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New Zealand Blood Service

Annual Statement of Performance Expectations

1 July 2018 – 30 June 2019

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NZBLOOD
Te Ratonga Toto O Aotearoa

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1 INTRODUCTION

Purpose

This Annual Statement of Performance Expectations has been prepared in accordance with the Crown Entities Act 2004 and should be read in conjunction with the July 2017 – June 2021 NZBS Statement of Intent (SOI).

It sets out how the New Zealand Blood Service (NZBS) will organise itself and prudently deploy resources (in line with both the new April 2018 Government Expectations on Employment Relations in the State Sector and the 20 June 2018 Letter of Expectation from the Minister of Health) to ensure transparency, collaboration and value for money in the support of New Zealand's healthcare sector. It identifies for Parliament and the New Zealand public what NZBS intends to achieve and how performance will be assessed, in order to deliver on the organisation's strategic goals[1] and its single enduring Output Class and Outcome:

Health needs of people in New Zealand are supported by the availability of safe and appropriate blood, blood products, tissue products and related services.

Government Expectations for the 2018/19 Financial Year

This Statement of Performance Expectations has been prepared taking into account the Minister's 20 June 2018 Letter of Expectations for the 2018/19 financial year, requiring NZBS to take a whole of sector view and;

- *Focus on keeping costs to district health boards as low as possible while continuing to ensure the safe supply of blood and blood products as and when needed and;*
- *Continue to innovate where appropriate to support this goal.*

NZBS will also adhere to the Minister's more general expectations of:

- Ongoing fiscal discipline and prudent financial management;
- Contributing as part of the team approach across the health and disability system, to continue to improve service delivery, building on progress that has already been made to achieve better results for New Zealanders;
- Continuing the commitment to ongoing continuous performance improvement, including publishing non-sensitive performance information on the NZBS website to demonstrate openness, transparency and accountability;
- Working constructively with the Ministry of Health as required for all functions undertaken by the New Zealand Blood Service;

NZBS Strategy

The NZBS strategy is explained in detail in the Statement of Intent. What NZBS plans to achieve in the 2018/19 year as detailed in Part I of this document is linked to the following seven strategic goals:

[1] See Section 4 of SOI

	Strategic Goal
1.	NZBS builds on core capabilities to provide a range of products and services which are appropriate to New Zealand health needs and priorities.
2.	NZBS achieves the highest possible safety and quality standards in all that it does.
3.	NZBS manages a sustainable donor population capable of supporting ongoing product demand in New Zealand.
4.	NZBS relationships with other health sector entities are mutually supportive and productive.
5.	NZBS has a sustainable, competent and engaged workforce.
6.	NZBS uses international best practices and internal Research and Development capabilities to improve and develop products and services for the New Zealand health and disability sector.
7.	NZBS is a financially sustainable organisation operating effectively and efficiently.

Business Improvement Activities

In addition to maintaining a safe and secure supply of blood, blood products, tissue products and related services at all times, NZBS's main areas of focus for the 2018/19 year are related to the following business improvement activities:

Ensuring Appropriate Blood Product Utilisation

NZBS is a demand driven service. It works in partnership with prescribing clinicians in the District Health Boards (DHBs) and with Hospital Transfusion Committees to ensure clinically appropriate utilisation of blood and blood products. This is very effective, as evidenced by the ongoing reduction in demand for Red Blood Cells (RBCs) as DHBs, with the support of NZBS, have progressively implemented patient blood management programmes. This reduction in RBC prescribing, whilst good medical practice and overall reducing sector costs, does create financial challenges for NZBS with the associated loss of production volume and product dispensed.

Immunoglobulin product (IVIg) utilisation is also closely managed and monitored, as this drives plasmapheresis collection activity. Historically, the rate of growth in New Zealand has been lower than that seen in other countries. For example, growth in Australia is consistently between 11-13% per annum, whereas up until 2015 NZBS growth was on average 6.5% per annum and since then it has reduced to between 0 – 4%.

While the 2017/18 financial year has seen an 11% increase in IVIg demand growth, a medium growth outlook (5% per annum) for immunoglobulin is reflected over the current 4 year planning horizon.

These changes in demand are forecast to continue into the 2018/19 financial year therefore NZBS will continue to flex its collection activity to align with actual demand in order to minimise expiry levels.

Collections and Facilities

Over the period of this SPE and the associated SOI, NZBS will seek to ensure optimum efficiency of the blood collection and processing network. This will include;

- Establishment of processing of Haematopoietic Progenitor Cells (HPC) at the Wellington site from late 2018. This will provide support for the stem cell therapy programme in the Central region.

- During 2018, planning will be finalised for the refurbishment and improvement of the main Auckland laboratory facilities. By 2022 this will provide a second future proofed processing facility (along with Christchurch) capable of servicing the blood supply needs for the whole of New Zealand if required.
- The Auckland site also houses the National Tissue Typing and National Reference Laboratory. Growth and new technologies in these areas requires an update in space and configuration planned over the next 2 – 3 years.
- NZBS leases all of its buildings and regularly reviews its overall facility infrastructure in response to changes in forecast collection and manufacturing requirements. The major changes planned are to ensure that New Zealand maintains at least two hub sites capable of processing the blood product supply for the entire country whilst providing the most cost effective method of supply chain management and service delivery.
- NZBS will deploy business improvement programmes across our major sites, utilising LEAN methodologies, to ensure that we can minimise the capital outlay needed to extend and refurbish those sites. Staff will be supported to lead the redesign of their working environments with particular focus on the Auckland hub site which has been signalled for extension and/or refurbishment for several years.
- Due to the continued decline in demand for red blood cells and the increasing cost of facility operations we will consider the potential rationalisation of red blood cell only collection sites. We will ensure that donors continue to have the ability to donate locally by enhancing mobile collections where efficient to do so.

Business Improvement activities

Safety is the cornerstone of everything that NZBS does, therefore quality and ongoing process improvement is embedded in the way that we work.

- A major focus for business improvement activity for 2018/19 will be the area of productivity improvements in donor services and technical services. We have built in savings to reflect this activity both in cost avoidance terms and real savings in operations.
- During 2018/19 NZBS will accelerate process improvements through our '*Process Excellence'* programme, aimed at implementing LEAN systems and processes across NZBS operations. This is multi-year activity based on a programme of work which will engage and develop staff from the front-line in delivering meaningful improvements, building on NZBS's culture of safety and excellence. In addition to direct process improvements, savings targets associated with these projects have been incorporated within the financial projections.
- Following a successful Executive management restructure in 2017 we will complete further realignment of the management teams during calendar year 2018.

Sector Relationships

The critical relationship for NZBS is with the District Health Boards (DHBs). Over the term of the current Statement of Intent (SOI), NZBS aims to further develop its strategic relationship with the DHBs to ensure the sector works collaboratively to develop a strategy for blood management in New Zealand so providing a proactive response to changing demand patterns whilst ensuring prudent financial considerations.

Addressing the overall cost to the sector remains challenging, particularly in light of the ongoing volume decline in fresh product issues and will require NZBS to focus strongly on business improvement opportunities for cost containment, use technologies to drive efficiencies and ensure optimal skill mix models are in place in our workforce.

As New Zealand's national blood service we are proud and honoured to support the health needs of New Zealanders. As a demand driven organisation, central to our purpose and decision making is our core focus to meet the needs of patients, donors and health sector stakeholders who utilise our services, in a safe, sustainable, high quality manner.

Customer feedback, clinical engagement, research and surveys help inform and guide our focus on business improvement and service strategy. Over the coming year we plan to grow our external partnerships and strategic engagements to ensure we are proactively planning and meeting changing service demand.

Financial Plan

As a demand responsive service within the public health and disability sector, NZBS has a constant focus on improving its performance, increasing efficiencies and containing costs wherever possible. Business improvement initiatives, centred on the application of LEAN methodologies that focus on collaborative team efforts to improve performance by systematically removing waste and reducing variation, have been incorporated in the financial forecasts covering this planning period.

Infrastructure investment has, over the last few years, been a focus and this focus is maintained over this 4 year planning period. Such investment does introduce additional cost to the business, for example higher depreciation charges not all of which could / can be immediately offset by savings initiatives with the inevitable influence on price setting decisions.

NZBS has a statutory responsibility to balance the Minister's and DHBs' expectation of minimising any price increase to the sector with the Crown Entities Act 2004 obligation to maintain financial viability. Achieving that necessary balance is a constant challenge particularly in a period of falling or largely minimal demand growth, noting a low growth outlook continues to be forecast over this 4 year planning period.

Price Setting

In its annual setting of prices for the sector NZBS is required to balance a range of price setting considerations not all of which naturally align. The considerations that must be taken into account as part of the price setting process comprise;

- Working to a breakeven earnings position accepting that does not mean NZBS cannot plan for a deficit or surplus;
- Maintaining the Board's collective duty to ensure NZBS operates in a financially responsible manner at all times;
- Ensuring sufficient cash is generated from operating activities to enable capital funding to be available to ensure equipment and infrastructure are maintained;
- Ensuring the Crown's Capital Charge levy totalling $8.93m over the 4 year planning period can be funded in addition to the normal operational expenditures.

As an operating principle NZBS is committed to working to keep its annual price settings to a minimum albeit that expectation required to be balanced against the need to behave in a financially responsible manner.

In the current planning period NZBS has found it extremely challenging to set its prices at desired minimum levels, defined at below 2% p.a. in the face of ongoing fresh product volume decline, primarily red cells, combined with cost input pressures ranging from expected elevated increases in labour costs through to toll fractionation charges for fractionated product manufacture.

In addition NZBS is shortly to celebrate its 20th year since establishment and with that milestone is the recognition of the need to ensure key areas of infrastructure continue to be adequately maintained to ensure NZBS remains a fit for future purpose essential service provider.

The price settings forecast for the key product categories and overall weighted price increases over the 4 year planning period are set out below.

Heading	Actual 2016/17	Forecast 2017/18	Forecast 2018/19	Forecast 2019/20	Forecast 2020/21	Forecast 2021/22
Weighted Price Increase % – All Products & Services	1.87%	1.98%	3.98%	3.91%	2.64%	2.66%
Weighted Price Increase % – Fresh Products	1.63%	1.96%	3.46%	3.47%	1.99%	1.99%
Weighted Price Increase % – Fractionated Products	1.90%	2.19%	4.75%	4.76%	3.30%	3.27%
Weighted Price Increase % – All Blood Products	1.86%	2.06%	4.11%	4.12%	2.65%	2.67%
Weighted Price Increase % – All Services	2.13%	1.68%	3.40%	3.01%	2.56%	2.73%

Over the 2018/19 to 2021/22 4 year planning period NZBS is forecasting a compound volume increase of 7.24% and a compound price movement of 14.12%. This price movement compares with a forecast *'all groups'* compound CPI movement of 6.90%.

The long run NZBS price setting behaviour over the period 1 July 2007 to 30 June 2022, shows a *3.83% higher* compound price increase (net of price rebates to the DHBs) when compared to the annual compound CPI movement over the same period.

As a benchmark indicator this comparison is considered the best long run indicator of NZBS price setting behaviour over time, post any price rebates made to the sector.

Price Rebates

NZBS has a mechanism in place to provide a price rebate to the DHBs in the event there is a level of earnings surplus which is not required by NZBS to meet and discharge its own financial obligations and responsibilities.

NZBS may generate additional revenue or make savings, as against budget setting, by events such as:

- increases in demand for products and services;
- improved fractionation yields;
- exchange rate gains; and/or
- internal cost efficiencies.

Since the price rebate mechanism was introduced in 2009 NZBS has paid $9.95m in price rebates to DHBs, the last such payment in the 2014/15 financial year.

There is no planned price rebate for the 2018/19 financial year. The 4 year financial projections show no planned price rebates.

Earnings Performance Outlook

NZBS is forecasting operating deficits for the first 2 years of the planning period effectively absorbing cost on behalf of the sector. In addition NZBS reports non-operating items relating to expenses associated with the Auckland hub site redevelopment project as well as those that arise from international accounting standards compliance obligations.

There are two reporting compliance items classified by NZBS as non-operating items namely;

- Accrued Rent Payable which is a charge arising from the compliance requirement to amortise the Christchurch Blood Centre lease over the term of the initial lease. In the first half of the lease term the amortised charge is higher than the actual lease payment. This difference is treated as a non-operating charge to earnings with a matching liability accrual within the Statement of Financial Position.
- Unrealised Foreign Exchange gains / (losses) arising from the requirement to mark forward exchange contracts held by NZBS to the market 'spot rate' at a month end or at balance date.

Both these items are non-cash in nature but impact the final reported earnings surplus or (deficit). A *cumulative operating deficit of $1.49m* is forecast over the 4 year planning period, noting the latter 2 years of the planning cycle are forecasting small operating surpluses.

This financial forecast outlook remains consistent with the Minister's 30 April 2012 letter to the NZBS Chairman that clarified the expectation of ending the financial year at a breakeven position wherein it was further clarified as:

> "*The requirement to end the financial year at a break-even position does not necessarily mean NZBS should not plan for a deficit or surplus. Rather, it reflects the Board's collective duty to ensure that NZBS operates in a financially responsible manner*." (letter from Minister to NZBS Chairman dated 30 April 2012)

The NZBS earnings performance outlook over the forecast period is detailed below.

