



# Privacy Impact Assessment – Early Learning Information System

## November 2013

### Privacy Impact Assessment scope

This Privacy Impact Assessment covers the Ministry's collection and use of early childhood education (ECE) information through the Early Learning Information System only. Any information collection stemming from the Social Obligations policy or Education Amendment Act 2013, including additional Privacy Impact Assessments and Information Sharing Agreements with other agencies is out of scope at this time. This is because policy work for both these areas is ongoing. For more information, refer to section 7: Possible future proposals using ELI Information.

While this assessment covers the Ministry's collection and use of information, ECE services will also be collecting and using information about children enrolled and attending their services, and information about their staff. While ECE services will be responsible for ensuring the privacy and non-disclosure of the personal information provided for ELI, the Ministry will work to support ECE services to meet these obligations. Support will be provided in the form of training, user guidelines, communications and privacy resources. Support will focus on ensuring services are aware of their responsibilities and the possible consequences of not maintaining the privacy of information on individuals.

### 1. Purpose of the Early Learning Information System

The Ministry of Education (the Ministry) is developing an Early Learning Information system (ELI), to enable it to have full, accurate, and timely information about enrolment, attendance, and teaching at ECE services.

ELI will address the poor quality information on ECE participation which currently exists because of the shortfalls of existing paper-based information collection systems. ELI is part of a four year work programme that supports the Government's intention to deliver an increase in participation in ECE (CAB Min (12) 4/1 refers). The ELI project will contribute to the Government's Better Public Services goal that in 2016, 98% of children starting school will have participated in ECE.

Having full, accurate, and timely information about enrolment, attendance, and teaching at ECE services will lead to improvements in outcomes for learners, increased operational efficiencies for both the Ministry and ECE services and will provide a foundation for future development of ECE policy.

ELI will achieve these objectives by:

- Using a National Student Number (NSN) to uniquely identify children participating in ECE.
- Capturing detailed enrolment, attendance, identity and demographic information for individual children using the NSN so that the Ministry will know how many children are attending ECE services, at what ages, and for how long. This will enable the Ministry to make more informed policy and funding<sup>1</sup> decisions.
- Capturing demographic, qualification, and employment information for people providing education and care at ECE services so that the Ministry will know about numbers and qualifications of people working in ECE. This will enable the Ministry to make more informed policy and funding decisions.
- Implementing a variety of methods for ECE services to submit child-based participation information. This will increase operational efficiencies for these services and for the Ministry, by making the information available more quickly and more often. Having more detailed child-based participation information will also enable the Ministry to monitor participation in early childhood education and to encourage participation in particular communities where there are vulnerable children or children at risk of poor educational outcomes.
- Implementing a variety of methods for ECE services to submit information about people providing education and care.
- Facilitating the exchange of information between ECE services and the Ministry, ECE services and parents, and between ECE services and schools as appropriate – through parents sharing information about their child – not through ELI. This will also increase operational efficiencies for the services.

Note that there will be no change to the primary school enrolment processes and no interface between ELI and the compulsory schooling sector's ENROL system. ELI will not record whether a child has left the country or did not attend primary school. If a child has attended ECE and moves to primary school the child's details are entered on ENROL separately, and by the primary school. The only information that may transfer is the NSN where a child has one. The primary school will search for the NSN on the National Student Index (NSI) system.

## **2. Agile system development**

The ELI system is being developed under an Agile methodology. This means that system requirements are largely set but may change as the IT system development work is in process. Changes may occur when new requirements emerge, or when views of the system being developed prompt further changes to system requirements. It is anticipated that the set of requirements will be settled by July-August 2013. These changes would not be at a level where additional privacy assessments might be required.

## **3. Existing collection processes for ECE information**

The Ministry currently has limited information on ECE participation and its impact on later achievement. It does not have good information on how many, and which groups of, children participate in ECE, how much they participate and the relationships between their participation levels, the quality of the ECE experienced and their subsequent achievement.

The lack of individual child-based information impacts significantly on the Ministry's ability to provide high-quality advice on the most cost effective policy options to improve participation levels and learner outcomes. Without individualised information on enrolment and attendance, many alternatives to the current funding system (based on child-places) cannot be accurately costed or efficiently implemented.

The Ministry's current ECE data collection process is based on 1980s technology. The main statistical data collection is an annual census which provides a minimum of aggregate information on ECE learners and teachers. It is time consuming for ECE services to produce, and the accuracy of the data cannot be fully validated by the Ministry. The annual census provides the Ministry with a 'snapshot' of the number and average ages of enrolled children, as well as the number of staff for ECE services and is used in the development of policy, monitoring participation in early childhood education, and funding. However, these processes do not match the current IT capabilities in place across most of the ECE sector.

