Final Report

AMPC
AUSTRALIAN MEAT PROCESSOR CORPORATION

Delivering livestock processing transparency back to producers

Project code
2020-1083

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Date submitted
29/6/2025

Published by
Wodonga Rendering Pty Ltd

Date published
29/6/2025

Contents

1.0 Abstract

Wodonga Rendering has achieved improved transparency to Livestock Producers with Feedback Reports usually sent by email within 24 hours of their livestock being killed and graded. The information on the feedback reports is at carcase level for large stock and at mob level for small stock. It includes key pricing attributes along with Animal Health and welfare aspects include vet pathologies on the carcase and offal.

Photo images are typically provided for condemns and partial condemns of carcasses.

The project includes a blueprint forward to provide further enhancements including a producer and agent self-service portal to view and download information such as feedback reports, images and RCTI's.

Other enhancements include electronic booking of stock with electronic NVDs with the ability to auto-populate fields based on Producer profile and Wodonga Abattoir reference information.

2.0 Executive summary

Purpose of the Project:

The purpose of the project was to provide relevant information from a processor in a timely manner back to livestock producers in order:

1. Build trust in the supply chain
2. Provide valuable animal health information that we have back to producers (and agents) so they can make informed decisions in the management of their livestock
3. Build integrity into producer systems through a more transparent ongoing process

The Objectives of the Project:

The original objectives were to:

1. Provide "***producer accessible slaughter feedback transparency system with photo evidence of any defects***".
2. A web portal to provide booking, receipting and kill data information to producers.
3. Ability for producers to make booking requests and create electronic NVDs.
4. Feedback to include fault and disease issues captured through Animal Health Stations including photo images

The Methodology of the Project:

The project was to involve the following components:

1. Hand wands that intergrate with Emydex for unloading and lairage scanning point in the stockyards.
2. Software integration of the scanning functions in Item 1 to the Emydex Inventory & processing system.
3. A livestock receipting Emydex module will be developed and implemented that will leverage off existing NLIS integration from the Kill Floor module.
4. Development for the livestock receipting module to integrate with NLIS and ERP status checks and eNVD's.
5. A livestock booking, appointments and and receipting module will be included for the beef line.
6. Implementation of Animal Health Stations on Large and Small Stock kill lines including reporting at body and Lot level. Implement of photo taking function for faults and feedback to suppliers
7. Development of livestock supplier portal that includes:
    - Grid Pricing
    - Booking in Stock
    - Creating and signing eNVD's for each booking. The eNVD's will interact with the NLIS and have the ability to print off a paper version for the Livestock Haulier
    - Provide Feedback reports, detailed grading data by body in Excel format which will include NLIS/RFID data.
    - Recipient Created Tax Invoices
    - History of all bookings, feedback and RCTI's
    - Photos of carcass faults
    - A secure environment in the cloud that can be accessed from any device.

8. Implement photo taking function at each animal inspection stations with integration to the existing Emydex Kill Floor module

The Result and Key Findings:

1. Overall feedback to Livestock Producers greatly improved through:
    a. PDF feedback reports being emailed with 24 hours that included:
        i. Detailed carcase data for large stock and categorised by weight range data for small stock
        ii. Animal health issues including pathologies from AQIS Vet on carcase and offal
        iii. Photo images of condemns, partial condemns and serious health issues
    b. Improved web information and supplier logons to https://www.ascotmeats.com.au/

2. The web portal was not developed to the extent that was planned in the project. At present it only provides grid pricing sheets, the process information and general information.

3. The ability of producers to make booking requests and create electronic NVDs
    a. Booking requests can be made through the online portal message centre or by email however we have not yet developed electronic NVD's.
        i. This was planned to happen as an upgrade to the Web Portal subsequent to upgrades delayed as mentioned above.

4. Feedback to include fault and disease issues captured through Animal Health Stations including photo images
    a. This has been achieved in practice, however the last stage in making it a self service aspect in a web portal is yet to be developed as per above.

