Parliament of the Commonwealth of Australia

RINGING IN THE CHANGES

Telecom's zonal charging policies

Report from the House of Representatives
Standing Committee on Expenditure

October 1984

Australian Government Publishing Service
Canberra 1984

ISBN 0 644 03554 4

Printed by Canberra Publishing and Printing Co.

FOREWORD

This report arose out of a decision by the Expenditure Committee to examine Telecom's Zonal Charging Policies in February 1984. The Committee thanks the 67 individuals and organisations who made submissions to the Inquiry and the witnesses who gave evidence at public hearings in Sydney, Melbourne, Brisbane, Perth, Canberra, Penrith (NSW) and Mornington (VIC).

We would like to acknowledge the co-operation of the Australian Telecommunications Commission. We were particularly grateful for the assistance of Mr Keith West, Manager, Trunk Network Services, who was made available by the Commission to assist the Inquiry.

As Sub-committee Chairman I would like to thank my fellow Committee members who made time available to fit in with their busy schedules. Thanks are also due to the Inquiry staff who worked long hours and displayed a professional enthusiasm in the preparation of the report.

I am particularly grateful to Ross James, who was seconded from the Department of Communications to the Committee for the duration of the Inquiry.

The Committee appreciated the co-operation of Garth Simmons, Allan Klason and other members of the Statistics Group, Department of the Parliamentary Library, and Mr C Veenstra and his staff in the Division of National Mapping, Department of Resources and Energy, for their assistance in the preparation of the maps.

I believe that this report will make an important contribution to the development of a more responsive attitude by the Australian Telecommunications Commission to the needs of the Australian community. The report highlights the inadequate response by the Commission to population growth and distribution since the 1960's. Implementation of the Committee's recommendations would make a substantial improvement in Telecom's responsiveness to community needs.

Ross Free
Sub-committee Chairman

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LIST OF RECOMMENDATIONS

Recommendation 1:

Extending capital city local call zones [Para 5.22]

- Telecom's zonal charging policies should be restructured to take account of rapid population growth in outer metropolitan areas and to ensure that people in these areas have greater local call access to capital city zones and major regional service centres.

- Telecom should extend outer metropolitan local calling areas for the zones adjoining all State capital cities. This could be achieved by expanding existing outer metropolitan zones to take in high growth areas or by reducing the size of inner city zones to allow extended local call access to a wider community of interest.

Recommendation 2:

Local call access for particular areas [Para 5.63]

- Telecom should give urgent attention in Sydney, Melbourne, Brisbane and Perth to extending local call access for outer areas which are logically part of the metropolitan area. Early action should be taken in areas including:

  Penrith/Sydney (NSW)
  Beaudesert/Brisbane (QLD)
  Mornington Peninsula/Melbourne (VIC)
  Rockingham/Perth (WA)

Recommendation 3:

Subscribers outside extended local call zones [Para 5.66]

. Reduced rates should be granted to those subscribers adjacent to local call zones. These reduced rates should reduce the differential between those inside and outside extended local call zones.

Recommendation 4:

Short distance rates [Para 5.69]

. Telecom should reduce charges for short distance calls up to 50 kms to recognise changes in community of interest.

Recommendation 5:

Reviewing provincial city charging arrangements [Para 5.71]

. Telecom should review its charging policies for provincial cities.

Recommendation 6:

Provincial cities with high population growth [Para 5.71]

. Telecom should extend local call zones for provincial cities with high population growth, e.g. Gosford/Wyong, Sunshine Coast, Gold Coast.

Recommendation 7:

Provincial cities linked with adjacent capital cities [Para 5.72]

. Telecom should reduce rates for provincial cities whose growth and development is closely linked with adjacent capital cities, e.g. Wollongong, Geelong.

Recommendation 8:

Timed local calls [Para 5.95]

. The Committee does not favour the introduction of timed local calls.

Recommendation 9:

Financing options [Para 5.107]

. All costs associated with the extension of local call zones should be financed from Telecom's internal sources. There are a number of funding options available including:

- rearrangement of capital spending priorities
- increased rental/service fees
- increased local call rates
- review of STD rate reductions

Recommendation 10:

Cross-subsidisation [Para 5.121]

. Telecom should continue to accept its responsibility for subsidising loss-making activities, e.g. rural services. Cross-subsidisation is consistent with Telecom's social obligations to the community and should be maintained.

Recommendation 11:

Cost allocation [Para 5.126]

- Telecom should review its cost allocation procedures so that its profits and losses on individual services can be more clearly identified. Profit and loss information on individual services should be provided in Telecom Annual Reports.

Recommendation 12:

Simplifying charging policies [Para 5.141]

- In modifying its charging policies, Telecom should give a high priority to simplifying the charging arrangements to improve customer understanding.

Recommendation 13:

STD charge steps [Para 5.146]

- The existing 5 charge steps for STD calls should be reduced to reflect the declining importance of distance in the provision of telecommunications services.

Recommendation 14:

Time of day rates [Para 5.153]

- Telecom should simplify the STD rate structure by having fewer scales with discounts applied in accordance with traffic loading over the hours of the day and the days of the week to encourage better usage of the network.

Recommendation 15:

Service fees and rentals [Para 5.162]

- Telecom should introduce the concept of a service fee to replace the term 'rental'. The term, 'service fee', would more accurately reflect that rentals/service fees are designed to cover service and access costs in addition to rental of telephone apparatus.

Recommendation 16:

Directory areas [Para 5.165]

- Telecom should simplify its existing range of directories by amalgamating outer metropolitan directories and grouping directory areas in accordance with communities of interest.

Recommendation 17:

Directory entries [Para 5.169]

- Where Telecom's zonal boundaries divide a suburb telephone subscribers in that suburb should be included in the directories for both zones free of charge.

Recommendation 18:

Itemised accounts [Para 5.175]

- Telecom should devote more resources to accelerating the introduction of systems which provide itemised accounts.

Recommendation 19:

Complaints handling [Para 5.190]

. Telecom should establish a Complaints Bureau in each State to handle and effectively respond to customer problems with its charging policies and difficulties with the provision of telecommunications services. The Complaints Bureau should be clearly identified in the telephone book.

Recommendation 20:

Information on zonal boundaries [Para 5.193]

. Copies of the zonal arrangements should be available at each Telecom District Office and information on zonal boundaries should be available to the public on request. Abridged versions of this information should be provided in each telephone directory.

Recommendation 21:

Information on STD charging rates [Para 5.197]

. Simplified information on the costs of calls between STD zones should be included in telephone directories.

Recommendation 22:

Telecom's social research [Para 5.198]

. Telecom should undertake more research in the social field to improve its responsiveness to social developments and social concerns should play a greater role in Telecom's decision-making process.

Recommendation 23:

Charging policy reviews and the Prices Surveillance Authority [Para 5.205]

. Telecom should take the opportunity of Prices Surveillance Authority reviews of its standard telephone charges to re-examine its charging policies and to inform the community of the basis for its existing charging policies. This information should be made available to the public notwithstanding that notification to the PSA does not result in a public inquiry by that body.

CHAPTER 1

THE SCOPE AND OBJECTIVES OF THE INQUIRY

1.1 On 7 February 1984 the House of Representatives Standing Committee on Expenditure resolved to inquire into Telecom's zonal charging policies.

1.2 The terms of reference of the inquiry were as follows:

To inquire into and report on:

1) Telecom's charging policies in capital and provincial city areas;

2) the rationale for the establishment of the existing pattern of charging zones;

3) the extent and distribution of population growth in metropolitan and provincial areas since the existing charging zones were established;

4) the adequacy of Telecom's response to these patterns of growth;

5) the social and economic consequences of (4) above;

6) appropriate action to ameliorate any adverse social and economic consequences; and

7) other matters as the Committee decides in the course of the inquiry.

1.3 The Committee decided to focus on the existing charging policies covering 26 selected capital and larger provincial cities. These areas were selected on the basis that the population in each selected city approximated to a minimum of 50,000 people. It was recognised that there are other large conurbations which are close to 50,000. The selected cities include approximately 74% of Australia's population.

1.4 The 26 capital and provincial cities are set out below in Table 1.1:

TABLE 1.1

CAPITAL AND PROVINCIAL CITIES WITH POPULATION OF 50 000 AND ABOVE

NSW	Sydney	QLD	Brisbane
	Gosford/Wyong		Rockhampton
	Newcastle		Mackay
	Wollongong		Townsville
	Albury/Wodonga		Cairns
	Bathurst/Orange		Toowoomba
	Wagga Wagga		Gold Coast
			Sunshine Coast
VIC	Melbourne	TAS	Hobart
	Geelong		Launceston
	Ballarat		Burnie/
	Bendigo		Devonport
SA	Adelaide	WA	Perth
NT	Darwin	ACT	Canberra

1.5 Charging policies for metropolitan and provincial cities cannot be viewed in isolation from those for the rural community. The Committee therefore took the opportunity in the course of the public hearings to invite representatives from rural organisations to present their views.

1.6 At a later stage it is the Committee's intention to examine Telecom's charging policies in relation to other urban centres and rural areas.

1.7 Telecom's existing charging policies essentially derive from the Community Telephone Plan of 1960. Since 1960 there have been a series of reviews and major modifications to the zonal charging policies with the introduction of two schemes - Community Access 80 and Countrywide Calling. These are described in more detail in Chapter 2.

1.8 The 1960 Plan established a charging zone policy that was designed to reconcile a number of objectives including community of interest, equity, cost and engineering practicability. The Committee's aim has been to examine these objectives and to identify whether the policies that were established by Telecom in 1960 are necessarily appropriate for the 1980's.

1.9 Many representations to Telecom and to the Government have been made over the years seeking adjustments to the charging policies and the charging zone boundaries suggesting that the charging policies should be changed to reflect changing community and demographic patterns.

1.10 In its submission to the inquiry, Telecom pointed out that any examination of its zonal charging policies needs to be considered in the light of its Australia-wide responsibility to provide world standard national services at affordable prices. Telecom's view is that it needs to be able to balance its charges across all its activities so as to ensure that all Australians have access to a reliable telephone service at a reasonable cost.

1.11 The Committee has taken into account the need to view Telecom's zonal charging policies within the context of its overall pricing policies. Telecom's approach to any changes to the zonal charging policies should be seen to be consistent with Telecom's charter to 'best meet the social, industrial and commercial needs of the Australian community'.(1)

1.12 In response to its terms of reference, the Committee has sought to evaluate the adequacy and the social and economic consequences of Telecom's response to changes in community and demographic developments and to suggest appropriate action to ameliorate any adverse consequences.

1.13 Telecom's charging policies affect all sections of the community. Population growth and distribution has had a particular impact on residential subscribers. For this reason the Committee has focussed on residential subscribers and has not dealt with Telecom's charging policies for business services such as charges for leased lines, data transmission, videotex and other telecommunications services.

1.14 Telecom's charging policies for basic telephone services do of course impact on business subscribers. The Committee has examined issues related to the provision of basic telephone services, such as STD rates, which will also affect the business community.

1.15 Many of those living in outer suburban areas and rural areas are almost entirely dependant on the telephone for personal contact. High telephone charges can serve as an impediment to what many would regard as an essential community need - the right to communicate.

1.16 In addition telephone charging arrangements affect the Government's economic policy objectives. For example, Governments at all levels have introduced a number of measures designed to reduce the existing high levels of unemployment. Submissions to the Committee indicated that expensive telephone calls to potential employers are an added burden for job seekers. Business representatives have also argued that telephone costs affect competitiveness and serve to prevent decentralisation of industry.

1.17 Telecom has a statutory obligation to respond to the social, industrial and commercial needs of the Australian people. The community demands a high degree of social responsiveness from the nation's largest publicly owned enterprise. Telecom has not been sufficiently responsive to the needs of the Australian community in the 1980's.

1.18 Consequently the Committee has made recommendations designed to promote Telecom charging policies which are equitable, consistent with Telecom's statutory obligations and adequately respond to community needs.

CHAPTER 2

TELECOM'S CHARGING POLICIES IN CAPITAL AND PROVINCIAL CITY AREAS

Community Telephone Plan

2.1 The origin of the existing pattern of charging zones was the Community Telephone Plan of 1960.(1) In August 1959 the then Postmaster-General, Hon. C.W. Davidson, OBE, MP, tabled a document entitled 'Progress - Policy - Plans'(2) which outlined communication problems in Australia and long term policies for the development of the telephone, telegraph and postal systems. This 1959 review led to the Community Telephone Plan which was introduced on 1 May 1960.

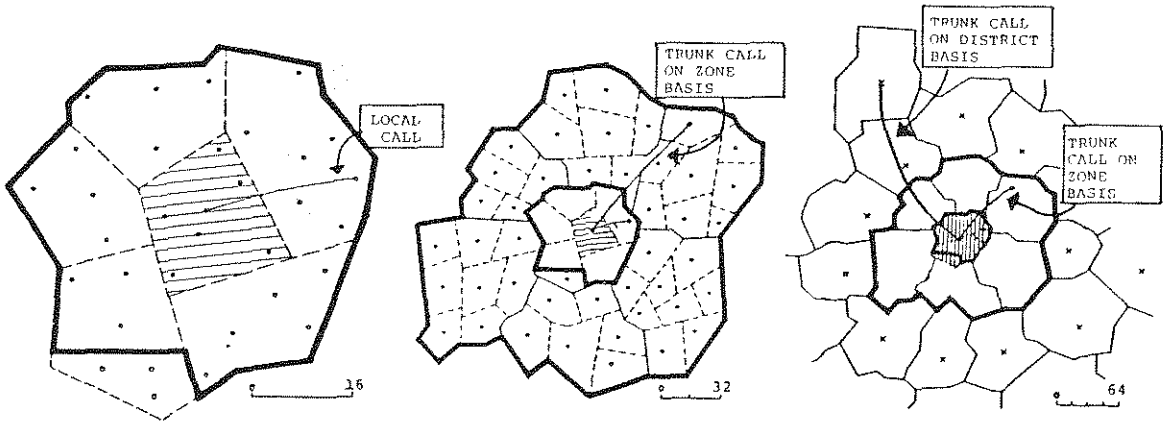
2.2 The Community Telephone Plan outlined new numbering, charging and switching plans which were required to enable the national telephone system to be automated. The country was divided up into zones, each about 384km^2 with none less than 192km^2 nor more than 576km^2. Each zone was designed to include wherever possible exchanges with a high community of interest.

2.3 Capital city zone boundaries are 24kms radial from the GPO for Sydney and Melbourne, and 16kms in Brisbane, Adelaide, Perth and Hobart. The zones adjoining these extend a further 16kms. Exchanges are grouped into charging zones and charging zones grouped into charging districts. Community of interest has had a strong influence in determining charging zones and districts.

2.4 Local call access was provided between exchanges in the same and adjoining zones, i.e. extended local call service areas (ELSA) were established. Trunk rates were to apply on all other calls.

2.5 A diagram illustrating the principles for calls between zones is set out at Figure 2.1(3)

FIGURE 2.1 CALL CHARGING PRINCIPLES



LOCAL CHARGING

Exchanges are grouped to form zones. Calls within a zone and to adjacent zones are treated as local calls.

——— Shows the local call range for subscribers in the shaded zone.

TRUNK CHARGING ON ZONE BASIS

Zones are grouped to form districts. Calls (other than local calls) within a district or to adjacent districts are charged at trunk rates based on the distance between zone centres.

——— Shows the range of trunk calls from the shaded zone which will be charged on this basis.

TRUNK CHARGING ON DISTRICT BASIS

Calls between districts which are not adjacent are charged at trunk rates based on the distance between district centres.

——— Shows where district to district charging commences for calls from the shaded district.

Source: Community Telephone Plan 1960

2.6 The essence of the call charging scheme then is that calls within a zone and between adjacent zones are charged at local rates. Where calls cross two zonal boundaries they are charged at trunk rates dependent on distance.

2.7 Since 1960 there has been continuing review by Telecom of all zoning arrangements. Two major reviews have led to modifications of the Community Telephone Plan. The first, which arose out of the 1979 review, led to what is known as the Community Access 80 Scheme and the second in 1983 led to Countrywide Calling.

Community Access 80 (4)

2.8 The 1979 review came to the following conclusions:

- the existing zoning and charging scheme was essentially sound and suitable
- some modifications were necessary to boundaries
- to meet changing needs two new concepts should be developed as an overlay to the basic zoning and charging framework.

2.9 The first of these concepts was the introduction in May 1980 of a Community Call at a rate between a local call and STD trunk rates. This is presently 15 cents for a 3 minute call. The Community Call provided cheaper calls for those just outside local call zone boundaries:

- to meet community needs for communications from rural properties and small towns to a service town providing a reasonable range of services in those cases where an untimed local call was not available
- to provide a low cost link between newly developed outer urban areas (adjoining the present outer metropolitan telephone zones) and their parent capital cities.

2.10 The second concept was the introduction of a ceiling on the price of STD calls within a charging district and another ceiling on the price of STD calls between adjoining districts. This was designed to recognise the great distances that separate communities in much of rural Australia. In addition, the May 1980 revisions provided for the combination of the 325km-485km and 485km-645km charging rates with the whole distance step chargeable at the lower rates.

