



ANNUAL OPERATING PLAN 2023/24

JUNE 2023

DataGene Limited






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Executive Summary

DataGene’s 2023/24 Annual Operating Plan outlines the work plan for the year and presents the financial outlook to deliver on these goals. DataGene’s operations and activities are directed by the Strategic Priorities within its five-year Business Plan (2019/20 to 2023/24) which incorporates guidance from the Herd Improvement Strategy 2019-2024. DataGene’s key deliverables for 2023/24 are summarised below by strategic priority area.

TABLE 1: Delivery Priorities for 2023/24

<p>Data-driven Decisions</p> 	<ul style="list-style-type: none"> • Data Connect project: Develop a short to medium-term data exchange solution until the iDDEN¹ data exchange hub is fully integrated across multiple equipment and software manufacturers. • Continue integration of the iDDEN data exchange hub with international equipment manufacturers and the CDR. • Increase uptake of HerdPlatform and associated tools (especially MIR Conception Tool and Selective Dry Cow Tool) through DataVat. • Explore opportunities to provide a platform for sustainability reporting across the supply chain.
<p>Animal Performance</p> 	<ul style="list-style-type: none"> • Promote use of the Sustainability Index and help drive industry sustainability initiatives. • Maintain support for heifer genomic testing uptake and continue to increase heifer testing. • Continue the focus on the Good Bulls strategy. • Rebuild DataGene website to improve functionality and user experience.
<p>Herd Improvement R&D</p> 	<ul style="list-style-type: none"> • Improve parentage reporting. • Improve efficiency of delivery for Semen Fertility and Red Breed Genomics. • Review the use of MACE² for type breeding values and review methods to improve stability of breeding values. • Maintain Ginfo farmer participation at current levels, including classifications and genotyping.
<p>Service Provision</p> 	<ul style="list-style-type: none"> • Agree a new Funding Agreement with Dairy Australia and agree a new five-year business plan. • Foster collaboration with industry stakeholders through regular Standing Committees and other meeting opportunities. • Maintain security auditing and penetration testing of DataGene systems. • Finalise and begin implementation of a DataGene Digital Strategy.

¹ International Dairy Data Exchange Network

² Multiple Across Country Evaluation, which is performed by Interbull.

The outlook for DataGene’s financial performance in 2023/24 indicates a similar level of income to 2022/23 matched by carefully controlled expenditure at the same level. Dairy Australia’s Funding Agreement remains critical to the operations of the business and accounts for 43% of total income. The major expenditure is on salaries which accounts for 56% of DataGene’s total expenditure. Depreciation and amortisation reflect the significant investment in IT infrastructure and continue to be a major expense line. The 2023/24 budget framework will deliver a break-even EBITDA² bottom-line whilst maintaining a fiscally sound cash position.

TABLE 2: Financial Summary

BUDGET INCOME STATEMENT	Budget 2023/24	Forecast 2022/23
Total Income	5,888,000	5,920,500
Total Expenditure	5,888,000	6,109,000
Operating Surplus/(Deficit) excl non-cash	0	(188,500)
Depreciation & amortisation	492,000	493,000
Surplus/(Deficit) incl non-cash	(492,000)	(681,500)

BALANCE SHEET	Budget 2023/24	Forecast 2022/23
Assets	6,610,000	7,677,000
Liabilities	2,660,000	2,584,000
Net assets	3,950,000	5,093,000

BUDGET CASHFLOW	Budget 2023/24	Forecast 2022/23
Cash at beginning of the financial year	1,886,000	1,795,000
Net cash provided by operating activities	-159,000	190,000
Cash used in investing activities	-129,000	-99,000
Cash at end of the financial year	1,598,000	1,886,000

About DataGene

DataGene is owned by the Australian dairy industry, with foundation members being Dairy Australia, Australian Dairy Farmers (ADF) and the National Herd Improvement Association (NHIA). In February 2023, total membership of DataGene was 27 members including herd test centres, genetics suppliers, genetic service providers, data service providers and breed associations.

Our Vision

Enabling farmers and industry to maximise profit through data-driven decisions

Our Mission

DataGene delivers world-class genetic evaluation, software, and decision-making tools to enable Australian farmers to improve their herd and maximise their profit through data-driven decisions and innovative industry services.

Our Values

1. **COMMITMENT TO CLIENTS** - We work towards shared and innovative outcomes for members and stakeholders.
2. **DIRECT, OPEN & HONEST COMMUNICATION** - We depend on genuine and sustained stakeholder engagement.
3. **INCLUSIVE** - We are genuinely inclusive and value farmer and member involvement in governance and oversight functions.
4. **INNOVATIVE** - We aim to be creative and innovative in our products and services.
5. **ENGAGEMENT WITH EMPLOYEES** - We treat our people with respect, support them in their development and value their contribution to our success.
6. **INTEGRITY & ETHICAL VALUES** - We apply best-practice corporate governance and financial management principles

DataGene collaborates with a range of organisations to enable pre-competitive actions such as data sharing, the development and conduct of research and development, extension activities, strategy development and promotion of the dairy industry and the herd improvement sector.