Benefits to the Industry:

There are 2 broad key benefits of this Project to the Industry:

1. Improved trust between producers and processors

By providing timely and user-friendly information, including images, gives producers greater confidence in processing plant outcomes

2. Actionable Information

By providing objective information on animal health issues and pathologies the livestock producer can use this information to make informed decisions about livestock husbandry and care. They can then use this to improve care, productivity and quality of the livestock they produce which in turn assists processors achieve higher quality outcomes. Both producer and processor can benefit economically from information that the processor has by providing this feedback directly and within 24 hours.

Future research/extension/adoption and recommendations

Wodonga Rendering will continue to develop their feedback mechanisms back to Livestock Producers which will include:

1. Continuing to develop, capture and report on Animal Health and Welfare issues back to producers
2. To develop an enhance the Supplier portal:
    a. Capture supplier information, eg. PIC numbers, authorised contact details
    b. Ability to capture and confirm booking requests
    c. Ability to create pre-populated electronic NVD's
    d. Capture and report on receipt of livestock loads against bookings and potential to provide Animal Welfare reporting and video capture of unloading – this is possible through another AMPC Project (Project No. 2024-1057: Pilot validation of Animal EYEQ AI technology to count stock at receival and determine commercial viability in a processing facility)
    e. Ability to capture photos of all carcases and make available, eg. At weigh grade station. Potentially also video.
    f. Provide a repository of feedback reporting and RCTI's including downloadable data for producers.
3. This work can also include capturing and reporting other favourable and non-favourable data for producers and processors. With this information it can be fed back into the livestock producers management practices to improve livestock quality and down stream red meat products.

3.0 Introduction

The red meat industry has long faced challenges in delivering consistent, transparent feedback to livestock producers regarding the outcomes of their consignments. Historically, feedback was limited to basic pricing and yield data, with little insight into animal health findings or carcass-level faults. This project sought to bridge that information gap by leveraging RFID technology, photo capture systems, and a centralised supplier portal to deliver comprehensive slaughter feedback—including fault photos and animal health findings—back to producers in a timely and accessible format.

The project, conducted by Wodonga Rendering Pty Ltd with co-funding from AMPC, aimed to not only implement carcass-level feedback systems on the kill floor, but also to establish a digital self-service portal for livestock suppliers to access feedback reports, RCTIs, booking functions, and eNVD services. This work is distinct in combining real-time defect imaging, cloud-based feedback delivery, and integration with industry-standard traceability and documentation systems.

4.0 Project objectives

As outlined in the project agreement and subsequent variation:

- Implement livestock scanning at unloading and lairage points using hand wands and fixed RFID panels.
- Develop and integrate a livestock receipting module linked to NLIS and Emydex ERP.
- Install Animal Health Stations with photo capability for carcass and offal inspections.
- Capture, store and link images of carcass faults to feedback reports.
- Create a supplier portal providing:
    - Kill data, fault images and feedback
    - Grid pricing, booking requests, and eNVD generation
    - RCTI download and consignment history
- Ensure cloud access to supplier documentation from any device.

These objectives were designed to build trust with producers and agents, improve livestock management decisions, and enhance traceability and compliance.

5.0 Methodology

The project followed a collaborative and iterative methodology, adapting over time due to evolving systems, stakeholder needs, and vendor changes.

1. **Stakeholder Consultation and Scoping**
   The initial phase involved detailed scoping of requirements through engagement with both internal and external stakeholders:
   - *Internal stakeholders* included company owners, the plant manager, kill floor supervisors, stockyards, quality assurance (QA), and livestock administration teams.
   - *External stakeholders* comprised livestock producers, stock agents, Integrity Systems Company (ISC), and the various technology providers including Emydex, Triton Systems, and web portal developers (Kurl Web and MEQ).

2. **Requirements Gathering and Documentation**
   Functional requirements were captured and formalised into detailed design documents. These specifications covered hardware (e.g. photo capture stations), software workflows (e.g. kill data capture, grading, NLIS integration), and portal architecture for producer access.

3. **Staged Supplier Engagement and Implementation**
   External vendors were engaged to implement the requirements across multiple phases. The shift from Emydex to Triton Systems necessitated significant rework and re-scoping of previously developed APIs and integrations. Meeting milestone dates proved challenging due to technical dependencies and the need to align new systems with ongoing plant operations.