2.11 In effect, the zoning and charging rates under Community Access 80 established 3 types of calls:

(i) a community call:

- if local call access was not given between a zone and the zone containing its service town, then community call access was given
- in metropolitan areas the community call access involves calling between the central metropolitan zone and each zone adjoining the outer metropolitan zones (see maps for Sydney and Melbourne) [Figures 2.2 and 2.3]

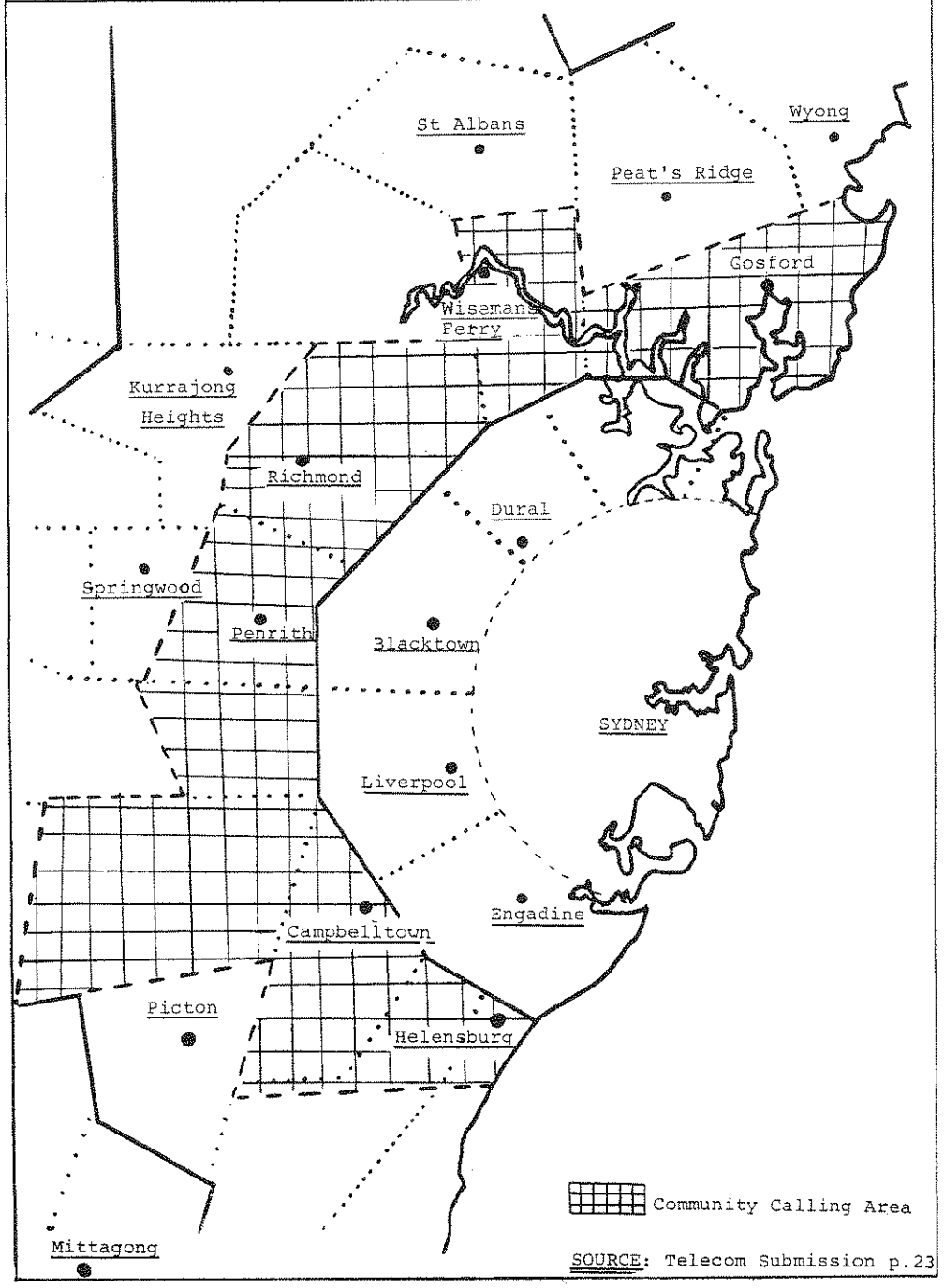
(ii) a district call provided the application of a specified maximum charging rate for telephone calls within a telephone district

(iii) a regional call provided the application of a specified maximum charging rate for telephone calls between zones in adjacent telephone districts

2.12 A number of criteria were established for service towns. These included:

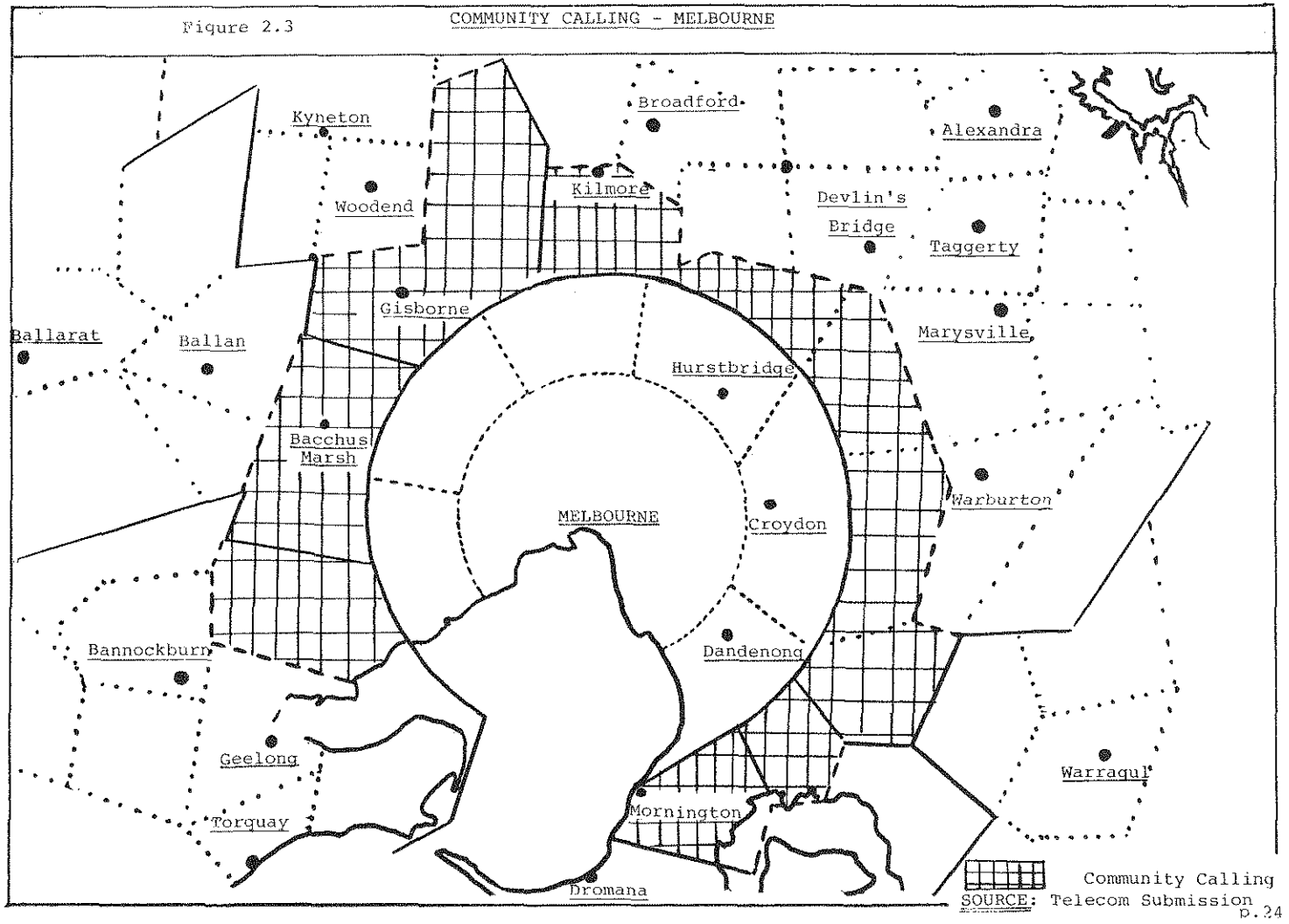
- access to domestic services such as doctor, nospital, baker;
- access to business services such as banks, post offices;
- reasonable physical access; and
- evidence of community of interest.

FIGURE 2.2 COMMUNITY CALLING - SYDNEY



SOURCE: Telecom Submission p.23

Figure 2.3 COMMUNITY CALLING - MELBOURNE



SOURCE: Telecom Submission p.24

2.13 For outer metropolitan areas community calls were introduced providing access both ways between subscribers in outer metropolitan and city areas. Community call access was provided to and from the central zone for all subscribers in each zone adjoining outer metropolitan zones.

Countrywide Calling[5]

2.14 Following a further review, Telecom instituted a scheme on 1 October 1983 which extended the principle of Community Access 80. The scheme was directed towards people living in outback and sparsely populated areas and was known as Countrywide Calling. It resulted in larger and fewer charging areas (access was provided to a minimum of 500 customers for a low call fee) and was designed to provide modern automatic services in remote areas within a reasonable time period.

2.15 Call charging principles were established for extended zones:

- calls between customers within an extended zone are charged at 15 cents for 3 minutes. However calls between customers within a 32km radial area of an automatic exchange are charged at the local call rate;
- calls between all customers of a manual exchange are charged at the local call rate;
- calls between an extended zone and an adjoining zone are charged at a maximum of 60 cents for 3 minutes;
- calls between an extended zone and a zone in which the designated service town for the extended zone is located are charged at 15 cents for 3 minutes;
- calls between an extended zone and a non-adjoining zone within the same charging district are charged at a rate not exceeding $1 for 3 minutes;
- calls between an extended zone and a non-adjoining zone within an adjoining charging district are charged at a rate not exceeding $1.50 for 3 minutes; and

- calls between the extended zone and any zone in a non-adjoining charging district are charged at a rate applicable to the radial distance applying between the district centres.

2.16 A map of the Countrywide Calling zones is set out in Figure 2.4.

Telecom's existing charging policies

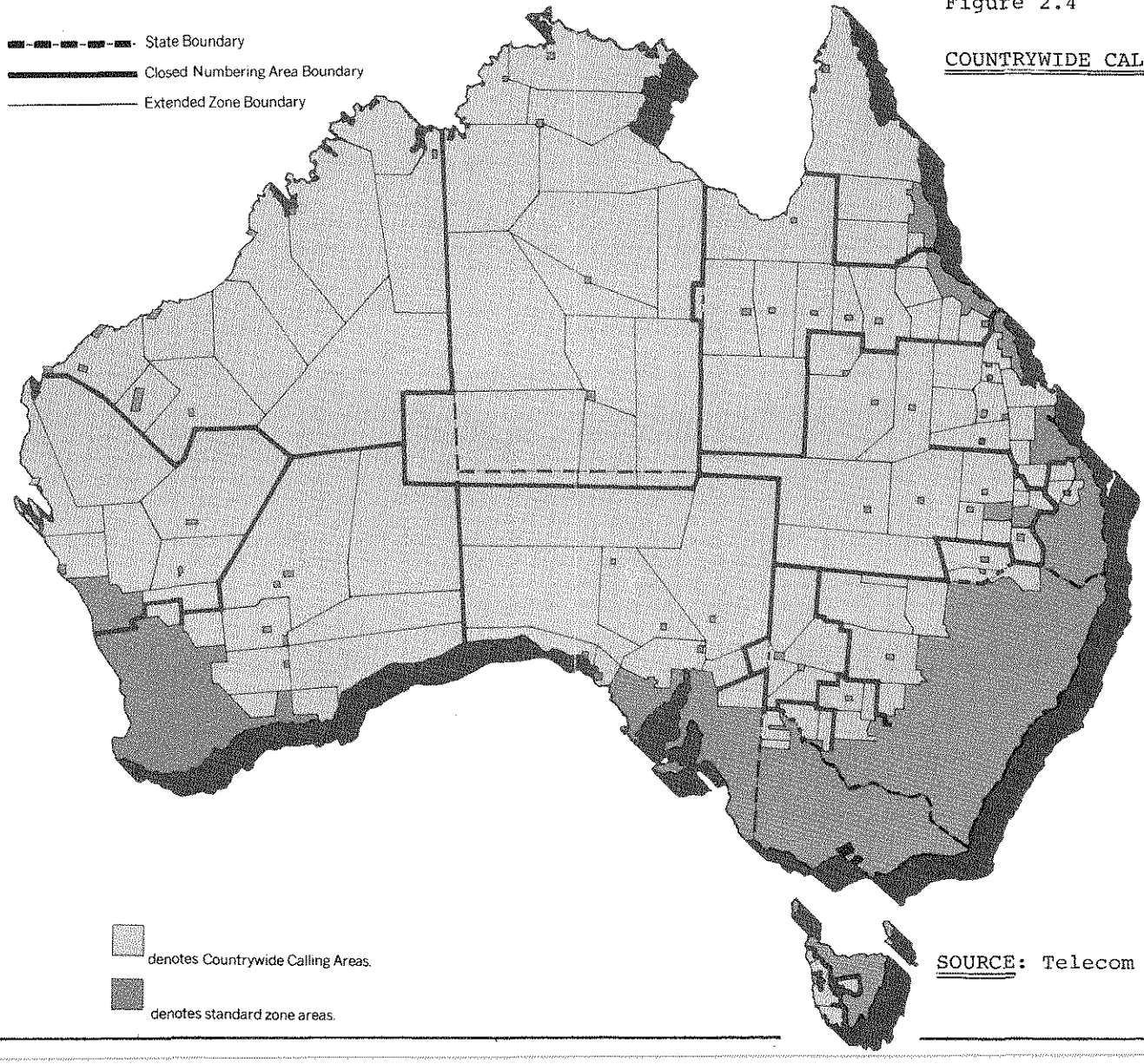
2.17 Telecom's charging rates are based on distance and time. As a result of technological developments such as improved transmission systems - optical fibres, microwave and coaxial cables, the importance of distance has declined.

2.18 Telecom has passed on some of the benefits of improved technology by progressively reducing STD charges and eliminating distance steps. This is consistent with Telecom's objective to price its services more closely to cost.

2.19 Table 2.1 sets out movements in Telecom prices. Telecom notes that even though there have been reductions in STD rates long distance calls remain priced substantially above cost and short distance calls are priced below cost.

Figure 2.4

COUNTRYWIDE CALLING



SOURCE: Telecom Submission p.30

TABLE 2.1

TELECOM PRICE MOVEMENTS

	TELECOM PRICES				% PRICE INCREASES			
	JUNE 1960	SEPT 1975	JUNE 1982	MARCH 1984	1960-1975	1975-1982	1982-1984	1975-1984
Consumer Price Index	87.3	181.6	359.8	411.8	108	98	14	127
Business Rental	$33.00	$120.00	$158.00	$190.00	264	32	20	58
Non-Business Rental	$26.50	$85.00	95.00	$115.00	221	12	21	35
Local Call Fee	3.3c	.09c	.12c	.15c	173	33	25	67
Ave 3 min Trunk Call	.64c	$1.16	$1.02	.90c	81	-12	-12	-22

Source: Telecom submission p.36

2.20 Telecom STD distance steps were most recently amended on 1 October 1983 with the introduction of Countrywide Calling. There are presently five charging steps:

TABLE 2.2
STD DISTANCE CHARGING STEPS

A Up to 50 km
F 50 to 85 km
M 85 to 165 km
Q 165 to 745 km
Y Over 745 km.

2.21 In addition there are 4 time of day rates:

TABLE 2.3
TIME OF DAY RATES

Day Rate	Mon-Sat	8.00am - 12.30pm
		1.30pm - 6.00pm
Intermediate Rate	Mon-Sat	12.30pm - 1.30pm
Night Rate	Sunday	8.00am - 6.00pm
		6.00pm - 9.00pm
Economy Rate		9.00pm - 8.00am

2.22 All of these rates are calculated on the basis of percentage of the day rate.

TABLE 2.4
CHARGING RATE RELATIVITIES

Day rate	100%
Intermediate rate	75%
Night rate	60%
Economy rate	50%

2.23 Telecom has prepared a table for the Committee designed to attempt to simplify the calculation of charges dependent on time, distance and time of day. This is set out in Table 2.5.

TABLE 2.5

CALL CHARGES FOR TELEPHONE CALLS MADE FROM CUSTOMERS TELEPHONE SERVICES
NOT EQUIPPED WITH COIN ATTACHMENTS

1. STD CALLS

% OF DAY RATE	100%		75%		60%		50%	
SCALE	DAY RATE MON-SAT 8am-12.30pm 1.30-6pm		INTERMEDIATE RATE MON-SAT 12.30-1.30pm		NIGHT RATE SUNDAY 8am-6pm DAILY 6pm-9pm		ECONOMY RATE 9pm-8am	
CHARGE STEP	PULSE INTERVAL (Secs)	3 MIN CALL CHARGE ($)	PULSE INTERVAL (Secs)	3 MIN CALL CHARGE ($)	PULSE INTERVAL (Secs)	3 MIN CALL CHARGE ($)	PULSE INTERVAL (Secs)	3 MIN CALL CHARGE ($)
COMMUNITY ACCESS	180	0.15	180	0.15	180	0.15	216	0.125
A 25-50 km	90	0.30	120	0.225	150	0.18	180	0.15
P 50-85 km	45	0.60	60	0.45	75	0.36	90	0.30
M 85-165 km	27	1.00	36	0.75	45	0.60	54	0.50
Q 165-745 km	18	1.50	24	1.125	30	0.90	36	0.75
Y Over 745 km	13.5	2.00	18	1.50	22.5	1.20	27	1.00

Note: (a) STD calls made from Public Coin Telephones are charged 20c per meter registration.
(b) Local call (untimed) $0.15 per call.

Source: Telecom March 1984

2.24 The Table illustrates the complexity of the existing charging arrangements. On occasions the Committee had the clear impression that even Telecom experts appear to have some difficulty in comprehending the system. In Chapter 5 the Committee has therefore made certain recommendations designed to simplify the existing system.

International comparisons with Telecom charges

2.25 Telecom has conducted a comparison of telephone rentals and connection fees in Australia with those applying in overseas countries.(6) All charges were converted to Australian currency as at May 1983.

TABLE 2.6

INTERNATIONAL COMPARISON OF RENTALS AND SERVICE CONNECTION FEES

	Rental		Service Connection Fee
Australia	Business	$180.00	$150
	Non-Business	$105.00	
Sweden	Business	$ 49.98-$ 55.53	$60.16
	Non-Business	$ 49.98-$ 55.53	
United Kingdom	Business	$163.97	Business $156.17
	Non-Business	$105.41	Non-Business $136.64
Japan	Business	$ 82.11-$152.50	$1124.24
	Non-Business	$ 58.65-$105.58	
Canada (Montreal)	Business	$458.35	Business $81.05
	Non-Business	$139.20	Non-Business $34.19
United States (Los Angeles)	Business	$116.78	
	Non-Business	$ 69.92	Non-Business $66.68

2.26 The table illustrates that Telecom rental charges are relatively high compared with some overseas countries, particularly when it is noted that Canadian rentals include unlimited free local calls.

2.27 Telecom has also conducted a tariff comparison of tariffs for the average residential service. On this basis Telecom tariffs are $15 p.a. higher than the average for the countries used in the comparison. (see Table 2.7)

2.28 It is Telecom's view that because of wage differences between various countries, a direct comparison of telephone tariffs does not always present a true picture of the position. Table 2.8 sets out international comparisons for the average working hours required to earn the equivalent of an annual telephone bill.

TABLE 2.7

INTERNATIONAL TARIFF COMPARISON
AVERAGE RESIDENTIAL SERVICE
ANNUAL COSTS (Australian Currency) (a)

	INSTALLATION (1/10 OF INST CHARGE)	RENTAL	600 LOCAL CALLS	50 TRUNK CALLS	TOTAL $(AUST)
AUSTRALIA	15.00	105.00	78.00	66.25	264.25
NEW ZEALAND	7.56	150.54	-	90.67	248.77
CANADA (TORONTO)	3.42	150.15	-	94.53	248.10
USA (LOS ANGELES)	6.67	69.92	53.85	83.87	214.31
UNITED KINGDOM	13.36	105.41	80.71	58.70	258.48
SOUTH AFRICA	5.32	51.10	38.33	46.58	141.33
JAPAN	39.10 (b)	105.58	58.69	97.29	300.66
NORWAY	32.25	164.45	118.00	112.61	427.31
SWEDEN	6.01	55.53	20.65	28.53	110.72
WEST GERMANY	9.61	155.74	71.29	60.84	297.48
FRANCE	6.41	90.43	59.10	72.86	228.80

(a) The exchange rates used were those being applied by the Australian Reserve Bank on 24.3.1983.
(b) The interest bearing deposit lodged with the connection fee was disregarded.

Source: Telecom May 1983.