Introduction

DataGene’s operations and activities are governed by a five-year Business Plan (2019/20 to 2023/24) which incorporates direction from the Herd Improvement Strategy 2019-2024. The strategic priorities identified in the Business Plan are summarized below:

TABLE 3: DataGene’s Business Plan 2020-24 snapshot

	Business Plan Strategic Priorities 2020-24	DataGene 2023/24 AOP Key Focus Areas
Improved decision-making from data	<ul style="list-style-type: none"> Develop and support new decision tools Expand and secure additional data Drive and support industry innovation 	<ul style="list-style-type: none"> Support uptake of HerdPlatform Deliver Data Connect Implement iDDEN Connection Increase access to phenotypes
Increased animal performance through herd improvement	<ul style="list-style-type: none"> Increase reliabilities Improve service delivery Increase farmer and industry service uptake Increase the number of genomically-tested females 	<ul style="list-style-type: none"> Increase use of Australian metrics Increase replacements from good bulls Streamline evaluation service Clear value proposition
Improved animal performance from research and development	<ul style="list-style-type: none"> Deliver new health breeding values Use genomics and other technology (e.g., MIR) to predict future performance 	<ul style="list-style-type: none"> Increase genomic technology use Support rollout of the Clinical Mastitis App Deliver MIR Conception for FOSS machines
Improved and diversified services	<ul style="list-style-type: none"> Build and maintain DataGene and industry infrastructure Develop and maintain industry solutions Establish new revenue streams 	<ul style="list-style-type: none"> Shared infrastructure and capability Right-sized support functions Coordinated service development Expanded collaboration

This Annual Operating Plan outlines the work plan and the targets DataGene aims to achieve in the 2023/24 year and the financials to achieve this. In general, the content of the Annual Operating Plan is at a summary level and a greater level of detail is within individual tracking tools for each business unit.

The DataGene Board and management regularly monitor a variety of performance metrics that cover the genetic merit of the national herd, the market acceptance of DataGene products and services, herd recording levels, and extension and communication reach. The primary metrics are shown in Table 4 on the next page.

TABLE 4: Primary metrics for DataGene

<p>1. The average rate of genetic gain for sires of cows for BPI exceeding \$30/cow/year over a 10-year period.</p>	<p>In April 2023, this is currently at \$28.82/cow/year over the previous 10-year period.</p>
<p>2. The level of female genomic testing increasing annually by at least 15%.</p>	<p>61,531 females were genomically tested during 2021/22 and full-year results for 2022/23 are expected to exceed 100,000 females.</p> <p>The increase in full-year results represents an increase of 13% from 2020/21.</p>
<p>3. The number of new cows with phenotypes in CDR increasing annually by 5% of the previous year.</p>	<p>The number of cows with data in the CDR in April 2023 has increased to 17.1 million cows.</p> <p>This represents an increase of 4.3% from 2022.</p>

2022-23 Achievements

- The annual rate of genetic gain for the Balanced Performance Index (BPI) for sires of Holstein cows increased to \$32.62 per cow in 2022-23.
- An increase of \$15.63/cow/year was also recorded for sires of cows in the Jersey breed.
- The Sustainability Index was included in August 2022 release of Australian Breeding Values.
- The mid-infrared spectroscopy (MIR) Conception Tool and Selective Dry Cow Tool (SDCT) were launched.
- 11,000 dairy animals added to the reference population to increase the reliability and stability of Australia’s genomic Breeding Values (ABVs).
- Updated Mastitis Resistance ABV included in August 2022 ABV release.

DataGene structure and governance

DataGene Board

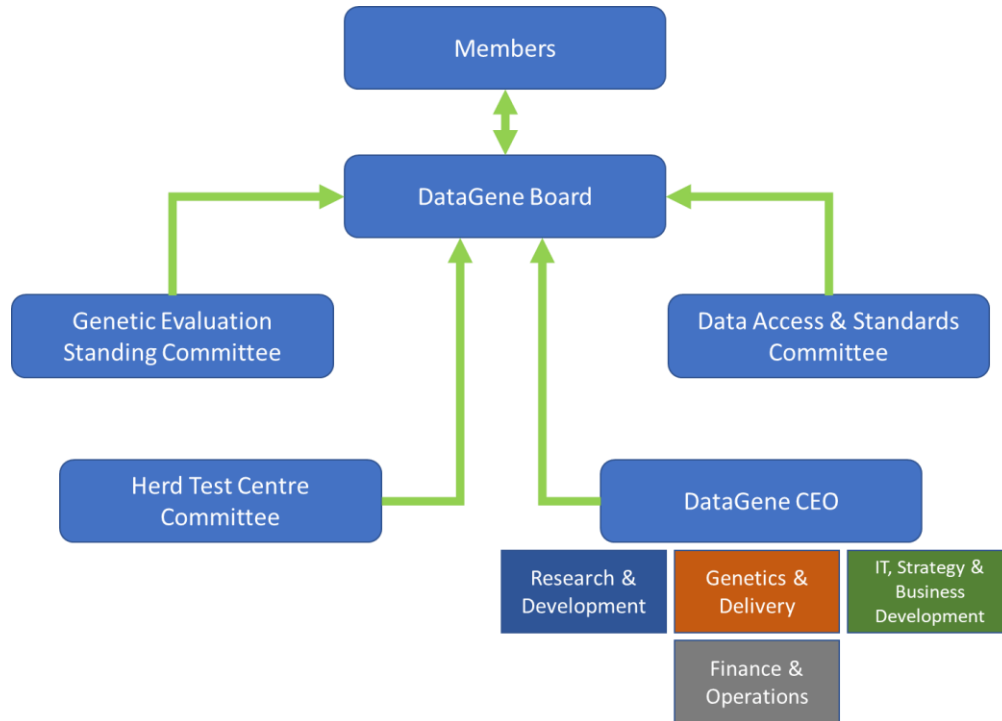
DataGene is governed by a seven-member, skills-based Board. Board members are elected at an Annual General Meeting (AGM) on their knowledge and experience in dairy, herd improvement, finance, and governance. The Board must include three Directors with direct expertise in dairy farm management. Directors serve three-year terms and up to three consecutive terms (i.e., nine years in total). The ongoing rotation of Directors ensures the continuing refreshment of skills and experience on the Board. One new Board member and one re-standing Board member were elected at the DataGene AGM in November 2022.

DataGene will conduct an open call for nominations in July 2023 for three Board positions that are due for election at the AGM in November 2023. As described in the Constitution, the Nominations Committee will consider and select candidates that will stand for election at the AGM.

