Advice about iEd extracted from **Report to Government Investment Ministers: Data and Analytics Contingency – Trance Two investment proposals** under section 16(1)(e) of the Act

Tranche 0 and the first year of Tranche 1 of the iEd Programme (10 – 18)

10. **AGREE** to fund the Tranche 0 and the first year of Tranche 1 of the iEd Programme, to the full amount sought from the Data and Analytics Contingency, with a corresponding impact on the operating balance and debt

AGREE / DISAGREE

	$m – increase/(decrease)				
	2016/17	2017/18	2018/19	2019/20	2020/21 & Outyears
Operating Balance Impact	2.606	8.156	-	-	-
Debt Impact	-	1.504	-	-	-
Total	2.606	9.660	-	-	-

11. **APPROVE** the following changes to appropriations to give effect to the policy decision in recommendation 10 above:

<div align="right">**APPROVED / NOT APPROVED**</div>

Vote Education Minister of Education	$m – increase/(decrease)				
	2016/17	2017/18	2018/19	2019/20	2020/21& Outyears
Multi-Category Expenses and Capital Expenditure:					
Oversight of the Education System MCA					
Departmental Output Expense					
Research and Analysis	2.606	8.156	-	-	-
(funded by revenue Crown)					
Ministry of Education:					
Capital Injection	-	1.504	-	-	-
Total Operating	2.606	8.156	-	-	-
Total Capital	-	1.504	-	-	-

12. **AGREE** that the change to appropriation for 2016/17 in recommendation 11 above be included in the 2016/17 Supplementary Estimates and that, in the interim, the increase be met from Imprest Supply

<div align="right">**AGREE / DISAGREE**</div>

13. **AGREE** that the expenses incurred under recommendation 11 above be a charge against the tagged Data and Analytics Contingency established as part of Budget 2016

<div align="right">**AGREE / DISAGREE**</div>

14. **INVITE** the Minister of Education to seek approval from Cabinet for the overall iEd Programme prior to Budget 2018

<div align="right">**AGREE / DISAGREE**</div>

15. **DIRECT** the Ministry of Education to seek further advice from the Capital Investment Panel prior to Budget 2018

<div align="right">**AGREE / DISAGREE**</div>

16. **DIRECT** the Ministry of Education to report back to Investment Ministers in February 2018, upon the completion of Tranche 0 with detailed business cases

<div align="right">**AGREE / DISAGREE**</div>

17. **DIRECT** the Ministry of Education to report back to Investment Ministers in June 2018, for the activity which occurs as part of Tranche 1 (between the period of February-May 2018)

<div align="right">**AGREE / DISAGREE**</div>

Integrated Education Data, iEd (Ministry of Education)	Overall alignment
A system-wide information management programme to make education data accessible to inform decision-making by learners, whānau, teachers, education providers, Communities of Learning I Kāhui Ako, and government	Will enable social sector innovation and improve the ability for customer-centric decision making at the front line.
	Education data is a key asset for the data system that covers a significant part of the population.
	System gaps addressed
	Ensures data is designed and managed consistently across the Education sector to provide a single view of a learner.
	Improves the quality and interoperability of data, making it easier to share and use across and outside the Education sector.
	Provides appropriate access to data and analytics to both participants and providers in the Education system, to shape services and improve outcomes.

Note:

This table also contains the following information under the heading "system context":

- Integrated Education Data will provide relevant information to individuals and families, empowering them to be proactively engaged in the learner's education journey
- The proposal will enable the Ministry to release open data connect with SIUs Data Exchange, and improve the quality of Education data within the IDI

Appendix C
Advice about iEd extracted and/or summarised under section 16(1)(e)

Summary of information from Appendix 1 to
Education Report: Youth Funding Review and 0-5s Review Cabinet Report-Back —
Work Programme
4 February 2016

The document gives a summary of the higher level objectives of iEd, and notes that information from iEd can be used to identify, measure and monitor risk for young people.

Extraction and summary from:
Briefing Note: Background on the Third Data Hui
21 April 2016

Linkage to iEd

12 We know that increased use of education data can help Iwi, Pasifika and NGOs to assist their people. We also know decisions within the education system can be better informed by evidence and data.

13 iEd will automate data tasks and integrate education data which will improve access to education data. iEd will also link up seamlessly with the SIU data highway. There is very strong alignment between the Minister of Finance's expectations and the iEd initiative.

19 **Summary:** this paragraph notes that iEd and ORA will be discussed at a future clinic. The paragraph further notes that iEd tools will allow for more granular, leaner-specific data.

Extraction from:
Education Report: Developing capability to report on individual progress
24 May 2016

iEd and ORA

13 iEd and ORA will provide better access to education data, data that is fit for purpose, and data that is more easily understood, analysed, and related to data in other sectors. This will enable better informed decision making and more engaged parents, whānau and communities. The iEd and ORA initiatives will support the availability of linked data by bringing together data sources related to individual students, and enabling access to these *[sic]* data.

14 The cross agency Information Group (IG) has completed their work describing the future state for government data infrastructure, and has identified priority investment areas. The business case continues to align with the IG's work, and is developing with the inclusion of the Schools Information Sharing Initiative (SISI) into the programme. The timing and process for drawing down on the contingency funding is still under discussion and we will brief you as it becomes clearer. The IG is looking at establishing a small panel of experts to assist them in assessing the proposals being put up this year.

53 To achieve improvement in the system, this paper proposes that you agree:

- to launch the Learning and Progression Frameworks in all schools in May 2016
- that we will consult with the sector on the provision of information at the individual level (for iEd/ORA) and come back to you with options in September.

Summary from
Education Report: Approval of the Education Resourcing System Implementation Business Case
7 November 2016

24 The paragraph notes the relationship between iEd and the Education Resourcing System (ERS) currently under development.

This paragraph also refers to a diagram in the appendix, which I am withholding in full under section 9(2)(f)(iv) of the Act.

Summary from
Briefing Note: Census Transformation Cabinet Paper
26 October 2016

The paper notes that the Ministry has developed iEd, and this will change the way we use data. The paper further notes the intention to seek funding through the Data Contigency Fund.

This document refers to work from another work programme requiring further decision making, which I am withholding under section 9(2)(f)(iv) of the Act.

MINISTRY OF EDUCATION
TE TĀHUHU O TE MĀTAURANGA

BRIEFING NOTE: Integrated Education Data (iEd): Progress and Funding Update

Date:	11 July 2016	Priority:	Medium
Security Level:	In Confidence	METIS No:	1011122
Approved by:	Dr. Craig Jones	DDI:	04 439 5406

Purpose

1. The purpose of this briefing is to update you on (i) progress on the Integrated Education Data (iEd) work programme and associated detailed business cases, and (ii) the process to access funding for the programme from the data contingency fund (DCF).

2. The iEd programme business case will be delivered in mid August, with two supporting detailed project business cases due mid September. These dates will allow us to request at the September Investment Panel meeting funding for the projects. We believe that this will be the first formal opportunity for data and analytics bids to request access to the DCF.

3. We have worked collaboratively with colleagues from MSD and the Social Investment Unit to ensure connectedness with their data initiatives and gain support for our programme. We have also ensured that our programme of work is fully consistent and aligned with the priority focus areas from the Data Investment Framework developed by the cross-agency Information Group (IG)

The Information Group and the Data Investment Framework

4. High quality, accessible data and information is critical to supporting learner achievement and social investment. There is a need to invest in our education data assets in order to extract the true value of education data to meet the needs of the Education Work Programme and the government's desire for greater data sharing and a social investment approach.

5. The iEd programme was put forward in Budget16 supported by an indicative business case.

6. All data and analytics related Budget bids were put on hold until Ministers had a clearer strategy for the future state for government data infrastructure. A DCF was established as part of Budget16 in order to fund data investment. The DCF has $40m operating and $10m capital over four years and expires in February 2017.

7. The cross-agency IG has led the work to create a Data Investment Framework (DIF), which outlines the future state for government data infrastructure. The IG has also identified six priority focus areas for investment.

8. Focus areas 1, 3, 4 and 5 are the most relevant to the Ministry.

    a. Focus area 1 - Apply insights and actionable information to the front line

b. Focus area 3 - Easily find and safely access open and protected government data

c. Focus area 4 - Client-centric data management

d. Focus area 5 - Environment to actively support data sharing

Process to access the Data Contingency Fund (DCF)

9. All agencies have been told they need to resubmit their proposals for funding. Until recently it was uncertain as to how the resubmission process would work.

10. Late last week we were informed that the IG will undertake a bid triage exercise on 21 July. The DIF will be used to guide decisions as to which bids should go forward to the second stage. Agencies must show strong alignment with DIF in order to be considered and we have worked this into our business cases. We expect the IG and other agencies (e.g. SNZ, MSD and MOH) to support our bid.

11. The second stage, which is yet to be confirmed, is for bids to be reviewed by the Investment Panel (IP). The IP meets in the third week of Sept (exact date yet to be confirmed) they then meet again in November. We are ensuring that we are ready for the September meeting and hope to have confirmation of the process in the coming weeks.

12. We will participate in the Treasury run Corporate Centre business case clinics in the lead up to the IP and incorporate the feedback we receive to ensure a higher probability of success.

The iEd Programme of Work

13. iEd is the vision and strategy for how we take data and information management within the education system from where it is today, to where it needs to be. The Education Work Programme and the government's aspirations for greater use of data through a significant increase in data sharing are key drivers of the programme.

14. The programme is divided in 4 work streams (refer to appendices 2 – 3 for further information). The work streams are:

1. Information Management Standards and Governance
2. Capability Building and Change Management
3. Student Information Sharing Initiative (SISI)
4. Education Data Services (EDS)

15. Deliverables are prioritised and phased throughout the programme depending on the needs for data sharing across government and the Education Work Programme.

16. Work streams 1 & 2 are foundational to the successful delivery of work streams 3 & 4 and comprise:

a. Implementing robust data and information management practices
b. Establishing standards and governance
c. Building the capability to:
   i. understand the value of data
   ii. use data and information to inform decision making
   iii. use data to evaluate the success of programmes
d. Changing business processes around data collection, quality assurance and access

17. Work stream 3 - Student Information Sharing Initiative (SISI) creates a central repository for core student information to enable a student's data to follow them along their ECE, schooling and tertiary pathway.

18. Work stream 4 - Education Data Services (EDS) will deliver the new way of working with data; automating business and quality assurance processes, standardising our approach to the platforms and tools used to manage, analyse and report on data and making data more accessible, higher quality and more timely. EDS will delivered the learner-centred data management needed to support learners to succeed.

