



Australian Red Meat Industry

Technical Fact Sheet - the electronic Messaging for Cattle and Sheep National Vendor Declaration (eDEC) System

Executive Summary

The Electronic Livestock National Vendor declaration (eDEC) system is based on the work that was completed for the development of the EANCOM Despatch Advice message and Quality Test Report message for the MLA export project and other meat industry projects.

The livestock declarations (NDV, Waybill, MSA declaration) and commercial consignment information can be represented in the standard EANCOM Despatch Advice message that is used for information related to consignments and commercial information transmission between businesses.

The requirement for efficiently sending industry and company specific commercial information electronically between businesses (producer to producer, producer to saleyard, producer to feedlot and producer/ feedlot/ saleyard to abattoir) was also considered and included in the eDEC system.

The eDEC system is based on the use of the GS1 system and specifically EANCOM messaging standards. There is no proprietary hardware or software. Any system vendor can develop solutions that are able to use the eDEC system. The eDEC system is a means to communicate between trading partners (producer to producer, producer to saleyard, producer to feedlot and producer/ feedlot/ saleyard to abattoir) using common standards.

The need for security has been addressed along with the regulatory requirements outlined in the various State and Commonwealth acts. At the simplest level the function of creating an eDEC electronic message is controlled by password functionally based on PIC and on the software to control the creation of the message.

This document outlines the technical elements of the eDEC system, security issues to be considered, methods to send and receive messages and the regulatory considerations.

The need to develop a system that meets both the commercial requirements of industry and the regulatory requirement for transparency and audit ability have been the focus of this document.

Vendor

(Producer/ Feedlot)

Download Free **eDEC™** software from www.mla.com.au/lqs or **eDEC™** function as part of your "On Farm" or feedlot Software



Purchaser

(Producer/ Feedlot/ Sale Yard/ Processor)

Download Free **eDEC™** viewer software from www.mla.com.au/lqs or **eDEC™** function as part of your "On Farm" or feedlot Software



**Automatic Email of
eDEC Message to destination**



**Receiver and Transport
eDEC™ NVD copies
sent with livestock**



- Vendor prints **eDEC™** NVD in triplicate.
- Vendor signs each copy.
- 2 copies sent with livestock.
- Vendor copy held on farm.

- Purchaser gets **eDEC™** message.
- Reconciles to livestock on arrival.

Vendor Benefits

- Lower cost per NVD
- Less errors than manually written NVDs
- More complete information

Purchaser Benefits

- Receive livestock information in advance
- Less errors than manually written NVDs
- More complete information
- Export information to other applications
- Easier to reconcile livestock on arrival

