CHAPTER 4 : THE SPATIAL UNIT CODE SYSTEM

1 This chapter describes the system of nominal geocodes(1) which identify/represent ASGC spatial units.

2 The ASGC code system consists of several standard sets of numeric codes – one for each group of spatial units of a particular type, eg Australian States and Territories. The standard code sets are supplemented by a special purpose code set which is described in paragraphs 6–8 below.

Standard ASGC Codes

3 The codes in some standard sets can be used independently, eg the codes for Statistical Districts or States and Territories, while those in others need to be used in association with codes from other sets, eg SLA codes which need to be used together with State and Territory codes for unambiguous Australia wide identification of SLAs.

4 The reasons for adopting such a system of codes were partly historical (to minimise the costs of conversion of pre–ASGC codes to ASGC codes) and partly practical (to minimise spatial unit code sizes and to provide flexibility of choice in presenting spatial unit hierarchies for statistical output purposes).

5 A separate standard ASGC code set exists for each of the following:

(a) Census Collection Districts (CDs)

The Census Collection District is the smallest geographical area used in the collection of Census data and is the area enumerated by one Census Collector. These are identified by a unique six digit code within each State and Territory. The first two digits identify Census Divisions (these closely follow Federal electoral boundaries), the next two digits identify Census Subdivisions (ie Census Field Group Leader Workload Areas) and the last two digits identify CDs within a Census Subdivision and are allocated sequentially from 01 within each Subdivision. For complete Australia wide identification the six digit code needs to be used in conjunction with the one digit State/Territory code. CDs are the basic building blocks for aggregation to higher geographical levels (eg to Statistical Local Areas).

NOTE: Census Subdivisions and Census Divisions are geographic regions used in the Population Census field enumeration system and are not part of the ASGC and differ completely from ASGC Statistical Subdivisions and Divisions.

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(1) Nominal geocodes, as distinct from positional geocodes, merely identify spatial units by one or more symbols, eg numeric or alphanumeric codes. Positional geocodes also identify their location on maps.

(b) Statistical Local Areas (SLAs)

These are identified by unique four digit numeric codes within a State/Territory. They have the following features:

(i) Within each State/Territory SLA codes are in the range 0001–9990 (excluding those ending with 99). (Codes ending with 99 and those within the range 9991–9999 have been reserved for special purposes).

(ii) The arrangement of SLA codes within each State/Territory is in ascending numerical order for alphabetically listed Legal LGAs/SLAs. Gaps have been provided between the codes of adjoining SLAs to provide space for future expansion or change.

(iii) The fourth, ie last, digit of the SLA code is used as an indicator for the following characteristics:

- 0 indicates that the SLA equates with a Legal LGA,
- 1–8 indicates that the SLA is a part Legal LGA, and
- 9 indicates that the SLA represents either an unincorporated area, an off–shore/migratory category or an undefined category.

For unique Australia–wide identification each SLA needs to be identified, at least, by its own four digit code plus the code of the relevant State/Territory.

(c) Statistical Subdivisions (SSDs)

These are identified by unique two digit numeric codes within Statistical Divisions. Gaps between codes of adjoining SSDs provide space for future expansion or change. The ordering of SSDs within Statistical Divisions follows traditional practice. For unique Australia wide identification each SSD needs to be identified, at least, by its own two digit code plus the code of the relevant Statistical Division and State/Territory.

(d) Statistical Divisions (SDs)

These are identified by unique two digit numeric codes within States/Territories. Gaps between codes of adjoining SDs provide space for future expansion or change. The ordering of SDs within States/Territories follows traditional practice. For unique Australia wide identification each SD need to be identified, at least, by its own two digit code plus the code of the relevant State/Territory.

(e) States/Territories (S/Ts)

These are identified by unique one digit numeric codes within Australia.

(f) Urban Centres/(Rural) Localities (UC/Ls)

These are identified by unique five digit numeric codes within States/Territories. The arrangement of UC/L codes within each State/Territory is in ascending numerical order for alphabetically listed UC/Ls. Gaps have been provided between the codes of adjoining UC/Ls to provide space for future expansion or change. For unique Australia wide identification each UC/L needs to be identified, at least, by its own five digit code plus the code of the relevant State/Territory.