TABLE 2.8

INTERNATIONAL TARIFF COMPARISON
AVERAGE RESIDENTIAL SERVICE
AVERAGE WORKING HOURS REQUIRED TO EARN EQUIVALENT OF ANNUAL TELEPHONE BILL (a)

	INSTALLATION		RENTAL		LOCAL CALLS		TRUNK CALLS			
	Hours	% of Total Hours	Hours	% of Total Hours	Hours	% of Total Hours	Hours	% of Total Hours	Total Hours	Ranking in Order of Least Hours Required to Pay Annual Telephone Bill
AUSTRALIA	1.80	5.68	12.59	39.74	9.35	29.52	7.94	25.06	31.68	5
NEW ZEALAND	1.26	3.04	25.01	60.51	-	-	15.06	36.45	41.32	7
CANADA (TORONTO)	0.35	1.38	15.51	60.52	-	-	9.77	38.10	25.63	3
USA (LOS ANGELES)	0.68	3.11	7.12	32.63	5.48	25.13	8.54	39.13	21.82	2
UNITED KINGDOM	2.61	5.29	20.15	40.78	15.43	31.23	11.22	22.70	49.41	9
SOUTH AFRICA	2.19	3.76	21.03	26.16	15.77	27.12	19.17	32.96	58.16	11
JAPAN	3.81	12.99	10.30	35.12	5.73	19.54	9.49	32.35	29.33	4
NORWAY	4.07	7.54	20.76	38.48	14.90	27.62	14.22	26.36	53.95	10
SWEDEN	0.97	5.44	8.94	50.14	3.33	18.68	4.59	25.74	17.83	1
GERMANY	1.28	3.24	20.68	52.34	9.47	23.97	8.08	20.45	39.51	6
FRANCE	1.26	2.80	17.84	39.53	11.66	25.83	14.37	31.84	45.13	8

(a) Calculated with gross wages per hour paid by manufacturing industry in 1982.

Source: Telecom May 1983.

2.29 Telecom asserts that one of its underlying pricing objectives is to reduce the real price of telecommunications services.(7) Many of Telecom's charges have been reduced in real terms. However, using international comparisons, Telecom's charges are generally as high, if not higher than overseas countries.

2.30 The conclusion to be drawn from these international comparisons is that continuing efforts are required by Telecom to improve efficiency and productivity in order to keep charges internationally competitive.

Telephone directories and information on zonal boundaries

2.31 As far as Telecom is concerned, the identity of each customer is determined by the customer's telephone number. Most telephone numbers with the same STD code are listed alphabetically in one telephone directory.

2.32 Before any modifications are made to Telecom's zoning and charging arrangements, consideration must be given to whether changes in zonal boundaries only affect charges or also affect the numbering and hence the directory listing and telephone identity of the customer. The Committee has therefore examined the implications of its recommendations in Chapter 5 in conjunction with suggested improvements to telephone directories and to the provision of information on zonal boundaries.

Itemised accounts

2.33 A major customer complaint relating to Telecom's charging policies is the failure to provide an itemised account so that the subscriber can determine the cost of individual calls.

2.34 Itemised accounts are available in many overseas countries. In the United States and Canada for example monthly accounts of STD and local call charges are provided.

2.35 Any problems with billing are accentuated because Telecom does not have a monthly billing system and this means that unauthorised use of a subscriber's telephone can go unchecked for a considerable time.

2.36 The importance of this issue to customers has led the Committee to examine in more detail Telecom's plans for itemised accounts. Telecom's proposals for itemised billing are discussed in Chapter 5.

Telecom's social research

2.37 The Committee attaches a high priority to Telecom's fulfilment of its social obligations to the community. As a publicly-owned enterprise it must respond effectively to subscribers both in their role as taxpayers and consumers of Telecom services.

2.38 Before Telecom can effectively respond to the social needs of the community, it must undertake social and market research to gain a better appreciation of customer requirements.

2.39 Telecom's information systems at present are primarily designed to assist technical planning and resource programming. From a management viewpoint many of these systems do not serve a useful purpose in gaining a better appreciation of the social aspects of customer needs for telecommunications services.

2.40 An improved understanding of these social needs would place Telecom in a better position to more positively respond to problems and inadequacies in its existing charging policies. The social aspects of Telecom's existing charging policies are discussed further in Chapter 5.

CHAPTER 3

POPULATION GROWTH SINCE THE EXISTING ZONES WERE ESTABLISHED

Population growth and distribution in Australia since 1960

3.1 During the Inquiry, a theme which frequently arose was that, despite significant growth in Australia's population since 1960, Telecom has not made corresponding adjustments to its zonal and charging policies. This theme was highlighted in two questions that were put to the Committee:

> 'Why cannot Telecom expand its thinking and be more flexible and expand with the need of the community? Why should a circle drawn on a map set the parameter for here and ever after?'(1)

It is now proposed to examine the extent of Australia's population growth since 1960, and the impact of that growth on local communities.

3.2 Australia is one of the most urbanised countries in the world.(2) Its population is centred in capital cities and is unevenly distributed over a large land mass. The population increased by almost 50% in the period 1960-1981 and much of the increase occurred in the capital cities.

3.3 In the 1960's this increase paralleled a period of rapid industrial expansion in the capital cities and was accompanied by very large migrant intakes. In the 1970's, with diminishing migrant intakes, growth in capital cities was less dramatic but was paralleled by a decline in Australia's rural population.(3)

3.4 When the 'Community Telephone Plan for Australia, 1960' was issued by the Director-General, Posts and Telegraphs [4] in March 1960, Australia had a population of approximately 10 million people. Of this number, 54% lived in the State capital cities (excluding Darwin) and 38% of the total population were clustered around the Sydney and Melbourne metropolitan areas.[5]

3.5 By 1981, when the most recent census was conducted by the Australian Bureau of Statistics (ABS), the population had increased to a total of almost 15 million people. Approximately 9 million or 60% of this number lived in the State capital cities (excluding Darwin) and 40% were located in the metropolitan areas of Sydney and Melbourne.[6]

3.6 The six major States, overall, grew at an average rate of 27.3% during the 1966-81 period.[7] The growth rates for New South Wales (23.5%), Victoria (22.6%) and South Australia (20.4%) were marginally less than the overall average, and Tasmania's growth rate, at 15.0%, lagged significantly. In contrast, Queensland and Western Australia showed exceptional growth with rates of 40.1% and 53.3% respectively.

3.7 To determine how much of each major State's overall growth had occurred in its capital city, figures showing absolute increases in population for each State from 1966-1981 were compared to those of the respective capital cities for the same period. The results follow in Table 3.1:[8]

TABLE 3.1

ESTIMATED PROPORTION OF STATE POPULATION GROWTH OCCURRING IN CAPITAL CITIES 1966-1981

State	1966-81 Absolute Increase '000	Capital City	1966-81 Absolute Increase '000	Capital City Increase as % of State Increase
NSW	997.0	Sydney	576.7	57.8
VIC	726.7	Melbourne	486.0	66.9
QLD	670.9	Brisbane	187.0	27.9
TAS	55.8	Hobart	24.5	43.9
SA	223.8	Adelaide	140.8	62.9
WA	452.0	Perth	339.3	75.1

3.8 The Table reveals that approximately half to three quarters of the population growth in all States except Queensland occurred in the respective State capital cities. The Brisbane figure of 27.9% seems unusually low. However, the figure may be accounted for by the fact that the nearby urban areas of the Gold Coast (Queensland part) and the Sunshine Coast recorded an increase, as a percentage of the State's overall increase, of 22.3% for the same period. This figure, combined with the Brisbane figure of 27.9%, demonstrates that, for the 1966-81 period, a total of 50.2% of the State's population growth occurred in Brisbane and its environs.

3.9 In summary, the results confirm not only that Australia's population tends to cluster in the capital cities but also that the capital cities are the major centres of growth.

3.10 Telecom's 1960 Community Telephone Plan was based on the premise that Australia's population could reach 33 million by the year 2010. Current ABS figures predict that, by that time, Australia's total population (including all States and Territories) will be likely to be approaching the range 20.5 million to 23.2 million.(9) Table 3.2 sets out a comparison between Telecom's 1960 estimates and the ABS projections for each State (excluding the Northern Territory):(10)

TABLE 3.2

POPULATION ESTIMATES FOR CIRCA 2010

State	Telecom Est. (1960) (m)	ABS Est. (1983) (m)
New South Wales	11.0	6.84- 7.83
Victoria	9.8	4.88- 5.55
Queensland	4.6	4.15- 4.57
South Australia	3.5	1.42- 1.59
Western Australia	2.9	2.12- 2.44
Tasmania	1.2	0.49- 0.53
TOTAL	33.0	19.90-22.51

3.11 When ABS estimates of population growth are compared to the 1960 estimates of the Department of Posts and Telegraphs, two observations can be made:

- Queensland and Western Australia are growing at approximately the rate originally predicted;
- the remaining States are growing at a slower rate than originally envisaged.

In addition, on the evidence of the statistics in paragraphs 3.4 and 3.5, the population, increasingly, is clustered in the capital cities (60% in 1981 compared to 54% in 1960).

3.12 The conclusion to be drawn is that population growth has been substantially less than Telecom envisaged in 1960. At the same time, Australians are, increasingly, choosing to live in the capital cities. Telecom, in its Community Telephone Plan, claimed that the Plan allowed for a great deal of flexibility:

> 'Flexibility to meet unforeseen subscriber development and to permit expansion beyond the capacity of the plan must be retained.'(11)

Accordingly, there should be additional capacity remaining in the original Plan to allow not only for modifications but also for responses to the changes that have occurred in the patterns of population growth and distribution since 1960.

Growth in capital and provincial cities

3.13 Centres of population approximating 50,000 and above were examined by the Committee to determine the extent of population growth and the changes that had occurred since the existing charging zones were established in 1960. A map has been drawn of each subject area and a set of 26 maps is attached at Appendix IV.

3.14 Using ABS census figures for 1966 and 1981, the maps have been illustrated to show the rate of population growth in Local Government Areas (LGA's).(12) The LGA boundaries shown on the maps are those that were in effect at the 1981 census and 1966 figures have been adjusted to take account of LGA boundary changes which occurred in the intervening period.

3.15 It must be emphasised that, because of these adjustments to the LGA boundaries, the 1966 figures for each LGA are estimates only and are not official figures. All maps show growth for the period 1966-1981 except for the maps of Brisbane, Darwin and Canberra.(13)

3.16 The maps have been shaded to show negative growth areas, moderate growth areas in the range of 0-50% and high growth areas of 50% and above. In addition, a heavy line has been drawn on each map to indicate the existing Telecom local call zone boundaries. The maps are illustrative only as some distortion has occurred in areas with low-base population

figures. For example, in the Jamboree Heights LGA in Brisbane, an area of 3.2 square kilometres, the population rose from an estimated base of 213 in 1971 to 2916 at the 1981 census, an increase of 1269%.

3.17 Similarly, the maps do not address the question of population density and areas which have not shown growth may nevertheless have a higher resident population than areas where growth has occurred. By way of illustration, the population of the Manly LGA in Sydney, with an area of 14.4 square kilometres, has declined by 2.9% over the 1966-81 period, and had a population of 37080 at the June 1981 census. The Eaglehawk LGA in Victoria, on the other hand, with an area of 15 square kilometres, registered a growth of 40.6% in the period but had a population of only 7355 at the June 1981 census.

3.18 Despite these qualifications, the maps provide a useful indication of the areas where growth is occurring. In general terms, the maps show that the largest population increases have occurred in outer LGA's of capital cities and in the urban centres surrounding them. Moreover, all the capital cities have outer metropolitan LGA's where high population growth of 50% or more has occurred. The overall growth rate of the Australian population for the period 1966-1981 was 28.7%.(14) In marked contrast to this moderate growth rate, however, an examination of the growth rates of outer metropolitan LGA's reveals that in many instances, the population has doubled or trebled over this period. In the following table, capital city LGA's which display high growth of 50% or more have been sampled to illustrate the extent of the growth and the numbers of people involved.

TABLE 3.3

POPULATION GROWTH IN CAPITAL CITY AND ADJACENT STATISTICAL DIVISIONS 1966-1981
Sample LGA's in High Growth Areas of 50% or Greater

LGA	Area (Sq Kms)	Estimated Population 1966	Population at 30 June 1981	Percentage Rate of Growth 1966-1981
Sydney				
Blue Mountains	1,421.1	30,733	55,877	81.8
Campbelltown	312.7	25,707	91,525	256.0
Gosford	938.3	42,807	94,369	120.5
Penrith	399.2	46,391	108,720	134.4
Wyong	732.2	24,727	68,950	178.8
Melbourne				
Cranbourne	744.8	13,100	34,821	165.8
Gisborne	279.8	2,311	7,074	206.1
Mornington	92.2	10,217	23,512	130.1
Pakenham	873.1	10,987	17,876	62.7
Waverley	59.3	69,845	122,471	75.3
Brisbane				
Albert	1,223.8	4,645	54,870	1,081.3
Caboolture	1,216.4	10,150	32,644	221.6
Logan	242.2	15,113	82,606	446.6
Moreton	1,787.8	8,421	23,581	180.0
Pine Rivers	741.9	13,313	58,189	337.1
Hobart				
Brighton	441.6	2,207	9,441	327.8
Sorell	763.0	3,309	5,243	58.4
Spring Bay	1,113.2	1,205	1,885	56.4
Adelaide				
Meadows	589.9	5,668	23,127	308.0
Mount Barker	360.2	5,353	9,220	72.2
Munno Para	350.3	14,286	26,927	88.5
Port Elliott/ Goolwa	425.9	2,335	3,991	70.9
Willunga	270.6	2,517	6,542	159.9
Perth				
Armadale	545.3	7,373	36,116	389.8
Mundaring	636.6	9,200	20,786	125.9
Rockingham	253.9	4,383	24,740	464.5
Serpentine-Jarrahdale	888.2	3,094	5,039	62.9
Wanneroo	791.1	2,383	93,611	3,828.3

3.19 These figures, when compared to the overall Australian population growth rate for 1966-1981 of 28.7%, highlight the enormity of the growth in outer metropolitan LGA's, particularly in New South Wales, Victoria, Queensland and Western Australia. In these States in particular, many LGA's have experienced extensive population increases and they have resulted in very large concentrations of people in the outer suburbs of the capital cities.

3.20 An examination of the maps illustrating population growth in the capital cities reveals the following general trends:

- the greatest population growth has occurred in outer metropolitan LGA's;
- growth is extending over a wide geographical area;
- growth has occurred away from the city centres;
- population has declined in inner city areas;
- moderate to high growth has occurred in LGA's which surround the city centres;
- there are high growth areas along the coastal metropolitan fringe as well as in inland LGA's of capital cities;
- in some capital cities, the population growth areas extend to other urban centres and urban development is unbroken.

3.21 An examination of the maps of the provincial cities reveals uneven growth patterns. Individual LGA's of provincial cities have also been surveyed to assess the extent of the growth and the number of people involved, and the results of the survey follow.

TABLE 3.4

POPULATION GROWTH IN PROVINCIAL CITY LGA's
1966-1981
Sample LGA's of Provincial City and Adjacent
Statistical Districts

LGA	Area (Sq Kms)	Estimated Population 1966	Population at 30 June 1981	Percentage Rate of Growth 1966-1981
N.S.W.				
Albury	104.3	25,112	36,684	46.1
Bathurst	238.8	18,937	22,703	19.9
Newcastle	189.9	143,070	135,207	-5.5
Orange	297.4	24,162	30,351	25.6
Wagga Wagga	4,807.3	35,343	47,399	34.1
Wollongong	663.5	149,523	169,381	13.3
VIC.				
Ballarat	456.3	12,246	18,845	53.9
Bendigo	32.1	30,806	31,841	3.4
Geelong	13.7	18,129	14,471	-20.2
Wodonga	330.2	11,878	19,208	61.7
QLD.				
Cairns	51.5	26,802	39,096	45.9
Gold Coast	119.3	49,485	117,824	138.1
Mackay	19.6	18,646	20,664	10.8
Maroochy	1126.4	21,466	53,428	148.9
Rockhampton	159.3	46,119	52,383	13.6
Toowoomba	116.7	55,805	66,698	19.5
Townsville	375.2	59,496	81,172	36.4
TAS.				
Burnie	599.3	18,611	19,994	7.4
Devonport	122.1	16,758	23,162	38.2
Launceston	27.2	37,217	31,273	-16.0

3.22 Figures in the table accentuate the varying growth in provincial cities. Gold Coast, on one hand, has shown enormous growth in terms of both percentage increase and number of residents. Old established LGA's, on the other hand, have shown a relative decline.

3.23 However, further examination of the maps reveals that LGA's which surround these older, established LGA's of provincial cities frequently show high rates of population growth. In the Geelong region, for example, the LGA's of Bellarine, South Barwon and Barrabool, which extend to the Victorian coastline, have experienced high growth rates of 50% or more in the 1966-81 period. A similar growth rate is occurring in LGA's extending to the NSW coastline in the Newcastle area and a high growth rate of 50% or more has been recorded in the LGA's of Great Lakes and Port Stephens.

3.24 Overall, the maps of both capital and provincial cities reveal that:

- the areas of greatest growth are the outer LGA's of capital cities;
- the most dramatic and extensive growth has occurred in the outer metropolitan LGA's of Sydney, Melbourne, Brisbane and Perth;
- dramatic growth has occurred in provincial city areas such as Gosford/Wyong, Gold Coast and Sunshine Coast, located on the coastal fringe.

3.25 Overall growth in capital cities has been compared with the overall growth in provincial cities for the 1966-81 period.(15) The results of this comparison appear in Table 3.5.(16)

3.26 The table indicates steady overall growth rates of approximately 20% in all major State capital cities except Perth which has grown at a significantly higher rate in the 1966-81 period (60.6%). Of the provincial areas, Gosford/Wyong, Gold Coast and Sunshine Coast have shown exceptional growth when compared to other provincial cities and capital cities.

TABLE 3.5

OVERALL RATE OF POPULATION GROWTH
IN CITIES 1966-1981

Capital Cities (By ABS Statistical Division)			Provincial Cities (By ABS Statistical District)		
City	Total Pop. at 30/6/81	% increase over 1966 pop. estimate	City	Total Pop. at 30/6/81	% increase over 1966 pop. estimate
Sydney (excluding Gosford/Wyong)	3,041,377	18.8	Gosford/Wyong	163,319	141.8
			Newcastle	389,237	18.9
			Wollongong	222,539	25.4
			Albury/Wodonga	72,352	40.9
Melbourne	2,722,817	21.7	Bathurst/Orange	59,801	21.2
			Wagga Wagga	47,399	34.1
Brisbane	1,028,527	22.2			
			Geelong	137,173	31.2
Adelaide	931,886	17.8	Ballarat	71,930	14.0
			Bendigo	58,818	25.5
Hobart	168,359	17.0			
			Rockhampton	53,646	14.6
Perth	898,918	60.6	Mackay	45,551	40.9
			Townsville	94,604	58.5
Darwin	61,412	31.6	Cairns	62,426	64.3
			Toowoomba(a)	66,698	19.5
Canberra	220,423	134.9	Gold Coast	177,264	175.2
			Sunshine Coast(b)	74,014	171.2
			Launceston	84,784	11.2
			Burnie/Devonport(b)	70,924	21.4

(a) Toowoomba is part of a statistical district only.
(b) No urban centre of 25,000 people or more.

3.27 In addition to compiling statistical information on the extent of Australia's population growth, the Committee received submissions and evidence was gathered regarding the effect of population growth in capital and provincial cities.

