



Annie Hindle
DIRA Review Team
Agriculture, Marine and Plant Policy
Policy and Trade Branch
Ministry for Primary Industries

By email: dira@mpi.govt.nz

8 February 2019

Dear Annie,

Review of the Dairy Industry Restructuring Act 2001

Thank you once again for the recent discussions that you have had with me and the DairyNZ policy team regarding the current review of the Dairy Industry Restructuring Act (DIRA). DairyNZ welcomes the review process, and the opportunity to provide feedback on whether the DIRA's regulatory regime is continuing to operate in the long-term interests of dairy farmers, consumers, and the wider New Zealand public.

Our role

DairyNZ is the industry good organization representing New Zealand's dairy farmers. Our purpose is to secure and enhance the profitability, sustainability, and competitiveness of New Zealand dairy farming. Our work, which is funded by a levy on milksolids and government investment, includes:

-) Research and development to create practical on-farm management tools
-) Leading the adoption of best practice farming
-) Promoting careers in dairying; and
-) Advocating for farmers with central and regional government.

Our approach to the DIRA review process

Against this background, our approach to the current review is to ensure that any proposed changes to the DIRA are evidence-based, promote effective competition, drive productivity improvements, and support the sector's ongoing transition into high-value consumer product markets. It is also important that the DIRA contributes to the delivery of improved environmental outcomes for the benefit of all New Zealanders.

DairyNZ's emphasis is therefore on ensuring the DIRA provides a strong platform from which the dairy sector can achieve the social, economic, and environmental objectives outlined in the Dairy Tomorrow Strategy (<https://www.dairytomorrow.co.nz>). Our farmers, fellow industry organisations, and processing companies will provide more detailed insights into how the DIRA is currently influencing the level and intensity of competition within the domestic dairy market, and opportunities for improvement.

Key comments

The Cabinet Paper approving the DIRA Review Discussion Paper for release indicates that the main purpose of this consultation process is to test whether the Ministry has accurately identified the regulatory challenges that are of key concern to dairy market participants and the wider public. We have therefore provided some provisional observations which we look forward to discussing in due course.

Dairy sector performance

According to the Discussion Paper the Ministry's preliminary analysis suggests that:

-) The DIRA is an effective tool in managing Fonterra's continuing dominant market position, which is estimated to be 80.5% of the national market share based on 2018 data;
-) The regulatory arrangements imposed by DIRA provide high-levels of business certainty (at relatively low cost) that cannot be replicated by the Commerce Act's general section 36 powers for dealing with anti-competitive behavior. Consequently, the DIRA remains the most effective tool for safeguarding competition in the dairy sector; and
-) There is no evidence the DIRA is constraining dairy sector growth.
BUT
-) The DIRA may be preventing Fonterra from effectively managing its farmers' environmental performance, thereby creating reputational risks for Fonterra, its farmers, and the wider dairy sector.

We broadly agree with this analysis, which is consistent with several key findings arising out of the Commerce Commission's 2016 report on *The State of Competition in the New Zealand Dairy Industry*. However, we do consider that it is essential for the current review process to test the robustness of the datasets underpinning these initial findings. The economic analysis that the Ministry commissioned *Frontier Economics* to undertake prior to the commencement of the public consultation process on the drivers and current state of dairy market performance is an important first step. Our expectation is that dairy farmers and processing companies will have valuable perspectives on the reliability of this analysis and will provide additional data that will assist the Ministry in refining its understanding of the challenges associated with the current DIRA regime.

Impact on business strategy

The DIRA Discussion Paper asks a broad suite of questions regarding the impact the DIRA may be having on Fonterra's corporate strategy, with specific reference to Fonterra's:

-) Base milk price calculation,
-) Terms of supply,
-) Shareholding requirements,
-) Dividend policy, and
-) Competitive position in the global market place

While we understand the rationale for framing these questions, we consider they are most appropriately addressed by Fonterra and its farmer suppliers in the first instance.