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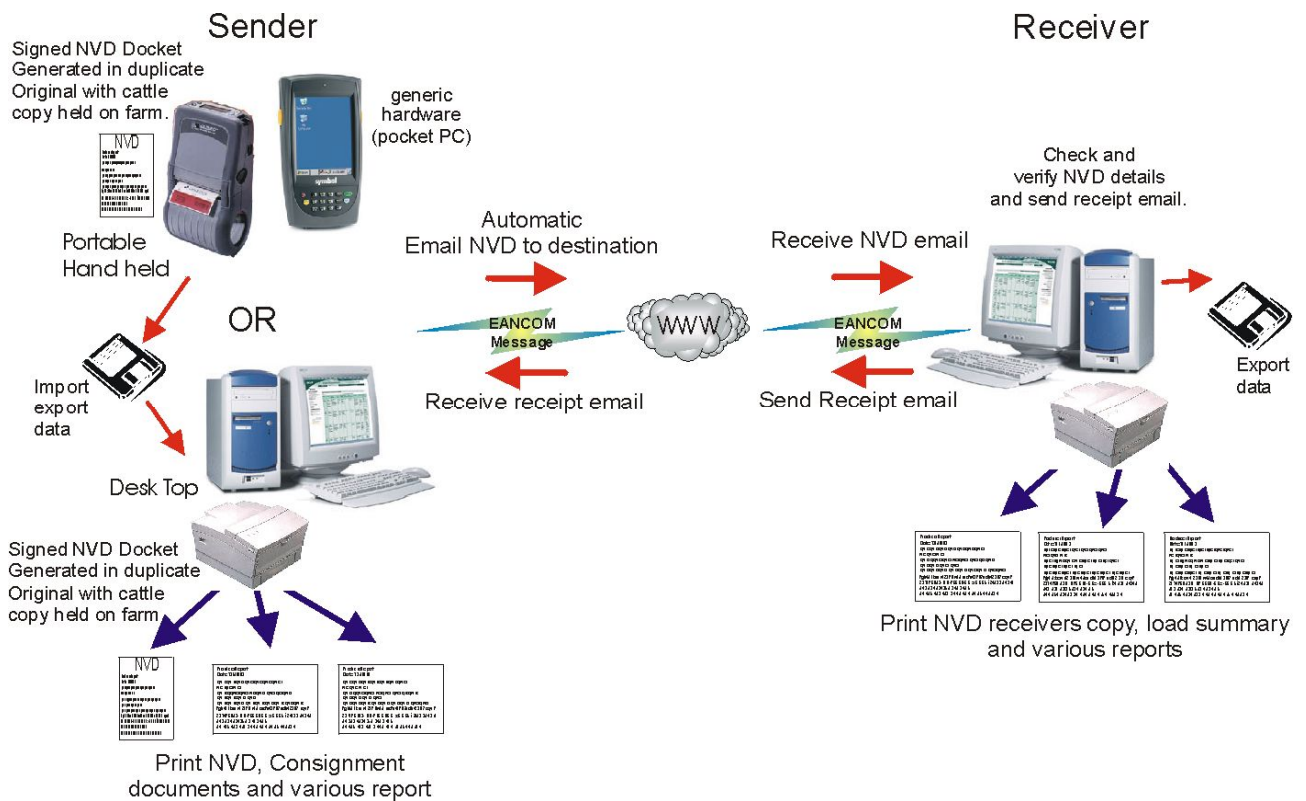
eDEC Electronic Messaging Systems Details

The electronic Livestock Declaration (NDV, Waybill, MSA declaration and NFAS declarations) eDEC system works by recording the required declaration and commercial information by the consignor (sender). The information is then sent electronically to the consignee. A duplicate declaration docket is generated and is signed by the consignor. The original is sent with the consignment and the duplicate is kept with the consignor.

When the consignee (receiver) receives the physical shipment they check it against the eDEC and if all is correct then generate a receipt message. This message is automatically emailed back to the consignor (sender).

The eDEC system uses the EANCOM Despatch Advice message for the consignment details and the EANCOM Receiving Advice message for the proof of delivery.

The diagram below shows how the eDEC system operates.