The Board and management will continue to review significant company policies according to the agreed rotation schedule. In 2023/24, policies for review are Cash Reserves, Performance Improvement, Social Media, Unacceptable Behaviour and Intellectual Property.

DataGene Committees

The six recommendations from the 2021/22 review of the Standing Committee structure and membership were implemented during 2022/23. DataGene’s Committee structure now consists of the Genetic Evaluation Standing Committee (GESC), the Data Access and Standards Standing Committee (DASC) and the Herd Test Centre Committee (HTCC).



DataGene’s Standing Committees enable members to have direct influence over DataGene’s priorities and program activities. These Committees are not simply advisory bodies, but exercise authority as delegated by the DataGene Board. The Committees comprise individuals from within the dairy industry and herd improvement sector who possess relevant skills and experiences. Standing Committee members are either nominated by stakeholders for DataGene Board approval or appointed directly by the DataGene Board, according to the terms of reference for each Committee’s structure. Each Standing Committee is chaired by a DataGene Board member and includes at least one DataGene management team member.

Committee	Role	Membership
Genetic Evaluation Standing Committee (GESC)	<p>Provides advice and recommendations to the DataGene Board on specialist matters in relation to genetic evaluation and related technologies.</p> <p>The Genetic Evaluation Standing Committee helped prioritise projects that are presented in this AOP.</p>	<p>Farmer Chair</p> <p>DataGene’s Chief Executive Officer & Stakeholder Relations Manager</p> <p>Representatives from:</p> <ul style="list-style-type: none"> • Dairy farmers (2) • Breed organisations (2) • DairyBio (1) • Genetics company (4) • Genomics service provider (1) • ADF (1) • Dairy Australia (1)

Data Access and Standards Standing Committee (DASC)	Provides advice and recommendations to the DataGene Board on specialist matters in relation to the development and implementation of data standards and sharing. The Committee will also provide advisory services to the broader herd improvement industry to assist in decision-making regarding data access and standards	Farmer Chair DataGene’s Chief Executive Officer & Chief Information Officer Representatives from: <ul style="list-style-type: none"> • Herd Test Centres (3) • Software providers (3) • Dairy farmers (2) • Breed organisations (2) • Genetics company (1) • ADF (1) • Dairy Australia (1)
Herd Test Centre Committee (HTCC)	Makes recommendations and proposals to DataGene Board and management, and respective centre Boards (or equivalent) on herd test-related matters, including software and service development. Enables collaboration on pre-competitive projects.	DataGene’s Chief Executive Officer & Stakeholder Relations Specialist 1 representative each from: <ul style="list-style-type: none"> • National Herd Development (NHD) • HICO • Dairy Express • TasHerd • FarmWest • Yarram Herd Services

Organisational Structure

DataGene’s organisational structure is based on the following functional areas and roles:

Chief Executive Officer			
Research & Development	Genetics & Delivery	IT, Strategy & Business Development	Finance & Operations
<ul style="list-style-type: none"> • Lead Scientist • Geneticist / Team Leader • Geneticists • Genomic Services Officer 	<ul style="list-style-type: none"> • Stakeholder Relations Manager • Comms & Marketing Manager • Stakeholder Relations Specialist • Industry Liaison • Project Officer • Genomic Acceleration • Data and Services Manager 	<ul style="list-style-type: none"> • Group Leader - Strategy, IT & Business Development • Chief Information Officer • IT Manager • Project Managers • Senior Software Engineer • Software Developers • Systems Administrators 	<ul style="list-style-type: none"> • Chief Financial & Operating Officer • Executive Assistant • Bookkeeper

DataGene’s Leadership Team comprises the heads of each business unit and other key staff (including those from DairyBio) and meets regularly. The Lead Science function is provided by DairyBio rather than by a DataGene employee. However, the integration of the science into the implementation framework was a key driver for the creation of DataGene. The AOP forms the basis for the goals of each business unit and relevant aspects are incorporated into the workplans of each DataGene employee.

DataGene's risk management

DataGene's Board and Management manage risk through a variety of means:

- Regular reviews of the formal risk register for internal, external and project risks.
- Undertaking horizon-scanning and a SWOT analysis annually for issues, threats, and opportunities.
- An annual security audit and penetration testing of DataGene's information technology systems by an external IT security consultant.
- Appropriate insurance policies including Business Insurance, Public Liability and Product Liability, Directors and Officers (D & O) Insurance, Professional Indemnity Insurance, and Cyber Insurance.

DataGene stakeholders

DataGene has a range of strategic relationships, end-users, customers, and stakeholders with which it interacts at various levels.

Dairy farmers

- Contribute funding via dairy farmer levies paid to Dairy Australia
- Primary audience and users of Australian Breeding Values
- Use tools such as the Good Bulls App, Genetic Progress Report, DataVat, and HerdPlatform
- Buy DataGene products such as Genomic Breeding Values
- Are a key audience for DataGene extension, communications, and marketing activities
- Supply data to drive genetic evaluations

Service providers (breed organisations, herd test centres, etc.)

- Use breeding values and tools such as the Good Bulls App, Genetic Progress Report, DataVat, and HerdPlatform
- Work collaboratively with DataGene on projects
- Are a key audience for DataGene communications and marketing activities
- Purchase DataGene services such as breeding values and software
- Provide data to DataVat and are part of the industry's data pipeline

Industry partners

- **Dairy Australia** is the primary funder and a founding member of DataGene. Dairy Australia also operates as a client of DataGene in the development of software solutions such as the updates to the Fertility and Mastitis Focus Reports.
- **Australian Dairy Farmers (ADF)** has a key role to ensure that DataGene's priorities and activities reflect the priorities of the dairy farmer community, in addition to DataGene's many direct interactions with farmers. DataGene relies on ADF to be publicly supportive of and a strong advocate for, herd improvement. DataGene also has a direct relationship with farmers through its products, services, extension, and communications.

