Self-assessment questionnaire on the implementation of the OECD Council Recommendation on Good Statistical Practice

New Zealand

Stats NZ

May 2018

Recommendation 1.
Adherents put in place a clear **legal and institutional framework** for Official Statistics which should in particular provide:

i) details as to the organisation of the NSS, the legal status and role of the NSO, as well as the legal status, functions, relationship, rights and responsibilities of other institutions within the NSS;
ii) a clear mandate for institutions of the NSS to collect data for statistical purposes.

Good practice 1.1:
Existence of a comprehensive and coherent statistical legislation periodically revised and amended. The statistical legislation defines the nature of Official Statistics; the legal framework for the compilation, production and dissemination of Official Statistics; the legal status, role in the system, functions, relationship, rights and responsibilities of institutions within the NSS; the mandate for data collection; the coverage of statistical activities; and the role, functions and composition of the Statistical Council. The statistical legislation also regulates the organisation of the NSS; the independence of the NSO and its head; the relationship between the producers of statistics and respondents; the access to administrative records and their use for statistical purposes; the dissemination policy; the legal infrastructure for ensuring the confidentiality and the penalties in case of breach of confidentiality; budget issues; the availability of sufficient resources for financing statistical programmes, the international statistical co-operation, and the co-ordination of statistical activities within the country's statistical system.

Good practice 1.2:
Laws and regulations governing the collection, compilation and production of Official Statistics are consistent with the Fundamental Principles of Official Statistics of the United Nations.

Good practice 1.3:
Statistical authorities have a clear mandate for data collection and the authority to compel respondents to comply with data requests (e.g. the Population and Housing Census, Agricultural Census, surveys, administrative sources, etc.). In the case of Population and Housing Census, the obligation for citizens to participate and to respond to the questionnaires is legally binding and established by law.

Good practice 1.4:
Statistical authorities are required by law to conduct a Census of Population and Housing and a Census at of Agriculture at least every ten years.

Good practice 1.5:
Statistical laws and regulations are publicly available.

OECD best practice	Assessment against best practice
1.1	Substantially Meets
1.2	Meets The principles and protocols for producers of Tier 1 statistics in New Zealand are based on the Statistics Act 1975 and the United Nations Fundamental Principles of Official Statistics as well as the Privacy Act 1993, the Official Information Act 1982 and the Public Records Act 2005.
1.3	Meets Part 4 of the Statistics Act 1975 specifies the provisions that apply to the collection of statistics (Sections 28 to 30, 34 to 38) and the obligations to participate (Section 31 to 33).
1.4	Meets This is specified in Part 3: Section 22 to 27 of the Statistics Act 1975.
1.5	Meets Statistics Act 1975 and other legislation, policies and protocols are publically available from Stats NZ website from this link (Stats NZ legislation).

Response from adherent on Recommendation 1:

Please enumerate the main strengths and weaknesses identified with regard to recommendation 1. Are other good practices relevant to this recommendation implemented in your country? What kind of actions do you consider important to improve the situation as regards recommendation 1 in your country?

The Statistics Act 1975 has ensured the provision of trustworthy Official Statistics for which New Zealand is widely respected. There is opportunity to consider amendments to the Act under New Zealand annual legislative reform programme. The Act was most recently amended in 2013.

While ad hoc amendments have been made to the Act over time, the language and style of the Act still reflect the drafting conventions in New Zealand during the early 1970s and a full scale review is now being undertaken by Stats NZ with a view to repealing and replacing the current Act with more modern and future focused legislation.

The Statistics Act does not prescribe a Statistical Council. Rather, the Act is enabling, although it does require the Government Statistician to meet at least every 5 years with users of Official Statistics to review their needs. It also provides that the Government Statistician may set up Committees of Statisticians, Suppliers or Users of Official Statistics, and other interested parties to further the provisions of the Statistics Act or for general educational purposes. Examples, include an Integrated Data Advisory Group (to provide effective oversight for including new data collections in and improve access to integrated data held at Stats NZ) and a Macro-Economic Statistics Advisory Group (to collaborate and co-design producing economic and labour market statistics). Both groups have members from government and non-government sectors, who share their expertise and advice.

The Statistics Act does not include provisions dealing with budget or financial sufficiency. This is consistent across New Zealand's legislative programme with financial considerations guided by the Public Finance Act 1988 and an Annual Appropriation (Estimates) Bill.

The Statistics Act requires a census of population and dwellings to take place every 5th year with the next due to take place in 2018. The Act does not make specific provisions for the timing of an agricultural census. In practice, a full agricultural census is carried out every 3 years with a sample survey every other year.

Recommendation 2.

Adherents ensure professional independence of National Statistical Authorities. To this end, Adherents should ensure that the National Statistical Authorities:

i) are professionally independent from other policy, regulatory or administrative departments and bodies, as well as from private sector operators, considering that professional independence of the producers of Official Statistics is essential for the production and the dissemination of objective statistics;
ii) have the exclusive authority, as part of their professional independence, to decide on statistical methods and dissemination;
iii) are protected, through the inclusion of explicit provisions in statistics legislation, from political and other interference in developing, compiling and disseminating Official Statistics.

Good practice 2.1:

The professional independence of the Statistical Authorities from other policy, regulatory or administrative departments and bodies, as well as from private sector operators in compiling and disseminating Official Statistics is explicitly guaranteed by law, and ensured in practice by all entities of the NSS.

Good practice 2.2 (adopted from the European Statistics Code of Practice):

The Head of the NSO, and where appropriate, the heads of other National Statistical Authorities, have responsibility for ensuring that statistics are developed, produced and disseminated in an independent manner.

Good practice 2.3 (adopted from the European Statistics Code of Practice):

The Head of the NSO, and where appropriate, the heads of other National Statistical Authorities, have the sole responsibility for deciding on statistical methods, standards and procedures, and on content and timing of statistical releases.

Good practice 2.4 (adopted from the European Statistics Code of Practice):
The Head of the NSO, and where appropriate, the heads of other National Statistical Authorities, have sufficiently high hierarchical standing to ensure senior level access to policy authorities and administrative public bodies. They are of the highest professional calibre.

Good practice 2.5 (adopted from the European Statistics Code of Practice):
The appointment of the Head of the NSO and, where appropriate, the heads of other National Statistical Authorities, is based on professional competences only. The reasons on the basis of which the incumbency can be terminated are specified in the legal framework. These cannot include reasons compromising professional or scientific independence.

Good practice 2.6:
National legislation provides a clear and detailed description of the procedure for appointment and dismissal of the Head of NSO. A list of conditions under which the Head of NSO can be dismissed is provided for by law.

Good practice 2.7:
A clear reporting system for the Head of NSO is provided by law in order to ensure and reinforce its technical independence.

Good practice 2.8 (adopted from the European Statistics Code of Practice):
The statistical work programmes are published and periodic reports describe progress made.

Good practice 2.9 (adopted from the European Statistics Code of Practice):
Statistical releases are clearly distinguished and issued separately from political/policy statements.

Good practice 2.10 (adopted from the European Statistics Code of Practice):
The NSO, and where appropriate, other Statistical Authorities, comment publicly on statistical issues, including criticisms and misuses of statistics as far as considered suitable.

Good practice 2.11:
Data collection, data production, and release of information are ensured without formal approval from third parties.

Good practice 2.12:
A Statistical Council including external experts advises the Heads of National Statistical Authorities on strategic statistical issues. The nature of the Statistical Council and the reporting arrangements to government are provided for by law.

OECD best practice	Assessment against best practice
2.1	Meets Statistics Act 1975: Section 15, specifies the independence of the Government Statistician. Other producers of Tier 1 Statistics, principles and protocols have independence in practice, but not explicitly guaranteed by law except for environmental reporting under the Environmental Reporting Act 2015.
2.2	Meets The Government Statistician has responsibility for ensuring that statistics are developed, produced and disseminated in an independent manner under the Section 15 of the Statistics Act 1975. The Environmental Reporting Act 2015 requires the Secretary for the Environment (the Chief Executive of the Ministry for the Environment) along with the Government Statistician, to act independently in producing and publishing reports under that Act. The Government Statistician has sole responsibility for deciding the procedures and methods to be used in providing statistics that will be included in an environmental report.
2.3	Meets

	The Government Statistician have the sole responsibility for deciding on statistical methods, standards and procedures, and on content and timing of statistical releases, under Section 14 of the Statistics Act 1975. Other producers of Tier 1 Statistics, principles and protocols are guided by best practice guidelines based on the United Nations Fundamental Principles of Official Statistics.
2.4	Meets The Government Statistician is also the Chief Executive of Stats NZ and a full member of the Heads of New Zealand Government Ministries and Agencies.
2.5	Meets The Government Statistician is appointment by the Head of the State Sector, the State Services Commissioner, under Section 37 of the State Sector Act 1988.
2.6	Meets Under Section 37 of the State Sector Act 1988, the appointment process is independent of Government Ministers. The Government Statistician may be appointed for a term of not more than 5 years and shall be eligible for reappointment. The Government Statistician can only be removed from office for just cause or excuse. Further interpretation of just cause or excuse is determined by the Courts as required in the circumstances.
2.7	Meets Clear reporting duties are specified under Section 14 of the Statistics Act 1975, together with duties for annual reporting set out in Section 16.
2.8	Meets Statistical work programmes are available from Stats NZ website including (Release calendar), (Output plan) and (Strategic intentions)
2.9	Meets
2.10	Meets The duties of the Government Statistician are specified in Section 14 of the Statistics Act 1975 and include: • advising the Minister and government departments on statistical policy/projects • promoting standards and classifications • making projections and statistical models • running the five-yearly Census of Population and Dwellings. •
2.11	Meets Data production and release of information, new or changed data collection is subject to Ministerial approval under Section 6 of the Statistics Act 1975.
2.12	We do not have a Statistical Council per se – see response to recommendation 1.

Response from adherent on Recommendation 2:

Please enumerate the main strengths and weaknesses identified with regard to recommendation 2. Are other good practices relevant to this recommendation implemented in your country? What kind of actions do you consider important to improve the situation as regards recommendation 2 in your country?

Under the Statistics Act 1975 , Section 13, the Government Statistician is also the Chief Executive of Stats NZ. Unlike most other New Zealand Government Chief Executive appointments, the appointment process is independent of Government Ministers. The Government Statistician may be appointed for a term of not more than 5 years and shall be eligible for reappointment. The Government Statistician can only be removed from office for just cause or excuse. Further interpretation of just cause or excuse, is determined by the Courts as required in the circumstances.

In all other cases, producers of Tier 1 Statistics, principles and protocols are guided by best practice guidelines which embody the Statistics Act 1975 and the United Nations Fundamental Principles of Official Statistics as well as the Privacy Act 1993 , the Official Information Act 1982 and the Public Records Act 2005. The development of the principles and protocols were designed by the Government Statistician in consultation with Chief Executives of producers of Tier 1 Statistics, principles and protocols and agreed by Cabinet. Adherence is monitored by Stats NZ.

An annual report is provided to the Minister of Statistics as soon as practicable after the close of each financial year. That report must be tabled in Parliament by the Minister as soon as practicable after it is provided to him or her. In addition to the annual report required by Section 16 of the Statistics Act 1975, there are clear duties relating to reporting set out in Section 14.

Recommendation 3.

Adherents ensure adequacy of human, financial and technical resources available for the production and dissemination of Official Statistics. To this end, Adherents should ensure that resources are:

i) sufficient to allow National Statistical Authorities to meet their commitment to quality, and to meet professional standards thereby fulfilling their role as providers of reliable, relevant and accessible data for national and international use;

ii) adequate to produce a minimum core set of data, to be defined nationally or internationally, to monitor the economy, society and the environment.

Good practice 3.1:

National Statistical Authorities have sufficient funding for statistical production and dissemination, to support staff training, to develop computing resources, and to implement innovation. Resources are adequate in magnitude and in quality to meet statistical needs.

Good practice 3.2:

The adequacy of resources is regularly monitored.

Good practice 3.3 (adopted from the European Statistics Code of Practice):

The scope, detail and costs of statistics are commensurate with needs.

Good practice 3.4 (adopted from the European Statistics Code of Practice):

Procedures exist to assess and justify demands for new statistics against their cost.

Good practice 3.5 (adopted from the European Statistics Code of Practice):

Procedures exist to assess the continuing need for all statistics, to see if any can be discontinued or curtailed to free up resources.

Good practice 3.6 (adopted from the European Statistics Code of Practice):

National Statistical Authorities implement a policy of continuous vocational training for their staff.

OECD best practice	Assessment against best practice
3.1	Meets New Zealand government agencies are expected to continuously assess their funding so that it is more cost effective in the future. Details of the funding process for New Zealand agencies is included in the summary for this section. Stats NZ is focused on providing a sustainable and financially viable core that can keep pace with demand and expectations. Like many agencies, cost pressures mean that we constantly need to continue to challenge ourselves to ensure that our resources are invested in the highest value areas and deliver to stakeholder and customer expectations. To address this, we have established a central team to drive prioritisation from an organisation perspective and are accelerating our movement to "as a service" technology. We have also sought additional funding from the New Zealand Government budget process when necessary. For example, additional funding was provided to the Stats NZ appropriation with the 2016/17 budget for the Data Futures Partnership work.
3.2	Meets New Zealand Government agencies are required to provide annual reports which include their financial statements, a breakdown against appropriations as well as with performance statements against the targets set in the output plan, as per the criteria set out in the Public Finance Act 1988. These documents are independently audited as specified in the Public Audit Act 2001. The latest Stats NZ output plan and annual report is linked here Corporate Publications. As well as the annual reports, Ministers receive independence advice on the cost, productivity, risk and value for money of departments through monitoring agencies, benchmarking studies and reviews. In 2014, Stats NZ was reviewed using the Performance Improvement Framework. Recommendations from that review resulted in Stats NZ redefining is role to include a refreshed strategic direction, organisation character and culture, operating mode and development of investment principles. A follow-up PIF review was published in August 2017 that assessed progress against the recommendations.
3.3	Meets The Relevance principle of Tier 1 Statistics, principles and protocols states that statistical work programmes must be relevant to the needs of government, business and community, within the available resource and be regularly assessed to justify their continuation. Adherence to the protocols is regularly monitored by independent boards (see Rec 1) as well as Stats NZ. Regular feedback is also sought from respondents and users of Official Statistics to monitor the impact of existing statistical collections. Stats NZ also undertakes regular review of its own statistical production against need and is currently adopting a new operating model.
3.4	Meets Procedures are specified in the Relevance principle within Tier 1 Statistics, principles and protocols to assess demands for new statistics. This principle requires development of Official Statistics to have clear objectives, identify the information needs they are attempting to address and employ effective consultation to meet primary user expectations. These procedures are further supported by the work of the Information Group, a cross-government group that works closely with Investment

	Ministers to provide advice for the New Zealand Government budget process. The Information group has identified a number of priorities to guide agencies in any data bids. These are based on the Data Investment Framework. From 2018, this will be formalised in the budget bid process.
3.5	Meets Tier 1 Statistics, principles and protocols are the most important statistics for understanding how well New Zealand is performing. These statistics and the need for regular reviewed. The relevance principle for example, states that any ongoing statistical programme should be regularly assessed justify its continuation. This can be done by agency self-review, independent review by a board such as Advisory committee of Official Statistics or a part of 5 yearly system review. This five-yearly review of the Tier 1 Statistics list is underway in 2017 and will look at the relevance of the current Tier 1 list in meeting New Zealand's most important information needs. Stats NZ is working with a number of users and producers across the system as part of the review. In addition, Stats NZ regularly engages with users in a number of ways to monitor the relevance and use of existing statistics it produces and discover emerging need and priorities. This includes a formal 5 yearly meeting of Users of Official Statistics, small and more frequent Data Hui's and a regular survey of customer perceptions.
3.6	Meets Stats NZ has a continuous process of learning and development for staff, which is embedded into our people management policies and practices as well as the everyday systems and processes that managers use. Managers in all areas have a local training and development budget to use for staff training. An online system is used to help manage learning and development although we also have a Leadership Coaching Programme for Senior Leaders which provides people with access to an external coach to support them with specific developmental goals. Staff are encouraged to drive their own development by taking an active role in identifying and prioritising their needs. We use a Coaching for Performance approach to help staff create a positive, directed change in their working lives and develop their potential. The principles of our coaching model are: • Coaching drives organisational performance • The coaching and development process is open and transparent • Coaching and development is owned and led by Stats NZ's leaders • Coaching and development is a dynamic process that reflects changing circumstances • Coaching enables a more targeted investment in the development of each individual • Coaching values and respects the uniqueness of each individual employee and their contribution to the organisation We are also reviewing our workforce capabilities and job descriptions to be clear on about which capabilities and skills we will need to deliver our core offerings, both now and in the future. This is a multi-year programme of work to guide our capability development over the next few years.

