transceivers**
  – CCIA tests and ‘approves’ RFID reading equipment
  – Internal standard
    • Administered by Technical Advisory Committee
    • Testing completed by competent testing lab
What about UHF?

• What is the Ultra High Frequency (928MHz) Standard for livestock identification?

  – In Canada?

  – EPC Gen 2, ISO 18000-6?
What about UHF?

• ISO SC19/ WG3

– Project Team – *Numbering Schemes for UHF*
  • 1-5 years away*
What is the **VALUE** of CA Standards?

How does this benefit the system?

- Provides a single platform for animal ID
  - Tags, bolus, chips

- Ensures consistency of essential features
  - Quality
  - Reliability
  - Performance
  - Compatibility
  - Interoperability
  - Efficiency
  - Effectiveness

- Helps make the development, manufacturing and supply or devices more efficient
What is the **VALUE** of CA Standards

Value Proposition

**Allows a single technology/device** across the system
- Lower cost
- Better/faster supply

**Sets a minimum expectation** for
- Performance
- Conformance
- Longevity
- Quality
What is the **VALUE** of CA Standards

**Value Proposition**

– Allows a process to test conformance and performance of approved tags

• Keeps inferior tags/vendors out of the system
• Process to remove non-performing products
What is the **VALUE** of CA Standards

Confidence in the system

• governments
• industry
• manufacturers
QUESTIONS and DISCUSSION