- **National Herd Improvement Association (NHIA)** is a founding member of DataGene. DataGene also has direct relationships with many NHIA members, who are also members of DataGene.

In addition, there are important relationships with non-NHIA members such as Zoetis, Neogen, Easy Dairy and Apiam. These are key relationships for the delivery of DataGene products and services and the development pipeline for new products and services, particularly as they are major clients and contributors of data, respectively. Zoetis and Neogen deliver genomic services and Easy Dairy and Apiam provide software to the vet industry and farmers. They are key collaborators for data and data services with DataVat.

- **Agriculture Victoria** is an in-kind contributor to DataGene in terms of supporting overhead costs for some in the Genetic Evaluation team; it is a user of DataGene data; and it is a strategic partner in its provision of research outputs to industry through DairyBio. DataGene's Lead Scientist is also provided by Agriculture Victoria.
- DataGene also works closely with other non-members, such as the Gardiner Dairy Foundation on specific projects. DataGene collaborates with Agricultural Business Research Institute (ABRI) on key information technology development projects, particularly relating to herd test reporting. DataGene also works with and provides services to other industries, such as the Cotton Rural Development Corporation (CRDC) and the Animal Genetics and Breeding Unit (AGBU).

International collaborators

- **Interbull** is a vital partner to deliver accurate breeding values to the Australian industry.
- **International Dairy Data Exchange Network (iDDEN)** will become an important link between the Centralised Data Repository (CDR) and other dairy data sources.
- **Council on Dairy Cattle Breeding (CDCB)** is a valuable partner and customer for software development in the United States.
- **International Committee on Animal Recording (ICAR)** provides standards, guidelines, and networks to shape services.
- **TMA Solutions** (DataGene's IT service partner in Vietnam) work closely with DataGene staff on developing and maintaining systems and tools for DataGene's use and for the development of products for customers.
- **International herd improvement organisations** such as those in the UK, Canada, New Zealand and Ireland are important future partners for collaboration on delivering new and improved genetic evaluation tools as well as management tools.

The year ahead: 2023/24 outlook

Industry

The operating environment for DataGene in 2023/24 is expected to remain broadly optimistic. Competition by processors for milk in Australia has driven historically strong milk prices and the financial performance of many dairy farm businesses. However, it is expected that international milk production will grow modestly in 2023 from most regions apart from Australia.

Australian cow numbers continued to fall to 1.340 million cows in 2021/22, representing a 3.5% fall from 2020/21. Data indicates that culling was at increased levels at the start of 2021/22, compared to the prior year. Australian exports of live dairy heifers were 98,464 head in 2021/22, an increase of 8.5% from 2020/21 and about 24% above the five-year average.

With the impact of production constraints of flooding and excessive rainfall, as well as increased input costs, Dairy Australia forecasts 2022/23 full year milk production to fall by between 4% and 6% to between 8.0 and 8.2 billion litres in 2022/23. Dairy Australia is projecting the milk pool will stabilise in the 2023/24 season.

In 2021/22 there were 4,420 registered dairy farms operating in Australia, a 4.3% decrease in farm numbers from the previous year. 1,882 herds participated in herd testing in 2021/22 representing total cow numbers of 506,707. This equates to 38% of all cows being herd tested and a 4% decrease in cows participating in herd testing from the previous year.

Financial

The objective in the 2023/24 budget process was to identify income and control expenditure to deliver a break-even Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA), maintain a healthy Balance Sheet and the continuation of prudent cash reserves. These cash reserves are critical to enable the company to successfully weather the cyclical nature of agriculture and to fund the future redevelopment of major pieces of infrastructure, such as the genetic evaluation system, DataVat and datagene.com.au.

An important key date is approaching with the current five-year Funding Agreement with Dairy Australia (2019/20 to 2023/24) being due for renegotiation at the end of this AOP period. Preparation for a new Funding Agreement, including a Five-Year Business Plan and a comprehensive project proposal and budgets will be required during Q1 2024.





In addition to the Dairy Australia funding, the 2023/24 budgeted income includes the delivery of existing services such as ABVgs, bull testing, Ginfo calf testing, export heifers and Centre software. In addition, the successful delivery of contracted projects and the securing of new projects are critical to income. Expenditure remains very similar to the previous year with salaries being the largest expenditure item. Depreciation and amortisation again reflect the significant investment in IT infrastructure development and continue to be a major expense line and cause of decreasing assets. The cash balance is expected to fall in 2023/24 due to continued investment in infrastructure as well as a deficit in cash provided by operating activities as DataGene invests in improving its services. The Board reviews its Reserve Policy every year in order to assure adequate reserves and to assess its ability to invest in upgrading services and infrastructure.

As always, actual performance compared to budget will be reviewed throughout the year to ensure delivery of the financial goals. Should there be any shortfall in expected revenue during the year this will be mitigated by changes to expenditure which would be instituted by management in a timely manner. In addition, all expenditure is tightly controlled and options for operational efficiencies investigated.

The DataGene Digital Strategy, a part of the larger Five-Year Business Plan, proposed for 2023/24 will require additional Board discussion and consideration. Components of the strategy are listed in the work plan but are not included in the budget. Once fully prepared each proposal will be presented to the Board for consideration.