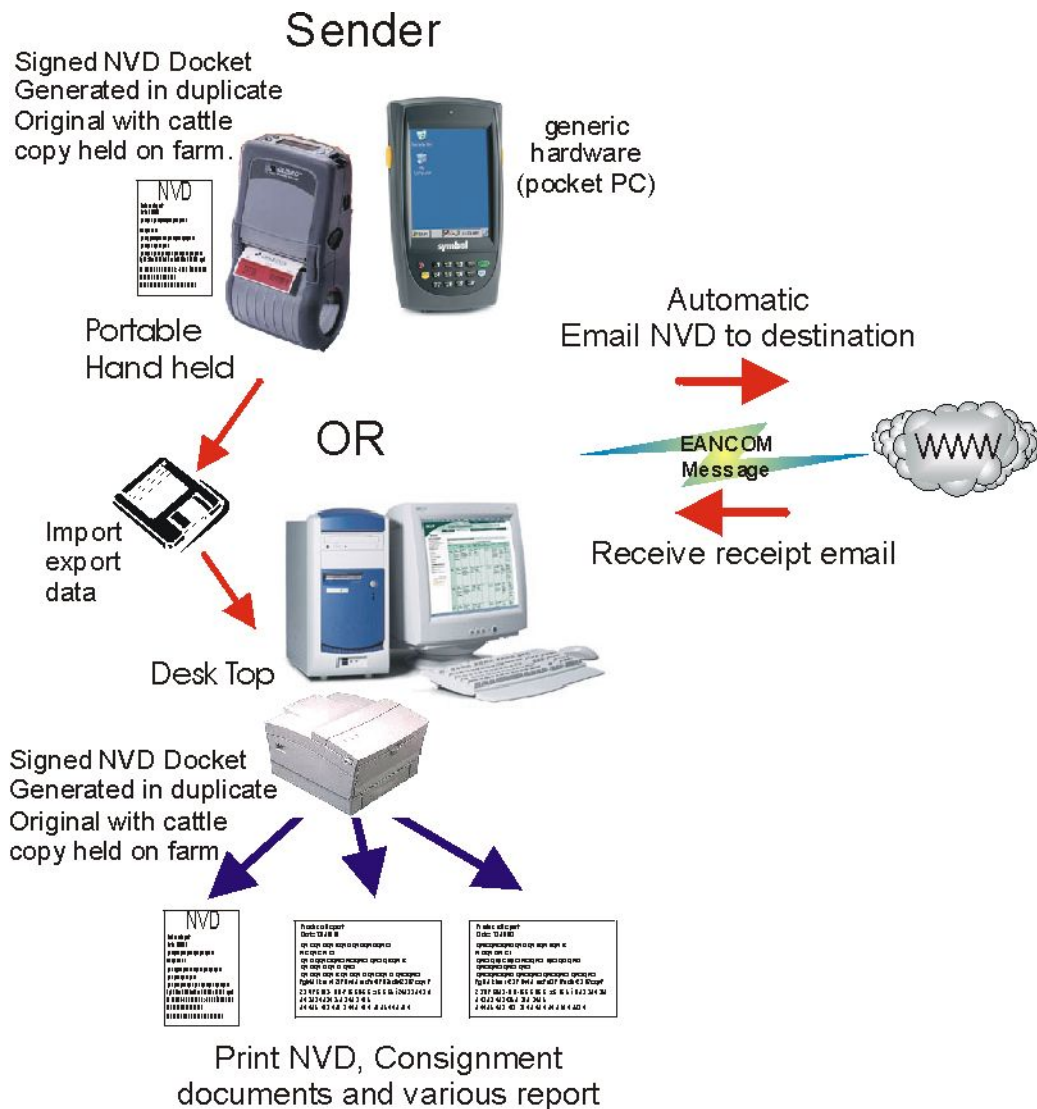
To clearly distinguish between an EANCOM Despatch Advice message for non-eDEC purposes and an EANCOM Despatch Advice message for eDEC purposes, there is a element of the message that indicates that it is an EANCOM despatch advice message for the purpose of eDEC electronic declarations.

For security purposes the function to create eDEC specific EANCOM Despatch Advice is password protected.

The Consigner (Sender)

The consigner (sender) can generate an eDEC (EANCOM Despatch Advice) message by a number of different methods, these are:

1. The consigners system [PAM, Cattle Plus, etc] (through password control) creates an EANCOM Despatch Advice message compliant to the Message Implementation Guidelines for the Despatch Advice for cattle with the eDEC elements. The original and duplicate are printed and the message is then sent via email to the required consignee.
2. Manually enter the consignment NVD details into the eDEC messaging creator tool (hand held or desk top) and with password control create EANCOM message with eDEC elements. The original and duplicate are printed and the message is then sent via email to the required consignee.



A unique number is created for each eDEC NVD docket generated that combines a unique property code (based on the PIC), the date and the time. No two eDEC declaration dockets have the same number. The eDEC can not be generated until all critical pieces of information has been correctly entered and any invalid information is identified and correct information prompted.

Information that is common, such as the address and phone number of a specific property, are held in the eDEC message creator tool on an “enter once and remember” basis.