The Discussion Paper also highlights longstanding concerns regarding the unintended consequences associated with the DIRA's open entry requirement. In particular, whether the obligation for Fonterra to collect milk from all new suppliers is driving the continuation of a commodity-based dairy sector. The Paper concludes that, from a regulatory perspective, there is nothing in the DIRA to prevent Fonterra from proactively adjusting its milk price over multiple seasons to reduce milk volumes and create headroom for increased investment in value-add processing initiatives. Consequently, the Paper suggests there is no evidence the DIRA is inhibiting Fonterra's ability to transition to high-value add dairy processing. However, the paper then goes on to list the sizable management and logistical reasons why milk price adjustments are difficult to implement in practice.

In many respects the discussion regarding the efficiency and effectiveness of the open entry requirements raises issues that go to the heart of the current review process. At first analysis the DIRA bears all the hallmarks of a well-functioning competition policy instrument. However, in practice it fails to provide Fonterra with the right level of management flexibility that it requires to respond to challenges in a rapidly changing global market place. We agree with the Ministry's analysis that striking the right balance between regulatory control and management flexibility is a highly complex issue, and there is unlikely to be a single solution.

DIRA's impact on the dairy sector's environmental performance

The Discussion Paper notes that dairy sector growth has delivered significant economic benefits for New Zealand. However, the rising international demand and high prices for dairy products, coupled with the lack of other comparable returning land use options, has led to an increase in the size of the national herd and the expansion of dairy farming into new areas. There is a suggestion that the DIRA's open entry requirements may have contributed to this expansion and produced adverse environmental outcomes as a result.

We broadly agree with the Discussion Paper's analysis that there is likely to be a causal relationship between the DIRA's open entry requirements, dairy sector expansion and the potential for this expansion activity to impact on environmental outcomes in some catchments. We also share Fonterra's concerns, as outlined in the Paper, regarding the reputational risks associated with its mandatory obligation to accept supply from farmers who have poor track records in relation to their on-farm practices and/or may not meet the environmental performance requirements outlined in its terms of supply agreement. We think it is essential that all dairy farmers *can* and *will* operate at industry-agreed Good Management Practices.¹ Consequently, we think it is timely to address the potentially distortionary impacts that the open entry requirements may be having on Fonterra's ability to manage its environmental footprint.

We also agree in principle that environmental outcomes are generally best addressed through the Resource Management Act (RMA), with the DIRA focusing on the efficient operation of the dairy market. However, the question as to which regulatory lever the Government should pull when dealing with a competition policy provision that appears to be having adverse environmental outcomes is less clear-cut. We would appreciate more guidance from the Ministry on the specific range of amendments (to either the RMA or the DIRA) that it is exploring in relation to this issue, and

¹ Please see *Good Management Practices: A guide to good environmental management on dairy farms* available at https://www.dairynz.co.nz/media/4106341/Good_management_practices_April_2016.pdf

the criteria for determining the most appropriate regulatory vehicle for implementing the required changes.

The Discussion Paper also invites feedback on the environmental issues that should be addressed either through the DIRA review or some other means. The Paper touches on the large number of policy processes that are currently underway, including the Essential Freshwater Programme, the Zero Carbon Bill, and the proposed National Policy Statement for Indigenous Biodiversity. The forthcoming review of the Biosecurity Act will also examine the role that biosecurity plays in securing international market access and safeguarding the competitive position of New Zealand's dairy farmers and processing companies. Our recent experience suggests that the policy intersects between these various workstreams are not well-understood. This raises the risk of policy fragmentation, and we are concerned about the impact that this could have on the quality of our farmers' business environment. This is an issue that we are keen to engage with the Ministry of Primary Industries and Ministry for the Environment on as soon as possible.

Does the DIRA incentivize inefficient entry by large dairy processors

We agree with the Discussion Paper's assessment that it is timely to revisit whether the original rationale for providing large dairy processors with access to Fonterra milk during their initial establishment stage still stands. We look forward to discussing this issue in more detail with the Ministry in due course. This review must examine whether existing DIRA regulations, in any way, undermine the global competitiveness of our New Zealand dairy industry. We regard this as something critical to our future in a global market place that is facing on-going change and potentially more competition.

Access to farm performance data

Efficient markets require high-quality information flows. The dairy sector is no exception, with increasing demands (e.g. from National Animal Identification and Tracing, processors and national and regional government) for access to farmer-provided data. This is an important issue which may be technically outside the scope of the current DIRA review. We would however like to draw the Ministry's attention to the recent New Zealand Animal Evaluation Limited submission on the Dairy Herd Improvement Regulatory Review (located at Appendix 1) which raises several issues of relevance to the DIRA review process.