19. The creation of an integrated data layer will create a single source of truth that can be accessed for self-service reporting, pre-defined reports, online sites such as dashboards for parents or COLs, and for cross-government and open data sharing using the Social Investment Unit sponsored data highway.

Timeline

Date	Deliverable
21 July	Information Group triage session
End July	Corporate Centre business case clinic
Early August	First draft of the iEd programme business case complete
Mid August	iEd programme business case complete
Early September	First draft of the SISI and EDS detailed business cases complete
Mid September	SISI and EDS detailed business cases complete
End September	Investment Panel meeting
TBC	Funding confirmed by Ministers

Appendices

20. Appendix 1 - provides an overview of the data landscape at the Ministry of Education.

21. Appendix 2 & 3 – provide roadmaps on how iEd can be achieved.

22. Appendix 4, 5 & 6 provide more detail on the current and future states of data and information management.

Using our data well

How we're structuring our data landscape to transform New Zealand education

1 The right decisions

Enabling insights

Good data will enable us to all make better decisions; that's our starting point.

The greatest value will flow from the collaborative delivery of education. Good data is 'whole' information, allowing us make evidence-based decisions, try new things, and find better answers.

2 The right place at the right time

Getting it to those who need it, when they need it

Availability of coherent education data and information for everyone will drive curiosity and improvement.

We're putting data to work, for everybody. We'll provide intuitive tools and interfaces for easy visibility into new information and together locate and unlock the value in our data.
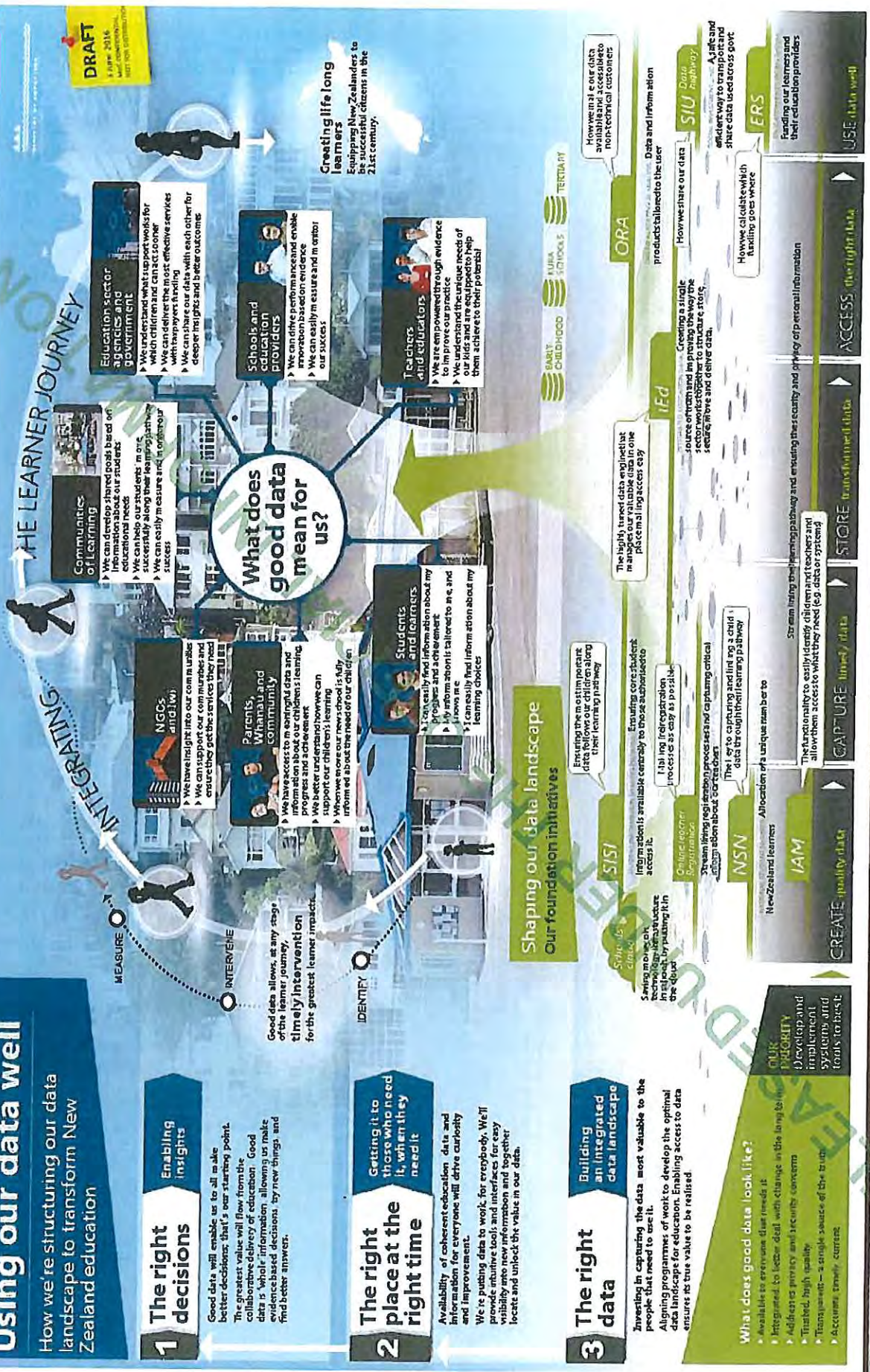
3 The right data

Building an integrated data landscape

Investing in capturing the data most valuable to the people that need to use it.

Aligning programmes of work to develop the optimal data landscape for education. Enabling access to data ensures its true value to be realised.

What does good data look like?

- Available to everyone that needs it
- Integrated to better deal with change in the long term
- Addresses privacy and security concerns
- Trusted, high quality
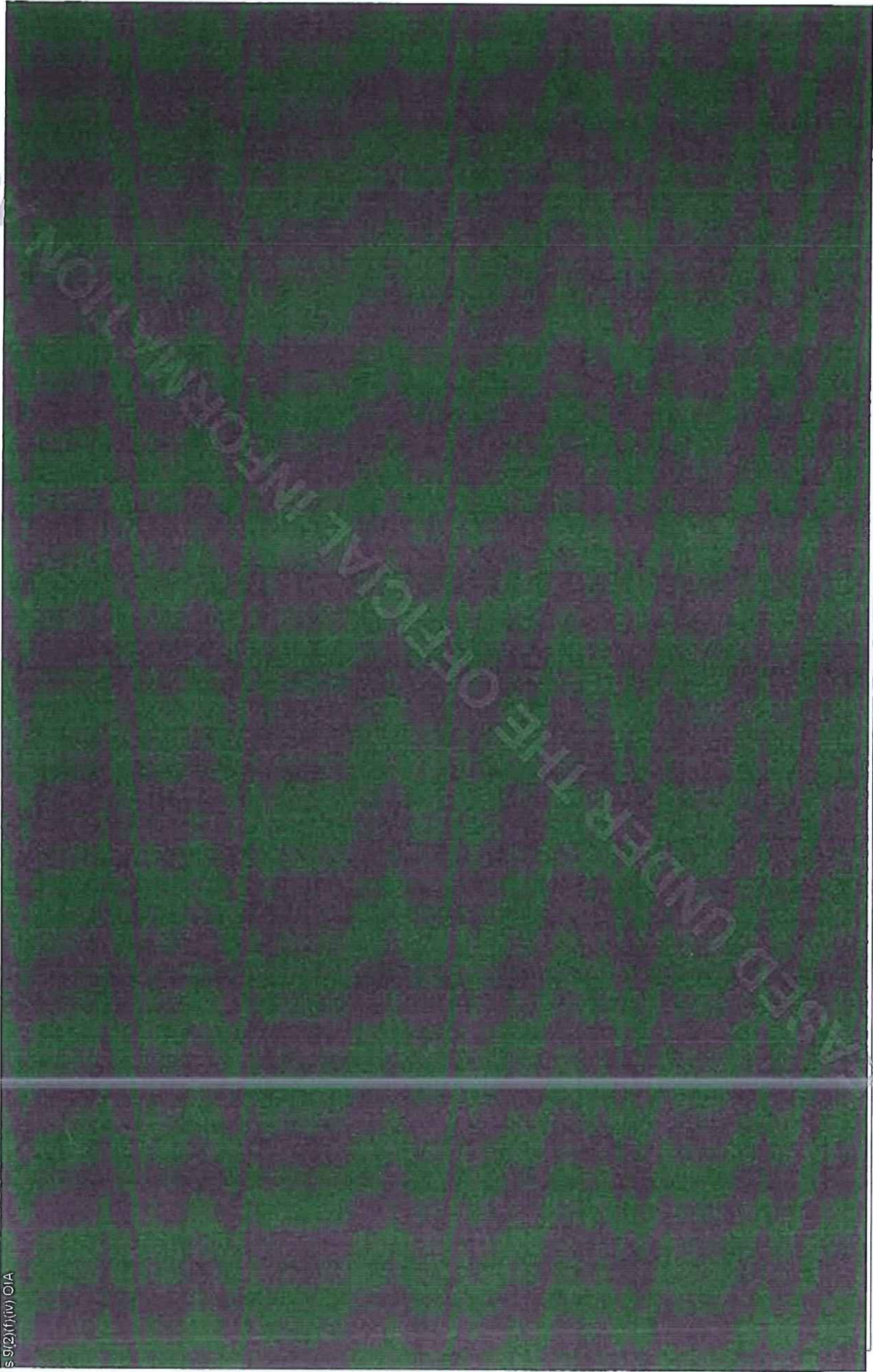- Transparent — a single source of the truth
- Accurate, timely, current

Integrated Education Data (IEd)

DRAFT
1 June 2016

THE LEARNER JOURNEY

MEASURE
INTERVENE
IDENTIFY

INTEGRATING

Good data allows, at any stage of the learner journey, **timely intervention** for the greatest learner impact.

Creating life long learners
Equipping New Zealanders to be successful citizens in the 21st century.

What does good data mean for us?

