

# **Top Down Review of the Official Statistics System**

## **Phase 2**

### **Recommended Option for the future role of Statistics New Zealand and the Official Statistics System**

**5 December 2003**

## **Purpose**

- 1 This report presents the Review Team's preferred model to make improvements to the official statistical system, and seeks Ministers' approval for the model
- 2 Under the Statistics Act 1975 the term "official statistics" is defined as any statistics that can be produced by a government department. The Act also enables any other "agency of the Executive Government of New Zealand" to be defined as a Government agency for the purposes of this Act.

## **Problems with the Current System**

- 3 The Statistics Act 1975 had three major objectives (see section 3 of the Statistics Act 1975):
  - a To provide information for Executive Government, government departments, local authorities and businesses for making policy decisions and to enable these groups and also the general public to understand economic, social, demographic and other matters of interest
  - b To co-ordinate as effectively as possible and to render most useful the official statistics produced by government, and
  - c To avoid unnecessary duplication of requests for information by government.
- 4 These objectives remain as relevant today as they were back in 1975, and are consistent with the benefits of working across government agencies, using statistical evidence to support government decision-making and providing best value for money.
- 5 There have been three substantial changes that have limited the ability of the Statistics Act 1975 to work as intended:
  - a Substantial growth in data demands to inform public policy and describe economic, social, demographic and environmental change
  - b Major changes in information technologies during the 1980 and 90s enabling the creation and storage of significantly more administrative data, and the ability to more readily process and disseminate data to produce statistics, and
  - c The significant changes in the public management system during the 1980 and 1990s made more explicit the role and responsibility of Chief Executives in managing their departments but the consequence, until recently, was a low priority given to inter-agency collaboration and working together across government agencies.
- 6 The Review Team found wide acceptance of the need for significant improvements in the overall co-ordination and management of the official statistics system:
  - a *Management of the official statistics system.* The current system is characterised by a weak and fragmented co-ordination and management model and is not consistently focussed on the important statistics. In line with Government's direction outlined in the Review of the Centre, there needs to be stronger management and co-ordination of statistics to get the most value from the Government's investment in statistical activity.
  - b *Better management of access to statistical data.* The current weak co-ordination of the official statistics system has resulted in inconsistent access to statistical data. This has

resulted in significant under utilisation of existing data and statistics to inform policy decisions and evaluative activities.

- c *Differing standards and policies currently being applied by departments.* These reduce the ability of researchers to utilise data from across the state sector. Greater consistency in the adoption of standards and in the documentation of existing data sources would facilitate access and location of data, and allow greater integration of data from different sources.
- d *Better use of existing government statistics.* There is significant potential to better utilise the existing stock of information within government without undertaking new surveys.
- e *Contract surveys under the Statistics Act.* Conflict has arisen in the past between departments and Statistics New Zealand over contract surveys. Departments have expectations as purchasers of Statistics New Zealand surveys to 'own' data provided by respondents and to have full access to the data and results. On the other hand, the Government Statistician has an obligation to maintain trust in Statistics New Zealand produced statistics and give effect to the Statistics Act 1975. This requires Statistics New Zealand to retain control of the full statistics production process including access and release protocols. These two conflicting interests have resulted in some heat over access to data between departments and Statistics New Zealand.

### **Recommended Model**

- 7 To address the problems outlined above, the model proposes defining a portfolio of statistics across the state sector (referred to as *Tier 1* from this point on) that are important in their own right and, consequently, need to be produced, analysed and released to high statistical standards.
- 8 Other statistics still play a role in the official statistics system and the use of standards in their production will be strongly encouraged by the Government Statistician. However, there will not be the same obligations to meet standards for these statistics, as there can be legitimate reasons for not applying standards that need to be taken into account by the producer.
- 9 The model has the following 11 elements that together will form an official statistics system across the state sector that is capable of overcoming the problems of the current system:
  - a *Broadening the coverage of official statistics* to include a class of entities to be known as Crown Agents (Public Finance Bill (State Sector Management) 2003). These entities fulfil an important role of government that fit naturally into official statistics. Producers of Tier 1 statistics outside the proposed scope of departments and crown agents, need to be invited to come within the scope.
  - b *Identification of a set of important statistics (Tier 1).* Tier 1 statistics are a defined set of key official statistics that are performance measures of New Zealand. The identification of Tier 1 statistics is primarily based on the purpose of the statistic and not 'who' produces the statistics. The list of Tier 1 statistics will be developed by a committee of Chief Executives, chaired by the Government Statistician, who will make a recommendation to ministers that the list be published as a regulation.
  - c *Application of a consistent set of standards, protocols, and policies for Tier 1 statistics.* The Government Statistician will set standards, protocols, and policies to be applied to

- Tier 1 statistics and therefore maximise the ability to integrate, compare and use such statistics across the state sector.
- d *The Minister of Statistics will approve all new or substantially revised Tier 1 surveys to ensure standards as defined above are being met.*
  - e *Leadership by the Government Statistician of the development of the official statistics system through the development of standards, protocols and policies, the use of Statistics New Zealand's expertise and capability and a strong programme of statistical research.*
  - f *Independent Advice and Review.* The Advisory Committee on Official Statistics (ACOS) will represent the interests of the wider statistical community, including users, producers, and suppliers of statistical data to ensure that official statistics, particularly Tier 1 are developed to meet the needs of users and producers.
  - g *Accessing and releasing statistics*
    - i. Users will be able to access a full list of available statistics produced by government
    - ii. Users will be able to use a variety of methods to access Tier 1 statistics, and
    - iii. Release of Tier 1 statistics will be by Chief Executive of the producing agency according to a calendar of release dates published at least six months in advance.
  - h *A single point of access to Tier 1 unit record survey and administrative data.* A new business unit will be set up in Statistics New Zealand called the Official Statistics Research and Data Archival Centre (OSRDAC). OSRDAC will provide a single reference point for unit record data for Tier 1 statistics for government, university and other researchers. Statistics New Zealand will promote, manage transparently, and reduce current cost of access for OSRDAC.
  - i *Clear terms for contract survey work undertaken by Statistics New Zealand for government agencies.* These terms and conditions, including earlier cabinet decisions, must be widely available and understood by potential contracting parties, as knowing the ground rules up front should help remove some tension in this area.
  - j *Notification process for all surveys,* in order to produce a comprehensive register of all official surveys.
  - k *A Burden management process* will be put in place for all surveys with a sample size over 2,500. Agencies will be encouraged to collaborate. The final decision will be made by the Chief Executive of the producing agency
- 10 Once Ministers have approved this model, a detailed implementation plan will be developed. The Review Team envisages the implementation of the model will build on existing processes (e.g. e-GIF) and work (e.g. Social Statistics Programme). In addition, there will be a need for some:
- Cabinet directives to set in place new or modified parts of the system
  - additions to the Statistics Act 1975 (e.g. to form ACOS), and
  - additional funding for some of the government agencies to meet the requirements of the proposed model.

