



Proposal to establish a framework for electronic Animal Status Declaration

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Prepared by Animal and Animal Products Directorate, Regulation and Assurance of Ministry for Primary Industries

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1 Preamble

1.1 ESTABLISHING A FRAMEWORK FOR ELECTRONIC ANIMAL STATUS DECLARATION

This discussion paper provides options for how to establish a framework for electronic completion and transfer of electronic Animal Status Declaration (ASD). Included in this paper are also the parameters that a system should meet. The Ministry for Primary Industries (MPI) emphasises that the views and recommendations outlined in the paper are preliminary and are provided as a basis for consultation with stakeholders.

MPI will analyse the submissions and develop guidelines for electronic ASD. Once the guideline is finalised it will be issued by MPI and posted on the MPI website. Hard copies will be available on request. In parallel, any necessary changes to legislation will be progressed.

1.2 SUBMISSIONS

There are areas where MPI would appreciate specific input from all stakeholders. These are formulated as specific questions and contained in blue boxes. In addition to these, MPI welcomes written submissions on the proposals contained in this document.

All submissions must be received by MPI no later than 5pm on 22 August 2014.

Written submissions should be sent directly to:

Emil Murphy
Specialist Adviser
Animal Products
Ministry for Primary Industries
P O Box 2526
Wellington 6011

or emailed to Animal.Products@mpi.govt.nz

1.3 RELEASE OF SUBMISSIONS

MPI expects to release all submissions. If you have specific reasons for wanting to have your submission or personal details withheld, please set out your reasons in the submission.

All submissions are also subject to the Official Information Act 1982 and can be released (along with the personal details of the submitter) under the Act. MPI will consider those reasons when making any assessment under the Act.

2 Background

The ASD is a mandated form under the Animal Products Act 1999. The purpose of the ASD is to transfer key information about an animal, or group of animals, to the next person in charge, including the processor of these animals. A major driver for this information transfer, additional to food safety, is to facilitate trade and access to overseas markets. The current ASD form can be found at <http://foodsafety.govt.nz/elibrary/industry/animal-status-declaration/index.htm>

Currently the process of completing an ASD is an entirely manual process. The person in charge at the originating farm fills out the ASD, normally this will physically accompany the animal while in transit and is passed on to the receiving person in charge. A copy of the ASD is held for at least one year at both the originating and the receiving location. This process is repeated for each movement.

Throughout the primary production sector as well as the meat processing industry there is a keen interest for MPI to allow for electronic execution of the ASD. This is seen as an opportunity to improve on the integrity of the system while at the same time simplifying its use.

2.1 ISSUES

ASDs are a major issue for meat processors with some companies needing to employ 0.5 of a labour unit to follow-up on missing or incorrect ASDs before animals can be processed. Introducing the ability for ASDs to be electronic has a great potential to streamline and facilitate the transfer of information required in relation to food safety, market access and animal health requirements.

There are provisions in the Animal Products (Specifications for Products Intended for Human Consumption) Notice 2013 for electronic transmission (fax or e-mailed scanned) of ASDs, however this does not provide for the electronic execution, or completion, of the ASD form. That the Animal Products (Specifications for Products Intended for Human Consumption) Notice allows for the electronic transmission of supplier statements is explicitly stated both for farm-to-farm movements as well as for supplying to meat works.

2.2 CONSIDERATIONS

A working group of the main stakeholders has suggested the following key attributes as being the most important to them:

- Correct and complete data provided by suppliers
- Ease of use for all users
- Streamlined transfer of data between users
- Reduce compliance costs for users (indirectly)
- Meets all market/regulatory requirements
- Use of crossover data
- Contingency for system failures
- Long term storage of completed forms
- Potential to use data provided for multiple purposes

The ASD scheme must still allow for a paper based system for use by suppliers that are unable to access an electronic system. A paper based system also needs to be available as a back-up in case of any failure of an electronic system.

For the ASD to fulfil the purpose of acting as an assurance to our trading partners by underpinning our official assurances it is important that a framework for electronic delivery is robust. There must be sufficient provisions for verifying and auditing functions. In addition the system must also provide enough information to sustain compliance and enforcement actions should this become necessary.

To maintain credibility the systems in place should adhere to the Electronic Transactions Act 2002.

3 Delivery Provider

MPI is proposing to issue guidance material that would need to be met by the electronic ASD system. It is important to note that the main difference between the considered options is how many providers are allowed to deliver the service.