Response from adherent on Recommendation 3:

Please enumerate the main strengths and weaknesses identified with regard to recommendation 3. Are other good practices relevant to this recommendation implemented in your country? What kind of actions do you consider important to improve the situation as regards recommendation 3 in your country?

Producers of Official Statistics in New Zealand obtain resources for the production and dissemination of Official Statistics as part of the appropriation process of the New Zealand Government. The key features of the New Zealand appropriate process are that:

1. Each appropriation is made to a specific Minster and is a Vote administrated by a specified department
2. Each appropriation is defined as one of six types and have a clear type, scope, maximum amount and period
3. All appropriations are accrual based which requires that they specific the full cost of resources required to produce outputs, make transfer payments and count expenditure in the period the activity occurred/will occur
4. Appropriation and statutory authority from Parliament gives a government authority to spend public money
5. Most appropriations are for a one year but multi-year appropriation can be used for projects lasting up to five years. The Census for instance is funded as a multi-year appropriation.

For example, the government purchases the delivery of three key things from Stats NZ through the appropriation process. They are:

- Release and dissemination of Official Statistics.
- Census. This is a five year appropriation to manage and conduct New Zealand's 2018 Census of Population and Dwellings.
- System leadership for data and analytics across the public sector including the operation of the integrated Data Infrastructure (IDI), statistical and data management advice and the operation of access channels.

The New Zealand Government proposed expenditure for the coming year are submitted in the estimates presented to New Zealand Parliament at the same time as the Minister of Finance delivers the budget. Each agency must provide a Statement of Intent to Parliament at this time. This statement describes the agency operating intentions what outcomes it will pursues and the framework for reporting of achievement. The Stats NZ statement of intent is linked here Corporate Publications. After budget is agreed, outputs plans are signed by Chief Executive of the agency and the relevant ministers. These output plans let ministers know what goods and services will be delivered for the money provided and provide information on how performance will be measured and assessed. These plans should also have been reviewed against current government priorities and assessed to make spending more cost effective into the future.

If expected cost efficiencies are inadequate to undertake new work or address a substantial change in priorities, additional funding can be sought either by an individual agency or as part of a joint initiative as part of the budget process. For example, Stats NZ received two additional purchases in 2017/18 through this process to fund:

- New work to co-location with other government agencies as part of a wider cross government efficiency measure
- Data Futures Partnership to lead the development of innovative solutions to data use problem in New Zealand. Stats NZ is the secretariat for the Partnership.

The 2018 budget process will include an additional section for data related initiatives for agencies wanting to prepare a Budget bid for initiatives with a significant data component. This highlights the value of data as an asset in New Zealand and will help create a system that supports the:

- Safe sharing of appropriate data (within and outside government)
- Use of data to target service delivery
- Release of open data.

The demand for a stronger New Zealand data system view is also reshaping Stats NZ's strategic direction and future role. In addition to our role as Statistical Producer, we recently gained another role as Government Chief Data Steward. This newly created role requires Stats NZ to keep pace with demand for urgent progress in data services in New Zealand. We are using the recommendations from an independent performance review and the opportunity from this new role to redefining our operating model and refresh our strategic direction.

An organisational capability model for Stats NZ was introduced to help achieve this and has resulted in a refreshed approach to our workforce capability planning and practices. The model is aligned to the New Zealand Government Capability model and the European Statistical System Enterprise Architecture Reference Framework. It represents all of the capabilities which the Stats NZ need to grow and develop to achieve our goal for both of our roles. A review of statistical, data and analytic job families was completed in November 2017 to assess which capabilities and skills we will need to deliver our core offerings, both now and in the future. Outcomes expected from this review are improved alignment with similar roles outside Stats NZ, improved clarity of career paths for Stats NZ staff and improved our ability to attract, grow and retain for core roles.

Recommendation 4.
Adherents protect the privacy of data providers (including individuals, households, enterprises, administrations and all levels of government) and guarantee by law the confidentiality of the individual information provided and its use for statistical purposes.

Good practice 4.1 (adopted from the European Statistics Code of Practice):
Statistical confidentiality is guaranteed by law.

Good practice 4.2:
Specific measures are in place to ensure the full protection of individual data from any potential disclosure without consent, with the aim to ensure the confidence of data providers in participating in statistical surveys: written instructions and internal guidelines are provided to statistical authority staff on the full protection of statistical confidentiality in the production and dissemination processes; appropriate penalties are prescribed for wilful breach of confidentiality and for any disclosure of individual data of a private nature that could infringe upon private life. These penalties are well-known to statistical staff and new employees sign legal confidentiality commitment upon appointment.

Good practice 4.3 (adopted from the European Statistics Code of Practice):
The confidentiality policy is made known to the public.

Good practice 4.4 (adopted from the European Statistics Code of Practice):
Physical, technological administrative and organisational provisions are in place to protect the security and integrity of statistical databases.

Good practice 4.5:
Provisions are in place and internal guidelines are available to allow external users access to micro-data for statistical research purposes under strict protocols and only after anonymisation of the data.

Good practice 4.6:
Privacy issues as regards the use of new data sources (e.g. social network data) are identified and procedures are implemented to guarantee statistical confidentiality.

OECD best practice	Assessment against best practice
4.1	Meets The Statistics Act 1975 provides statistical confidentiality for respondent information with some very limited exceptions, for example, where there is consent of the individual or entity to disclosure or details of external trade, movement of ships and cargo handled at ports. All information can only be used for statistical or research purposes after the application of appropriate confidentialisation and/or de-identification procedures to protect against unauthorised disclosure of personal information by any reasonably foreseeable means.
4.2	Meets Specific measures are in place to ensure the full protection of individual data from any potential disclosure without consent. These are publically available on our website under our Privacy & Confidentiality page and cover requirements from the Statistics Act 1975, Official Information Act 1982, Privacy Act 1993 and Public Records Act 2005.

	All employees of Stats NZ must make a declaration of secrecy before entering into his or her duties as set out in the Statistics Act 1975. The requirement to make a declaration of secrecy also applies to employees of other Government departments and contractors in circumstances as set out in the Act. Responsibilities for management, reviewing and monitoring of privacy and confidentiality guidelines are also publically specified. The Statistics Act 1975 creates offences and sets out penalties for wilful breach of confidentiality. There are also penalties in the Privacy Act 1993 which complement those in the Statistics Act 1975.
4.3	Meets These are publically available on our website under our Privacy & Confidentiality page and cover requirements from the Statistics Act 1975, Official Information Act 1982, Privacy Act 1993 and Public Records Act 2005.
4.4	Meets The Privacy & Confidentiality guidelines also define accountabilities and approach to sharing data and the associated security of those data holdings. Further provisions are in place to protect the security and integrity of statistical databases in the Data integration guidelines. These guidelines are publically available to ensure data integration is conducted in an open and transparent manner. These guidelines require the undertaking a privacy and confidentiality impact assessment to minimize risk and maintain trust
4.5	Meets Our Microdata access guidelines specify the protocols for external users to obtain access to micro-data for statistical research purposes. Access is only provided after anonymisation of the data, restricted to only the data the individual requires and agreed timeframe and purpose. Access may also require the approval of wider system protocols such as the Ethics committee approval or written consent of the source data provider.
4.6	Meets Privacy issues as regards the use of new data sources are identified and confidentiality methodologies and procedures are implemented by our confidentiality network as part of our quality procedures. This group provides confidentiality advice and builds capability both with Stats NZ and across the Official Statistics system.

Response from adherent on Recommendation 4:

Please enumerate the main strengths and weaknesses identified with regard to recommendation 4. Are other good practices relevant to this recommendation implemented in your country? What kind of actions do you consider important to improve the situation as regards recommendation 4 in your country?

The Statistics Act 1975 provides statistical confidentiality with some very limited exceptions. Individual schedules may be disclosed for bona fide research or statistical purposes in relation to a matter of public interest, but only if the name and address of the person or undertaking are deleted. Every person involved in the research or statistical project makes a declaration of secrecy and the Government Statistician is satisfied that the security of the schedule and the information in it will not be impaired. Further, published results of any research or statistical project must not divulge any more information that the Government Statistician could publish. Stats NZ requires Privacy Impact Assessments to be routinely carried out.

Stats NZ maintains, and regularly reviews, guidelines and standards for confidentiality, which are accessible and published to all employees as well as being publically available. Our organisation has a strong focus on being open and transparent about the data and information we collect and how we use it to benefit New Zealand. In addition, to the information privacy, security and confidentiality guidelines for existing data use, we have a strong focus on maintaining our social licence. There is an annual Trust and Use survey to measure public opinion and we

have an engagement programme underway to understand people's view on sensitivity of data and information we ask for and their views of any proposed changes. For example, we recently undertook research with New Zealander's to understand their views about using New Zealand hosted and offshore cloud services before deciding on a transition to the use of cloud services. Our engagement programme to understand and operate within our social licence also includes stakeholder engagement with other data agencies as well as assessment of externally facing value of data.

Recommendation 5.
Adherents ensure the right to access administrative sources to produce Official Statistics. To this end, Adherents should ensure that:
i) National Statistical Authorities have the right to access administrative data for the regular production of Official Statistics and to use them in the interest of ensuring quality of Official Statistics, raising the analytical value of Official Statistics, reducing burden on survey respondents and reducing cost of statistical programmes;
ii) National Statistical Authorities co-operate with owners of administrative records as regards their statistical quality and have authority to influence their design to ensure they are fit for statistical purposes.

Good practice 5.1:
The Statistical Authorities are authorised by law to use administrative records for the regular production of Official Statistics.

Good practice 5.2:
Administrative sources are used whenever possible and cost-effective to avoid duplicating request for information and reduce reliance on direct surveys.

Good practice 5.3 (adopted from the European Statistics Code of Practice):
National Statistical Authorities are involved in the design of administrative data in order to make administrative data more suitable for statistical purposes.

Good practice 5.4 (adopted from the European Statistics Code of Practice):
National Statistical Authorities co-operate with owners of administrative data in assuring data quality.

Good practice 5.5 (adopted from the European Statistics Code of Practice):
Agreements are made with owners of administrative records which set out their shared commitment to the use of these data for statistical purposes.

Good practice 5.6:
Recommended practices are available for the reporting and presentation of administrative data.

Good practice 5.7:
Linking administrative data with survey data is encouraged by National Statistical Authorities with the aim of reducing the burden on respondents, reducing the costs in producing Official Statistics, and increasing the analytical value of Official Statistics.

OECD best practice	Assessment against best practice
5.1	Meets The following laws govern the use of administrative records for the regular production of Official Statistics. Public Records Act 2005 Official Information Act 1982 Statistics Act 1975. There are also specific acts such as the Tax Administration Act 1994 which specify use or potential use of administrative records for the production of Official Statistics.
5.2	Meets Producers of Official Statistics under Principle 8 Minimising Respondent Load of the Tier 1 Statistics, principles and protocols are required to keep the cost of compliance to an acceptable level. This includes assessing the potential to use existing data sources including administrative data to

	provide some or all of the information before undertaking any new collection. Information on survey respondent load for Tier 1 statistics are included in the annual reports to the New Zealand Parliament by the producers of these statistics, as a monitoring mechanism. Stats NZ has put significant effort into streamlining our surveys and reducing respondent burden through the use of administrative data. The use of tax data has been key to this with New Zealand's Inland Revenue department suppling more than 50 million tax records to Stats NZ in the 2016-17 financial year, making it one of our crucial suppliers of administrative data. Data supplied by Inland Revenue is embedded in all of Stats NZ's macro-economic measures (including GDP, Retail Trade, Balance of Payments, and CPI) along with many social measures (such as population estimates and labour market measures). A result of this use has been the reduction of the number of businesses surveyed from 268,000 in 2002 to 74,000 in 2016. Our Census Transformation programme is also investigating how to produce population statistics from administrative data rather than the traditional Census. In 2017, Stats NZ received additional funding over the next three years to continue this programme.
5.3	Meets To support the Government's priority to get more value from data, the State Services Commissioner has designated Stats NZ as the lead agency for government-held data, and appointed Government Statistician and Chief Executive, Liz MacPherson to the newly-created role of Government Chief Data Steward (GCDS). The Government Chief Data Steward (GCDS) is responsible for overseeing the development of policy, infrastructure, strategy, and capability relating to the use of data across government. This includes the design of data in order to make administrative data more suitable for statistical purposes. We recently launched the Data Leadership Hub to support agencies to use good practice, guidance, resources, and tools. This includes identifying new data sources, using new methodologies, and removing roadblocks to accessing data and implementing data standards.
5.4	Meets A focus for the Data Leadership Hub service is to improve the consistency in the way data is collected, recorded, and shared. For example, New Zealand agencies have identified up to 150 ways that the same information is captured. Data standards would see this number reduce to 20, resulting in better quality data being created as well as efficiencies. There is also an all of government community of practice which provides practical support to help agencies better manage the quality of the administrative data they hold. A guide is publically available to assist with the assessment of administrative data quality. Administrative Data guide Stats NZ and data suppliers for the IDI are also working together to improve the quality of data in this database as well as reduce holding multiple copies of data across the system.
5.5	Meets An example of this, is the Memorandum Of Understanding (MOU) between Stats NZ and Inland Revenue which provides both the framework and accountabilities for the use of tax data for statistical purposes. Inland Revenue continues to have a strong interest in how its data is used and ensuring that this is consistent with the Tax Administration Act 1994. This

	type of co-operation and co-ordination on areas of common is supported by the MOU. Currently, Stats NZ teams are working closely with the 2017 Inland Revenue Business Transformation project to ensure that changes to the tax system will not greatly impact our collection of data or the flow of statistics and insights that our customers depend on.
5.6	Partially Meets This is an emerging area of focus in the New Zealand Government data system. The Data Leadership Hub has recently launched a Data Consultancy Service and a prototype Data Knowledge Centre to provide practical support to agencies to help them better manage, and share the data they hold. Some proposed practices are available for the reporting and presentation of administrative data but these are evolving.
5.7	Meets Linking administrative data with survey data is encouraged by Stats NZ both internally in our role as producer of Official Statistics and in our Government Chief Data Steward role, to increase the value of data across the government system. Stats NZ has been exploring and using administrative data linked with survey data for over a decade with the aim of reducing the burden on respondents, reducing the costs in producing official statistics, and increasing the analytical value of official statistics. A key area of focus has been the use of tax and population data discussed in Question 5.2, but also includes the use of our Integrated Data Infrastructure (IDI) and Longitudinal Business Database (LBD). These databases contains microdata about people and households and businesses from a range of Government agencies as well as Stats NZ surveys (including the 2013 Census) and non-government agencies. While originally for research purposes, there is increased use of these sources for production of official statistics. There is a current IDI expansion programme underway to assist this together with the planned implementation of Data Admin First architecture through the delivery of the IR Transformation, Census Transformation and Statistics Data Cloud Solution Architecture projects by 2018. These projects will provide the framework for the roles, processes and technology that will be required to expand the use and linking of administration and survey data for production of official statistics. It will also provide a scalable and flexible platform for the development of a big data environment.