## 1. Official Statistics

- 11 The current definition of official statistics in section 2 of the Statistics Act 1975 has two elements:
- a The source of statistics (surveys and administrative records) which does not need to be changed, and
  - b Who produces them (government departments).

This definition is limited in scope and yet too broad to manage effectively. It:

- i. excludes potentially valuable statistics produced by Crown entities because it is restricted to "departments", and
  - ii. encompasses a wide range of departmental data that might generally be expected to be useful only for internal management purposes or statistical purposes for a narrow range of users. (See paragraph 12)
- 12 When the Statistics Act was introduced in 1975 the structure of government was very different to the modern arrangement. Significant activities have been moved out of the ambit of departments and therefore outside the scope of the Act. Some important statistics are now being produced by government agencies outside the scope of the Statistics Act (e.g. tertiary education performance statistics produced by TEC or road safety statistics produced by LTSA).
- 13 The coverage of official statistics needs to be broadened to include a class of entities to be known in the Public Finance Bill (State Sector Management) 2003 as Crown Agents, defined as "non-company Crown entities that have a close working relationship with the government of the day"<sup>1</sup>. These entities fulfil an important role of government that fit naturally into official statistics.
- 14 Other types of entities (ACEs, ICEs, CROCs, SOEs) have not been included as they tend to have regulatory, commercial or judicial functions and are unlikely to be producers of significant statistics.
- 15 *The process to produce a list of Tier 1 statistics could include those produced by agencies outside the proposed scope of official statistics (departments and crown agents). These producers need to be invited to come within the scope of official statistics to ensure that there is confidence in the statistics which are important enough to be classified as Tier 1. Likely examples of these agencies are the Reserve Bank and QVNZ.*

## 2. Tier 1 statistics

- 16 Tier 1 statistics are a defined set of key official statistics that are performance measures of New Zealand. The identification of Tier 1 statistics is primarily based on the purpose of the statistic and not 'who' produces the statistics. The Government Statistician will encourage the development of the set of Tier 1 statistics to achieve a consistent level of quality across all subject areas.

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<sup>1</sup> State Services Commission paper *Review of Centre - Crown entity governance*  
<http://www.ssc.govt.nz/display/document.asp?navid=216>

- 17 Tier 1 statistics will have most of the following attributes:
- a Are essential to central government decision making
  - b Are of high public interest
  - c Need to meet public expectations of impartiality and statistical quality
  - d Require long term continuity of the data
  - e Provide international comparability or meet international statistical obligations.
- 18 The identification of Tier 1 statistics is central to the proposed model. In the consultation phase for this report, departments consistently asked which statistics would be Tier 1 so that they could determine the likely impact on their departments. The Review Team's view is that the major components of Tier 1 statistics will be:
- a those currently produced by Statistics New Zealand - primarily economic and demographic statistics, but also includes some social statistics (e.g. HSS, SOFIE, Labour Market), and including statistics produced by data integration from other departments' databases
  - b a few economic statistics produced by other organisations outside the definition of producers of official statistics (e.g. Reserve Bank, Quotable Value New Zealand)
  - c some key social statistics: particularly health, education, justice sector and social development statistics produced from surveys and administrative databases, and
  - d a future set of environmental statistics now being developed.
- 19 The Review Team has produced a list of Tier 1 statistics as an indicative set to inform this stage of the Review. This list is not definitive. The Government Statistician will convene a group of chief executives, (or their delegates), who are likely to be producers of Tier 1 statistics, to advise Ministers, through the Minister of Statistics, on what should be included in the initial list of Tier 1 statistics. Subsequent changes to the list will be proposed to ministers, by a similar group convened for that purpose. The Government will consult users as part of the process. The indicative list is in Appendix 1.

### **3. Application of standards, protocols, and policies**

- 20 Producers of Tier 1 statistics will apply the statistical standards, protocols and policies set by the Government Statistician in order for the system to work effectively across the state sector and allow a whole of government statistical picture to be built up. Although some obligations exist on departments under the current system, the identification of Tier 1 statistics may require additional obligations to be placed on departments in order for their statistics to meet the quality requirements, including the potential for cross-agency integration and collaboration, for Tier 1 statistics.
- 21 In order to ensure standards policies and protocols (see paragraphs 22-28 below) are applied consistently for Tier 1 statistics, and that Government maximises the value of its investment in Tier 1 statistics, the Minister of Statistics will approve all new or substantially revised Tier 1 surveys. This survey approval process will be a transparent, simple and timely process based upon a self-assessment completed by departments.

Self-assessments that meet the Tier 1 standards, policies and protocols will be referred automatically by the Government Statistician for approval to the Minister of Statistics. A sample checklist for department's self-assessment is in Appendix 5.

*Standards for surveys and administrative databases*

- 22 The adoption of common standards for Tier 1 statistics across administrative databases and surveys will allow a greater utilisation of a vast pool of data and enable more comprehensive statistics to be produced. Increased utilisation of existing data can reduce the need to survey the public directly with a corresponding reduction in respondent burden. The Review Team found strong cross agency support for the adoption of a common set of internationally compatible standards and basic data definitions for administrative databases and surveys. This is also in line with the Government's E-Government strategy of common metadata definitions.
- 23 Components of these standards include:
  - a Statistical standards
  - b definitions of statistical units, and
  - c classifications (e.g. ANZSIC) and coding processes.
- 24 The technical nature of standards and the need for one common set for Tier 1 statistics makes the setting of standards an appropriate role for an expert, centralised, independent decision-maker. At an international level many statistical standards are ratified by the United Nations Statistical Commission with Statistics New Zealand participating actively in this work. The Government Statistician should undertake this role in consultation with departments and key users.
- 25 The adoption of common standards in existing administrative databases and surveys could involve significant effort, time, and cost to government agencies. The process of migrating to common standards needs to be carefully managed and focused on leveraging off existing work in this area. Standards should be implemented in the following way:
  - a all new surveys and administrative databases should incorporate the relevant standards into the planning and initial implementation phase, and
  - b existing surveys and administrative databases should be updated to the standards at the time of their next major revision or upgrade, which in some cases may not be completed for some considerable time.
- 26 The E-Government Unit's "New Zealand E-government Interoperability Framework (NZ e-GIF)"<sup>2</sup> is a good starting point for making basic data definitions for administrative databases more widely known.

