Communication and Data Management Services
NGR and Industry Good Functions

To: GM Crops Management Act Review Board

From: Mel Taylor, Operations Manager – National Grower Register

Date: 17/08/2007

Re: Technical and data solutions to assist the responsible introduction of GM crops

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National Grower Register

NGR is an existing grain grower service organisation with the core goal of ensuring efficient flow of industry information and facilitating effective commerce. Specifically, NGR provides grower registration and payments details to Australian grain traders and marketers to facilitate the smooth purchase of grain from producers.

The NGR system offers grain producers across Australia a secure and streamlined registration process using a single delivery card. A full time call centre operates to ensure data integrity and responsiveness, efficient processing of enquiries and applications. All NGR activities are free for registered growers with revenue derived from grain traders and marketers on a fee for service basis. (Refer to Appendix 1 for more information on NGR.

As an industry wide data service, NGR is not in a position to offer a policy position on the introduction of GM crops or any amendments to moratoria, however I write to outline the services and capabilities of NGR that may assist the review committee in assessing the scope of technical challenges associated with GM crop introduction. These issues may include grower communication, data collection, reporting, implementing GM zones and reconciling zones / licenses with grower activities.

NGR is in a position offer a mechanism to assist the safe and accountable introduction of GM crops in co-existence with non-GM crops, through a range of existing and proposed service.

What does NGR bring to the table in terms of GM introduction

NGR is well placed to fulfil an integral role in technical development and grower liaison for initiatives that pertain to GM introduction such as;

- Track and Trace model (refer to Appendix 2 – "A National Property Identification System for the Australian Grains Industry")
- Genetically Modified crop tracking and geographical mapping of GM areas
- Communication with growers
- Use of our grower web portal and data capture tool

NGR has in place a stable, secure database, current live data sharing mechanisms with agencies and grain marketers and a user-friendly grower website for data inputting by growers at farm level. By leveraging from these existing technical industry assets, states wishing to introduce regulated GM cropping may benefit from an alliance with NGR's data systems. The NGR can offer effective and economical solutions to some of the logistical reporting and regulation requirements that may be imposed.

Additionally NGR's current data set represents the vast majority of Australian Grain Growers, and our organisation has established effective communication channels with 30k+ grain growers, making NGR a sound state and national basis for identifying growers and capturing their activities. The NGR mechanism is well accepted across the grain supply chain.

What does NGR propose?

NGR's existing and proposed systems offer some technical data collection and communication solutions that could have the potential to impact on the feasibility of tracking GM crop areas, preserving GM free areas and facilitation reporting and monitoring.

NGR would welcome the opportunity to submit a further technical brief on the implementation of data collection, a track and trace solution should such information be necessary to aid the decision making process regarding the introduction of GM crops.

Specifically NGR wishes to make available full statements / consultation detailing;

- NGRs existing and potential capability to deliver key industry good functions
- Discussing industry needs in areas where NGR has expertise and capability e.g. grower communication and access, data collation and dissemination, technical development
- Scope a property identification system that would meet the requirements of states wishing to facilitate the safe and accountable introduction of GM crops. Such a system could accommodate unique identification of Australia grain growers and their land parcels, any GM crop restrictions on these parcels, GM licensing data (if such is introduced) and interfaces for both growers, traders and governing bodies to share information about GM production.

If NGR can provide further information, I invite you to contact me with the particular interests of the GM Crop Act Review board, or simply request any of the above documents or a consultation opportunity.