Education sector agencies and government
- We can develop shared goals based on information about our students' educational needs
- We understand what support works for which children and can act sooner
- We can deliver the most effective services with taxpayers' funding
- We can share our data with each other for deeper insights and better outcomes

Communities of Learning
- We can help our students more successfully along their learning pathway
- We can easily measure and monitor success

Schools and education providers
- We can drive performance and enable innovation based on evidence
- We can easily measure and monitor our success

Teachers and educators
- We are empowered through evidence to improve our practice
- We understand the unique needs of our kids and are equipped to help them achieve to their potential

NGOs and iwi
- We have insight into our communities
- We can support our communities and ensure they get the services they need

Parents, Whānau and community
- We have access to meaningful data and information about our children's learning progress and achievement
- We better understand and how we can support our children's learning
- Whenever we move our new school is fully informed about the need of our children

Students and learners
- I can easily find information about my progress and achievement
- I find information tailored to me, and knows me
- I can easily find information about my learning choices

Shaping our data landscape
Our foundation initiatives

Schools cloud
Saving money on technology infrastructure in schools by putting it in the cloud

SISI
Ensuring the most important data that follows our children along their learning pathway

NSN
Allocation of a unique number

New Zealand learners

IAM
Stream lining registration process and capturing critical information about our children

Online learner Registration
Making registration process as easy as possible

Information is available centrally to those authorised to access it

Ensuring core student data through their learning pathway

The key to capturing and linking a child data through their learning pathway

The functionality to easily identify children and teachers and allow them access to what they need (e.g. data or systems)

IFed
The highly tuned data engine that manages our valuable data in one place and its access easy

Creating a single source of truth and improving the way the education sector works together to structure, store, secure, share and deliver data.

ORA
How we make our data available and accessible to non-technical customers

Data and information products tailored to the user

How we share our data

SIU Data Highway
A safe and efficient way to transport and share data used across govt

ERS
Funding our learners and their education providers

How we calculate which funding goes where

CREATE quality data → CAPTURE timely data → STORE transformed data → ACCESS the right data → USE data well

EARLY CHILDHOOD · KURA SCHOOLS · TERTIARY

s 9(2)(f)(iv) OIA

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Integrated Education Data (iEd)

s 9(2)(g)(i) OIA

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s 9(2)(f)(iv) OIA

Integrated Education Data (iEd)

3

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MINISTRY OF EDUCATION
TE TĀHUHU O TE MĀTAURANGA

ANNOTATED AGENDA

Integrated Education Data (iEd) Clinic

Wednesday 17 August 2016
4:00pm – 5:00pm

Purpose of Meeting	The purpose of the clinic is to discuss and seek your feedback on: • The purpose, proposed direction and next steps of the Integrated Education Data programme
Attendees	Lisa Rodgers, Karl Le Quesne – Early Learning and Student Achievement Craig Jones, Rochelle Barrow - Evidence, Data and Knowledge Andrea Schollmann, Ruth Isaac - Education System Policy Zoe Griffiths, Stuart Wakefield - People, Capability and Resources
Agenda	1. Role of Integrated Education Data to support the education work programme 2. Key work streams 3. Data Contingency Fund & iEd bid update 4. Next Steps
Attachments	A3: Using our data well: how we're structuring our data landscape to transform New Zealand education. A3: Implementation Roadmap for Integrated Education Data (iEd) – Recommended Scope

ANNOTATED AGENDA

Integrated Education Data (iEd) Clinic

Wednesday 17 August 2016
4:00pm – 5:00pm

Item	Agenda	Action

1.   **Role of Integrated Education Data**   *Verbal update*

Discussion Points

As a business transformation programme iEd encompasses many of the data and information transformation initiatives already underway across the system and will have implications for all of them:

- Student Information Sharing Initiative
- Education Data Services
- Education Resourcing System
- National Student Number
- Identity and Access Management
- Online Reporting and Analysis

This represents a significant step-change to support and enable the education work programme, particularly:

- Relevant, timely and meaningful information for Communities of Learning
- Detailed data to support the Funding Review
- Linked data that better describes the student journeys, supporting a range of improvements to quality teaching and learning.

Accordingly, the iEd programme is the vision and strategy for how we move the education system's data and information management to a modern system that is internally coherent and externally connected. Achieving this will require a significant investment of time and resources.

Action Required

- Note the role of iEd to support the education work programme

2.   **Key work streams**   *Discussion*

Discussion Points

There are four parallel work streams to deliver iEd:

- Work stream 1 – **Information Management Standards and Governance;** requires us to establish the data standards and governance structures required to deliver the information management maturity we need within the education system.

- Work stream 2 – **Student Information Sharing Initiative (SISI);** improves the flow of information within and between Communities of Learning by increasing the interoperability of student management systems (SMS) in NZ and creating a central repository for core student information that enables a student's data to follow them along their ECE, schooling and tertiary pathway.

- Work stream 3 – **Education Data Services (EDS);** is a new way of working with data for education agencies. It automates business and quality assurance processes, standardises our approach to the platforms and tools used to manage, analyse and report on data and make high quality data more accessible and timely. In conjunction with SISI, this will enable student progression and other data to be more effectively used by schools, parents, and community for decision making.

- Work stream 4 – **Capability Building and Change Management;**

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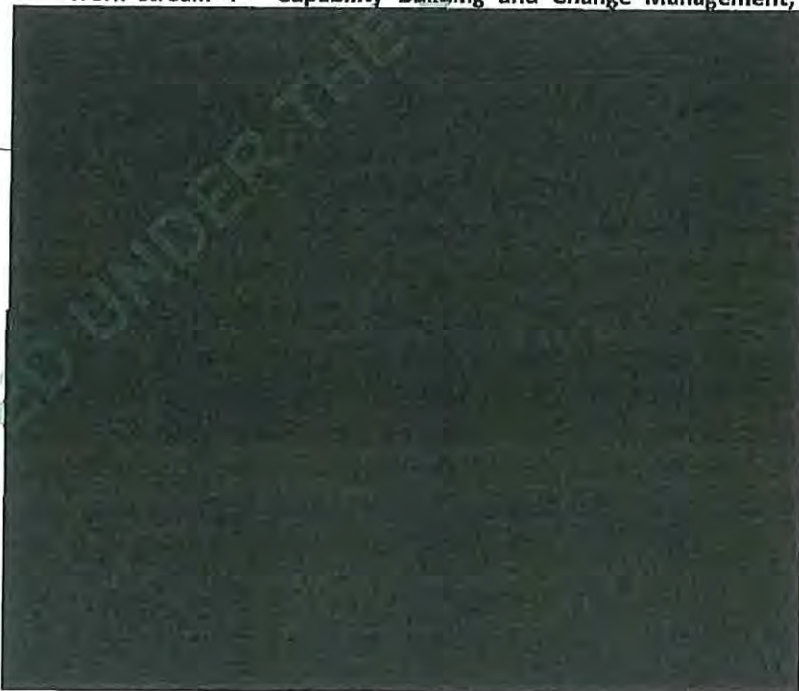
Action Required

- **Comment** on the parallel work streams set out in the attached A3

MINISTRY OF EDUCATION
TE TĀHUHU O TE MĀTAURANGA

ANNOTATED AGENDA

Integrated Education Data (iEd) Clinic

Wednesday 17 August 2016
4:00pm – 5:00pm

"Using our data well: how we're structuring our data landscape to transform New Zealand education" and our intended sequencing of the EDS work stream, focussing on learner data, then workforce data.

3. **Data Contingency Fund & iED bid update**   *Verbal*
                                                                  update

Discussion Points

- This business case is being supported by the cross-agency Information Group along with five other bids to draw from the data contingency fund set aside under Budget 2016. These bids are being supported in two tranches for consideration by the Treasury-led Investment Panel

- Tranche 1 bids will be considered on 7 September and Tranche 2 bids will be considered in November. We have been advised that the iEd programme will be considered by the Investment Panel in Tranche 2.

- The data contingency fund is undersubscribed. Participating in Tranche 2 in no way impacts our success in accessing funds.

- In putting together the programme of work there are a number of options that present themselves. We would like to meet with you to discuss some of these options and confirm priority focus areas for the first two years of the iEd programme.

- In order to meet the requirements of the Investment Panel, our Programme Better Business Case needs to be completed and approved by end October.

Action Required

- Note the progress, timeframes and nature of the bid.

4. **Next steps**   *Discussion*

- We will schedule further clinics to update you on progress as the program business case(s) to discuss investment options ahead of the Investment Panel meeting in November

Decisions Required

- Endorse next steps of the Integrated Education Data programme.

Using our data well

How we're structuring our data landscape to transform New Zealand education

THE LEARNER JOURNEY

INTEGRATING

Creating life long learners
Equipping New Zealanders to be successful citizens in the 21st century.

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Shaping our data landscape
Our foundation initiatives

EARLY CHILDHOOD   KURA SCHOOLS   TERTIARY

Schools cloud
Saving money on technology infrastructure in schools by putting it in the cloud

SISI
STUDENT INFORMATION SHARING INITIATIVE: Ensuring core student information is available centrally to those authorised to access it.
Ensuring the most important data follows our children along their learning pathway

Online teacher registration
Making (re)registration processes as easy as possible

NSN
NATIONAL STUDENT NUMBER: Allocation of a unique number to New Zealand learners
Streamlining registration processes and capturing critical information about our teachers

IAM
IDENTITY AND ACCESS MANAGEMENT: Streamlining the learning pathway and teachers and allow them access to what they need (e.g. data or systems)
The key to capturing and linking a child's data through their learning pathway

EDS
EDUCATION DATA SERVICES: Creating a single source of truth and improving the way the sector works together to structure, store, secure, move and deliver data.
The highly tuned data engine that manages our valuable data in one place making access easy

ORA
ONLINE REPORTING & ANALYSIS: Data and Information products tailored to the user
How we make our data available and accessible to non-technical customers

S/U *Data highway*
SOCIAL INVESTMENT UNIT: A safe and efficient way to transport and share data used across govt
How we share our data

ERS
EDUCATION RESOURCING SYSTEM: Funding our learners and their education providers
How we calculate which funding goes where

The functionality to easily identify children and teachers and allow them access to what they need

CREATE quality data → CAPTURE timely data → STORE transformed data → ACCESS the right data → USE data well

OUR PRIORITY
Develop and implement systems and tools to best:

AGENDA

MINISTRY OF EDUCATION
TE TĀHUHU O TE MĀTAURANGA

Clinic: PaCT, IED and ORA Update
29 November 2016 12pm

Purpose of Meeting	To discuss the change approach to PaCT uptake and achieving the benefits of iED/ORA such that high quality student progress information is available to provide a comprehensive picture of learning in Aotearoa New Zealand.
Attendees	Karl le Quesne, Pauline Cleaver, Craig Jones.
Agenda	1) IED/ORA programme and deliverables
	2) High quality individual student data to drive system improvement
	3) Learning from pilots
	4) Change strategy

Item 1: The iEd programme of work will deliver education system participants and government customised access to the data and information they need to make data-driven decisions.