Annual Operating Plan 2023/24

TABLE 5: Delivery Priorities for 2023/24

<p>Data-driven Decisions</p> 	<ul style="list-style-type: none"> • Data Connect project: Develop a short to medium-term data exchange solution until the iDDEN data exchange hub is fully integrated across multiple equipment and software manufacturers. • Continue integration of the iDDEN data exchange hub with international equipment manufacturers and the CDR. • Increase uptake of HerdPlatform and associated tools (especially MIR Conception Tool and Selective Dry Cow Tool) through DataVat. • Explore opportunities to provide a platform for sustainability reporting across the supply chain.
<p>Animal Performance</p> 	<ul style="list-style-type: none"> • Promote use of the Sustainability Index and help drive industry sustainability initiatives. • Maintain support for heifer genomic testing uptake and continue to increase heifer testing. • Continue the focus on the Good Bulls strategy. • Rebuild DataGene website to improve functionality and user experience.
<p>Herd Improvement R&D</p> 	<ul style="list-style-type: none"> • Improve parentage reporting. • Improve efficiency of delivery for Semen Fertility and Red Breed Genomics. • Review the use of MACE for type breeding values and review methods to improve stability of breeding values. • Maintain Ginfo farmer participation at current levels, including classifications and genotyping.
<p>Service Provision</p> 	<ul style="list-style-type: none"> • Agree a new Funding Agreement with Dairy Australia and agree a new five-year business plan. • Foster collaboration with industry stakeholders through regular Standing Committees and other meeting opportunities. • Maintain security auditing and penetration testing of DataGene systems. • Finalise and begin implementation of a DataGene Digital Strategy.

Key deliverables in the annual workplan have been prioritised as MUST DO, SHOULD DO or COULD DO according to criteria in Table 6 below. The expectation is that not all KPIs may be delivered in 2023/24 but are presented as stretch targets to drive improvements in key metrics. Activity in the Projects section marked with an * and in italics are capital investments that are not included in the budget attached. They will be the subject of individual investment decision papers which will be taken to the Board. In addition, Business as Usual and ongoing work has been separated out into its own section with the same layout and coding. A range of projects touch on various aspects of sustainability, such as work on the Sustainability Index, beef on dairy, reporting and tools across the value chain, and working with DairyBio to collect methane phenotypes.

TABLE 6: Deliverable prioritisation

1	Highest priority and key deliverables ('MUST DO')	<ul style="list-style-type: none">• A non-negotiable requirement to meet business needs.• Critical to the current delivery timeframe for the project or organisation to be a success.
2	Medium priority and secondary deliverables ('SHOULD DO')	<ul style="list-style-type: none">• Should have this requirement, if possible, but project or organisational success does not rely on it.• Important but not necessary for delivery in the current delivery timeframe.• They are often not as time-critical or there may be another way to satisfy the requirement so that it can be held back until a future delivery timeframe.
3	Lower priority and will be delivered if resources allow ('COULD DO')	<ul style="list-style-type: none">• Could have this requirement if it does not affect anything else in the project or organisation.• Desirable but not necessary, e.g., could improve the user experience or customer satisfaction for little development cost.• These will typically be included if time and resources permit.

Strategic Priorities - Projects

Strategic Priority 1 – Improved Decision Making from Data

Area	Activity	Completion Date	2023-24 Target/Outcome	Priority	Dependencies & Prerequisites
1.1 DataVat Maintain, support, and enhance DataVat, including prioritised developments and upgrades	Rebuild DataVat*	15 August 2023	Stakeholder consultation	1	Agreement on Digital Strategy and approval by the Board of a proposal
		30 January 2024	BRD complete		
		31 March 2024	Design		
		30 May 2024	DataVat delivered into test environment		
	Automate National Stats calculations from CDR	30 September 2023	National Statistics calculation automated from CDR	2	
	Automate sorting of files delivered from 1-Click	10 June 2023	BRD complete	3	
		7 July 2023	Build, test, release		
	Update DIF 105V3 daily	15 June 2023	BRD complete	2	Availability of key SMEs and development capacity
		30 July 2023	Build, test, release		
	Fix data transfer issue between Centre and the old database that is used for Fertility Focus Report	15 December 2023	BRD complete	1	
		30 June 2024	Build, test, release		
	Set Cow Search as a default window for farmers log in	28 August 2023	BRD complete	1	
		30 October 2023	Build, test, release		
	Display Progeny	15 February 2024	BRD complete	2	Availability of key SMEs and development capacity
		30 June 2024	Build, test, release		
Improve Within Herd Ranking Tool	30 July 2023	Collate user feedback	2		
	30 September 2023	BRD complete			
	14 November 2023	Build, test, release			
Improve sign in for HerdPlatform	30 July 2023	Collate user feedback	1		
	30 September 2023	BRD complete			
	14 November 2023	Build, test, release			
1.2 Coordinated Data Management	Data Connect*	30 June 2023	Draft BRD Complete	1	Agreement on Digital Strategy and approval by the Board of a proposal
		14 November 2024	POC data flow demonstrated at AGM		
		30 June 2024	Analyse data and suitability for DataGene products		

Area	Activity	Completion Date	2023-24 Target/Outcome	Priority	Dependencies & Prerequisites
		30 June 24	Re-design the schema of the CDR to enable data to flow between organisations via the API, including application of National Cow and Herd IDs	1	
		30 June 2024	Re-design the schema of CDR to accommodate Easy Dairy data through DataGene API (additional reporting) and connect Easy Dairy farms	1	
	iDDEN moving data between farm and CDR	30 June 2024	Two iDDEN customers able to exchange data with CDR	1	Willingness of 3 rd parties to connect
	HerdData App	30 September 2023	Options paper on use cases of HerdData App	1	
	Develop process to allow multiple termination codes to be recorded	30 September 2023	Review codes	2	Availability of key SMEs and development capacity
		31 October 2023	BRD complete		
1 March 2024	Build, test, release				
1.3 Herd Recording Innovation	Deliver Centre components as a service as per Digital Strategy*	30 June 2024	Begin delivering a number of components of Centre via data services on DataVat	1	Agreement on Digital Strategy and approval by the Board of a proposal
	Partnership model and resources to support innovative herd recording centres.	15 December 2023	Options paper on use of new on-farm data for reporting	2	
		30 June 2024	Allow inline and robotic data to populate Herd Reports	1	Willingness of 3 rd parties to participate
1.4 Decision Support Tools	MIR Conception	31 January 2024	BRD Complete for a MIR Conception Tool for FOSS machines at NHD	1	Reliant on DairyBio for new FOSS model
		15 March 2024	FOSS report implemented		
	Examine opportunities for development of tools and resources in Milk Quality and Sustainability across value chain, e.g., milk processors, quality assurance, etc.	31 March 2024	Options paper around Milk Quality and Sustainability Reporting	1	Availability of key SMEs
	Good Bulls App – Include semen fertility	31 July 2023	BRD complete	2	
1 October 2023		Build, test, release			
1.5 Access to Phenotypes	Methane	30 June 2024	Work with DairyBio to collect methane data from sensor devices	1	
	Ginfo	30 June 2024	Annual contact with each farmer	2	