Earnings Performance Outlook	Actual 2016/17	Forecast 2017/18	Forecast 2018/19	Forecast 2019/20	Forecast 2020/21	Forecast 2021/22
EBITDA ($000s)	7,318	5,938	5,581	8,429	9,837	9,818
EBIT ($000s)	3,594	1,959	1,336	3,248	4,106	4,060
Operating surplus / (deficit) ($000s)	(11)	(1,183)	(796)	(117)	1,143	994
Non-Operating items ($000s)	(62)	440	(630)	(477)	(785)	(817)
Reported surplus (deficit) ($000s)	(73)	(743)	(1,426)	(594)	358	177

Demonstrating Financial Sustainability

NZBS considers its financial sustainability and the ability to fund its capital programme from within its own financial resources is best demonstrated by the following specific measures namely;

- *EBITDA* representing the underlying **E**arnings performance **B**efore **I**nterest (finance and capital charges), **T**axation (noting NZBS is income tax exempt), **D**epreciation and **A**mortisation (accrued rental liability) charges as well as any foreign exchange gains or (losses) - realised or unrealised.

- *Cash generated from operating activities* noting NZBS is required to meet all its capital investment requirements from its operating earnings.

- *Available working cash* without recourse to either the term deposit programme or external funding sources in order to assist in meeting planned capital expenditure when that cannot be fully funded from operating cash flows, noting that those operating cash flows are in turn influenced by NZBS price settings.

- *Liquidity capability* that is available over and above the working cash position that could be utilised in a timely manner if the need arose. In the NZBS context in addition to the available working cash balance, liquidity capability would comprise the balance of the term deposit programme, excluding the Adverse Fractionation Event reserve funds of $4.0m, plus the available undrawn funds under the NZBS funding facility.

The following table sets out these key NZBS financial sustainability metrics over the planning period.

Heading	Actual 2016/17	Forecast 2017/18	Forecast 2018/19	Forecast 2019/20	Forecast 2020/21	Forecast 2021/22
EBITDA ($000s)	7,318	5,938	5,581	8,429	9,837	9,818
% EBITDA to Revenue	6.45%	4.95%	4.42%	6.32%	7.06%	6.74%
Cash Generated from Operating Activities ($000s)	3,870	5,526	3,098	4,855	6,763	5,240
that provides for;						
Capital Expenditure Programme ($000s)	5,088	5,473	9,304	8,557	9,000	8,117
% of capital expenditure funded from operating activities	76.06%	100.00%	33.30%	56.74%	75.14%	64.46%
Available Working Cash at year end ($000s)	3,927	3,727	1,916	1,785	2,827	2,809
Liquidity Capacity within existing arrangements ($000s)	11,927	11,727	9,916	9,785	10,827	10,809
Equity ratio %	82.63%	83.14%	76.13%	71.68%	68.16%	65.46%
Term Borrowings including finance leases ($000s)	8,280	7,836	11,672	14,478	17,284	19,617

The 2016/17 and 2017/18 financial years' capital expenditure reflects the eTraceline national blood bank management software project ($8.14m) which successfully went live on 2 September 2017. The eTraceline software is an extension of the blood management system designed to support the blood banking functions across the DHB blood banking network.

The forecast levels of capital expenditure over the planning period include the planned redevelopment of the Auckland site at 71 Great South Road, Epsom. The redevelopment has a planned capital spend of $15.70m covering the 2018/19 financial year through to the 2021/22 financial year.

NZBS is planning to fund this redevelopment via a finance leasing facility increasing term borrowings accordingly over the forecast planning period.

NZBS considers the financial management approach reflected in this set of financial forecasts represents an acceptable balancing between operational imperatives, the various competing stakeholder expectations and the requirement to maintain a sound financial position at all times.

NZBS confirms compliance over the 4 year planning period with its credit facility banking covenant obligations.

Note: The Financial Plan has made no allowance for the financial impact of any loss caused by blood component contamination or major manufacturing problems where the outcome is the responsibility of NZBS. In the 2014/15 financial year NZBS established an

Adverse Fractionation Events reserve of $3.0m to ensure a measure of financial mitigation exists should an adverse manufacturing event occur. The balance of this reserve was increased to $4.0m in 2016/17 following a risk assessment of the Toll Fractionation Agreement with CSL Behring (Australia) Pty Limited.

While component contamination has never occurred, these risks remain ever present and if triggered would represent a significant adverse financial event for the organisation. NZBS considers the establishment of the Adverse Fractionation Event reserve combined with the maintaining of a sound financial position provides reasonable assurance NZBS has the financial capacity to manage such an event out of its own financial resources.

Recourse to the process outlined in 2005 by the Ministry of Health would only occur when NZBS financial resources proved to be inadequate[2].

This Statement of Performance Expectations is structured in two parts:

- Part I provides a concise tabulated explanation of how performance is to be assessed for the period 1 July 2018 to 30 June 2019 and in more general terms for the subsequent 3 years and consists of:
    - the Forecast Statement of Externally Focused Service Performance which NZBS will report against in its Annual Report for 2018/19; and
    - Forecast Statement of Internally Focused Service Performance (Capability and Input Measures) relating to internal NZBS activities;

- Part II presents:
    - Forecast Financial Statements for the 4 years to 30 June 2022;
    - Supporting assumptions; and
    - Statement of Accounting Policies.

David Chamberlain	Ian Ward	Sam Cliffe
Chairman	**Deputy Chairman**	**Chief Executive**

Date: 27 June 2018

[2] Please see Assumption 19 on page 27

PART I

2 FORECAST STATEMENT OF SERVICE PERFORMANCE ACTIVITIES - 1 JULY 2018 TO 30 JUNE 2019

NZBS has one overall Output Class, comprising three interrelated outputs related to:

- Donors (and patients)
- Products and Services
- Supply Chain Management – aligning supply with demand

Each of which collectively contributes to the achievement of the outcome below:

New Zealand Blood Service Outcome

Health needs of people in New Zealand are supported by the availability of safe and appropriate blood, blood products, tissue products and related services

OUTPUT	Value 2018/19 $(excl. GST)
Provision of a safe and effective blood service for all New Zealanders through supply and delivery of: • Fresh Blood Components • Fractionated Blood Products • Other products and related services	Revenue $127.40m Expenses $128.83m Deficit $1.43m

IMPACT STATEMENT
District Health Boards (DHBs) and private health providers receive a safe and secure supply of blood, blood products, tissue products and related services at the right place, at the right time to meet demand at ALL times.

The following table details the external service output performance measures for 2018/19 that will be reported against in the NZBS 2018/19 Annual Report.

These output performance measures are linked to NZBS's enduring outcome and the following two externally focused strategic goals:

Strategic Goal 1:

***NZBS** builds on core capabilities to provide a range of products and services which are appropriate to New Zealand health needs and priorities*; and

Strategic Goal 4:

***NZBS** relationships with other health sector entities are mutually supportive and productive.*

The outputs outlined below will apply for the 2018/19 year and as forecast for the subsequent 3 financial years to 30 June 2022.

2.1 FORECAST STATEMENT OF EXTERNALLY FOCUSED SERVICE PERFORMANCE

Performance measures relate to achievement of NZBS's two externally focused strategic goals and will be reported in the NZBS Annual Report.

WHAT is intended to be achieved	HOW performance will be assessed each year								
Performance Measures	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
1. External output measures related to Key Products and Services which contribute to achievement of NZBS Enduring Outcome and Strategic Goal 1.	Actual	Actual	Actual	Actual	Forecast	Target	Target	Target	Target
Product and Service availability 1.1 Key products and services are available at all times (24 x 7). Measure is instances when this is not achieved and which could potentially have a negative consequence for patients.	ACHIEVED 0	ACHIEVED 0	ACHIEVED 0	ACHIEVED 0	0	0	0	0	0
2. External output measures related to Demand Management and the relationship with DHBs which contribute to achievement of Strategic Goal 4.	Actual	Actual	Actual	Actual	Forecast	Target	Target	Target	Target
2.1 Planning and Communication with District Health Boards (DHBs) NZBS will demonstrate a productive and supportive relationship with the DHBs consistent with maintaining a strategic partnership, including proactively engaging with them through the Lead DHB CEO to agree pricing matters in a timely manner in order to inform preparation of DHB Annual Plans.	ACHIEVED Feedback received from the Lead DHB CEO stated; *"NZBS has fully met the requirements of its Planning and Communications with DHBs' performance measure"*	ACHIEVED Feedback received from the Lead DHB CEO stated; *"NZBS has fully met the requirements of its Planning and Communications with DHBs' performance measure"*	ACHIEVED Lead DHB CEO confirmed an open communication process with DHBs over price setting and utilisation patterns to inform the new financial year. To quote: *"I believe you have developed an open partnership with me which will hopefully see a greater strategic partnership developed".*	ACHIEVED NZBS assessed its communication obligations to the DHBs and relationship management were met over the course of the 2016/17 financial year. However the Lead CEO changed twice during the year with an extended period of no Lead CEO. In these circumstances formal feedback could not realistically be expected.	NZBS to receive favourable feedback from the Lead DHB CEO on maintaining a greater strategic partnership and the timely and relevant provision of information, including any issue resolution over the course of the 2017/18 financial year.	NZBS to receive favourable feedback from the Lead DHB CEO on maintaining a strategic partnership and the timely and relevant provision of information, including any issue resolution over the course of the 2018/19 financial year.	NZBS to receive favourable feedback from the Lead DHB CEO on maintaining a r strategic partnership and the timely and relevant provision of information, including any issue resolution over the course of the 2019/20 financial year.	NZBS to receive favourable feedback from the Lead DHB CEO on maintaining a strategic partnership and the timely and relevant provision of information, including any issue resolution over the course of the 2020/21 financial year.	NZBS to receive favourable feedback from the Lead DHB CEO on maintaining a strategic partnership and the timely and relevant provision of information, including any issue resolution over the course of the 2021/22 financial year.

Performance Measures	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
2.2 NZBS Reports for DHBs	Actual	Actual	Actual	Actual	Forecast	Target	Target	Target	Target
Monthly demand management reports outlining purchase volumes by key product line are provided to DHBs to assist them to manage local usage and costs.	ACHIEVED Monthly reports detailing product use and expiry information provided to all 20 DHBs throughout 2013/14.	ACHIEVED Monthly reports detailing product use and expiry information provided to all 20 DHBs throughout 2014/15.	ACHIEVED Monthly reports detailing product use and expiry information provided to all 20 DHBs throughout 2015/16.	ACHIEVED Monthly reports detailing product use & expiry information were provided within set timeframes to all 20 DHBs throughout 2016/17	Reports are provided to each DHB by the 10h working day of the following month.	Reports are provided to each DHB by the 10th working day of the following month.	Reports are provided to each DHB by the 10th working day of the following month.	Reports are provided to each DHB by the 10th working day of the following month.	Reports are provided to each DHB by the 10th working day of the following month.
2.3 Clinical Oversight Programme	Actual	Actual	Actual	Actual	Forecast	Target	Target	Target	Target
All blood banks located in main DHB hospitals (other than the 6 DHBs where NZBS is responsible for blood bank provision) will receive at least 1 NZBS Clinical Oversight visit (and audit report) per year in order to enable them to meet the requirements of ISO15189 for IANZ Accreditation.	ACHIEVED 100% achievement of a minimum one clinical visit and report per year to all non NZBS managed blood banks in main DHB hospitals	ACHIEVED 100% achievement of a minimum one clinical visit and report per year to all non NZBS managed blood banks in main DHB hospitals	ACHIEVED 100% achievement of a minimum one clinical visit and report per year to all non NZBS managed blood banks in main DHB hospitals	ACHIEVED 100% achievement of a minimum one clinical visit and report per year to all non NZBS managed blood banks in main DHB hospitals	100%	100%	100%	100%	100%
2.4 Haemovigilance[3] - Patient safety (measured in calendar years)	Actual for 2012 calendar year	Actual for 2013 calendar year	Actual for 2014 calendar year	Actual for 2015 calendar year	Target for 2016 calendar year	Target for 2017 calendar year	Target for 2018 calendar year	Target for 2019 calendar year	Target for 2020 calendar year
2.4.1 To promote risk awareness and best practice in transfusion, NZBS will publish an annual Haemovigilance Report for each calendar year and will share this information with all DHBs to assist them to reduce the incidence of adverse transfusion related events.	ACHIEVED 2012 Annual Haemovigilance Report published and distributed to DHBs in November 2013 and posted on the NZBS web-site.	ACHIEVED 2013 Annual Haemovigilance Report published and distributed to all DHBs in December 2014 and posted on the NZBS web-site.	ACHIEVED 2014 Annual Haemovigilance Report published and distributed to all DHBs in December 2015 and posted on the NZBS web-site.	ACHIEVED 2015 Annual Haemovigilance Report published and distributed to all DHBs in December 2016 and posted on the NZBS web-site.	ACHIEVED 2016 Annual Haemovigilance Report published and distributed to all DHBs in December 2016 and posted on the NZBS web-site	2017 Annual Haemovigilance Report published and distributed to all DHBs in the December Quarter of 2017.	2018 Annual Haemovigilance Report published and provided to all DHBs by quarter 2 of 2018.	2019 Annual Haemovigilance Report published and provided to all DHBs by Quarter 2 of 2019.	2020 Annual Haemovigilanc e Report published and provided to all DHBs by Quarter 2 of 2020.
2.4.2 Number of transfusion related adverse events occurring as a result of an NZBS "system failure" reported to the National Haemovigilance Programme, with a severity score greater than 1 and imputability score classified as likely/probable or certain.[4]	ACHIEVED 0	ACHIEVED 0	ACHIEVED 0	ACHIEVED 0	0	0	0	0	0

[3] As part of the National Haemovigilance programme DHBs report adverse or unexpected transfusion related events or reactions in blood product recipients to NZBS. Internationally recognised Haemovigilance classification systems are used to determine severity and imputability (definitions included in glossary). More information on the NZBS Haemovigilance Programme can be found on the NZBS website at: http://www.nzblood.co.nz/Clinical-information/Haemovigilance-programme

[4] This measure reports adverse events that have occurred as a result of NZBS "*system failures*" and therefore excludes adverse events resulting from a physiological reaction to the transfusion of a biological product.