THE iEd PROGRAMME AND DELIVERABLES

- The Education System has a wealth of rich data that could improve learner decisions, resource allocation, prioritisation, planning and teaching practices. However, the data is currently not consistently accessible at the level of quality required to enable good decision-making.

- The iEd Programme will lift education achievement by enabling access to this information. This will support better decision-making by learners, whānau, teachers, education providers, Communities of Learning | Kāhui Ako and government about where to focus and what works.

- The iEd Programme will create, amongst other things, a national repository of learner information using common standards to enable data sharing.

s 9(2)(f)(iv) OIA

iEd FUNDING UPDATE

- The Ministry has had widespread support for the iEd program in all of the panel discussions held to date.

- The iEd Programme will be considered by Investment Ministers on 8 December. We will provide a briefing for you ahead of that meeting.

- The cross-agency Information Group (IG) will be advising Investment Ministers in advance of this meeting. The IG has prioritised our investment as the highest priority project among Tranche 2 data bids.

- The Corporate Centre and the independent Investment Panel will also be advising Investment

Ministers and informal feedback from these groups has been very positive.

- We understand that advice from the Corporate Centre (Treasury) will be for $6.8m to be drawn down from the data contingency fund to initiate the foundational work and to develop detailed requirements and market testing.

s 9(2)(f)(iv) OIA

out of scope

s 9(2)(g)(i) OIA

out of scope

out of scope

out of scope
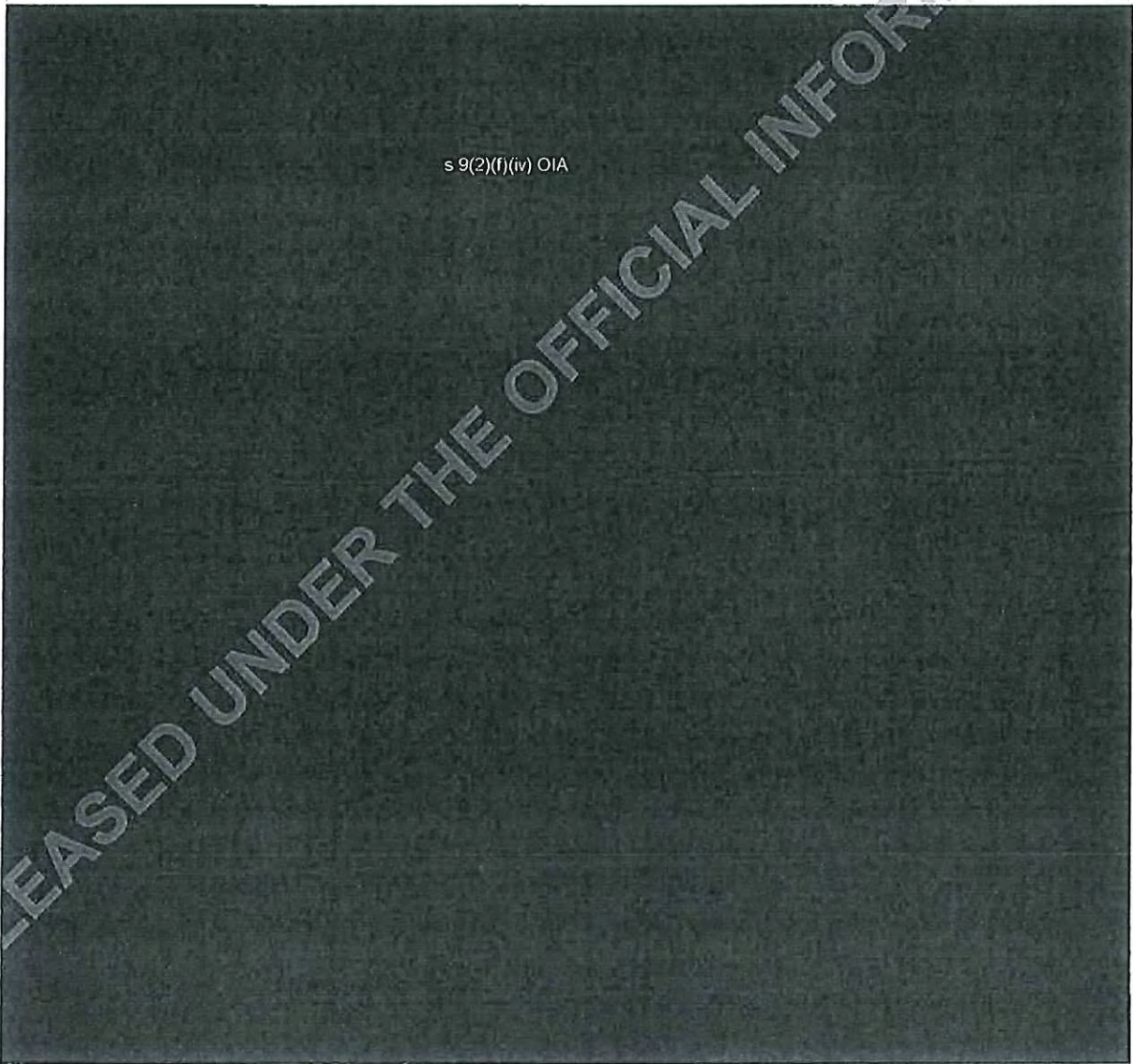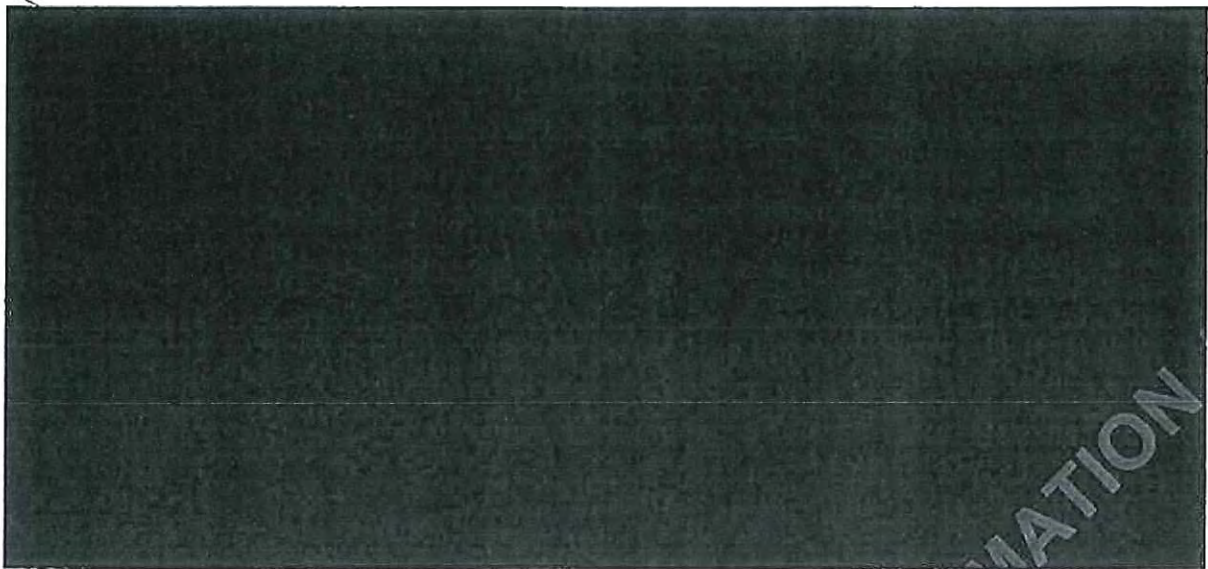
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MINISTRY OF EDUCATION
TE TĀHUHU O TE MĀTAURANGA

BRIEFING NOTE: iEd Investment Ministers Meeting

Date:	1 December 2016	Priority:	High
Security	In Confidence	METIS	1037970
Approved by:	Dr. Craig Jones	DDI:	(04) 439 5406

Purpose

1. This briefing updates you on the Integrated Education Data (iEd) work programme and provides you with supporting material (Attachment 1) ahead of the meeting of investment Ministers on 8 December at 8:30am.

iEd is a critical enabler for your education reforms

2. It will deliver a data platform with a learner-centric view of a student's education journey, including a complete picture of the learning support they receive along the way. This will lift educational achievement by improving access to data and information in order to support better decision-making by learners, whānau, service providers and agencies about where to focus and what works.

3. When the programme is complete student information will follow the learner as they move between schools, reducing the impact of school transitions on student achievement. This will also create a central repository of learner-level information that can be deployed to those who need it (and are allowed to have access to it) to help decision-making.

iEd is an essential component of your funding review

4. You have outlined an ambitious approach to better target funding to have the greatest positive impact on outcomes for New Zealander students. An essential part of this review is to better build line-of-sight between investments going into early childhood education services, schools and kura, and their ability to cause learning to happen. To do this, New Zealand needs to significantly improve the maturity of data and information systems across the sector. iEd will deliver that increase in maturity.

Other agencies strongly support this work

5. There has been strong support from officials throughout the business case development process. Other agencies are concerned about the lack of data management maturity in the education system comparative to others in the social sector, and agree that this needs to be urgently addressed through iEd.

6. The cross-agency Information Group ranked the iEd bid as the top business case priority among bids considered under Tranche 2 of the Data and Analytics Contingency Fund set aside under Budget 16. The unique value proposition of our bid is that we capture information about every child in the country. Treasury have also been strongly supporting our bid.

7. The iEd programme will lift the quality and interoperability of education data and enable us to connect with the Social Sector Data Exchange (the Social Investment Unit's Data Highway[1]). If we can plug education data into the wider social sector, this will be game-changer for the broader social system.

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[1] This data highway will securely connect government departments and ultimately NGO's to enable the safe transmission of data between parties – allowing information to be shared under a federated data model.

Investment Ministers will consider the iEd proposal on December 8

8. We understand that you will attend this meeting and we have attached some key points for your use. We are seeking $6.8m from the Data Contingency Fund, with a further $5.4m set aside in future years to fund the foundational work of the programme. This will deliver significant benefits to the system.

s 9(2)(f)(iv) OIA

10.

s 9(2)(g)(i) OIA

11.

Next steps

12.

s 9(2)(f)(iv) OIA

13.

14. We have yet to receive the final advice that will go from the Information Group to Investment Ministers ahead of the meeting on November 8th. We will forward this to your office as soon as we have it.

