

Expert Group meeting on International economic and social classifications New York, 18-20 May 2011

Standard Classification of Statistical Activities: A New Zealand Perspective

Andrew Hancock, Statistics New Zealand



## Standard Classification of Statistical Activities: A New Zealand Perspective

Andrew Hancock

Classifications and Standards, Statistics New Zealand
Private Bag 4741
Christchurch, New Zealand
info@stats.govt.nz
www.stats.govt.nz

**Liability statement**: Statistics New Zealand gives no warranty that the information or data supplied in this paper is error free. All care and diligence has been used, however, in processing, analysing and extracting information. Statistics New Zealand will not be liable for any loss or damage suffered by customers consequent upon the use directly, or indirectly, of the information in this paper.

**Reproduction of material:** Any table or other material published in this paper may be reproduced and published without further licence, provided that it does not purport to be published under government authority and that acknowledgement is made of this source.

## Introduction

The New Zealand Standard Classification of Statistical Activities (NZSCSA) is based upon the United Nations Economic Commission for Europe Classification of International Statistical Activities. The classifications are identical in scope, coverage, and structure, the only difference being based upon the Statistics New Zealand classifications naming convention to adopt international standards as New Zealand standards.

## Rationale

Prior to the introduction of NZSCSA there was no approved standard classification of statistical activities in use within Statistics New Zealand or across the New Zealand Official Statistical System. The NZSCSA classification provides a starting point for organising statistical data and metadata into statistical domains which relate to the broad type of statistical activities. The classification is a three level classification comprising Statistical Domains at the first level and Statistical Areas at the second level. A further breakdown at level 3 is provided in some specific instances but not in all instances of the classification structure. This provides a level of flexibility for users to adapt the structure and obtain more detail in specific areas of the classification.

A statistical domain refers to a statistical activity that has common characteristics with respect to variables, concepts, and methodologies for data collection and the whole statistical data compilation process.

The international classification is used for electronic interchange of aggregated statistics between international organisations. The international classification is also embedded in the Subject-Matter Domains and Cross Domain Concepts of the Statistical Data and Metadata Exchange system (SDMX). SDMX is the international standard for the reporting and interchange of statistical metadata. The Statistical Domains are consistent with the conceptual treatment in the Statistics New Zealand Metadata framework which is currently based on the Metanet system. However a new metadata system is under consideration based on the Data Documentation Initiative (DDI) and SDMX.

The Statistical Domains and Areas are embedded into Statistics New Zealand Document One (DocOne) framework, and have been used to create the Subject Matter Area (SMA) DocOne libraries, although with some variation due to implementation issues (ie the volume of work in some areas and limits on the capacity of DocOne libraries), and also pragmatic issues (eg ensuring SMA work is not split across libraries). It is also used to categorise folders within the Classifications and Standards by Topic section of the Classification and Standards DocOne library.

Additionally the statistical areas have been incorporated into the subjects listing of the Classifications and Related Standards (CARS) system. It is the intention to use the top level domains and the statistical areas of NZSCSA as the starting point when navigating for classifications when the CARS system is enhanced. Existing CARS topics and classifications will be assigned to a NZSCSA statistical area where this has not already been done.

Two examples of where the NZSCSA is currently used by Statistics New Zealand are:

within the Survey Manager (Survey Info) database (SIM). Used to sort views and attach statistical activities to information held in SIM - for example SIM profiles, glossary of

terms and glossary of acronyms. (Note that the UNECE classification was introduced into SIM in 2007).

in the metadata (DDI) that supports data held in the data archive

Some examples of where the NZSCSA could potentially be used or where there might be a need to concord to the standard:

Subject categories used on the Statistics New Zealand website including within Search, Browse for stats and Infoshare functions / tools. The current categories are based on feedback from customer focus groups organised by Product Development and Publishing (ie for a public audience) and although there are some similarities to UNECE classification, there is no concordance between these at present.

The Library Team use library standards for cataloguing / categorising publications etc. related to statistical activities.