*Protocols and Policies for Tier 1 statistics*

- 27 Protocols and policies cover practices such as the handling of data, release of statistics, and access to data. Their purpose is to ensure that there is integrity in the handling of data, that statistical data is only used for its intended purpose, and, ultimately, that the

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<sup>2</sup> Version 1.1, 10 July 2003, E-government Unit, State Services Commission <http://www.e-government.govt.nz/docs/e-gif-v-1-1/index.html>

confidence of users and suppliers of data is retained by the agency collecting and producing statistics.

- 28 There is a need for a common set of protocols and policies for Tier 1 statistics to maintain public confidence in these statistics. As with standards, the Government Statistician will set policies and protocols for Tier 1 statistics. However, protocols and policies differ from standards in that they are less technical in nature and, arguably, more subjective. The Government Statistician will be expected to go through a consultation process before setting protocols and policies. ACOS will also have a role in reviewing and reporting on the application of protocols and policies set by the Government Statistician (see Independent Advice and Review below).

#### *Leadership of Official Statistics*

- 29 The current statistical leadership role of the Government Statistician is set out in Section 14 of the Statistics Act 1975. For continuing development of the official statistics system it is important that emphasis is placed upon:
- a The development of standards, protocols and policies described above
  - b the use of Statistics New Zealand's expertise and capability to support departments to improve the quality and reduce the cost of Tier 1 statistics, and
  - c a strong programme of research, to inform users and producers about the quality and effectiveness of Tier 1 statistics, and develop new statistical series from existing data sources. This research will be facilitated by the establishment of the Official Statistics Research and Data Archive Centre (OSRDAC).

#### **4. Independent advice and review - ACOS**

- 30 The Advisory Committee on Official Statistics (ACOS) will represent the interests of the wider statistical community, including users, producers, and suppliers of statistical data to ensure that Tier 1 official statistics are developed to meet the needs of users and producers.

#### *Role of ACOS*

- 31 ACOS is focussed upon improving the quality and relevance of official statistics by:
- a producing an annual report on:
    - i. the “health” of Tier 1 statistics
    - ii. the appropriateness of standards, policies and protocols, and
    - iii. recommends changes necessary to improvements to Tier 1 statistics.
  - b advising the Government Statistician on the management of the Official Statistics and Research Data Archive Centre.
- 32 *In any report to the Minister of Statistics and Cabinet, ACOS must give an opportunity to the affected agencies to comment on ACOS's recommendations and opinions. Any dissenting views should be included in the report.*
- 33 Accountability for the production and quality of Tier 1 statistics according to the appropriate statistical system standards, protocols and policies will be through normal departmental accountability processes and informed by ACOS’s “Health of Statistics” report.

### *Members of ACOS*

- 34 The Minister of Statistics will appoint ACOS members, including the Chair, based on the advice of major users, suppliers, and producers of statistical data. Members of ACOS are appointed as individuals, and not representatives of any particular organisation or interest group. The Government Statistician will be an ex-officio member of ACOS.
- 35 ACOS should have 8 - 12 members. This has implications for the structure and operation of ACOS (discussed below).
- 36 The Chair of ACOS has an important role and should possess the following attributes:
  - a is respected by the statistics community; and
  - b is viewed as impartial and unaligned with any particular organisation or interest group.

### *Structure of ACOS*

- 37 The structure of ACOS is defined through:
  - a the role that it will undertake; and
  - b the need for its advice to be authoritative and independent of the Government Statistician.
- 38 *To undertake functions such as reporting on the health of Tier 1, ACOS requires secretariat support.* ACOS will need to be briefed and gather information to make its decisions. While Statistics New Zealand will provide this secretariat support, it is likely that ACOS would look to contract specialist resources to look at particular areas and address specific issues.

## **5. Accessing and release of statistics**

- 39 The construction of a single state sector statistics portal managed by Statistics New Zealand will enable users, producers and researchers to quickly find all available official statistics. This will be kept up-to-date through the notification system. (see section 8 below)
- 40 Producers of Tier 1 statistics will need to have in place a range of ways of facilitating access to their statistics to help them to be better utilised. The Review Team identified six different methods that users should expect to be able to use with any government agency producing Tier 1 statistics and two additional ways which are currently being developed (Confidentialised Unit record Files (CURFs), and Remote Microdata Access Service (RMAS), (refer to Appendix 4). Both these methods were recommended by the McLennan reviews in 2002 of the barriers to access unit record and small area data. Statistics New Zealand already provides the six different methods. Other producers of Tier 1 statistics should look to work with Statistics New Zealand rather than provide their own solutions.
- 41 To maintain trust in official statistics Tier 1 statistics will be released under the principles that:
  - a There is regular publication of on-going Tier 1 statistics, with a calendar of release dates to be published at least six months in advance, and

- b The Chief Executive of the producing agency is responsible for the publication of Tier 1 statistics according to this timetable. The Government Statistician will release surveys contracted by government agencies with Statistics New Zealand as the producer.

**6. A single point to access unit record data - OSRDAC**

- 42 A new business unit will be set up in Statistics New Zealand called the Official Statistics Research and Data Archival Centre (OSRDAC). OSRDAC will provide a single reference point for unit record data for Tier 1 statistics for government, university and other researchers. Statistics New Zealand will promote, and manage OSRDAC transparently, and reduce the current cost of access of using unit record data. This will encourage researchers to make full use of its capabilities. Subject to normal budget processes, OSRDAC will provide:

- a. A metadata archive for Tier 1 surveys, administrative data and integrated statistical datasets.
- b. A unit record data archive for all Tier 1 surveys, and Statistics New Zealand's holdings of Tier 1 administrative datasets and integrated statistical datasets, including historical data (e.g censuses of particular interest to researchers).
- c. The infrastructure to promote data access and facilitate research.(e.g. Offsite access facilities for those unable to work in the research centre such as the provision of confidentialised unit record files (CURF's), and Remote access data laboratory (RADL)). This will include implementation of the McLennan Data Access review recommendations.
- d. Core CURF's from existing datasets such as HLFS, HES, longitudinal surveys health surveys, and samples of a cross section from administrative data files.
- e. Metadata and unit record data from other statistics may also be held in OSRDAC at the discretion of the producer and the Government Statistician

- 43 The following requirements to supply data will be established:

- a *Tier 1 Surveys.* A copy of the unit record file and metadata will be deposited with OSRDAC.
- b *Tier 1 Administrative Data.* Government agencies responsible for the administrative database will supply the metadata of the database (effectively a description of what data is contained in the database).