3.28 Evidence provided at the Sydney hearing epitomises the concern of many inhabitants of outer capital city areas whose LGA's continue to be excluded from the Telecom local call zones, despite their growth and development:

> 'It is of concern ... to many people in the community, that a very sophisticated planning agency like Telecom, which has long investment lead times and very sophisticated arrangements for planning, should still see the pattern of urban development as it was in 1960 at the latest, if not before.'(17)

3.29 In the Sydney region, major growth is occurring towards the west, the southwest and the north.(18) The estimated population of the Sydney region by the turn of the century is 4 million(19) and although population is not growing at the rate originally envisaged(20) growth in the outer metropolitan areas is continuing at a very strong rate.

3.30 The net result of this growth has been that outer and inner city areas have developed links common to both: 'the extended Sydney region is one labour market - the Sydney region is an integrated urban area'.(21) This theme of strong community links was repeatedly stressed, and the following comment is representative of the evidence of many witnesses:

> 'I would just keep coming back to the fact that we are, in fact, part of the Sydney area ...'(22)

3.31 In Melbourne, patterns of population growth, similar to those around Sydney, have occurred in outer metropolitan zones:

> '... some areas which could reasonably have been classed as country zones in the 1960's, have since developed to the point where they are now part of the wider Melbourne metropolitan community of interest.'(23)

3.32 The most obvious examples of areas where the function has changed from rural to urban are in the LGA's surrounding Mornington and Geelong.(24) Witnesses have indicated that these areas are now dormitory suburbs of Melbourne and consider that '(Telecom's) zoning principles do not reflect the population patterns of the 1980's'(25), particularly in these very high growth areas to the south(26).

3.33 In outer Perth areas development is occurring along four corridors and the population is expanding rapidly.(27) There are now large tracts of land which have become urban in character.(28) Many residents and local organisations consider that Telecom's zonal and charging policies are segmenting the corridors, and the disadvantage experienced by many groups located outside the local call zone was summarised as follows:

> 'All of these groups, because of their interrelation with the metropolitan region as a whole, will be disadvantaged if the current zoning policy is not changed, and as the corridor develops and elongates, those further along the corridor will be disadvantaged even more.'(29)

3.34 In summary, the evidence strongly supports conclusions drawn from a study of the maps and an analysis of the population statistics. Outer urban areas of the capital cities have very high growth rates; the growth is likely to be sustained; the outer urban areas have become integrated with inner urban areas, and very strong community links have been formed.

3.35 Unlike the consistent growth rates in the capital cities, growth rates in provincial cities have varied. Some provincial cities are concerned to improve the links with their parent capital cities. A representative from the Wollongong City Council, for example, argued very strongly that, because of Wollongong's very narrow economic base and its proximity to the capital city, it has very strong community links with Sydney.(30) The Geelong Regional Commission has argued that the business communities of Melbourne and Geelong are interdependent

and that, in many respects, the two cities 'are one entity'.(31) Other provincial cities such as Mackay, Wagga Wagga and Albury/Wodonga are more concerned with their own communities of interest. Their chief concern is that the varying charging rates within the district tend to discourage the use of provincial city facilities and services, and thus, the influence of the cities as regional centres is undermined.(32)

3.36 Community of interest is one of the key aspects of Telecom's Charter,(33) and Telecom's apparent disregard of the strong links which have developed between outer and inner city areas is a major concern to local residents and community organisations. One witness summarised this concern as follows:

> '... many people look at Telecom as being the closest thing that we have to George Orwell's Big Brother, whether that be right or not ... one way or another, ... it is time that Big Brother started to respond to some of the needs of local people.'(34)

3.37 One of the most striking features about Telecom's zonal policies is that, in outer metropolitan areas, large numbers of people are adversely affected by the present boundaries. The Committee has assessed the number of people who are located in zones just outside the capital city telephone districts, and the Committee's findings are shown in Table 3.6.(35) The results of the assessment highlight the fact that substantial numbers of people in the capital cities, particularly Sydney, Melbourne, Brisbane and Perth, would benefit by an extension of the present Telecom boundaries. Moreover, based on the 1981 estimates, more than 1.5 million people in capital cities would benefit if local and community call zones were extended by one zone.

TABLE 3.6

STATE CAPITAL CITIES:(a)
ESTIMATED POPULATION LIKELY TO BENEFIT BY
EXTENSION OF LOCAL AND COMMUNITY CALL ZONES

EXTENDING LOCAL CALL ZONE(LCZ) BY ONE ZONE			EXTENDING COMMUNITY CALL ZONE(CCZ) BY ONE ZONE		
City Region	1981	2001	City Region	1981	2001
Sydney	358,277	479,375	Sydney	307,000	410,766
Melbourne	183,566	235,515	Melbourne	187,720	240,845
Brisbane	122,034	198,427	Brisbane	96,970	157,673
Hobart	48,861	58,438	Hobart	7,371	8,816
Adelaide	37,402	43,498	Adelaide	39,674	46,141
Perth	139,027	219,801	Perth	43,808	69,260
TOTAL	889,167	1,235,054	TOTAL	682,543	933,501

(a) Excluding Darwin

Age and income distribution

3.38 While population growth has been shown to be pronounced in all capital cities, the most pronounced growth has occurred in the outer metropolitan areas of Sydney, Melbourne, Brisbane and Perth.

3.39 The high growth areas of these cities have tended to attract higher concentrations of disadvantaged groups such as low income or single parent families than other metropolitan areas.(36) Analysis by planning authorities of development in high growth areas indicates that outer metropolitan growth areas have also tended to attract young family groups, and there are large concentrations of people in the 0-14 age bracket in outer metropolitan areas located inland.(37) Further, large concentrations of people in the 60+ age bracket tend to be attracted to outer metropolitan areas located on the coast.(38) In support of these trends, the Committee was advised that 'there is a tendency in Australia for low income households to be located at the fringe'.(39)

3.40 In addition to the disadvantages of age and income, people in these outer areas experience further disadvantage by their location outside the city local call zones:

> 'In Australian cities, in Sydney in particular, many of the households least able to bear the burden of high charges for services are living at the periphery. This is, in part, because of the public housing there - because that is the cheapest place to go - and we find (in this) State that very often, those new households moving in have borne the brunt of this.'(40)

3.41 To assess the extent of disadvantage in the populations of outer metropolitan LGA's, three key cities, Perth, Sydney and Melbourne, were surveyed for statistics on age and income. The results of the survey are provided in Table 3.7 in which two inner city LGA's and five high growth LGA's are sampled in each of the three capital cities.(41)

TABLE 3.7

AGE AND INCOME DISTRIBUTION IN CAPITAL CITY LGA's JUNE 1981

Location	LGA	Total Pop.	% of labour force		% pop./age brackets		Earn $15000 or less		% rate pop growth 1966-81
			employed	unemployed	0-14 years	60+ years	% pop.	% households	
Sydney Inner	Ashfield	41253	47.3	2.7	18.0	19.0	82.0	47.5	-1.6
	Ryde	88948	51.0	1.6	19.0	15.6	78.0	37.0	9.4
Sydney Outer	Blue Mountains	55877	38.0	2.0	28.2	17.0	79.0	47.2	81.8
	Campbelltown	91525	37.8	2.5	37.4	4.8	78.7	47.7	256.0
	Gosford	94369	36.5	2.5	24.5	21.0	83.6	54.4	120.5
	Penrith	108720	42.0	2.7	31.3	6.4	80.0	37.3	134.4
	Wyong	68950	31.6	3.2	23.8	24.1	86.0	62.8	178.8
Melbourne Inner	Heidelberg	64757	45.3	2.4	21.6	16.2	77.2	37.9	1.3
	Mordialloc	27869	45.4	1.9	19.2	20.3	80.7	49.0	-0.7
Melbourne Outer	Cranbourne	34821	43.3	2.2	32.6	7.2	81.0	39.5	165.8
	Gisborne	7074	41.5	1.6	32.5	9.9	71.3	31.6	206.1
	Healesville	9418	40.9	2.3	27.7	14.1	82.0	51.8	46.4
	Mornington	23512	40.3	2.4	26.8	16.8	79.5	47.4	130.1
	Pakenham	17876	43.5	2.2	29.7	11.1	79.8	43.7	62.7
Perth Inner	Nedlands	20257	37.4	2.1	18.6	26.4	73.7	41.3	-13.2
	Perth City	79398	43.6	4.9	15.0	22.0	82.5	54.8	-17.6
Perth Outer	Armadale	36116	39.8	2.9	32.8	7.8	82.7	44.5	389.8
	Mundaring	20786	41.2	2.2	30.7	9.9	79.1	41.1	125.9
	Rockingham	24740	37.9	3.4	28.0	13.4	81.7	48.9	464.5
	Serpentine/ Jarrahdale	5039	41.8	1.9	29.8	8.0	81.4	41.2	62.9
	Wanneroo	93611	41.6	2.4	35.7	4.4	78.9	36.3	3828.3

3.42 The survey highlights the fact that, in June 1981, significant proportions of the population in the surveyed LGA's had an annual income of $15,000 or less.(42) The survey also confirmed some of the evidence provided in submissions and at hearings:

- there are heavier concentrations of children 0-14 years in inland outer metropolitan LGA's than in inner city LGA's; and
- there are significant concentrations of people in the 60+ age bracket in outer metropolitan LGA's located on the coastal fringe.

3.43 In addition to the disadvantages of age and fixed or low incomes experienced by many of the residents of outer metropolitan LGA's, 'isolation and loneliness (are further factors) in the discomfort of these people...'.(43) Additional hardship is being incurred, therefore, by the application of higher telephone charges in outer city zones. In 1982, before becoming Prime Minister, the Hon. R.J.L. Hawke, A.C., M.P., acknowledged the hardship which results from these telephone charges. His comments were made with regard to residents of the Mornington Peninsula, but are relevant to all residents of outer metropolitan LGA's:

> 'I particularly share your concern at the financial hardship this (telephone charging in outer areas) can cause to pensioners and those on fixed incomes for whom, in many cases, a telephone is essential.'(44)

Government development policies

3.44 At the time of the establishment of the Telecom local call zones in 1960, outer urban centres such as Campbelltown and Penrith in Sydney, and Geelong and Frankston in Melbourne, were areas of relatively small population separated by large areas of undeveloped land from the city centres.(45) In addition, they were considered to be predominantly rural areas and did not share a community of interest with the inner and intermediate city areas.(46)

3.45 However, since 1960, the character of these centres has changed, partly as a result of State Government policies and programs which have fostered growth in these outer areas. Development along corridors, for example, has been a feature of the urban development in Sydney and Perth.(47) Some programs such as that for Albury/Wodonga(48) have been instituted in the interests of decentralisation; other development programs are dictated by geographical features so that in Adelaide, for example, development is occurring to the north or south of the city.(49)

3.46 Regardless of the reason for the development, state planning authorities are committing very significant amounts of resources to these areas of high growth. Road and rail links are being upgraded, industrial estates are being developed, and programs to relocate State Government Offices outside central business districts are being undertaken.(50)

3.47 While the Telecom zones have been formulated on a radial basis, Government development policies in most of the major states have been structured towards corridors which have extended beyond the Telecom zones. Tasmania is the only state in which urban growth centres are unlikely to extend outside present local call zones.(51)

3.48 In most of the states, Telecom is perceived as being reluctant to adapt or change its zoning arrangements to keep pace with population growth patterns. This reluctance is considered to be hampering outer urban development and is proving to be a disincentive to decentralisation programs.(52)

Growth in numbers of telephone subscribers

3.49 In 1959, when the Australian telephone system was reviewed by the Director-General, Posts and Telegraphs, there were more than 2 million telephone services in Australia amounting to a density of 20.5 telephones per 100 population.(53)

3.50 By June 1983, Australia's telephone density had increased to 36.4 telephones per 100 population. This increase in density has been steady, particularly over the last decade, and the growth since 1975 is summarised below in Table 3.8:(54)

TABLE 3.8

TELEPHONE SERVICES PER 100 POPULATION

YEAR ENDED JUNE	NSW	VIC	QLD	SA	WA	TAS	AUST
1975	27.3	29.1	22.1	23.6	23.3	23.3	26.1
1976	28.0	29.8	23.2	24.9	24.4	24.2	27.0
1977	28.7	30.8	23.4	26.3	25.6	25.5	27.8
1978	30.3	32.0	24.5	28.7	27.2	26.9	29.3
1979	33.3	33.5	26.3	32.6	29.1	28.2	30.9
1980	33.6	35.0	27.9	31.5	31.2	29.5	32.6
1981	35.2	36.2	29.9	33.5	32.9	30.9	34.2
1982	36.6	37.4	31.0	34.7	33.9	32.2	35.3
1983	37.5	38.1	32.3	36.1	35.1	33.4	36.4

3.51 In real terms, there were over 5.5 million telephone services in Australia in June 1983, of which 3.5 million were located in metropolitan local service areas and 2 million were located in areas either outside the metropolitan local call zone or in the country.(55)

3.52 In March 1983, the ABS conducted a survey to determine the extent of telephone penetration in private dwellings in Australia.(56) The results of the survey highlight the integral role of the telephone in the Australian community. The major findings are:

- 85.3% of the estimated 5,087,200 households in private dwellings had the telephone connected;
- households in capital cities were more likely to be connected to the telephone than households in rural areas (89% in city areas compared to 79.1% in rural areas);
- approximately 50% of the estimated 748,200 households not connected gave cost as the main reason for non-connection;
- the unemployed were less likely to live in households connected to the telephone; and
- of the 1,965,300 people in the 60+ age bracket, 90.1% were in households where the telephone is connected.

3.53 Statistics recently provided by Telecom[57] indicate that there are varying telephone penetration rates in the outer and inner metropolitan areas of Sydney. Telecom has emphasised that these statistics are working estimates only. Despite this qualification, the estimates indicate that there is a high telephone penetration rate in the Sydney local call zone, but lower telephone penetration rates in adjacent telephone districts. Telecom's working estimates are set out in the following table:

TABLE 3.9

TELEPHONE PENETRATION IN THE SYDNEY AND ADJACENT TELEPHONE DISTRICTS

Area	Telephone Penetration % (June 1984 Estimates)
North Central Coast District	79.0
Penrith District	85.5
Campbelltown (TBO area)(a)	85.0
Wollongong (TBO area)(a)	88.0
Sydney call zone: (02)	92.2

(a) Telecom Business Office

Summary

3.54 In this chapter, we have seen the significant growth in Australia's population since 1960. The greatest effects of the growth have been experienced in the capital cities but despite this, there have been few changes by Telecom to its outer metropolitan zoning and charging arrangements. In addition to the high overall population growth, several major trends have been noted:

- increasing numbers of people are living in the capital cities;
- greatest growth in the capital cities is occurring in the outer metropolitan areas;
- there are relatively high concentrations of disadvantaged groups in the outer metropolitan areas;
- many of the new-growth outer metropolitan areas are located outside the Telecom local call zones;
- strong community links have developed between outer and inner city areas.

3.55 Against this background of change since the inception of the Community Telephone Plan in 1960, it is now proposed to examine the adequacy, and social and economic consequences, of Telecom's response to population growth.

CHAPTER 4

THE ADEQUACY AND SOCIAL AND ECONOMIC CONSEQUENCES OF TELECOM'S RESPONSE

4.1 To this point, the dramatic changes in community of interest and the response of Telecom to those developments have been outlined. It is now proposed to discuss the adequacy and the consequences of Telecom's response as embodied in its reviews and the Community Telephone Plan, Community Access 80 and Countrywide Calling.

Community Telephone Plan 1960

4.2 It is worth noting that in the 1960 Plan it was stated that:

> 'In grouping the exchanges in zones the aim was to have the average area covered by a zone approximately 150 sq. miles. Subject to this limitation exchanges with similar community of interest were included within the one zone.'(1)

This quotation would suggest that the technical criterion of zone area was as important as considerations of community of interest.

4.3 Furthermore, the limited extent of an individual zone was clearly perceived as a problem in the 1960 Plan. This is why the calls to adjacent zones are charged the local call fee only. If a higher fee were applied on calls to adjacent zones, a short call across the limits of a zone would cost more than a longer call within the zone. Hence for individual subscribers, what is

important is not the extent of their local zones, but the extent of the limits of zones adjacent to each subscriber's zone. This charging technique, which was called Extended Local Service Area (ELSA), was designed to limit inequities for those on the borders of the charging zones. These charging arrangements have been illustrated in Chapter 2 at paragraph 2.5.

4.4 Initially therefore, the zonal charging arrangements involving group charging were based on largely technical criteria with the community of interest objective being observed wherever possible. Also, to avoid distance anomalies the principle of charging a local call fee to adjacent zones was adopted. The Community Telephone Plan established zones around the capital cities which extended 20 miles or 32 kms from the General Post Office.

4.5 This distance appears to be a fairly arbitrary line which has been perpetuated over the years, viz. the 32 km zone established under the Countrywide Calling Scheme. The fact that the distance is drawn from the GPO, which bears little relationship to technical considerations involved in the provision of telecommunications services nor to community of interest is evidence of the arbitrary nature of this line.

Telecom reviews

4.6 Chapter 3 outlined the significant population change which has taken place in Australia since 1960. In particular, cities have continued to grow to the extent that 'community of interest' has extended way beyond the original Telecom definitions. The main focus of the Committee's interest was therefore, whether Telecom has responded adequately to these changes which have occurred over the last twenty four years.

4.7 Telecom has stated in its submission to the Inquiry that since 1960 there has been a continuing review of all zoning arrangements. Telecom says that -

> 'Whilst local factors are considered, the final decision on any zoning arrangement must be in accordance with clearly defined principles'(2)

Telecom has not stated what those principles are. It should be noted that if 'community of interest' is one of these principles, Telecom cannot deny that there have been significant community changes since 1960.

4.8 Two reviews of charging for the areas surrounding the capital cities were made in 1974 and in 1977. As internal reviews they have not been made public nor have they been available to this Committee. Furthermore, Telecom argues that:

> '... movements over the years had improved the relativity of telephone call charges from those areas to the central zone of the relevant capital city as compared with the local call fee' (3)

4.9 However, the Committee does not believe it is sufficient to argue that because short distance trunk calls have improved relative to local calls, there is no room for change. As technology improves and telecommunications become less distance dependent, telephone call charges over longer distances should all decline relative to local call fees.

Community Access 80

4.10 While the 1974 and 1977 reports maintained the status quo, the outer urban development continued. So again in 1979 Telecom reviewed zonal arrangements and introduced in May 1980 Community Access 80.(4) Once again, this internal review also found 'The existing zoning and charging scheme ... to be essentially sound and suitable.' (5) The difficulty with all these reviews is that besides being unpublished, Telecom is acting as the judge over its own decisions with regard to zonal charging arrangements. In this situation it is at least arguable that Telecom will have some bias in its judgements.

4.11 It took Telecom 20 years to make a major change to the charging system with the introduction of the community call concept in Community Access 80.

4.12 The cost to Telecom was minimal and is illustrated in Table 4.1. The estimated revenue losses for 1980-81 following the introduction of Community Calls was $0.6M for the country and $5.0M for the metropolitan areas.(6) This estimated loss of $5.6M represented about a third of one per cent of Telecom's revenue from telephone calls in that year, which indicates that Telecom's 'concessions' did not have a significant impact on the overall budget.