(g) Statistical Districts (S Dists)

These are identified by unique four digit numeric codes within Australia. The first two digits indicate the State, Territory or States within which the Statistical District falls. The majority of the Statistical Districts are contained wholly within one State/Territory and this is indicated by a zero (0) as the second digit, with the first digit indicating the State or Territory. In cases where Statistical Districts cross States/Territories boundaries the first digit indicates the major State/Territory and the second digit the minor State/Territory. The last two digits have been allocated in ascending numerical order to traditionally arranged Statistical Districts. Gaps in codes between adjoining Statistical Districts provide for future expansion or change.

(h) Legal Local Government Areas (Legal LGAs)

These are identified by unique four digit numeric codes within States/Territories. The Legal LGA codes were determined in conjunction with SLA codes and are strongly integrated with them. They have the following features:

(i) they are identical with SLA codes in all cases where there is a strict one to one correspondence between Legal LGAs and SLAs; and

(ii) their first three digits are identical with the first three digits of SLA codes in all those cases where Legal LGAs consist of two or three SLAs.

The above described incorporation of the Legal LGA code in the SLA code permits almost all SLAs to be linked with their respective Legal LGAs. The only exceptions occur in Queensland and the Northern Territory in the case of the following Legal LGAs:

- QLD: Albert, Brisbane, Logan, Pine Rivers, Redland, Caboolture, Gold Coast, Moreton, Thuringowa and Townsville; and
- NT : Darwin and Palmerston.

In these 12 exceptional cases the number of (actual/proposed) component SLAs of each of the Legal LGAs is too large for their codes to incorporate the links. However, the link can still be provided by using look–up tables.

For unique Australia–wide identification each Legal LGA needs to be identified, at least, by its own four digit code plus the code of the relevant State/Territory.

(i) Sections of State

These are identified by unique one digit numeric codes within States/Territories and need, for Australia–wide identification, to be associated with the code of the relevant State/Territory.

(j) Statistical Retail Areas (SRAs)

These are identified by unique four digit numeric codes within Australia. The first digit of the code specifies the State/Territory of the SRA and the remaining three digits identify the particular SRA within its State/Territory. The code is in ascending numerical order for SRAs listed in the following order: State/Territory x Statistical Division x Statistical Subdivision x Statistical Retail Area. Statistical Local Areas are ordered alphabetically within SRAs. In the Northern Territory, however, retail population limitations force the combining of SLAs across SSD boundaries to form an SRA. Gaps in the code between SRAs in adjoining Statistical Subdivisions provide for future expansion or change.

Special Purpose ASGC Codes

6 For certain statistical operations it is necessary to make provisions for the geographical classification of statistical information in cases where only incomplete location information is available. For example, a particular Population Census Schedule might provide insufficient location information to enable other information collected on the Schedule to be coded to an SLA or even a Statistical Subdivision. This usually occurs as a result of questions relating to usual residence 1 year ago and 5 years ago. There are many instances in such cases where only the Capital City or State name is given. Another example occurs within the Crime and Justice Statistics in the case of people with 'no fixed address' or 'no fixed abode'. To enable such vaguely specified information to be coded within the Main structure of the ASGC a system of special undefined spatial categories and codes has been devised for input processing purposes.

7 In this system the two digit codes of 88 (in the case of SSDs and SDs) and 98 (in the case of SRs) and unique four digit SLA codes within States/Territories ending in 99 designate the undefined categories which are intended for the following uses:

(a) Information required to be coded at the SLA level but only codable at SSD level should be coded to the undefined SLA within the defined SSD.

(b) Information required to be coded at the SLA level but only codable at SD level should be coded to the undefined SLA of the undefined SSD within the defined SD.

(c) Information required to be coded at the SLA level but only codable at the State/Territory level should be coded to the undefined SLA (9899) of the undefined SSD in the undefined SD within the defined State/Territory.

(d) Information required to be coded at the SLA level but only codable at the Australian level should be coded to the undefined SLA (9099) of the undefined SSD in the undefined SD of the undefined State in Australia. The undefined State is designated by the code 9. This is particularly true in cases where usual residence information is <u>not stated</u> .

(e) An SLA code of 9199 is to be used in 'usual residence' and similarly worded coding where the information is <u>not applicable</u> (eg children who were not alive 5 years ago).