Response from adherent on Recommendation 5:

Please enumerate the main strengths and weaknesses identified with regard to recommendation 5. Are other good practices relevant to this recommendation implemented in your country? What kind of actions do you consider important to improve the situation as regards recommendation 5 in your country?

Stats NZ works in partnership across the Government to ensure there is access to administrative sources to produce Official Statistics and that agencies have the capability and assistance to use these sources. This is to ensure quality of Official Statistics as well as increasing the value of data while reducing burden on survey respondents. This work is aligned to several New Zealand Government initiatives such as achieving a 25 percent reduction in business effort in dealing with government as well as programmes being undertaken by administrative data suppliers such as working with the Inland Revenue Transformation programme to establish a regular data feed for tax data or working with the Ministry of Business, Innovation and Employment to remove migration departure cards (used to produce migration statistics).

A focus for New Zealand in the next few years is to establish the framework and capability across government agencies to use data (including administration data) effectively and efficiently. This key task is being progressed under our Government Chief Data Steward role. We will be working across government to develop a shared vision

and roadmap for the support of New Zealand's data use as well as the provision of guidance, resources, and tools via the Data Leadership Hub. It is expected that this work will include some legislation review to increase future data use and innovation

Stats NZ is also improving and working to expand its use of linked administrative data and surveys to produce Official Statistics. As stated in question 5.7, there is a current IDI expansion programme underway to assist this together with the planned implementation of Data Admin First Architecture through the delivery of the IR Transformation, Census Transformation and Statistics Data Cloud Solution Architecture projects by 2018. These projects will provide the framework for the roles, processes and technology that will be required to expand the use and linking of administration and survey data for production of official statistics. It will also provide a scalable and flexible platform for the eventual development of a big data environment.

Recommendation 6.
Adherents ensure the impartiality, objectivity and transparency of Official Statistics, through the development, production and dissemination by the National Statistical Authorities of statistics respecting scientific independence put in place in an objective, professional and transparent manner in which all users are treated equitably. Equitable treatment implies in particular equal access to data by all users.

Good practice 6.1:
Official Statistics are collected, compiled and disseminated on an impartial and objective basis and determined by statistical considerations only.

Good practice 6.2:
Equal access to Official Statistics for all users at the same time is guaranteed by law. If a public or private body has access to Official Statistics prior to their public release, this fact and subsequent arrangements are publicised and controlled. In the event that a leak occurs, pre-release arrangements are revised to as to ensure impartiality.

Good practice 6.3 (adopted from the European Statistics Code of Practice):
Choices of data sources and statistical methods as well as decisions about the dissemination of statistics are informed by statistical considerations.

Good practice 6.4 (adopted from the European Statistics Code of Practice):
Errors discovered in published statistics are corrected at the earliest possible date and publicised.

Good practice 6.5 (adopted from the European Statistics Code of Practice):
Information on the methods and procedures used is publicly available.

Good practice 6.6 (adopted from the European Statistics Code of Practice):
Statistical release and statements made in press conference are objective and non-partisan.

Good practice 6.7:
Statistical release dates and times are announced in advance. A twelve-month-ahead advance release calendar is provided. Official Statistics are released according to a standard daily time. Any divergence from the dissemination time schedule is publicised in advance, explained, and a new date is set.

Good practice 6.8:
Any major revision or changes in methodologies are announced in advance.

Good practice 6.9:
Internal guidelines are made available by statistical authorities to respond to erroneous interpretation and misuse of statistics. They are well-known by staff.

Good practice 6.10:
Statistical plans and programmes, methodologies, processes and procedures quality assessments are made publicly available by the statistical authorities.

Good practice 6.11:

Guidelines exist for the presentation of data, including the treatment of time series breaks, and seasonally adjusted data, with the aim to ensure that official statistical data and metadata are presented in a way that facilitates proper interpretation and meaningful comparisons.

OECD best practice	Assessment against best practice
6.1	Meets The Review of Official Statistics System recommended that identification of a set of key official statistics to be known as Tier 1 Statistics, principles and protocols, would be produced using standard principles and protocols across the New Zealand Government system. By definition, these statistics are collected, compiled and disseminated on an impartial and objective basis and determined by statistical considerations only. For Stats NZ collections, this is reinforced in the Statistics Act 1975, Section 4 where the requirements for independent and objective collection and disclosure of information are specified.
6.2	Meets Producers of Official Statistics under Principle 5 Accessibility of the Tier 1 Statistics, principles and protocols must provide equal and open access. The New Zealand Data and Information Management Principles also require open access and for Stats NZ, these requirements are also reinforced by the Statistics Act 1975. To comply with the legislation and cross government requirements, Stats NZ has an internal policy *Release of Official Statistics* that specifies that 1. Statistics are to be made available as soon as practical after they have been collected. 2. A calendar of periodical statistical releases will be published on the Stats NZ website at least six months in advance of the statistics becoming available. For irregular and ad hoc statistical releases, exact release dates are provided as soon as possible and ideally at least two weeks in advance. 3. All first release statistics are released at 10:45am, on the Stats NZ website, on the date notified in the calendar of statistical releases. Any alteration to a pre-announced release date is to be made public as early as possible and accompanied by an explanation for the change. Key stakeholders are to be notified. 4. For Statistics of high interest, an embargoed pre-release briefing is available at head office of Stats NZ. Attendees are invited to begin arriving at 10am with the briefing starting at 10:30am, under embargo conditions and finishing at 10:45am on the day of release. These are identified in the media centre on the Stats NZ website. 5. For identified major statistics, there is an option for simultaneous briefing of relevant key officials or ministers at the same time as the embargoed pre-release briefings. 6. All releases will conform to Stats NZ policies and standards for confidentiality. 7. All errors found in published statistics are to be managed in accordance with the policy *Handling Errors in Published Statistics* 8. Revisions to published statistics due to a change in methodology, or similar, may be made in subsequent releases. These are to be accompanied by relevant supporting and explanatory information as per the policy *Revisions.*
6.3	Meets Producers of Official Statistics are required to adhere to the Tier 1 Statistics, principles and protocols and New Zealand data and information

	management principles when choosing data sources and statistical methods. The Official Statistics Principle 3 (Quality) and Protocol 1 (Quality) require Official Statistics to be produced using sound statistical methodology from relevant and reliable data sources which are appropriate for purpose. Design of official statistics are also expected to maximised existing data sources and make use of international standards and developments New Zealand data and information management principles requires data and information to be open, readily available, well managed, authoritative and reusable unless there are necessary reasons for its protection. For Stats NZ collections, this is reinforced in the Statistics Act 1975, Section 4 where the requirements for independent and objective collection.
6.4	Meets Protocol 1 (Quality) of Tier 1 Statistics, principles and protocols requires producers of Official Statistics to provide information on the processes and methods used to produce official statistics include measures of quality such as estimated measurement errors. They are to be available to users to understand the data and judge their usefulness. Stats NZ adheres to this by its policy Handling errors in published statistics. This policy outlines the procedures for discovering and resolving errors including assigning a significance rating which determines the level of resolution required.
6.5	Partially Meets Information on the methods and procedures used by New Zealand producers of official statistics is publicly available but varies in scope and depth. Under Protocol 5, Tier 1 Statistics, principles and protocols produced from the New Zealand Government system are required to be widely disseminated with unambiguous presentation, supported by commentary that provides background information on methodology, quality indicators, glossaries and links to other related information. Producers of New Zealand Official Statistics can also find guidance is this areas from the New Zealand data and information management principles. However further work is needed to improve the availability and standardise this metadata across the New Zealand data system. This is a key priority for the new Government Chief Data Steward role. As a producer of Official Statistics, Stats NZ needs to improve its coherence and depth of our publically available information on methods and procedures, to meet the needs of a wider range of users. We do have publically available information on the following areas: 1. Concepts, classifications and standards 2. Standards, glossaries and questionnaires can also be accessed on the website or as appendices in reports 3. Information on methodology of statistical processes such as methods for data integration undertaken, survey design, collection techniques as well as technical assessment of quality or methodology techniques.

6.6	Meets Producers of Tier 1 Statistics, principles and protocols within New Zealand are required to comply with Protocol 5 Release Practices from the Official Statistics System (OSS). Element 3 of this covers conduct in press conferences and the need to be objective. In the case of Stats NZ, this is reinforced by both in our Code of Conduct, Section 57 of State Sector Act 1988, which requires that public servants must be impartial and our internal media policy. This policy *Dealing with Media Inquiries* provides procedures to deal with different types of media inquiries including press conferences. It also specifies who is authorised as a media spokesperson and where assistance is available such as from our communications staff. Training and support in engaging with the media is also provided to those managers responsible for statistical releases.
6.7	Meets As required by the Tier 1 Statistics, principles and protocols, statistical release dates and times for Stats NZ and other producers of official statistics are announced in advance. In the case of Stats NZ, a twelve-month-ahead advance Release calendar is provided on the Stats NZ website. Individual release dates for regularly produced statistics are required to be confirmed at least six months in advance of the statistics becoming available. For irregular and ad hoc statistical releases, exact release dates are provided as soon as possible and ideally at least two weeks in advance. All official statistics are released according to a standard daily time of 10.45am. Any divergence from the dissemination time schedule is publicised in advance, explained, and a new date and time is set.
6.8	Meets As required by the Tier 1 Statistics, principles and protocols, any major revisions or changes in methodologies are announced in advance by Stats NZ and other producers of official statistics. In the case of Stats NZ, the procedures for this are specified in our internal policy *Revisions.* This policy specifies that revisions are notified to users through either pre-data release documentation or within the release itself, and this material is available on the Stats NZ website. For all key measures (i.e. BOP, CPI, GDP & LFS) and a growing number of other measures, users are pre-notified of significant or regular revisions through a Revisions Paper and the release of this Revisions Paper is notified via the publically available Release calendar. For other revisions, we identify such revisions in the release's accompanying explanatory notes, within a Revisions Section. An example of pre-notification of forthcoming revisions is within National Accounts where revisions are held until the September quarterly release of Quarterly GDP and this ties in with the annual benchmark process and any flows from the quarterly BOPs. Prior to the release of the revised data, we signal revisions to customers through a 'revisions' paper and in some cases back-cast series and identifier changes. This 'revisions' paper is notified via the Release calendar, 6 months in advance of its release. The following link National Accounts improvements is to the "Preview of 2016 national accounts improvements" (published 4th November 2016) were we discuss a suite of forthcoming revisions & methodological changes that were due to be released 18th November 2016 & 15th December 2016. Please note that these releases were delayed to the 8th December and 22nd December due to an earthquake.

	An example of a less than 'significant' or irregular revision can be found in the "Productivity Statistics: 1978–2016" release, where the following link is the 'Revisions' Section of the publication: Productivity Statistics 1978-2016 release - Revisions
6.9	Partially Meets Producers of Tier 1 Statistics, principles and protocols, within New Zealand are required to comply with Protocol 5 Release Practices from the Official Statistics System (OSS). Element 3 provides some general guidelines to responding to misuse of statistics and erroneous interpretation. Application of these guidelines however, is largely left to the individual agencies and as a result vary across producers of official statistics in New Zealand. In the case of Stats NZ, our internal policy *Dealing with Media Inquiries* provides some guidelines for responding to erroneous comments, but requires judgement and experience to be effective. This is an area of improvement for the organisation and there would be benefits from more comprehensive guidelines and improved staff support.
6.10	Meets Under Protocol 1 Quality and Protocol 5 Release Practices, Tier 1 Statistics, principles and protocols produced from the New Zealand Government system are required to be widely disseminated with background information such as methodologies, statistical plans and programmes and quality assessments. This is to allow users to understand the data and judge their usefulness. The New Zealand data and information management principles also provide a similar guide. Both documents recommend that the amount and level of technical information provided with the data is adapted to the needs of the intended audience and therefore at discretion of the agency. This results in variation in the range and depth of available information across the New Zealand Government system. Stats NZ provides this type of information in a number of areas in its website. Individual reports that describe a particularly methodology or review of the findings are listed under the topic. For example the webpage Women in addition to containing data on women, has reports comparing the findings and quality on childcare surveys run by Stats NZ over time as well as an article describing the range of methods for measuring fertility and their limitations. Further information is available from the Methods Section of Stats NZ website including research papers on analytical or methodological topics. Stats NZ also has a section for consultation documents where people can provide feedback on statistical programmes and developments such as the recent review of the iwi classification.
6.11	Meets Producers of Tier 1 Statistics, principles and protocols within New Zealand are required to comply with Protocol 1 Consistency for the release of official statistics. This protocol requires statistics to be consistent and coherent within the dataset, over time and with other major datasets. These protocols are incorporated into the Stats NZ policies *Release of Statistics* and *Revisions.* The first specifies the need for unambiguous presentation and second states that overriding consideration should be given to ensure consistent time-series are maintained through adequate

	backdating as breaks in the time-series significantly reduce their usefulness. For Stats NZ and other New Zealand agencies, this consistency is also designed into the production of official statistics through the use of good business processes such as: • common registers and frames • common collection units • common questions, concepts, variables etc. • application of harmonised methodologies • use of international and national codes of practice • by comparing and integrating data over time including seasonal adjustment • managing revision processes by documenting discontinuities and/or providing consistent back-data series. This is applied in Stats NZ by our methodological team in two ways. Firstly through the use of standard procedures, tools and manuals. For example, the Social Survey Manual outlines the current practice regarding methodology to be used in social surveys, what tools should be used in development of surveys and sample selection. Secondary, there are also a range of networks on key topics which provide a forum to discuss and resolve issues related to a particular methodological topic and share practices. One of the current networks is the Time Series network who are responsible for: • ensuring seasonal adjustment and trend estimation are done to "best practice" • working with the external and internal seasonal adjustment community • managing the seasonal adjustment area and give access approvals • maintaining standards • providing training and advice on best practice across New Zealand Government community Membership of these networks can be wider than Stats NZ, will often representatives on International Working Groups and will meet regularly to share knowledge with counterparts in other countries.