Through the annual census information about ECE enrolment and attendance is collected and manually inputted via hardcopy forms, or it is printed and sent from an ECE service's student management system. Most of this data is collected at a service level (e.g. "Number of children enrolled"). ELI will collect some of this data at a more detailed level, for example data on the length of daily attendance for each child.

Once ELI is in place the Ministry will no longer require ECE services to complete the annual ECE census.

#### 4. Proposed collection of ECE information for the assignment of NSNs

The Education Act 1989 allows for NSNs to be assigned to children who are enrolled in ECE services. As part of the ELI project, NSNs will be assigned to all children enrolled in ECE services. The Education Amendment Act 2013 enables the allocation of NSNs to children not enrolled in an ECE service, but the policy work on this change has not yet commenced and will be addressed in a separate Privacy Impact Assessment.

ELI will rely on the use of NSNs to uniquely identify each child. ELI will provide access to the National Student Index (NSI) via the ELI web interface or student management systems (SMS) to allow ECE services to find or create NSNs for ECE learners using the identity information the service has obtained from the parents.

ECE services will have access to child records for children aged 0-5 as part of an NSN search in order to allocated an NSN.

Information about the NSN, its purpose, use and rules on access to NSN information are all set out on the Ministry's website. A copy of the website information for parents is attached.

#### 5. Proposed collection of ECE information through ELI

ELI will collect enrolment, attendance, identity and demographical information for individual children enrolled in ECE services.

Eighty percent of the early childhood sector will use an SMS to submit this data to the Ministry and will ultimately be responsible for managing this data within the SMS and maintaining its security and privacy. Twenty percent of the early childhood sector will enter the required data into the Ministry's secure ELI web page. These services will be supported to maintain privacy of information through ELI web training and guidelines.

The ELI system will be connected to FIRST<sup>2</sup>. The FIRST system holds the licence and licensee details for each service. The two reasons for connection of ELI to FIRST is to ensure correct identification of the ECE service and to display FIRST information back to the service so that it can be corrected when required.

*Initial set-up phase of ELI (Early allocation of national student numbers)*

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<sup>2</sup> FIRST stands for **Funding Information Regulatory System Technology**. It is an internal application that allows Ministry of Education staff to license New Zealand educational organisations. Ministry staff also use FIRST to access profile and regulatory information about these organisations.

The allocation of NSNs has commenced. The Ministry began collecting identity information about children in February 2013 and anticipates the majority of NSNs will be allocated before the ELI system is implemented. The NSN will be populated into ELI when the system is implemented. ECE services are advising parents in writing via the enrolment agreement that this information is being provided to the Ministry for the purposes of assigning NSNs and may refer them to further information on the Ministry website.

In order to ensure the accuracy of the data for NSN purposes, the identity information for children with NZ birth certificates will be verified in the following way:

- a) With the Department of Internal Affairs, in accordance with the Information Matching Agreement made under section 78A and Schedule 1A of the Births, Deaths and Marriages Registration Act 1995 (see attachment) and section 99 of the Privacy Act 1993. The Information Matching Agreement with Internal Affairs, dated April 2009 is being amended to include information matching of identity data about children in ECE services. The Technical Standards Variation Report is expected to be signed in February 2013.

For children without a NZ birth certificate data matching is not possible and an unverified NSN record is created.

The statutory authority for the matching of information with the Department of Internal Affairs is the Births, Deaths, Marriages, and Relationships Registration Act 1995 is as follows:

*78A Disclosure of birth information, death information, marriage information, civil union information, and name change information to certain specified agencies for certain purposes*

- *(1) The purpose of this section is to authorise the disclosure of birth information, death information, marriage information, civil union information, and name change information to certain specified agencies for certain purposes.*
  - (2) The Registrar-General and the chief executive of a specified agency listed in the first column of [Schedule 1A](#) may enter into an agreement for the disclosure by the Registrar-General to the chief executive of any information described in the second column of that schedule in relation to the specified agency only for the purpose described in the third column of that schedule in relation to the information.*
  - (3) An agreement entered into under subsection (2) may be varied by the Registrar-General and the chief executive.*
  - (4) The Registrar-General may disclose birth information, death information, marriage information, civil union information, and name change information to the chief executive under this section only in accordance with [Schedule 1A](#) and an agreement entered into under subsection (2).*
- Schedule 1A  
Disclosure of information to specified agencies*

Ministry of  
Education

Birth information, name change information, and  
death information

To verify and update student information on the National  
Student Index

- 1) The relevant exceptions to Privacy Principle 2(2) are set out below:

*Principle 2*

*Source of personal information*

*(1) Where an agency collects personal information, the agency shall collect the information directly from the individual concerned.*