- 44 OSRDAC will be able to provide access to the data for users (under terms and conditions for unit record data) for all Tier 1 surveys (Statistics New Zealand and other agencies) and Tier 1 administrative data held by Statistics New Zealand. Other government agencies responsible for Tier 1 administrative databases will have two options for providing access to their data. The agency can provide access itself through its own facilities or allow OSRDAC to provide access. The Review Team envisages that, if OSRDAC provides access, the administrative data will remain with the agency and an arrangement will be entered into to allow OSRDAC access to necessary data, as requests arise. Access to data from non Tier 1 surveys will be the responsibility of the agency that ran the survey.

- 45 The formation of OSRDAC does not interfere with departments' access and ownership of their own data. Administrative data can be subject to legislative or contractual obligations to protect privacy (e.g. IRD or Justice sector legislation). Consequently, unit record access may not be possible for all administrative databases producing Tier 1 statistics. The level and nature of data stored in OSRDAC must be flexible enough to meet this duty whilst still offering a useful service to users of statistics.
- 46 Cabinet decision [CAB (97) M31/14] gave Statistics New Zealand the lead role in cross agency integration work to address privacy concerns, which is consistent with this proposal as OSRDAC will be a unit within Statistics New Zealand. OSRDAC would also address Cabinet concerns about the paucity of researchers' access to unit record and small area data. These issues were identified as part of deliberations on the Information Knowledge Base for social policy.

## **7. Clear terms for contract survey work undertaken by Statistics New Zealand for departments**

### *Contract Survey Terms of Reference*

- 47 The Government Statistician will have a set of clear terms and conditions for undertaking contract surveys. These terms and conditions must be widely available and understood by potential contracting parties. Clarity of the 'ground rules' should help remove some tension in this area.

### *Role clarification:*

- 48 The model also clarifies Statistics New Zealand's role in the following ways. Statistics New Zealand will:
- a restrict its contract survey work to the production of statistics to Tier 1 standards, policies and protocols
  - b provide advice, on request, on standards, policies and protocols for all official statistics
  - c provide specialised statistical services for Tier 1 statistics to other government agencies on a cost recovery basis and similar services may be available for other statistics if the capacity is available
  - d reaffirm that all Statistics New Zealand (including contract) surveys are carried out under the Statistics Act and subject to its provisions. In particular, this means that confidentiality be maintained and Statistics New Zealand surveys remain compulsory, and
  - e reaffirm that the principles for the release of surveys produced under contract by Statistics New Zealand, and noted by Cabinet (POL Min (02) 14/7), will continue to apply.

### *Access to statistics prior to first release –*

- 49 Departments desire access to statistics from contract surveys prior to release, to enable officials and Ministers to respond promptly to public queries following the release of the data. The present arrangements are:
- a For any new area of statistics involving a sponsored survey, the Government Statistician will grant the sponsoring agency(s) appropriate access to the work in

progress and final survey results for a reasonable period, specifically to assist in the preparation of the first release and as a consequence to enable the agency(s) to make effective and immediate use of the final data following the first release. Such access will be in accordance with the provisions of section 21 of the Statistics Act, and

- b Any other release of the data to other departmental employees or their Ministers will follow the normal Statistics New Zealand procedures for releasing embargoed data (i.e. a 'lock-up' prior to release at 10:45am).

*Access to unit record data following release*

- 50 Departmental employees will have access through normal Datalab access rules. Most contract surveys include some access to the Datalab at no additional cost.

*Joint collections*

- 51 All information from a joint collection (section 9 of the Statistics Act) can be shared with the contracting government agency unless the respondent objects in writing.

**8. Managing respondent burden**

- 52 Respondent burden is becoming an increasing problem with the growth of statistical and other surveys, and creates compliance costs for both businesses and communities. Government needs to actively manage respondent burden by:

- a Better utilisation of existing data (discussed above).
  - i. The application of a common set of standards across administrative databases should indirectly reduce respondent burden by allowing greater utilisation of existing data
  - ii. The use of OSRDAC as a central repository of unit record data, and
  - iii. The survey notification system (see below).
- b Burden Management Process - For all new or substantially revised surveys, which have a sample size of more than 2,500, departments will consult with the Government Statistician early in the planning cycle to manage respondent burden. The consultation will be on:
  - i. Ways to minimise overlap of the people being surveyed
  - ii. The elimination of any duplication with existing data sources, and
  - iii. The collection of data through the survey for other departments (and vice versa).

Departments make the final decision after consulting with the Government Statistician.

- c Survey Notification Process - All agencies carrying out surveys of persons, or organisations will complete a simple notification process for any survey directly or indirectly funded by the agency (e.g. what information will be collected, who it is being collected from, and how results will be made available). For this purpose surveys are not restricted to those for statistical purposes, and include research and other descriptive surveys. The information will be published by Statistics New Zealand. This information will be used:

- i. To provide a single point of reference for users and producers of official statistics. This will increase usage of existing statistics and minimise duplication.
- ii. To manage respondent burden. Statistics New Zealand will use it to help reduce instances of over-sampling, which could result in excessive respondent burden.
- iii. To prepare summary respondent burden information to be included in Statistics New Zealand's Annual Report to Parliament.