This could be summarized in four different options with varying involvement from MPI:

1. Anyone can operate any electronic system based on standards set by MPI;
2. Only systems approved by MPI as meeting the relevant standards are allowed to be operated;
3. MPI mandate one specific service provider, such as NAIT or NZ Post, to provide the electronic ASD system;
4. MPI develops and operates the electronic ASD system

A summary of pros and cons for the different delivery options can be found in Appendix 1.

MPI's preferred option is to allow for several approved providers to operate systems, in analogy with the current printing of forms. All systems would have to meet the standards set by MPI for that purpose and have approval prior to start operating.

MPI is proposing a 5 year approval that can be renewed an infinite number of times provided the system meets and continues to meet the relevant standards, including audit outcomes.

- | |
|---|
| <p>Q1. Do you agree with the analysis in Appendix 1?</p> <p>Q2. If not, what changes do you think is needed for the analysis to be valid?</p> <p>Q3. Which of the above 4 options do you prefer? Why?</p> <p>Q4. Is there a limit to the number of providers that should be allowed at any one time?</p> <p>Q5. How long should an approval be valid for?</p> |
|---|

4 High Level Requirements

In order to meet MPI and regulatory requirements proposals for electronic ASDs should consider the high level requirements detailed below.

4.1 FUNCTIONAL REQUIREMENTS

4.1.1 Deliver the same capability as the current paper based form.

The current paper based form is mandated by the Animal Products Act 1999 and subsequently it is a mandatory requirement that any electronic form that is developed captures the same data.

4.1.2 Ability to generate report in the exact format of the current ASD

It is important that any system developed for electronic submission of ASDs has the ability to present the data in exactly the same format as the current paper based ASD. This requirement is critical in order to ensure that our processes and outputs are acceptable to overseas trading partners and that no market access restrictions are put in place.

In addition to this the ASD is used by MPI frontline verification services personnel, specifically veterinary technical supervisors (VTS). VTS request original ASD forms from the operator when completing verification tasks. The main tasks for which ASDs are requested include:

- Animal welfare case reports
- On farm verification audits
- HGP trace back
- Monthly performance based verification tasks

Taking this into account VTS would need access to or be able to request electronic/hard copy ASD forms from the operator. An electronic version of the ASD would need to contain all information currently present on ASD (Appendix 2). The system:

- Must be able to output the submitted data in the same format as the approved paper form, front and back, both on screen and printed
- Must be able to output submitted data in specified file format over specified time periods, e.g. annual report as .csv file
- May be able to output a TB declaration in a different format, as specified by TBFree NZ

4.1.3 Complete data

The use of mandatory fields, validation and other mechanisms are required in order to ensure that correct and complete data is provided by suppliers. This is a key benefit for suppliers and processors as it will reduce the process wastage that occurs due to incomplete data. In addition this requirement will ensure MPI audit requirements are met.

4.1.4 Streamlined transfer of data between users

The transfer of data between parties should be as streamlined as possible in order to deliver maximum benefit through increased process efficiency.

4.1.5 Electronic signature

As the form is a declaration the User needs to have the functionality to enter an electronic signature that is compliant with NZ regulatory requirements. The form:

- Must be signed in a way that explicitly identifies the submitter
- Must include a time stamp on signatures
- Must only allow the original signatory to amend a submitted ASD
- Must track changes made, apply a new time stamp and electronic signature for any amendments that can be made after signing

4.1.6 Electronic submission & workflow

The form must have the capability to be submitted electronically and subsequently added to the appropriate workflow. Once the form has been submitted the user may need to have the ability to update/amend the report if necessary (e.g. if the tallies are incorrect). However the electronic ASD must not be able to be edited after the animals are accepted at the processing facility for slaughter without special controls.

4.2 NON FUNCTIONAL REQUIREMENTS

4.2.1 Proposal content

Every proposal for review should include the following:

- Architectural Diagram
- Detailed Design Diagram
- High Level Design (processes)

4.2.2 MPI Security requirements

The following MPI Security Requirements must be met:

- Follows MPI policy guidelines in relation to the transmission, storage and disposal requirements for 'In Confidence' material (Appendix 3).
- Web Applications must adhere to the OWASP Secure development standard (https://www.owasp.org/index.php/Cheat_Sheets#tab=Master_Cheat_Sheet)
- An authentication system is required that is capable of mitigating authentication threats taking into account the sensitivity of the data.

4.2.3 Regulatory requirements

The system needs to adhere to the following legislation:

- Electronic Transactions Act 2002.
- Animal Products Act 1999
- Privacy Act 1993.