Yours sincerely

Mel Taylor
Operations Manager
National Grower Register

APPENDIX 1

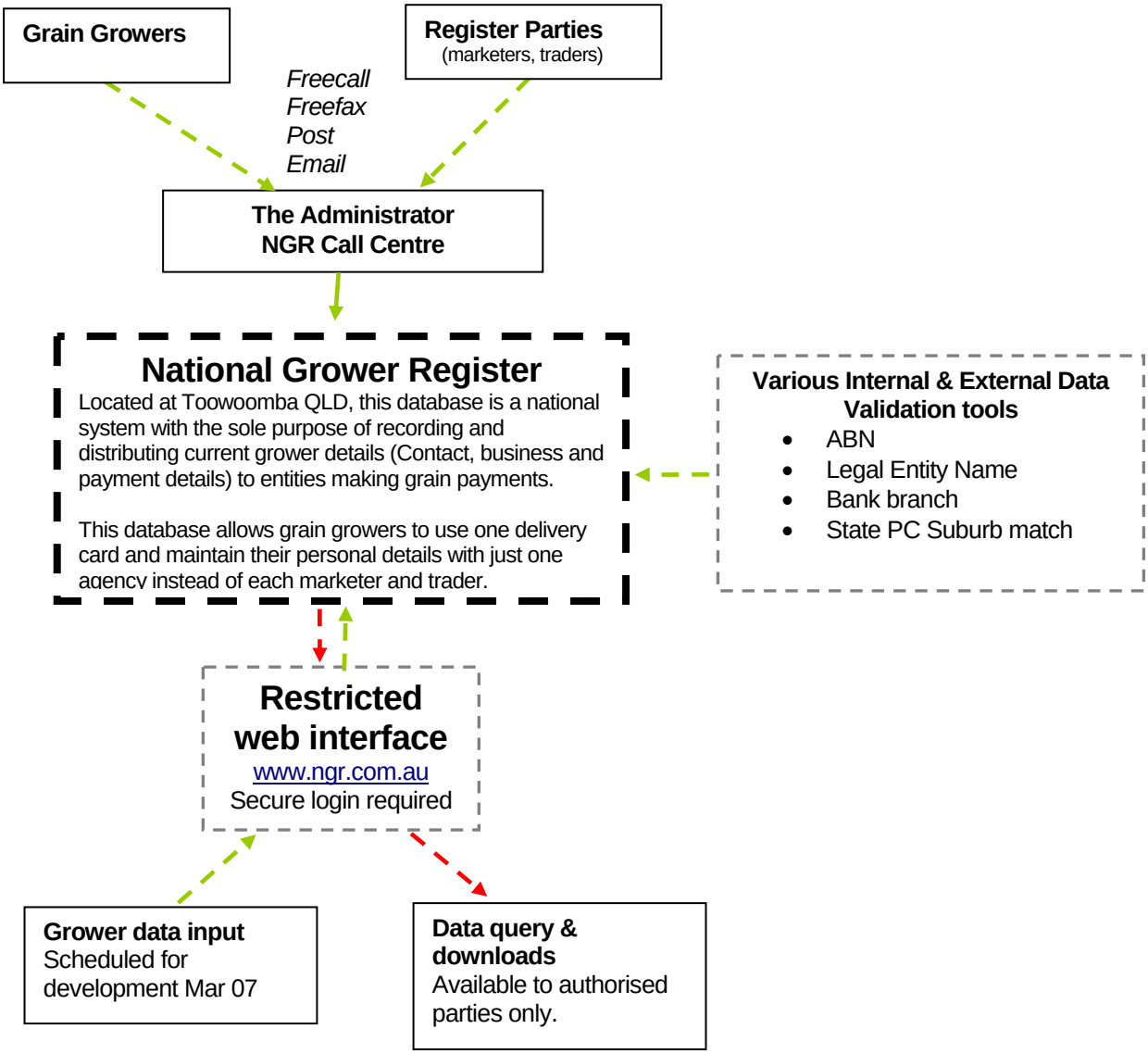
About NGR

National Grower Register (NGR) is a joint venture between GrainCorp and ABB Grain, providing grower registration and payments details to all grain buyers for a fee to facilitate the purchase of grain from Australian grain producers in all states except Western Australia where WA CBH operates their own registration system.

The NGR system offers grain producers across Australia a secure and streamlined registration process using a single delivery card. NGR cards are used in Australia for delivery to a many sites and grain traders with registration free to all growers. A full time call centre operates to ensure data integrity and responsive, efficient processing of enquiries and applications. The call centre is free to access for growers

For each delivery card NGR currently collects contact, business and banking information for each grower. This information is stored in a secure database and made available to authorised parties for the purpose of facilitation of grain payments. Data is available to authorised parties through a secure web interface on demand.

The current NGR communication and information flow is illustrated below:



APPENDIX 2

A National Property Identification System for the Australian Grains Industry

Prepared by: National Grower Register, February 2007

CONCEPT

A simple, web-based interface to accurately capture, analyse and manipulate spatial data reflecting point of origin information relating to grain deliveries, in a format that is then be able to distributed to key audiences to meet emerging market and industry demands.

RATIONALE

Several market signals in the Australian grains industry indicate the need to identify the original location of grain, and collect property and land use information pertaining to its production, often referred to as traceability.

As the grains industry embraces technology assisted agricultural practices, and as consumers become more discerning about the life history of produce, the introduction of a nation-wide property identification system linked to each delivery represents the first step toward total traceability.

Examples include:

i. demand from domestic and international markets for quality assurance of foodstuffs;
ii. growers adopting and seeking recognition for environmentally sound and sustainable land practices; and
iii. grain producers need for a competitive edge through product differentiation of their commodity.

This seeks to offer the grains industry and its customers the same additional level of assurance that the National Livestock Identifications Scheme (NLIS) has offered greater quality control and security to the livestock industry. (Refer to Appendix 2 for a case study on NLIS.)