2.2 FORECAST STATEMENT OF INTERNALLY FOCUSED SERVICE PERFORMANCE (CAPABILITY & INPUT MEASURES)

The following measures relate to achievement of NZBS's five internally focused strategic goals. They could be considered "proxy output measures" in the context of NZBS activities and are key contributors to NZBS's success in achieving its enduring outcome and the external output measures identified in Section 4 of the SOI. They will therefore also be reported in the NZBS Annual Report.

WHAT is intended to be achieved	HOW Performance will be assessed each year								
Performance Measures	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
3. Internal measures related to Products and Service Quality which contribute to achievement of Strategic Goal 2	Actual	Actual	Actual	Actual	Forecast	Target	Target	Target	Target
3.1 Donation Testing Each donation will be tested prior to use in accordance with the NZBS Manufacturing Standards (as approved by Medsafe). • No product is released for issue to a patient until it has passed all safety tests and associated records are maintained.	ACHIEVED 100% tested	ACHIEVED 100% tested	ACHIEVED 100% tested	ACHIEVED 100% tested	To maintain 100% donation testing	To maintain 100% donation testing	To maintain 100% donation testing	To maintain 100% donation testing	To maintain 100% donation testing
3.2 Regulatory Compliance - Medsafe NZBS will ensure it maintains Medsafe licences for its 6 main sites 100% of the time, to provide an assurance of GMP compliance.	ACHIEVED 100% GMP Licensing Compliance maintained	ACHIEVED 100% GMP Licensing Compliance maintained	ACHIEVED 100% GMP Licensing Compliance maintained	ACHIEVED 100% GMP Licensing Compliance maintained	100% GMP Licensing Compliance	100% GMP Licensing Compliance	100% GMP Licensing Compliance	100% GMP Licensing Compliance	100% GMP Licensing Compliance
3.3 Regulatory Compliance – IANZ (International Accreditation New Zealand) NZBS will ensure it maintains IANZ accreditation 100% of the time at all of its diagnostic laboratories.	ACHIEVED 100% IANZ accredited	ACHIEVED 100% IANZ accredited	ACHIEVED 100% IANZ accredited	ACHIEVED 100% IANZ accredited	100% IANZ accredited	100% IANZ accredited	100% IANZ accredited	100% IANZ accredited	100% IANZ accredited
3.4 Regulatory Compliance – ASHI (American Society of Histocompatibility and Immunogenetics) NZBS will maintain ASHI accreditation 100% of the time at the national Tissue Typing laboratory.	MAINTAINED 100% ASHI accredited Biennial on-site audit completed	MAINTAINED 100% ASHI accredited	MAINTAINED 100% ASHI accredited Biennial on-site audit completed	MAINTAINED 100% ASHI accredited	100% ASHI accredited Biennial on site audit completed	100% ASHI accredited	100% ASHI accredited Biennial on-site audit to be conducted	100% ASHI accredited	100% ASHI accredited Biennial on-site audit to be conducted

Performance Measures	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
4. Internal measures related to Donors which contribute to achievement of Strategic Goal 3	Actual	Actual	Actual	Actual	Forecast	Target	Target	Target	Target
4.1 Donor Population NZBS maintains a donor population capable of meeting the ongoing demand for blood and blood products.	These reported numbers represent the donor population required to meet demand and in any given year is constantly flexed to ensure demand alignment in order to minimise expiry.								
• Active whole blood & apheresis donor panel.	112,744	109,158	110,746	109,751	107,300	106,200	106,200	106,500	106,000
NOTE: The NZBS active Donor population, split between whole blood and apheresis donor panels maintained at levels to support ongoing demand and therefore may be above or below the original target set.									
4.2 Donor Satisfaction Measure of overall satisfaction with the quality of service • 90% of donors give an 8 or higher score out of 10 of their experience/satisfaction with the service.	New Measure in 2016/17 Financial Year			ACHIEVED 91.35%	Greater than 90% satisfaction with the service	Greater than 90% satisfaction with the service	Greater than 90% satisfaction with the service	Greater than 90% satisfaction with the service	Greater than 90% satisfaction with the service
NOTE: This is ascertained by internal NZBS donor surveys conducted 6 monthly over the financial year. The first survey was conducted in June 2017. The survey results will be benchmarked against the Australian Red Cross Blood Service for comparative purposes.									

Performance Measures	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
4.3 Targeted donor recruitment strategies	**Actual**	**Actual**	**Actual**	**Actual**	**Forecast**	**Target**	**Target**	**Target**	**Target**
4.3.1 Recruit 2,900 new and reinstated Māori donors to the active donor panel (each year measure).	New Measures in 2017/18 Financial Year				2,900	2,900	2,900	2,900	2,900
4.3.2 Recruit 11,000 new and reinstated youth donors between the ages of 16-25 on the active donor panel (each year measure)[5].					11,000	11,000	11,000	11,000	11,000
NOTE: For clarity, the definition of a New Donor is a donor who has made a valid blood donation for the very first time in New Zealand. The definition of a Reinstated Donor is a person who has made at least two donations of which one blood donation was made within the last 12 months and the interval between that donation and the prior donation is more than 24 months excluding autologous or therapeutic donations.									
4.4 Raw Material (Collections) Inputs – based on Demand Forecasts	**Actual 2013/14**	**Actual 2014/15**	**Actual 2015/16**	**Actual 2016/17**	**Forecast 2017/18**	**Forecast 2018/19**	**Forecast 2019/20**	**Forecast 2020/21**	**Forecast 2021/22**
4.4.1 Total Whole Blood donations.	120,858	120,099	119,967	111,146	111,000	109,300	108,425	107,825	107,325
4.4.2 Total Plateletpheresis donations.	3,942	3,436	3,145	2.852	2,675	2,700	2,725	2,765	2,800
4.4.3 Total Plasmapheresis donations.	32,514	41,438	52,026	53,081	58,325	61,100	65,000	70,000	70,000
4.4.4 Total donations.	157,314	164,973	175,138	167,079	172,000	173,100	176,150	180,590	180,125

[5] Attraction of youth donors assists in future proofing the service – encouraging new donors to replace those who are retiring.

Performance Measures	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
5. Internal measures related to People which contribute to achievement of Strategic Goal 5	Actual	Actual	Actual	Actual	Forecast	Target	Target	Target	Target
5.1 Annual Employee turnover.	10.4%	8.1%	9.9%	10.6%	12.0%	12.0%	12.0%	12.0%	12.0%
5.2 Employee Engagement Index Score from biennial Staff Engagement Survey using the JRA and Associates Survey Tool.	68.5%*	No survey	No survey	71.4% with an 84% survey participation rate	No survey	Better than the last survey	No survey	Better than the last survey	No survey
NOTE: * NZBS focus over the 2012/13 and 2013/14 years was on money saving initiatives to address the then decline in revenue relating to reduced clinical prescribing of blood product. The impact of this cost focus combined with the closure of 2 whole blood collection centres during this period was considered the major contributory factor to the decline in the Employee Engagement Index Score. **									
6. Internal measure related to Development which contributes to achievement of Strategic Goal 6			Actual	Actual	Forecast	Target	Target	Target	Target
6.1 Auckland Facility Redevelopment Project Successful completion of key project milestones in accordance with Board approved project plan.	A new measure in 2015/16		PROJECT DEFERRED The Board deferred this project until 2019 when NZBS will occupy the whole site, enabling improved flexibility for refurbishment work	No performance Measure set for 2016/17 as project deferred pending further re project planning work	Business case and associated project plan for the redevelopment of the Auckland site facilities approved by the Board no later than 30 June 2018.	Key milestones achieved by 30 June 2019 in accordance with the approved Project Plan.	Key milestones achieved by 30 June 2020 in accordance with the approved Project Plan.	Key milestones achieved by 30 June 2021 in accordance with the approved Project Plan.	Key milestones achieved by 30 June 2022 in accordance with the approved Project Plan.
7. Internal measures related to Financial Sustainability which contribute to achievement of Strategic Goal 7	Actual	Actual	Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
7.2 Financial Management Assure cost efficiency and value for money management through maintenance of financial sustainability in an environment which is demand driven (i.e. changes in product demand – mix and volume by the DHBs, impacts on the NZBS financial result).	Surplus Reported Actual – $864k surplus Rebate paid to DHBs - $2.0m	Surplus Reported Actual – $4.71m surplus Rebate paid to DHBs - $3.55m.	Deficit reported Actual - $2.34m deficit No Rebate paid	ACHIEVED Deficit reported Actual - $0.08m deficit on revenue of $114.37m No Rebate paid	Forecast Deficit Forecast deficit of $743k on revenues of $121.05m No Rebate Planned	Achievement of budget Forecast deficit of $1.43m. No Rebate Planned	Achievement of budget Forecast deficit of $594k. No Rebate Planned	Achievement of budget Forecast surplus of $358k. No Rebate Planned	Achievement of budget Forecast surplus of $177k. No Rebate Planned

PART II

3 FINANCIAL PLAN

3.1 OVERVIEW OF THE 4 YEAR FINANCIAL PLAN

The 2018/19 financial year plan together with the following three financial year projections have been based on the 2017/18 base year forecast, incorporating actual results and trending demand patterns evident in quarter 3 of the base year forecast.

The NZBS planning environment remains '*difficult*' with a demand outlook consistent with blood management practices being constantly assessed and refined by the District Health Boards (DHBs). The demand forecast for primary fresh products continues to decline (a generally global trend) with ongoing decline forecast over the four year planning period.

Forecast Demand Patterns

Using the benchmark of "*Product issued / tests performed per 1000 head of population*" NZBS is forecasting the following demand trends over the planning period for its key blood products and services.

(a) Fresh Products – 6.63% decline forecast in issues per 1000 head of population

The historic and forecast metrics for the fresh product category is set out below.

KEY INDICATORS	ACTUAL FY 15	ACTUAL FY 16	ACTUAL FY 17	FORECAST Base Yr FY 18	FORECAST Budget FY 19	FORECAST Year 2 FY 20	FORECAST Year 3 FY 21	FORECAST Year 4 FY 22
- Total Fresh Products - units	142,939	140,978	135,363	135,746	134,767	134,080	133,770	133,457
- Fresh Products Annual % Volume Growth	0.54%	(1.37%)	(3.98%)	0.28%	(0.72%)	(0.51%)	(0.23%)	(0.23%)
- Fresh Products per 1,000 Head of Population	31.09	30.01	28.21	27.76	27.09	26.58	26.23	25.92
- Per 1,000 Head of Population % Movement	(1.36%)	(3.47%)	(6.00%)	(1.61%)	(2.42%)	(1.89%)	(1.31%)	(1.18%)
- Annual % Compound movement since base year - FY09	(15.04%)	(16.20%)	(19.54%)	(19.31%)	(19.90%)	(20.30%)	(20.49%)	(20.67%)

The overall expectation is for a continuing volume decline over this planning period. Fresh product demand is forecast to be at 25.92 units issued per 1000 head of population by 2021/22. This represents a 6.63% decrease in issues per 1000 head of population over the 4 year planning period.

To put the quantum of fresh product decline in historic perspective the volume of fresh product issues in the 2008/09 financial year totalled 169,567 issues. The compound volume decline from that time to the 2021/22 volume forecast of 133,457 issues equates a volume decline of 20.67%. Volume decline of this magnitude makes it extremely difficult for any manufacturing operation to sustain a minimum price setting position.

The individual product trends within the fresh product category are detailed below;

FRESH PRODUCT - INDIVIDUAL PRODUCT SETTINGS	FY 15	FY 16	FY17	FY 18	FY 19	FY 20	FY 21	FY 22
- Red Cells - Units (excluding AB Credits)	107,992	106,389	101,228	102,050	100,823	100,087	99,601	99,115
- Red Cells Annual % Volume Growth	(0.61%)	(1.48%)	(4.85%)	0.81%	(1.20%)	(0.73%)	(0.49%)	(0.49%)
- Red Cells per 1,000 Head of Population	23.50	22.67	21.10	20.87	20.27	19.84	19.53	19.25
- Per 1,000 Head of Population % Movement	(2.46%)	(3.53%)	(6.92%)	(7.94%)	(2.89%)	(2.11%)	(1.56%)	(1.43%)
- Platelets - Adult Doses excluding Buffy Coat sales	13,279	13,511	14,295	14,547	14,784	14,895	15,009	15,120
- Platelets Annual % Volume Growth	(4.88%)	1.75%	5.81%	1.76%	1.63%	0.75%	0.77%	0.74%
- Platelets per 1,000 Head of Population	2.89	2.88	2.98	2.97	2.97	2.95	2.94	2.94
- Per 1,000 Head of Population % Movement	(6.66%)	(0.36%)	3.59%	3.34%	(0.11%)	(0.65%)	(0.32%)	(0.22%)
- Cryoprecipitate - units	4,996	5,358	5,048	4,910	4,950	4,975	5,025	5,075
- Cryoprecipitate Annual % Volume Growth	5.11%	7.25%	(5.79%)	(2.73%)	0.81%	0.51%	1.01%	1.00%
- Cryoprecipitate per 1,000 Head of Population	1.09	1.14	1.05	1.00	0.99	0.99	0.99	0.99
- Per 1,000 Head of Population % Movement	3.15%	5.02%	(7.76%)	(12.05%)	(0.91%)	(0.89%)	(0.08%)	0.03%
- FFP Plasma - units	16,673	15,720	14,792	14,239	14,210	14,123	14,135	14,147
- FFP Plasma Annual % Volume Growth	12.64%	(5.71%)	(5.91%)	(3.73%)	(0.20%)	(0.61%)	0.08%	0.08%
- FFP Plasma per 1,000 Head of Population	3.63	3.35	3.09	2.91	2.86	2.80	2.77	2.75
- Per 1,000 Head of Population % Movement	10.54%	(7.67%)	(7.88%)	(13.06%)	(1.91%)	(1.99%)	(0.99%)	(0.87%)

(b) Immunoglobulin Product – 15.3% forecast increase in grams issued per 1000 head of population

Unlike fresh product, Immunoglobulin product (comprising Intragam P, Evogam and Privigen product) is forecast to see modest year on year increases in demand.