4.2.4 Availability

Availability requirements should be considered from the user perspective in order to determine what is acceptable. The criteria for acceptance should be agreed in consultation with users and factors that should be considered are as follows:

- Response time (during core hours and outside of core hours)
- Throughput
- Number of users

4.2.5 Recovery and tracing

Back Up and Disaster Recovery options must be implemented to ensure that there is no loss of data and that MPI, Suppliers, and Processors can meet their regulatory and market access requirements and obligations. In addition, the system:

- Must allow access for verification and auditing purposes
- Must not allow changes by a verification or auditing access
- Must have procedures for maintaining continued compliance with relevant regulations
- Must have a procedure to include changes imposed from MPI within 28 days.

4.2.6 Data

The electronic ASD System developed by providers must take into account the need for the data from all systems to be stored in a central repository at some point. Important points are:

- Common standards for data communication to enable full inter-system compatibility.
- Potential to use data provided for multiple purposes.
- Data should be configured in a way that is easily retrievable (i.e. Data Schema is configured so that there is a separate element for each piece of data).

4.2.7 Storage

Long term storage of completed forms as required by law:

- Supplier and receiver: Must store original ASD for at least one year.
- Primary Processor: Must store form for at least 4 years

4.2.8 MPI Reporting requirements

The proposed solution will need to ensure that it can adapt to future MPI Reporting Requirements.

Specific questions:

- Q6. Is there a need to require capability to display the ASD on-screen?
- Q7. Should amendments be allowed or should the system require a new ASD to be raised?
- Q8. Should other persons in charge be allowed to make amendments?
- Q9. Is 28 days long enough to implement changes imposed by future regulation?
- Q10. If not, how long is an acceptable timeframe?

5 Appendix 1 – Delivery Options

The following summarises the pros and cons of the different options for delivery of an electronic ASD system. The pros and cons are **not** listed in order of significance. It is acknowledged that these do not represent an exhaustive list of all possible benefits or drawbacks.

5.1 OPEN SYSTEM

In this option, MPI define a set of security standards that any system for electronic execution of ASD would need to adhere to and open up the option for any interested party to develop and provide this service.

There would most likely need to be common standards for data communication to enable inter-system compatibility.

Pros	Cons
<ul style="list-style-type: none">• Commercial decision to develop system• Allow for improved data interrogation and statistics• Can introduce central repository if needed• Allows for innovative approach• Allows for specialised applications• Quick to respond to changes required by users	<ul style="list-style-type: none">• More complicated to track systems once approved• More effort for MPI to manage• Possibly very different look between systems which may cause issues for overseas competent authorities• Need to keep register of approved systems• May have compatibility issues between providers• Access to other data (e.g. NAIT) uncertain• May need some legislative changes

This option allows for a flexible and business driven development of electronic systems that can be specialised in their application. It requires limited resources from MPI in terms of ongoing development but could require some resources for registering and approving systems. On the other hand, potentially significant resource is required from businesses to develop and operate systems, although there is potential for collaboration through associations to achieve commercial efficiencies.

5.2 SELECTED PROVIDERS

In this option, MPI define a set of security standards that any system for electronic transaction of ASD would need to adhere to. After this a centrally-focused approval or selection process would take place and one or more specified providers (potentially up to a capped maximum number) would be allowed to operate an electronic ASD system for a fixed period of time, with a new approval/review process in place at a set point in time e.g. after five years of operation.

There would need to be common standards for data communication to enable full inter-system compatibility.

Pros	Cons
<ul style="list-style-type: none"> • Easy to track approved systems • Easy to work closely with all providers • Commercial decision to develop system • Allow for improved data interrogation and statistics • Easy to introduce central repository if needed 	<ul style="list-style-type: none"> • Regular tender or review process of providers needed • Access to other data (e.g. NAIT) uncertain • Would likely require changes to primary and/or secondary legislation (Act/regulation) • May have compatibility issues between providers • Limit innovative/specialised applications • May implement changes required by users slowly

This option still allows for certain flexibility and specialisation in the developed systems. The business drivers are likely to focus on the largest users and there may be limited scope to address specific needs for smaller industry players. This option also requires more staff and time resources from MPI in terms of regular review and tender processes but may have benefits when updating any requirements.

5.3 SINGLE PROVIDER

In this option, MPI contracts a single service provider with developing an electronic ASD system, either through a competitive process or by consensus amongst major stakeholders. An obvious potential candidate is NAIT, and in that case it is envisaged the electronic ASD system would be part of the current NAIT system and would be expected to operate under the same standards as currently, and in the future, applies to NAIT. It should be emphasized however, that other entities also operate tracking systems that could potentially be used for these purposes.