Response from adherent on Recommendation 6:

Please enumerate the main strengths and weaknesses identified with regard to recommendation 6. Are other good practices relevant to this recommendation implemented in your country? What kind of actions do you consider important to improve the situation as regards recommendation 6 in your country?

The purpose of Tier 1 Statistics, principles and protocols is to set the expectation and to ensure that official statistics produced for New Zealand are produced, analysed and released on an impartial and objective basis and determined by statistical considerations only. The Release principle further requires access to the data be equal and open. These principles and protocols are supported by legislation and many agencies including Stats NZ incorporate the principles and protocols into their internal procedures and policies. For example Stats NZ policies such as *Release of Official Statistics* specify standard release times, schedules and supporting information required for the release of Stats NZ collections.

This is an area of strength across the New Zealand Official Statistics system however there are areas of improvement needed. For example, the application of procedures relating to responding to misuse of statistics and erroneous interpretation is largely left to the individual agencies and as a result varies in scope and effectiveness. Improvements to the depth and availability of supporting information on methods and procedures used to produce official statistics can also be improved. Standardising and improving the availability of metadata like this, is a key priority for the new Government Chief Data Steward role.

Likewise, as a producer of official statistics, Stats NZ needs to improve the coherence and depth of its publically available information on methods and procedures to meet the needs of a wider range of users. In particular, there needs to be improvements in the provision of metadata for microdata or analytic users who wish to apply their own techniques or models to the data. While some Stats NZ datasets (confidentialised as required) are accessible through the open data website at www.data.govt.New Zealand, needs to continue in making data available in this manner. Stats NZ also supports other government agencies to make their data open through the cross-government Open Data Programme, which it hosts (Open Data New Zealand) and a future focus is to improve the range and accessibility of data in this format.

Recommendation 7.

Adherents employ sound methodology and commit to professional standards used in the production of Official Statistics. To this end, Adherents should:

i) apply appropriate statistical procedures and methods, including a stated revisions policy;

ii) strive to adhere to international norms and standards, such as methodological manuals developed by the United Nations Statistical Commission or by the OECD, and international classifications in the statistics collected by the OECD.

Good practice 7.1:
Official Statistics are produced according to strictly professional considerations, including scientific principles and professional ethics with regard to methods and procedures used for the collection, processing, storage and dissemination of statistical data.

Good practice 7.2 (adopted from the European Statistics Code of Practice):
Sound statistical methodology requiring adequate tools and procedures and expertise is implemented and guaranteed by the national statistics law.

Good practice 7.3:
International statistical standards, guidelines and good practices are applied in the National Statistical System as appropriate.

Good practice 7.4:
National statistical classifications developed by statistical authorities are consistent with international classifications. Detailed concordance exists between national classifications and the corresponding international classification.

Good practice 7.5 (adopted from the European Statistics Code of Practice):
Procedures are in place to ensure that standard concepts, definitions and classifications are consistently applied throughout the National Statistical Authorities.

Good practice 7.6:
Subject matter advisory committees made up of external experts advice on relevant statistical matters.

Good practice 7.7 (adopted from the European Statistics Code of Practice):
Graduates in the relevant academic disciplines are recruited.

Good practice 7.8:
Co-operation with the scientific community, academic institutions and international organisations is organises to improve methodology and the effectiveness of the methods implemented, and to improve methodological ant technical skills of staff.

Good practice 7.9:
Strategies for recruitment, as well as processes for technical and managerial development and training of existing staff, are established, implemented, and revised as required.

Good practice 7.10:
In the case of statistical surveys, questionnaires and systems for production are systematically tested prior to the data collection.

Good practice 7.11:
Parallel runs are undertaken when systems or questionnaires are redesigned in any significant way.

Good practice 7.12 (adopted from the European Statistics Code of Practice):
Survey designs, sample selections and estimation methods are well based on regularly reviewed and revised as required.

Good practice 7.13 (adopted from the European Statistics Code of Practice):
The business register and the frame for population surveys are regularly evaluated and adjusted if necessary in order to ensure high quality.

Good practice 7.14 (adopted from the European Statistics Code of Practice):
Data collection, data entry, and coding are routinely monitored and revised as required.

Good practice 7.15 (adopted from the European Statistics Code of Practice):
Appropriate editing and imputation methods are used and regularly reviewed, revised or updated as required.

Good practice 7.16 (adopted from the European Statistics Code of Practice):
Revisions follow standard, well-established and transparent procedures.

Good practice 7.17:
A revision schedule is published by the producers of Official Statistics.

Good practice 7.18:
The design of statistical questionnaires used in survey-based data collection processes is regularly reviewed.

OECD best practice	Assessment against best practice
7.1	Meets Under the Tier 1 Statistics, principles and protocols used for official statistics in New Zealand, Official Statistics are required to be produced according to strictly professional considerations, including scientific principles and professional ethics with regard to methods and procedures used for the collection, processing, storage and dissemination of statistical data. The purpose of Tier 1 Statistics, principles and protocols is to set the expectations and ensure that these important Official Statistics are produced, analysed and released to a high statistical standard. As one of the producers of official statistics in New Zealand, Stats NZ maintains professional competence in the following ways: 1. Use of sound methodology that is aligned to good international practice and professional expertise 2. Culture of continuous improvement, sharing statistical best practice and evaluation 3. Processes and methods used to produce official statistics are documented, transparent and available to users to understand the quality and fit to their needs 4. Data revisions follow a regular, well established and transparent schedule. Details of how these are applied are stated in the following recommendations.
7.2	Meets The Tier 1 Statistics, principles and protocols used for official statistics in New Zealand are guided by the Statistics Act 1975 as well as other legislation. This includes the Privacy Act 1993, the Official Information Act 1982 and the Public Records Act 2005. The Tier 1 Statistics, principles and protocols also are based on the United Nations Fundamental Principles of

	Official Statistics. For example, official statistics are defined in Section 2 of the Statistics Act 1975 while the Privacy Act 1993 outlines 12 Information privacy principles which should be followed by all official collections Stats NZ compiles with these legislation requirements by incorporating key elements in its internal procedures and policies such as the *Revisions policy*. The Government Statistician has the sole responsibility for deciding on statistical methods, standards and procedures, and on content and timing of statistical releases, under Section 14 of the Statistics Act 1975. This section of the act also specifies that the Government Statistician is required to define and promote the use of standard statistical concepts, procedures, definitions and classifications.
7.3	Meets Protocol 2 of the Tier 1 Statistics, principles and protocols is National and International comparability. The protocol specifies that producers of official statistics in New Zealand should work together to ensure that New Zealand makes an effective contribution to the harmonisation of official statistics. Under this protocol, it is recommended that common statistical frames, definitions and classifications align wherever possible to national and international frameworks in order to facilitate meaningful comparison of data between countries. For example, the methodology for the New Zealand System of National Accounts is based on the international System of National Accounts SNA08. Classifications used in this output such as New Zealand Standard Institutional Sector Classification are regularly updated to align with their international counterpart Statistical Classification for Institutional Sectors (SCIS). Similarly, the conceptual framework used to produce BOP statistics in New Zealand is based on sixth edition of the IMF Balance of Payments manual (BPM6) while the design of the Household Labour Force Survey is based on the ILO guidelines. Stats NZ advocates the use of international best practice guidelines and consistent use of National Statistical Standards and Classifications across government and other agencies. Key standards such as Australian and New Zealand Standard Industrial Classification (ANZSIC 2006) is used by multiple agencies to classify industry and its use encouraged with a freely available coding tool. Under the Government Chief Data Steward role, we are supporting agencies to increase the use of data standards to improve consistency and coherence across the New Zealand data system. This will be done with the establishment of an external facing Data leadership hub to support good practice, provide guidance and share resources and tools. The New Zealand Open Government Data Programme also promotes the use of open data standards to assist coherence across the national and international data system.
7.4	Meets As stated in 7.12 below, Protocol 2 of the Tier 1 Statistics, principles and protocols requires producers of official statistics in New Zealand to use common statistical frames, definitions and classifications wherever possible to align to national and international frameworks. Stats NZ adapts international standards wherever possible, and where this is not possible, adherence or alignment to an international standard is ensured either conceptually and/or structurally. All Australian and New Zealand Standards and standard classifications are concorded to their international counterpart as appropriate. This is a mandatory requirement for all classifications that are considered National standards. For example,

	the Australian and New Zealand Standard Industrial Classification (ANZSIC06) can be directly matched to the International Standard Industrial Classification of All Economic activities (ISIC Rev 4). This adherence is further supported by a common coding file and tool being made available to New Zealand agencies which need to classify industry data. Likewise that Australian and New Zealand Standard Classification of Occupation (ANZSCO) links directly to the International Standard Classification of Occupations (ISCO08), The New Zealand Standard Country classification to (ISO 3166). An example of this process can be found in this paper Classifications and Standards access-use ICT which outlines how Stats NZ aligned the Statistical Standard used for Information and Communications Technology (ICT) with International standards. It shows the impact on statistics by updating the standard to reflect the rapid advances in this area and the need to measure progress towards the information society. It also shows how we report on International indicators, including the core ICT indicators developed by the Partnership on Measuring ICT for Development and the key ICT indicators from the Organisation for Economic Cooperation and Development (OECD).
7.5	Meets The Tier 1 Statistics, principles and protocols provide guidance to producers of Official Statistics in New Zealand on the use of standard concepts, definitions and classifications in a number of areas. Protocol 2, recommends the use of common frameworks, standards classifications to maximise the value of statistical data. Under Section 14 of the Statistics Act 1975, the Government Statistician is required to define and promote the use of standard statistical concepts, procedures, definitions and classifications. Stats NZ offers this expertise and advice by documenting standards and classifications carefully and making them available on the website. We also promote best practice frameworks and coding tools by making them readily accessible to other producers of official statistics for example our industry and occupation coders are free to use on the website. Community of practices, technical advisory groups and open consultation are also used to publicise and promote standards. For example, the recent review of the Statistical standard for geographic areas (SSGA 18) involved considerable consultation across New Zealand, Territorial Authority Planners and GSI analysts were involved in defining areas and providing suitable names that would aid understanding. A Technical Advisory Group with a range of representatives both within and outside government was also used to guide the development of the standard. Stats NZ in our role as Government Chief Data Steward are working to support agencies to increase the use of data standards in order to improve consistency and coherence across the New Zealand data system. One of the first steps to achieve this, is with the establishment of an external facing Data leadership hub to advise on good practice, guidance, resources and tools. It is also being achieved with under the New Zealand Open Government Data Programme which promotes the use of open data standards.
7.6	Meets. Stats NZ engages external experts' advice on a number of relevant statistical matters through committees, specific (targeted) advice, or consultation processes such as statistical geography review mentioned in recommendation 7.5 above. Advice is sought on our work-programme, statistical standards, content and stakeholder engagement. We also

	participate in International meetings and Special Advisory Committees (e.g. OECD Informal Advisory Group on Measuring GDP in a Digitalised Economy) as opportunities to draw on knowledge. Finally, we often work in collaboration with other National Statistical Institutes or partners in the New Zealand Official Statistical System when undertaken developments. The following examples show a range of committees, their scope and their role: • The 'External Advisory Board' comprises seven external expert users who provide advice on aspects of our work-program and provide input into the strategic direction of aspects of our production processes (e.g. dissemination strategy) • When developing the Non-Profit Institutional Satellite Account (NPISA), we consulted widely with the John Hopkins University Centre for Civil Society Studies, who are the experts behind the NPISA and its measurement • Stats NZ updates the basket for the CPI every three years. Every second basket review (6 yearly) a CPI Advisory Committee is formed to discuss development priorities. Members of the committee are Government and non-government. Public submissions are also called for. The last CPI Advisory Committee met in 2013. In the future, this committee is likely to be merged with the broader 'External Advisory Board' mentioned above. • Stats NZ works with the Ministry for the Environment to produce regular environmental reports as required by the Environmental Reporting Act 2015. The Government Statistician has sole responsibility for choosing the statistics to represent the topics. As part of the production process, Stats NZ and the Ministry regularly engage Technical Advisory Groups for advice on environmental data sources, quality, and interpretation. Technical Advisory groups are composed of scientists and analysts from Crown Research Institutes, Regional Councils, other natural resource sector agencies, and the private sector where they have the expertise that the public sector does not. There is a range of technical groups in addition to the Ministry of Environment one.
7.7	Meets Stats NZ recruits graduates annually across the necessary range of quantitative, IT and corporate disciplines. Graduates undertake training and mentoring to ensure that they rapidly become proficient in statistical collection, production and dissemination. We have an established graduate recruitment programme with New Zealand universities targeted to attract statistical methodologists and other specialised areas. In addition, Stats NZ has a secondment programme with other NSO'S and is part of All of Government data Intern programme. Our statistical education unit has several specialised course to build statistical capability that are recognised by the New Zealand Qualifications Authority (NZQA). These courses are available both within and outside Stats NZ. One of these courses (Certificate for Official Statistics) was recently updated to have a greater emphasis on using data to make policy decisions to reflect growing demand for support for analysts. In addition, Stats NZ has study assistance programme to support staff career development, which will be an asset to Stats NZ. This is for the successful completion of a course or study with an education provider that is recognised by the NZQA.