*(2) It is not necessary for an agency to comply with subclause (1) if the agency believes, on reasonable grounds,—*

*(a) that the information is publicly available information; or*

*(b) that the individual concerned authorises collection of the information from someone else; or*

*(c) that non-compliance would not prejudice the interests of the individual concerned; or*

*(d) that non-compliance is necessary—*

*(i) to avoid prejudice to the maintenance of the law by any public sector agency, including the prevention, detection, investigation, prosecution, and punishment of offences; or*

*(ii) for the enforcement of a law imposing a pecuniary penalty; or*

*(iii) for the protection of the public revenue; or*

*(iv) for the conduct of proceedings before any court or tribunal (being proceedings that have been commenced or are reasonably in contemplation); or*

*(e) that compliance would prejudice the purposes of the collection; or*

*(f) that compliance is not reasonably practicable in the circumstances of the particular case; or*

*(g) that the information—*

*(i) will not be used in a form in which the individual concerned is identified; or*

*(ii) will be used for statistical or research purposes and will not be published in a form that could reasonably be expected to identify the individual concerned; or*

*(h) that the collection of the information is in accordance with an authority granted under [section 54](#).*

### *When ELI is up and running*

When a child first enrolls in an ECE service, the child will be assigned an NSN by ELI as set out section 4 above. The ECE service will collect information about the child from their parent/s and will inform the parent/s that the information the parent provides, together with information about the child's attendance, will be recorded on ELI.

The ECE service will advise parents that the Ministry will have access to information on ELI but that the information collected will be used for the purposes stated in the privacy statement. The privacy statement included in all enrolment forms is as follows:

<b>◆ Privacy Statement:</b>
<p>We are collecting personal information on this enrolment form for the purposes of providing early childhood education for your child.</p> <p>We will use and disclose your child's information only in accordance with the Privacy Act 1993. Under that Act you have the right to access and request correction of any personal information we hold about you or your child.</p> <p>Details about your child's identity will be shared with the Ministry of Education so that it can allocate a national student number for your child. This unique identifier will be used for research, statistics, funding, and the measurement of educational outcomes.</p> <p>You can find more information about national student numbers at: <a href="http://www.minedu.govt.nz/parents">www.minedu.govt.nz/parents</a></p>

Ministry users with appropriate permissions may use the names and addresses stored in ELI if a child's attendance at ECE becomes sporadic, and the child meets the criteria as at risk of poor educational outcomes. The Ministry will monitor the attendance of these groups and should attendance cease, Ministry staff or agents may use the data collected via ELI to contact the families to assist them to re-enrol in ECE. The criteria and business processes for this work are to be developed, and access to names and addresses will be managed under strict role based access controls.

Note the Ministry will only use ELI information to monitor the participation patterns of groups of children not attending who are enrolled in an ECE service, not children with no prior enrolment. The Education Amendment Act 2013 will give the authority for an NSN to be allocated before enrolment if the Secretary of Education is satisfied that certain conditions have been met. But at this time, the policy work is yet to commence, and is therefore out of scope for this Privacy Impact Assessment.

The Ministry currently collects children's addresses from ECE services for funding purposes. Sections 144A and 311(5)(a) of the Education Act 1989 apply.

It is a key priority for the Ministry to monitor and assess the level of participation of all groups of children, and identify which groups may require additional resources. The Ministry currently monitors the participation of groups of children, including Māori, Pasifika and children from low-socio economic areas because these groups are under-represented in ECE participation statistics. The Ministry's ECE Participation Programme targets more resources to these groups. The Ministry is also working to support the Better Public Services: Supporting vulnerable children goal to increase participation in ECE and will eventually work with the Ministry of Social Development on the social obligations for parents' policy.

### **Information about staffing**

The ECE service will also collect and record information about numbers of people working in the service and their qualifications (if any) and this information will similarly be available to the Ministry through ELI. The identity of these people will not be accessible by the Ministry. Services already attest to the qualifications and registration status of staff. No verification of identity or qualification checks are currently undertaken by the Ministry except for when auditors check qualifications at a service audit.

The Ministry currently collects information about ECE staff for statistical purposes and has the authority to do so under section 144A of the Education Act 1989. The ECE workforce is an integral component of any country's ECE system. The quality and effectiveness of provision, the lifelong outcomes and benefits that are known to accrue from good quality ECE depend on its workforce, including both teaching and non-teaching staff.

Staffing information is needed to support policy and research questions on:

- equity and cultural balance
- drivers of best practice and quality of provision and outcomes, including, for example, evaluation of national curriculum goals
- operating structures and efficiency (including funding policy based on cost drivers)
- to support operational business, including licensing, regulatory compliance and funding

Information on gender, roles, full-time status, and staff-child ratios is currently part of international OECD reporting requirements.