4. **Feedback and Refinement**
   As components of the system were implemented—such as image capture, feedback report generation, and partial portal functions—stakeholders provided ongoing feedback. This iterative review loop allowed for refinement of workflows, better alignment with producer expectations, and prioritisation of future enhancements.

6.0 Results

The project delivered several of its key objectives, including producer reporting, RFID traceability and fault documentation, while others – particularly portal interactivity – remain in progress.

The project delivered meaningful improvements in information flow from processor to producer, particularly through the introduction of enhanced PDF feedback reports. However, some objectives—particularly relating to automation and system integration—remain partially implemented.

Key outcomes include:

- ✅ **Producer feedback reports** are now routinely generated and emailed within 24 hours of kill. These reports include:
  - Carcase-level grading data for large stock, and weight-range summaries for small stock
  - Animal health findings including pathology notes from onsite veterinarians
  - Manually captured photo images of condemned or partially condemned carcasses (taken via handheld digital cameras or phones)
  - RCTIs for each consignment
- ✅ **Manual image capture** is currently in place. While automated image capture stations were initially scoped, images are instead taken at inspection stations using independent devices. These photos are then stored and linked manually for use in feedback reporting.
- ✅ **Integration of livestock scanning, grading, and NLIS validation** into the kill floor system has improved traceability and carcase-level data integrity. Body-level data is now linked to RFID tags and available for analysis.
- ❌ **The Supplier Portal** is live but only partially functional. It currently offers:
  - Grid pricing sheets
  - Static process and general information pages
  - Login-based access for some users

However, planned features—including interactive bookings, eNVD creation, report/photo downloads, and RCTI access—are not yet deployed.

- ⚠️ **System change impacts:** The mid-project shift from Emydex to Triton Systems rendered much of the earlier API development redundant. This disrupted the rollout of the digital portal, which has been delayed while plant IT resources focus on the implementation and stabilisation of the new kill floor system.

7.0 Discussion

The project demonstrated the tangible value of providing detailed, timely kill data to producers. Feedback was well-received by suppliers, with the addition of fault photos and health data significantly improving transparency. This enabled producers to better manage animal health, track causes of condemnation, and build trust in processing outcomes.

Despite this, limitations in software integration and vendor coordination constrained full portal delivery. The change in kill floor system mid-project had a cascade effect on APIs, document management (Laserfiche), and middleware functionality. Moreover, the complexity of integrating NLIS, eNVD, photo capture, and RCTIs into a seamless user experience proved higher than anticipated.

Still, the foundational systems are now in place, and Wodonga Rendering is well-positioned to complete the portal rollout as plant commissioning and IT resources allow.

8.0 Conclusions

- The project has improved producer access to meaningful slaughter feedback.
- Systems for carcass photo capture and health fault reporting are operational and delivering value.
- The original portal vision has not yet been fully achieved but remains technically feasible.
- Lessons were learned regarding IT integration complexity and change management.

9.0 Recommendations

Immediate Recommendations:

1. Complete the final stages of portal development using Triton system APIs
2. Introduce supplier user testing and feedback loops during the final rollout phase:
    - Electronic bookings and eNVD integration
    - Supplier and agent information
    - Feedback and RCTI's repository
    - Carcase photos

Future Opportunities:

1. Explore future modules including:
    - Video capture of unloading (lick to AMPC Project 2024-1057)
    - Mobile access to portal
    - Real-time transport integration
    - In-portal chat or ticketing for producer and agents

10.0 Project outputs

Supplier Feedback Reports (PDFs) including carcase data, photos, pathology (see Appendix)

Additional Animal Health Stations implemented on Beef and Small Stock Kill Floors and Offal.