## Appendix 1 - Draft indicative List of Tier 1 statistics for discussion

<i>Statistic</i>	<i>Producer</i>	<i>Source</i>
<b>DEMOGRAPHIC</b>		
<i>Population</i>		
Population count, and growth	SNZ	Census
Distribution	SNZ	Census
Components of population change	SNZ	Census
Composition	SNZ	Census
Gender	SNZ	Census
Maori Population	SNZ	Census
Estimated Population	SNZ	Based on Census
Sub national Populations	SNZ	Based on Census
Ethnic Group Populations	SNZ	Based on Census
Diversity - country of birth	SNZ	Census
Citizenship approvals	SNZ	Department of Internal Affairs
Families and Households	SNZ	Census
<i>Births</i>		
Births and birth rate, total fertility rate	SNZ	Births, Deaths and Marriages (Identity Services, DIA)
<i>Marriage and divorce</i>	SNZ	Births, Deaths and Marriages (Identity Services, DIA)
<b>Deaths / Mortality</b>	SNZ	Births, Deaths and Marriages (Identity Services, DIA)
<b>Migration</b>		
Arrivals, departures and net migration	SNZ	Arrival and Departure Cards
Overseas visitors	SNZ	Arrival and Departure Cards
<b>SOCIAL</b>		
<i>Culture &amp; Identity</i>		
Te reo Maori	SNZ	Census, Maori Language Survey
Cultural Participation	SNZ	Cultural Experiences Survey

## Education (& Training)

### *Highest qualification/Level of attainment*

Qualification and study course attendance	SNZ	Census
Primary schools	Ministry of Education	National Education Monitoring Project (NEMP)
Secondary schools	Ministry of Education NCEA	Administrative Data
Tertiary	Ministry of Education / NCEA	Administrative Data

### *Participation*

Early Childhood Education (ECE)	Ministry of Education	Administrative Data
School level	Ministry of Education	Administrative Data
Tertiary level	Ministry of Education / Tertiary Education Commission	Administrative Data

### *Providers*

Early Childhood Education (ECE)	Ministry of Education	Administrative Data
School level	Ministry of Education	Administrative Data
Tertiary level	Ministry of Education	Administrative Data

### *Literacy*

Secondary	Ministry of Education	Administrative Data / OECD Programme for International Student Assessment (PISA)
Adult	Ministry of Education	Administrative Data / International Adult Literacy Survey (IALS).

### *Student Loans*

Borrowers	Ministry of Education	Administrative Data
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## Health

### *Health Inputs*

Health Workforce	NZ Health Information Service	Surveys and administrative data?
Health Expenditure	Ministry of Health	National health accounts

### *Health Activities*

Health Services	Ministry of Health	Administrative data, Health Survey (primary health care)
Disability Services	Ministry of Health, SNZ	Administrative Data, Disability Survey
Mental Health Services	Ministry of Health	MHINC, Mental Health Survey

### *Health Outcomes*

Health Risks	Ministry of Health, SNZ	Health Survey, Health Behaviour Survey, Nutrition Survey, administrative data (on consumption eg alcohol, tobacco, food)
Diseases & Injuries	Ministry of Health, SNZ	Notifiable diseases register, cancer register, Health Survey, administrative

Reproductive Health Outcomes	Ministry of Health, SNZ	data (mainly for injury) Administrative data, Abortion Supervisory Committee
Nonfatal health outcomes (functional limitations, disability)	Ministry of Health, SNZ	Health Survey, Disability Survey, administrative data
Fatal health outcomes & summary measures of population health	Ministry of Health	Administrative data (on cause of death)
<b>Housing</b>		
Housing	SNZ	Administrative Data / Housing Survey
Housing Indicators	SNZ	Census
Dwelling types	SNZ	Census
Tenure of households	SNZ	Census
Household composition / number of usual residents	SNZ	Census
House / Property Price Index	QVNZ	QVNZ
Real cost of Housing	SNZ	CPI
Mortgage interest rates	RBNZ	RBNZ
Accommodation benefits	Ministry of Social Development	Administrative Data
<b>Justice &amp; Law</b>		
Conviction rates	Ministry of Justice	Administrative Data
Sentencing	Ministry of Justice	Administrative Data
Inmates	Department of Corrections	Administrative Data
National Crime Statistics	NZ Police	Administrative Data
Crime Victimization	Ministry of Justice	NZ National Survey of Crime Victims
<b>Social Framework</b>		
Human rights	?	Human Rights Commission?
Religion	SNZ	Census
<i>Labour Market</i>		
Labour supply – Employment, Unemployment	SNZ	HLFS, Census
Labour demand	SNZ	Quarterly Employment Survey, Labour Cost Index
Work stoppages	SNZ	Department of Labour
<b>Income</b>		
Incomes	SNZ	NZ Income Survey
Distribution	SNZ	Census
Average earnings and hours	SNZ	Quarterly Employment Survey
Salary and Wage Rates	SNZ	Labour Cost index
Household income	SNZ	HES
Welfare	Ministry of Social Development	Income Support Recipients, Benefit Dynamics database, Living Standards Survey

## ECONOMIC

### National Economy

#### *National accounts*

GDP	SNZ	National Accounts
Real Gross National Disposable Income	SNZ	National Accounts

#### *Government Sector Finance*

Crown Accounts	SNZ	Departments
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#### *International accounts / BOP*

BOP	SNZ	Mix of business and household surveys and administrative data
Current account	SNZ	Mix of business and household surveys and administrative data

#### *International Investment Position*

SNZ	Mix of surveys
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### General Industry

SNZ	Annual Enterprise Survey
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#### *Agriculture, Forestry and Fisheries*

Agricultural Production	SNZ	Agricultural Production Census
Forestry	SNZ	Agricultural Production Census
Fishing - Fish Stocks	Ministry for the Environment	Environmental Performance Indicators

#### *Manufacturing & production*

SNZ	Economic Survey of Manufacturing	
Retail Trade	SNZ	Retail Trade Survey
Wholesale Trade	SNZ	Wholesale Trade Survey

#### *Energy Production*

SNZ	Surveys, Ministry of Economic Development
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#### *Tourism*

Accommodation	SNZ	Accommodation Survey
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#### *Transport*

?	?
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#### *Building and Construction*

Building consents	SNZ	Territorial Authorities
Building Activity	SNZ	Building Activity Survey