## Information to be collected

The following table indicates the information that will be collected through ELI, from whom, and the Ministry's purpose for collection.

Record	Data Element	Access						Source		Purpose			
		MOE Business User	MOE Data Quality Analyst	MOE Data Entry Clerk	MOE Analyst	ECE Service Administrator	Geocode Service	Parent/Caregiver	ECE Service	Allocation of NSN	Policy Development	Statistical Purposes	Monitoring Purposes
Child	NSN		X	X	X	X		X		X	X	X	X
Child	ECE Service Enrolled	X	X	X	X	X		X		X			
Child	Legal names		X	X	X	X		X		X			
Child	Alias Name		X	X	X	X		X		X			
Child	DOB		X	X	X	X		X		X	X	X	
Child	Sex	X	X	X	X	X		X		X	X	X	
Enrolment	Ethnicity	X	X	X	X	X		X			X	X	
Enrolment	Iwi affiliation	X	X	X	X	X		X			X	X	
Enrolment	Home address		X	X	X	X	X	X			X	X	
Enrolment	Previous addresses		X	X	X	X	X	X			X	X	
Enrolment	Geocode		X	X	X	X	X				X	X	
Enrolment	Home language	X	X	X	X	X		X			X	X	
Enrolment	Active / Inactive	X	X	X	X	X		X	X		X	X	X
Enrolment	Enrolment start date	X	X	X	X	X		X	X		X	X	X
Enrolment	Enrolment end date	X	X	X	X	X		X	X		X	X	X
Enrolment	Days Enrolled (M,T,W,T,F,S, S)	X	X	X	X	X		X	X		X	X	
Enrolment	Times Enrolled (M,T,W,T,F,S,S)	X	X	X	X	X		X	X		X	X	
Enrolment	Hours of 20 Hours / Week	X	X	X	X	X		X	X		X	X	X
Enrolment	Date of Parents Attestation for 20 Hours	X	X	X	X	X		X	X		X	X	X
Attendance	Daily attendance start date, time	X	X	X	X	X		X	X		X	X	X
Attendance	Daily attendance end date, time	X	X	X	X	X		X	X		X	X	X
Attendance	Absence	X	X	X	X	X			X		X	X	X

Attendance	Subsidies	x	x	x	x	x			x		x	x	x
ECE Service	Service Identifier	x	x	x	x	x			x		x	x	
ECE Service	SMS /Web Interface used	x	x	x	x	x			x		x	x	
ECE Service	Home based addresses	x	x	x	x	x			x		x	x	
ECE Service	Internet Access Y/N	x	x	x	x	x			x		x	x	
ECE Service	Child / Teacher ratio	x	x	x	x	x			x		x	x	
ECE Service	Under one waiting time	x	x	x	x	x			x		x	x	
ECE Service	One year old waiting time	x	x	x	x	x			x		x	x	
ECE Service	Two year old waiting time	x	x	x	x	x			x		x	x	
ECE Service	Three year old waiting time	x	x	x	x	x			x		x	x	
ECE Service	Four year old waiting time	x	x	x	x	x			x		x	x	
Staff	ECE Service	x	x	x	x	x			x				
Staff	Role	x	x	x	x	x			x				
Staff	Paid / Unpaid	x	x	x	x	x			x				
Staff	Permanent / Temporary	x	x	x	x	x			x				
Staff	Full time / Part time	x	x	x	x	x			x				
Staff	Sex	x	x	x	x	x			x		x	x	
Staff	Ethnicity	x	x	x	x	x			x		x	x	
Staff	Highest qualification held	x	x	x	x	x			x		x	x	
Staff	NZTC registered Y/N	x	x	x	x	x			x		x	x	
Staff	Appointment date	x	x	x	x	x			x		x	x	
Staff	Resignation date	x	x	x	x	x			x		x	x	
Staff	Years spent in service	x	x	x	x	x			x		x	x	
Teacher Contact	Session	x	x	x	x	x			x		x	x	
Teacher Contact	Session Actual Start Date and Time	x	x	x	x	x			x		x	x	
Teacher Contact	Session Actual End Date and Time	x	x	x	x	x			x		x	x	
Teacher Contact	Teaching Language	x	x	x	x	x			x		x	x	
Teacher Contact	Teaching Language Percentage	x	x	x	x	x			x		x	x	

- 6. pAccess – who can access the data
- r Source – who provides the data
- i Purpose – what the data will be used for
- P
- r
- P

**Privacy analysis of ELI**

The following sections contain the Ministry’s analysis of ELI under the privacy principles set out in the Privacy Act 1993.