Initial deployment of secure supplier login portal at https://ascotmeats.com.au

Documentation of Farmer Portal API specifications and endpoints

Functional Design Documents for:

- Factory Floor Systems
- Back Office & Kill Agenda
- Photo Capture System
- Web Portal and eNVD booking flows

11.0 Bibliography

Wodonga FDD Farmer Portal v1.2, Emydex, Oct 2021

Wodonga Beef Kill Line – Factory Floor v1.21, Emydex, Sep 2020

Wodonga Beef Kill Line – Back Office v1.2, Emydex, Sep 2020

Wodonga Beef Kill Line Photo Capture FDD v1.5, Emydex, Sep 2020

Ascot Livestock Supplier Portal Design Document v1.0, Aug 2021

ASCOT MEATS Livestock Supplier Portal Overview v1.02, Jan 2020

Feedback Report Example: Supplier: DO NOT USE – 17 June 2025

Recipient Created Tax Invoice (RCTI) Example: Suppler: DO NOT USE – 7 June 2025

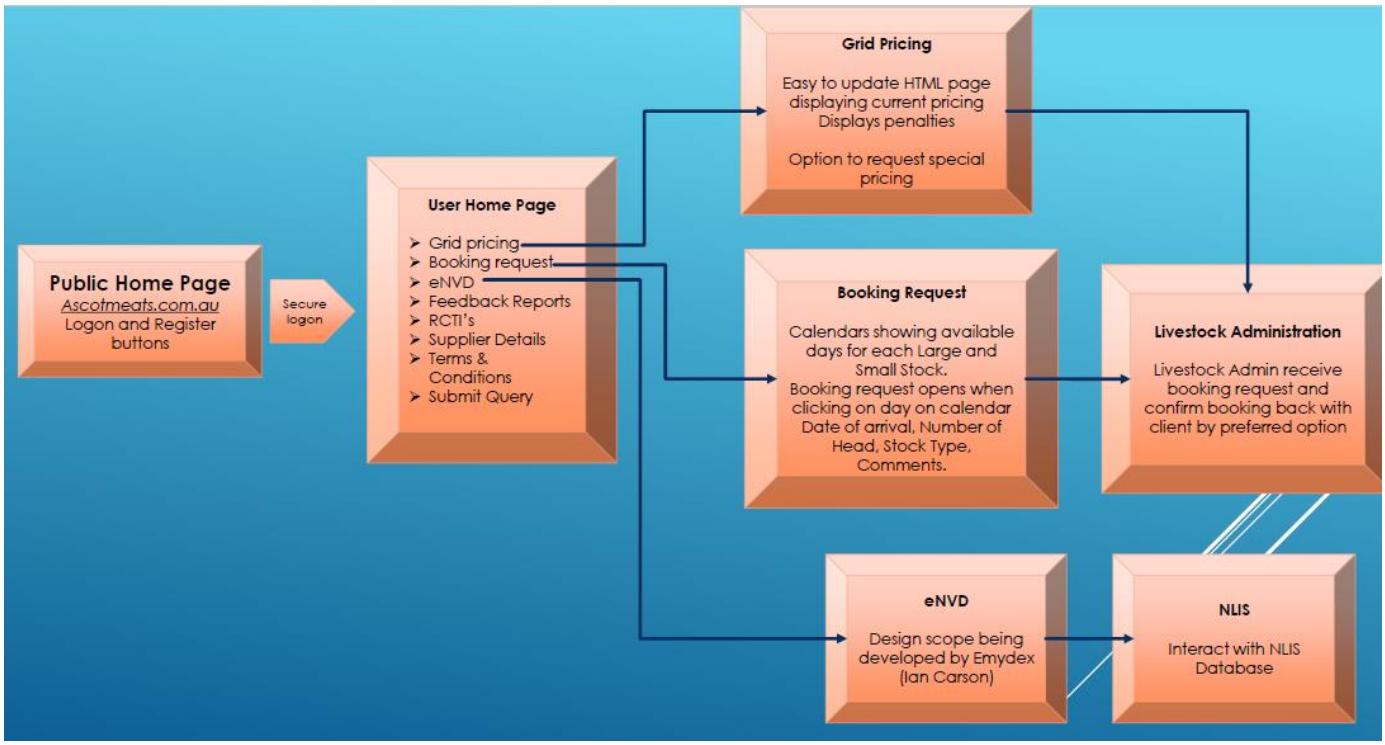
12.0 Appendices

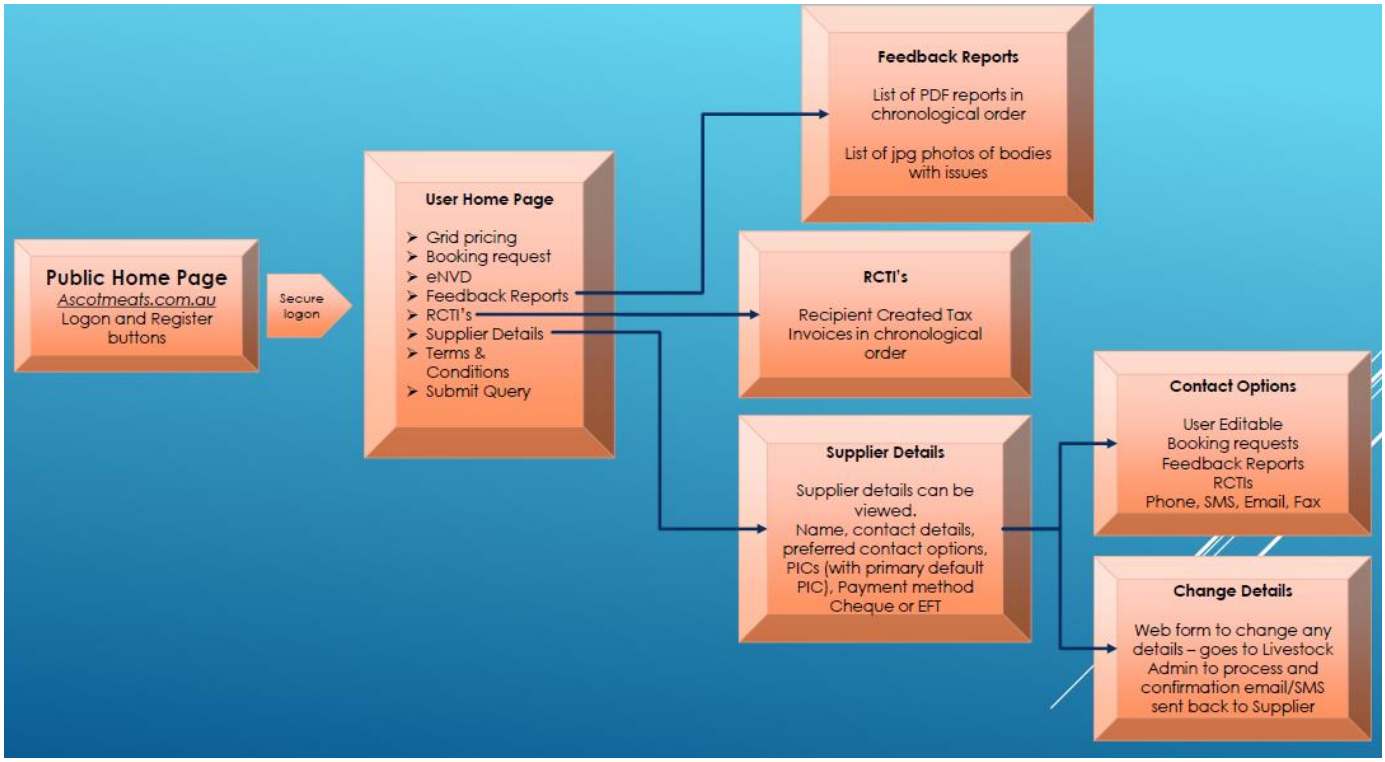
12.1 Appendix 1: Example Suppler Reports