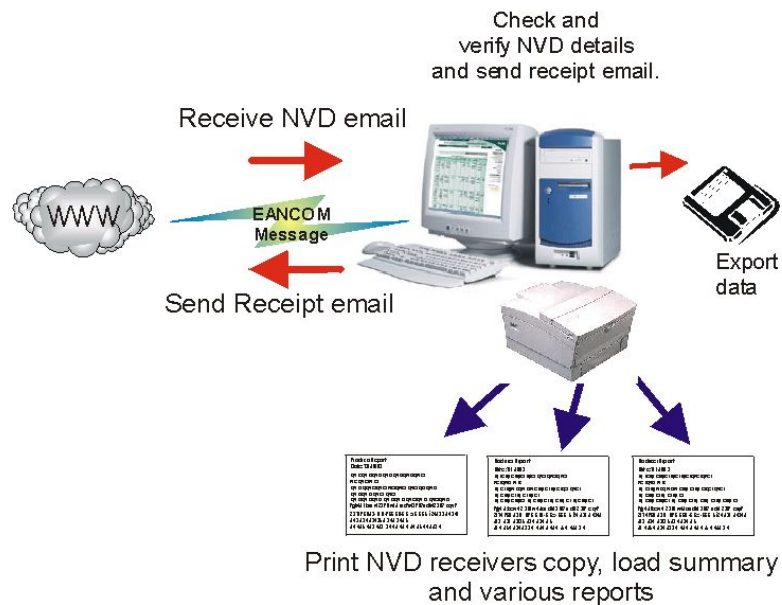
The eDEC message creator tool also checks emails that have been received for consignments that have been accepted by the consignee. These are matched and checked against the EANCOM messages that have been sent. Any consignments that do not have a receipt file are shown on an Outstanding Receipt Report.

The Consignee (receiver)

The consignee (receiver) receives emailed EANCOM messages for each consignment. The emails have the EANCOM message as an attachment. The eDEC message creator tool takes the email attached and creates a record of the consignment. A look a like NVD, MSA declaration, NFAS declaration and state waybills can be printed showing the details of the consignment. A series of reports can be printed showing the consignment details. These details can be matched to the physical consignment. The process of receiving and matching is as follows:

1. The consignees system receives an EANCOM Despatch Advice message compliant to the Message Implementation Guidelines for the Despatch Advice for cattle (eDEC). The message is processed by the consignees system [PAM, Cattle Plus, Abattoir System, etc] and necessary reports created. An EANCOM Receiving Advice receipt message is created and then sent via email to the required consignor and nominated AQIS recipient.
2. Manually enter the details of the cattle received into the eDEC messaging creator this then matches the consignment of cattle details to a specific eDEC EANCOM message. Any errors are shown on a series of reports.

Receiver



Once a consignment has been checked the eDEC message creator tool creates through password control an EANCOM Receiving Advice message. This message can then be sent by automatic email to the consignor.

Any errors identified between the eDEC EANCOM message and the physical consignment details are identified and reports are created showing the errors. Action can be taken on the errors identified.

The Record Keeping and Audit

For each consignment an original and duplicate eDEC NVD docket are created. The Consignor signs both the original and the duplicate. The duplicate is held with the consignor and the original is sent with the cattle.

The consignee receives the eDEC EANCOM message in advance of the cattle. The consignee matches the cattle, the original eDEC NVD docket and the details in the electronic eDEC EANCOM message. The consignee generates a consignment report, which can be filled with the original eDEC NVD docket.

The consignee generates an EANCOM receipt message and it is automatically sent back to the consignor confirming receipt of the cattle and that all was in order.

The records of matched messages can be filed electronically and manually and held for the statutory period.

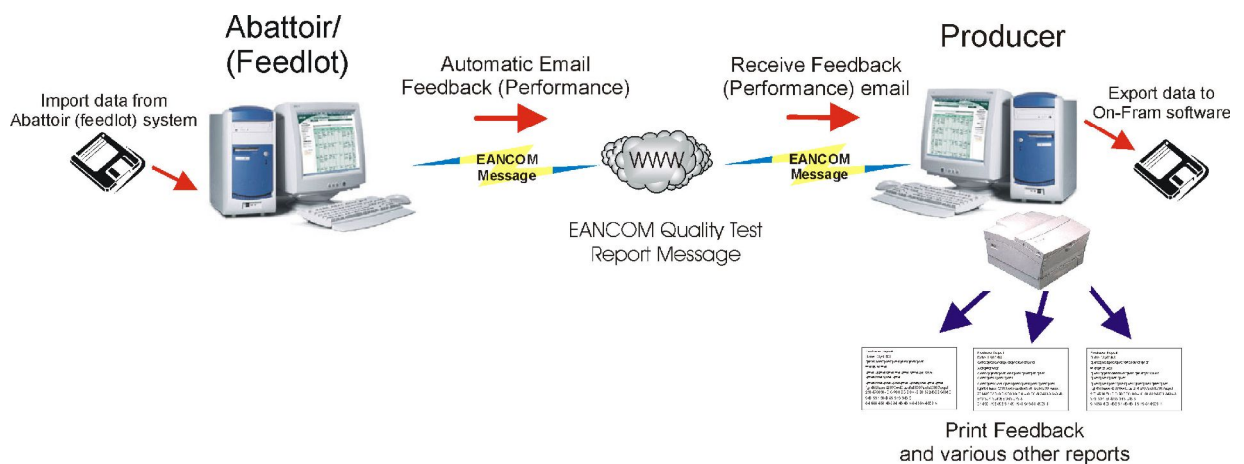
This approach allows for audit of consignment at both the consignors and the consignee locations and these can be matched to verify that no alterations have occurred.