TABLE 4.1

FULL YEAR LOSS OF REVENUE FOR THE COMMUNITY ACCESS 80 PROPOSALS ESTIMATED FOR 1980/81

Preparatory Steps	$M
1. Amalgamation of W & X Rates	3.9
2. Reduction of Off Peak M Rates	1.3
Zoning Proposals	
1. Community Call - Country	0.6
2. Community Call - Metro	5.0
3. District Call M Rate Max.	1.4
4. Regional Call Q Rate Max.	0.6
TOTAL for 1980/81	$12.8M

4.13 Telecom agreed in its Community Access 80 report that many areas outside the capital cities have changed from rural to urban and that these areas have important social and business links with the central city.(7) However, the suggestion that the radius of the local call area applying to metropolitan areas be extended to cover these areas was rejected by Telecom.(8) Telecom cited a number of reasons for this rejection.

4.14 First of all, Telecom argued that Australian local call areas are large by world standards. While this is true, it is no argument against a further extension. Montreal, for instance, has a local call radius of 48 kilometres compared with 40 kilometres for Sydney.

4.15 Secondly, Telecom argued that a further extension of the local call area around cities would raise questions of relative equity with other telephone customers. Yet there never has been local call equity between telephone customers. Local call access varies across Australia according to the density of the population. By way of example local call access for a number of areas are reproduced below in Table 4.2.

TABLE 4.2

COMPARISONS OF LOCAL CALL ACCESS IN SELECTED AREAS

Local Call Area	Local Call Access Customers	% of Sydney's Local Call Access Customers
Sydney	1,215,500	100
Penrith	188,750	16
Campbelltown	100,370	8
Gosford	79,130	7
Wollongong	75,080	6
Albury-Wodonga	22,660	2
Mornington	124,745	10
Geelong	63,440	5

Source: Telecom Submission, pp.57-60

4.16 From this table it can be seen that Penrith subscribers only have access to one-sixth of the subscribers for the local fee that subscribers in Sydney have and Geelong subscribers only one-twentieth. Under these circumstances it is little wonder that subscribers outside the major metropolitan zones complain about inequitable treatment compared with their inner metropolitan counterparts.

4.17 Of course, comparisons of local call access are even more dramatic when figures for country zones are used. It was only in 1983 with the introduction of Countrywide Calling that rural customers were guaranteed community call access to a minimum of 500 subscribers.

4.18 That this inequity was present in the zonal charging system right from its introduction is clear from this statement in the Community Telephone Plan of 1960:

> 'It is possible ... that different rentals based on the number of subscribers available at unit fee, may assist in overcoming anomalies'(9)

4.19 Telecom has received many representations over the years that local call areas around cities be extended. This issue was considered in the Community Access 80 review but was rejected by Telecom. One of the arguments advanced against such a move is that such an extension would necessitate extensive number changes for many customers who would gain nothing from it. This argument reflects on Telecom's decisions at a technical level, because one of the key aims of the 1960 Plan was building in the potential to handle these types of problems:

> 'Flexibility to meet unforeseen subscriber development and to permit expansion beyond the capacity of the plan must be retained'(10)

4.20 Telecom has also used as an argument against expansion of zones the fact that extension of the local call zone around Sydney may necessitate an early move to eight digit numbers in Sydney.(11) However, the original numbering system should be able to cope with future population growth.

4.21 Number changes are not a major constraint on extending local call zones. There would necessarily need to be modifications to charging equipment which might in some areas need to be accompanied by some number amendments but any number changes would only apply to a small proportion of affected customers.

4.22 Finally Telecom argued that:

> '(P)eople in the outer areas would have to pay more for certain long distance calls which are calculated from zone centres'(12)

This is, of course, true, but by the same argument these customers would also pay less for other trunk calls in the opposite direction.

4.23 Two conclusions can be drawn thus far. Firstly, some level of inequity is unavoidable if boundaries are to be drawn at all. Secondly, the Community Access 80 scheme only made minimal changes and involved revenue concessions from Telecom of much less than one per cent.

4.24 Clearly, Telecom has shown a real reluctance in the face of dramatically changed circumstances to substantially change its original Plan. The changes made to date have been minor and have not adequately taken into account massive population changes around the fringe of the cities. Community of interest considerations have, ever since 1960, taken a back seat to the preservation of the original technical plan.

Countrywide Calling

4.25 Submissions to the Committee made a number of criticisms of the introduction of Countrywide Calling. In particular, submissions from rural organisations criticised the loss of local call access which is inherent in the 32 km limit imposed under the scheme. Submissions argued that under the system which existed prior to the introduction of the scheme local call access was considerably greater than 32 kms.

4.26 The Rural Telephone Subscribers Association was outspoken in its comments:

> 'We sincerely hope that the Committee will understand the feelings of utter betrayal experienced by remote subscribers with the introduction of Countrywide Calling on 1 October 1983 ... Of greatest concern is the imposition of timed local calls for many subscribers in extended zones.'(13)

4.27 The Association recognises that under the Scheme some subscribers received cheaper trunk access over long distances. However, the Association believes that the zonal changes embodied in Countrywide Calling whereby local call access is removed from a group of subscribers, should be considered in conjunction with any proposal to increase the areas over which a local call can be made in capital and provincial cities.

4.28 The Committee intends to carry out a more detailed analysis of Telecom's rural charging policies at a future inquiry. However, the Committee notes the loss of local call access for a range of rural subscribers and the adverse reaction that has caused in the rural community.

4.29 In addition while Telecom claims there have been benefits for remote subscribers from the scheme, there have also been substantial benefits for Telecom. Additional capital expenditure of $30M in call charging equipment was avoided over the next decade. The cost for Telecom in introducing Countrywide Calling has been an expected lower revenue of about $1M per annum in call fees. There was also a once only capital cost of about $1.5M to implement the scheme in 1983.(14)

4.30 The Committee considers that while Telecom stressed the virtues of the introduction of the Countrywide Calling scheme, the major beneficiary of the introduction of the scheme was Telecom itself which saved $30M on call charging equipment by extending the size of the zones.

Social consequences

4.31 The effects of Telecom's refusal to enlarge the local call areas has had a significant impact on the districts concerned. Telecom has acknowledged that:

> 'Although some of these new areas are over 50 km from the capital city proper, a community of interest has developed between them with strong social and business ties'(15)

4.32 In an earlier section it was noted that subscribers adjacent to the metropolitan local areas only have local call access to a mere fraction of subscribers compared with those in the capital cities.

4.33 In this situation inner metropolitan subscribers obtain greater access to other subscribers compared with outer metropolitan subscribers. The problem of inequality is inherent in any charging policy based on zones and distance.

4.34 The social consequences of Telecom's refusal to enlarge the local call areas are compounded for the disadvantaged groups in our society, particularly the aged, the unemployed and low single-income families with children. Unemployment problems are illustrated by comments from the Commonwealth Employment Sevice:

> '... the sound that every job seeker and staff member of the Penrith CES dread when ringing a prospective employer within the 40 kilometre radius is the STD beeps. To many employers this signifies that you live too far away. Bearing in mind that due to limited local employment opportunity a huge amount of job seeking activity is conducted out of the Penrith area, the STD beeps can often spell the final blow to employment opportunity, more so after a rail dispute'(16)

Casual employees also have a problem because:

> '... where employers seek to contact on-call or casual labour they can often be deterred by having to make STD calls to advise employees when they are required'(17)

4.35 This problem is also evident in Wollongong:

> '... the employment market in Sydney is the main source of jobs for Wollongong unemployed people and therefore there is a communication cost in their trying to find jobs in Sydney'(18)

4.36 Problems for the aged were highlighted to the Committee on the Mornington Peninsula south-east of Melbourne. Indeed the telephone problems on this Peninsula covered not only social but

economic and technical aspects. The social problem for this area is that many Melbourne citizens have retired into this area and feel isolated from family and friends because they are not included in the Melbourne 03 zone. A high percentage of residents are aged pensioners. For instance, 28% of the population of Flinders are aged pensioners.(19)

4.37 Apart from the financial cost, there is clearly a psychological barrier to use of the telephone for fear of incurring high charges.(20) Long telephone calls to family, for instance, can be expensive. The pensioners, like the unemployed, also found it difficult and expensive to maintain contact with businesses and government departments located in the Melbourne central business district.(21) The incidence of network congestion compounded the feelings that residents were obtaining an inferior service for a higher price.

4.38 Low income earners generally find it more difficult to afford a telephone then the rest of the community. Households with low disposable incomes in the Campbelltown area, for instance, find it expensive to maintain social ties with inner city subscribers.(22) Indeed the State Government has developed large residential areas on the outskirts of Sydney especially to house low income earners. Telecom's charging policies seem directly at odds with the State Government's intention of raising the welfare of these people. The sense of isolation is heightened when the locational choice is encouraged by the Government.

Economic impacts

4.39 It is not possible to strictly differentiate between the economic and social impacts of a particular action because changes to the level of economic activity in a region have an impact on direct employment, social interaction and, of course, through a multiplier effect, this change ripples through the region to create further changes to activity and hence employment.

4.40 There have been consistent claims to the Committee[23] that businesses have been deterred from locating in the outer metropolitan areas just outside the local call zones because of this communication barrier. An extreme example of this problem was reported in the press (Sydney Morning Herald, 17.11.77) when a Campbelltown cable factory was actually built across the boundary of the Sydney and Campbelltown telephone districts. The administration tower of the factory had to be built at one end of the site to avoid paying STD charges to Sydney. A further measure of this zonal barrier is the land vacancy rate either side of the zone boundary. For instance, industrial land in Penrith was said to be 75% vacant compared with 25% in nearby St. Mary's.[24] The Committee is naturally aware that other factors could also be influencing this situation, but this data does lend some weight to the view that Telecom's artificial barrier has affected the location of businesses.

4.41 Generally speaking, the value of land declines as the distance from the city centre increases. One measure, then, of the degree of distortion caused by Telecom's zonal charging policies, is the existence of a sharp differentiation in industrial and commercial land values either side of the boundary lines. This difference will, to some extent, indicate the capitalised value of the expected extra communications costs if business interests locate outside the line.

4.42 Another measure of the economic cost of this barrier to effective communication is the extent to which firms will by-pass the local exchange altogether and the cost of doing so. These firms use 'land-lines' which enable them to either call another extension in the metropolitan local call zone for no charge or to make a call within the city metropolitan area for the cost of a local call. For example, a leased line would enable a Penrith business access to the 02 zone with a St Mary's telephone number. This would in essence allow a call within the Sydney metropolitan area for the cost of a local call, albeit at a cost of around $3,000 rental per annum.[25]

4.43 The use of leased lines is estimated to save these companies 20% on their telephone accounts, which are claimed to be in excess of $250,000.(26) This would indicate an annual saving of $50,000. In addition, these firms no longer face the psychological barrier of having their clients dial into another zone, nor do they suffer any congestion problems that might occur in their local exchange when dialling out.

4.44 The use of leased lines immediately raises the issue of equity in a business sense - not only the concern that equal-sized businesses either side of the boundary are treated differentially - but that the larger firms can, to some extent, render this communications barrier ineffective whereas the small firms cannot afford the fixed annual rental of such lines. Thus smaller businesses are disadvantaged.

4.45 Up to this point, the Committee has only considered how Telecom's zonal charging policies may distort the pattern of social and economic activity away from more optimal levels. However, it has long been the policy of both state and federal governments to promote decentralisation. The policy seeks to relocate industry and commerce away from the central business districts. In a dynamic sense, then, the relocation and establishment of new firms on the outer fringe of Australia's conurbations has been a prominent political goal. At the state level, various funds are available to assist firms and infrastructure such as road, rail, water, electricity and sewerage are provided to facilitate this outer urban growth.

4.46 In these circumstances, it seems that Telecom's charging policies provide an impediment to the success of government development policies. While there exists continued planning to accomplish growth accompanied by active programs, Telecom has persisted with a zonal charging policy which is contrary to the policy. Telecom is exerting a negative influence on government policy in an attempt to preserve a zonal charging system which is not responsive to community needs. Telecom should give more thought as to how active assistance could be provided for government objectives instead of impeding growth programs.

Telecom's Charter

4.47 The adequacy of Telecom's response must also be seen against the background of its charter embodied in section 6 of the Telecommunications Act 1975 which states that:

> 'The Commission shall perform its functions in such a manner as will best meet the social, industrial and commercial needs of the Australian people for telecommunications services...'

4.48 The legislation states that Telecom shall have regard to:

> '(i) the desirability of improving and extending its telecommunications services in the light of developments in the field of communications;
>
> (ii) the need to operate its services as efficiently and economically as practicable; and
>
> (iii) the special needs for telecommunications services of Australian people who reside or carry on business outside the cities.'(27)

4.49 In addition, Telecom has a range of financial obligations under the legislation. The most important of these are that revenue must cover current expenses each year and provide not less than half of Telecom's capital requirements.(28)

4.50 There are, inevitably, difficulties in the satisfactory reconciliation of the 'social, commercial and industrial needs' of the community. The social needs of the community for cheap affordable telecommunications services have to be reconciled with Telecom's commercial needs to generate sufficient revenue to cover costs and capital requirements. Striking the appropriate balance is the challenge.

4.51 While there are arguments about the appropriate balance between various classes of customers there is an overall responsibility on Telecom to provide the best possible services to the Australian public. There is an obligation to ensure that Australia's telecommunications services are developed in a timely and responsive fashion in accordance with the highest technical standards to meet customer needs.

4.52 Telecom must respond not only to business needs but also to needs of residential subscribers. It is the group of residential subscribers who are outside the local call zones who are substantially disadvantaged by the existing arrangements. These groups comprise both rural and metropolitan subscribers.

4.53 Telecom takes its social obligations seriously. However, Telecom has not exhibited much responsiveness in changing its zonal charging arrangements to reflect overall changing community aspirations. It is difficult to accept that no major change in the zonal boundaries is warranted when the significant changes outlined in Chapter 3 are examined.

4.54 On 20 October 1983 the Government confirmed Telecom's monopoly position in telecommunications. The present Minister for Communications, the Hon Michael Duffy, MP, announced that the Government endorsed Telecom's monopoly position as the national telecommunications common carrier by rejecting the major thrust of the Davidson Inquiry Report which recommended a much larger role for private enterprise. Mr Duffy said that:

> 'Now that the Government has made its decision on the major recommendations of the Davidson Inquiry, Telecom can get on with the job of providing and continually developing efficient and responsive telecommunications infrastructures and services in Australia.'(29)

4.55 The point is that Telecom because of this monopoly is in a position to reorganise its charging policies in any way it wants consistent with good business practice. Its present policy which accords with its broader statutory obligations is

to cross-subsidise in a manner which it believes accords with its overall objectives. There is no constraint in principle, apart from financial considerations, on Telecom rearranging its priorities if it so wishes.

4.56 There is bipartisan support at Government level that the existing practice of cross-subsidisation should continue. The former Minister for Communications in the Liberal National Country Government, the Hon. Neil Brown, QC, MP, stated:

> '... it is essential that a national common carrier, particularly in a country as large as Australia, should be able to draw on its profitable services to subsidise other services that are costly to provide as a result of the great distances involved.'(30)

4.57 The present Government's rejection of the Davidson Report's recommendations has maintained Telecom's traditional role as the national telecommunications common carrier.

4.58 Telecom has acknowledged that tariffs for rural customers are aimed at assisting with the burden of remoteness and are currently set at levels which on the average yield revenues substantially below costs.

4.59 Telecom has also acknowledged that most of its services yield revenues substantially below costs and that the only major revenue raiser is the main Sydney/Melbourne trunk route. Therefore most of Telecom's services make a loss in Telecom's terms.

4.60 Telecom responses to criticisms of its zonal charging arrangements have been consistent. The basic zoning and charging framework has always been found to be 'essentially sound and suitable'.(31) Telecom has adopted over the years an extremely defensive and intransigent position when its arrangements have been queried. This attitude must be seen against the background of the range of political and other pressures which have been placed on Telecom to alter or adjust the boundaries.

4.61 However, the interests of a large proportion of Telecom customers cannot be ignored. The Committee believes Telecom must remain accountable for its decisions to those who provide its revenues. Internal reviews are not a satisfactory means of ensuring the accountability of the nation's largest public enterprise.

4.62 Telecom is free subject to broad constraints to adjust its charging policies to become more responsive to community needs. Community of interest, equity and engineering practicability have substantially changed over the past twenty years. The Committee considers that Telecom should accordingly make greater efforts to respond to these developments. The options for change which the Committee sees would be in line with community needs are set out in the following chapter.

CHAPTER 5

APPROPRIATE ACTION TO AMELIORATE ADVERSE SOCIAL AND ECONOMIC CONSEQUENCES

Social needs of the residential subscriber

5.1 The Committee to date has stressed the need for Telecom to become more responsive to its customers.

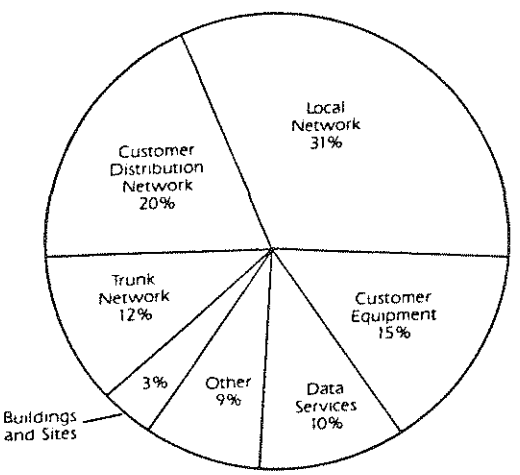
5.2 Telecom has argued that it is making a major effort to satisfy customer requirements. Its capital program of $1925M for 1984/85 is considered to be the minimum consistent with Telecom's responsibilities and the social, industrial and commercial needs of the community.

> 'With the economy gaining momentum, Telecom faces a complex task in providing resources to satisfy customer demands for new and improved services during 1984/85. Indeed it is anticipated that the telecommunications sector will be an integral part of the continued recovery of the Australian economy in the coming year. With the growing importance of the information economy, the provision of modern telecommunications products and services represents an engine of sound, high-technology economic growth.
>
> In 1984/85 Telecom is expecting very healthy demand for its services. A record number, of more than 535,000 new telephone services, is planned to be connected during the year. New exchange equipment, new lines and new telephones will be required for these new services. In addition, demand for new telex and data services and new types of customer equipment will be met - and all will be provided within the shortest possible time.'(1)

5.3 The major items in the program will substantially upgrade the operation of the network. The components are illustrated in Figure 5.1.

FIGURE 5.1

COMPONENTS OF TELECOM'S CAPITAL EXPENDITURE



Source: Service and Business Outlook for 1984/85
Australian Telecommunications Commission
August 1984

5.4 In evidence to the Committee,[2] Telecom stated that in line with its obligations to act as a commercial enterprise it ensures that its investment program generates sufficient revenue to meet its financial requirements. However, the achievement of high rates of return are not always consistent with the social needs of its customers, particularly residential subscribers.