(f) An SLA code of 9299 is to be used in 'usual residence' and similarly worded coding where the information relates to overseas.

(g) An additional code of 9399 is to be used to represent the aggregation of the 'Unincorporated' SLAs for each State and the Northern Territory. It is to be used as a defacto Legal LGA to enable State/Territory totals to be produced for some Population Census Legal LGA output.

(h) An SLA code of 9499 is to be used to designate 'no fixed place of abode' for use in children in care, prison and other social statistics.

8 For example, the undefined spatial unit codes within the Statistical Division of Sydney are as follows:

ASGC CODE				ASGC SPATIAL UNIT NAME
S	SD	SSD	SLA	
1				New South Wales
	05			Sydney
		05		Inner Sydney
			0199	Inner Sydney Undefined
		10		Eastern Suburbs
			0399	Eastern Suburbs Undefined
		15		St George–Sutherland
			0599	St George–Sutherland Undefined
		20		Canterbury–Bankstown
			0799	Canterbury–Bankstown Undefined
		25		Fairfield–Liverpool
			0999	Fairfield–Liverpool Undefined
		30		Outer South Western Sydney
			1199	Outer South Western Sydney Undefined
		35		Inner Western Sydney
			1399	Inner Western Sydney Undefined
		40		Central Western Sydney
			1599	Central Western Sydney Undefined
		45		Outer Western Sydney
			1799	Outer Western Sydney Undefined
		50		Blacktown–Baulkham Hills
			1999	Blacktown–Baulkham Hills Undefined
		55		Lower Northern Sydney
			2199	Lower Northern Sydney Undefined
		60		Hornsby–Ku–ring–gai
			2399	Hornsby–Ku–ring–gai Undefined
		65		Manly–Warringah
			2599	Manly–Warringah Undefined
		70		Gosford–Wyong
			2799	Gosford–Wyong Undefined

NOTE: (i) The first two digits of the undefined SLA code are normally in the range 00 to 89 (usually with a gap of 1) in main ASGC structure order with the last two digits always being 99; and

(ii) The undefined SLA code for each Capital City is 0099.

In addition the undefined Statistical Division for each State is:

S	SD	SSD	SLA	
1	88	88	9899	NSW UNDEFINED
2	88	88	9899	VIC UNDEFINED
3	88	88	9899	QLD UNDEFINED
4	88	88	9899	SA UNDEFINED
5	88	88	9899	WA UNDEFINED
6	88	88	9899	TAS UNDEFINED
7	88	88	9899	NT UNDEFINED
8	88	88	9899	ACT UNDEFINED

while the undefined State would be designated by State/Territory code 9 as follows:

9	88	88	9099	STATE UNDEFINED (ie Australia) or for Population Census purposes NOT STATED
1–9	88	88	9199	NOT APPLICABLE
1–9	88	88	9299	OVERSEAS
1–9	88	88	9399	DEFACTO LEGAL LGA for Population Census purposes
1–9	88	88	9499	NO FIXED PLACE OF ABODE

The undefined Statistical Region would be designated as follows:

S/T	SR	SLA	
1–5	98	0099	CAPITAL CITY UNDEFINED
6–8	04	0099	
1–5	98	9899	STATE/TERRITORY UNDEFINED
6–8	04	9899	

9 (a) With regard to Section of State, code 4 is used for Population Census purposes to designate the combined Off–Shore and Migratory category.

(b) Two additional codes of 1–8 00000 and 1–8 99999 are used by Population Census to designate Rural Balance and Off–Shore and Migratory categories respectively in the recording of Urban Centres/(Rural) Localities.

Spatial Unit Code Changes between ASGC Editions

10 The main causes of spatial unit code changes between ASGC editions are:

(a) spatial unit name changes – especially in the case of Legal LGAs and SLAs,

(b) some spatial unit area changes – eg where one spatial unit is split into two or more new ones,

(c) consequential changes – ie where one change forces another, and

(d) general code structure revisions.

11 Because not all code changes reflect real spatial unit changes and because not all spatial unit changes are reflected by code changes it is not possible to rely on codes alone to precisely identify spatial units. It is therefore important to always quote (in publications or tabulations) the particular ASGC edition as well as the codes and names of the spatial units according to which statistics are compiled, disseminated or published.