Pros	Cons
<ul style="list-style-type: none"> • Established database that complies with MPI requirements • Can potentially combine with other data held • Compatibility easily achieved • Allow for improved data interrogation and statistics • Easy to introduce central repository if needed • May be more acceptable to overseas auditors 	<ul style="list-style-type: none"> • Unknown costs • Monopoly situation • Drivers to develop system may not be user focused • Would likely require changes to primary and/or secondary legislation (Act/regulation) • Sheep sector may see this as a move to include sheep in NAIT • Limits innovative/specialised applications • Not implementing changes required by users quickly

This option simplifies MPI's process with regard to updating forms. However, it will impose a "one size fits all" that will likely not allow for specialised solutions. This would only require minimal MPI and business resources once it had been developed and approved and is also more likely to be easily defensible to overseas competent authorities.

5.4 MPI PROVIDED SYSTEM

In this option, MPI internally develop and maintain the system for electronic ASD. The system would comply with MPI internal IT and Business Technology & Information Services requirements.

Pros	Cons
<ul style="list-style-type: none">• Full control and access for MPI• May be more acceptable to overseas auditors	<ul style="list-style-type: none">• Not MPI core business• Unknown costs• Monopoly situation• Non-commercial decisions in developing system• Not implementing changes required by users quickly• Limits innovative/specialised applications

This would likely be focused on the needs of MPI and very little on the needs of industry, especially limited, specialised solutions. It would require MPI resources to develop and also would require ongoing resources to maintain the system but would be very defensible to overseas competent authorities.

6 Appendix 2 – Animal Status Declaration

Animal Status Declaration													
Declaration: I am the person in charge of these animals and I declare that I have read and understand the requirements for this ASD and that the information that follows is true and accurate.								AHB herd no. or LIC MINDA code (cattle and deer only)					
Signature (person in charge)				Address animals moved from (Rapid Number, Road and Town/District)				NAIT no.					
Name (person in charge)								Phone					
Owner/Trade name (if different from person in charge)				Owner's postal address (if different from above)				Fax					
								Email					
								Date / /					
Stock type	Steer	Heifer	Cow	Bull	Lamb	Sheep	Deer	Other					
Tallies													
Description (e.g. breed, age, etc)													
Destination (e.g. name and location of processor, saleyard or farm destination)													
1.0 Withholding periods – all animals (see note 1 of the requirements)													
1.1 Are any of these animals within the withholding period of any treatment?								<input type="text" value="yes"/> <input type="text" value="no"/>					
1.2 If Yes, state the product name, method of treatment and dates applied (NB: these animals are NOT eligible for slaughter for human consumption until outside the withholding periods)													
Product name				Method of treatment				Date used					
								/ /					
								/ /					
2.0 Animal history – all animals (see note 2 of the requirements)													
2.1 Were all of these animals born on your property?								<input type="text" value="yes"/> <input type="text" value="no"/>					
2.2 Were any of these animals imported into New Zealand?								<input type="text" value="yes"/> <input type="text" value="no"/>					
2.3 Are any of these animals from either a MPI surveillance listed property or under MPI movement control for residues or any purpose other than TB?								<input type="text" value="yes"/> <input type="text" value="no"/>					
3.0 Animal feeding – cattle, sheep, lambs, goats, deer, alpacas, llamas (see note 3 of the requirements)													
3.1 Have any of these animals been fed ruminant protein in their lifetime?								<input type="text" value="yes"/> <input type="text" value="no"/>					
3.2 Have any of these animals been fed ANYTHING OTHER than milk or pasture (see description of 'Pasture fed') in their lifetime?								<input type="text" value="yes"/> <input type="text" value="no"/>					
4.0 John's Disease vaccination – where applicable (see note 4 of the requirements)													
4.1 Have any of these animals been vaccinated against John's disease in their lifetime?								<input type="text" value="yes"/> <input type="text" value="no"/>					
5.0 HGP treatment – cattle (see note 5 of the requirements)													
5.1 Have any of these cattle been treated with a hormonal growth promotant in their lifetime?								<input type="text" value="yes"/> <input type="text" value="no"/>					
5.2 If Yes, how many of these cattle have been treated with a hormonal growth promotant in their lifetime?								Number					
6.0 TB Declaration – cattle, deer (see note 6 of the requirements)													
6.1 What is the TB status of these animals? Enter status and index number						<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">Status</th> <th style="width: 50%;">Number</th> </tr> <tr> <td>yes</td> <td>no</td> </tr> </table>		Status	Number	yes	no		
Status	Number												
yes	no												
6.2 Have any of these animals been tested while under your management?						<input type="text" value="yes"/> <input type="text" value="no"/>							
6.3 What is the date of the last TB test for these animals and was TB detected?						<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">Date</th> <th style="width: 50%;">/ /</th> </tr> <tr> <td>yes</td> <td>no</td> </tr> </table>		Date	/ /	yes	no		
Date	/ /												
yes	no												
6.4 What is the date of the last TB test for the whole herd and was TB detected?						<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">Date</th> <th style="width: 50%;">/ /</th> </tr> <tr> <td>yes</td> <td>no</td> </tr> </table>		Date	/ /	yes	no		
Date	/ /												
yes	no												
6.5 Is the herd under TB movement control? (If Yes, a permit is required unless going direct to slaughter)						<input type="text" value="yes"/> <input type="text" value="no"/>							
6.6 Are these animals being moved from a property within a Movement Control Area?						<input type="text" value="yes"/> <input type="text" value="no"/>							
6.7 If Yes, have these animals been tested within 60 days prior to this movement? (The 60 day test is not required if the animals are going direct to slaughter)						<input type="text" value="yes"/> <input type="text" value="no"/>							
6.8 Does the herd from which these animals are being moved include cattle or deer which have been introduced from a herd of lower TB status within the last three years?						<input type="text" value="yes"/> <input type="text" value="no"/>							
I understand the obligations under the Animal Welfare Act of persons in charge of animals to ensure that their physical, health and behavioural needs are met in accordance with the minimum standards defined in Codes of Welfare under the Act													
7.0 Additional information (see note 7 of the requirements)								HAVE YOU SIGNED THIS FORM AT THE TOP LEFT?					