**Information Privacy Principle 1: Purpose of collection**

For the initial set up of ELI, and for each subsequent enrolment in ELI, selected Ministry staff will be using children’s names and identity information to assign NSNs to children. This is so that the NSNs can then be used without identification to enable the Ministry to have full, accurate, and timely information about enrolment, attendance, and teaching at ECE services. The Ministry needs to have this information so that it can develop ECE policy, measure educational outcomes and make funding decisions.

The Ministry and ECE services will also use ELI information to improve public services for vulnerable children by monitoring their participation in ECE and may contact these groups when attendance ceases. Access to personal details will be strictly limited to certain roles within the Ministry. The criteria and business processes for this work are to be developed. One example of a possible action is for the Ministry to contact a parent when a child ceases to attend, in order to seek to address any barriers to participation in ECE. ELI will not be collecting personal information about parents/caregivers, except for address information for each child enrolled.

Sections 144A and 311(5)(a) of the Education Act 1989 apply.

The Ministry does not need to collect the names of people working at ECE services for these purposes and will not be doing so. There is therefore no breach of this principle. As discussed previously the Ministry does collect some information about teaching and non-teaching staff currently, although it does not identify people directly. The Ministry has the authority to do so under section 144A of the Education Act 1989.

The collection and access of personal information of teaching and non-teaching staff by ECE services is outside of the Ministry’s role. Collection and use of information for internal purposes must be managed by ECE services themselves.

At the same time, we are encouraging ECE services to meet their obligations and responsibilities under the Privacy Act through training, guidelines and communications. The Ministry will also continue to post information and resources about privacy obligations on the Ministry of Education’s website for ECE services: [www.lead.ece.govt.nz](http://www.lead.ece.govt.nz)

## **Information Privacy Principle 2: Source of personal information**

ECE services will collect information about the children enrolling directly from the parents and they will also collect information on people working at the service. The Ministry will use ELI to access the information from the ECE services. For the initial set up of ELI the Ministry will also be collecting the information from ECE services.

The Ministry will not be collecting information directly from the individual and relies on Information Privacy Principle 2.2 (c) and (f) set out below. It is reasonably practicable for the Ministry to collect information directly from the parents or staff at early childhood centres. The collection of the information will not prejudice the children's or the staff's interests.

### *Principle 2*

#### *Source of personal information*

*(1) Where an agency collects personal information, the agency shall collect the information directly from the individual concerned.*

*(2) It is not necessary for an agency to comply with subclause (1) if the agency believes, on reasonable grounds,—*

- (a) that the information is publicly available information; or*
- (b) that the individual concerned authorises collection of the information from someone else; or*
- (c) that non-compliance would not prejudice the interests of the individual concerned; or*
- (d) that non-compliance is necessary—*
  - (i) to avoid prejudice to the maintenance of the law by any public sector agency, including the prevention, detection, investigation, prosecution, and punishment of offences; or*
  - (ii) for the enforcement of a law imposing a pecuniary penalty; or*
  - (iii) for the protection of the public revenue; or*
  - (iv) for the conduct of proceedings before any court or tribunal (being proceedings that have been commenced or are reasonably in contemplation); or*
- (e) that compliance would prejudice the purposes of the collection; or*
- (f) that compliance is not reasonably practicable in the circumstances of the particular case; or*
- (g) that the information—*
  - (i) will not be used in a form in which the individual concerned is identified; or*
  - (ii) will be used for statistical or research purposes and will not be published in a form that could reasonably be expected to identify the individual concerned; or*

It is expected that information from other systems, including FIRST and student management systems (SMS)<sup>3</sup> will also be uploaded into ELI.

### **Information Privacy Principle 3: Collection of information from subject**

The Ministry will not be collecting ECE learner or teacher information directly but the ECE services will.

The Ministry will require<sup>4</sup> ECE services to include information on each ECE enrolment form which explains to parents:

- What information is being collected and what will be submitted to the Ministry through ELI.
- That the information is being submitted so that an NSN can be assigned and the purposes of the NSN.
- That once an NSN is assigned, except for a limited purpose explained below, information on ELI is for the purposes of policy development and funding decisions, and for research and statistical purposes and for these purposes only the NSN will be used – there will be no identifying information.
- That it may also be used for monitoring participation, and the measurement of educational outcomes in ECE

Each ECE service will be responsible for passing on information about ELI to its teaching and non-teaching staff.

### **Information Privacy Principle 4: Manner of collection**

ECE services will be collecting information about children from parents at the time of enrolment and will be collecting attendance information during each child's time at an ECE service. The ECE service will be collecting information about people working at the service from the individual concerned and attendance and service information will be collected during each staff member's time at the ECE.

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<sup>3</sup> Student management systems (SMS) are software systems that enable ECE services and schools to track enrolment, attendance and funding information.