The historic and forecast metrics for immunoglobulin product review is set out below.

KEY INDICATORS	ACTUAL FY 15	ACTUAL FY 16	ACTUAL FY 17	FORECAST Base Yr FY 18	FORECAST Budget FY 19	FORECAST Year 2 FY 20	FORECAST Year 3 FY 21	FORECAST Year 4 FY 22
IMMUNOGLOBULIN VOLUMES - GRAMS	FY 15	FY 16	FY17	FY 18	FY 19	FY 20	FY 21	FY 22
- Total immunoglobulin Sales Volumes - Grams	335,014	356,927	355,374	394,650	414,221	434,784	456,382	479,094
- Total IVIg Annual % Volume Growth	12.21%	6.54%	(0.43%)	11.05%	4.96%	4.96%	4.97%	4.98%
- IVIg Average Annual Compound % Growth since 2008	5.78%	6.21%	5.45%	7.28%	7.37%	7.48%	7.61%	7.76%
- Total IVIg Grams per 1,000 Head of Population	72.90	76.05	74.13	80.71	83.26	86.18	89.49	93.05
- Per 1,000 Head of Population % Movement	10.11%	4.33%	(2.52%)	8.86%	3.17%	3.51%	3.84%	3.98%

Over the 9 years to 30 June 2017 immunoglobulin annual demand growth averaged 5.45% per annum. In the 2017/18 financial year the rate of annual increase accelerated to a forecast 11.05% growth rate. This rate of increase is not considered sustainable and a more modest level of future growth has been assumed for immunoglobulin product. Over this 4 year planning period the average annual growth rate is forecast at 5% per annum.

Immunoglobulin usage in 2011/12 totalled 64.67 grams per 1000 head of population. By 2016/17 this had increased to 74.13 grams per 1000 head of population, a 14.63% increase over that 5 year period. This level of immunoglobulin usage in New Zealand is significantly lower than what is reported internationally.

Based on the growth assumptions inherent in this plan the use of immunoglobulin product by 2021/22 is forecast to have grown to 93.05 grams per 1000 head of population. This translates to a 15.3% forecast demand increase per 1000 head of population over the 4 year planning period.

(c) Services – forecast 3.46% decrease in test volumes per 1000 head of population

The testing services and related activities performed by NZBS are forecast to have nominal annual growth over the 4 year planning period.

The historic and forecast metrics for all testing services is set out below.

SERVICES	FY 15	FY 16	FY17	FY 18	FY 19	FY 20	FY 21	FY 22
- All testing Services - Total Test Volumes	573,640	555,032	559,877	566,101	566,993	569,804	573,578	575,496
- All Testing Annual % Test Volume Growth	(0.48%)	(3.24%)	0.87%	1.11%	0.16%	0.50%	0.66%	0.33%
- All Tests Per 1,000 Head of Population	124.82	118.26	116.79	115.77	113.97	112.94	112.47	111.77
- Per 1,000 Head of Population % Movement	4874.78%	(5.25%)	(1.24%)	(0.88%)	(1.55%)	(0.90%)	(0.42%)	(0.62%)

In 2011/12 the overall test volumes per 1000 head of population stood at 127.34 tests. By 2016/17 the test rate per 1000 head of population had dropped to 116.79 tests, an 8.28% decline over this 5 year period.

For the 2017/18 financial year the test volumes are forecast to have further reduced to 115.77 test units per 1000 head of population. This current plan forecasts that by 2021/22 test unit volumes will have continued to decline to 111.77 test units per 1000 head of population. This translates to a forecast service testing demand decrease per 1000 head of population of 3.46% over the 4 year planning period

The overall growth outlook forecast over the 4 year planning period is set out below.

Growth Outlook	Actual 2016/17	Forecast 2017/18	Forecast 2018/19	Forecast 2019/20	Forecast 2020/21	Forecast 2021/22
Blood Products - % Growth	(3.58%)	4.33%	1.50%	1.96%	2.09%	2.13%
Services - % Growth	2.13%	1.51%	0.11%	0.54%	0.73%	0.63%
Overall NZBS % Growth Profile Forecasts	(2.54%)	3.79%	1.24%	1.70%	1.84%	1.86%

The forecast outlook within a generally low growth demand profile for NZBS products and services creates financial challenges. NZBS is effectively funded via the sector's demand profile and the financial challenges in a low growth setting are expected to be mitigated by;

- *The delivery of operational efficiencies* aimed at reducing operational cost wherever possible and,
- *the price setting mechanism*, acknowledging the sector's expectation of price increases being kept to a minimum. This sector expectation must also be balanced against the requirement to ensure NZBS behaves in a financially responsible manner and within that responsible manner generating sufficient internal funding to ensure NZBS can set annual capital plans that ensure essential infrastructure remains appropriately maintained.

Operational Efficiencies

Over this planning period, as noted above, an ongoing focus on delivering operational efficiencies remains a key focus in order to mitigate input cost pressures and reduce the pressure on the price setting mechanism.

NZBS has set itself a target of delivering $4.72m in operational efficiencies over the planning period. This represents an average annual operational cost savings target of $1.18m. Based on its experience to date of actively adopting LEAN methodologies and other business improvement techniques NZBS considers it is well positioned to securing those operational efficiency target settings.

Infrastructure Maintenance

Over this planning period the programme of infrastructure maintenance and renewal continues with the level of forecast capital spend and depreciation over the planning period set out below.

Capital Plan and Depreciation Forecasts	Actual 2016/17	Forecast 2017/18	Forecast 2018/19	Forecast 2019/20	Forecast 2020/21	Forecast 2021/22
Capital expenditure	5,088	5,473	9,304	8,557	9,000	8,117
Depreciation	3,351	3,978	4,244	5,181	5,731	5,757
Capital Spend Vs Depreciation (capital greater = positive)	1,737	1,495	5,060	3,376	3,269	2,360

Over the 4 year planning period NZBS is projecting a total capital spend of $34.98m which is $14.06m in excess of forecast depreciation charges and directly attributable to the planned redevelopment of the Auckland hub site.

The major spend in the last nearly 3 financial years ($8.1m) has related to the development of eTraceline, a stand-alone system designed to support the blood banking function within the DHBs. eTraceline successfully went live 2 September 2017.

The capital programme over the 4 year planning period comprises the following spend analysis by major category;

- Facilities - $20.37m. Key projects covered in this plan are;
    - an extension to and upgrade of the Auckland City Hospital Blood Bank approved in late 2017/18 but with the majority of the $775k capital spend funded within the 2018/19 financial year.
    - Refurbishment of the Wellington blood bank in 2019/20 - $300k.
    - The redevelopment of the Auckland hub site located at 71 Great South Road Epsom. There are two aspects to this redevelopment namely;
        - the relocation of the national office during 2018/19 back to the Auckland hub site post NZBS assuming sole occupancy of this important site.
        - Sole occupancy from 1 November 2018 enables NZBS to commence a long planned redevelopment of this key hub site after nearly 20 years of occupancy that will ensure it is appropriately configured to meet the foreseeable future needs of the blood service.

          This redevelopment programme is being planned as a likely 3 to 4 year programme with an established cost envelope of $15.74m capital allowance.
    - Planning for the possible relocation and redevelopment of the Auckland donor centres located at Manukau and North Shore. The capital allowance for both sites is $2.61m with the timing aligned to the expiry timings within both sites current leasing arrangements.
- Business Systems and IT Infrastructure - $6.36m over the planning period with the key areas of expenditure identified as;
    - NZBS Blood Management Systems comprising the eProgesa and eTraceline systems - $3.40m. In this planning period there remains a focus on improving the donor experience with, as an example, the introduction of a self-administered health history capability. Software upgrades/new installs are planned for donor management, tissue, cord and stem cell management systems as well as the piloting of smart fridges post the introduction of eTraceline.
    - Business Systems - $1.28m. Reflects planned upgrades to various business systems to improve functional performance. Investment is planned in the donor management system, the human resources / payroll areas combined with the ongoing investment in business intelligence capabilities.
    - Network Infrastructure - $1.68m. Investment required to maintain the existing NZBS network infrastructure noting this level of planned investment is lower than historically provided for. This is due to NZBS moving to adopt, where appropriate, ‘software as a service’ (SaaS) cloud service delivery within the current planning period.
- Equipment - $8.25m. A reflection of the ongoing need to maintain all NZBS equipment over the supply chain in suitable working condition, particularly where the supply chain is subject to strict GMP compliance requirements. An emerging trend within the management of the general equipment capital programme has been the willingness of suppliers to offer a finance leasing alternative to outright purchase.

  NZBS utilises the finance lease when evaluated as appropriate to do so. For NZBS the finance leasing option better aligns with the NZBS ‘*pay as you go*’ business model. The finance leasing option also provides improved flexibility to effect technology driven upgrades with minimum disruption than would occur if NZBS physically owned the equipment in question.

Price Setting

The Minister and sector's expectation remains set on keeping the costs to district health boards as low as possible. However NZBS is also required to balance that expectation against;

- The requirement to fund ongoing capital needs primarily from operational cash flows and approved funding options,
- the setting of price increases at the minimum required to maintain overall NZBS financial viability.

NZBS in taking the above factors into account considers it has taken a balanced view in coming to a position on the required price settings over the 4 year planning period. In terms of price increases, the price increases forecast over the 4 year planning period are a compound increase of 14.12% compared with a forecast compound CPI % movement of 6.90% over the same period.

This elevated price setting over the planning period compared to forecast CPI is a reflection of the very difficult balancing act NZBS faces within a low volume growth environment. Low volume growth makes it extremely difficult to adequately absorb increasing input costs despite those cost increases being mitigated in part by targeted operational efficiencies, maintain overall financial viability as well as deliver on the sector's expectation of keeping prices to a minimum.

While NZBS has worked hard to minimise its price settings within the current environment, it was simply not possible particularly with elevated wage expectations if a balanced financial outcome was to be achieved.

NZBS has a policy mechanism in place to effectively return price increases to the DHBs via a price rebate mechanism, should the actual demand levels and operational performance exceed the forecast financial out-turn. Under this mechanism NZBS last paid a price rebate in the 2014/15 financial year and has rebated $9.95m since the policy was introduced in the 2008/09 financial year.

No price rebates are forecast over this 4 year planning period.

Financial Position and Liquidity

Throughout the planning period NZBS maintains its financial gearing ratio under the 37.5% debt ceiling currently set within the NZBS Financial Guidelines Policy. Over the planning period the equity % ratio is forecast in the range of 76.13% to 65.46% of net total tangible assets.

NZBS is forecast to operate at all times within its banking covenant obligations over the 4 year planning period.

Ongoing financial sustainability is considered appropriately maintained over the 4 year planning period with a forecast average annual EBITDA of $8.42m. The average year-end available working cash position is forecast at $2.33m supported by available liquidity of $3.0m on term deposit and an entitlement of $5.0m in undrawn approved credit facilities.

Disclosure Statement

This financial forecast has been prepared as required by the Crown Entities Act 2004 for disclosure in this Statement of Performance Expectations (SPE) and may not be appropriate for any other purpose. If NZBS becomes aware that there are changes to the assumptions detailed below, which may materially impact the stated financial position, this SPE and the SOI (if necessary) will be amended accordingly under section 148 of the Crown Entities Act 2004.

Board Approval

The NZBS Board has agreed the financial forecast at the date of signing this *Statement of Performance Expectations*.

3.2 KEY ASSUMPTIONS

The following assumptions (and risk assessments[6] where appropriate) are key elements underpinning the financial forecasts for 2018/19 through to 2021/22:

Assumption	Comment / Risk

1. Price Setting – while NZBS works to keep price increases to a minimum, this is tempered by the need to maintain financial viability. Based on the assumed demand mix and input cost increases, the weighted price movements over the 4 year forecast period are set out below.

Year	**Overall Weighted Price Increase**	Overall Blood Product Price Increase	Overall Services Price Increase
2018/19	**3.98%**	4.11%	3.40%
2019/20	**3.91%**	4.12%	3.01%
2020/21	**2.64%**	2.65%	2.56%
2021/22	**2.66%**	2.67%	2.73%

Comment / Risk:

NZBS when assessing its price setting performance it is acknowledged the provision of imported skin generally denominated in USD brings the risk of currency fluctuation which is outside NZBS control.

Also if unbudgeted costs create unforeseen financial risks over the period then NZBS may require a price increase greater than indicated in the three outer years.