May 2017

7 Appendix 3 – MPI Security Requirements

Transmission, Storage and Disposal – National Security Information

IN-CONFIDENCE

Information compromise would be likely to prejudice the maintenance of law and order, impede the effective control of government in New Zealand or affect adversely the privacy of its citizens

- Prejudice the maintenance of law, including the prevention, investigation and detection of offences, and the right to a fair trial.
- Adversely affect the privacy of natural persons, including that of deceased natural persons.
- Disclose a trade secret or unreasonably prejudice the commercial position of that person who supplied or is the subject of the information.
- Disclose information which is subject to an obligation of confidence or which any person has been or could be compelled to provide under the authority of any enactment, where the making available of the information would be likely to prejudice the supply of similar information, or information from the same source, and it is in the public interest that such information should continue to be supplied; or be likely otherwise to damage the public interest.
- Prejudice measures protecting the health or safety of members of the public.
- Prejudice the substantial economic interests of New Zealand.
- Prejudice measures that prevent or mitigate material loss to members of the public.
- Breach the constitutional conventions for the time being which protect: the confidentiality of communication by or with the Sovereign or Her representative; collective and individual ministerial responsibility; the political neutrality of officials; and the confidentiality of advice tendered by ministers of the Crown and officials.
- Impede the effective conduct of public affairs through: the free and frank expression of opinion by or between or to Ministers of the Crown or officers and employees of any department or organisation in the course of their duty; the protection of such Ministers, officers and employees from improper pressure or harassment.
- Breach legal professional privilege.
- Impede a Minister of the Crown or any department or organisation holding the information to carry out, without prejudice or disadvantage, commercial activities.
- Lead to the disclosure or use of official information for improper gain or advantage.

Transmission

Electronic:

- An appropriate statement should accompany all IN CONFIDENCE information transmitted via e-mail or fax.
- It should outline legal responsibilities and notification / destruction instructions if the incorrect party receives it.
- IN CONFIDENCE data can be transmitted across external or public networks but the level of information contained should be assessed before using clear text.
- Username / Password access control and/ or encryption may be advisable (with the aim of maintaining public confidence in public agencies.)
- All IN CONFIDENCE information (including data) should clearly identify the originating government agency and date.

Manual:

- May be carried by ordinary postal service or commercial courier firms as well as mail delivery staff in a single closed envelope.
 - The outer envelope must clearly show a return address in case delivery is unsuccessful.
- In some cases Involving privacy concerns, identifying the originating department may be inappropriate and a return PO Box alone should be used.

Storage

Electronic:

- Electronic files (including databases) must be protected against illicit internal use or intrusion by external parties through a judicious selection of two or more of the following mechanisms:
 - user challenge and authentication (username/ password or digital ID/Certificate)
 - logging use at level of individual
 - firewalls and intrusion-detection systems and procedures; server authentication
 - OS-specific/application-specific security measures.

Manual:

- IN CONFIDENCE information should be secured using the normal building security and door-swipe card systems that aim simply to keep the public out of administrative areas of government departments.

Disposal

Electronic:

- Electronic files should be disposed of in a way that makes reconstruction highly unlikely.

Manual:

- Electronic files should be disposed of by departmental arrangements.