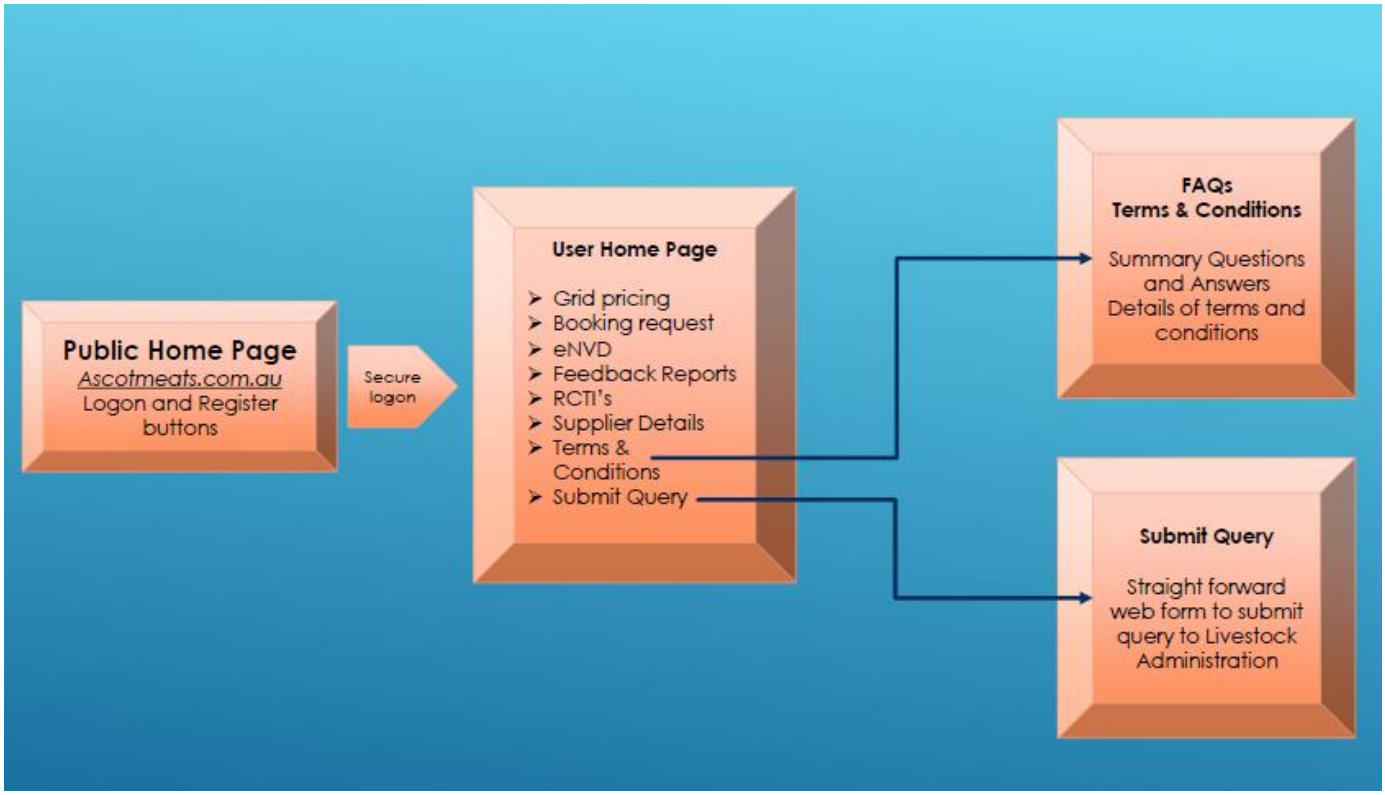
See attached PDF: “Feedback Report Example: Supplier: DO NOT USE – 17 June 2025”