Attachment 1

iEd Speaking Points for Investment Ministers Meeting, 8 December 2016

- Significant challenges have been identified in the way we collect, access and use data across the education system. iEd is the vision and strategy for overcoming these barriers.

s 9(2)(f)(iv) OIA

- [redacted] We are seeking funding for tranches 0 and 1 of the programme through the Data and Analytics Contingency Fund set aside in Budget 2016 .

s 9(2)(f)(iv) OIA

- [redacted]

- o [redacted]

- [redacted]

- [redacted]

- [redacted]

- The Programme Business Case closely aligns with the priority government data investment areas identified in the Information Group's Data Investment Framework. Specifically:

  o iEd delivers learner-centric data management. Data will no longer be managed in silos depending on what provider/institution that the learner attends

  o Education is prioritising the connection to the social sector data highway in order to scale up our data sharing capability

  o iEd will enable Education and other agencies to better measure return on our investments by linking specific programme investment data with educational and social sector outcome data

  o iEd will leverage off existing analytical tools to minimise duplication of investment across the social sector.

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MINISTRY OF EDUCATION
TE TĂHUHU O TE MĂTAURANGA

BRIEFING NOTE: Update on iEd

Date:	3 February 2017	**Priority:**	Medium
Security Level:	In confidence	**METIS No:**	1044208
Approved by:	Craig Jones	**DDI:**	04 439 5406

Purpose

You have requested an update on the current status of the business case for the Integrated Education Data project (iEd) and the next steps to progress this initiative.

Background

iEd is a System-wide information management programme. It is the vision and strategy to make education data accessible to inform decision-making by learners, whānau, teachers, education providers, CoL, and government. It is led by the Ministry of Education, in its role as the steward of the education system. In December we provided you with an overview of the business case and its role supporting the wider education work programme [METIS 1037970 refers].

The Programme Business Case was developed in consultation with TEC, NZQA, Treasury, ERO, Education Council, and DIA, through a combination of Investment Logic Mapping workshops and a series of bilateral discussions.

The Ministry is seeking funding for the initiation phase of the iEd programme from the Data and Analytics Contingency Fund. The Contingency ($40m operating and $10m capital over 4 years) was set aside in Budget 2016. This allowed for the Information Group (mandated as information system steward by the Government Chief Information Officer under the Partnership Framework) to develop a framework to inform investment decisions in relation to data infrastructure, and for agencies to develop business cases that align to that framework.

Cabinet approved the delegation of authority for the approval of drawdowns from the Contingency to Investment Ministers. Although the Fund was due to expire in February 2017, Cabinet endorsed an extension of the Fund in January 2017.

s 9(2)(f)(iv) OIA

The Ministry is seeking $12.2m from the Contingency Fund to begin four of the projects,

Meeting of Investment Ministers

The iEd programme had based timelines on an 8th December decision date for Investment Ministers with 4-6 weeks to ramp up resources, equipment and accommodation. This date was changed following the resignation of the Prime Minister and subsequent change in Ministerial portfolios.

Discussion on the Contingency Fund proposals (including the iEd programme) has now been confirmed as an agenda item for the Investment Ministers (Joyce, Dunne, Adams and Bridges) meeting on Monday the 13th of February, 3pm – 4pm in Minister Joyce's office.

Mark Sowden, Deputy Government Statistician will attend to represent the views of the advice providers (GCIO, TSY, the Information Group and the Independent Panel) and each bid agency will have one representative present for that agenda item.

Next steps

We will keep your office informed of the outcome of this meeting. If we are successful in accessing funding via the Contingency Fund we will provide you with regular reports of progress in the Education Weekly Update report ahead of a more detailed briefing in June.

If we are not successful we will provide you with advice before the end of February about next steps.

7

20 February 2017   1047392

Education Report: iEd / ORA funding update – provision of additional
information

Recommendations

We recommend you:

a.   **note** that, following their meeting of Investment Ministers on 13 February, they sought
     further information about iEd/ORA, specifically:

  * "compare current work with historical work recalled by the Minister of Finance in
    the tertiary sector. The Minister of Finance was particularly interested in whether
    this was the only/best way to achieve the expected benefits, given his previous
    experience"

  * "consider whether it is appropriate to fund Tranche 0 and Tranche 1
    simultaneously, or whether it would be better to sequence these"

  * "expand on how iEd/ORA investment fits/contributes to social investment
    outcomes".

b.   **note** that we have prepared a detailed response to each of these questions, and
     attached this as Appendix One

c.   **agree** that we forward this information to Statistics New Zealand, for the subsequent
     consideration of Investment Ministers

     AGREE / DISAGEE   AGREE / DISAGEE

     Minister of Education   Associate Minister of Education

d.   **note** that we will stay in close contact with your offices regarding this process and the
     final decision of Investment Ministers.

Dr Craig Jones
Deputy Secretary
Evidence, Data and Knowledge

NOTED / APPROVED   NOTED / APPROVED

Hon Hekia Parata   Hon Nikki Kaye
Minister of Education   **Associate Minister of Education**

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Education Report: iEd / ORA funding update – provision of additional information

Purpose of report

1. This report updates you on the additional information requested by Investment Ministers in relation to the contingency funding sought for the Integrated Education Data project (iEd) and the Online Reporting and Analysis (ORA) tool. We seek your agreement to provide the information attached in Appendix One to Statistics New Zealand for the subsequent consideration of Investment Ministers.

Background

2. iEd/ORA is a System-wide information management programme. It is the vision and strategy to make education data accessible to inform decision-making by learners, whānau, teachers, education providers, Communities of Learning | Kāhui Ako, and government.

3. It is led by the Ministry of Education, in its role as the steward of the education system. In December we provided the Minister of Education with an overview of the business case and its role supporting the wider education work programme [METIS 1037970 refers].

4. The Ministry is seeking funding for the initiation phase of the iEd/ORA programme from the Data and Analytics Contingency Fund. The Contingency ($40m operating and $10m capital over 4 years) was set aside in Budget 2016.

5. Cabinet approved the delegation of authority for the approval of drawdowns from the Contingency to Investment Ministers. Although the Fund was due to expire in February 2017, Cabinet endorsed an extension of the Fund in January 2017.

6. The Ministry is seeking $12.2m from the Contingency Fund to begin foundational work

s 9(2)(f)(iv) OIA

Meeting of Investment Ministers

7. Investment Ministers met on 13 February 2017 to discuss bids to the Contingency Fund and consider the iEd/ORA business case.

8. During the meeting Investment Ministers asked several questions about iEd/ORA, specifically:

   a. "compare current work with historical work recalled by the Minister of Finance in the tertiary sector. The Minister of Finance was particularly interested in whether this was the only/best way to achieve the expected benefits, given his previous experience"

   b. "consider whether it is appropriate to fund Tranche 0 and Tranche 1 simultaneously, or whether it would be better to sequence these"

c. "expand on how iEd/ORA investment fits/contributes to social investment outcomes".

9. We have prepared a detailed response to each of these questions. This is attached as Appendix One.

Next steps

10. We seek your agreement to provide the information attached in Appendix One to Statistics New Zealand.

11. We understand this will be collated and re-submitted to Investment Ministers for their consideration.

12. We will stay in close contact with your offices regarding this process and the final decision of Investment Ministers.

Appendix One: Information to be provided to Investment Ministers

Education - compare current work with historical work recalled by the MOF in the Tertiary sector. The MOF was particularly interested in whether this was the only way/best way to achieve the expected benefits, given his previous experience

We think the work recollected by the Minister of Finance was the Tertiary Learner Event Collection (TLEC) programme led by the Tertiary Education Commission. This project was subsequently re-scoped into a smaller, sequential, set of projects within the Tertiary Information Future State (TIFS) programme, including:
- a refresh of the Single Data Return
- the retiming of the SDR,
- collection of data from unfunded PTEs and
- building a replacement for the Tertiary Data Warehouse – the Tertiary Information Enhancement project (TIE).

s 9(2)(g)(i) OIA

Lessons learned from the TLEC and TIFS experience have informed the iEd/ORA business case. Specifically:

- Like TIFS, iEd/ORA has been explicitly structured into discrete projects. iEd/ORA has also been designed to provide ministers with off-ramps at critical stage gates. This will enable Government to invest iteratively, in line with current policy objectives.

- The immediate priority is to do for the compulsory sector what the TIE project will be doing for the tertiary sector.

- One of the key projects is the Student Information Sharing Initiative (SISI), which aims to facilitate the interoperability of school Student Management Systems to enable schools to share learner progress and other information about students.

- This repository will also feed into the Ministry's data systems to streamline and add to the data currently collected from schools (which are currently treated as 2500+ discrete collection entities).

- This builds on the Government's recent investment in ultrafast broadband in schools through N4L. We now have the ability to connect up all school data silos in a way that was not technically feasible only two years ago.

We have been consulting with the school sector on SISI for 18 months and the solution we are proposing is their preferred option. We are ready to seek market costing for the project.

The first Tranche of funding will also lift the Ministry's data infrastructure and capability to contribute more effectively to the Government's broader social investment priorities (i.e. by putting more high-quality data into the IDI).

We have begun work to bring together information into school, student and workforce data stores but this needs a step-change to streamline data capture and storage across the Ministry and the wider education sector.

s 9(2)(f)(iv) OIA

Education - consider whether it is appropriate to fund Tranche 0 and Tranche 1 simultaneously, or whether it would be better to sequence these

Tranches 0 and 1 are sequenced but we appreciate this may not have been apparent in the Statistics New Zealand paper considered by Investment Ministers. We are initially seeking funding for Tranche 0 and for part of Tranche 1 from the Data and Analytics Contingency Fund.

Tranche 0 funds will enable us to immediately begin foundational work on data standards and governance,

s 9(2)(f)(iv) OIA

The end of Trance 0 is the timeframe for the first off-ramp. The investment in Tranche 0 provides benefit even if Tranche 1 is not funded because it will have agreed standards and governance arrangements for data in the compulsory sector.

s 9(2)(f)(iv) OIA

Education - expand on how iEd/ORA investment fits/contributes to social investment outcomes

Investing in iEd/ORA enables the Education System to contribute more, higher quality data into the Integrated Data Infrastructure (IDI). Education was a participant in the pilot of the social sector data exchange (data highway) earlier this year and is confirmed as a Production 1 partner.

However, we need to improve the quality and coverage of education data to support other agencies in order to identify children at-risk of poor social outcomes. In collaboration with the data exchange, iEd/ORA will enable greater sharing of education data across government and improve outcomes for vulnerable children.

The unique value proposition for improving the maturity of education data is population coverage. There are more than 1 million children in education daily and an enormous amount of data is collected on those children each day.

The power of safely unlocking some of this data to improve policy and practice in other social sector agencies is unparalleled. However, this requires a step change in capability to ensure education data is robust and accessible.