Area	Activity	Completion Date	2023-24 Target/Outcome	Priority	Dependencies & Prerequisites
		15 September 2024	Options paper for post DairyBio genotyping	1	
	Load historic conformation data	1 September 2023	Historic conformation data loaded	3	Availability of key SMEs and development capacity
	Review options for getting additional data from insemination docket	15 December 2023	Prepare a report on options to increase data available for the semen fertility analysis, including AI docket entry and dedicated collection software	1	
		30 June 2024	Implement improvements in insemination data collection	2	Availability of key SMEs and development capacity

Strategic Priority 2 – Increased Animal Performance Through Herd Improvement

Area	Activity	Completion Date	2023-24 Target/Outcome	Priority	Dependencies & Prerequisites
2.1 Use of Australian Metrics	Develop a strategy for smaller breeds and sub-sections of industry	15 December 2023	Agreed strategy on a genomic approach for smaller breeds and sub-sections of industry	3	Availability of key SMEs
2.4 Clear Value Proposition	<i>Upgrade or redevelopment of corporate websites*</i>	1 July 2023	Complete BRD	1	Approval by the Board of a proposal.
		15 November 2023	AGM showcase		
		15 December 2023	New website is live		

Strategic Priority 3 – Improved Animal Performance Through Research and Development

Area	Activity	Completion Date	2023-24 Target/Outcome	Priority	Dependencies & Prerequisites
3.2 New and Improved Breeding Values and Management Tools	Update survival ABV	15 December 2023	Research Results complete	2	Reliant on DairyBio for delivery of model changes
		28 February 2024	GESC decision		
		30 May 2024	BRD complete		
		15 November 2024	Potential Implementation		
	Automate semen fertility	1 July 2023	Assess accuracy of new model	1	Availability of key SMEs
		1 July 2023	Decision by GESC to proceed		
		31 July 2023	BRD Complete		

Area	Activity	Completion Date	2023-24 Target/Outcome	Priority	Dependencies & Prerequisites
		1 October 2023	Semen fertility automated – Build, test, release		Availability of key SMEs and development capacity
	Automate red breed single step evaluation	11 July 2023	Released in ABV Run	1	
	Update genetic codes and haplotypes	30 September 2023	BRD complete	2	
		30 November 2023	Build, test, release		
	Increase BPI threshold for Good Bulls	15 June 2023	BRD complete	1	
		11 July 2023	Build, test, release		
	Update heat tolerance breeding value	30 September 2023	BRD complete	3	Availability of key SMEs and development capacity
		11 November 2023	Build, test, release		
	Automate Forward Prediction	30 July 2023	BRD complete	2	
		30 November 2023	Build, test, release		
	Calculate MACE type composites from MACE component traits and effects of MACE on proofs	1 November 2023	Report prepared for GESC	1	
		30 May 2024	BRD complete	2	Availability of key SMEs and development capacity
		15 November 2024	Build, test, release		
	Improve stability of breeding values	1 November 2023	Report prepared for GESC	1	Dependent on research outcomes
		30 May 2024	BRD complete		
		15 November 2024	Build, test, release		
	Update pedigree change report	31 July 2023	BRD complete	1	
		31 October 2023	Build, test, release		
	Update parentage report for Ginfo farmers	31 July 2023	BRD complete	1	
		31 October 2023	Build, test, release		
	Beef on Dairy	1 November 2023	Report on necessary steps to enable Beef on Dairy breeding values	1	
		30 November 2023	GESC decision on next steps		
		28 February 2024	BRD complete for any systems changes	2	Availability of key SMEs and development capacity
		30 June 2024	Build, test, release		
	NBO review for dairy, and potentially FVI	30 June 2024	NBO plan approved by GESC and Board	1	
	Support development of calf vitality	15 November 2023	Engage stakeholders	2	Dependent on research outcomes
		20 December 2023	BRD complete		
		31 May 2024	Build, test, release		

Area	Activity	Completion Date	2023-24 Target/Outcome	Priority	Dependencies & Prerequisites
3.3 Improved Genetic Evaluation Methodology	Improve MACE integration for red breeds	30 June 2024	Improve integration of MACE and genomic breeding values	1	Dependent on research outcomes
	Discussion paper on expanding single-step method to Holstein and Jersey	30 June 2024	Decision on movement to single-step	3	Availability of key SMEs
	Expression of traits	31 October 2023	Working group Recommendation	2	Availability of key SMEs and research outcomes
		30 November 2023	GESC decision		
		30 April 2024	BRD complete	3	Availability of key SMEs and development capacity
		15 November 2024	Build, test, release		

Strategic Priority 4 – Improved and Diversified Service Offerings

Area	Activity	Completion Date	2023-24 Target/Outcome	Priority	Dependencies & Prerequisites
4.1 Shared Infrastructure and Capability	DataGene Digital Strategy implemented	30 November 2023	Agree DataGene Digital Strategy as part of new five-year Business Plan	1	
		30 June 2024	GESNP Platform architecture and design	1	Agreement on Digital Strategy
		30 November 2023	Data Architecture Redesign document	1	Agreement on Digital Strategy
4.2 Adequate Support Functions	Ensure appropriate IT and Business infrastructure	30 March 2024	Mitigate any risks and issues highlighted by the implementation of the new technology recommended by Ronin Security Audit.	1	
		20 December 2023	Change DataGene program structure to mitigate key dependencies on individual TMA staff	1	
4.4 Expanded Collaboration	Maintain external client base	30 June 2024	Successfully contribute to Corporate Governance, Digital Strategy and data management requirements for the Australian Cotton Industry data platform project	1	
		20 December 2023	Implement a service support model for North America and Europe as required	1	