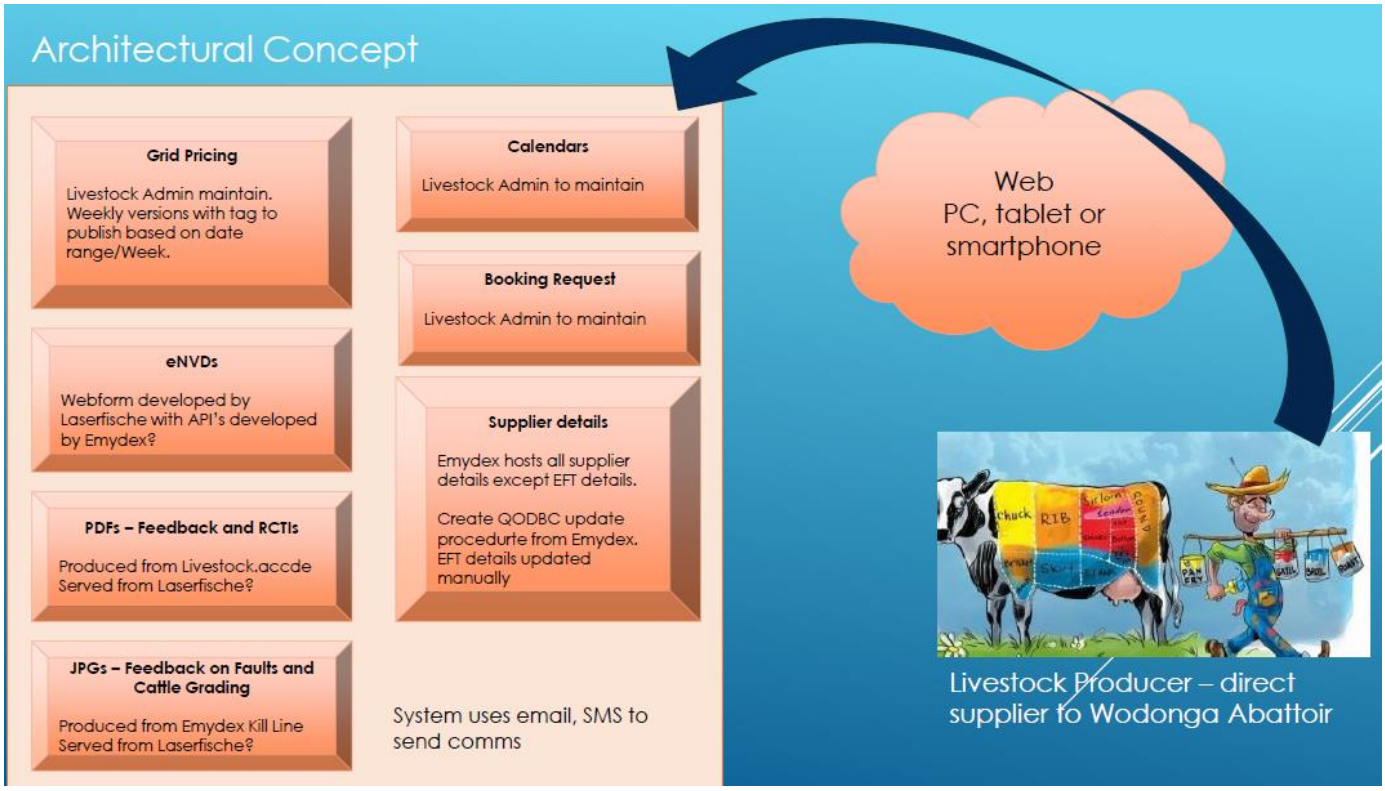
See attached PDF: “Recipient Created Tax Invoice (RCTI) Example Suppler DO NOT USE – 7 June 2025”

12.2 Appendix 2: System Archictecture & Portal Screens






Public Home Page
Ascotmeats.com.au
Logon and Register buttons
Secure logon
User Home Page
Grid pricing
Booking request
eNVD
Feedback Reports
RCTI's
Supplier Details
Terms & Conditions
Submit Query
FAQs
Terms & Conditions
Summary Questions and Answers
Details of terms and conditions
Submit Query
Straight forward web form to submit query to Livestock Administration


Architectural Concept
Grid Pricing
Livestock Admin maintain. Weekly versions with tag to publish based on date range/Week.
eNVDs
Webform developed by Laserfische with API's developed by Emydex?
PDFs – Feedback and RCTIs
Produced from Livestock.accde Served from Laserfische?
JPGs – Feedback on Faults and Cattle Grading
Produced from Emydex Kill Line Served from Laserfische?
Calendars
Livestock Admin to maintain
Booking Request
Livestock Admin to maintain
Supplier details
Emydex hosts all supplier details except EFT details.
Create QODBC update procedurte from Emydex. EFT details updated manually
System uses email, SMS to send comms
Web
PC, tablet or smartphone
Livestock Producer – direct supplier to Wodonga Abattoir