Risk Assessment: MEDIUM – Cost increases could exceed indicated price increases causing deterioration in the NZBS financial position, resulting in a requirement for price increases greater than currently indicated in the outer 3 financial years.

2. Revenue Forecasts – Revenue growth over the forecast period has been forecast as:

Year	**% Growth**
2018/19	**5.22%**
2019/20	**5.61%**
2020/21	**4.48%**
2021/22	**4.52%**

Comment / Risk:

Revenue growth is a combination of price and demand (volume) movements. The specific demand assumptions for the key revenue categories are detailed in Assumption 3.

Risk Assessment: MEDIUM - With price settings set annually, the major risk to revenue growth stems from the uncertainty of demand for any given product or service. The demand assumptions taken within these forecasts reflect recent trend indications as well as allowance for any known forward demand impact factors.

3. Demand (Volume) Assumptions – Demand (sales) growth over the forecast period has been assessed on a weighted product by product basis. The outcome of those assessments is detailed below at product category level.

(a) Summary of Product and Services Demand Growth

Product	2018/19	2019/20	2020/21	2021/22
Fresh	(0.27%)	(0.25%)	(0.03%)	(0.05%)
Fractionated	3.29%	4.08%	4.04%	4.03%
Blood Products	1.50%	1.96%	2.09%	2.13%
Services	0.11%	0.54%	0.73%	0.63%
Overall Total	1.24%	1.70%	1.84%	1.86%

(b) Key Forecast Fresh Blood Product Issues

Product	2018/19	2019/20	2020/21	2021/22
RBCs (units)	100,823	100,087	99,601	99,115
Platelets (Adult doses)	14,784	14,895	15,009	15,120
Fresh Plasma (units)	14,210	14,123	14,135	14,147
Cryoprecipitate (units)	4,950	4,975	5,025	5,075
Total Fresh Product Issues	134,767	134,080	133,770	133,457

Comment / Risk:

Sales volumes are totally dependent on health sector demand and outside NZBS direct control. Demand volatility is an ever present reality for NZBS, although the health and disability sector demographics indicate that low demand growth can reasonably be assumed despite the last few years of growth in the New Zealand population.

As a manufacturer, NZBS endeavours to maintain flexibility within its production settings in order to minimise product expiry and ensure inventory levels are kept aligned to the current individual product demand profiles, having regard to supply chain logistics, manufacturing requirements and product shelf life.

Red Blood Cells (RBCs): RBCs are the primary fresh product. NZBS works with the DHBs to actively manage their utilisation of RBCs which has seen a 6.1% decline in use over the last 4 years. With DHBs increasingly focused on their patient blood management activities or plans, short term decline is expected however population growth and an ageing population may see an offsetting increase in RBC demand. If demand increases or decreases beyond that forecast, whole blood collections (refer Assumption 4) will be flexed as required and accommodated within the current donor panel population.

[6] Risk Assessment is based on severity and likelihood.

Assumption

(c) Key Fractionated Blood Product Issues

Product	2018/19	2019/20	2020/21	2021/22
Immunoglobulin Issues (grams)	414,221	434,784	456,382	479,094

(d) Other Key Product Issues

Product	2018/19	2019/20	2020/21	2021/22
Femoral Heads	810	820	825	835

(e) Key Services

Product	2018/19	2019/20	2020/21	2021/22
Tissue Typing –Total Test Volumes	16,283	16,354	16,425	16,493
Compatibility Testing	110,500	110,250	110,250	110,500
Blood Grouping	156,000	156,500	156,750	157,000
Antibody Screen	150,000	152,000	155,000	155,750
Therapeutic venesection	4,325	4,350	4,375	4,400

Comment / Risk

<u>Immunoglobulin Product (IVIg)</u> – Intragam P and Evogam are the primary manufactured fractionated products supported by the second line commercially sourced Privigen product. Since 2008 the average annual growth rate for IVIg product has been 6.2%. However from a peak of a 12.2% growth spike in 2014/15 the growth rate has declined steadily until 2017/18 with an 11.0% growth spike. The IVIg growth rate in these forecasts reflects a medium growth setting of 5% per annum.

Over this planning period an average annual growth rate of 5.0% has been assumed. Should prescribing increase <u>or</u> decrease from the budgeted average annual growth assumption, then collection targets will be flexed to ensure demand is met and product expiry is minimised. (<u>Note</u>: IVIg product has a two year shelf-life which enables stock management to be flexed as required). Inventory levels for fractionated product will be managed at a minimum holding of 4 month's supply in order to ensure surety of supply.

Risk Assessment: HIGH - Demand volatility, both upside and downside, is a risk inherent within the NZBS business model. Historically NZBS been required to manage uneven demand growth across all products. This plan forecasts the reduction in fresh product volumes produced per 1,000 head of population from an actual 28.21 units in 2016/17 to a forecast 25.92 units in 2021/22 – a decline of 8.1% over the planning period. Should Immunoglobulin demand increase beyond NZBS's ability to collect the required levels of plasma for manufacture, the second line Privigen product would be used to supplement supply.

Assumption

4. Collection Volumes - Based on forecast demand patterns the required collection volumes over the planning period are forecast to be:

Collection Method	2018/19	2019/20	2020/21	2021/22
Whole Blood	109,300	108,425	107,825	107,325
Plasmapheresis	61,100	65,000	70,000	70,000
Plateletpheresis	2,700	2,725	2,765	2,800
Total Collections	173,100	176,150	180,590	180,125

Within these collection volumes the assumed kilograms (kgs) of plasma shipped to CSL Behring to be manufactured into fractionated products and returned to NZ has been forecast as:

Product	2018/19	2019/20	2020/21	2021/22
Plasma for Fractionation (Kgs)	71,377	74,062	77,605	77,476

With Whole Blood collections forecast to slowly decline the increase in required starting plasma is being secured via increased plasmapheresis collections. If demand exceeds this assumption then product may be supplemented via a second line commercial product.

Comment / Risk

Blood collection volumes are based on forecast demand with collection levels flexed as required over a financial year in order to minimise product expiry.

The growth in plasmapheresis collections forecast over the period is required to meet the forecast starting plasma demand for the manufacture of Fractionated Product (see Assumptions 3).

Risk Assessment: MEDIUM - collection volumes are very sensitive to product demand assumptions. Accordingly NZBS will flex its collection levels up or down to align with trending demand patterns.

This would be managed with an increase (or decrease) in donor recruitment activity and associated encouragement to existing donors to increase (or decrease) their donation frequency.

<table>
<tr><th></th><th>Assumption</th><th>Comment / Risk</th></tr>
<tr><td>5.</td><td>Only Albumex products will have revenue associated with the sale of surplus production volumes.

NOTE: there is no market for the sale of surplus Biostate (Factor VIII).</td><td>NZBS has a developed its stock management process to minimise product expiry and maximise product utilisation.

Risk Assessment: LOW – clearly defined contract arrangements are in place for surplus Albumin product via the NZBS fractionated product manufacturer, CSL Behring (Australia) Pty Limited.</td></tr>
<tr><td>6.</td><td>New Zealand is maintaining resilience of supply over the planning period for all major blood products including manufactured fractionated products of which Immunoglobulin Products (Intragam P and Evogam) are the driver products derived from NZBS provided starting plasma.

In 2015, as part of ensuring resiliency of supply, a second line immunoglobulin product supply agreement for the supply of Privigen was entered into with CSL Behring. This effectively introduced a hybrid supply arrangement for immunoglobulin product going forward and in doing so also represented a supply risk mitigation.

NZBS continually assesses its supply chain to ensure the mechanisms in place maintain resilience of supply and that those mechanisms remain appropriate and cost effective in meeting New Zealand’s demand needs for these fractionated products.</td><td>The principle of ensuring resilience of supply is framed within the wider context of self-sufficiency. NZBS is regularly reviewing its supply arrangements, based on financial, clinical and surety of supply criteria.

Risk Assessment: MEDIUM – NZBS on current demand forecasts collects sufficient blood (including plasma) and produces sufficient blood products to maintain self-sufficiency over the short term however the current hybrid supply arrangements are expected to continue over the planning period.
However a higher than forecast demand for immunoglobulin could be expected to see the level of second line product use increased.

The ability to revert to full self-sufficiency can be expected to remain under review over the planning period</td></tr>
<tr><td>7.</td><td>Current fractionation yields are expected to be maintained over the 4 year planning period.</td><td>Changes in the yield of fractionated product obtained by CSL Behring from a volume of plasma will impact either adversely (in the case of reduced yield) or favourably (in the case of improved yield) on the NZBS forecast financial position.

Risk Assessment: LOW – based on the prior yield performance of the manufacturer CSL Behring.</td></tr>
<tr><td>8.</td><td>Plasma fractionation costs in 2018/19 and subsequent years will increase in accordance with any agreed increases as provided for in the confidential CSL Behring Toll Manufacturing Agreement.

The current Toll Manufacturing Agreement operates until 30 June 2022.</td><td>The CSL Behring (Australia) Pty Ltd Toll Fractionation Agreement is priced in Australian dollars so an exposure to movements in the AUD:NZD cross rate exists.

Risk Assessment: MEDIUM – NZBS endeavours to mitigate this risk via Forward Exchange contracts purchased in accordance with the NZBS Treasury Policy. Also refer to the foreign exchange assumption 18 below.</td></tr>
<tr><td>9.</td><td>The stock turn ratios for the total inventory holding over the forecast period is set out below:
<table>
<tr><th>Stock Turns
(all Products)</th><th>Turns per Annum</th></tr>
<tr><td>2017/18 Year</td><td>3.58</td></tr>
<tr><td>2018/19 Year</td><td>3.67</td></tr>
<tr><td>2019/20 Year</td><td>3.89</td></tr>
<tr><td>2020/21 Year</td><td>4.01</td></tr>
<tr><td>2021/22 Year</td><td>3.99</td></tr>
</table></td><td>NZBS sets a minimum stock holding average of 3 to 4 months demand across its non-fresh product range to ensure surety of supply. This sets the minimum benchmark stock turn for all inventory held at an ideal stock turn of between 3.5 times and 4.0 times, a benchmark figure NZBS applies in the context of ensuring efficient working capital management.
Risk Assessment: MEDIUM – an unexpected drop in demand increases the risk of product expiry (fresh product) and higher short term inventory holding (fractionated product). The primary stock risk category is fractionated product (due to 3 - 4 month minimum stock holding) however the risk, as regards expiry, is mitigated in large part by this product category having a 2 to 3 year shelf life depending on the product.</td></tr>
</table>

<table>
<tr><th colspan="2">Assumption</th><th>Comment / Risk</th></tr>
<tr><td>10.</td><td>FTE requirements have been revised with the new levels incorporated in the financial forecasts as per below:

<table>
<tr><th>Year</th><th>Forecast FTE Levels as at 30 June each Year</th></tr>
<tr><td>2017/18</td><td>538.65</td></tr>
<tr><td>2018/19</td><td>559.38</td></tr>
<tr><td>2019/20</td><td>553.38</td></tr>
<tr><td>2020/21</td><td>553.38</td></tr>
<tr><td>2021/22</td><td>553.38</td></tr>
</table></td><td>As an essential service provider NZBS must adapt quickly to changes in demand and/or safety and regulatory requirements. Staffing levels are therefore subject to increase or decrease in response to changing business requirements, particularly changes in demand for products.

Over the planning period assumptions have been made based on forecast demand levels and efficiencies stemming from business improvement initiatives expected over the planning period.

Risk Assessment: MEDIUM – turnover is relatively low. The main risk is the inability to source new/replacement appointments with the required skill mix. NZBS is competing with the health and disability sector at large for resources, mitigated in part by participating in the same collective agreements as the DHBs.</td></tr>
<tr><td>11.</td><td>The majority of NZBS staff will continue to be employed on collective agreements (either Multi-Employer Collective Agreements (MECAs) or Single-Employer Collective Agreements).

Assumptions regarding employee cost increases have taken into account the Government's updated Expectations on Employment Relations in the State Sector published in 2018 and direct consultation with the Ministry of Health.

Known information combined with best estimates in respect of possible future settlements have been included in the financial forecasts over the planning period.</td><td>Staff costs make up on average 45% of NZBS's operational expenditures. Most collectives have built into them an annual increase together with merit step increases which have an impact on NZBS's overall annual cost increases.

Settlements in relation to Collective Agreement negotiations have a flow on effect to costs associated with staff working under Individual Employment Agreements.

Risk Assessment: MEDIUM to HIGH - risk of settlement outside of budgeted parameters, depending on wider sector settlements. (Assumption 1 also refers.)</td></tr>
<tr><td>12.</td><td>Consumable costs (based on current contracts, or expected CPI increases) and employee costs (FTEs required) are based on meeting the projected collection volume targets as set over the 4 year planning period and as summarised in Assumption 4.</td><td>Forecast collection volumes are subject to change in response to alterations in demand patterns for products, variation in production yields and/or collection / processing methods. Further staffing and consumable reductions would be considered in the event that collection volume requirements decrease further than forecast for a sustained period of time.

Likewise, if collection volume levels are required to increase significantly beyond those forecast, an increase in staffing and consumables may be required to collect and process additional volumes.

<u>Note</u>: Many NZBS consumables purchased from international markets are subject to foreign exchange fluctuations.

Risk Assessment: MEDIUM - that input price increases are higher than budgeted allowances. (Assumption 1 also refers.)</td></tr>
<tr><td>13.</td><td>Existing regulatory cost framework will be maintained with the only additional costs included in the budget being associated with initiatives to achieve compliance with the Public Records Act 2005.</td><td>NZBS has reflected its regulatory compliance costs over the planning period based on the existing regulatory framework and associated cost structures.