5.5 One commentator has queried the emphasis of Telecom's expenditure program:

> 'Why is much of its more than $1 thousand million annual capital expenditure devoted to introducing digital networks which will mean little detectable difference for the domestic telephone subscriber? The answer is that telephone administrations have two sorts of customers, one spending proportionately more on telecommunications than the other. Although the vast majority of those who have telephones use them for private purposes, the smaller group of those who require them for business is much more active. Revenues for the administrations come not so much from installing handsets as from the amount of use they receive. And based on the number of calls made, business telephones generate vastly more traffic than the average private telephone. So although they may not be the largest group of telephone owners, the business community and government certainly produce more profits for telecommunications carriers.'[3]

5.6 The same commentator went on to query the beneficiaries of changes in telecommunications technology and technological advance.

> 'What has all this meant for the private telephone subscriber and what will the changes underway mean in the future? The answer, surprising to some, is very little. The major beneficiary of the transformation of the telephone network will be large corporate users, in the way signals are transmitted and switched and in the greater range of equipment they can attach to the public telecommunications system. If they do not own a computer, or constantly use the telephone, domestic subscribers will see few benefits. The quality of the lines over which voice is carried will improve, although nowhere

> near the rate at which that improvement will occur for business subscribers. People who use the telephone in their social and private lives have little need for the myriad different attachments corporations want to connect to the telephone system.(4)

5.7 The Committee does not subscribe to the view that the sole beneficiaries of technological advance in telecommunications are the business community. Faster and more efficient telecommunications services benefit the whole community through promoting the efficiency of enterprises in providing better customer services as well as generating revenue which can be used to meet social objectives.

5.8 However, there remains the need for Telecom to satisfactorily reconcile its social, commercial and industrial objectives. The social needs of the residential subscriber should not be forgotten in the desire to create a profitable and efficient enterprise.

5.9 It is against this background that the Committee has considered the various options for change.

Maintenance of the existing charging policies

5.10 The majority of the submissions to the Committee argued that there should be adjustments to the existing Telecom charging policies to respond to population growth and distribution. Many of tnose presenting submissions severely criticised the lack of response by Telecom to changing community needs.

5.11 The focus of the complaints was the failure of Telecom to extend local call zones for outer metropolitan areas to allow local call access to capital city zones.

5.12 The frustration at Telecom's inability to change its charging policies was reflected in several submissions. For example the Wanneroo Shire Council in Western Australia stated:

'the inner and outer zonal policy based on concentric rings can only be perceived by the users as arbitrary and inappropriate'(5)

5.13 The submission went on to sum up the feelings of many:

'the growth pattern of Perth over the past twenty years and the projected growth in the next twenty create a strong case from a user view point for a change to the zonal charging policies - a change which does not discriminate between users living in the one metropolis'

5.14 Telecom's response over the years to these representations and feelings of frustration has been consistent. For example, the 1979 review which led to the introduction of Community Access 80 concluded:

'The existing zoning and charging scheme was shown to be essentially sound and suitable.'(6)

5.15 A review of the zoning and charging arrangements for the Sydney (02) telephone district area concluded:

'Telecom believes that the zoning principles introduced in 1960 are basically sound and appropriate and should continue to apply as the general basis for call charging.'(7)

5.16 The Committee's view is that Telecom has consistently exaggerated the difficulties associated with making changes to the charging policies. Telecom has adopted a defensive posture to maintain the original charging arrangements.

5.17 It is conceivable that in 20 years time the existing charging policies will still be considered as 'sound and appropriate'. It is this apparent inflexibility and lack of accountability which has contributed to giving the public the impression that Telecom is a monolithic giant which is a law unto itself. Telecom must show more responsiveness to community needs if it is to rid itself of this public perception.

5.18 The Committee has therefore concluded that changes should be made to the charging policies. A charging system based on extending the existing local call zones should more satisfactorily take into account community needs.

5.19 The Committee sought advice on engineering and cost implications of changes to the zonal boundaries that were raised in submissions and previous inquiries. These options are described in Telecom's submission: (8)

(a) extending capital and provincial city charging zones to incorporate the adjoining zones;

(b) abolishing the outer metropolitan zones within each capital city charging district;

(c) abolishing charging zones and substituting a time-based charge for all telephone calls.

5.20 Telecom's general view was that each of these proposals would have major ramifications for telecommunications in Australia by:

'(i) further shifting the burden of the social obligations in providing telecommunications services to the metropolitan business customer;

(ii) substantially increasing the costs of providing telecommunications service in Australia;

(iii) generally reducing the revenue derived from telecommunications;

(iv) creating major funding difficulties, which in turn would impact on Telecom's capital programme and its ability to provide a nationwide world standard service.'(9)

5.21 The adequacy of this assessment will be discussed in the following consideration of the various options.

Extending capital city charging zones

(i) Incorporating adjoining zones

5.22 This option involves extending each of the existing capital city charging zones to incorporate the adjoining zones For Sydney it would mean bringing the following zones within the 02 area:

Gosford	Mulgoa
Wiseman's Ferry	Camden
Windsor	Campbelltown
Penrith	Helensburg

5.23 Calls between these zones and Sydney's central zone would be charged an untimed unit fee.

5.24 Local call access to the central city zone would be provided for the outer metropolitan areas. No changes would be required to zoning and district boundaries and the existing numbering scheme would be retained.

5.25 The effect of this proposal for calls from outer metropolitan areas to city centres is to reduce charges from the existing 15 cents per 3 minutes (community call charge) to 15 cents per untimed call. Telecom estimates that this would stimulate day traffic by approximately 10%.(10)

5.26 Additional circuit capacity would be required to carry the extra traffic. For Sydney the cost is estimated at $2.2M. For all capital cities, the capital cost of extending the charging zones is estimated to be $8.8M.

5.27 In addition less revenue is expected to be generated as a result of reduced call charges. Telecom considers that the revenue loss is expected to be $10M per annum. The revenue loss will also be accompanied by operating and maintenance costs of $1.53M.

5.28 The total cost of extending local call zones for all capital cities is therefore estimated to be $20.33M. This is 1% of total Telecom estimated capital expenditure for the year 1984-85. It should also be remembered that Telecom's revenue for 1982-83 was $3.6 billion.

5.29 It is also possible that the $10M revenue foregone estimate may be inaccurate. Telecom accepts that revenue foregone estimates are subject to a range of uncertainties. The figure is based on present revenues at present prices, determining what would be the traffic at new prices and multiplying that by the new proposed price. The revenue is then calculated under the new price scenario and the difference is the revenue foregone.(11)

5.30 However the uncertainty is the traffic at the new price. Telecom bases its estimates on past experience. Traffic volume variation based on past experience may not be in line with reality.

5.31 The point is that revenue growth forecasts for telecommunications services have been traditionally underestimated, particularly in periods of growth in the economy.(12) It is possible that the potential revenue losses from extending local call zones have been overstated. Therefore the cost of extending local call zones may be less than Telecom estimates.

5.32 Telecom observes that if local call zones were extended there would exist a problem of a large tariff differential for those outside the extended zones in the seven capital city and provincial city zones. Reduced charges for these subscribers are estimated by Telecom to require $30M capital expenditure with a revenue reduction of $50M per annum. These estimates are again open to question in view of the difficulties in identifying the precise magnitude of potential revenue losses from reduced charges.

5.33 It should be noted that Telecom's revenue losses are a transfer of income from Telecom to its customers. This transfer is thererore not a loss to society. The cost to society is therefore limited to the initial capital cost plus any additional operating and maintenance costs. Even this cost will be offset by the net benefits associated with the additional calls.

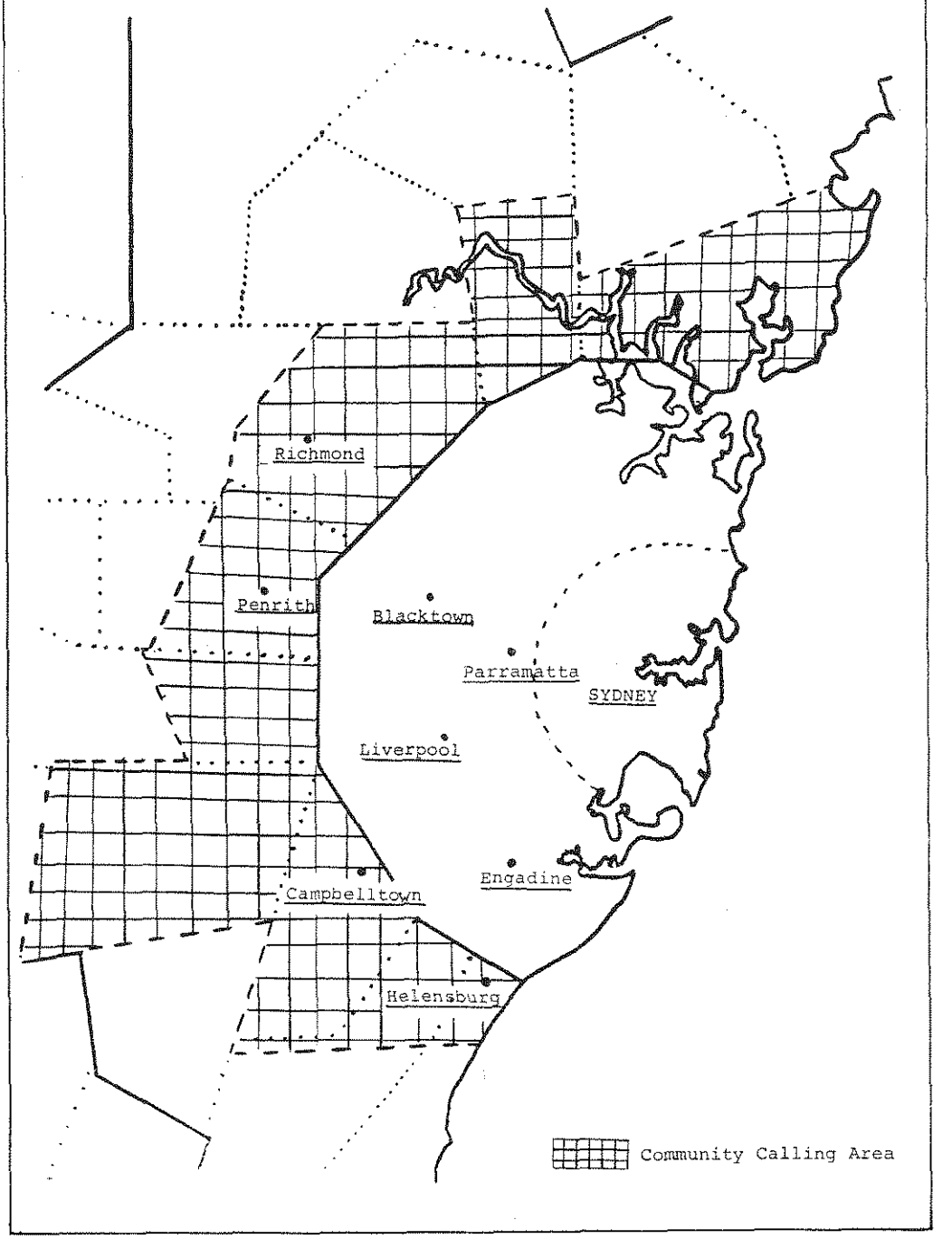
(ii) Reducing inner city zones

5.34 A further alternative under this option would be to reduce the size of the inner city calling zones thereby expanding the outer zone in each capital city. The effect of this is to extend local call access for those outside capital city zones. This is demonstrated in Figure 5.2.

5.35 For those in Penrith, local call access is extended to a much larger adjacent zone which could incorporate regional service centres such as Parramatta.

5.36 The benefits of this option would be restricted compared with option (i) since local call access does not extend to the inner city area for residents such as those living in Penrith. However, Penrith subscribers would be able to call many more subscribers in the 02 zone for the cost of a local call fee.

Figure 5.2 REDUCING INNER CITY ZONES



(iii) Abolishing outer metropolitan zones

5.37 Under this option all zones in each metropolitan charging district are amalgamated to form a single metropolitan zone/district. The various zone centres in the outer metropolitan areas would disappear and all interzone charging would recognise only one metropolitan zone, centred in or near the central business district.

5.38 The effect of this for Sydney is illustrated in Figure 5.3. All calls between Sydney and the adjacent zone i.e. Penrith, Richmond, Campbelltown, etc would become local calls.

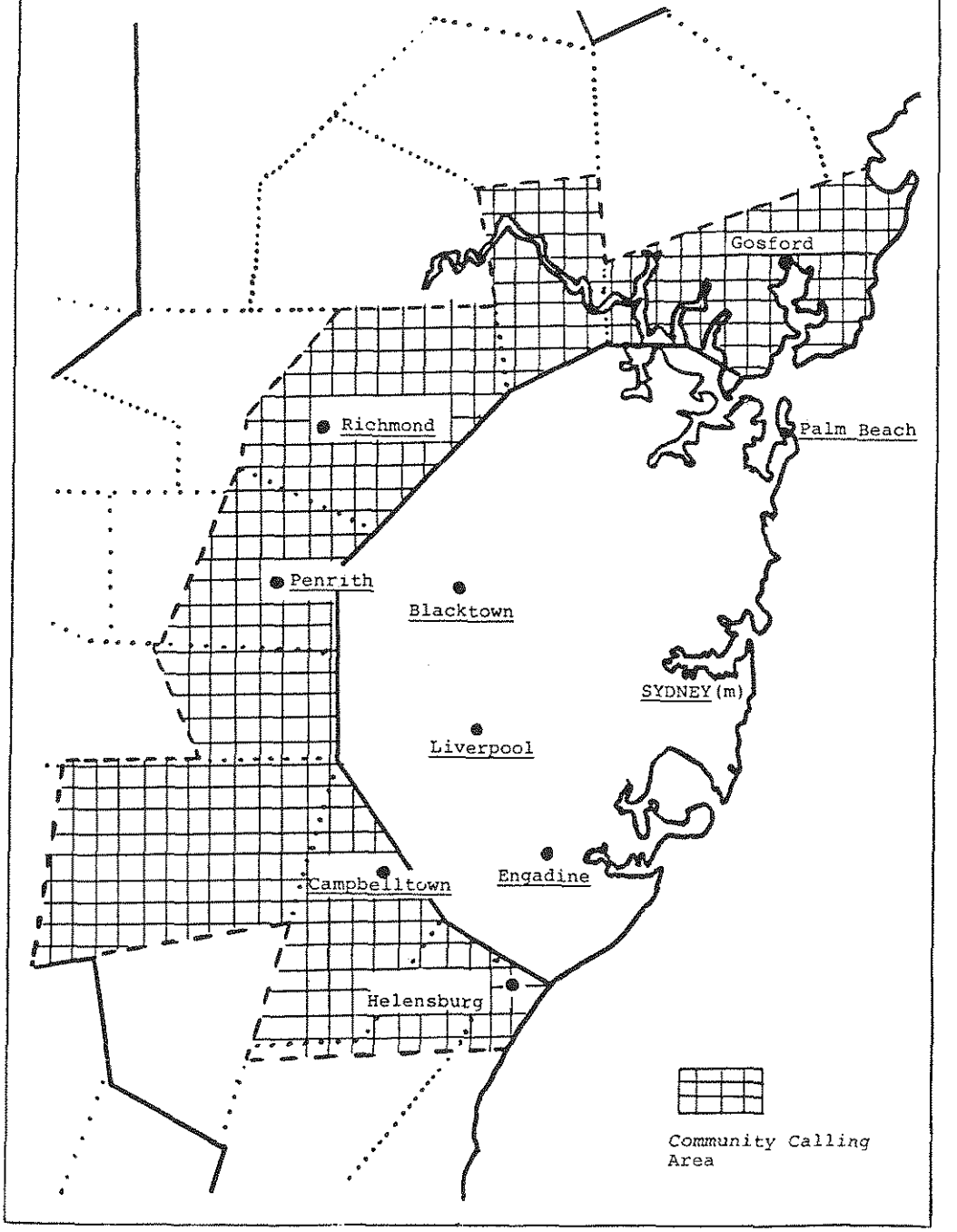
5.39 At present trunk call rates apply for longer distance calls within the existing zone, e.g. Liverpool/Palm Beach. The present charge for these calls within the metropolitan zone can be up to 60 cents per 3 minutes.

5.40 If this change was implemented, Telecom estimated that two traffic increases, in addition to the extra traffic generated in extending local call zones, would occur. Firstly, trunk distance call paths within the metropolitan zone would become untimed local fee paths, generating traffic. Secondly, some trunk distance charges between existing outer metropolitan zones and country zones would drop to unit fee, also promoting traffic stimulus.

5.41 Total costs of the additional trunk equipment to cover all metropolitan and provincial city networks is estimated by Telecom to be $36M. To maintain equity for country consumers, a further capital expenditure of $12M would be required, making a total of $48M. Revenue losses (i.e. gains to customers) of $60M per annum are estimated.

5.42 Telecom argues that equity issues would still be a problem as the non-metropolitan customers would be required to pay higher charges for equivalent distances. There would also be a large tariff differential within the area of reduced call charging and to the adjacent area.

Figure 5.3 ABOLISHING OUTER METROPOLITAN ZONES - SYDNEY



(iv) Extensions limited to certain capital cities

5.43 The Committee also considered limiting the extension of local calls to those capital cities where population growth has been most dramatic.

5.44 Chapter 3 noted that population growth has been much higher in Sydney, Melbourne, Perth and Brisbane than in Adelaide and Hobart.

5.45 The Committee asked Telecom to provide cost estimates for extending local call zones for Sydney, Melbourne and Perth. The total cost was $14.29M. The cost was made up of $6.2M capital cost, $7M revenue forgone and $1.09M operating and maintenance costs.(13)

5.46 The Committee rejected the proposition that the benefits of extended local call zones should be restricted to some and not all capital cities. The cost savings to Telecom of $6.04M, by limiting the extension to these three cities and not all capital cities, would be insignificant in terms of Telecom's overall expenditure of $3.37 billion in 1982-83. The costs of extending local call zones to incorporate adjoining zones are set out in Table 5.1.

TABLE 5.1

THE COSTS OF EXTENDING LOCAL CALL ZONES TO INCORPORATE ADJOINING ZONES

	Capital Costs of local calling ($M)	Revenue forgone per annum ($M)	Operating and maintenance costs p.a. ($M)
Capital Cities only	8.8	10	1.53
Capital Cities plus provincial cities	17.6	20	3.08
Capital Cities provincial cities and other country areas	47. 6	60	8.31

5.47 The Committee has addressed itself to a number of the arguments used by Telecom to oppose the extension of local call zones. Some of these arguments are set out below.

Are local calls loss-making?

5.48 Telecom is concerned that local calls only just cover average direct and indirect costs. The average revenue per call in 1982-83 was 12.5 cents and average direct and indirect costs totalled 12.0 cents per call.(14) Telecom argues that an average of five cents per call is required to cover the loss on rents. The total loss for local calls is estimated at $248.7M.

5.49 Telecom gave a breakdown of the earnings and expenses for metropolitan and non-metropolitan calls in its submission to the Prices Surveillance Authority (PSA).(15) The evidence provided to the PSA would appear to be contradictory to that provided to this Committee.

TABLE 5.2

EARNINGS AND EXPENSES FOR LOCAL CALLS

	Metro ($M)	Non-Metro ($M)
Earnings	678	295
Direct Expenses	386	286
Contribution	292	9

Source: Telecom Submission to Prices Surveillance Authority August 1984, p.30

From Table 5.2 it can be seen that Telecom makes a substantial profit from metropolitan local calls. It is misleading to conclude, therefore, that all local calls are loss-making.