This system has the potential to create a solid foundation for quality assurance, integration of on-farm land use data and GPS data. Real time traceability across the whole industry would represent a significant market advantage for Australian grain and create a platform for agricultural advancement.

Traceability is an emerging issue in agriculture worldwide and accurately identifying a physical point-of-origin is expected to be required in the near future. Therefore, a method for collecting and collating point of origin information relating to grain deliveries will be essential.

DELIVERABLES

NGR can offer the following specific solutions to the Australian grains industry:

- assign property identification to each unique grain property, such as a Property Identification Code (PIC);
- collect property identification and other important property information on behalf of the industry for example land size, boundaries, land use, productive area;
- develop a web-based grower interface where growers can add property information to their existing NGR grower record; primarily visual interface;
- liaise with industry to derive full benefits from this system, such as assisting with environmental data collection, genetically modified (GM) crop tracking;
- develop an internal global information systems (GIS) platform that can provide the Australian grains industry with valuable reports and statistics based on our existing data and the proposed property data; including reports and maps on genetically modified crops, yield / crop type, bio-risk tracking (e.g. identify all growers within a set radius of a known disease outbreak), environmental practices; and

- as required by industry and users of the NGR, create data outputs and make these available to authorised parties such as point of origin information to traders and marketers.

INDUSTRY BENEFITS

Immediate and long-term specific outcomes include:

- physical source of origin data assigned to each grain delivery;
- genetically modified (GM) commodity tracking. With the potential introduction of GM crops to Australia the ability to identify GM and non-GM crops has become an industry priority;
- Environmental Management System (EMS) data collection including grower/ producer self assessments;
- industry wide data land use, environmental and other reports; and
- interaction with existing and emerging global positioning systems (GPS) agricultural practices (also known as precision agriculture), to provide the industry with an off-farm data warehouse and region-wide or industry wide knowledge base.

The data collected under a property identification system will have wide ranging industry interest and applications.

DELIVERY MECHANISM

The National Grower Registration system (NGR) has the technical capability and grower access to develop and maintain a unique property identification system.

This includes an existing data warehouse for grain producer information, a secure and streamlined registration process using a single delivery card, and a 24 hour call centre to ensure data integrity and responsive, efficient processing of enquiries and applications.

(Refer to Appendix 1 for more information on NGR.)

KEY SUCESS FACTORS

1. Industry Leadership and Cohesion

   For the project to be a success the most critical factor is industry demand and leadership. Representatives of the Australian grains industry to take ownership of collaboration, policy development, grower participation and data use standards. NGR is not the appropriate vehicle to formulate standards and policy for the Australian grains industry.

2. 100% industry uptake

   An Australian grains industry equivalent to NLIS would only be of real value with strong industry support and uptake. The NLIS is supported by legislation which has ensured an absolute level of industry uptake and therefore NLIS is effective in its purpose.

Growers will ask two questions “will this system make my job simpler?” and “will this system help my business performance?” (presumably through better prices or streamlined business).

Grain producers will also need to be convinced of tangible benefits such as simplified reporting and meeting legislative requirements.

Key Aspects for adoption

1. Simple user systems

   From an end-user perspective, any system implemented will have to be simple and intuitive to navigate. NGR will also need to consider the individuals operating system and the availability of internet services in rural areas include price, speed. A communication strategy will also need to be implemented to introduce growers to the new system and provide support.

2. Universal Standards and Data Compatibility

NGR proposes to develop a system that is in line with existing / emerging standards and compatible with existing land data systems for example, Digital Cadastral Databases.

3. Web-based application - easy of use and remote central data storage

   A web based solution is preferable to a software-base solution as this will eliminate the need for growers to purchase software or download updates to use the system. Farm data can be stored off-farm in a central database and be referenced by industry or the contributing individual.

NEXT STEPS - WHERE TO FROM HERE?

The National Grower Register is willing and well-placed to develop and maintain the grain property identification system from a technical perspective; however strategic direction is sought from the Australian grains industry.

Due to the diverse beneficiaries of the data such an initiative could readily capture, it is imperative that a steering body, on behalf of the Australian grains industry, take an active role in policy regarding data dissemination. Intended groups to be consulted include:

- grain producers;
- grain marketers and traders;
- primary industries, natural resources and land management authorities Australia wide may be interested in producing industry wide reports, forecasts, biosecurity threat management plans;
- CSIRO and other research bodies, organisations that are currently interacting with a small number of growers for research purposes;
- federations and organisations representing grain producers; and
- organisations, projects and programs endorsed by the Australian grains industry such as Environmental Management Systems (EMS)

CONTACT INFORMATION

NGR is seeking expressions of interest and consultation opportunities with grain / agricultural organisations with an interest in bringing property identification and commodity traceability to the Australian grains industry.

Enquires and comments can be directed to:

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