Risk Assessment: LOW – the existing regulatory environment is well understood by NZBS.</td></tr>
</table>

<table>
<tr><th></th><th>Assumption</th><th>Comment / Risk</th></tr>
<tr><td>14.</td><td>Foreign exchange rates over the forecast period have been assumed as:

<table><tr><th>Year</th><th>AUD$</th><th>Euro</th><th>US$</th></tr><tr><td>2018/19</td><td>0.9088</td><td>0.5614</td><td>0.6625</td></tr><tr><td>2019/20</td><td>0.9152</td><td>0.5352</td><td>0.6593</td></tr><tr><td>2020/21</td><td>0.9037</td><td>0.5332</td><td>0.6808</td></tr><tr><td>2021/22</td><td>0.8905</td><td>0.5376</td><td>0.7063</td></tr></table>
These rates have been based on the latest information that was available at the time the financial forecasts contained within this document were prepared.</td><td>NZBS has exposure to foreign exchange fluctuations, primarily the Australian dollar through its Toll Fractionation contract with CSL Behring.

Based on 2018/19 settings a 1 cent movement in the AUD exchange rate increases or reduces fractionation costs by approximately NZD$220k.

The financial forecasts assume currency management is reflected over the planning period in accordance with the requirements of the Treasury Policy. Accordingly realised and unrealised currency movements are incorporated in the financial forecasts.

NZBS manages this operational currency risk via forward exchange contracts managed in accordance with the NZBS Treasury Management Policy.

Risk Assessment: MEDIUM – any ongoing volatility in global financial markets has the potential to impact New Zealand’s economic settings in the medium term. The short term, defined as the initial 12 to 18 months of the planning period, is risk mitigated via forward exchange contracts.</td></tr>
<tr><td>15.</td><td>As a demand-driven service provider to the health and disability sector, NZBS will share with the DHBs any unbudgeted realised net financial gains that it may achieve due to optimal product mix demand, improving yields and cost efficiencies, in accordance with the NZBS Financial Guidelines Policy.

No price rebates have been incorporated in these financial forecasts.</td><td>NZBS has a Financial Guidelines Policy that clearly sets out the Board’s obligations (having regard to NZBS’s longer term financial viability) to assess on an annual basis, whether any realised net financial gains will be shared with the DHBs as a price rebate.</td></tr>
<tr><td>16.</td><td>The Capital Charge, paid to the Crown, is based on the forecast closing equity position and has been assumed at the current rate of 6% per annum on closing equity over the forecast period.</td><td>This is a Government mandated charge over which NZBS has no direct control.</td></tr>
<tr><td>17.</td><td>The quantum of capital expenditure will be tightly managed year on year over the planning period to ensure the capital plan in any given year will not be exceeded.

The current 4 year forecast indicates a capital spend of $32.57m compared with a depreciation charge of $20.91m.</td><td>Safety requirements and the capital intensive nature of the blood service operations often means a variable capital spend on a year-on-year basis.

NZBS allows for capital substitution to apply in any given year.

Risk Assessment: LOW - the capital expenditure plan is a carefully considered and managed document ensuring a low risk of being greater than budget.</td></tr>
<tr><td>18.</td><td>Interest rates on the NZBS Funding Facility over the planning period have been based off projected 90 day interest rates and are assumed to be:

<table><tr><th>Year</th><th>Interest Rate</th></tr><tr><td>2018/19</td><td>2.80%</td></tr><tr><td>2019/20</td><td>3.10%</td></tr><tr><td>2020/21</td><td>3.53%</td></tr><tr><td>2021/22</td><td>3.95%</td></tr></table></td><td>The level of available funds has been set to ensure forecast funding needs can be accommodated without need for facility renegotiation. The term of the facility covers the first 2 years of the planning period.

The facility is operated in accordance with its banking covenants.

Risk Assessment: LOW - based on the forecast level of facility debt NZBS exposure to any interest rate movement is minimal in the context of the overall NZBS cost structure.</td></tr>
</table>

Assumption		Comment / Risk
19.	There will be no adverse material financial impact on the forecast financial position as a result of any plasma pool loss or product recall incident (e.g. loss of a pool of plasma through contamination or an identified manufacturing problem requiring the recall and potential destruction of product).	NZBS would expect to manage such adverse financial impact via its Adverse Fractionation Event Policy where a \$4.0m reserve exits to mitigate the initial financial impact of such an event prior to engaging in the '*last resort*' process outlined in 2005 by the Ministry of Health. Such action would only be initiated if the financial impact exceeded NZBS financial capacity. **Risk Assessment: LOW** – a plasma contamination has not occurred to date and is considered a low frequency high financial impact event. However a product recall event did occur in November 2013 with an adverse NZBS financial impact outcome of \$750k. The basis for managing such situations is now well established and is actively monitored by NZBS as to its financial capacity to deal with such events.

3.3 FORECAST FINANCIAL STATEMENTS

Forecast Statements of Comprehensive Revenue and Expense

	Budget FY 18	Forecast FY 18		Forecast FY 19		Forecast FY 20		Forecast FY 21		Forecast FY 22	
	$000	$000	%	$000	%	$000	%	$000	%	$000	%
Summary											
Total Revenue	118,446	121,048		127,397		134,796		140,932		147,339	
Total Expenditure	120,301	121,791		128,823		135,390		140,573		147,163	
Surplus / (Deficit) for the Year	(1,855)	(743)		(1,426)		(594)		358		177	
Further detailed as:											
Revenue											
Revenue from supplying Blood Products	94,545	94,386	77.97%	101,296	79.51%	107,472	79.73%	112,615	79.91%	118,052	80.12%
Revenue from supplying Services	22,528	25,478	21.05%	24,834	19.49%	25,746	19.10%	26,579	18.86%	27,444	18.63%
Revenue from Overseas Sales	1,075	827	0.68%	952	0.75%	1,240	0.92%	1,351	0.96%	1,408	0.96%
Interest Income	291	316	0.26%	308	0.24%	332	0.25%	380	0.27%	429	0.29%
Other Income	7	41	0.03%	7	0.01%	7	0.00%	7	0.00%	7	0.00%
Total Revenue	118,446	121,048	100.00%	127,397	100.00%	134,796	100.00%	140,932	100.00%	147,339	100.00%
Expenditure											
Cost of Consumables & Changes in Inventory ***	43,126	45,602	37.67%	46,487	36.49%	48,985	36.34%	51,487	36.53%	55,425	37.62%
Employee Benefit Expense	44,894	44,858	37.06%	49,813	39.10%	51,355	38.10%	52,876	37.52%	54,859	37.23%
Other Operating Expenses	24,109	24,781	20.47%	24,742	19.42%	26,298	19.51%	26,504	18.81%	26,931	18.28%
Operating Expenditure	112,129	115,241	95.20%	121,042	95.01%	126,637	93.95%	130,867	92.86%	137,216	93.13%
Earnings - EBITDA	6,317	5,807	4.80%	6,355	4.99%	8,158	6.05%	10,064	7.14%	10,124	6.87%
Depreciation (Depn)	4,447	3,979	3.29%	4,244	3.33%	5,181	3.84%	5,731	4.07%	5,757	3.91%
Finance Costs	537	578	0.48%	631	0.49%	879	0.65%	981	0.70%	1,147	0.78%
Capital Charge	2,620	2,434	2.01%	2,277	1.79%	2,216	1.64%	2,209	1.57%	2,225	1.51%
Operational Earnings post Depn & Financing Costs	(1,287)	(1,183)	(0.98%)	(796)	(0.63%)	(117)	(0.09%)	1,143	0.81%	994	0.67%
Non Operating Expenditure											
Accrued Rent Payable	601	601	0.50%	560	0.44%	560	0.42%	472	0.33%	428	0.29%
Revaluation of Derivative Financial Instruments	(33)	(1,041)	(0.86%)	(56)	(0.04%)	(258)	(0.19%)	138	0.10%	265	0.18%
Redevelopment Expenses - 71 Great South Road				125		175		175		125	
Total Non Operating Expenditure	568	(440)	(0.36%)	629	0.49%	477	0.35%	785	0.56%	817	0.55%
Surplus / (Deficit) for the Year	(1,855)	(743)	(0.61%)	(1,426)	(1.12%)	(594)	(0.44%)	358	0.25%	177	0.12%
Other Comprehensive Revenue and Expense	-	-		-		-		-		-	
Total Other Comprehensive Revenue and Expense	-	-		-		-		-		-	
Total Comprehensive Revenue and Expense for Year	(1,855)	(743)	(0.61%)	(1,426)	(1.12%)	(594)	(0.44%)	358	0.25%	177	0.12%

Forecast Statements of Changes in Equity

	Budget FY 18 $000	Forecast FY 18 $000	Forecast FY 19 $000	Forecast FY 20 $000	Forecast FY 21 $000	Forecast FY 22 $000
Opening balance	38,352	39,400	38,657	37,231	36,636	36,995
Total comprehensive Revenue and Expense for year	(1,855)	(743)	(1,426)	(594)	358	177
Movement in Adverse Fractionation Event Reserve						
Contribution from owners	-	-	-	-	-	-
Closing balance	36,497	38,657	37,231	36,636	36,995	37,171
Forecast changes in Equity over the forecast period						
(a) Crown Equity						
Opening Balance	15,717	15,717	15,717	15,717	15,717	15,717
Contribution from Owners	-	-	-	-	-	-
Closing balance	15,717	15,717	15,717	15,717	15,717	15,717
(b) Retained Earnings						
Opening Balance	19,636	19,683	18,940	17,514	16,920	17,278
Total Comprehenive Income for year	(1,855)	(743)	(1,426)	(594)	358	177
Transfer to Adverse Fractionation Event Reserve						
Closing balance	17,781	18,940	17,514	16,920	17,278	17,455
(c) Adverse Fractionation Event Reserve						
Opening Balance	3,000	4,000	4,000	4,000	4,000	4,000
Transfer from Adverse Fractionation Event Reserve		-	-	-	-	-
Closing balance	3,000	4,000	4,000	4,000	4,000	4,000
Closing Equity Balance	36,497	38,657	37,231	36,636	36,995	37,171

*** Note re Changes in Inventory

For ease of reporting, the '*Changes in Inventory*' category is an aggregated reporting category comprising 'cost of goods sold, production recoveries and inventory valuation adjustments' consistent with the application of manufacturing standard costing methodologies and generally accepted inventory valuation principles.

Forecast Statements of Financial Position

	Budget FY 18 $000	Forecast FY 18 $000	Forecast FY 19 $000	Forecast FY 20 $000	Forecast FY 21 $000	Forecast FY 22 $000
Equity						
Crown Equity	15,717	15,717	15,717	15,717	15,717	15,717
Retained Earnings/(Losses)	17,781	18,940	17,514	16,920	17,278	17,455
Adverse Fractionation Event Reserve	3,000	4,000	4,000	4,000	4,000	4,000
Total Equity	**36,497**	**38,657**	**37,231**	**36,636**	**36,995**	**37,171**
Equity as a % of Total Assets	50.0%	50.9%	46.2%	43.2%	41.1%	39.4%
Represented by:						
Assets						
Current Assets						
Cash and Cash Equivalents	514	3,727	1,916	1,785	2,827	2,809
Trade and Other Receivables	12,669	12,870	13,595	14,315	14,899	15,498
Inventories	28,030	29,400	29,903	29,959	30,361	31,985
Investments	7,000	7,000	7,000	7,000	7,000	7,000
Derivative Financial Instruments	54	171	227	485	347	82
Total Current Assets	48,267	53,167	52,640	53,544	55,434	57,374
Non Current Assets						
Property, Plant and Equipment	14,943	12,919	18,968	23,319	27,549	30,809
Intangible Assets	9,848	9,890	8,901	7,926	6,966	6,066
Total Non Current Assets	24,792	22,809	27,869	31,246	34,515	36,874
Total Assets	**73,058**	**75,976**	**80,509**	**84,790**	**89,949**	**94,248**
Liabilities						
Current Liabilities						
Trade and Other Payables	10,307	12,200	12,135	12,710	13,466	13,909
Provisions	4,100	3,517	4,216	4,406	4,544	4,748
Employee Entitlements	6,278	6,636	7,054	7,110	7,406	7,718
Derivative Financial Instruments	-	-	-	-	-	-
Borrowings	562	478	800	1,281	1,439	1,618
Lease Incentive Liability	25	26	26	26	26	25
Total Current Liabilities	21,272	22,857	24,230	25,533	26,880	28,019
Non Current Liabilities						
Employee Benefit Liabilities	1,900	1,646	1,763	1,903	2,013	2,170
Provisions	2,284	2,302	2,401	2,494	2,585	2,677
Accrued Rent and Lease Incentive Liability	2,668	2,678	3,212	3,746	4,192	4,595
Borrowings	8,437	7,836	11,672	14,478	17,284	19,617
Total Non Current Liabilities	15,288	14,462	19,048	22,621	26,074	29,058
Total Liabilities	**36,561**	**37,319**	**43,279**	**48,154**	**52,954**	**57,077**
Net Assets	**36,497**	**38,657**	**37,231**	**36,636**	**36,995**	**37,171**