Area	Activity	Completion Date	2023-24 Target/Outcome	Priority	Dependencies & Prerequisites
	Discovery Day	30 June 2024	Strategically strong and high-quality program is delivered. Participants recognise the day as successful.	3	Availability of key SMEs

*Activity marked with an * and in italics are capital investments that are not included in the current budget. They will be the subject of individual investment decision papers which will be taken to the Board.*

Strategic Priorities – Business as Usual

Strategic Priority 1 – Improved Decision Making from Data

Area	Activity	Completion Date	2023-24 Target/Outcome	Priority/Status	Dependencies and Prerequisites
1.3 Herd Recording Innovation	Drive uptake of HerdPlatform	30 June 2024	Herd Test Centres and Service Providers well supported to increase uptake	1	Willingness of 3 rd parties to participate
	Partnership model and resources to support innovative herd recording centres.	30 June 2024	Evidence of collaboration between herd test centres in areas such as marketing, support, new tool development	2	Willingness of 3 rd parties to participate
1.5 Access to Phenotypes	Ginfo	30 June 2024	10,000 Genotypes 9,000 LTEs	1	Willingness of 3 rd parties to participate
		30 June 2024	Annual contact with each farmer	1	

Strategic Priority 2 – Increased Animal Performance Through Herd Improvement

Area	Activity	Completion Date	2023-24 Target/Outcome	Priority/Status	Dependencies and Prerequisites
2.1 Use of Australian Metrics	Continued implementation of extension strategy targeting bull selection	30 June 2024	Ongoing increase in reseller use of BPI Integration of DataGene extension resources to company marketing materials Evidence of BPI use continues to increase	1	
	Increase heifer genomic testing	30 June 2024	Engage and influence bull companies, genomic service providers and farmers to increase the number of heifers tested. Target: 216,756	1	
2.2 Increased Replacements from Good Bulls	Improve reseller extension	30 June 2024	Review strategies for working with resellers. Target: 100% using Good Bulls	2	
2.3 Innovation in Evaluations	Maintain/Improve delivery of core products	Ongoing	Maintain databases, workflows and processes	1	
		Weekly	Routine and public runs delivered on time	1	

Area	Activity	Completion Date	2023-24 Target/Outcome	Priority/Status	Dependencies and Prerequisites
		Monthly	Monitor genomic evaluation results to reduce the number of animals without results	1	
2.4 Clear Value Proposition	Improve delivery of extension and communication	15 July 2023	2023-24 Comms and Marketing plan drafted	1	
		30 June 2024	Delivery of 2023-24 plan	1	

Strategic Priority 4 – Improved and Diversified Service Offerings

Area	Activity	Completion Date	2023-24 Target/Outcome	Priority/Status	Dependencies and Prerequisites
4.1 Shared Infrastructure and Capability	Develop, support, and maintain DataVat	30 June 2024	DataVat continues to provide core functionality	1	
4.2 Adequate Support Functions	Ensure appropriate DataGene staff and Board capability to deliver support.	16 November 2023	A professional selection process results in the election of three directors at the AGM	1	
		30 June 2024	Ensure all staff have the opportunity to visit with farmers and herd improvement organisations and to understand the range of data uses.	2	Availability of key SMEs
		30 June 2024	Development and training needs assessed and acted upon	1	
	Ensure appropriate IT and Business infrastructure	30 May 2024	Run a new Security Audit with Ronin Consulting	1	
		30 June 2024	Update Disaster Recovery Plan and have it reviewed by Leadership group	1	
		Ongoing	Ensure that all staff are aware of and following the DataGene Delivery Framework and applying it to all projects	1	
4.3 Coordinated Service Development	Maintain customer engagement and implement improvements	30 June 2024	Maintain communication with users of DataVat, Centre, HerdData and the website, including any necessary training in use of HerdPlatform, GESNP and DataVat	1	

Area	Activity	Completion Date	2023-24 Target/Outcome	Priority/Status	Dependencies and Prerequisites
4.4 Expanded Collaboration	Maintain external client base	30 June 2024	Maintain at least three external clients with contracted projects	1	
		30 June 2024	Provide maintenance and support for CDCB Web Connect	1	
	Establish and maintain strong communication with stakeholders through effective Standing Committees	30 June 2024	Hold a minimum of two meetings of the Genetic Evaluation Standing Committee	1	
		30 June 2024	Hold a minimum of two meetings of the Data Access and Standards Standing Committee	1	
		30 June 2024	Hold a minimum of two meetings of the Herd Test Centre Committee	1	
	Deliver Forage Value indices for Perennial, Annual and Italian ryegrasses	15 December 2023	Breeding values and Index delivered for three types of pasture and the various regions	1	
	Upskilling herd improvement advisors re DataVat	30 June 2024	Training sessions conducted for herd improvement advisors (groups within organisation).	1	

2022-23 Financial Statements

The financial outlook has been prepared using the following assumptions:

1. The industry continues to operate as 'business as usual' (e.g., stable cow numbers and milk pool, no significant disruptions such as disease outbreak, etc.)
2. Project income includes a portion whose source has not yet been identified at this stage. Historically, management has been able to deliver new projects over the 12-month period to provide this income.
3. A stable workforce with strong staff retention.
4. Ongoing maintenance and refinement of GESNP, CDR and DataVat will continue to occur.