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MINISTRY OF EDUCATION
TE TĀHUHU O TE MĀTAURANGA

To:	Hon Nikki Kaye
	Minister of Education
From:	Craig Jones, Deputy Secretary, Evidence, Data and Knowledge
CC:	Gerard Aberdeen, iEd Programme Director
Date:	3 July 2017
Subject:	Integrated Education Data (iEd) OIA: Reactive Questions and Answers

Purpose

1. Your Office has requested further information arising from our decision to release information about iEd to the Office of the Leader of the Opposition.

2. The request you received was for advice that you and the previous Minister received about the development of the Integrated Education Data system.

3. This document provides you with background information about consultations with the sector about iEd, and a set of questions and answers, should there be queries on this subject.

Background information

4. The Integrated Education Data (iEd) programme is a five year programme aimed at making education data more accessible for educators to raise student achievement and wellbeing.

5. iEd is part of a wider set of initiatives which will modernise and overhaul data collection across the public sector. This work is being lead by Statistics New Zealand. iEd will ensure that:

    ➢ Learners, parents and whānau have access to the right information to help learners succeed and reach their potential.
    ➢ Communities of Learning | Kāhui Ako are able to collaborate around a common achievement challenge, improve their collective decision-making and monitor and evaluate success.
    ➢ Education providers and government can use data to inform decision-making with evidence about what works, for whom and under what conditions.
    ➢ Learners can access an enduring record of their progress.
    ➢ Administrative burden on education providers is reduced from learner enrolments and compliance reporting.

6. An iEd programme board has been established to make key decisions on the programme, and an Education Sector Advisory Committee will be established to ensure key sector stakeholders have visibility and input into the direction of the programme.

7. iEd will be delivered in stages. As each stage concludes, funding will be sought for the next stage of the programme. Each stage is self-contained and the benefits of each stage are not reliant on funding for the next stage.

8. Initial work has been funded out of the Data and Analytics Contingency Fund, established in Budget 2016 to complete the analysis and design work. The initial funding will also enable us to progress work on some smaller scale initiatives to test new ways of working.

Student Information Sharing Initiative (SISI)

9. SISI is a key project within the iEd programme. It has the potential to provide a secure electronic platform to enable the transfer of a learners' information as they move between schools.

10. The platform has the potential to bring considerable benefits for both learners and teachers by:

   ➢ Making a difference to the 160,000 children and young people that for a range of reasons move schools every year.
   ➢ Reducing paperwork and saving time by providing schools with the information they need from other schools to get the right support to new students in their school. Critical information about each student will arrive at their school with them on day one.
   ➢ Storing relevant information securely in one place so it is much easier to access under the right conditions.
   ➢ Improving the flow of information within and between Communities of Learning | Kāhui Ako.

11. We've started the process to tender for an information technology partner to help us develop detailed requirements for SISI. They'll work with selected schools and their Student Management System vendors to develop and test requirements to support the business case to develop a technology solution.

12. We'll work with legal, ethics and privacy experts to inform the system design and ensure data privacy and access is managed appropriately.

13. SISI will start with schools and then has the potential to be expanded so that information is shared between early learning services, schools and tertiary institutions.

Consultation with the sector

14. The Ministry is co-constructing the iEd programme and SISI project with key stakeholders across the education sector to understand what a successful future state could look like.

15. The Ministry has been working with a number of schools via Roadshows, Cross Sector Forums, individual meetings and an online Loomio Group Forum for the past 18 months to start to consider their user needs.

16. An Education Sector Advisory Committee is being established to ensure key sector stakeholders are updated and provide input and advice into the direction of the programme.

17. We have now (May 2017) engaged experienced practitioners in co-construction, Davanti Consulting to assist us specifically for the SISI project. We will continue to work

with the sector using the Davanti process, workshops and one-on-one interviews to gain a broad understanding of what is needed and how it should be managed.

Questions and answers about iEd

Q: What is the Integrated Education Data programme?

Children and young peoples' progress and achievement is at the centre of the education system. We need to put an emphasis on using data to improve educational outcomes.

The Integrated Education Data (iEd) programme is a Ministry of Education transformation programme aimed at making education data more accessible for educators to support students with their progress and achievement. It will help ensure that the right support gets to each child and young person at the right time.

The programme's focus is on taking advantage of technology innovation to improve education information management systems and on building people capability, to make full use of education data.

It is planned that iEd will be delivered progressively in stages over the next five years. As each stage concludes, funding will be sought for the next stage of the programme. Each stage is self-contained and the benefits of each stage are not reliant on funding for the next stage.

However, when fully operational, the iEd programme has the potential to deliver a range of capabilities, platforms and functions to enable educational institutions, School Boards, and parents, to access up-to-date, secure and reliable information on the progress and achievement of learners at each stage of their education.

A programme board has been established to make key decisions on the programme, and an Education Sector Advisory Committee is being established to ensure key sector stakeholders have visibility and input into the programme.

Q: What will we get for our investment? How will the outcomes from the iEd programme benefit education agencies, providers, agencies, etc.?

The programme will facilitate more timely access to quality data for education providers. The goal, over time and in stages, is to take advantage of technology innovation to enable timely access to quality data and better use of information, so that:

> **Learners, parents and whānau:** Have access to the right information to help learners succeed and reach their potential.

> **Communities of Learning | Kāhui Ako:** Are able to collaborate around a common achievement challenge, improve their collective decision-making and monitor and evaluate success.

> **Education providers and government:** Can use data to inform evidence-based decision-making on what works, for whom and under what conditions.

> **Learners:** Can access an enduring record of their progress, and the administrative burden on education providers from learner enrolments and compliance reporting can be reduced.

Q: What problems will the iEd programme try address?

- **Access:** Learners, whānau, educators, providers and government do not have access to information when and how they need it to make the best decisions.

- **Collection:** Data gathering and entry is labour intensive, error prone and often duplicated, leading to gaps in data, poor quality data and high costs for education providers and government.

- **Use:** Low skill levels and awareness, few incentives and cultural resistance are leading to lower utilisation of information than desired.

Q: What had been done so far?

This work programme builds on previous work. The current iEd programme was formed out of the School Management System project in the old DELTA programme and the School Business Data Store project. It also builds on the work of the Data Futures Partnership and is a key part of the Education System Digital Strategy. We expect this programme to make an important contribution to achieving the Government's aims for education. Integrated systems based on common standards for data collection, security, privacy and identity and access management are necessary enablers for collaboration across agencies and between education providers to achieve quality outcomes for learners.

Q: How has the iEd programme been funded?

In March this year, the Government provided $12.2 million for the iEd programme from the 2016 Data and Analytics Contingency Fund for detailed analysis and design work, business case development, early initiative development and for prototyping the Student Information Sharing Initiative (SISI). The initial funding will also enable us to progress work on some smaller scale initiatives to test new ways of working.

The iEd programme is designed to be implemented in stages. Each stage is self-contained and will deliver benefits to a range of education system participants. Over time, these successive stages have the potential to deliver more and more benefits.

What will the iEd programme cost in total, if it is implemented in its entirety?

The full cost of the iEd programme of work is expected to be determined as part of work being undertaken on a detailed business case that is still under development.

Q: When will iEd be completed?

We expect the full roll out of iEd to take at least five years.

Q: What data will be included?

The Ministry will work with schools and other sector representatives to determine exactly what data is needed by whom - and in what form. Our priority is to ensure that data and information about students is managed and used in a secure and transparent way. Any sharing and reporting of this information will be done carefully. Only parties who have a recognised need will be given access to the data.

Q: What information will be shared and with whom?

We will work with the sector through an Education Agency Information Management Governance Group to ensure strict protocol are in place, about what core data will be collected and shared, and with whom. The group will be established as a part of our efforts to ensure education data is managed in a secure and transparent way.

Q: Is student data held by the Ministry of Education private and secure right now?

Yes, current systems are in place to manage the privacy and security of information, however recent technology advancements mean that there are opportunities to improve the efficiency and effectiveness of information management to support education providers, whanau and learners themselves to benefit from improved data access.

STUDENT INFORMATION SHARING INITIATIVE (SISI)

Q: What is the Student Information Sharing Initiative?

SISI is a key project within the iEd programme. It has the potential to provide a secure electronic platform to enable the transfer of a learners' information as they move through the education system. SISI has the potential to bring considerable benefits for both learners and teachers by:

> ➢ Making a difference to the 160,000 children and young people that for a range of reasons move schools every year.
> ➢ Reducing paperwork and saving time by providing schools with the information they need from other schools to get the right support to new students in their school. Critical information about each student will arrive at their school with them on day one.
> ➢ Storing relevant information securely in one place so it is much easier to access under the right conditions.
> ➢ Improving the flow of information within and between Communities of Learning | Kāhui Ako.

We've started the process to tender for an information technology partner to help us develop detailed requirements for SISI. We will work with selected schools and their Student Management System vendors to develop and test requirements to support the business case to develop a technology solution.

We'll work with legal, ethics and privacy experts to inform the system design and ensure data privacy and access is managed appropriately.

SISI will start with schools and then has the potential to be expanded so that information is shared between early learning services, schools and tertiary institutions. More information is available on the Ministry of Education website or via email: ied@education.govt.nz

Q: What information will be included SISI? Will it include student achievement data?

This is to be discussed and agreed with the sector but we expect that achievement data will be included.

Q: What will the Ministry do with the data it receives? Is it for performance based pay or to measure school performance?

The Ministry currently receives a variety of data from schools, services and providers, for policy, research and operational purposes. It uses the data to identify un-enrolled students, for example, with the aim of getting them back into education. SISI will enable the Ministry to reduce the reporting burden currently placed on schools. The Ministry does not intend to collect any more data than it currently does, without discussion and consultation with the sector.

Q: Will the Student Information Sharing Initiative make it easier to support those transient school students who, for socio-economic or other reasons, frequently move house and therefore, school?

Yes, SISI has the potential to improve information management so that more consistent and complete information is shared as soon as the student is enrolled at a new school. 160,000 students move school every year. This project will make a difference to them at an important time in their lives including those who face multiple, complex challenges. SISI will also make data available that will enable research into the impact of transience on student achievement and wellbeing, with the aim of tailoring support to vulnerable children and young people.

Q: How will the Ministry involve the sector in SISI?

The Ministry is co-constructing the iEd programme and SISI project with key stakeholders across the education sector to understand what a successful future state could look like.

The Ministry has been working with a number of schools via Roadshows, Cross Sector Forums, individual meetings and an online Loomio Group Forum for the past 18 months to start to consider their user needs.

An Education Sector Advisory Committee is being established to ensure key sector stakeholders are updated and provide input and advice into the direction of the programme.