Thank you once again for the opportunity to contribute to the review process. Please contact our National Policy Manager, Kay Brown on 027 704 5701 or kay.brown@dairynz.co.nz, if you have any questions regarding this submission. We are looking forward to receiving confirmation of the review outcomes and the Ministry's draft policy recommendations in the near future.



Dr Tim Mackle
Chief Executive
DairyNZ

Appendix 1: DairyNZ Submission on Dairy Herd Improvement Regulatory Review Process

12th November 2018

By Email: info@mpi.govt.nz

To Whom It May Concern

Re: Dairy Herd Improvement Regulatory Review

Please find below our submission in relation to: **Dairy Herd Improvement Industry Review of Regulation (MPI Discussion Paper No: 2018/10)**

This submission has been prepared jointly by DairyNZ and New Zealand Animal Evaluation Limited (NZAEL), and represents the views of both organisations.

Should you have any questions, please contact

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Yours sincerely



Warren Larsen
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David McCall
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Our Role

DairyNZ is the industry good organisation representing New Zealand's dairy farmers. Funded by a levy on milk solids and through government investment. Our purpose is to secure and enhance the profitability, sustainability and competitiveness of New Zealand farming. DairyNZ's work includes research and development to create practical on-farm tools, leading on-farm adoption of best practice farming, promoting careers in dairying, and advocating for farmers with central and regional government. DairyNZ invests approximately \$6.3 million per year of farmer's levy in genetic gain through NZAEL and research programmes.

New Zealand Animal Evaluation Limited (NZAEL), a wholly owned subsidiary of DairyNZ, establishes and maintains policies for the dairy sector's National Breeding Objective which includes developing a breeding goal for genetic improvement of New Zealand dairy cattle for the benefit dairy farmers. The National Breeding Objective is quantified as Breeding Worth (BW), which is calculated by NZAEL for all dairy cattle. NZAEL functions include:

-) defining, maintaining, estimating, publishing, and periodically reviewing a national BW index for artificial breeding sires to assist farmers when making breeding decisions. This index compares the expected ability of males and females to breed efficient converters of feed into farmer profit as replacements and is based on traits including but not limited to milkfat, protein, volume, liveweight, fertility, somatic cell score, body condition score and residual survival and their relative economic values;
-) managing, on behalf of DairyNZ, the Core Database pursuant to Dairy Industry (Herd Testing and New Zealand Dairy Core Database) Amendment Regulations 2014;
-) identifying traits that influence the breeding goal and deciding the relative importance of each of the traits in BW;
-) overseeing, and having input into the research portfolios relating to the breeding goal;
-) providing genetic evaluations and estimating breeding values (BV) for dairy animals;
-) providing advice on setting standards for and monitoring data quality for inclusion in genetic evaluations for dairy animals;
-) collecting, holding, analysing, manipulating, processing, evaluating, disclosing, distributing, and publishing any data which directly or indirectly relates to dairy cattle by any means required;
-) contracting reviewers and other relevant third parties to report on existing or proposed genetic trait evaluations and/or on existing or proposed economic valuation of genetic changes in the traits of dairy cattle;
-) consulting with farmers and with any other parties considered to have a relevant interest in the genetic improvement of dairy cattle and/or development of the dairy industry within this area in New Zealand or overseas.

Together DairyNZ and NZAEL have key roles to maintain and enhance the competitiveness of the New Zealand dairy industry by identifying animals that will optimise profit and lead to better environmental and animal welfare outcomes. We are acutely aware that New Zealand dairy farmers are in a race against international competitors to accelerate rates of genetic gain and are competing with major genetic improvement investments in Europe, North America, Asia and Australia. There is increasing evidence that under current data constructs we are falling behind those international competitors.

Contribution of data to genetic improvement

Genetic improvement of NZ dairy cattle contributes \$300 million per annum profit to New Zealand dairy farmers with significant spill over benefits to the NZ economy. This value relies on access to high quality data relating to individual animals' pedigree, conformation and behaviour (e.g. parentage, breed, udder quality, temperament etc.) and their performance (e.g. fertility, milk yield, body condition score etc.) combined with statistical techniques to estimate their genetic merit. These estimates of genetic merit are then combined with economic information to identify the most profitable (highest BW) animals. Without quality data, genetic variation, heritability, and genetic trade-offs between traits cannot be estimated, and the accuracy and breadth of indices are compromised.