EANCOM Electronic Feedback Messaging Systems Details

The EANCOM electronic feedback messaging system works by recording the required regulatory and commercial information by the abattoir (or feedlot for performance). The information is then sent electronically to the nominated party (the producer).

The EANCOM electronic feedback messaging system uses the EANCOM Quality Test Report message for the feedlot (performance) details.

The diagram below shows how the EANCOM Electronic feedback messaging system operates.



The EANCOM Quality Test Report message can be created by one of two methods:

1. The abattoir (feedlot) system can directly create an EANCOM Quality Test Report message compliant to the Message Implementation Guideline and email it to the nominated producer(s) or other email addresses.
2. The eDEC messaging creator tool can import abattoir (feedlot) data, and create and email an EANCOM Quality Test Report message to the nominated producer(s) or other email addresses.

The EANCOM Quality Test Report message can be received and processed by one of two methods.

1. The producer on-farm software (Stock Book, cattle plus, etc) can directly receive the EANCOM Quality Test Report message compliant to the Message Implementation Guideline and record the producer feedback.
2. The eDEC messaging creator tool can directly receive the EANCOM Quality Test Report message and print producer feedback reports and export the information into a text file for importing into on-farm software.

The Message Details

The messages used for the purpose of electronic National Vendor Declaration and the other declarations and commercial information are based on the EANCOM Despatch Advice message and the EANCOM Receiving Advice message. These are standard commercial messages that have been in existence for many years and are used globally for electronically transacting commercial and regulatory information.

This project does not create new messages, the project demonstrates how to use existing messages to handle livestock transaction information e.g. NVD, MSA declaration, NFAS declaration, state waybills and commercial details.

The specific details are contained in the Message Implementation Guidelines that describe the syntax of the message. (Refer to the Appendix for Message Implementation Guidelines).

Despatch Advice Message

The GS1 EANCOM Despatch Advice Message contains all the relevant consignment information at a cattle consignment level and the national vendor declaration requirements.

This message also support individual animal information such as NLIS device numbers, weights, dates, etc.

There is also a specific element to indicate that the EANCOM Despatch Advice Message is an eDEC NVD message.

Receipt

The GS1 EANCOM Receiving Advice message contains information about the corresponding EANCOM Despatch Advice message as well as the necessary information for the NVD requirements.

This message is used to report on status of the consignment on receipt at the consignee. Any anomalies or errors can be reported.

System Vendor Built Systems

The System Vendor solutions must print a paper eDECs in the format that is approved MLA.

Any system printed paper NVDs must have in 8 point Arial Font on the bottom right hand corner the System Vendor code and version issue date. This is necessary for compliance and audit requirements. The System Vendor Code is a 3 digit number prefixed by the letters "SVC" and issued by MLA on approval of the System Vendor system. The issue date code is based on the yymmdd for the version of the System Vendor system.

An example would be SVC101050515.

UN/EDIFACT Standards and GS1 EANCOM Standards

UN/EDIFACT is used worldwide and is the most widely used standard for Electronic Data Interchange. EDIFACT is administered by the United Nations Economic Commission for Europe (UN/ECE www.unece.org), and is regularly updated to take account of new business message types and changes in trade regulations. The abbreviation UN/EDIFACT stands for United Nations Electronic Data Interchange for Administration, Commerce and Transport.

EDIFACT effectively provides rules in the form of directories and guidelines to allow the standardisation of data being exchanged between organisations, and covers over 100 different message types.