#### *Communications / Science and Technology*

Internet access	SNZ	Census
IT statistics	SNZ	IT Survey

Innovation	SNZ	Business Practices Survey
R&D	SNZ	R&D Survey
Management Practices	SNZ	Business Practices Survey
Biotechnology	SNZ	Biotechnology survey
<b>Finance</b>	RBNZ	
Banking Sector	RBNZ	Prudential Returns
<b>Monetary data</b>		
Exchange & interest rates	RBNZ	RBNZ
Household Income and Expenditure	SNZ	HES
<i>Prices</i>		
<b>Inflation</b>		
Capital Goods Price Index	SNZ	Commodity Price Survey
Consumers Price Index	SNZ	CPI
Farm Expenses Price Index	SNZ	Commodity Price Survey
Food Price Index	SNZ	CPI
Labour Cost Index (All Labour Costs)	SNZ	Labour Cost Index
Labour Cost Index (Salary and Wage Rates)	SNZ	Labour Cost Index
Overseas Trade Indexes (Prices)	SNZ	Commodity Price Survey
Producers Price Index	SNZ	Commodity Price Survey
<b>Business demographics</b>	SNZ	IRD, SNZ Surveys
<b>Exports and imports</b>		
Overseas trade price	SNZ	NZ Customs Service Administrative Data
Merchandise imports and exports	SNZ	NZ Customs Service Administrative Data
Overseas Cargo	SNZ	NZ Customs Service Administrative Data

## ENVIRONMENT

### **Sustainable development**

Sustainable development indicators SNZ

### **Land use**

Land transfers LINZ

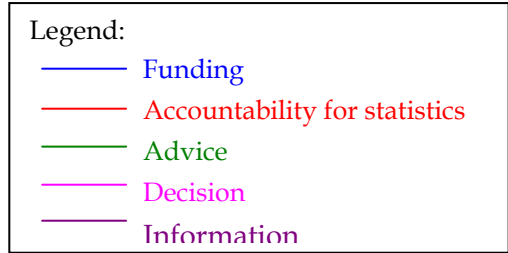
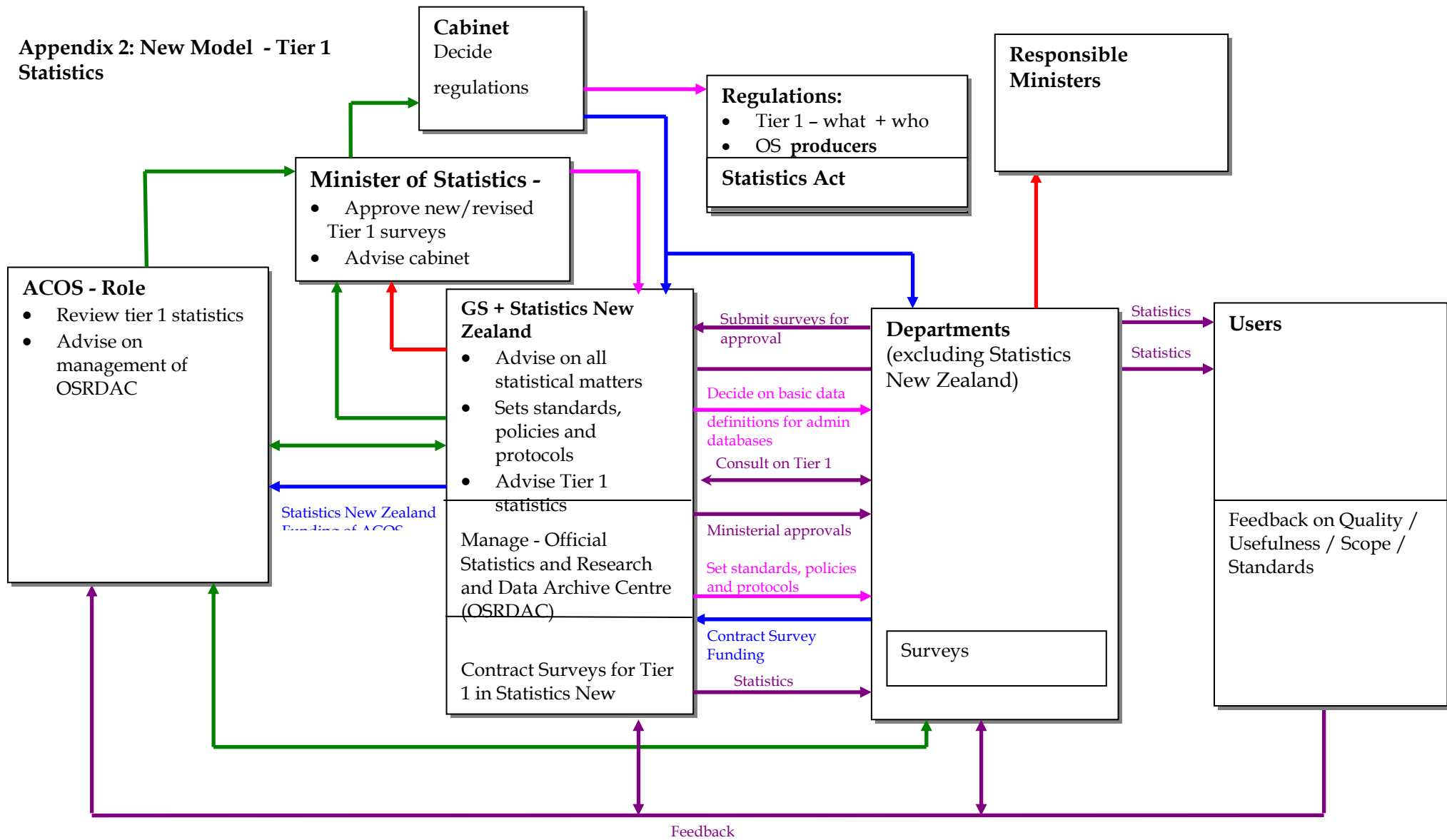
Maori land court Maori Land Court

Agricultural Production Census

### **Environmental Performance**

Environment Performance indicators	Ministry for the Environment	
Energy consumption	Ministry of Economic Development	Administrative Data
Natural Resource Accounts	SNZ	

**Appendix 2: New Model - Tier 1 Statistics**



### **Appendix 3 - Guiding Principles for selecting official statistics system options**

This section lists the guiding values and principles used by the Review Team in building the recommended model for the official statistical system. These principles reflect the need for the system to be a strong statistical system operating across the state sector but within public service environment, including values and standards.

To be useful, these principles need to be focussed upon achieving a core set of values that ensure the greatest benefit to the system's ultimate funders and consumers – the people of New Zealand. The interests of New Zealanders are many and varied, but the key trade-off that must be managed within the official statistics system is the balance between maximising the utilisation of official statistics and maintaining the confidence of respondents.

#### **Statistical Value Propositions (Principles)**

- Maintaining confidence in official statistics
- Maintaining confidence of respondents
- Maximise the utility and minimise the cost of official statistics

#### **UN Fundamental Principles of Official Statistics (1994)<sup>3</sup>**

*Principle 1:* Official statistics provide an indispensable element in the information system of a society, serving the government, the economy and the public with data about the economic, demographic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by official statistical agencies to honour citizens' entitlement to public information.