We have now (May 2017) engaged experienced practitioners in co-construction, Davanti Consulting to assist us specifically for the SISI project. We will continue to work with the sector using the Davanti process, workshops and one-on-one interviews to gain a broad understanding of what is needed and how it should be managed.

SISI PROCUREMENT

Q: What is the Ministry procuring?

The Ministry is running a two stage procurement process with a Registration of Interest (ROI) followed by a closed Request for Proposals (RFP) to suppliers successfully shortlisted at ROI stage. From the RFP we will select a single supplier to complete an Early Stage Rollout. This will support the detailed business case to obtain funding to roll out the platform nationwide. We are expecting the ROI to be out in early July 2017.

Q: How is the Ministry choosing the successful vendor?

Once the ROI has closed, proposals that meet the requirements will be given to the evaluation team to do an initial evaluation. A shortlist of suppliers will be created, who will be

invited to present to the evaluation panel. Following these presentations, the panel will produce a final shortlist of suppliers, who will be invited to respond to the RFP. The RFP process will be similar, although we are likely to have two rounds of supplier presentations with shortlisting at each stage. The requirements and the evaluation criteria will also be more detailed.

Q: Does this mean that SISI is going nationwide? How much will SISI cost?

We've started the process to tender for an information technology partner to help us develop detailed requirements for SISI. They'll work with selected schools and their Student Management System vendors to develop and test requirements to support the business case to develop a possible future technology solution. The delivery of a solution to schools nationwide is still subject to future funding.

Q: Is this just a way for the Ministry of Education to improve its own access to data from schools?

SISI has the potential to bring considerable benefits for both learners and teachers by:

- Making a difference to the 160,000 children and young people that for a range of reasons move schools every year.
- Reducing paperwork and saving time by providing schools with the information they need from other schools to get the right support to new students in their school. Critical information about each student will arrive at their school with them on day one.
- Storing relevant information securely in one place so it is much easier to access under the right conditions.
- Improving the flow of information within and between Communities of Learning | Kāhui Ako.

Ends

Hon Bill English
Speech to the Third Data Hui

20 April 2016

E ngā mana, e ngā reo
o ngā iwi o te motu,
o ngā tangata Pasifika
me ngā roopu hei āwhina i te Pani me te hunga Rawakore
tēnā tatau katoa

Aku hoa o te Whare Miere
me ngā Kaiwhakahaere, ngā Kai-takatu o ngā Tari o te Kawanatanga
Tēnā koutou katoa.

He huinga tangata he whakaaro kia rātau kua wehi atu ki te pō,
Te hunga mate ki te hunga mate
Te hunga ora kua tau mai nei,
ki te hui tuatoru a nga Whakaaturanga,
Tēnā tatau katoa

Good morning,

Can I acknowledge Dame Diane Robertson, chair of the Data Futures Partnership, John Whitehead, from the Partnership Government Statistician Liz MacPherson, Brendan Boyle, Chief Executive of the Ministry for Social Development who we just heard from, and my Parliamentary colleagues joining us here today.

It's fantastic to see such a great turnout here for a topic which a year ago none of us would have thought that much about.

But let us first remind ourselves why we're here today.

We're here because we need to change more lives.

I've just been through a Budget process, energised yet puzzled by the process which gives us the privilege of allocating billions of other people's money.

Money that is hard-earned week-by-week. The GST that is paid to us on the groceries.

We owe it, at least to the tax payer, but absolutely to the people needing our help, to use every tool available to change lives.

Lives which are described by the data.

The data is just a story.

Brendan referred to the 10,000 most challenging of our community who will cost us $6.5 billion over their lifetime.

That's 10,000 stories. 10,000 people who have over the last 30 years been the focus of endless discussion, multiple measurement, and beautifully-launched strategies – but their stories tell us that hasn't changed much.

They find themselves in lives that, for 20 or 30 years, are spent on the lowest income you can have in New Zealand trying to deal with the most complex family and personal challenges we can imagine.

This is the context for our discussions today on data.

While we're talking about some of the things that we find challenging, we should just keep in mind that by comparison our challenges are easy.

Our problems are in talking to another government department, whether we'll share some data. Others would love to have something that easy to deal with.

This is the third Data Hui following events in September and December, and the Government has been a consistent advocate of increasing transparency through information sharing.

And we've made good progress over the last few years.

You've heard some of that this morning from the Chief Executive of MSD, insights largely unknown until only recently.

Isn't it amazing how much we didn't know about the people we told everyone we cared for?

We now have a much better understanding of our most challenging customers and a partial view of their journey through our system.

That understanding is starting to translate into results.

Government actions have reduced the welfare system's future lifetime cost by $12 billion in just four years.

That equates to 60,000 people each spending 15 fewer years on benefits.

These are real achievements, but we're only just beginning.

We've found that greater openness delivers a range of benefits.

It increases trust between government and the public.

And it rewards governments for successfully getting on with business.

For example, the Treasury now publishes a Major Projects Report which rates the performance of projects covering $18.5 billion of spending across government.

This level of transparency, just on our projects, not people, has helped to sharpen the focus of public servants and Cabinet.

The uncomfortable fact is that, despite billions of dollars of spending on social services, we don't have that degree of transparency in social spending.

We need lift our effectiveness in helping people get back on their feet after setbacks.

As a Government, we've found that being as honest and straightforward as we can with the public, and with ourselves, about that uncomfortable fact means the conversation can focus on real solutions for real people.

It's always tempting for any government to throw more money into a system that isn't working.

What's difficult is to sit down and attempt to understand the drivers of poverty, or to unpick the downwards spiral, which we too often assume is inevitable, or to adjust systems so that we can actually change the lives of those people in the greatest need.

So today is about taking the next step on the path to improved sharing and use of data.

A reason there is such a broad range of people here is because the problems are complex and the solutions also sit outside the public service.

Today is also about recognising the opportunity to build on the progress that has already been made by Iwi, NGOs and Pasifika in the use of data in their daily operations.

As a Government, we are guided by a simple and obvious principle.

We'll do what works.

We welcome the accountability that goes with being measured publically on results, for example through the Better Public Services targets – still unique in the developed world.

And we welcome the public's rising expectation that we will use their money effectively.

Data sharing is an essential part of this.

If we are going to understand what works, we need to know what services went to whom – something we don't yet know.

We need to know whether those interventions changed outcomes and by how much – something we're only now starting to see.

And we want to understand the long term fiscal and social consequences of those changes.

We then need to use that information to inform where to invest next for better measurement, evaluation and feedback.

We're all becoming familiar with the language.

Services that take the time and efforts of vulnerable individuals and families for no improvement in outcomes reduce resilience and perpetuate the hardship cycle.

One reason to stop things that don't work is it saves Government effort and tax payers' money.

A better reason to stop things that don't work is because it wastes the time, effort and resilience of those for whom we are trying to help.

All too often, officials tell me there isn't the capability outside the public service to make better use of data to show impact.

I disagree, and the presentations later this morning will show you why. That perception is certainly changing within the public service. And that capability is going to lift.

We can harness and build on the progress already being made outside the public sector to measure, evaluate, and feed back into decisionmaking.

My hope is that officials here today listening to the presentations from service providers later this morning will continue, as they are now, to ask themselves how we can expand the use of these technologies.

Government departments hold enormous stores of information that are directly relevant to understanding what services work.

But too often that information sits in silos within departments. It is often difficult and sometimes impossible to access.

Those limits on access are used to protect the state's monopoly on the control and use of data.

Today is about further breaking down that monopoly.

By analogy, what we have at the moment is a warehouse stocked full of food.

The door is small, it's a bit hard to find, and when get to it you'll only get the food you're given.

But what we really want is a supermarket.

The kind of supermarket with a door that is easy to find, and that has rules for entry that are strict but clear.

Once you're inside this supermarket, you can rely on the quality of food that's on the shelf, and you get to choose what you want.

And on the way out, you're not going to be stopped by security second-guessing what you're going to cook when you get home.

Because that's what we currently do. We say "you can't have that data because you might misuse it".

Access to data shouldn't be the exclusive reserve of government – but that's what it largely is because in many cases access is being decided in an ad hoc fashion.

So today we're committing to improving access.

Iwi, NGOs, and Pasifika – many of you here today – have told us getting information out of departments is not easy.

It's a negotiation. Agency by agency. Official by official.

You've told us contracts are entered in to as if each negotiation was the first, with the each negotiation's success depending on who you are talking to.

But the officials you're working with are acting consistent with their environment. They are operating in many cases without clear rules on appropriate data sharing.

Sharing brings costs and risks for agencies, including protecting privacy, but few rewards.

It can be a low priority for agencies who feel they have limited resources and have to assertively prioritise.

So officials are reacting in quite reasonable ways to the circumstances they are confronted with.

The government has earned the right to collect and hold data because it has the trust of the majority of citizens. This is our social license.

Up until now, we have maintained that social license by saying "no" to many, perhaps most, requests for external use of that data.

But "just say no" as an approach to data security has meant we have made only limited use of all the data we have gone to the trouble of collecting.

Data has no value if it is not used.

So let's fix the system.

Let's reverse the presumption and make data sharing the norm rather than the exception by clarifying the rules.

We need to reverse that assumption, because actually the data belongs to the people it is about.

It belongs to the people and the whanau that you are working for and with.

Some of you here today have spoken of data sovereignty.

This is the idea that you, as citizens, and collectively as Iwi, Pasifika and NGOs acting on behalf of citizens, own the data held by public agencies.

We agree with you. This is not a novel idea.

In fact, that principle is embedded in statute. Principle 6 of the Privacy Act says:

Where an agency holds personal information in such a way that it can readily be retrieved, the individual concerned shall be entitled… to have access to that information.

I'll say that again – "the individual shall be entitled". That's the law.

So I look forward to the day when we will find a very long queue of citizens outside the warehouse who have figured out that the cost of retrieval is about zero and you shall provide them with that information.

It's just a matter of time.

So agencies are subject to a statutory obligation to share the information it holds about and are obliged to share it when you – or somebody authorised by you to act on your behalf – asks for it.

We're making changes to the system to make good on that statutory and policy commitment. Ongoing workstreams include:

- The Data Futures Partnership, which is developing guidelines for data sharing through conversations around the country to discover the boundaries of social license, as well as launching catalyst projects for data use.

- We've invested in the Integrated Data Infrastructure in Statistics New Zealand, eliminated most fees for use, and established the Analytics and Insights unit in the Treasury to publish insights from the IDI including its recent insightful work on at-risk 0-24 year olds.