<sup>4</sup> Services can be required to do this under the Funding Rules – section 2-7 of the *ECE Funding Handbook*.

## **Information Privacy Principle 5: Storage and security of the information**

ELI information will be stored in a database (Data Mart (DM)).

The methods of input available to ECE services will be through their SMS, through the ELI web page, or via hardcopy form. The services will also be able to view data relevant to their ECE licences from the Funding Information Regulatory System Technology system (FIRST). ECE services will also be able to query their ELI data through the ELI web page or through their SMS if that capability is provided and print reports for parents.

Once the data is collected, Ministry staff will be able to query the records for quality control purposes. When potential errors are found as a result of the quality control, MOE staff will inform the relevant services via telephone, e-mail or letter, and the services will re-enter the correct data. MOE staff will also be able to outsource address cleansing, validation and geocoding (the standard contract wording for outsourcing geocoding is included below). The data will then be moved to a business data store (BDS) for query and analysis. Tools for query and analysis of the BDS are part of the ELI project.

The standard contract wording for the Ministry outsourcing providers is:

### **Protection of Confidential Information**

13.1 Each Party confirms that it has adequate security measures to safeguard the other Party's Confidential Information from unauthorised access or use by third parties, and that it will not use or disclose the other Party's Confidential Information to any person or organisation other than:

- a. to the extent that use or disclosure is necessary for the purposes of providing the Deliverables or Services or in the case of the Buyer using the Deliverables or Services
- b. if the other Party gives prior written approval to the use or disclosure
- c. if the use or disclosure is required by law (including under the Official Information Act 1982), Ministers or parliamentary convention, or
- d. in relation to disclosure, if the information has already become public, other than through a breach of the obligation of confidentiality by one of the Parties.

### **Obligation to inform staff**

13.2 Each Party will ensure that it's Personnel:

- a. are aware of the confidentiality obligations in this Contract; and
- b. do not use or disclose any of the other Party's Confidential Information except as allowed by this Contract.

**Confidential Information** is Information that:

- a. is by its nature confidential
- b. is marked by either Party as 'confidential', 'in confidence', 'restricted' or 'commercial in confidence' c. is provided by either Party or a third party 'in confidence'
- c. either Party knows or ought to know is confidential, or
- d. is of a sensitive nature or commercially sensitive to either Party.

The IT supplier, FRONDE, will be responsible for design and implementation of the interfaces, ELI database and data mart. Access and authorisation to the ELI system will be provided by MOE through Education Sector Authentication and Authorisation (ESAA). Role based access and authorisation within ELI will be provided by the IT supplier as part of ELI design and implementation.

ELI will securely store all data with the In Confidence security classifications to the New Zealand Government standards. Refer to <http://www.security.govt.nz/publications/security-in-the-government-sector.html>. Also see <http://ict.govt.nz/programme/opening-government-data-and-information/new-zealand-data-and-information-management-princi>

The ELI database will be secured to the required level as per New Zealand Government security standards. The Ministry is currently performing a security assessment in conjunction with its IT department. The results of this security assessment will determine how information will be kept secure.

Online/website access will also be secured and tested. The results of the security assessment performed by IT will determine how this will be accomplished. The current expectation is:

- https encryption
- Education Sector Authorisation and Authentication (ESAA) login security; and
- security intrusion testing

The risk assessment will use the ISO 31000 Risk Management Standard, and is being performed by Security-Assessment.com.

Back-ups will be secured as follows:

- backed up using Tivoli Storage Manager Robot in secure (restricted access) data centre in Wellington
- two back-ups are written in proprietary format
- one copy kept locally in the Wellington Data centre
- a second copy is scanned and sent to the Auckland Data centre by a contracted data security company
- the Auckland Data centre is also secure and outsourced to Unisys.

ELI will be classified as a “Significant Service” meaning that it is not mission-critical but provides significant service to some of the Ministry’s critical business objectives and outcomes. Criticality may be raised to Mission Critical in the future if funding functionality is added.

### **Information Privacy Principles 6 and 7: Access to and correction of personal information**

No personal information on teachers will be held in ELI and therefore no information would be able to be provided to teachers who made such requests. Children's personal details, and the NSN record can be accessed by the parent or guardian concerned through the Ministry of Education. Names and addresses of teaching and other staff will not be held in ELI, so we will not know who they are.

### **Information Privacy Principle 8: Accuracy of personal information to be checked before use**

A series of data quality procedures will be in place, including field validation upon entry of data, record level validation of data prior to submission to the Ministry, validation through a rules based validation tool (managed by data quality staff), further validation through various reports, and manual validation where necessary.