7.8	Meets Stats NZ in our producer role, regularly participate and collaborate in the wider New Zealand community. We are part of the Chief Science Advisor Panel and our staff regularly participate in or led professional development activities such as the Population Association of New Zealand, Research Association of New Zealand, New Zealand Association of Economists, Geospatial, SAS and R users' forums as well as other associations. We have recently started up a number of community of practices for areas such as questionnaire design, data integration and data analytics. We also regularly send staff to National and International conferences to further their skills. Stats NZ in its Government Chief Data Steward role is responsible to support agencies to use good practice, guidance, resources and tools. A Data Leadership hub was recently created to help facilitate this. We will work alongside other government executives to ensure a shared system approach and co-design of the enabling infrastructure that will help agencies grow their capability and solve data challenges.
7.9	Partially Meets Stats NZ has a continuous learning and development process for staff embedded in our people management policies and practices. This is supported by systems and processes that managers use. Managers in all areas have a local training and development budget to use for staff training. An online system is used to help manage learning and development. There is also a leadership coaching programme for Senior Leaders which provides people with access to an external coach to support them with specific developmental goals. An organisational capability model for Stats NZ was recently introduced to refresh our workforce capability approach and practices. The model is aligned to the New Zealand Government Capability model and the European Statistical System Enterprise Architecture Reference Framework. It represents all of the capabilities which Stats NZ will need to grow and develop to achieve our goal for both of our roles. This is a multi-year programme of work to guide our capability development over the next few years. As a first step, our statistical, data and analytic job families were reviewed in November 2017 to assess which capabilities and skills we will need to deliver our core offerings, both now and in the future. Outcomes expected from this review are improved alignment with similar roles outside Stats NZ, improved clarity of career paths for Stats NZ staff and improved our ability to attract, grow and retain for core roles.
7.10	Meets New content for Stats NZ surveys is cognitively tested for comprehension and in most cases, a field test. In undertaken for social surveys.
7.11	Meets Stats NZ undertakes parallel runs with major redesigns, although such major redesigns are rare.
7.12	Meets Stats NZ undertakes regular reviews and revisions of survey design, example selections and estimation methods. This follows the regular cycle of outputs. For example, the Retail Trade Survey was redesigned following an output review to make greater use of administrative data and reduce the number of retail businesses we survey. The survey design, sample selections and

	methods were updated to maximise use of existing administrative data resulting in a reduction of 87% in the number of respondents needing to be surveyed. An added benefit of this new approach was being to improve the quality of quarterly sales data so information for all 16 regions in New Zealand could be published. An external review of New Zealand's System of Accounts looked at the data available and the investment approach used to produce this important statistic. The review also compared different frameworks for environmental accounting to assess possible impact and value add from using an alternative approach. Other recent examples of reviews include the Agricultural production census, HLFS and the CPI basket review.
7.13	Meets The Business Register and the Frame for population surveys maintained by Stats NZ is evaluated and adjusted following a major update, such as census.
7.14	Meets Stats NZ undertakes continuous improvement to develop techniques that reduce the burden on information providers and to provide respondent friendly collection methods that are based on best supplier principle i.e. always collect data from the most appropriate source after considering respondent load. Data collection, data entry and coding are routinely monitored and revised as required to minimise overlap of people or businesses being surveyed by Stats NZ and/or other producers of Official Statistics. Regular reports are provided to the output areas as well as the collection team as collection is underway. Summary respondent load information is provide with Stats NZ annual report. There is a multiyear plan to move from paper based data collection to digital collection and this together with the planned implement of an enterprise collection platform will provide opportunities to further improve the efficiency and responsiveness of our collection. Examples of the possible opportunities are evident with the development for upcoming 2018 Census. These new systems make use of operational data in real-time for key processes that manage the census field force such as address verification, workload creation and work allocation. Similarly the recent redevelopment of the Agricultural production census created opportunity to improve collection processes with the introduction of new online form as well as new system.
7.15	Meets Editing and imputation methodologies are regularly reviewed by our Editing and Imputation network as part of our quality procedures. This group provides editing and imputation advice, evaluate suitability of emerging techniques, tools and best practices both Nationally and Internationally. The network is regularly active in the International editing and imputation community and assists to build capability in these techniques within Stats NZ and across the official statistics system. For example, international standards and new best practices are being incorporated into the development of the editing and imputation processes for the upcoming 2018 Census. The goal for this Census is to automate as many processes as possible and run processing operations in parallel to field operations. This should allow data to be evaluated as it comes through and be used to inform field decisions. To achieve this goal,

	international best practice tools like Pentaho, R and Canceis are being used together with practical experience from recent census run by other countries. Developments for the 2018 Census and our experience to date were recently shared at the July 2017 International Census forum.
7.16	Meets Stats NZ has an internal Revision Policy, aligned to Protocol 5: *Release Practices from the Official Statistics System (OSS) Principles & Protocols* for *Producers of Tier 1 Statistics, principles and protocols."* The policy seeks to ensure that revisions undertaken by Stats NZ are as accurate, robust and freely available as new statistics. They are released in an open and transparent manner and are accompanied by relevant supporting and explanatory information. In developing our policy the following agencies policies were viewed: UK Office for National Statistics, OECD, Eurostat, Statistics Canada, Statistics Austria, Statistics Norway and Statistics Portugal. The Revisions Policy applies to all published official statistics produced by Stats NZ to give confidence to users that revisions applied by Stats NZ meet known and agreed principles for handling revisions and consistently applied. It is the responsibility of the relevant business unit to design and monitor relevant revision procedures and for determining at which point a revision should be made. During the design of these procedures the principles contained in the policy should be followed to ensure consistency and transparency for users of Stats NZ's information. The principles are: 1. Scheduled revisions are managed systematically, pre-announced, and reflected in dissemination plans 2. Unscheduled revisions should be released as soon as practicable after they occur and in an open and transparent way 3. A revisions policy should be stable over time and consistent across related outputs 4. Revisions comply with the same principles as other new information 5. Revisions must balance the need for users to have the best estimates against the uncertainty created by frequent revisions. Revisions which are frequent and trivial will undermine user confidence 6. The overriding consideration in publishing a revision should be to ensure that a consistent time series is maintained, as breaks in time series significantly reduce their usefulness 7. All revisions should be accompanied by documentation which adequately explains their nature, provides good analysis of the differences between the original and revised series, and explains the effect on any previously published commentary or interpretation.
7.17	Meets Aligned with the Stats NZ Revisions Policy outlined in Section 7.16 above, revisions are notified to users through either pre-data release documentation or within the release itself and this material is available on the Stats NZ website. For all key measures (i.e. BOP, CPI, GDP & LFS) and a growing number of other measures, users are pre-notified of significant or regular revisions through a Revisions Paper and the release of this Revisions Paper is notified via the publically available Release calendar. For other revisions, we identify such revisions in the release's accompanying explanatory notes, within a Revisions section.

	Revisions of official statistics by other New Zealand producers are also available from their website. They are often available as part of the explanatory note accompanying a release such as in the case of Ministry of Health (MoH) and Ministry of Business Innovation and Employment (MBIE) releases or accompanying the data itself in the case of Ministry of Justice (MoJ) releases.
7.18	Partially Meets Stats NZ reviews the design of questionnaires as required or in response to scheduled output review, but proactive or whole-scale review of questionnaire content is limited due to cost and time constraints.

Response from adherent on Recommendation 7:

Please enumerate the main strengths and weaknesses identified with regard to recommendation 7. Are other good practices relevant to this recommendation implemented in your country? What kind of actions do you consider important to improve the situation as regards recommendation 7 in your country?

The purpose of Tier 1 Statistics, principles and protocols is to set the expectation and to ensure that Official Statistics produced for New Zealand are produced, analysed and released to a high statistical standard. This is supported by legislation and many agencies including Stats NZ incorporate the principles and protocols into their internal procedures and policies. This is an area of strength with quality cognitive testing, continuous improvement within the areas of collection and processing, revision procedures and extensive use of National and International standards and classifications being used by Stats NZ. There are further improvements to be made with improving digital engagement for respondents including the availability of an internet collection system for our upcoming 2018 Census. Another area of improvement being investigated is a way of proactively reviewing the full questionnaires on a regular basis for surveys. Currently, parallel runs are only undertaken with significant redesigns

Protocol 2 of the Tier 1 Statistics, principles and protocols also requires that producers of Official Statistics should work together to ensure that New Zealand makes an effective contribution to the harmonisation of Official Statistics. Under this protocol, it is recommended that common statistical frames, definitions and classifications align wherever possible to National and International frameworks in order to facilitate meaningful comparison of data between countries. This is supported by the Statistics Act 1975 which specifies that the Government Statistician is required to define and promote the use of standard statistical concepts, procedures, definitions and classifications across Government and other agencies. Improvements can be made in this area and it is hoped that the recent establishment of the Government Chief Data Steward role and the New Zealand Open Government Data Programme, will achieve this. These two activities will provide support to agencies to increase the use of data standards to improve consistency and coherence across the New Zealand data system with the establishment of services and resource to support good practice, provide guidance and share resources and tools.

Recommendation 8

Adherents commit to quality of statistical products and processes, in particular the key quality dimensions as defined in national and international quality assessment frameworks, for instance in the *Quality Framework and Guidelines for OECD Statistical Activities*: timeliness and punctuality (statistics are released in a timely and punctual manner); relevance (statistics meet the needs of users); accuracy (statistics accurately and reliably portray reality); credibility (confidence is placed by users in statistics products); coherence and comparability (statistics are consistent internally, over time and in space and it is possible to combine and make joint use of related data from different sources); and interpretability and accessibility (see Recommendation 9)

Quality management, monitoring, evaluation plans and reports

Good practice 8.1:

A quality policy ensures that the producers of Official Statistics systematically assess the quality of Official Statistics. Quality policy is publicly available through guidelines, frameworks, reports, etc. and staff members receive appropriate training for their application.

Good practice 8.2:

An efficient, and possibly independent, quality management system exists. It includes an appropriate organisational structure; quality indicators and other tools and processes for the planning, implementation, and monitoring of the quality of source data; and the collection, processing, and dissemination of Official Statistics.

Good practice 8.3:
The national quality management systems are based on recognised models for quality frameworks, such as the IMF Data Quality Assessment Framework (DQAF), the European Foundation for Quality Management, European Code of Practice, the European Statistical System Quality Assurance Framework, Total Quality Management and ISO EN 9001, etc.

Good practice 8.4 (adopted from the European Statistics Code of Practice):
There are regular and thorough reviews of key statistical outputs involving external experts where appropriate (ECoP).

Good practice 8.5:
Quality assessment and certification processes guarantee the official nature of statistics produced in various parts of the NSS.

Good practice 8.6:
The organisational structure of the entities belonging to the NSS and governance arrangements are appropriate and regularly reviewed to assess and justify new statistical demands and related costs.

Good practice 8.7:
Information and communication technologies are regularly monitored and assessed for use in data collection, data processing and data dissemination.

Accuracy
Good practice 8.8 (adopted from the European Statistics Code of Practice):
Source data, intermediate results and statistical outputs are regularly assessed and validated (ECoP).

Good practice 8.9:
National Statistical Authorities put in place processes to ensure that sampling and non-sampling errors are measured, systematically documented, and that information is made available to users.

Good practice 8.10:
Studies and analysis of revisions are regularly conducted according to transparent procedures and the results are made available to users.

Timeliness and punctuality
Good practice 8.11:
Timeliness meets international statistical release standards.

Good practice 8.12 (adopted from the European Statistics Code of Practice):
The periodicity of statistics takes into account user requirements as much as possible (ECoP).

Good practice 8.13 (adopted from the European Statistics Code of Practice):
A standard day time for the release of statistics is made public (ECoP).

Good practice 8.14 (adopted from the European Statistics Code of Practice):
Preliminary results of acceptable aggregate accuracy are released when considered useful (ECoP).

Coherence and comparability
Good practice 8.15:
Official Statistics are consistent within datasets (i.e. elementary data are based on comparable concepts, definitions and classifications and can be meaningfully combined), across datasets (i.e. data are based on common concepts, units, definitions and classifications, or that any differences are explained and can be allowed for) and over time (i.e. data are based on common concepts, definitions, units, classifications, and methodology over time, or that any differences are explained and can be allowed for).

Good practice 8.16 (adopted from the European Statistics Code of Practice):

Statistics from the different sources and of different periodicity are compared and reconciled (ECoP).

Good practice 8.17 (adopted from the European Statistics Code of Practice):
Statistics are compiled according to common standards with respect to scope, definitions, classifications, and units in the different surveys and sources (ECoP).

Relevance
Good practice 8.18 (adopted from the European Statistics Code of Practice):
Processes are in place to consult users, monitor the relevance and utility of existing statistics in meeting their needs, and consider their emerging needs and priorities (ECoP).

Good practice 8.19:
User satisfaction surveys are undertaken on a regular basis. The results are publicly released and considered as an input for decisions about plans and priorities and they are reflected in the statistical work programmes.

OECD best practice	Assessment against best practice
8.1	Meets Producers of Official Statistics are required to adhere to the Tier 1 Statistics, principles and protocols and New Zealand data and information management principles and both of these frameworks have a focus on quality. The Official Statistics Principle 3 (Quality) and Protocol 1 (Quality) require Official Statistics to be produced using sound statistical methodology, relevant and reliable data sources and are appropriate for the purpose. Professional competence should validate all official statistics activity and been enhanced through training, research and reference to good International practice and professional expertise. The New Zealand Principles and Protocols of Official Statistics is based on the United Nations Fundamental Principles of Official Statistics. The New Zealand data and information management principles of Trusted and Authoritative requires producers of government data to support the purpose for which it was collected , be accurate, timely, consistent and without bias in that context. Where possible there should be an identified authoritative single source. Training across the New Zealand data system on the quality of official statistics is developing through the establishment of the data leadership hub and promotion of knowledge sharing forums.
8.2	Meets In addition to the Tier 1 Statistics, principles and protocols, Stats NZ also has an internal policy for *Data Quality management* which requires that quality should be considered in each stage of the statistical production business process. This approach has been embedded into our project management procedures (Prince2) to ensure that a project will create and verify products that are fit for purpose. This includes the methods used to accept the products, and who is responsible (quality planning); then ensuring that the quality methods are implemented and tracked (quality control and assurance). There are three stages in the Stats NZ quality management system: 1. Assessing quality and risk in the end to end process 2. Establishing routine management tasks 3. Review and evaluate for the system continuous improvement. Much of the statistical quality assurance work is undertaken by Stats NZ statistical methodology unit and they have recently adopted 'ASPIRE' to assess quality of official statistics especially when new and alternative

	data sources are used as input. ASPIRE is an evaluation process that gives rise to a set of numerical indicators that over time signify a changing level of quality risk for a statistical product." Assessment of key outputs using ASPIRE is undertaken annually.
8.3	Meets Tier 1 Statistics, principles and protocols, *Stats NZ Quality Management* policy and its accompanying ASPIRE framework integrate many of the main ideas from models of quality frameworks such as Total Quality Management, the European Foundation for Quality Management, Six Sigma and InfoQ. The New Zealand Principles and Protocols of Official Statistics is based on the United Nations Fundamental Principles of Official Statistics which in turn has incorporated a number of standard quality models. Stats NZ quality policy incorporates quality models from project management documentation, business process modelling as well as quality management practices of other National Statistics Offices including Statistics Canada, Statistics Netherlands, and the Australian Bureau of Statistics The ASPIRE framework itself stems from the work of Statistics Sweden to introduce a quality framework that goes beyond assessment based on compliance with standards. Aspire both assesses compliance and continual improvement by identifying areas of risks to data quality.
8.4	Meets There are regular and thorough reviews of key statistical outputs involving external experts where appropriate. Stats NZ has a range of external advisory groups such as Advisory Group on Macro-Economic Statistics, CPI Review Committee and Statistical Standard for Geographical Areas Advisory Group. These Boards are comprised of a mixture of external experts and stakeholders. Stats NZ also has an internal organisational design authority with external membership that assesses architectural alignment. Recent examples of reviews include the redesign of the National Accounts, Retail Trade Survey, Agricultural production census, HLFS and the CPI. The Retail Trade Survey was redesigned following an output review to make greater use of administrative data, and to reduce the number of retail businesses we survey. An added benefit of this new approach was being to improve the quality of quarterly sales data so information for all 16 regions in New Zealand could be published. The review of Agricultural Production Census involved consultation with Federated Farmers and the Ministry of Agriculture in order to improve the relevance of the questions to the farming community to increase response rates and uptake of the online form. An external reviewer was recently commissioned to review the efficiency and direction of Stats NZ national accounts production. The objectives of this review were to assess the current data available and investment approach for New Zealand's System of National Accounts and relevant inputs. The reviewer was an international national accounts and Environmental Reporting consultant and the review spanned several months with engagement with both Stats NZ staff and users of national accounts. The review findings were incorporated in the four year plan for National Accounts and were generally positive.