Challenges with the current construct

The **current fields defined as Core Data are not sufficient to calculate BW**. Data currently excluded but required to calculate BW include:

-) Body condition scores
-) Liveweight
-) Traits Other than Production (TOP) scores, specifically TOP scores for milking speed, overall opinion, legs, udder overall and dairy conformation

These non-core data are available based solely on agreements between NZAEL and Certified Herd Testers.

At present, data can only be supplied to the Core Database by Certified Herd Testers, yet Core Data and data required for animal evaluation exists outside of these Certified Herd Testers The current construct works for companies with sufficient incentives to provide both Core Data and non-core data, but not for those with limited incentives or ability to supply data to Herd Record Providers or DIGAD. This means that this non-core data collected by farmers and required for animal evaluation cannot be accessed or utilized by NZAEL.

Technological advancement means genotypes, animal health, environmental impact, high-throughput "-omic" data, and data collected by automated sensor technologies will be needed to calculate BW soon. **We need a forward-looking and commercially balanced construct that encourages investment in new technology and data utilisation for the National Breeding Objective.**

SECTION 5 - THE LIST OF REGULATED (CORE) DATA IS OUT OF DATE

Q1: Have we correctly described the issue?

The Discussion Paper correctly identifies that the list of Core Data is out of date in that it doesn't include all the data required for the national animal evaluation process to calculate BW. However, there are four important areas that are not covered in the document. These are:

1. farmer and breeding company access to cow genetic indices
2. usage and access to single nucleotide polymorphism (SNP) data required for parentage verification
3. usage and access to farm performance data
4. use of commercially funded genotypes in animal evaluations.

While the purpose of animal evaluation is to maintain and accelerate rates of genetic gain, this is not a simple function of animal evaluation alone. The rate of gain also depends on:

-) animal breeding companies and bull breeders identifying the best cows to mate to produce the next generation of elite sires. This “cow to bull” selection pathway contributes about 37% of the estimated \$300 million per annum. Therefore, any inefficiencies or barriers significantly impact rates of genetic gain;
-) farmers using these elite sires widely – supported by the AI companies endorsing the national breeding objective and competing to deliver the highest genetic merit bulls;
-) farmers identifying their best cows and replacement heifers and using these to increase the genetic merit of their herds.

This process is supported by investment in research, information systems, farmer support and breeding by companies and farmers. Without this, the effort in collecting Core Data and calculating BW has less impact. Changes to the arrangements for Core Data must consider the impacts on the wider genetic improvement system for dairy cattle, not just the accuracy and relevance of genetic indices.

Access to cow genetic indices including Breeding Worth

The original Business Case for the DIGAD identified the value that was being lost to the dairy sector through fragmentation of indices. Since the DIGAD was established this fragmentation has continued, at least partly due to the inability of LIC and CRV Ambreed to reach commercial terms on the supply of cow BW and breeding values from LIC to CRV. CRV Ambreed access to cow BW and breeding values are required to inform their contract matings to produce elite sires (cow to bull pathway) and to provide CRV's herd recording clients with BW and breeding values for their cows.

As part of the DIGAD negotiations between DairyNZ and LIC, it was agreed that LIC retained the commercial rights to cow BW, and LIC undertook to reach commercial terms with other users. These important agreements have not been achieved – and consequently, genetic gain has been compromised.

This construct has proved to be sub-optimal because the parties have been unable to reach commercial agreement for routine supply of the cow genetic indices. This has two important implications for genetic gain.

-) Farmers that supply data to the DIGAD via CRV are not routinely receiving the full genetic selection benefits of these indices despite paying for and supplying data and funding the operations of the DIGAD and NZAEL through their DairyNZ levy. This is a disincentive to participate in herd testing and data supply.
-) Breeding companies that need to identify elite females as parents for the next generation of high genetic merit bulls are not routinely purchasing Elite Cow Lists from LIC.