Accuracy of NSNs assigned to children in ECE will be ensured through procedures and training for the relevant people. NSN data will be verified for New Zealand born children against Department of Internal Affairs, Births, Deaths and Marriages.

Equally, ECE services will be required and responsible for ensuring they have followed all the necessary processes to ensure information is correct.

The Ministry will develop rules, guidelines and training on ELI, which will include requirements to ensure that all data submitted is correct. The training and guidelines for ECE services will also include a focus on:

- the proper use of ELI
- ensuring that confidential information, such as contact details of children are kept safe
- ensuring that all ELI information is kept up to date for parents

ECE services currently manage information about children already, so the introduction of ELI will not necessarily require a change in practice, except that address information may also be stored in ELI in addition to a paper file or other electronic file. Services will also be responsible for delivering training and guidance to staff on privacy once the initial training and guidelines have been delivered by the Ministry.

It is important to note that 80% of ECE services use an SMS to manage their information. This means 80% of services will not be using the ELI web page. As a result, some aspects, such as the delivery of training and guidelines will from time to time be out of the Ministry's direct control.



## ***SMS interface with ELI***

The transmission of ELI messages Services to the Ministry is managed by three components:

- ESAA
- InfoHub
- ELI Core

Each component is described below.

The functionality provided by the components will allow message transmission between SMS providers, Service Providers and ECE Services and the Ministry (depending on the SMS hosting solution in place). For ease of readability, the term 'Service' will be used throughout this document to refer to the **source** of ELI messages.

### ***What is ESAA?***

ESAA (Education Sector Authentication & Authorization) is the Education sector's Identity and Access Management (IAM) system. An IAM facilitates the management of electronic identities used to initiate, capture, record and manage user identities and their related access permissions e.g. it will manage individual user accounts, and machine accounts.

ESAA acts as the Ministry's gatekeeper for Services requesting access to InfoHub even though the access is on a machine-to-machine basis. If ESAA does not recognize the Service credentials or the Service is deemed not to have authority to access InfoHub, then ESAA will return an error message. SMS solutions will be required to monitor and manage such errors.

Only when ESAA is satisfied the Service has correctly requested access to InfoHub and has the requisite level of authority to interact with InfoHub, will the message be passed to ELI core.

### ***What is InfoHub?***

The purpose of InfoHub is to provide a technology framework for information transfer.

In the context of an SMS, InfoHub provides an interface to send data into the Ministry, fulfilling the following business needs:

- Provide a means to send data to the Ministry in a timely and efficient manner
- Integrate data using a consistent set of standards
- Provide a secure means to exchange data

It is not intended to:

- incorporate business rules (e.g. for validation or routing)
- enforce business processes or business rules in agencies
- provide workflow

InfoHub will provide the mechanism for the transmission of messages from Services to the Ministry.

Message transmission will be arranged on a machine-to machine basis (commonly referred to as B2B: business-to-business) with no human intervention. The transmission of messages according to an agreed frequency (yet to be confirmed) will be managed as an automated process.

Once a Service transmission request has been verified by ESAA), InfoHub will dispatch the message on to ELI core. If, for some reason e.g. server outage, InfoHub cannot deliver the message then it will re-try transmission on a periodic basis. This re-try process is not a Service responsibility; it is managed entirely by InfoHub. If, after successive re-tries message delivery is still not achieved, then the message will be added to a 'dead letter' queue for the attention of the InfoHub administrator.

### ***What is ELI core?***

Within the ELI system, ELI core is the 'landing' database that will receive all messages transmitted by Services. Upon delivery of a message, ELI core will evaluate the message xml structure for compliance.

Should the xml be incorrect, the message will not be returned or a request to resend automatically issued. System administrators at the Ministry will monitor ELI core population and will contact the appropriate nominee e.g. SMS vendor, to resolve the issue.

### **Information Privacy Principle 9: Retention of personal information**

It is proposed that ELI records are kept for a similar timeframe for that which is applied to the ENROL system. That timeframe is seven years to achieve the objective of providing statistical resource for longitudinal analysis. Providing the NSN is included in the learner's record, the retention of names would not be necessary beyond the seven years identified for the current enrolment records, as the NSN would be sufficient identification for disaggregated data for research purposes. Therefore records could be kept beyond the seven year timeframe provided names and any other identifying information was deleted. Records will be kept for longer than seven years for research and statistical purposes.

Longitudinal analysis will be conducted outside of ELI and ENROL by authorised users, and most likely with datasets that do not include children's names. Access is approved to staff after they have completed the required forms, including those on confidentiality and privacy. Access will be retracted once staff are no longer working on specific datasets.

For ENROL and Attendance data files, the Ministry of Education's analysis group store data extracts in secure folders. Only those that have a need to work with the data have access to these folders.