	The production of the CPI also is subject to external review on a regular basis and this is undertaken by the CPI Review Committee.
8.5	Meets Under the Tier 1 Statistics, principles and protocols, Stats NZ has a role to quality assure official statistics produced by other agencies as well as reviewing their performance against the Tier 1 protocols. The review of performance against the Tier 1 Protocols is done every 5 years whereas assurance is at the request of the agency. Two recent assurance projects recently undertaken by Stats NZ were to assess ways to improve the use and quality of statistics produced by the New Zealand Police and Ministry of Justice. New Zealand Police requested a review of the quality of their data collection systems following public criticism of the quality of their offence statistics. Ministry of Justice requested a review to identify options to reposition their crime and safety survey to better fit the emerging social investment framework.
8.6	Partially Meets Governance arrangements for the NZ official statistics system are still evolving in New Zealand. A cross government agency committee known as the Information Group examines data system needs and helps prioritise investment towards Government data production. The Information Group advises from a system-wide perspective on how Government can better unlock the value of the information it holds on behalf of citizens. To date, the Information Group has strengthened data and analytics networks across the Government data system. The Information Group has also developed a Data Investment Framework to identify critical system gaps and provides system-wide approach to data investment. In addition to this, the State Services Commissioner has designated Stats NZ as the lead agency for Government-held data, and appointed Government Statistician and Chief Executive, Liz MacPherson to the newly-created role of Government Chief Data Steward as part of a process to establish further accountability and governance for data in New Zealand.

8.7	Meets
	Stats NZ is constantly monitoring best practice and new technology trends for their applicability to our operations in data collection, data processing and data dissemination. This is achieved in many ways including:
	• Subscription to best practice advisors such as Gartner, Forrester and Info-Tech Research Group
	• Active engagement in multiple industry groups and professional bodies, e.g. IT Professionals New Zealand, IT Standards and Methods New Zealand, New Zealand Research Association
	• Active engagement with multi-agency government bodies and groups such as the New Zealand Statistical Association, Cross Agency Analytic forum
	• Compliance with directives and advice from the Government Chief information Officer, and participation in GCIO multi agency bodies, including membership of GIO Governance groups:
	  ○ ICT Strategic Leadership Group
	  ○ Technology Group
	  ○ Information Group
	  ○ Service Innovation Group
	  ○ Secretariat
	• Active engagement with specialists and advisors to assist in identifying and implementing best practice technologies and

	processes. For example, we use independent consultants to profile customers and lead user experience design processes to design our new website • Active discussion with our partners and vendors to leveraged their knowledge skills and experience to identify new and innovative technology opportunities • We encourage innovation and exploration of new approaches and technologies to achieve better outcomes, this includes supporting innovation workshops and 'hacks', and collaborating with the wider community including commercial supplier to trail new technologies and approaches.
8.8	Meets Producers of Official Statistics in New Zealand are required to adhere to the Tier 1 Statistics, principles and protocols. Protocol 3 (Accuracy) specifies that source data and statistical techniques are sound and statistical outputs describe the reality they are designed to represent. Stats NZ applies this protocol, in its role as producer of official statistics by: • Having a set of accuracy requirements which are built into our statistical production processes such as editing and imputation. Any outliners to the set accuracy requirements alert the processing team so that investigation can occur • Having information generated by our statistical processes that generate and monitor accuracy requirements. For example, our collection team are alert to any records that are missing or fall outside the business rules for any direct collection system. This allows us to investigate potential issues and adjust collection processes if needed while collection is still in process • Having survey and non -survey errors produced as part of the statistical processes to allow further assessment of accuracy • Agreement on accuracy requirements is part of the development processes and is guided by the standards set out by our methodological team and international best practice. They are reviewed as part of the regular output review using our standard quality framework ASPIRE.
8.9	Meets As stated in 8.8 above, producers of official statistics in New Zealand are required to adhere to the Protocol 3 (Accuracy) of the Tier 1 Statistics, principles and protocols. This protocol specifies that survey errors should be produced and be used to assess accuracy and guide use. The error types produced by producer of official statistics, are expected to vary with the data sources used. Similarly, the acceptable level of error is also expected to vary across subject areas and target characteristics. Stats NZ applies this protocol, in its role as producer of official statistics by having survey and non-survey errors produced and disseminated as part of the statistical processes. Survey errors are produced during the processing stage to allow results to be validated and included in our information releases to allow users to understand accuracy and suitability to their needs.
8.10	Meets As stated in 7.16 above, Stats NZ has an internal Revision policy, aligned to *Protocol 5: Release Practices from the Official Statistics System (OSS) Principles & Protocols for Producers of Tier 1 Statistics."* This policy is applied to all published Official Statistics produced by Stats NZ to provide transparency and confidence to users on the revisions we undertaken. Any

	revisions are accompanied by documentation which adequately explains their nature, provides good analysis of the differences between the original and revised series, and explains the effect on any previously published commentary or interpretation. For example, the revisions Section Revisions Labour Force Survey for the recent Household Labour Force survey release explains that the seasonal adjustment process used to adjust the data, the impact on current estimates as well as identifying estimates that might be affected by future revisions. Independent review and auditing is also used to assess the accuracy for procedures as part of output review. This is normally done as part of an update to concepts or a method such as a refresh of the CPI basket or adoption of upgraded classification such as HS2012 for trade data.
8.11	Meets Producers of Tier 1 Statistics, principles and protocols within New Zealand are required to comply with Protocol 1, Quality from the Official Statistics System (OSS). Element 3, of this protocol is Timeliness and it specifies that data must be released within a time period that permits the information to be of value to users. This protocol is based on the United Nations Fundamental Principles of Official Statistics and requires that releases dates are announced well in advance, timeliness of release is balanced with the need to avoid revisions and that standards for key economic statistics as prescribed in the International Monetary Fund (IMF) Special Data Dissemination Standards (SDDS) are meet. Stats NZ adheres to this through its *Release of Statistics policy*. Details of how the policy adheres to the protocol is specified in Sections 8.12, 8.13 and 8.14 below.
8.12	Meets Stats NZ adheres to this through its *Release of Statistics policy.* This requires users to be consulted and are advised in advance of any releases and of any significant changes in statistical methods. Releases include analysis and background information on methodology, and quality indicators.
8.13	Meets Producers of Tier 1 Statistics, principles and protocols within New Zealand are required to comply with Protocol 1, Quality from the Official Statistics System (OSS). Element 3, of this protocol is Timeliness and it specifies that data must be released within a time period that permits the information to be of value to users. Stats NZ adheres to this through its *Release of Statistics policy*. Under this policy, data is released to all users at a set time 10.45am on the specified day of release. This release is designed to provide equal access by users with ministers, media and the public gaining access at 10.45am across all channels.
8.14	Meets Timeliness (Element 3) of Protocol 1, from the Official Statistics System (OSS) also specifies the requirements for the release of provisional or preliminary data for producers of Tier 1 Statistics, principles and protocols within New Zealand. It recommends that there needs to be sufficient trade-off between early release and consistent quality over time in particular the need to avoid revisions.

	Stats NZ adheres to this through its *Release of Statistics policy* as well as the timeliness standards for key economic statistics prescribed in the International Monetary Fund (IMF) Special Data Dissemination Standards (SDDS). Our policy states that provisional and experimental series are to be released when acceptable. They should be clearly noted to avoid confusion and provide users of the data with the necessary confidence they need when using the data to make informed decisions.
8.15	Meets Producers of Official Statistics in New Zealand are required to adhere to the Tier 1 Statistics, principles and protocols. Element 7 (Consistency) of Protocol 1 (Quality) specifies that statistics should be coherent and consistent within the dataset, over time and with other major datasets. It is recommended that producers of Tier 1 Statistics, principles and protocols in New Zealand use standard practices and approaches to achieve this. This includes the use of international or national guidelines such as System of National Accounts (SNA), New Zealand standard areas classification for geospatial data or cross government standards such as New Zealand data and information management principles. It is further recommended by the protocol that release of Tier 1 Statistics, principles and protocols in New Zealand should be accompanied with a clear statement of the degree of compliance with agreed definitions, methods and practices. As producer of Official Statistics, Stats NZ meets this protocol through a wide range of ways. Our systems are based on New Zealand Government and International standards such as the standard business process and capability models. The design of our regular outputs are based on shared capability, platforms, tools and design. For example, social surveys run by Stats NZ all use a core set of questions, standard methods and concepts as recommended in the Social Survey Manual, align to an overarching social statistics architecture and sampling frame. As stated in earlier sections, we make substantial use of International standards and concepts. For example, the New Zealand Harmonised System Classification used for New Zealand overseas trade data is based on the World Customs organisation Harmonised Commodity Description and Coding system. Likewise, our Labour Market, BOP and National Accounts statistics have clear alignment to their International equivalents as do other Tier 1 statistics. There is scope to improve the consistency of data across the New Zealand data system. Stats NZ in its Government Chief Data Steward role is working to address this with the creation of a Data Leadership hub which is an external-facing service to support agencies to use good practice, guidance, resources and tools. This will cover the use of data standards to maximise the value of data and improve efficiency by ensuring consistency in the way information is collected, recorded, and shared. The New Zealand Open Government Data Programme, also led by Stats NZ, is also expected to contribute with the promotion of international open data standards.
8.16	Meets As stated for Section 8.15 above, producers of Official Statistics in New Zealand are required to adhere to Element 7 (Consistency) of Protocol 1 of the Principles and Protocols of Official Statistics. This specifies that statistics should be coherent and consistent within the dataset and over time.

	Stats NZ meets this protocol through extensive use of standard concepts, classifications, methods, processes and architecture. This includes reconciling statistics from the different sources and of different periodicity. For example, we have a time series based tool that allows users to view and download time series data from a large range of sources. The source data is put into a common time based framework to achieve this. Similarly our Integrated Data Infrastructure (IDI) and Longitudinal Business Database (LBD) use a common framework and linking techniques to create a single database using microdata from a range of data sources including non-government agencies.
8.17	Meets See 8.15 above for detail
8.18	Meets Stats NZ regularly engages with users in a number of ways to monitor the relevance and use of existing statistics and discover emerging need and priorities. This includes a formal 5 yearly meeting of Users of Official Statistics, small and more frequent Data Hui's and a regular survey of customer perceptions.
8.19	Meets User satisfaction surveys are undertaken on a regular basis. The results are publicly released and considered as an input for decisions about plans and priorities and they are reflected in the statistical work programmes. Stats NZ regularly engages with users in a number of ways to assess satisfaction. There is a regular annual survey of customer perceptions of both the website and our customised data services. We also seek consultation and feedback on significant statistical developments by user forums or consultation papers. An example was the consultation undertaken with the recent statistical geography review. Users were interviewed to identify how they use geography boundaries and their concerns, This included interviewing a wide range of customers from central and local government, the research community, private sector and community groups. In addition, there is the formal meeting of Users of Official Statistics occurs every five years as specified in the Statistics Act 1975. This meeting is designed to review user needs for Official Statistics produced by Stats NZ and other New Zealand agencies. It is focussed on monitoring the need, relevance and use of Official Statistics and discovering emerging need and priorities. Feedback from this meeting is then incorporated into the statistical programme of the relevant statistical producer. For example, feedback from the user forum is used as input to decide what content is prioritised to be on the next census form.

Response from adherent on Recommendation 8:

Please enumerate the main strengths and weaknesses identified with regard to recommendation 8. Are other good practices relevant to this recommendation implemented in your country? What kind of actions do you consider important to improve the situation as regards recommendation 8 in your country?

The majority of these recommendations are covered by New Zealand's Tier 1 Statistics, principles and protocols.

We are currently further developing this framework in a number of these areas such as use of standardised classifications across the New Zealand data ecosystem to improve the underlying quality of data and consistency of data. Stats NZ in its Government Chief Data Steward role is working to address this with the creation of a Data Leadership hub which is an external-facing service to support agencies to use good practice, guidance, resources

and tools. The New Zealand Open Government Data Programme, also led by Stats NZ, is also expected to contribute with the promotion of international open data standards.

Governance arrangements to monitor and manage this type of work across the system are still evolving in New Zealand. A cross Government Agency Committee known as the Information Group is undertaking an increasing role in examining data system needs and prioritising investment towards Government data production. From 2018, the Data investment framework developed by this group will be formalised in the New Zealand budget bid process. The recent designation of Stats NZ as the lead agency for government-held data, and appointment of Government Statistician and Chief Executive, Liz MacPherson to the newly-created role of Government Chief Data Steward is also part of this process to establish further accountability and governance for data in New Zealand. These changes are resulting in review of the scope and responsibilities of existing advisory groups to reflect the changing priorities

Recommendation 9.
Adherents ensure user-friendly data access and dissemination, so that statistics are presented in a clear and understandable form, released in a suitable and convenient manner, including in machine-readable form ('open data'), can be found easily and are available and accessible on an impartial basis with supporting metadata and guidance. This also entails a commitment to respond to major misinterpretations of data by users.

Good practice 9.1:
Statistical information is available through different dissemination tools, including media channels, Internet, online database and paper publications and easily downloadable in different formats.

Good practice 9.2:
A dissemination policy ensures the free dissemination of Official Statistics.

Good practice 9.3:
In order to ensure equal access to national statistics for international users, English-language statistical information (data and metadata) is available on websites of National Statistical Authorities.

Good practice 9.4:
A corporate strategy and appropriate guidelines are in place for the preparation of statistical publications (paper and electronic).