*Principle 2* To retain trust in official statistics, the statistical agencies need to decide according to strictly professional considerations, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data.

*Principle 3* To facilitate a correct interpretation of the data, the statistical agencies are to present information according to scientific standards on the sources, methods and procedures of the statistics.

*Principle 4* The statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics.

*Principle 5* Data for statistical purposes may be drawn from all types of sources, be they statistical surveys or administrative records. Statistical agencies are to choose the source with regard to quality, timeliness, costs and the burden on respondents.

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<sup>3</sup> <http://unstats.un.org/unsd/goodprac/bpabout.asp>

*Principle 6* Individual data collected by statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes.

*Principle 7* The laws, regulations and measures under which the statistical systems operate are to be made public.

*Principle 8* Co-ordination among statistical agencies within countries is essential to achieve consistency and efficiency in the statistical system.

*Principle 9* The use by statistical agencies in each country of international concepts, classifications and methods promotes the consistency and efficiency of statistical systems at all official levels.

*Principle 10* Bilateral and multilateral co-operation in statistics contributes to the improvement of systems of official statistics in all countries.

### **Principles of Good Governance**

*Clarity of roles.* Particularly agencies understand their role

*Transparency.* Particularly agencies understand how and why decisions are made

*Accountability.* Particularly agencies are accountable to others for their actions and the delivery of agreed outputs on time.

#### **Appendix 4 - List of Options for data access**

Adapted from Dennis Trewin's (Australian Statistician) CES seminar paper *Access To Microdata - Issues, Organisation And Approaches* (2002)

- 1 Standard Statistical Outputs: Usually in the form of tables available on a website. Restricts the type of analysis that users can undertake.
- 2 Databases: Provide more detail and the flexibility for researchers to generate their own tables. (e.g. Table Builder using Beyond 20/20 software)
- 3 Customised Services: At the request of researchers, usually at marginal cost.
- 4 Onsite Data Laboratory: provides access for researchers to unidentified unit record data under supervision.
- 5 Collaborative projects: where a researcher with department analyst who is able to access unit record data
- 6 Secondment: In effect, working on contract as a departmental official on departmental premises.
- 7 Confidentialised Unit Record Files (CURFs): Data is unidentifiable. Release is on CD ROM. Equivalent to what are generally termed microdata releases.
- 8 Remote Microdata Access Service (RMAS): Access to CURFs but more detailed release may be possible because of the greater control over prevention of matching with external databases.

**Appendix 5. Sample Changed or Revised Tier 1 Survey Self-assessment Form**

<b>Survey Approval Pro Forma</b>						
<b>PART A – ( To be completed by Statistics New Zealand from Tier 1 Approval Information )</b>						
<b>Department / Agency:</b>						
<b>Collector (If different to Department / Agency):</b>						
<input type="checkbox"/> New Survey			<input type="checkbox"/> Substantially Revised Survey			
1	<b>Survey Title:</b>					
2	<b>Survey Objectives:</b>					
3	<b>Alternative Data Sources Evaluated</b>					
	3.1	<b>Other surveys:</b>				
	3.2	<b>Administrative Systems:</b>				
4	<b>Frequency:</b>					
5	<b>Cost:</b>					
6	<i>Methodology</i>					
<input type="checkbox"/> Compulsory			<input type="checkbox"/> Voluntary			
	6.1	<b>Population Frame:</b>				
	6.2	<b>Sample Design:</b>				
7	<b>Method of Enumeration</b>					
	7.1	<input type="checkbox"/> Mail Questionnaire	<input type="checkbox"/> Self-Completed Electronic Questionnaire	<input type="checkbox"/> Personal Interview	<input type="checkbox"/> Telephone interview	<input type="checkbox"/> Other (specify):
8	<b>Anticipated Response Rate:</b>					
<b>PART B – Statistical Standards, Classifications Used and Policies and Protocols ( To be completed by Survey Producer ) – See Checklists</b>						

Survey Self-Assessment Checklist				
	Using	Not Applicable	Modified + why	Not Using + why
<i>Statistical Standards *</i>				
Age 1998	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Country	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dwelling Address 1999	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dwelling Type 1999	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family Type 1999	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Iwi 2000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
etc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Classifications *</b>				
Age – New Zealand Standard Classification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Area Unit 2003	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Australia and New Zealand Standard Industrial Classification – New Zealand version 1999 (ANZSIC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Country – New Zealand Standard Classification 1999	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family type – New Zealand Standard Classification 1999	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Labour Force Status – Standard Classification 1999	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
etc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Policies &amp; Protocols</i>				
Regular Release Date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advance notification of Release Date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Release by Chief Executive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provision of Six Methods of Access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\* For further details see the Statistical Standards and Classifications pages on the Statistics New Zealand website ([www.stats.govt.nz](http://www.stats.govt.nz))

**Certified by Chief executive of the producing agency:**

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**Name:**  
**Title:**  
**Agency:**

## Appendix 6 - Terms of Reference

### Shaping Official Statistics for the 21st Century:

Terms of Reference for a Review of Statistics New Zealand and its future contribution to Official Statistics

#### *Mandate for Review*

The Ministers of Finance, State Services, and Statistics have agreed that a “top down review” of Statistics New Zealand by The Treasury and State Services Commission, in conjunction with Statistics New Zealand, is necessary.

Terms of Reference to be agreed by the Ministers of Finance, State Services, and Statistics.

#### *Objectives of the review*

1. To determine the areas where additional resources, either financial or otherwise, will be needed for Statistics New Zealand to maintain current core outputs at an appropriate quantity, quality, and timeliness.
2. To identify options for the future role of Statistics New Zealand and its contribution to official statistics that will remain relevant and sustainable into the future.
3. To identify areas where additional resources, either financial or otherwise, will be needed for Statistics to carry forward its future role, as agreed by Ministers.
4. To make recommendations to the Ministers of Finance, State Services, and Statistics accordingly.

#### *Background*

The strong emphasis now being placed on the importance of evidenced-based policy, increasing interest in regional and population subgroups and in information linked across sectors or across time, together with the shifting emphasis towards outcomes in government evaluation practices, is leading to a rapid growth in demand for a broader and more complex range of statistics from both survey and administrative sources. The number of new statistical initiatives for which funding is being sought in the 2003 Budget is just one indication of this rapidly growing demand.