This situation will be exacerbated in 2019 when CRV starts supplying Core and other data directly to DIGAD rather than through LIC. At that point, indices for CRV enrolled cows will not be supplied to LIC unless CRV and LIC reach commercial agreement, further reducing the information flow to breeding companies and herd record providers and the rate of genetic gain.

DairyNZ does not have a solution that continues the previous arrangements produced by DIRA and the agreement between LIC and DairyNZ. The onus has been on the commercial players to reach agreement – but this has not happened. **A new construct is required which in our view - and based on close observations of the last decade - will only be achieved through government leadership.**

Access to SNP data for parentage verification

Parentage errors are biasing the national evaluation system. We have demonstrated that an increase in the number of animals with DNA-verified parentage will reduce bias and increase the accuracy of estimated breeding values and BW. Therefore, increasing the use of parentage testing will increase genetic gain.

At present, there are two main providers of parent verification technology for NZ dairy cattle. These two providers use a different selection of SNPs, and farmers are provided only the parentage result (i.e. the ID of the likely sire and dam) while the underlying SNP data remains with the provider. Both factors contribute to a market environment where farmers face large financial costs if they change parent verification providers, as they must re-genotype their cows (i.e. potential dams of calves) with the new provider. This creates a barrier to providers who wish to enter the industry because this cost limits farmers' ability to consider new providers.

NZAEL proposes establishing a standard set of SNPs as 'parentage SNPs'. Accredited parent verification providers would be required to both use these SNPs for their parent verification process and supply these SNP genotypes to other providers under farmer direction.

This practice is common place internationally, with a selection of 550 SNPs identified as an international set of standard parentage SNPs. NZAEL's preference would be to align with international standards following initial validation to ensure these selected SNPs are appropriate for parent verification in NZ cattle.

Technically, it is the parentage not the SNP data that is required for AE. If DNA providers cannot agree to exchange SNP data, an alternative approach is that parentage SNPs are designated as Core Data with the Access Panel able to release these with farmer permission.

Access to farm performance data

There is increasing demand for farmer-provided data for use by NAIT, processors and government. Barriers to sharing and re-use of these data remains a rub point with farmers. In the future, data held in DIGAD could be valuable to farmers and to parties to whom they need to supply data. For example, antibiotic treatment records for mastitis cases being supplied to milk processors.

NZAEL's preferred position is that farmers provide these data via their herd record provider, who then has an arrangement with the next user (e.g. a milk processor) to share the data with farmer permission. However, there are likely to be blockages to this flow because the herd record provider has competing relationships with an existing milk processor or because providing data and linkage is not a priority for the HRP. Given that the data are held in DIGAD, it makes sense that the farmer should be able to authorize its release to the milk processor. The connection to the DIGAD and data processing costs would be met by the end user.

Access to genotyping and genomic prediction

We acknowledge that both CRV and LIC have made significant co-investments with government to collect phenotypic data and genotypes and develop genomic prediction systems. We want that investment to continue, and it would be in the interests of the sector for new commercial companies to invest further in genotyping and phenotyping.

DairyNZ is currently investing in developing a new approach to bring genomic data into the BW calculations. Both CRV and LIC are collaborating in this project, and funding has been sought from MPI through a PGP. If successful, this approach will require either genotypes or genomic BVs to be supplied to NZAEL by the companies.

To protect those historic investments against free-loading and encourage on-going participation, we propose a model where genotype or sequence data is made available for the NZAEL animal evaluation function and research only. In the construct proposed in answer to Question 2, the required genomic data would be designated as required for the calculation of BW but not available through the Access Panel.

A Consortium (modelled on overseas experience) is envisaged as the business model to fund efficient collection of genotypic (and potentially phenotypic) data. This would include provision for new members to join in through a substantial contribution of genotypes and data, an investment, or a one-time fee. If new phenotyping technologies offer potential for increased genetic gain with a cost or IP structure that inhibits data sharing, a similar Consortium model could be used. The Information Herds concept being tested by NZAEL could follow this option to protect and incentivise genotype and phenotype collection and provision.

Q2: Of Options (i), (ii) and (iii) above which do you prefer?