- We've developed the Cost-Benefit Analysis tool, or "CBAX", through Treasury, a template for lifetime cost-benefit analysis. This was fully incorporated for the first time in the Budget process this year.

- In February we launched a Social Investment Insights tool, a platform providing a point-and-click access to selected IDI data.

- And we're reviewing the Statistics Act and the Privacy Act in this context.

I want to talk about another recent change, which is central to the presentations you'll be hearing later today.

In the middle of 2015, we established the Social Sector Investment Change Programme.

It's now the Social Investment Unit, and it is currently building a data highway that will be integral to the social investment system.

This data highway will securely connect all participants, including departments – Health, Education, Social Development, Justice, Inland Revenue and ultimately all parts of government – allowing information to be shared and joined under a federated data model.

Each department will be a node on this highway, and their data will be accessible through it.

Our vision is that service delivery providers, including many in this room, will be able to connect to a prototype of this data highway in the near future.

It will be a one-stop shop for access to identified data held by departments, subject to the informed consent of clients and to standards set to achieve compliance with all relevant legislation.

We will call it a Data Access Service.

Those standards will be applied consistently, so departments and service providers can be confident of access provided they meet those standards and hold authorisation for sharing.

Importantly, access will not be subject to veto by departments who may not agree with the findings drawn from the data.

Data will be interoperable, that is, joined up across agencies. Iwi, Pasifika groups and NGOs holding suitable authorisation from their customers will also be able to match data they hold with the data held by agencies.

For social service providers, this will make data access professional, routine, reliable and responsible – rather than an unpredictable negotiation.

And by levelling the playing field on access to government data, subject to appropriate controls consistently applied, new models for social service delivery will emerge.

Models that are more effective in changing lives.

Access rules will be informed by the work of the Data Futures Partnership, as well as the Privacy Commissioner, and the Government Statistician.

Improving access to data amounts to the democratisation of data in an orderly and safe way.

Government holds no unique place in the use of data, even if it is its largest repository. There is no government monopoly on good ideas.

Increasingly, the currency in the delivery of social services will be new and better ideas.

Open access to data will in-effect create an information logistics platform that will be used in ways we can't yet envisage.

I must emphasise that increasing access to data will not be at the expense of security or risk to privacy.

Quite the opposite – we are improving access by clarifying the rules around sharing, and applying those rules consistently.

Let me also say to agencies here today – we are doing this.

There will be sharing of the data under your control which has not been previously shared.

It is neither an agency's right nor its responsibility as a data steward to decline to share that data for fear of misinterpretation or of findings you might disagree with.

If you're worried about misinterpretation, then clarify – but don't withhold.

We'll be working with you as we move into this new and, at times, uncomfortable territory.

Improving access to data beyond this new service will involve considered judgment about two issues in particular on which the Government does not yet have a position.

The first is around secondary identification, which occurs when data that has been anonymised by removing names and addresses can nevertheless be used to identify individuals from combinations of data points.

The problem is that it is hard to anticipate all the ways secondary identification can occur.

And so, without legislative protections post-release, agencies understandably respond by being aggressive in sanitising data before putting it into the public domain, for example by requiring high levels of aggregation that will in many cases remove much of the data's value.

Statistics New Zealand has told me that using their normal procedures for making anonymised data safe from secondary identification will frequently produce empty data where the populations of interest are small.

And, from a provider's point of view, that is almost always the case.

Legislation setting penalties for secondary identification could enable improved access while protecting the public's confidence in appropriate use of data.

This proposition is yet to be thoroughly tested by the Government, and we have arrived at no position on it at this stage.

A second way to support social license for improving data access is by establishing citizen-level control of how data is used.

One version of this is called Personal Information Management Services, a technology that gives citizens the ability to opt-in or opt-out of sharing some or all of their personal records.

In effect, it shifts decisionmaking on the use of data from the steward to its owner.

This technology exists now, and it promises a future in which the problem of discovering the boundaries of collective social license is replaced with a system that responds to each of your individual preferences for sharing.

It will also enable the creation of data intermediaries who, working within the legislative boundaries for data use and the permissions granted by individual citizens, will be able to find and distribute information for like-minded or like-behaving people for social services providers.

Again, this proposition has to be thoroughly tested.

Finally, let me close by restating what today's hui is about.

Today we learn about the technologies supporting measurement, evaluation and feedback that are already in operation among Iwi, NGOs and Pasifika providers of social services.

As Government, we want to build on these achievements rather than replicate them.

Today is also about committing to further improvements in the sharing and use of data on a level playing field.

We want to do this by clarifying rules protecting privacy, applying those rules consistently, and sharing data except where those rules prevent it.

So welcome to the Beehive, thank you all for taking the time to be here today as we take the next step in improving the sharing of data.

That is – your data.

Thank you.

Hon Hekia Parata
Extracts from speech to Cross Sector Forum

10 March 2017

Because you're going to get out into the booths, it's so exciting. I'm going to come to that. But on the matter of data, look, if any of you had the privilege to witness Dr Craig Jones' first presentation on what the state of data is in the NZ education system, do any of you remember that? It was really compelling. Thank you, Paul. Thank you, Karen. It was based on Lego blocks. And basically what Craig did was, he said here's the first picture, this is what it looks like, a whole pile of Lego blocks. We've got data for Africa across our system, but it's all just in, you know it's not connected or anything like that. Then he said, here's where we are now, and there was a picture of a Lego railway track, with a Lego train and a Lego train driver going round the track. And what that of course was meant to tell us all was that we have put some of that data together so that it makes a meaningful pathway and then the third which is what we were all waiting for, because we just couldn't wait, which is Craig, when you go to his booth, you will feel the magnetism of how someone can talk about what is essentially plumbing and wiring of data, make it sound so exciting. And then the third one was a whole Lego city. Functioning together, interactive, integrated, telling a great story, that's where we're headed, to a Lego city with our data, right? So when you go to the evidence booth, which is part of, no, when you go to the booth about data, which is part of the evidence neighbourhood, you will get this picture.

Who remembers Vanna White from the Price Is Right? Anyway, this picture here just shows you about how much data is collected by different parts of the system and how important it is to get it into a synthesised collection space... Excuse me. [Answers phone] Hi Prime Minister. Yes, everybody's having a fabulous time... no that's not, that was a timer. That was, me, my timer telling me I've spoken for 5 minutes, it might have felt like 15 but no, it was 5. In any event, we have been working behind the scenes and as part of the social investment that our government has invested in, which is how do you bring data together to identify which kids where, for what? What do they need? Not just in education. In health. In social development. You know, in the new Ministry for oranga tamariki, Andrew, and so how do we use that data to tell us where precisely do we need to invest and make a difference.
10.10.19
Well in education, we've been competing against other parts of the social investment landscape to make an argument to invest in us, so that we can build this digital platform upon which we can get a greater organisation of data which then will be available for use in a thoughtful and timely manner. Some of you will have participated in CC, right? Anyone here, who's participated in CC? On my god, yeah 1, 2, 3, 4, 5, 6 all of you it's clear. There was just so many hands up I couldn't count you. I made the mistake this morning, because I am bilingual, there was no tohu toa on the i and I thought CC was just city. But in fact, it's not. It is the Student integrated, what, Shared Integrated Student Initiative? Student Information Sharing Initiative. That's what it is.

And it is about how do we, how will we be able overtime to get to a point where really good information travels with the child through their education pathway. The point of this big wind up is that we won some of the share of the contestable funding to get the first two years underway. Minister Kaye is leading this initiative now. And so we expect with the first two years of funding and because there are just magicians in the

Ministry of Education, in that instead of it taking 10 years, it might take 5. Ha! Hysteria passes over Dr Jones face. Anyway, so that's the wiring thing there. We got some of the money. We are building this platform. We will involve you in it. We will observe all the privacy protocols. We will not burden you with asking you for collection of even more detail. We will try to make sense of what's already collected to tell a story to assist you to cause learning to happen for specific kids in real schools, in real times. Ok that was that.

Press Release: **Here comes iEd – joining up student data and information to help drive better achievement**

20 March 2017

A system which gathers up scattered parts of student data and information and pulls them together into a meaningful form has received its first injection of funding

iEd (Integrated Education Data) is all about using data and information to raise student achievement and wellbeing. It will be rolled out for at least the next 5 years and uses data and information so that resources go to where they're needed most in the education system.

A vital part of the iEd programme is ensuring that data and information about students is managed and used in a safe and transparent way. Any sharing and reporting of this information will be done carefully with only those with a recognised need being given access to the data.

iEd will also support Communities of Learning | Kāhui Ako to set achievement challenges, evaluate progress and share information to improve student performance.

The first part of iEd is an initiative called SISI (Student Information Sharing Initiative) which has been put together by the education sector and the Ministry. When SISI is implemented, all educators will have accurate and reliable information so they can better support student learning and wellbeing.

Critical information about each student will arrive at their school with them on day one. This reduces the burden on teachers to re-test to see where their students are at and means they don't need to go to previous schools for student information. SISI will start with schools and then be expanded so that information is shared between early learning services, schools and tertiary institutions.

As iEd develops the Ministry will continue to work with schools as well as a range of other important stakeholders, to ensure information is useful, relevant and can be safely shared. To learn more about iEd and SISI and get involved, email us on iEd.programme@education.govt.nz

Ministry Bulletin for School Leaders He Pitopito Kōrero
Integrated Education Data

20 March 2017

Integrated Education Data Initial funding for Integrated Education Data (iED), a system that will gather scattered parts of student data and information and pull them together into a meaningful form for learners, whānau, teachers, education providers, Communities of Learning | Kāhui Ako, and government was announced at the National Cross Sector Forum on March 10.

iEd will be all about using data and information to raise student achievement and wellbeing. It will use data and information so that resources go to where they're needed most in the education system. It is at least a 5 year programme that will be phased to make sure the biggest challenges are addressed first.

The first component of the programme, the Student Information Sharing Initiative (SISI), will ensure that critical information moves with students as they transition between schools and that educators have the accurate and reliable information needed to support student learning and wellbeing.

The iEd programme will also support Communities of Learning | Kāhui Ako to set achievement challenges, evaluate progress and share information to improve student progress and performance. We have been working on SISI with the school sector over the last 18 months and as iEd develops will continue to do so, along with other important stakeholders, to ensure information is useful, relevant and can be safely shared. To learn more about iEd and SISI and get involved, email iEd. programme@education.govt.nz.

In the time since Statistics NZ created this table the Ministry has advanced work to implement address verification in our school roll data collection. It is likely that, if a subsequent assessment were made, Education would be assessed at a higher level on this measure than reflected in this table.