5.50 Telecom has also claimed that for community calls average revenue is 24 cents, whereas average direct and indirect costs totalled 35 cents in 1982-83.(16) There could be a number of reasons for this. Firstly, the Community Access 80 program

under which the Community Call concept was implemented covered both metropolitan and country areas and it is not known which areas in Australia generated the most significant losses. Secondly, the community calling was designed to apply, in part, to the developing urban fringe areas where infrastructure must be supplied ahead of demand. Therefore, it would not be surprising that losses would be incurred in the first few years following new suburban development.

5.51 The difficulties created by relying too heavily on a static picture of one year's revenues and costs become apparent when it is realised that in areas of substantial growth, facilities will always have to be supplied ahead of demand. Therefore, those areas, which are precisely those covered by the Community Call arrangement, can be expected to make initial 'losses' until the density of subscribers increases enough to drive the average cost figure down.

5.52 As with any business, it is not uncommon to incur initial losses as the customer base improves and Telecom in the outer areas would be no exception in this regard. It follows therefore that it is inappropriate on efficiency grounds to exclude the metropolitan fringe from the local call zones. In time these areas can be expected to become profitable as the density of the population increases. Telecom must take a longer term view of this matter as much as any business would.

5.53 As an example of the variations which can occur over time in telephone contributions per service for a particular district, in the years 1980-81 to 1982-83 the loss per service for the Penrith district (remembering that these figures are based on full cost allocations) doubled from $109 to $242.(17) Although revenue per service increased by a healthy 31% over that time, costs increased much faster with a 52% rise. A substantial part of the cost increases resulted from increased works which would be more fully utilised over time.

5.54 Telecom has also indicated that earnings did decline after May 1980 because the price of calls to the inner city zone in Sydney was reduced.(18) The percentage rate of interest applicable to capital works also increased significantly over the period of time in question.

5.55 After some discussion between the Committee members and Telecom officials on this matter (19), it is clear that it is the provision of excess capacity for rapid growth which dominates financial results in the short term. Indeed Telecom has stated:

> 'Telecom regards these figures as being indicative only and not as a matter of a sort of profit and loss for each area and action taken from a management point of view on that fact alone' (20)

5.56 The Committee has demonstrated, and Telecom has acknowledged, that it is unwise to place too much emphasis on the net revenue contributions of outer metropolitan districts when evaluating extensions to local call zones. The Committee has also demonstrated that clear arguments on an efficiency basis do not exist for the continuing exclusion of the outer urban areas from the local call zone. Inappropriately priced local calls cannot be used as an argument against extending local call zones.

5.57 The point needs to be made that notwithstanding the uncertainties on revenue foregone, the capital cost of $8.8M is a mere 0.4% of Telecom's 1984/85 capital program.

Are international comparisons of local call size areas sufficient to deny extension for Australian subscribers?

5.58 Telecom argues against extending local call zones on the basis that those in outer metropolitan areas are now receiving benefits of the cheapest equivalent calls of similarly placed customers in almost any country in the world.

'the existing metropolitan local call areas in Australia are already large by world standards. The Australian charging system should not be altered in a manner which is out of character with trends in the telecommunications industry throughout the world. To extend further local call areas around metropolitan areas would exacerbate the perceived inequities within the metropolitan areas in the areas around those areas and the comparisons between them and the country areas. To extend untimed local calling around metropolitan areas would be against the thrust of arguments which have been put to Telecom from time to time and, in particular, matters which came before the recent public inquiry into telecommunications services in Australia, the Davidson Committee. To summarise, those arguments are based on the proper allocation of costs, economic arguments, resource allocation, which is not in accordance with the best optimum allocation of resources and, of course, the country views that in effect nothing further should be done for the city until a great deal more can be done for the country.'(21)

5.59 Telecom concludes that:

'to increase costs in this way and to reduce revenue would be against our interpretation of that provision in the Act which requires Telecom to operate its services as efficiently and economically as practicable.' (22)

5.60 The Committee takes a different view. It considers that the benefits of extending local call zones would considerably outweigh the costs. Such an extension would not make a significant impact on Telecom's ability to operate efficiently and economically.

5.61 As shown in Table 5.3, extending local call zones to incorporate adjoining zones would benefit approximately 0.89 million people. This is estimated to rise to 1.24 million in 2001. In addition, extending the community call zone is estimated to benefit a further 0.68 million people rising to 0.93 million in 2001. The cost of extending local call zones by one zone for capital and provincial cities is $17.6M capital cost, $20M revenue foregone and $3.06M operating and maintenance costs. On a

per capita basis this cost is not excessive and is totally consistent with Telecom's obligations to respond to the social needs of the Australian community.

TABLE 5.3

TOTAL ESTIMATED POPULATION LIKELY TO BENEFIT BY EXTENSION OF LOCAL AND COMMUNITY CALL ZONES

	1981	2001
Local call zone extension	889,167	1,235,054
Community call zone extension	682,543	933,501
TOTAL	1,571,710	2,168,555

Source: Committee estimates

5.62 The Committee therefore believes that Telecom should respond to population growth and distribution since the 1960's by extending local call zones to allow extended untimed local call areas between outer metropolitan and capital city subscribers.

Recommendation 1: Telecom's zonal charging policies should be restructured to take account of rapid population growth in outer metropolitan areas and to ensure that people in these areas have greater local call access to capital city zones and major regional service centres.

Telecom should extend outer metropolitan local calling areas for the zones adjoining all State capital cities. This could be achieved by expanding existing outer metropolitan zones to take in high growth areas or by reducing the size of inner City zones to allow extended local call access to a wider community of interest.

Local call access for particular areas

5.63 In Sydney, Melbourne, Brisbane and Perth, there has been particularly high population growth in some outer metropolitan areas just outside existing local call zones. These areas are totally dependent on the capital cities for their services and other facilities. High volumes of telephone traffic pass between these areas and the central city districts.

5.64 Expansion of population has led to anomalies in the zonal boundaries separating population concentrations which are logically part of the metropolitan centre. These anomalies are particularly serious in areas which have experienced the highest population growth.

5.65 Anomalies also exist where nearby communities have to pay high telephone charges because of the way the boundaries are presently drawn.

Recommendation 2: *Telecom should give urgent attention in* Sydney, Melbourne, Brisbane and Perth to extending local call access for outer areas which are logically part of the metropolitan area. Early action should be taken in areas including:

Penrith/Sydney (NSW)
Beaudesert/Brisbane (QLD)
Mornington Peninsula/Melbourne (VIC)
Rockingham/Perth (WA)

Subscribers outside extended local call zones

5.66 Any extension of local call zones would create major inequities for customers just outside the local call zones. For example if the Sydney Telephone District was expanded to give greater local call access, there would be pressure for the community call rate to be extended outwards.

5.67 Presently subscribers within the 50-85km radius can pay up to 60 cents for 3 minutes (day rate) for calls across cities. Telecom considers that having regard to the fact that this rate is only marginally profitable, any reduction would not be acceptable since it would necessitate the calls being cross-subsidised by the earnings received from the longer distance calls. Telecom also notes that there would be some engineering costs involved.(23)

5.68 The Committee does not believe that these costs would be significant in view of Telecom's total revenues. It would not be equitable to extend the capital city local call zones without making some adjustment to the adjacent zones.

Recommendation 3: **Reduced rates should be granted to those subscribers adjacent to the new extended local call zones. These reduced rates should reduce the differential between those inside and outside extended local call zones.**

Short distance rates

5.69 At present there are marked differences in Telecom charges for short distances up to 50 kms. For example, a subscriber making calls in the Melbourne area could be charged either 15 cents untimed local call fee, 15 cents per 3 minute community call fee or 30 cents per 3 minute call, depending on the subscriber's location in the metropolitan area.

5.70 The existence of three scales of charges for these short distance calls creates confusion in the minds of subscribers and inequities for subscribers making similar distance calls. Changes in community of interest in metropolitan and provincial city areas demand a reduction and simplification of short distance rates.

Recommendation 4: Telecom should reduce charges for short distance calls up to 50 kms to recognise changes in community of interest.

Reviewing provincial city charging arrangements

5.71 Chapter 3 of this report noted that there has been uneven growth in provincial cities. Growth has been highest in Gosford/Wyong, Sunshine Coast and Gold Coast. This contrasts with negative growth in the inner Local Government Areas of some provincial cities such as Geelong and Newcastle.

5.72 There are, as noted in Chapter 3, two types of provincial cities - those which are geographically close to the capital cities and are dependent on them for many of their services, e.g. Geelong, Wollongong and those which are regional centres which exist in their own right and are not as dependent on capital cities, e.g. Wagga Wagga, Mackay and Albury/Wodonga.

5.73 Representatives of some provincial cities have argued that population growth over the past 20 years has been so significant that their local call zones should be extended.(24)

5.74 Telecom has estimated that the cost of extending local call zones for all provincial cities is $20.33M, the same as the cost of extending local call zones for capital cities. This figure is made up of $8.8M capital cost, $10M revenue foregone and $1.53M operating and maintenance costs.(25)

5.75 On a per capita basis the benefits of extending local call zones for provincial cities are less than for capital cities. This is not, however, sufficient justification for denying local call access for areas where there has been significant population growth.

5.76 Provincial cities generally have argued for cheaper rates to capital city zones. In the case of provincial cities which are distant from capital cities, e.g. Albury/Wodonga, this means reduction in STD charges. The submission from the Albury/Wodonga Telecommunications Committee reiterated a recommendation made earlier in its submission to the 1982 Davidson Inquiry:

> 'The considerable disadvantages experienced by non-metropolitan subscribers be removed by progressive reductions of trunk rates (especially over longer distances), by holding decentralised business rentals whilst substantially increasing others, to more nearly match the return on investment scenarios recommended by McKinsey. Such restructuring should reflect time as the basis for charging rather than distance; and should be accomplished to allow Telecom time to adjust for changes in locations and type of demand.' (26)

5.77 Those cities which are situated close to capital cities have argued for reduced calling rates to their adjacent capital cities. For example Wollongong and Geelong are two major provincial cities dependent for many of their services on their associated capital cities, Sydney and Melbourne respectively.

5.78 Presently call charging between both cities and their parent cities is charged at 60 cents per 3 minutes (day rate).

5.79 Telephone trafric flows are significant between Geelong and Wollongong and their capital cities. High telephone charges have been cited as a significant burden by both the Wollongong City Council and the Geelong Regional Commission.

5.80 The submission from the Geelong Regional Commission noted that:

> 'the Geelong Region is the only major provincial centre within the 50-85km zone of the State capital.'(27)

5.81 The Commission stressed the social links with Melbourne as a commuter centre and the family links between Geelong and Melbourne residents.

5.82 The Committee also notes the dependency of Wollongong on Sydney. The Wollongong City Council commented:

> 'The inclusion of Wollongong in the "community call" zone would enhance the assistance already being given the region and have a positive influence on the economic well-being of industry and commerce in Wollongong.'(28)

5.83 The Committee believes that there is a good case for reducing the charging rates for provincial cities which have close links with capital cities and are geographically adjacent. In the case of Geelong and Wollongong, development is almost contiguous between Geelong/Melbourne and Sydney/Wollongong.

5.84 Some areas which are as close to Sydney/Melbourne as Geelong/Wollongong, presently have local call access to the capital cities. This 15 cent untimed call fee compares with the existing rate of 60 cents per 3 minutes for Geelong and Wollongong.

5.85 In addition, while there is no uniform case based on population growth for extending local call zones for provincial cities, some provincial cities have claims which require close examination.

Recommendation 5: **Telecom should review its charging policies for provincial cities.**

Recommendation 6: **Telecom should extend local call zones for provincial cities with high population growth, e.g. Gosford/Wyong, Sunshine Coast, Gold Coast.**

Recommendation 7: **Telecom should reduce rates for provincial cities whose growth and development is closely linked with adjacent capital cities, e.g. Wollongong, Geelong.**

Time based charging

5.86 Several submissions supported the introduction of time based charging. The Albury/Wodonga Telecommunications Committee observed that:

> 'The current tariff structure reflects distance and not time. With a near-complete automatic network, telecommunications services in such a vast continent are largely installed. Costs now involved in the network are mainly time related, and tariffs should reflect this.'(29)

5.87 The Submission urged that:

> 'the only equitable basis of charging for a national network in a country whose main tyrannies are distance and remoteness is for a (longer term) local call rate based on time.'(30)

(i) National uniform charge

5.88 Telecom in its submission to the Inquiry examined the potential for abolishing charging zones altogether and substituting a time based charge for all telephone calls.

5.89 Telecom estimated that the introduction of timed local calls would involve an engineering cost of $100M.(31) Changes at charging centres across the nation would add $5M to this cost. Therefore the engineering cost would be of the order of $105M nationally.

5.90 A national time based charge of 15 cents per 3 minutes would reduce total call revenue in 1984/85 by $750M, assuming no changes in demand. To retain the same level of call revenue, the 3 minute call charge would need to be substantially more than 15 cents.

5.91 Telecom estimates that the uniform fee would need to be in the range of 30 to 35 cents per 3 minutes to derive the same revenue as with the existing tariffs, to allow for the reduction in trunk revenue and the likely decline in demand for local calls.

5.92 A uniform charge of 30 to 35 cents per 3 minutes would imply a large reduction for most trunk calls and could lead to a large increase in trunk traffic requiring substantial additional investment in the trunk network; thus leading to a higher uniform charge.

5.93 Telecom suggests an alternative which would be to charge local calls at 15 cents per 5 minutes and short distance calls (i.e. up to 85 kms) at 15 cents per 3 minutes. All other

calls beyond 85 kms would be charged at existing trunk rates. This tariff structure would generate about the same revenue as the existing tariff structure.

5.94 However, such a uniform charging scheme would lead to a situation where short distance calls subsidise long distance traffic and residential callers subsidise business traffic, clearly an inequitable arrangement. On this basis the Committee does not favour the introduction of a uniform time based charge.

(ii) Timed local calls

5.95 There was some support for the introduction of timed local calls. Mr Peter Reith of the Victorian Liberal Party supported the implementation of many of the Davidson Inquiry recommendations including the introduction of timed local calls.(32)

5.96 NUS International Pty Ltd, saw several potential advantages in the introduction of timed local calls.

> '(1) By generating additional revenue from local call tariffs, other charges, such as exchange-line rentals and connection charges, could be frozen or even reduced for a prolonged period.
>
> (2) The Consumer, charged on a "User Pays" principle, should minimise traffic congestion, particularly at peak times, by reducing number of calls and lengthy durations which would result in the greater utilisation of expensive line-plant.
>
> (3) This greater utilisation of existing line-plant may delay or even prevent the need for highly expensive expansion development projects.
>
> (4) This "User Pays" principle should increase the Consumers general awareness of Telecommunications Costs.' (33)

5.97 A May 1983 study [34] undertaken by Telecom illustrates the local call fees charged overseas. At the time of the study, the Telecom local call fee was 13 cents (untimed). All charges presented in Table 5.4 are converted to Australian currency. On the basis of these international comparisons, Telecom's local call fee is not necessarily lower than those applying overseas.

5.98 The Davidson Inquiry recommended the introduction of timed local calls.[35] Attention was drawn to the fact that business users can tie up a telephone line for data or other communications purposes for the cost of a local fee.

5.99 Telecom data supplied to the Davidson Inquiry indicated that 66% of local calls are for a period less than 3 minutes. That Inquiry concluded that the local call unit fee could be reduced by 40% without reduction in Telecom's existing local call revenues to the benefit of the majority of local call users.

5.100 Of all the recommendations of the Davidson Inquiry the proposal to introduce timed local calls created the greatest furore.

5.101 In the run-up to the March 1983 election there was a bipartisan commitment not to introduce timed local calls.

TABLE 5.4

INTERNATIONAL COMPARISON OF LOCAL CALL FEES

Country	Local Call Fee
Australia	13 cents per call (untimed)
United Kingdom	Peak Rate - 8.4 cents per 1 min 30 sec Standard Rate - 8.4 cents per 2 mins Cheap Rate- 8.4 cents per 8 mins Peak Rate - 9am-1pm Mon/Fri Standard Rate - 8am-9am Mon/Fri - 1pm-6pm Mon/Fri Cheap Rate- All other times
Netherlands	6 cents (untimed)
Canada (Montreal)	Business rentals ($458.35) and Non-business rentals ($139.20) cover an unlimited number of free local calls.
Sweden	3.1 cents per 6 minutes (8am-6pm Mon/Fri) 3.1 cents per 12 minutes (all other times)
United States (Los Angeles)	8am-5pm Mon/Fri 0-12km 3.6 cents for first minute 1.2 cents for each additional minute 13-19km 7.2 cents for first minute 3.6 cents for each additional minute 20-25km 9.6 cents for first minute 6.0 cents for each additional minute Charges are reduced by 30% and 60% outside the hours shown
Japan	4.8 cents per 3 minutes

5.102 The former Minister for Communications, the Hon. N.A. Brown, Q.C., M.P. announced on 9 February 1983:

> 'The aged, disabled and others who depend on a telephone as their lifeline need have no fear. They will be able to continue to use the telephone for local calls for the cost of a standard call as they can now.
>
> The telephone is an essential link for so many people. Our decision on this issue will ensure that people will continue to be able to use the telephone without fear that it will be priced beyond their means.'(36)

5.103 The present Prime Minister, the Hon. R.J. Hawke, AC, MP. in his Rural Policy Speech of 20 February 1983 noted that the Davidson Inquiry had recommended time-charging for local calls.

> 'Labour opposed the limited terms of reference of the Davidson Inquiry, has opposed the Committee's recommendations, and, in Government will not implement any of the recommendations which disadvantage country people. For the Labour Government, those recommendations are dead.'(37)

5.104 Disadvantaged groups such as pensioners, rural subscribers and the young have been strong in their opposition to the introduction of timed local calls.

5.105 Telecom observes that there are a number of pressures developing which would favour local call timing:(38)

- network exploitation - e.g. by computer users of Datel Service and interconnect competitors;
- need to increase revenue from the local product and reduce dependence on trunk products;
- reaction of metropolitan customers who make short calls to increasing costs of their local untimed calls;
- need to reduce capital costs of local network;
- need to prepare for the introduction of ISDN - which removes distinction between data and voice and will be time/volume charged (AUSTPAC traffic is timed currently); and

- country customers see city dwellers at an advantage with untimed calls.

5.106 The Committee accepts the view of the Managing Director of Telecom:

> 'I think that in the short term, we have no chance of seeing the timing of local calls in Australia. That is my view. Distance is still a very important factor in the cost of telephone service and while you can see the diminishing impact of distance in the progressive reduction in long-distance telephone charges - not only in Australia but world wide - it will be many years before distance ceases to be a significant factor over short distances. We would not consider a national, uniform, time-based charging system a realistic option at this time.' (39)

Recommendation 8: **The Committee does not favour the introduction of timed local calls.**

Financing Options

5.107 Telecom is concerned that, in total for all its operations, total revenues cover total cost. There are a number of revenue raising options which would cover the costs associated with any possible changes to the zonal charging policies. These include increased borrowings (overseas or domestic), increased rentals, increased local or STD call rates, reductions in interest payments to the Commonwealth, or budget subsidies.