Under the current construct, there is a risk that:

-) **All data that is collected and required for Animal Evaluation are not supplied to the Core Database.** This is because there is a requirement in the current Regulations that Core Data **must be sent only by Certified Herd Testers**. This precludes companies collecting and holding data required for animal evaluation from submitting data to the Core Database unless they develop data sharing and transmission agreements with Certified Herd Testers on a case-by-case basis.
-) **New types of data required to keep pace with technology developments or data needs for Animal Evaluation are not available or utilised.** This is because there are regulatory or commercial hurdles to accommodate new technologies.

We agree that ***Option (iii) Provide a mechanism that provides flexibility for core data to be redefined without requiring formal regulatory amendment*** provides the optimal construct to meet the animal evaluation needs of the New Zealand dairy industry now and in the future. However, with any change in regulatory construct, we emphasise that a regulatory framework is still required to ensure Core Data is supplied to the Core Database.

Our recommendation on this mechanism has 3 steps:

1. NZAEL approve a business case for new Core data fields after consultation with the sector. Where necessary, this business case should include any need for compulsory collection or supply of data.
2. The Access Panel designate new fields as Core Data based on the NZAEL submission.
3. The Minister or Director General of MPI approve the Access Panel decision where this brings new data under the control of the Access Panel or requires compulsory data collection or supply.

The criteria for Core Data field expansion would require a business case that includes “*demonstrated or estimated value to the New Zealand dairy farmer via an increased rate of genetic gain in the national dairy herd*” and consideration of the costs and investments for other participants in the sector.

This option maximises agility to respond to product and technology development, market conditions, consumer needs, and data requirements balanced by commercial considerations. We must be able to update Core Data fields within 3-6 months.

Our current view is that the mechanism proposed in Option (iii) should be used to develop the business case for all fields required for Animal Evaluation (i.e. all data required for the calculation of BW), to be designated as Core Data and under the control of the Access Panel.

For your reference, and in addition to existing Core Data fields, the following data is currently required to calculate BW:

-) Body condition score measurements undertaken by Certified Traits Other than Production (TOP) Inspectors orASUREQuality
-) Static liveweight and TOP liveweight measurements
-) Traits Other than Production (TOP) scores, specifically TOP scores for milking speed, overall opinion, legs, udder overall and dairy conformation

Data also required includes date, inspector, animal and herd identifier data for those measurements.

We also see that:

-) increasing consumer focus on the animal health and welfare of animals, improving the environmental outcomes of dairy cattle e.g. lower nitrate leaching and reduced methane production, and technological advancements, and;
-) probable integration of genomic breeding values or genotypes into NZAEL estimates of genetic merit

will mean that additional Core Data will be required to calculate BW in the foreseeable future.

Expansion of Core Data fields under the current Access Panels arrangements where all Core Data is available to applicants who meet a relatively low test of ‘not harming’ the NZ dairy sector creates tension between data suppliers and potential applicants.

This tension reduces investment in data collection and innovation by current and potential data suppliers, and may have a detrimental outcome. There is also a risk that the commercial players back away from the NBO and BW as a marketing strategy and shift their investment

to differentiate their commercial products from BW and undermine the NBO. Australia took this path at considerable cost to the dairy sector there due to low genetic gain and the subsequent cost to government and the sector of reversing the damage by creating DataGene.

To mitigate this risk, DairyNZ proposes that Core Data is segregated into two sets:

1. Core Data – Data required to calculate BW supplied under compulsion, which the Access Panel has control over and would require Ministerial/Director General approval.
2. Core Data (Restricted) - Data required for animal evaluation that the Access Panel does not control access to. Rather, these data are supplied and used specifically for national animal evaluation and research purposes e.g. genotype or sequence data.

This construct (or similar) would allow the flexible expansion of data required for animal evaluation purposes, but reduce the risk of companies not participating and investing in improving the national genetic evaluation system.

An expanded list of Core Data fields would promote the expansion of industry good research into novel areas, promote collaboration between research organisations, provide greater value from maintaining the Core Database, and increase the outputs and impacts of industry good research.

We would also propose that the Manager of Core Database:

-) Adopts ICAR Standards or develop its own Standards for Core Data not covered by ICAR Standards or existing NZ Data Standards
-) List Core Data fields and associated Data Standards on the DairyNZ Website

We further propose that regulations would refer to a webpage that stated the current list of Core Data fields as approved by an independent Panel.

Q3: Under option (ii) are you able to provide an estimate of costs or lost revenue to herd testers?