Forecast Statements of Cash Flows

	Budget FY 18 $000	Forecast FY 18 $000	Forecast FY 19 $000	Forecast FY 20 $000	Forecast FY 21 $000	Forecast FY 22 $000
Cash Flows from Operating Activities						
Cash was provided from:						
Receipts from Blood Products and Services Revenue	117,070	119,201	125,618	132,645	138,714	144,994
Interest Received	30	70	70	45	66	83
Receipts from Other Revenue	749	746	763	1,121	1,276	1,340
	117,850	120,017	126,451	133,811	140,056	146,417
Cash was disbursed to:						
Payments to Employees	44,296	43,772	49,151	51,118	52,432	54,339
Payments to Suppliers	66,193	67,847	71,223	74,849	77,734	83,536
Distributions to Primary Stakeholders	-	-	-	-	-	-
Interest Paid	489	529	583	835	937	1,103
Capital Charge Paid	2,620	2,434	2,277	2,216	2,209	2,225
Net GST Payable to IRD	(16)	(92)	120	(63)	(20)	(26)
	113,582	114,491	123,353	128,955	133,293	141,177
Net Cash Flow from Operating Activities	**4,268**	**5,526**	**3,098**	**4,855**	**6,763**	**5,240**
Cash Flows from Investing Activities						
Cash was provided from:						
Proceeds - Interest on Term Deposits > 3 Months	259	232	237	286	314	346
Proceeds from the sale of Property, Plant & Equipment	-	-	-	-	-	-
	259	232	237	286	314	346
Cash was disbursed to:						
Acquisition of Property, Plant & Equipment	(3,900)	(3,311)	(8,472)	(7,457)	(7,800)	(6,942)
Acquisition of Intangible Assets	(978)	(2,162)	(832)	(1,100)	(1,200)	(1,175)
Acquisition of Investments - Term Deposits	(4,000)	(3,000)	(5,000)	(4,000)	(5,000)	(4,000)
Receipts from Maturity of Investments	4,000	3,000	5,000	4,000	5,000	4,000
	(4,878)	(5,473)	(9,304)	(8,557)	(9,000)	(8,117)
Net Cash Flow from Investing Activities	**(4,619)**	**(5,241)**	**(9,068)**	**(8,271)**	**(8,686)**	**(7,771)**
Cash Flow from Financing Activities						
Cash was provided from:						
Proceeds from Term Facilities	-	-	-	-	-	-
Proceeds from Term Borrowings - Finance Leases	-	-	4,836	4,373	4,245	3,951
	-	-	4,836	4,373	4,245	3,951
Cash was disbursed to:						
Repayment of Term Facilities	-	-	-	-	-	-
Repayment of Term Borrowings - Finance Leases	(521)	(490)	(677)	(1,089)	(1,281)	(1,439)
	(521)	(490)	(677)	(1,089)	(1,281)	(1,439)
Net Cash Flow from Financing Activities	**(521)**	**(490)**	**4,159**	**3,284**	**2,965**	**2,512**
Net increase/(Decrease) in Cash and Cash Equivalent	**(871)**	**(206)**	**(1,811)**	**(131)**	**1,042**	**(18)**
Cash and Cash Equivalents at the beginning of the yea	1,385	3,932	3,727	1,916	1,785	2,827
Cash and Cash Equivalents at the end of the year	**514**	**3,727**	**1,916**	**1,785**	**2,827**	**2,809**

Reconciliation of Surplus / (Deficit) with Net Cash Flow from Operating Activities

	Budget FY 18 $000	Forecast FY 18 $000	Forecast FY 19 $000	Forecast FY 20 $000	Forecast FY 21 $000	Forecast FY 22 $000
Total Comprehensive Revenue and Expense for Year	(1,855)	(743)	(1,426)	(594)	358	177
Add Back Non Cash Items:						
Depreciation - Property Plant and Equipment	2,773	2,582	2,424	3,106	3,570	3,682
Depreciation - Intangible Assets	1,674	1,396	1,821	2,075	2,161	2,075
Property, Plant & Equipment Write Off Provision	-	-	-	-	-	-
Change in Premises Reinstatement Provision	99	99	99	93	91	92
Change in Lease Incentive Liability	(25)	(26)	(26)	(26)	(26)	(26)
Add / (Less) Items Classified as Investing Activity:						
Net (Gain) / Loss on Sale of Property, Plant & Equipment	-	0	-	-	-	-
Proceeds - Interest on Term Deposits > 3 Months	(259)	(232)	(237)	(286)	(314)	(346)
Movement in Working Capital:						
(Increase)/ Decrease in Trade and Sundry Receivables	(336)	(800)	(709)	(699)	(562)	(576)
(Increase) / Decrease in Prepayments	(14)	(5)	(16)	(21)	(22)	(22)
(Increase) / Decrease in Inventories	223	289	(503)	(56)	(402)	(1,624)
Increase / (Decrease) in Trade Creditors & Other Payables	206	(80)	573	302	146	(28)
Increase / (Decrease) in Other Payables	248	2,914	(567)	298	636	505
Increase / (Decrease) in General Accruals	435	(400)	627	166	111	170
Increase / (Decrease) in Employee Entitlements	531	1,025	535	197	405	469
Increase / (Decrease) in Accrued Rent Payable	601	601	560	560	472	428
Revaluation of Derivative Financial Instruments	(33)	(1,097)	(56)	(258)	138	265
Net Cash Inflow/(Outflow) from Operating Activities	**4,268**	**5,526**	**3,098**	**4,855**	**6,763**	**5,240**

3.4 STATEMENT OF ACCOUNTING POLICIES

1) Reporting Entity

The New Zealand Blood Service (NZBS) is an appointed entity pursuant to Section 63 of the Human Tissue Act 2008, primarily responsible for the performance of functions in relation to blood and controlled human substances in New Zealand.

NZBS is a Crown entity under the New Zealand Public Health and Disability Act 2000, and, more specifically a Statutory Entity under the Crown Entities Act 2004. NZBS's ultimate parent is the New Zealand Crown.

NZBS is a public benefit entity as its primary objective is to support the New Zealand healthcare community through managing the collection, processing and supply of blood, controlled human substances and related services. Accordingly, NZBS has designated itself as a public benefit entity (PBE) for the purposes of applying the Public Benefit Entities Accounting Standards (PBE Standards), issued by the External Reporting Board (XRB).

2) Authorisation Statement

These forecast financial statements were authorised for issue on 27 June 2018 by the Chief Executive Officer of NZBS who is responsible for the forecast financial statements as presented. The preparation of these financial statements requires judgements, estimations and assumptions (refer section 3.2 for key assumption details) that affect the application of policies and reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed reasonable under the circumstances.

Actual financial results achieved for the period covered are likely to vary from the information presented and the variations may be material.

It is not intended that the prospective financial statements will be updated subsequent to presentation.

3) Basis of Preparation

The financial statements of NZBS have been prepared in accordance with the requirements of the Crown Entities Act 2004 and the New Zealand Public Health & Disability Act 2000.

These financial statements have been prepared in accordance with New Zealand generally accepted accounting practice (NZ GAAP), in accordance with Tier 1 PBE Standards. They comply with PBE Standards, as appropriate for PBEs.

The accounting policies set out below have been applied consistently to all periods presented in these financial statements.

The financial statements have been prepared on a historical cost basis, with the exception of certain items identified in specific accounting policies.

The financial statements are presented in New Zealand dollars. The functional currency of NZBS is New Zealand dollars.

4) Significant Assumptions

These forecast financial statements are based on the financial results reported to 31 January 2018 and the inherent trends reflected in those results and have been prepared on the basis of key assumptions as detailed in Section 3.2 as to future events that NZBS can reasonably expect to occur, associated with actions it reasonably expects to take.

These forecasts have been compiled on the basis of the strategic plan (as detailed in the Statement of Intent) and Ministerial expectations at the date the information was prepared. Estimated year-end information for 2017/18 is used as the opening position for the 2018/19 forecasts.

The forecast financial statements have been prepared in compliance with *NZFRS 42 Prospective Financial Statements.*

5) Standards and Interpretation issued and not yet adopted

There are no standards issued and not yet effective that are relevant to NZBS.

6) Significant Accounting Policies

Early adoption of PBE IFRS 9

NZBS has elected to early adopt PBE IFRS 9 Financial Instruments (2014) ("IFRS 9") from 1 July 2018 without restatement, in accordance with the transition requirements. The date of initial application is 1 July 2018. IFRS 9 was issued in January 2017 and is applicable for accounting periods beginning on or after 1 January 2021. This standard sets out the new requirements for classification and measurement, impairment and hedge accounting for financial instruments.

The following changes to accounting policies due to application of IFRS 9 have been applied to these financial statements.

Classification and measurement of financial assets

NZBS classifies its financial assets as subsequently measured at either amortised cost or fair value depending on NZBS's business model for managing the financial assets and the contractual cash flow characteristics of the financial assets. On adoption of IFRS 9, investments previously classified as loans and receivables are now classified as financial assets at amortised cost. However there is no material impact as these are still measured at amortised cost.

Classification and measurement of financial liabilities

Classification of financial liabilities remained unchanged for NZBS. Financial liabilities continue to be measured at either amortised cost or at fair value through profit and loss.

Changes to impairment of financial assets

The PBE IFRS 9 impairment requirements are based on an expected credit loss model, replacing the incurred loss methodology under PBE IAS 39. NZBS applies the simplified approach for trade and other receivables, which requires the lifetime expected credit losses to be applied when measuring the loss allowance. The impact of adopting IFRS 9 has not had a material impact on the loss allowance.

Revenue

Revenue is measured at the fair value of consideration received or receivable. The specific accounting policies for significant revenue items are explained below.

Sales of Products

Revenue from the sales of products is recognised at the time the risk and effective ownership transfers to the customer.

Provision of Services

Revenue from the rendering of services is recognised as the services are provided.

Price Rebate to District Health Boards

NZBS also considers annually in accordance with the financial guidelines policy, price rebates to District Health Boards which if elected by the Board to be paid are recognised at the point of decision and deducted from the amount of revenue received or receivable.

Interest Income

Interest income is recognised using the effective interest method.

Capital Charge

The capital charge is recognised as an expense in the financial year to which the charge relates.

Leases

Finance leases

A finance lease is a lease that transfers to the lessee substantially all the risks and rewards incidental to ownership of an asset, whether or not title is eventually transferred.

At the commencement of the lease term, NZBS recognises finance leases as assets and liabilities in the statement of financial position at the lower of the fair value of the leased item or the present value of the minimum lease payments.

The amount recognised as an asset is depreciated over its useful life. If there is no certainty as to whether NZBS will obtain ownership at the end of the lease term, the asset is fully depreciated over the shorter of the lease term and its useful life.

Operating leases

An operating lease is a lease that does not transfer substantially all the risks and rewards incidental to ownership of an asset. Lease payments under an operating lease are recognised as an expense on a straight-line basis over the lease term.

Cash and Cash Equivalents

Cash and cash equivalents include cash in hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less, and bank overdrafts. Cash and cash equivalents are classified and measured at amortised cost in the statement of financial position. These financial instruments are short term in nature and the carrying amount is considered to be a reasonable approximation of fair value.

Bank overdrafts are shown within borrowings in current liabilities in the statement of financial position. Bank overdrafts are classified and measured at amortised cost. As these are short term in nature the carrying amount is considered to be a reasonable approximation of fair value.

Trade and Other Receivables

Trade and other receivables are initially measured at fair value and subsequently measured at amortised cost using the effective interest method, less any provision for impairment. Trade and other receivables are short term in nature and the carrying amounts are considered to be a reasonable approximation of fair values.

NZBS applied the simplified approach to measure the loss allowance for trade and other receivables. Under this approach the loss allowance is the lifetime expected credit loss. Trade receivables which are significant on an individual basis are evaluated on a line by line basis. For those are not determined to be significant individually, the loss allowance is assessed on a portfolio basis, taking into account days past due and historical loss experience in portfolios with shared characteristics. Historical loss rates are adjusted for forward-looking indicators and relevant macro-economic factors.

A provision for impairment of receivables is established when there is objective evidence that NZBS will not be able to collect all amounts due according to the original terms of receivables.

Inventories

Inventories are measured at cost upon initial recognition. To the extent that inventory was received through non-exchange transactions (i.e. donated goods) for no cost or for a nominal cost, the cost of the inventory is its fair value at the date of acquisition.

However, as NZBS is not legally permitted to purchase blood from the public, the accounting fair value of blood from donors is considered nil. Therefore the cost of inventories comprise all costs of collection, costs of conversion, and any other costs incurred in bringing the inventories to their present location and condition.

After initial recognition, inventory is measured at the lower of costs and net realisable value. The cost of inventory is determined using the FIFO or weighted average methods. The valuation includes allowance for slow moving items. Obsolete inventories are written off.

The write down from cost to net realisable value is recognised in the surplus or deficit except for fractionated derived products manufactured from New Zealand sourced plasma (refer below).

Inventories are recognised as an expense when deployed for utilisation or consumption in the ordinary course of NZBS's operation.

Fractionated derived products manufactured from a principal pool

Fractionated derived products are manufactured into finished blood products by a third party manufacturer on a "toll" manufacturing basis using NZBS provided sourced plasma. Fractionated derived products in the main are manufactured from between 10.4 tonne to 13.0 tonne plasma pools and the NZBS rolling manufacturing plan generally currently allows for 5 of the larger production pools in a financial year. The driver product group within the manufacturing process is the immunoglobulin product represented by Intragam P and Evogam product.

The principal pool work in progress (WIP) is included at full standard cost as the final output that the manufacturer must produce is locked in via the agreed production plan for a pool and contract yields per the toll manufacturing agreement. This high level of certainty enables the WIP to be viewed in the same light as finished fractionation product for the purposes of inventory valuation.