Statisphere - Statistics by Subject view: <a href="http://www.statisphere.govt.nz/statistics-by-subject.aspx">http://www.statisphere.govt.nz/statistics-by-subject.aspx</a>

Survey Notification System / OSS Notification Form - 'Subject keywords for Statisphere's search engine' field - <a href="http://www.statisphere.govt.nz/about-official-statistics/survey-notification-system.aspx">http://www.statisphere.govt.nz/about-official-statistics/survey-notification-system.aspx</a>

Government datasets online - <a href="http://www.data.govt.nz/">http://www.data.govt.nz/</a> - subject classification / keywords used on Homepage and in Search functionality (each dataset has one or more keywords associated with it)

The NZSCSA can be found at:

http://www.stats.govt.nz/surveys\_and\_methods/methods/classifications-and-standards/classification-related-stats-standards/statistical-activities-v2.aspx

## Issues

Statistics New Zealand, in adopting the International Standard Classification of Statistical Activities, envisaged a period of settling in for the classification as there are a number of classification best practice and operational issues in using the classification.

When it was decided to first investigate the use of the classification, it was apparent that there was some uncertainty about what was the official version as two classifications were identified (one within UNSD and one within UNECE). Statistics New Zealand went with the UNECE version.

From a classifications best practice perspective, there were concerns around the code pattern and structure of the classification ie it is not neatly sequential or hierarchical which is problematic for storing in classification management systems. It was hoped that the structural issues could be resolved once the international standard was reviewed as this would flow back into the New Zealand standard.

The main usage of the International Statistical Activities classification is in Domain 1-3, whilst there is limited use of Domains 4-5. The concern exists that there are issues of mutual exclusivity between Domain 4 and other parts of the classification but in adopting the international classification a strict interpretation was applied.

In terms of the international category definitions, it was felt that whilst these did not provide exhaustive clarity as to content, and thus left open the possibility of interpretation, it was better to utilise the existing definitions and then identify through the operationalising of the classification any problems that may come up. This did make for some interesting decisions

when the classification was used in the Document One structure for the Statistics New Zealand Classifications and Standards team. The domains form the top level and then classification reviews or variables are embedded underneath based on the definitional material in the international classification. (see Appendix 1).

There is also concern about how well the classification can be used for sector-wide assessments particularly for national statistical strategies.

APPENDIX 1: Statistical Activity Classification structure as used within Statistics New Zealand's Document One Classification and Standards database.

DOMAIN	ACTIVITY
Population and Migration	
	Age
	Air Routes
	Country Children
	Family Structure
	Fertility
	Household Composition
	Living Arrangements
	Ports – Sea and Air
	Relationship and Partnership Status
	Relationship to Reference Person
	Sex
	Usual Residence
	Years of Arrival/Years since Arrival
Labour	. 23.0 3.7 11.1 3.1 1 3.1 0 3.10 0 7 11.1701
	Employment Status
	Hours Worked in Employment
	Labour Force Status
	Occupation
	Participation in Employment
	Status of Employment
	Workplace Address
Education	·
	Qualifications
Health	
	Cigarette Smoking
	Health
	Disability
Income and Consumption	
	Income
Social Protection	
Housing	
	Dwelling Type
	Fuel Types used in Dwelling
	Number of Occupants
	Number of Rooms/Bedrooms
	Tenure of Household
	Homelessness
	Dwelling Occupancy Status
	Rent Paid by Households
Justice and Crime	Mortgage Payments
Justice and Crime Cultural Activities	
Political and Other Community Activities	
Time-Use	
Cultural Identity	
Outtural lucility	Ethnicity
	lwi
	Language
	Maori Descent
	Religious Affiliation
	Sexual Orientation
	Gender
	General

Macro-economic Statistics	
Economic Statistics	
	Broad Economic Categories
	Financial Assets and Liabilities
	System of National Accounts Suite
	Classification of Economic Units
Business Statistics	
	Industry
	Institutional Sector
	Commodities/Products
	Standard Business Reporting
	Non-Profit Organisations
Sectoral Statistics	
	Agriculture. Forestry, Fisheries
	Energy
	Mining, Manufacturing, Construction
	Transport
	- Motor Vehicles
	- Travel to Work
	Tourism
	- Accommodation
	Banking, Insurance, Financial Statistics
Government Finance, Fiscal and Public Sector	-
Statistics	
	Currency
International Trade and Balance of Payments	
	Harmonised System (Trade)
Prices	
	Rent Amount
Labour Cost	
Science and Technology	
	Research
Environment	
Regional and Small Area Statistics	
	Geographic Classifications
Multi-Domain Statistics	
	Living Conditions, Poverty and Cross-Cutting Social
	Issues
	- Socio-Economic Status
Gender and Special Population Groups	
Information Society	
	Telecommunications
Globalisation	
Sustainable Development	
Coordination of International Statistical Work	
	Australian Bureau of Statistics
	United Nations Statistics Division