Costs will only increase where new data is to be collected. This might include, for example, puberty data in yearling heifers to support the calculation of the fertility BV. This is a possible outcome of current research at DairyNZ. The process of bringing new data fields into Core data will require a business case and consultation with the sector and with the Access Panel.

The constructive tension that this creates for NZAEL to justify expansion of data collection, the ability of the data providers to refuse to collect those data, and the ability of NZAEL to negotiate cost-sharing of data collection should mitigate against cost increases that are not justified or important data not being collected.

Q4: Are there other options that should be considered?

Our view is that ***Option (iii)*** is optimal, but that it requires some finessing of detail as described above.

HERD TESTING TECHNOLOGIES ARE CHANGING

Q5: Have we correctly described the issue?

Yes. We agree with the need to enable organisations other than Certified Herd Testers to supply data to the DIGAD. The question of compulsion to record and/or supply data is under-emphasised. Currently Herd Testers are compelled to supply data not directly related to herd testing (e.g. calving date) where this is necessary for animal evaluation.

As an example of data that is collected but not supplied, the unrecorded use of hormonal reproductive treatments is probably leading to poor estimates of reproductive performance especially in young cows. It is likely that these data will be collected routinely by vets in future, but these data may not be transferred to a farmer's herd records. In this case it would be beneficial to be able to compel the data to be sent to the DIGAD.

NZAEL supports the ability of the Access Panel in designating Core Data to include compulsion to collect and supply.

Q6: Under Option (ii) are there any arrangements that could provide for a new class of person to provide data?

We support ***Option (ii) Provide for a new class of persons to provide data.***

We propose that **Certified Data Providers not just Certified Herd Testers** could provide data to the Core Database. The current approach allows only a Certified Herd Tester to provide data to the Core Database, creating an unnecessary barrier for companies who may not provide herd testing services but provide other important measurement services and collect data that could accelerate rates of genetic gain in the national dairy herd.

The current focus on herd testing produces only a small subset of the data required to estimate genetic indices and requires other potential Core Data providers (e.g. organisations with animal treatment, pregnancy, or parentage, data etc.) to negotiate data transfer agreements and arrangements with Certified Herd Testers as a "pass-through" to the Core Database. Our preference is that all data comes via Herd Record Providers as this is most efficient and farmers would have all their cow related data in one place. However, we recognise that commercial pressures and investment decisions mean that this may not always be possible, so the DIGAD should be able to receive data directly.

Certified Data Providers could be classed as follows:

-) Certified DNA Parentage Verification and Genotype Providers – these could provide parentage information and genotypes directly to Herd Record Providers and/or direct to the Core Database
-) Certified Phenotype Providers (e.g. liveweight, body condition score, Traits Other than Production, milk volume, fat and protein yield and other milk composition traits, somatic cell score and animal health treatment). These providers could provide phenotypic data directly to Herd Record Providers and/or direct to the Core Database. Note: Certified Herd Testers would become a class of these providers.
-) Certified Herd Record Providers - these would provide birth, mating, calving, fate, breed composition, death, sale, purchase and cow and herd movement information direct to the Core Database. They would receive male and female genetic indices.

We envision that these organisations would be Certified by an Internal Committee of Animal Recording (ICAR) process or an NZAEL-led certification process. Ongoing compliance would be assessed by Telarc (or equivalent organisation) and NZAEL.

Q7: Are there other options that should be considered?

No.

SECTION 6 - THE ACCESS PANEL

Q8: Do you consider that the statutory criteria by which the Access Panel determines access to data should be retained or amended?

We consider the current criteria of **beneficial or not harmful** to be too broad, too low, and not sufficiently objective and transparent. We would prefer applications evaluated against a narrower and higher standard of being **beneficial** using a published framework that guides Access Panel decision making to provide objectivity and external visibility regarding areas of data usage and the beneficial impact(s) of data usage.

Q9: Which of the above options do you prefer and why?

We recommend *Option (ii) Retain the current criteria with published guidance*. A published framework will provide greater objectivity.

Q10: If the criteria were amended or added to, what factors would be useful criteria to assess applications against?