Valuation of fractionated derived products from these plasma pools, both finished goods and WIP, is based on allocating the actual input cost of manufacturing a plasma pool (NZBS source plasma input plus third party toll fractionation manufacturing fee) to prorated finished/WIP product output using actual product plasma yield, reported by the manufacturer.

Post this product cost allocation, if there are any products where cost exceeds the net realisable value then that cost excess is reallocated to the driver product group.

Financial Assets

NZBS classifies its financial assets within the scope of PBE IFRS 9 *Financial Instruments* into the following three categories: (1) Financial assets at fair value through surplus or deficit, (2) Financial assets at amortised cost, and (3) Financial assets at fair value through other comprehensive revenue or expense.

Financial assets are initially measured at fair value plus transaction costs unless they are carried at fair value through profit or loss in which case the transaction costs are recognised in the surplus or deficit.

Purchases and sales of investments are recognised on trade date, the date on which NZBS commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and NZBS has transferred substantially all the risks and rewards of ownership.

The fair value of financial instruments traded in active markets is based on quoted market prices at the balance date. The quoted market price used is the current bid price.

The fair value of financial instruments that are not traded in an active market is determined using valuation techniques. NZBS uses a variety of methods and makes assumptions that are based on market conditions existing at each balance date. Quoted market prices or dealer quotes for similar instruments are used for long-term debt instruments held. Other techniques, such as estimated discounted cash flows, are used to determine fair value for the remaining financial instruments.

The subsequent measurement of financial assets depends on their classification. NZBS classifies financial assets into three categories depending on their contractual cash flow characteristics and NZBS's business model for managing financial assets.

The categories of financial assets are:

Category (1) - Financial assets at fair value through surplus or deficit

This category has two sub-categories: financial assets held for trading, and those designated at fair value through surplus or deficit at inception. A financial asset is classified in this category if acquired principally for the purpose of selling in the short term or if so designated by management to eliminate or significantly reduce an accounting mismatch.

Derivatives are also categorised as held for trading unless they are designated as hedges. Assets in this category are classified as current assets if they are either held for trading or are expected to be realised within 12 months of the balance date.

After initial recognition they are measured at their fair values. Gains or losses on re-measurement are recognised in the surplus or deficit.

Category (2) - Financial assets at amortised cost

A financial asset is measured at amortised cost only if both of the following conditions are met:

- It is held within a business model with an objective to hold assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise to cash flows that are solely payments of principal and interest.

After initial recognition they are measured at amortised cost using the effective interest method, less impairment. Gains and losses when the asset is impaired or derecognised are recognised in the surplus or deficit.

Category (3) - Financial assets at fair value through other comprehensive revenue or expense

A financial asset is measured at fair value through other comprehensive revenue or expense if both the following conditions are met:

- The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Impairment of Financial Assets

At each balance date NZBS assesses whether there is any objective evidence that a financial asset or group of financial assets is impaired. Any impairment losses are recognised in the surplus or deficit. The loss allowance is measured based on expected credit losses, taking into account external factors and forward looking indicators. NZBS has recognised a loss allowance in relation to trade and other receivables measured at amortised cost. The methodology applied is described in more detail in 'Trade and other receivables' section.

Financial Liabilities

NZBS classifies its financial liabilities within the scope of PBE IFRS 9 *Financial Instruments* as either financial liabilities at fair value through surplus or deficit or financial liabilities at amortised cost. The classification of financial liabilities are determined on initial recognition. NZBS may choose at initial recognition to designate a financial liability as at fair value through surplus or deficit if doing so eliminates or significantly reduces an accounting mismatch.

All financial liabilities of NZBS are measured at amortised cost except derivative financial instruments which are measured at fair value. Gains or losses on re-measurement are recognised in the surplus or deficit.

All financial liabilities are recognised initially at fair value, and in the case of loans and borrowings, plus directly attributable transaction costs.

NZBS's financial liabilities include trade and other payables, loans and borrowings.

Foreign Currency Translation

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Transactions denominated in foreign currency are reported at the reporting date by applying the exchange rate on that date. Foreign exchange gains and losses resulting from the settlement of such transactions are recognised in the surplus or deficit.

Accounting for Derivative Financial Instruments and Hedging Activities

NZBS uses derivative financial instruments to manage exposure to foreign exchange risks arising from financing activities. In accordance with its Treasury Management Policy, NZBS does not hold or issue derivative financial instruments for trading purposes. NZBS has not adopted hedge accounting.

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value at each balance date. The resulting gain or loss is recognised in the surplus or deficit.

Property, Plant and Equipment

Property, plant and equipment consists of operational assets which include plant and equipment, computer hardware, motor vehicles, furniture and fittings / office equipment and leasehold improvements.

Property, plant and equipment is shown at cost less accumulated depreciation and impairment losses.

Additions

The cost of an item of property, plant and equipment is recognised as an asset if, and only if, it is probable that future economic benefits or service potential associated with the item will flow to NZBS and the cost of the item can be measured reliably.

Property, plant and equipment is initially recognised at cost. Where an asset is acquired at no cost, or for a nominal cost, it is recognised at fair value as at the date of acquisition.

Work in progress is recognised at cost less impairment and is not depreciated.

Disposals

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount of the asset. Gains and losses on disposals are included in the surplus or deficit.

Subsequent costs

The cost of replacing or improving part of an item of property, plant and equipment is recognised in the carrying amount of an item. The costs of day-to-day servicing of property, plant and equipment are recognised as incurred in the surplus or deficit.

Depreciation

Depreciation is provided on a straight-line basis on all property, plant and equipment, at rates that will write off the cost of the assets to their estimated residual values over their useful lives.
The useful lives of major classes of assets have been estimated as follows:

Computer Equipment:	- 3 to 5 years
Furniture and Fittings:	- 5 to10 years
Motor Vehicles:	- 3 to 4 years
Plant and Equipment:	- 5 to10 years
Leasehold Improvements:	- Shorter of term of lease or useful life

The residual value and useful life of an asset is reviewed, and adjusted if applicable, at each financial year end.

Intangible Assets

Acquired computer software licenses are capitalised on the basis of the costs incurred to acquire and bring to use the specific software.

Costs associated with maintaining computer software are recognised as an expense when incurred.

Amortisation

The carrying value of an intangible asset with a finite life is amortised on a straight-line basis over its useful life. Amortisation begins when the asset is available for use and ceases at the date that the asset is derecognised. The amortisation charge for each period is recognised in the surplus or deficit.

The useful lives of major classes of intangible assets have been estimated as follows:

Computer Software - 3 years

Computer Software Blood Management System (eProgesa and eTraceline) - 10 years

Changes in the expected useful life or the expected pattern of consumption are treated as changes in accounting estimates.

Intangible assets with a finite useful life are assessed for impairment whenever there is an indication that the asset may be impaired.

Impairment of Non-Financial Assets

NZBS does not hold any cash-generating assets. Assets are considered cash-generating where their primary objective is to generate a commercial return.

Non-Cash-Generating Assets

Property, plant, and equipment and intangible assets held at cost that have a finite useful life are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable service amount. The recoverable service amount is the higher of an asset's fair value less costs to sell and value in use.

Value in use is determined using an approach based on either a depreciated replacement cost approach, restoration cost approach, or a service units approach. The most appropriate approach used to measure value in use depends on the nature of the impairment and availability of information.

If an asset's carrying amount exceeds its recoverable service amount, the asset is regarded as impaired and the carrying amount is written-down to the recoverable amount. The total impairment loss is recognised in the surplus or deficit.

The reversal of an impairment loss is recognised in the surplus or deficit.

Creditors and Other Payables

Creditors and other payables are classified as financial liabilities measured at amortised cost. As these are short term in nature the carrying amount is considered to be a reasonable approximation of fair value.

Employee Benefits

- **Short-term benefits**

  Employee benefits that NZBS expects to be settled within 12 months of balance date are measured at nominal values based on accrued entitlements at current rates of pay. These include salaries and wages accrued up to balance date, annual leave earned to, but not yet taken at balance date, retiring and long service leave entitlements expected to be settled within 12 months, and sick leave.

  NZBS recognises a liability for sick leave to the extent that absences in the coming year are expected to be greater than the sick leave entitlements earned in the coming year. The amount is calculated based on the unused sick leave entitlement that can be carried forward at balance date, to the extent that NZBS anticipates it will be used by staff to cover those future absences.

  NZBS recognises a liability and an expense for bonuses where contractually obliged or where there is a past practice that has created a constructive obligation.

- **Long-term benefits**

  Long service leave and retirement leave

  Entitlements that are payable beyond 12 months, such as long service leave and retirement gratuities, have been calculated on an actuarial basis. The calculations are based on:

  - Likely future entitlements accruing to staff, based on years (of service years) to entitlement, the likelihood that staff will reach the point of entitlement and contractual entitlements information; and
  - The present value of the estimated future cash flows. The discount rate is based on the weighted average of Government interest rates for stock with terms to maturity similar to those of the relevant liabilities. The inflation factor is based on the expected long-term increase in remuneration for employees.

Superannuation Schemes

Defined contribution schemes

Obligations for contributions to defined contribution superannuation schemes are recognised as an expense in the surplus or deficit.

Defined benefit schemes

NZBS belongs to the Defined Benefit Plan Contributors Scheme (the scheme), which is managed by the Board of Trustees of the National Provident Fund. The scheme is a multi-employer defined benefit scheme.

Insufficient information is available to use defined benefit accounting, as it is not possible to determine from the terms of the scheme, the extent to which the surplus/deficit will affect future contributions by individual employers, as there is no prescribed basis for allocation. The scheme is therefore accounted for as a defined contribution scheme.

Provisions

NZBS recognises a provision for future expenditure of uncertain amount or timing when there is a present obligation (either legal or constructive) as a result of a past event, it is probable that expenditures will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

Provisions are not recognised for future operating losses.

Provisions are measured at the present value of the expenditures expected to be required to settle then obligation using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to the passage of time is recognised as an interest expense.

Borrowings

Borrowings are initially recognised at their fair value. After initial recognition, all borrowings are measured at amortised cost using the effective interest method.

Borrowings are classified as current liabilities unless NZBS has an unconditional right to defer settlement of the liability for at least 12 months after balance date.

Adverse Fractionation Event Reserve and Matching Investment Funds

NZBS collects source plasma and contracts a third party to manufacture that source plasma, via a complex series of processes known as fractionation, to produce a range of derived fractionation products for use within the New Zealand health sector. The manufacturing contract clearly defines the party's respective risks and responsibilities inclusive of financial risk attribution should certain of those risks inherent in the manufacturing process actually occur. NZBS attributed financial risks have, based on historical performance, been classified as being of low frequency but with a potentially high financial impact if an event did occur.

Accordingly NZBS has elected to mitigate this manufacturing financial risk with the establishment of the Adverse Fractionation Event Policy that mandates the establishment of an Adverse Fractionation Event Reserve within the Equity section of the Statement of Financial Position that is complemented by a matching term deposit fund to ensure access to liquidity in the event of an adverse event occurring.

Under this policy NZBS is required to assess, on an annual basis, the upper level of potential financial risk, the current level of the reserve and whether further funds should be transferred to the reserve with matching liquidity also required to be then set aside.

Equity

Equity is the Crown's interest in NZBS.

The components of equity are:

- *Crown Equity* - Crown Equity is the net asset and liability position at the time NZBS was established plus any subsequent equity injections.
- *Accumulated Comprehensive Revenue and Expense* - is the accumulated surplus/deficit since NZBS establishment.
- *Adverse Fractionation Event Reserve* - is the transfer from accumulated comprehensive revenue and expense commencing financial year ending 30 June 2015. The reserve has been established to mitigate the financial manufacturing risk associated with the production of fractionated derived products.

Good and Service Tax (GST)

All items in the financial statements are stated exclusive of GST, except for receivables and payables, which are stated on a GST inclusive basis. Where GST is not recoverable as input tax then it is recognised as part of the related asset or expense.

The net amount of GST recoverable from, or payable to, the Inland Revenue Department (IRD) is included as part of receivables or payables in the Statement of Financial Position. The net GST paid to, or received from the IRD, including the GST relating to investing and financing activities, is classified as an operating cash flow in the statement of cash flows.

Commitments and contingencies are disclosed exclusive of GST.

Taxation

NZBS is a statutory corporation under the New Zealand Public Health & Disability Act 2000 and is exempt from income tax under Section CW38 of the Income Tax Act 2007.

Budget Figures

The budget figures are those approved by the Board of NZBS at the beginning of the year as presented in the *Annual Statement of Performance Expectations*. The budget figures have been prepared in accordance with NZ GAAP and comply with NZ GAAP, using accounting policies that are consistent with those adopted by the Board for the preparation of the financial statements.

Critical Accounting Estimates and Assumptions

In preparing these financial statements NZBS has made estimates and assumptions concerning the future. These estimates and assumptions may differ from the subsequent actual results. Estimates and assumptions are continually evaluated and are based on historical experience and other known or expected factors, including expectations or future events that are believed to be reasonable under the circumstances. Where this is the case the basis of those assumptions are detailed in the relevant accounting policy and / or Section 3.2 of this document.

Critical Judgements in Applying the NZBS Accounting Policies

In preparing these financial statements NZBS management has made judgements in applying the NZBS accounting policies. These judgements have been applied consistently to all periods presented in these financial statements. There are no material judgements that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities that need disclosing.

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