Recommended within the framework of the United Nations, the rules are approved and published by the UN/CEFACT (United Nations Centre for Trade Facilitation and Electronic business) in the United Nations Trade Data Interchange Directory (UNTDID) and are maintained under agreed procedures.

GS1 EANCOM is fully based on the UN/EDIFACT (United Nations Electronic Data Interchange for Administration, Commerce and Transport), which comprises of a set of internationally agreed standards, directories and guidelines for the electronic interchange of data.

GS1 EANCOM is a detailed implementation guideline of the UN/EDIFACT standard messages. UN/EDIFACT messages are often complex and users may easily misunderstand the principles and original intentions of message's designers. GS1 EANCOM guideline are a subset of UN/EDIFACT messages, providing clear definitions, explanations and examples which allow trading partners to exchange commercial documents in a simple, accurate and cost effective manner.

GS1 EANCOM also incorporates into the electronic messages, the GS1 standards of physical identification of trade items, logistics units and the Global Location Numbers identifying the trading partners. It allows the physical flow of goods to integrate with related information sent by electronic means.

Originally designed primarily for the retail sector, GS1 EANCOM has grown to become the most widely used UN/EDIFACT subset, and is now found in a variety of other industries including health, manufacturing, food, building supplies, transport, electronics, and publishing.

Industry Developed Software Tools

Standalone PC software tools have been developed for the eDEC by MLA. These free tools create the required message, print eDEC NVD forms and send the message by email. There is also a viewer/ receipt tool.

These tools can be readily downloaded from the MLA Web site and used to understand the way the messages are created and the forms are printed.

These tools should be used as a model and a reference when System Vendors develop their own respective software/ system products.

The industry tools have limited functionality and are intended as standalone tool suitable for those users that do not have an integrated system.

Transmitting eDEC Messages

There are two message used for the eDEC methods. These are the GS1 EANCOM Despatch Advice Message (containing the consignment information) and the GS1 EANCOM Receipt Message (Acknowledging the physical receipt of the consignment in good condition).

Both messages are sent by text file attachment by email.

There can only be 1 message per email.

The text attachments must have the file extension of .DSV for GS1 EANCOM Despatch Advice Messages and .REC or RCV for GS1 EANCOM Receipt Advice Messages.

The attachment file name of the message is to be the eDEC PIC and Serial number.

The subject line must be the file name.

e.g. QAWD030217987384.dsv or QAWD030217987384.RCV for an eDEC.

The email “to” addresses and “from” address must be within correct segments of the GS1 EANCOM message.

The fixed “to” email addresses required for regulatory purposes is:

edec@mla.com.au

Printing of Documents

Printed eDECs must have “Original” printed on the top right hand corner and signed at the time of creation. Any additional printed electronic NVDs/ eDECs that are printed from a message must have “Copy” printed on the top right

hand corner. This approach is necessary to distinguished originals from reprints.

An eDEC message resent as a replacement or duplicate, the printed eDEC must have "Replacement" or "Duplicate" printed on the top right hand corner of each page. This is controlled through the BGM segment of the GS1 EANCOM messages.

On the top right hand corner of each printed page "page x of y" must be shown. Where "x" is the page number and "y" is the total number of pages. This is necessary to ensure that no pages are lost.

Printed Copies of eDECs

When printing is required (e.g. EU load-outs)

3 copies must be able to be printed, these are marked:

Consigned To Copy (Receiver)

Consigned From Copy (Sender)

All original copies must be signed when printed.

Security Requirements

The eDEC system is an email based system. Password protection is required if an EANCOM dispatch advice is to also include the requirements for an eDEC. Only those personnel properly authorised can activate the system to add the eDEC component to an EANCOM dispatch advice. The major element of security is the audit ability of the system within the property and the ability for auditors to cross check cattle movement between properties.

Refer to the reference document titled "Electronic Messaging System Issues for Security".

Amendment Register

Version	Amendments	Issue date
1	Initial Issue (after draft circulation and comment)	10 th October 2003
2	Update for format	1 st May 2007

Appendix

Message Implementation Guides

Sample eDEC “look a likes”

Sample Message - Text - Despatch Advice Message and Receiving Message