Good practice 9.5:
A corporate database and glossaries promote the use of standard statistical concepts and definitions.

Good practice 9.6 (adopted from the European Statistics Code of Practice):
Users are kept informed about the methodology of statistical processes including the use of administrative data.

Good practice 9.7 (adopted from the European Statistics Code of Practice):
Metadata are documented according to standardised metadata systems.

Good practice 9.8:
A corporate strategy and appropriate guidelines are in place for the preparation and dissemination of metadata on concepts, scope, classifications, basis of recording, data sources, statistical techniques, differences from internationally accepted standards, annotation of good practices, geographical coverage, etc.

Good practice 9.9:
Processes ensure that sampling and non-sampling errors are measured and systematically documented and that information is made available to users for all key statistical outputs.

Good practice 9.10:
Internal guidelines are available in statistical agencies on responding to erroneous comments. These guidelines are well known by staff.

Good practice 9.11 (adopted from the European Statistics Code of Practice):
Access to micro-data is allowed for research purposes and is subject to specific rules or protocols.

Good practice 9.12:
Where a pricing policy exists for specific services or custom-designed products, conditions of sale are clearly communicated.

Good practice 9.13:
Educational material is developed with the aim to enhance the use of Official Statistics and to avoid their misuse and misinterpretation.

Good practice 9.14:
Official Statistics are released in machine-readable form ('open data') that encourage reuse and analyses.

OECD best practice	Assessment against best practice
9.1	Meets Official Statistics produced from the New Zealand Government system are expected to be widely disseminated across multiple changes and formats under Protocol 5: Release Practices from the Official Statistics System (OSS) Tier 1 Statistics, principles and protocols. This includes making information available via the media, public libraries and the internet to promote widespread access. The protocol also requires producers to provide facilities to support both electronic and print media as well as readily available metadata and directories. Stats NZ adheres to this and the New Zealand data and information management principles through its Release of Statistics policy. Access to our data is provided in a wide range of levels (aggregates to microdata), formats (analytical reports, maps, tables or in databases) and tools such as Infoshare, New Zealand Stats, visualisation and profilers as well as bulk CSV downloads.
9.2	Meets Access to Official Statistics produced from the New Zealand Government system must be equal and open under Protocol 5: Release Practices from the Official Statistics System (OSS) Tier 1 Statistics, principles and protocols. This protocol is based on the United Nations Fundamental Principles of Official Statistics Stats NZ as an example, adheres to this and the New Zealand data and information management principles through its Release of Statistics policy. This allows a wide range of data, metadata and analytical reports to be freely available on our website including datasets where users can customise and download their required information.
9.3	Meets Producers of Tier 1 Statistics, principles and protocols within New Zealand are required to comply with Protocol 5 Release Practices from the Official Statistics System (OSS). This includes presenting statistics in an understandable manner that can be widely disseminated. Stats NZ adheres to this through its *Release of Statistics policy.* Both data and metadata on the Stats NZ website are available in the English language as one of the official languages of New Zealand. Translations are available for any content published in Te Reo.
9.4	Meets

	Guidelines for the preparation of statistical publications (paper and electronic) are also covered by Protocol 5: Release Practices from the Official Statistics System (OSS), New Zealand data and information management principles and the New Zealand Government Web standards. All producers of Tier 1 Statistics, principles and protocols are required to comply with these guidelines and Stats NZ does this via an internal publishing policy for Official publications and Research Papers and the *Release of Statistics policy*.
9.5	Meets Under Protocol 5, Tier 1 Statistics, principles and protocols produced from the New Zealand Government system are required to be widely disseminated with unambiguous presentation, supported by commentary that provides background information on methodology, quality indicators, glossaries and links to other related information. Stats NZ has a corporate database Aria, for concepts, classifications and standards that is available both internally and from the Stats NZ website in adherence with this requirement. Additional information on standards, glossaries and questionnaires are also available from the website under Survey resources or with standard reports.
9.6	Meets Information on methodology of statistical processes including the use of administrative data are available from the Stats NZ website under Methods Section. This Section contains information as recommended by Protocol 5 on the following areas: 1. Information about how data is organised and coded 2. Information on the methods used in data analysis 3. Information on data integration undertaken 4. Research paper on analytical or methodological topics 5. Information about survey design and collection methods.
9.7	Partially meets While New Zealand statistical producer use the New Zealand data and information management principles to document metadata, further work is need to improve the availability and standardise metadata across the New Zealand data system. Stats NZ in its Government Chief Data Steward role is working to address this with the creation of a Data Leadership hub which is an external-facing service to support agencies to use good practice, guidance, resources and tools. This will cover the use of data standards to maximise the value of data and improve efficiency by ensuring consistency in the way information is collected, recorded, and shared. The New Zealand Open Government Data Programme, also led by Stats NZ, is also expected to contribute with the promotion of international open data standards.
9.8	Partially meets Under Protocol 5, producers of Tier 1 Statistics, principles and protocols are required to provide and disseminate background information on methodology, quality indicators, glossaries and other related metadata. However, it is recognised that the guidelines and dissemination of this metadata could be improved across the New Zealand data system.

	Stats NZ are undertaking a number of key data accessibility and management activities to strengthen this area, both in our roles of Statistical producer and Government Chief Data Steward. These include increasing the percentage of data publically available at open data standard level as well as automate processes to generate metadata as an integral part of the statistical production. Our corporate database for concepts, classifications and standards has recently been made available externally. We also are working with other producers to improve the availability of metadata across the system via our Data Leadership hub.
9.9	Meets Under Protocol 5, producers of Tier 1 Statistics, principles and protocols are required to support release of data with commentary that provides background information on quality indicators including sampling and non-sampling errors. Stats NZ for example adheres to this requirement through its *Release* of *Statistics policy* which provides the guidelines for measurement and documentation of sampling and non-sampling errors and how that information is made available to users. Individual releases are accompanied by relevant supporting and explanatory information on associated errors.
9.10	Meets Producers of Tier 1 Statistics, principles and protocols within New Zealand are required to comply with Protocol 5 Release Practices from the Official Statistics System (OSS). Element 3 of this covers responding to erroneous comments as well as accidental or wrongful release. In the case of Stats NZ, this is done by the use of internal *Media policy* that provides internal guidelines for responding to erroneous comments as well as procedures specified in manuals for key output areas.
9.11	Meets Stats NZ has a specific guidelines for access to micro-data for research purposes which is publically available from our website Microdata access. These guidelines are based on the 5 Safe Principles, outline the process and responsibilities associated with obtaining access as well as how the guidelines align to other security, privacy and legal documents.
9.12	Meets Most Stats NZ information can be accessed by self-help however, we also provide an information centre service to help customers find what they need. We also offer a customised data service for more complex data requests. We charge on a cost recovery basis for this service and details of this service are available from the following link Customised services. Where a pricing policy exists for specific services or custom-designed products, our internal pricing policy require that terms and conditions of sale are clearly communicated with the original quote and with delivery of goods.
9.13	Meets Stats NZ meets this requirement in multiple ways: 1. By disseminating Tier 1 Statistics, principles and protocols with unambiguous presentation and metadata that provides background information on methodology, quality indicators, glossaries and links to other related information

	2. Provision of education and training resources in using data ranging from classroom activities for primary and secondary teachers to guidance and training for users through our data knowledge centre 3. Provision of consultancy services to support good practice, provide assurance and grow capability for Government agencies.
9.14	Partially meets While Protocol 5 and the New Zealand data and information management principles require New Zealand Official Statistics to be widely disseminated using multiple channels, the availability of information in machine-read form can be improved. The New Zealand Open Government Data Programme was recently set up to led this work Open Data New Zealand. Stats NZ in its role as Government Chief Data Steward is supporting other Government agencies to make their data open through this programme and providing advice and expertise to support this through our Data Leadership hub. Stats NZ itself, has a number of confidentialised datasets including the most recent census results, accessible through the open data website at www.data.govt.New Zealand. In addition, we have recently ran our own open data forums and been active sponsors of recent GovHacks. We are also have an experimental Stats NZ data search bot and APIs for direct download of data. Our experimental APIs are in OData and JSON formats, currently hosted on an Azure environment. We have an Open data collaboration forum where our customers can work with us to shape our future open data offerings. We have been actively looking to collaborate with other customers interested in open data feeds, and to date have had discussions with a number of New Zealand Government agencies.

Response from adherent on Recommendation 9:

Adherents ensure user-friendly data access and dissemination, so that statistics are presented in a clear and understandable form, released in a suitable and convenient manner, including in machine-readable form ('open data'), can be found easily and are available and accessible on an impartial basis with supporting metadata and guidance. This also entails a commitment to respond to major misinterpretations of data by users.

Access to and the dissemination of Official Statistics produced from the New Zealand Government system are required to comply with the framework of Protocol 5: Release Practices from the Official Statistics System (OSS). Tier 1 Statistics, principles and protocols. This framework requires Tier 1 statistics to be accessible, widely disseminated and publically released in a prescribed manner. They are to be secure, impartial, interpretable, correct and revised as needed to protect the integrity of the Official Statistics System of New Zealand. This international comparable framework is further supported by cross government initiatives such as New Zealand data and information management principles, Open Data Programme, New Zealand Goal Framework and legislation such as the Copyright Act 1994, Privacy Act 1993, Statistics Act 1975, Official Information Act 1982 and Public Records Act 2005 .

The New Zealand Data and Information management principles provide guidance at detailed level about the management and retention of data and information for government agencies. It provides detail on government ICT strategy, architecture, technical standards such as APIs, GEA-New Zealand, authentication and other technical or web standards as well as case studies. The principles in summary, government data and information should be open, readily available, well managed, reasonably priced and re-usable unless there are necessary reasons for its protection. Personal and classified information will remain protected. Government data and information should also be trusted and authoritative.

New Zealand Open Government programme focuses on:

1. leading the work that has placed New Zealand sixth in the Open Data Barometer global rankings for readiness, implementation and impact of open data
2. working with government agencies on the supply side to raise awareness, support, inform, troubleshoot and advise on their release of open government data
3. working with users of open government data (both within and outside government) on the demand side to understand and represent their data needs, troubleshoot, and connect them with relevant government contacts
4. representing New Zealand government in the international open data community – including membership of the Open Data Institute Leaders' Network and the Open Data Charter Stewards' Group
5. supporting local initiatives using open government data, such as GovHack, International Open Data Day and the Open Government Ninjas online group.

New Zealand Goal (New Zealand Government Open Access and Licensing) framework provides guidance for agencies to follow when releasing copyright works and non-copyright material for re-use by others. It aims to standardise the licensing of government copyright works for re-use using Creative Commons licences and recommends statements for non-copyright material. New Zealand Goal has a separate Software Extension (New Zealand Goal -SE) for licensing and releasing copyright software works under free and open source software licences New Zealand Goal-SE makes use of the General Public Licence (GPL) and the Massachusetts Institute of Technology (MIT) licence, providing software specific guidance for releasing publicly funded software as open source.

However, the application and uptake of these frameworks and principles vary across the New Zealand data system and it is recognised that improvements can be made. Key areas for improvement are:

1. To improve and expand the availability and standardise metadata across the New Zealand data system.
2. To increase the availability of information in machine-read form can be improved.

Stats NZ in its Government Chief Data Steward role is working to address this with the creation of a Data Leadership hub which is an external-facing service to support agencies to use good practice, guidance, resources and tools. This involves working alongside other Government executives to ensure a shared system approach and co-design of the enabling infrastructure that will help agencies grow their capability and solve data challenges. These initiatives include, improving access to data, facilitating open data, and implementing standards. It will cover the use of data standards to maximise the value of data and improve efficiency by ensuring consistency in the way information is collected, recorded, and shared.

Stats NZ is also working to address this in our producer of Official Statistics role and reviewing our own agency processes, policies and channels to strengthen these areas. These include increasing the percentage of data publically available at open data standard level, improving the sustainability of our integrated data infrastructure (used by external researchers) as well as working with our data suppliers and partners to reduce holding multiple copies of data across the system. We will have a website in late 2017 based on a topic based design that should make the web site more user friendly, our data tools easier to find, and give users a better overall experience. Associated with this new website, testing is being carried out to open our data by improving our channels, specifically, have API's in place for direct download of data, and improve access to our Integrated Data Infrastructure database.

Recommendation 10.
Adherents establish responsibilities for co-ordination of statistical activities within the National Statistical System. To this end, Adherents should ensure that:
i) the co-ordination of statistical activities among statistical producers is done through the use of standard concepts and classifications and avoids the duplication of effort;
ii) responsibilities for such co-ordination function are clearly laid out and anchored in statistical legislation.

Good practice 10.1:
The role and responsibilities of all producers of statistics are clearly determined by law. A co-ordinator of the National Statistical System, such as the NSO, is also designated by law.

Good practice 10.2:
The designated co-ordinator has responsibility to co-ordinate the statistical activities of official producers in the NSS and to represent the NSS as a whole. This concerns in particular the use of appropriate statistical concepts and

procedures, the implementation of international standards and efforts to minimise duplications in data collection, production and dissemination of Official Statistics.

Good practice 10.3:
Procedures, mechanisms, tools, guidelines, or agreements are in place to ensure effective co-ordination within the NSS. Procedures include: establishment of a national statistics plan; co-ordinated data dissemination, e.g. through a single data portal; assistance with implementation of international standards and classification; and common quality management processes.

Good practice 10.4:
Exchange of statistical information between statistical agencies is actively undertaken.

OECD best practice	Assessment against best practice
10.1	Meets The New Zealand Statistics Act 1975 outlines the role and powers of the Government Statistician and how official statistics will be coordinated. Other provisions in the Act include Stats NZ's powers to collect statistics, run a five-yearly national census of population and dwellings, and apply offences and penalties for refusing to supply information to collectors.
10.2	Meets Producers of New Zealand's most important statistics must adhere to the Tier 1 Statistics, principles and protocols. The principles and protocols addresses the key objectives in the Statistics Act 1975, the Privacy Act 1993, the Official Information Act 1982 and the Public Records Act 2005 as well as the United Nations Fundamental Principles of Official Statistics. The Principles and Protocols for Producers of Tier 1 Statistics relevant to this recommendation include: 1. Principle 4 – Coherence - The value of statistical data is maximised through the use of common frameworks, standards and classifications 2. Principle 6 – Efficiency - Official Statistics agencies strive to be efficient and provide value for money 3. Principle 8 – Minimising respondent load - The costs of compliance are kept to an acceptable level and data is collected only when the expected benefits of a statistical survey exceed the imposition on providers 4. Principle 9 – Maximising existing data sources -Maximise the use and value of existing data by integrating or aligning available statistics and administrative sources 5. Principle 10 – International participation - Official Statistics agencies make use of and contribute to international statistical developments.
10.3	Meets As stated earlier, New Zealand's most important statistics Tier 1 Statistics, principles and protocols. This framework ensures a high standard of quality, reliability and integrity so to provide trust and confidence to Government decision-makers and other decision-makers, the New Zealand public, and the international community. The principles and protocols addresses the key objectives in the Statistics Act 1975, the Privacy Act 1993, the Official Information Act 1982 and the Public Records Act 2005 as well as the United Nations Fundamental Principles of Official Statistics. Collectively, the principles embodied in these instruments apply to all Tier 1 statistics.