Assessment criteria could include benefits in the following areas:

-) Financial
-) Environmental/sustainability
-) Science/knowledge creation
-) Product development
-) Animal health and welfare
-) Farm and animal performance
-) Social

We also recommend that Core Data applicants must provide examples or estimates of beneficial value in each of these areas for an application to be approved.

As set out in answers to Question 1, applications under which farmers effectively seek access to their own data for purposes related to DNA parentage verification or on-supply to third parties should be granted. However, the Access Panel should be satisfied that genuine market failure exists, and that this is preventing the preferred flow of data via Herd Record Providers or DNA parentage verification suppliers.

Q11: Are there any other options that should be considered?

No.

Functions of the Access Panel

Q12: Do you consider the Access Panel should carry out additional functions?

Yes

Q13: Which of the above options do you prefer and why?

NZAEL supports Option (ii).

We suggest that the functions of the Access Panel should include the current functions:

1. Evaluating applications for access to data in the Core Database (the Panel must take into account criteria set out in the Regulations in making a decision).
2. Determining other circumstances under which the manager of the Core Database must make data in the Core Database available (including, for example, at the request of persons who have supplied the information from which that data results).
3. Appointing an auditor to evaluate compliance by the Manager of the Core Database and LIC with requirements regarding the maintenance and provision of access to data as set out in the Regulations.

And additional functions, including:

4. Determining what is regulated Core Data
5. Determining what data must be supplied for the purposes of calculating BW, but not under the Panel's control on access
6. Providing guidance to the Manager of the Core Database on waiving per animal fees when access requests will produce industry good outcomes aligned with the Core Data Application

We believe that having an independent panel ultimately determining what is Core Data to be beneficial and will remove potential conflicts of interests.

Q14: Are there any other functions that should be considered?

No

Access Panel membership

Q15-Q18

We believe that the membership of the Panel should be reviewed to ensure their ability to assess applications based on areas covered under 6.1.1 above, and/or if the functions of the Access Panel are expanded.

6.1.4 Continued Access Panel oversight of LIC's copy of the Core Database

Q19: Do you support Option (i) or (ii)?

We support **Option (ii) Remove Access Panel oversight of core data held by LIC at a defined point in time after DairyNZ is able to receive core data direct from other organisations.**

We note that LIC (and CRV) is likely to apply to the Access Panel for the Core Data that LIC or CRV itself does not hold to recreate a complete Core Data set. In this situation, we see it as the role of the Access Panel to put sufficient conditions on LIC regarding the use of this data to protect and prevent the risk of third parties circumventing the Access Panel.

Q20: Should Access Panel oversight of LIC's copy of the Core Database be removed after 12 months or 24 months?

We believe 12 months is sufficient so long as the Access Panel places sufficient controls on LIC's use of the Core Data supplied from the DIGAD after this time.

MONITORING AND REPORTING

Access Panel annual reporting

Q21-23

We support the Access Panel primarily reporting to milksolids levy payers via its annual report and on the web but also reporting to the Minister of Agriculture. We believe that this reporting should be more informative and include:

-) Number of successful and non-successful applications
-) Specific criteria for which applications were granted

Manager of the Core Database annual reporting

Q24-26

We support *Option (ii) Establish reporting requirements and enable publication of some high-level information.*

We suggest that this information should include a summary of the:

-) Number of successful applications
-) List of successful applicants
-) High level summary of each of the successful applications with non-confidential information. Note: We would propose that these summaries would be published only when 12 months had elapsed after data was delivered
-) Benefits realised from past Core Data Extracts

CERTIFICATION OF HERD TESTERS AND ASSOCIATED OBLIGATIONS

Q27: What are your views on Options (i), (ii) and (iii) above.

We support the inclusion of all three options.

Option (i) Increasing decision-making clarity for the appointment of certification bodies

Option (ii) Increasing decision-making clarity for the revocation of approval of certification bodies

Option (iii) Including an obligation on the certification body to advise the Director-General if its ability to certify may change

Q28 Other issues in relation to certification?

As indicated under Q6, we see that Certified Data Providers not just Certified Herd Testers would be compelled to provide Core Data to the Core Database. Certified Data Provider obligations would include adhering to data standards, audits and ensuring they are compliant. The Certification protocol for those other types of Certified organisations may or may not include Director-General of MPI involvement, but we see it as important that a certifying body independent of NZAEL or DairyNZ is integral in that process.