The lack of effective co-ordination of official statistics over the past decade has seen greater fragmentation of official statistics, particularly in the fields of social statistics and sustainable development indicators. These two areas are where there has been the greatest increase in demand in recent years. This trend was highlighted recently when Statistics New Zealand was unable to provide the Ministers of Statistics with an overview of the totality of the Government's statistical activities. Continuation of the status quo will exacerbate this trend significantly in the next few years.

The Government Statistician has recently advised both the Minister of Statistics and the State Services Commissioner that Statistics New Zealand has a growing problem with regard to its capacity to deliver its present range of outputs to an appropriate level of quality. It therefore has no spare capacity to respond to the pressure to do more either in terms of delivering new statistical outputs or in facilitating the co-ordination of official statistics across government.

The Minister of Statistics, in consultation with the Minister of Finance and the Minister of State Services, has agreed that:

- (a) the capacity issues at Statistics New Zealand need to be addressed quickly; and

- (b) this needs to be within the broader context of ensuring in future that the Government gets value for money from the totality of its investment in official statistics and that compliance costs for official surveys are effectively managed.

As the demand for information and statistics increases from government agencies and the range of official statistics expands, so too does the tension with the other primary role of the Government Statistician and for all chief executives producing official statistics. This is to look beyond the needs of the government of the day to meet the needs of its citizens and provide information to them so that they can make judgements on the performance of government and its programmes, and to support citizens as they make political, social, economic and environmental decisions.

For both government agencies and citizens, Statistics New Zealand has a production role, preparing national statistics, and a coordination and oversight role across the system of official statistics under the Statistics Act 1975. These dual functions need to be considered within any review of the capability of Statistics New Zealand.

### ***Process***

The review will be split into three stages:

*Stage 1* – will focus on:

- identifying the immediate resource needs of Statistics New Zealand; and
- meeting those needs through the 2003 Budget process.

*Stage 2* – will focus on:

- analysing the drivers of Statistics New Zealand's role and their capability implications; and
- recommending options for the future role of Statistics New Zealand and official statistics and the funding mechanisms to be used.

*Stage 3* – will focus on implementing options agreed to by Ministers from Stage 2.

### ***Scope of Review***

#### **Stage 1**

##### *Identifying the immediate resource needs of Statistics New Zealand*

- determine areas where additional resources are necessary for Statistics New Zealand to maintain its core outputs to an appropriate quantity, quality, and timeliness;
- identify which budget initiatives address areas where additional resources are necessary;
- identify any other resources that are required in the immediate future;
- advise Ministers which bids should proceed in Budget 2003 and which should be considered in later budget rounds accordingly.

##### *Meeting the immediate resource needs through the 2003 Budget process*

- Budget initiatives will proceed through the regular Budget process; and
- Treasury will consult with Statistics New Zealand and State Services Commission on the analysis of Budget proposals and bi-lateral briefings and make joint-recommendations to Ministers.

#### **Stage 2**

##### *Analysing the current situation, including*

- assessing the existing state of the official statistical system and the contributions of Statistics New Zealand and other agencies to the system.

- identifying any areas impeding Statistics New Zealand or other agencies from making fully effective contributions;
- analysing the reasons behind difficulties and
- analysing the immediate and likely future impact of these difficulties.

*Recommending options for the future role of Statistics New Zealand and official statistics*

The Official Statistics System

- advise how Statistics New Zealand and Government agencies can best co-ordinate their statistical and information needs and processes to minimise duplication and achieve high quality official statistics across government;
- advise how Statistics New Zealand and Government agencies can determine, and prioritise, enhancements to the range, relevance and quality of official statistics to meet the current and emerging needs of users;
- advise how to manage the portfolio of official statistics as a national resource.

Statistics New Zealand's Role

- advise on how Statistics New Zealand can assist the Government to understand and support its ongoing investment in official statistics;
- advise on Statistics New Zealand's role in the production and dissemination of official statistics; and
- advise on Statistics New Zealand's role in the broader system of official statistics.

Government Investment in Statistics New Zealand's Capability

- identify the areas where resources will be needed to maintain Statistics New Zealand's capability to deliver its current range of official statistics at an appropriate level of quality over the next three to five years;
- advise on areas where resources will be needed to develop the infrastructure to respond to demands for new statistics and to provide the capacity to make these available on an ongoing basis; and
- indicate the level of resources and areas where resources that are likely to be required to undertake the roles suggested in this review.

The Review Team is to take into account:

- The Statistics Act 1975;
- Statistics New Zealand's Strategic Directions;
- the Government Statistician's memorandum of 22 November 2002 to the Minister of Statistics on capability issues at Statistics NZ
- the recommendations for official statistics given in the UK White paper on Open Government (1993);
- the UN Statistics Division Handbook on the Operation and Organisation of a Statistical Agency (2001);
- Australian Government Statistician's presentation to ESCAP (2002) on Statistical Capacity Building;
- the current state of coordination of official statistics;
- new demands for official statistics currently proposed for the 2003/04 budget bid cycle;
- the views of third parties, and
- other information that it views as relevant to the review.

Stage 3

- Stage 3 will involve implementation of options from Stage 2, as agreed by Ministers.
- It is unclear whether the Review Team will need to be involved in this stage and the role (if any) will be confirmed in the Stage 2 report back.

### ***Reporting***

Reports will be to the Ministers of Finance, State Services, and Statistics. They will be joint-reports, signed out by The Treasury, State Services Commission, and Statistics New Zealand.

### Timeframe

#### Stage 1

- now to 14 April 2003
- Report to Ministers on immediate resource needs of Statistics New Zealand on *10 February 2003*.

#### Stage 2

- 10 Feb to 30 June 2003
- Report to Ministers on the drivers of Statistics New Zealand's difficulties and options for the future role of Statistics New Zealand and official statistics on *30 June 2003*.

### Stage 3

- Involvement of Review Team to be confirmed in the Stage 2 report to Ministers.

#### *Participants*

Sponsors: Minister of Statistics in consultation with the Ministers of Finance and State Services

Steering Committee: Brian Pink, Statistics New Zealand (Chair)  
Malcolm Inglis, State Services Commission  
Paul Stocks, Treasury

Working Group: David Archer, Statistics New Zealand (Team Leader)  
Greg Claridge, State Services Commission  
Lee Colville, Treasury