10.4	Meets Exchange of statistical information between statistical agencies is actively undertaken. Producers of Tier 1 Statistics, principles and protocols must adhere to Principle 9 of the Principles and Protocols to maximise the use and value of existing data by integrating or aligning available statistics and administrative sources.

Response from adherent on Recommendation 10:

Please enumerate the main strengths and weaknesses identified with regard to recommendation 10. Are other good practices relevant to this recommendation implemented in your country? What kind of actions do you consider important to improve the situation as regards recommendation 10 in your country?

Many of New Zealand's statistics, are produced according to international standards and frameworks which allow for comparisons between countries. The United Nations Fundamental Principles of Official Statistics, for example, provides the basic framework for Official Statistics in New Zealand.

New Zealand's Government Statistician, is mandated through the Statistics Act 1975 to coordinate statistical activity across New Zealand's Official Statistics system by:

- driving the overall performance of the Official Statistics System and ensuring New Zealand gets the information it needs, and that this information is value-for-money at the lowest possible cost to government, the community, and suppliers of data
- providing direction to the Official Statistics System including working with government departments to build shared ownership, minimise duplication, and maximise reuse of data
- defining and agreeing on the results that agencies will focus on together
- coordinating statistical activities across government, including setting statistical standards, reviewing and commenting on the validity of statistics, monitoring progress and performance, and ensuring that action is taken if expected results are not achieved
- advising the government on policies, priorities, and the costs and benefits of statistical activities.

The Government Statistician also holds the new role of the Government Chief Data Steward of New Zealand, a role which is the functional lead for New Zealand's public sector data. This involves working alongside other Government executives to ensure a shared system approach and co-design of the enabling infrastructure that will help agencies grow their capability and solve data challenges. These initiatives include, improving access to data, facilitating open data, and implementing standards. These include the:

- Information Group
- Data Leadership hub
- Data Road Map
- Open Data

Information Group: A cross Government agency committee known as the Information Group examines data system needs and helps prioritise investment towards Government data production. The Information Group advises from a system-wide perspective on how Government can better unlock the value of the information it holds on behalf of citizens. To date, the Information Group has strengthened data and analytics networks across the Government data system. The Information Group has also developed a Data Investment Framework to identify critical system gaps and provides system-wide approach to data investment.

Data Leadership hub: Work is being undertaken to develop a Data Leadership hub which is an external-facing service to support agencies to use good practice, guidance, resources and tools. This will cover

- Data standards: to maximise the value of data and improve efficiency by ensuring consistency in the way information is collected, recorded, and shared
- Data stewardship: create best-practice data management that is easy for all to use
- Data consultancy: Stats NZ will provide a consultancy service for agencies. This means agencies can request data specialists to work with them for varying periods of time, which provides practical support to help them better manage, and securely share, the data they hold
- Data knowledge centre: a web portal supported by real people, the Data Knowledge Centre provides support for agencies to maximise the value they get from data.

Data Road Map: The Data Road Map is under development. The Data Road Map provides a shared vision to support agencies to build capability, and access and use data effectively and efficiently. This responsive, flexible foundation supports data use across Government, reducing duplication and cost.

Open Data: The goal of Stats NZ's Open Government Data Programme is to accelerate the release of open Government data through expanding and deepening open data practice in Government agencies, and continued engagement with users of Government data. The Programme includes:

- working with government agencies to raise awareness, provide support, and advise on their release of open data
- working with data users (both within and outside government) to understand and represent their data needs
- representing New Zealand Government in the international open data community.

Adoption of the International Open Data Charter was approved by New Zealand Cabinet on 21 August 2017. The Open Government Data Programme is coordinating the implementation of the charter principles by Government agencies.

Recommendation 11.
Adherents commit to international co-operation. To this end, Adherents should:
i) encourage statistical producers to achieve common goals in statistics jointly with the statistical producers in other countries and with international organisations, with a view to developing internationally comparable statistics, to designing international standards and to exchanging information on good practice;
ii) provide the necessary data for the OECD's reporting system and analytical work, in compliance with international statistical standards as recognised by the OECD and preferably using the Statistical Data and Metadata eXchange method/standard in particular for domains with internationally agreed Data Structure Definitions (DSDs).

Good practice 11.1:
National statisticians participate actively and regularly in international expert groups, conferences and workshops.

Good practice 11.2:
National Statistical Authorities participate in joint projects with other countries to share development burden.

Good practice 11.3:
Heads of NSOs or their staff chair international statistical bodies.

Good practice 11.4:
National Statistical Authorities participate in the main international statistical fora to exchange on their statistical practices, to participate in research and conceptual work and to contribute actively to the definition and design of international norms and statistical standards.

Good practice 11.5:
Access to micro-data by international organisations is explored as a means to reduce the burden of countries responding to questionnaires.

Good practice 11.6:
National Statistical Authorities provide complete and timely answers to the questionnaires of international organisations.

Good practice 11.7:
Producers of Official Statistics use modern statistical and IT tools, such as SDMX for the regular transmission of data and metadata to international organisations, notably the OECD.

OECD best practice	Assessment against best practice
11.1	Meets Stats NZ is an active participant in a range of International Working Groups both in the European and Asia/Pacific areas. Areas of involvement include strengthening core statistics such as National Accounts, Labour market, Prices and populations as well as defining common statistical

	architecture, standards and methods. We are also increasing our involvement in international fora on emerging data needs such as development of new data measures, open data standards or data sources together with the defining measures for global indicators such as sustainable development goals.
11.2	Meets Stats NZ works with our Pacific Partners to build capability in the Pacific as part of a New Zealand aid development programme and provides regular advice and mentoring to Pacific Island NSO's. The focus to build capability long term to strengthen overall socio-economic governance in the Pacific. This work is aligned to regional and national plans in the Pacific as well as collaborating with the Australian Bureau of Statistics and other New Zealand Government agencies to ensure our respective Pacific development programmes are aligned and minimise burden on Pacific Island governments. In addition we are working in partnership with Statistics Netherlands to explore the potential of big data sources to make statistics production faster, better and more while reducing cost and administration burden.
11.3	Meets The Government Statistician is a member of the CES Bureau and we chair a number of international committees, including the UN Expert Group on International Statistical Classifications and the Committee on Statistics and Statistics Policy (CSSP).
11.4	Meets Stats NZ is an active participant that actively shares and exchanges research and conceptual work across European and Asia/Pacific areas. A third of our International Engagement Programme would be classified as this. Recent exchanges of research and conceptual work include the web scraping work and use of scanner data for Prices, population estimation using Bayesian methodology and other experimental series as part of our Census Transformation project and the capability work we led in the High level group for the Modernisation of Statistics.
11.5	Meets Our database on our Stats NZ website is accessible to all and uses open standards that are in common use by a number of International organisations. We are in the process of, selectively, expanding our access to microdata to allow international access under certain circumstances. A pilot for international access was recently undertaken with the European Commission Joint Research Centre on integrated data for policy analytics.
11.6	Meets There is dedicated responsibility to provide complete and timely answers to the data questionnaires of international organisations. Every attempt is made to provide prompt and appropriate responses to policy questionnaires and working group papers.
11.7	Meets We have standard metadata and data exchange standards for our products. In addition, A tailored data dictionary can be created at user request containing data methodology, variable names, descriptions and code ranges for all our database products.

Response from adherent on Recommendation 11:

Please enumerate the main strengths and weaknesses identified with regard to recommendation 11. Are other good practices relevant to this recommendation implemented in your country? What kind of actions do you consider important to improve the situation as regards recommendation 11 in your country?

Stats NZ is working with other New Zealand Government agencies to share information, standards and coordinate our efforts to improve our international collaboration and better represent New Zealand internationally. Stats NZ will be updating its International strategy this financial year to reflect this and clarify outcomes. This will involve a review of current representation and priorities.

Much of our current International work is focused on strengthening our core statistical production while reducing cost and administration burden. However, there is a growing awareness that our international work needs to become more customer-centric and aligned to indicators and the growing international data community. Recent International customer based collaborations have included assisting the Secretariat of Pacific Community to define and identify their key customers, participation and sharing our experience with innovation including taking part in a virtual hackathon as well as participation and sharing of our experience with our integrated database and innovative website.

Our International Engagement is expected to broaden with the Government Statistician now also holding the new role of the Government Chief Data Steward of New Zealand. This will require us to representing New Zealand Government in the International open data community and work to improve access to data and standards in a wider range of areas that the traditional areas of statistical production.

Our Pacific aid development programmes across the New Zealand Official Statistics system have already been reviewed to ensure alignment under a common Pacific framework and minimise Pacific Island country burden. We are also working to align the New Zealand Pacific programmes with work undertaken by Australia and Pacific national statistical offices to develop a regional Pacific development programme and champion the region internationally.

There is dedicated responsibility to provide complete and timely answers to the data questionnaires of International organisations. Data is exchanged with a range of International for a using open data and metadata standards or the format of their choice. Our database on our Stats NZ website is accessible to all and also uses open standards that are in common use by a number of International organisations. We are in the process of, selectively, expanding our access to microdata to allow International access under certain circumstances. A pilot for International access was recently undertaken with the European Commission Joint Research Centre on integrated data for policy analytics.

Recommendation 12.
Adherents encourage exploring innovative methods as well as new and alternative data sources as inputs for Official Statistics, and in particular encourage statistical agencies to actively explore possibilities to use new data sources (including large datasets owned by the private sector), or to combine existing and new data sources as input for Official Statistics. At the same time, these opportunities are weighted against the limits of using modern information technologies and the need to maintain the quality of Official Statistics.

Good practice 12.1:
National Statistical Authorities actively encourage and undertake research on new sources and new methods for Official Statistics, including in the private sector and through combination of existing sources.

Good practice 12.2:
National Statistical Authorities develop methodological work and IT structure to ensure the quality of Official Statistics when new and alternative data sources are used as input.

Good practice 12.3:
An explicit policy is formulated towards the use of "Big Data[1]" and private data that considers legal, technical and methodological implications.

Good practice 12.4:
Implications for statistical infrastructure, statistical methods, and analytical tools are systematically assessed.

Good practice 12.5:
There are explicit agreements between producers of Official Statistics and owners of private data; and legislation which regulate access to this information and deal with privacy issues.

Good practice 12.6:
National Statistical Authorities participate in the development of capabilities to process geospatial data.

OECD best practice	Assessment against best practice
12.1	Meets Stats NZ is actively researching new data sources and methodologies for use in official statistics. We are currently investigating alternative ways of producing small-area population, social, and economic statistics in the long term. There are a range of such programmes underway, including our Census Transformation Programme, which is preparing New Zealand to move away from a full enumeration approach to obtaining population information. In addition we are working in partnership with Statistics Netherlands to explore the potential of big data sources and collaborating with the Australian Bureau of Statistics to explore the use of web-scraping and scanner data for Prices. We are also working with a range of pilot projects with partners from New Zealand iwi and non-government organisations to facilitate access to existing data, develop capability and measures that are relevant and used by their communities. Another example is the work that Stats NZ, ACC and the New Zealand Private Surgical Hospital Association undertook in partnership to review the index for elective survey costs. The New Zealand ACC provide funding to public and private hospitals to cover the costs of providing surgeries and medical assistance for ACC-related injuries such as surgeon fees, capital costs, medical consumables etc. The existing methodology used with this, was believed to be insufficient to provide an accurate representation of the annual inflationary impact. To address this, ACC and the New Zealand Private Surgical Hospital Association requested Stats NZ to partner with them to develop a new index. Stats NZ also hosts an innovation website (http://innovation.stats.govt.New Zealand/), which allows Stats NZ to share initiatives, and develop, test and refine products and services. Users are invited to test out the ideas, products and services and then provide feedback. Initiatives include a data knowledge centre prototype to help users find, use and manage New Zealand Government data, a Stats NZ data search bot, and experimental APIs which will help Stats NZ to better understand the formats, metadata and documentation the user needs.
12.2	Meets Stats NZ have recently adopted 'ASPIRE' to assess quality of official statistics when new and alternative data sources are used as input. ASPIRE is an evaluation process that gives rise to a set of numerical indicators that over time signify a changing level of quality risk for a statistical product. Assessment of key outputs is undertaken annually. We also share and invite comment on initiatives by the innovation website and peer review from other statistical or analytical partners. Technology designs are reviewed and assessed by our Enterprise Design Authority which has external members. Conceptual, logical and high level

	physical designs are required to align to overarching all of government architectures in order to provide seamless access to disparate data stores.
12.3	Partially meets Integrated data policy exist and we are actively investigating options in key areas of Census transformation, prices, data integration futures and the Trust Model. While we have a 4 year excellence horizon which guides research priorities, there is no overarching policy for statistical production at this time.
12.4	Does not yet meet
12.5	Does not yet meet
12.6	Meets We contribute to the national spatial data infrastructure of New Zealand by maintaining the geographic classifications and spatial data such as addresses, roads imagery, topographic and administrative data in one system that allows the geocoding of statistical data when location is known. Training in the use of geospatial tools and techniques are provided by our geospatial team to view, understand and visualise data from the geospatial perspective in the form of maps, globes, reports and charts. Stats NZ and Land Information New Zealand collaborate closely on a range of initiatives to integrate location enabled statistical data with spatial data and showcase the resulting benefits. Examples of this collaboration has included joint data forums to test ideas such as using publically available business location information from google to improve business statistics as well as to develop common standards and highlight constraints and privacy considerations.

Response from adherent on Recommendation 12:

While Stats NZ is actively researching new data sources and methodologies for use in official statistics, we are still developing our policies and assessment criteria in this area. We have a 4 year excellence horizon which guides research priorities and a dedicated programme in operation from September 2016, that tests the concepts for innovative "outside the box" initiatives with the assistance of external vendors. This has resulted in substantial learnings in areas such as direct data sourcing from hard to reach populations, efficiency through automation, suitability of alternative data sources and modelling techniques and the Trust Model. We have also work with other partners both in New Zealand and internationally to explore opportunities, learnings and draw on the experience of others. We invite feedback on ideas, products and services via the Stats NZ innovation website, from peers and at National and International forums.

In addition, we have actively participating in the development of capabilities to process and provide a geospatial perspective on data in partnership with Land Information New Zealand for several years. Our geospatial team are currently updating New Zealand's statistical geographies in the first major review since 1992. The aim of this work is to produce data that better reflects places and communities and minimises the amount of data suppression we have to apply to smaller geographic areas. This statistical standard for geographic Areas defines the places for which we deliver statistics and will be used in the next New Zealand census (March 2018). GIS technology, satellite imagery are some of the tools used in this design.