ENROL contains names as its main purpose is to identify an individual if they remain un-enrolled for more than 20 days.

There is no process in place to delete records from ENROL after any period of time. As ENROL is now a significant tool for longitudinal studies and names are need to match to other government datasets, removing names would not be useful.

We do archive records, which mean they do not show up in the main search function. They stay within ENROL, and can be searched on by selecting 'search archived records'.

ENROL has a privacy flag. If this is ticked for a student this means:

- any ENROL screen printouts for this student have a water mark "Keep Information Private"
- schools cannot see much about the student until they completely enrol the student
- The Ministry of Education does not share this information with other agencies.

Note that while there is an NSN the record can always have a name appended by matching to the NSI database.

Access to ENROL is provisioned to schools after they sign an authorisation form/privacy statement. Ministry of Education users have to apply on the IT portal and be given approval by the Manager or Senior Data Analyst from the Ministry's Data Collection Unit (part of the Ministry's analysis group).

#### **Information Privacy Principle 10: Limits on use of personal information**

ELI will contain detailed enrolment, attendance, identity and demographic information for individual children. ELI will also capture demographic, qualification, and employment information for people providing education and care in ECE services.

The information is being collected, and will be used, by the Ministry to provide full, accurate, and timely information on enrolment and attendance in ECE services to inform future ECE policy and funding decision making.

Attendance information, names and contact details may also be used – under strict role based access controls – to support the work to improve public services for vulnerable children.

The information is being collected, and will be used, by ECE services for the purposes of providing ECE services to those learners enrolled and for the purposes of managing the people who work at the service.

Access to ELI information will be role based and asset based.

This means that system controls will ensure that MOE and ECE employees will only have access to information that they need for the purposes outlined above, and that rights would be restricted if they move to a role that requires less access.

### **Information Privacy Principle 11: Limits on disclosure of personal information**

There are currently no plans to share ELI information with any other groups or government agencies, nor is the Ministry proposing information matching with other Government departments at this stage.<sup>5</sup>

ECE services will be responsible for ensuring the privacy and non-disclosure of the personal information provided for ELI. Services are currently responsible for ensuring the privacy and non-disclosure of personal information held in paper files, including enrolment information, so the introduction of the ELI system has little impact on their existing obligations.

### **Information Privacy Principle 12: Unique identifiers**

Principle 12 relates to the assignment of unique identifiers.

ELI will rely on use of NSNs to uniquely identify each child. ELI will provide access to the National Student Index (NSI) via the ELI web interface or student management system to allow services to find or create NSNs for children.

The statutory authority that authorises the use and assignment of NSNs to children enrolled in ECE services is Part 30 of the Education Act. Section 344 of the Education Act required a gazette notice to authorise the use of NSNs by ECE services. A gazette notice issued by the Secretary for Education, that took effect from 1 February 2013, authorises ECE services to use NSNs for the purposes of enrolment, attendance, resourcing, statistical and research,

## **7. Possible future proposals involving ELI information**

Any future uses of ELI information would need to comply with Part 30 of the Education Act. This is because the use of the NSN means that the information in ELI is only able to be used by authorised NSN users for the purposes specified in the Education Act.

ECE services and the Ministry are both authorised users. The purposes listed are:

- monitoring and ensuring student enrolment and attendance
- ensuring education providers and students receive appropriate resourcing
- statistical purposes
- research purposes
- ensuring that students' educational records are accurately maintained

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<sup>5</sup> The Ministry does currently data match with the Department of Internal Affairs, Births, Deaths and Marriages.

Possible future proposals involving ELI information include:

**A) Allowing NSNs to be assigned to children who are not enrolled in an ECE service** but who would benefit from such an enrolment and using the NSN for the purpose of encouraging attendance at early childhood services. (Refer to Education Amendment Act 2013)

Under Part 30, NSNs are only able to be assigned to learners enrolled with an education provider. Allowing NSNs to be assigned to children who are not enrolled in an ECE service and broadening the purpose for which an NSN can be used is allowed for under the Education Amendment Act 2013 enabling the Ministry to allocate NSNs to children not enrolled in an ECE service. This will require further policy work and will undergo a separate privacy impact assessment.

**B) Information sharing with the Ministry of Social Development** for the purpose of ensuring beneficiaries' social obligations to enrol their children in an ECE service are met. This policy, and the information involved, will be subject to a formal information sharing agreement between the Ministry of Social Development and the Ministry of Education. Work on this policy is still underway.

**C) Use of ELI information for funding purposes** – a future funding system would use actual child attendance information from ELI to calculate the funding to be paid to ECE services. Any new funding system would be subject to a separate Privacy Impact Assessment. Where this work may impact on ELI, this ELI Privacy Impact Assessment will be revisited if deemed necessary.