Income Statement

Overall, the 2023/24 total budget income is similar to the 2022/23 total forecast income. Expenditure on salaries continue to account for 56% of the total expenditure excluding depreciation and amortisation as we endeavour to maintain the strong skillsets we have built over previous years. Software development expense has reduced from the previous year as a large portion of the work will be delivered through internal resources. All expenses will be tightly controlled. This budget framework will deliver a break-even EBITDA bottom-line.

DataGene revenue sources

DataGene has four primary sources of revenue, and its goal remains to maintain diversified income streams:

- Core funding from Dairy Australia via the current Funding Agreement which runs to 30 June 2024
- Semen companies, genomic service providers and farmers paying for genetic evaluation services
- Herd improvement companies paying for Centre and other related software.
- Customers paying for projects delivering improved software, tools, reports and/or services

Business Development Projects, generate revenue through major and minor development and consulting projects, such as with the Council of Dairy Cattle Breeding (CDCB), Food Agility CRC and CRDC. These projects require a mixture of existing staff skills and experience, such as stakeholder engagement, IT and change management, and offshore development resources which DataGene then project manages. During the previous five budget years DataGene has generated new projects of similar value to that appearing in this AOP. This unidentified new project income is the major risk in this AOP, however management has clear strategies in place which will be implemented to mitigate any shortfall risk should it materialise.

Genetic evaluation services income budget of \$1,530,000 comprises service fees associated with ABV(g), pre-determined access fees, new calf testing, NASIS registrations, workability, and export heifer services.

Salaries and associated costs remain the largest expenditure item and equate to 56% of the total expenditure excluding depreciation and amortisation. Consultants' expenditure includes costs incurred for calf testing. These calf testing costs have a correlation to revenue for calf testing. Software development captures the costs to maintain GESNP, CDR, and DataVat plus project work undertaken with customers. It is important to note that Ginfo has moved into a maintenance phase following the efforts to deliver an increased number of herds in past financial years. Communications activities remain particularly important. All other expenditure is at similar levels to the previous financial year.

As demonstrated in previous financial years, expenditure will be monitored carefully in line with income and adjusted accordingly to maintain a sound financial position.

TABLE 7: Income Statement 2023-24

INCOME STATEMENT BUDGET	2023-24	2022/23
	Budget	Forecast ³
TOTAL INCOME	5,888,000	5,920,500
TOTAL EXPENDITURE	5,888,000	6,109,000
NET SURPLUS/(DEFICIT) FROM OPERATIONS	0	(188,500)
Less Depreciation & Amortisation	492,000	493,000
SURPLUS/(DEFICIT) INC NON-CASH	(492,000)	(681,500)

As shown in Table 7 above, the budget income statement shows a break-even EBITDA for the year. On a full accrual accounting basis, including depreciation and amortisation, the bottom line is in a deficit position. Depreciation and amortisation reflect the significant historic investment made into core IT infrastructure to create the genetic evaluation system, the Central Data Repository and DataVat. These core infrastructure pieces underpin DataGene's ability to deliver service to the industry.

Balance Sheet and Statement of Cashflow

The cash reserve position in the Balance Sheet at the end of 2023-24 is expected to be around \$1.598 million. This positions DataGene well for future infrastructure investment that will be required.

During the year there will be capital investment into new servers and storage expansion trays to support weekly ABV runs. Other investment includes notebooks, firewall hardware updates and the replacement of 2014 motor vehicles. \$129,000 has been budgeted for these purchases. In addition, potential projects around DataGene's Digital Strategy will be taken to the Board for approval. These may contain capital investments. These are not included in these financials.

The cash balance is expected to fall in 2023/24 due to continued investment in infrastructure as well as a deficit in cash provided by operating activities as DataGene invests in improving its services. The Board reviews its Reserve Policy every year in order to assure adequate reserves and to assess its ability to invest in upgrading services and infrastructure.

TABLE 8: Balance Sheet 2023-24

BALANCE SHEET BUDGET	2023-24
Total current assets	2,419,000
Total non-current assets	4,191,000
Total liabilities	2,660,000
Net assets	3,950,000
Assets	6,610,000
Liabilities	2,660,000
Net assets	3,950,000

³ as at May 2023

TABLE 9: Cashflow 2023-24

CASHFLOW FROM OPERATING ACTIVITIES	2023-24
Receipts from clients	6,774,000
Payments to suppliers and employees	6,538,000
Net cash provided by operating activities	236,000
BAS In/(Out)	(395,000)
Cash flow from operating activities	(159,000)
Cash used in investing activities	(129,000)
Net increase / (decrease) in cash held	(288,000)
Cash at end of the financial year	1,598,000

Appendix 1: Glossary

Abbreviation	Description
ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
ABV	Australian Breeding Value
ADF	Australian Dairy Farmers
AGBU	Animal Genetic and Breeding Unit
AGM	Annual General Meeting
AOP	Annual Operating Plan
API	Application programming interface
BPI	Balanced Performance Index
BRD	Business Requirements Document
CDCB	Council for Dairy Cattle Breeding
CDR	Central Data Repository
CRDC	Cotton Research & Development Corporation
DA	Dairy Australia
DASC	Data Access & Standards Committee
DIF	Data Exchange Format
EBITDA	Earnings before interest, taxes, depreciation, and amortization
GESC	Genetic Evaluation Standing Committee
GESNP	Genetic Evaluation System, New Platform
HISSG	Herd Improvement Industry Strategic Steering Group
HTCC	Herd Test Centre Committee
ICAR	International Committee on Animal Recording
iDDEN	International Dairy Data Exchange Network
KPI	Key performance indicator
LTE	Linear type evaluations

MACE	Multiple Across Country Evaluation, and international evaluation from Interbull
MIR	Mid-infrared
NHD	National Herd Development
NHIA	National Herd Improvement Organisation
SME	Subject matter expert