5.108 As a benchmark figure Telecom has stated that an increase in the local call fee of one cent would raise approximately $55M.(40) On this basis an increase in the local call fee of approximately two cents would be sufficient to offset the cost of extension of capital and provincial city zones.

5.109 Telephone rentals earned just over one billion dollars in 1982-83. Extending capital city call zones could be financed by a 12% increase in all rentals. For example, a $10 increase in rentals would raise approximately $56M.

5.110 STD call revenues approximated 1.3 billion dollars in 1982-83. On these figures, extending capital city call zones could be financed by a 9% increase in STD charges.

5.111 Telecom borrowings for 1984-85 have been limited by Loan Council to $600M. If Telecom used some of these funds to cover the initial capital cost of extending local call zones and implemented the program in 1984-85 then 8% of its total borrowings in that year would be required.

5.112 Telecom's payment by way of interest on Commonwealth advances was just short of $600M in 1983-84. The interest is being paid at existing commercial rates on funds that were borrowed several years ago. Telecom therefore supports a reduction in its ongoing interest payments, particularly in view of the low risk nature of funds invested.(41)

5.113 Explicit budget subsidies could also be requested by Telecom to cover the capital costs and revenue losses of extending local call zones. By way of comparison, current subsidies to subscribers are estimated to be $490M.(42)

5.114 Telecom has considered the relative merits of the various revenue raising possibilities mentioned above.(43) An increased level of borrowings from both domestic and off-shore markets is favoured by Telecom. In fact with a flexible exchange rate it is difficult to mount a convincing argument against increasing Telecom's off-shore borrowing.

5.115 Telecom has forecast progressive increases in rentals and believes that scope exists for marginal increases in the local call fee.

5.116 Budget subsidies are not favoured by Telecom, in particular general revenue grants similar to those made to other Commonwealth owned organisations which incur losses. There is less resistance on Telecom's part to subsidies for specific

projects or clearly identified target groups and indeed pensioners at present obtain approximately a one-third concession on rental, which is reimbursed to Telecom by the government.

5.117 An indication of Telecom's own preferences for revenue raising can be gained from its notification of price increases to the Prices Surveillance Authority in July 1984. Rather than concentrate on a single instrument, Telecom has proposed a number of changes which would increase revenues by an estimated $101M in a full year.

5.118 Brief details of proposed tariff charges are:

- business and non-business rentals to increase by $8 per annum;
- local and community calls to increase by one cent;
- reductions in day rate trunk calls of four per cent; and
- increases in off peak trunk calls of 6.7 per cent.

5.119 Telecom could have moved some way towards an extension of local call zones by forgoing the reductions in day rate trunk calls. Trunk calls make a profit of $1.03 billion.

5.120 The Committee has demonstrated that there are a range of revenue raising options available to Telecom. The impact of extending zones on Telecom's accounts would be very modest and could be countered simply by a combination of revenue measures. Rather than become entangled in borrowing requests Telecom should raise revenues from a range of internal sources, including adjustment of its priorities within its $1.92 billion capital expenditure program.

Recommendation 9: **All costs associated with the extension of local call zones should be financed from Telecom's internal sources. There are a number of funding options available including:**

- rearrangement of capital spending priorities
- increased rental/service fees
- increased local call rates
- review of STD rate reductions

Cross-subsidisation

5.121 In its submission to the Committee Telecom gave its own assessment of the complexities of cross-subsidisation. Telecom believes that whilst the metropolitan telephone rental for business services is about that required for break even, the lesser amount for non-business services on average falls far short of covering the cost of provision of a telephone service to a non-business customer in suburban areas. Furthermore, the telephone rental falls very far short of the cost of provision of a telephone service to any customer in the rural areas, particularly remote areas.

5.122 Telecom considers that the local call fee more than covers the cost of switching within a local exchange but falls short of total cost when switching to other exchanges, say, in excess of 10 km away. Short distance trunk calls, including community calls, are unprofitable and the major source of Telecom's profit is the long distance trunk area, particularly in the intercapital routes.

5.123 Put another way, inner metropolitan areas generally more than pay their way because the rental is largely that for business, the local calls are usually short and the trunk calls are usually to major provincial cities or to other capitals. The further one proceeds outwards from the centre of the metropolitan areas there is a preponderance of non-business rentals, untimed local calls tend to be over greater distances and of greater duration, and a higher proportion of trunk calls tend to be made when there are discounts applying.

5.124 In short, those areas which are between about 10 km and 80 km from the centre of capital cities tend to be areas which receive cross-subsidisation. In addition, most of the rural subscribers, and particularly those living in remote areas, tend to receive a cross-subsidy.

5.125 The Committee recognises that Telecom should provide services at below the cost of their provision to particular groups in the community. This is in accordance with Telecom's charter. It does not accept the view that the responsibility for subsidising loss-making activities, e.g. rural services, should be removed from Telecom. Cross-subsidisation is consistent with Telecom's social obligations.

Recommendation 10: Telecom should continue to accept its responsibility for subsidising loss-making activities e.g. rural services. Cross subsidisation is consistent with Telecom's social obligations to the community and should be maintained.

Cost Allocation

5.126 Telecom in recent years has been adjusting its prices to more accurately reflect cost. This is consistent with a number of recent reports on Telecom's tariffs and tariffing principles.

5.127 The 1980 McKinsey Report entitled 'Capital and Policy Requirements for the 1980's': Telecom Australia (44) strongly recommended that Telecom price its services to more closely reflect actual cost. This was to be achieved by:

- restructuring trunk, local and rental tariffs to reflect cost;
- making additional use of marginal cost pricing where excess capacity exists; and
- developing plans for eliminating the losses incurred in uneconomic activities.

5.128 McKinsey estimated that in order to price services more closely to cost, by 1985 tariffs would need to be increased by 6% p.a. for local calls. In other words, local call prices are

presently priced below cost and trunk calls are priced substantially above cost.

5.129 The Davidson Inquiry also came to the conclusion that prices should be related to costs.

> 'Cost related pricing does not imply that all prices should be fixed strictly in accordance with the cost of supply. Cost of supply, is, however, a major determinant of the price. Some degree of subsidy or consideration of other factors - e.g. market promotion or market development - may still be important to the final price structure.'(45)

5.130 Telecom uses the argument that its services should be priced more closely to cost for denying that local call zones should be extended. The table below illustrates the magnitude of the losses estimated by Telecom on local calls and short-distance trunk calls. Middle and long distance trunk calls, i.e. over 85kms are said to be profitable on average.

TABLE 5.2

SHORT DISTANCE CALLS CONTRIBUTION

	Average Revenue Per Call $	Average Direct Cost Per Call $	Average Indirect Cost Per Call $	Average Alloc. Per Call To Recoup Loss on Rents $	Average Profit or Loss Per Call $	Total Cont. To Prof. or Loss $(M)
Local Call	0.125	0.10	0.02	0.05	-0.045	-248.726
Comm. Call	0.24	0.30	0.05	0.05	-0.16	- 12.768
A 25-50km	0.33	0.29	0.06	0.05	-0.07	- 4.217
F 50-85km	0.65	0.30	0.12	0.05	0.18	18.644

Source: Telecom Submission p. 33

5.131 In the course of the public hearings several comments were made on the concept of pricing according to cost.

5.132 Henry Ergas from the OECD in Paris summed up the basic arguments for cost-based pricing:

> '... cost-based pricing is even more important for public monopolies than it is for private companies. The reason for that is really that by its nature a public monopoly common carrier is subject to multiple political pressures. If it can base its pricing decisions on a fairly simple rule, that is, that we will price according to cost - if you want to subsidise people subsidise them directly - then it has quite an effective way of meeting those pressures. Once it deviates from that rule it will face continuing conflict and continuing questioning of the legitimacy and rationale of its pricing structure. So you need a simple decision rule to deflect and buffer the pressures under which a monopoly common carrier inevitably operates. Secondly, the community needs a cost-based pricing rule to be able to assess the performance of that common carrier. It is important for the oversight function of government for checking that a service is being provided efficiently to the community that the prices being charged should be transparent and clear, and that it should be possible to track cost changes and measure clearly the efficiency and productivity gains and their distributions to different parts of the community of the monopoly common carrier. If one has a price structure which is a highly anarchic one, moulded by the interplay of political influence and technological developments, it becomes very difficult to assess, from outside, the efficiency with which a service is being provided to any particular area.'(46)

5.133 Yet there remains uncertainty about Telecom's costing methods. Coopers and Lybrand have commented:

> 'when this uncertainty regarding the methods of apportioning costs is added to the difficulties with the allocation of revenues under present revenue accounting systems, the analysis of product profitability produced by the product accounting system is unreliable for the uses being made of the data externally.'(47)

5.134 Cost allocation is used as the primary basis for apportioning costs between different classes of telephone subscribers.

5.135 All cost allocation studies have inherent difficulties since total system costs are allocated according to a particular series of judgements. All cost allocation studies reflect judgmental allocations of historical costs and thus the resulting rates based on those studies are only as valid or flawed as these judgements. It follows that two equally 'reasonable' allocation methods could produce widely differing results.

> 'The problem basically arises in respect to the common costs of providing service; that is, to that part of the infrastructure of telecommunication services which is not targeted to any particular user or narrowly defined set of users but which is used in common by different users with differing intensities, sometimes at differing times of day.'(48)

5.136 The notion that prices should reflect costs rests on the grounds that efficiency in the allocation of resources would be enhanced. Unfortunately, the notion of cost involved here is marginal cost, which bears little relationship to average cost and even less to an average cost which includes arbitrary allocations of overheads.

5.137 From an economic efficiency viewpoint, Telecom's cost and revenue information cannot be relied upon as an indication whether price exceeds marginal cost for a class of service. Accordingly the Committee does not believe Telecom's costs as presented for public scrutiny can be totally relied upon in making judgements concerning an efficient use of resources.

5.138 Fully allocated cost studies may cause misleading results because pricing decisions require demand information, i.e. market analysis, as well as supply information, i.e. cost

analysis. Prices are not solely determined by costs in any market. In addition, factors other than pure efficiency (e.g. equity and revenue raising considerations) must influence Telecom's tariff structure.

5.139 The Committee considers that the cost allocations and therefore the net revenue calculations presented to the inquiry are not adequate indicators of the profits and losses associated with the provision of Telecom's services.

5.140 The community should have a clear view of the efficiency and productivity of the nation's largest public enterprise. Adequate information on the profitability of individual services should be provided in Telecom's Annual Reports to facilitate public scrutiny.

Recommendation 11: Telecom should review its cost allocation procedures so that its profits and losses on individual services can be more clearly identified. Profit and loss information on individual services should be provided in Telecom Annual Reports.

Simplifying charging policies

5.141 In discussions with Telecom it has become clear that it is possible to simplify the existing charging rates. This would especially apply for calls across cities where many subscribers are unaware that they are being charged at STD rates.

5.142 At the public hearings Mr West of Telecom said

> 'There is no doubt that customers at the present time consider that the cost of telephone usage is rather more expensive than it really is. It is a regrettable fact that if you asked the person in the street what is the cost of a local call they are probably unaware that it is currently 15c and many would say that it is 20c because that is the cost from a coin phone. If you ask, and we have

done market research on this point, the people the cost of trunk calling, STD calling, the answer is almost invariably, about twice what it really is. There is a misapprehension throughout the community as to the cost of making these calls to the extent that simplification might let us get the message through rather more easily; it could be to Telecom's advantage and ultimately to the customers' advantage.'(49)

5.143 The Australian Telecommunications Users Group conducted a survey which indicated that only half the respondents were aware that longer distance calls within the metropolitan area are timed.

5.144 The lack of customer understanding is a problem which Telecom should make greater efforts to improve.

5.145 One possibility would be to ensure that a maximum rate applies for all calls within an STD zone. For example it would simplify arrangements if subscribers in one book know that a maximum rate applied for calls to subscribers in another book.

Recommendation 12: In modifying its charging policies, Telecom should give a high priority to simplifying the charging arrangements to improve customer understanding.

STD charge steps

5.146 There are presently five charge steps for STD calls (apart from Community Calling) based on distance. These charge steps are set out below:

- A rate between 25 and 50 km
- F rate between 50 and 85 km
- M rate between 85 and 165 km
- Q rate between 165 km
- Y rate over 745 km(50)

5.147 The Committee does not have a detailed analysis of the degree to which Telecom's costs vary with both time and distance. Indeed overseas researchers have lamented that this an international problem which is not endemic to Australia. Until more is known about the relative impact of distance and time on the cost structure, the Committee cannot make finely tuned judgements regarding the relative merits of various tariffs which combine both time and distance elements.

5.148 Telecom has supplied the Committee with information regarding the cost of short-distance trunk charging. The average direct cost of these calls is 29 cents for the 25-50 km band, 30 cents for the 50-85 km band and slightly more than 30 cents for the Community Calls between 85 and 120 km.(51) On this basis, at least over the shorter STD distances, distance appears to have virtually no effect on average direct cost and therefore it is difficult to see how Telecom can justify the rate differentials unless demand elasticities vary markedly in the range up to 120 kilometres. This is highly unlikely.

5.149 In discussions with Telecom representatives it was clear that even within Telecom the existence of the five charge steps was not well understood. Having a system of distance steps combined with complex time of day rates makes the overall charging system almost incomprehensible.

5.150 The Committee also notes the declining importance of distance as a result of improvements in technology. The trend towards digital technology will reduce the cost of circuits. This combined with further developments in optical fibres, satellites and microwave transmission will all reduce the costs of long distance transmission.

5.151 The 1980 review of Telecom's tariff policies combined two of the STD distance steps and as a result of further improvements in technology it would appear that further reductions could be possible.

5.152 Telecom has indicated that the declining importance of distance may allow reductions in the distance steps which presently exist. The Committee therefore recommends that Telecom review its existing distance steps with the objective of reducing the existing five steps.

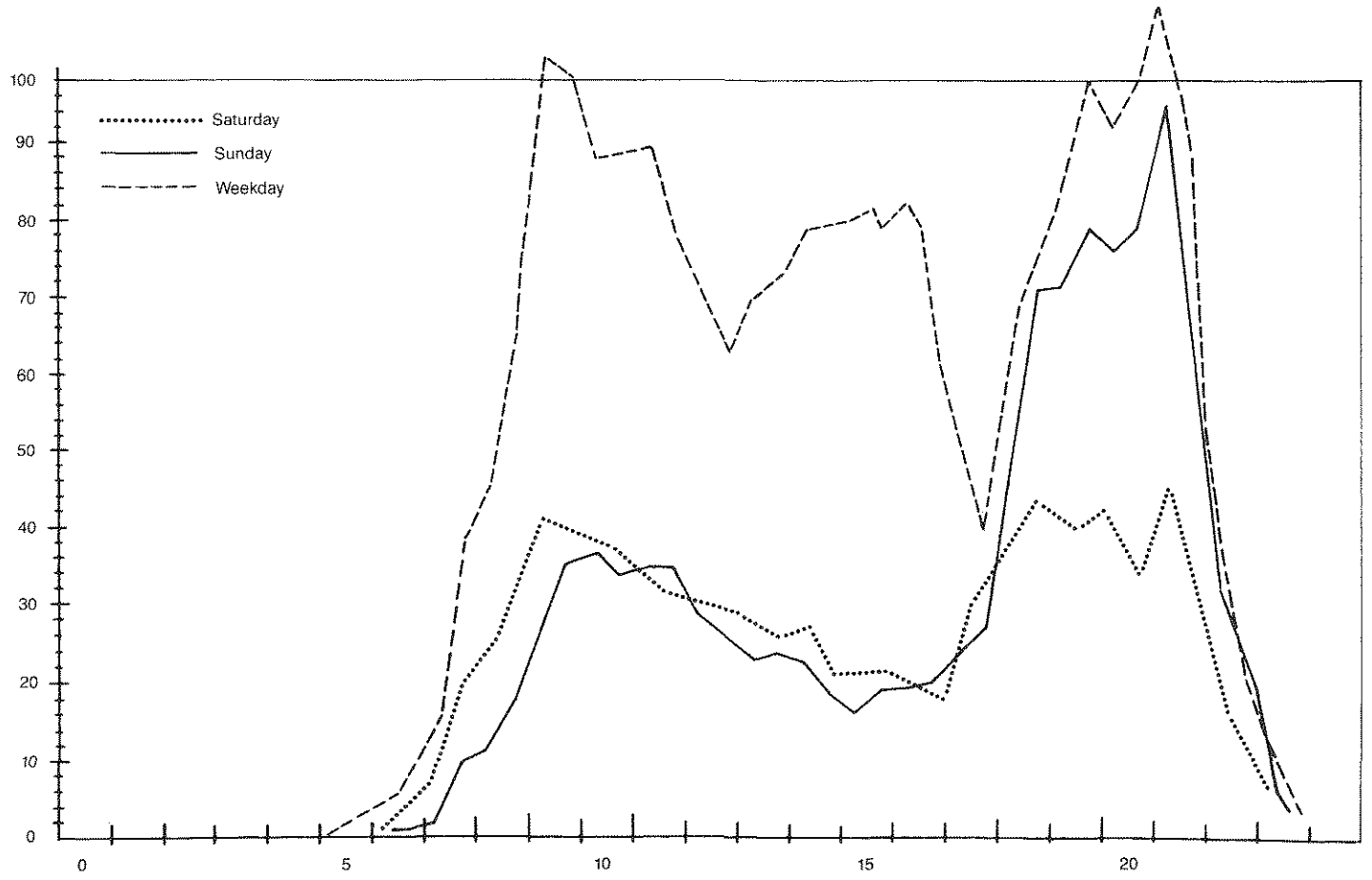
Recommendation 13: The existing five charge steps for STD calls should be reduced to reflect the declining importance of distance in the provision of telecommunications services.

Time of day rates

5.153 Telecom in its submission gave an indication of STD traffic flows in accordance with the time of day and day of the week. This graph is reproduced as Figure 5.4 and is described as reasonably representative of the network as a whole.

5.154 As can be seen on weekdays the traffic is reasonably busy from about 8.00am to 10.00pm with some decrease at lunchtime and around 5.00pm. The situation is different at the weekend when the network is generally under-utilised except between 6.00pm and 10.00pm on Sunday nights.

5.155 Telecom notes that the average call holding time increases significantly after 6.00pm for both local and STD calls and after 9.00pm for STD calls when the economy rates apply.



A SUMMARY, FOR ALL RATES, OF THE LEVEL OF STD TRAFFIC
AS A PERCENTAGE OF THE WEEKDAY BUSY HOUR

FIGURE 5.4

5.156 The Committee noted that different arrangements apply overseas. For example, in the United States the time of day rates are set out in Table 5.3.

TABLE 5.3

UNITED STATES TIME OF DAY RATES

100%	8.00am- 5.00pm	weekdays
65%	5.00pm-11.00pm	each night except Saturday
40%	11.00pm- 8.00am	daily
	8.00am-11.00pm	Saturday
	8.00am- 5.00pm	Sunday

5.157 The Australian telecommunications network is substantially under-utilised for a large proportion of the time and the existing time of day rates have led to sub-optimal use of the network.

5.158 The existing rates are complex and there appears to be substantial lack of knowledge on the part of subscribers as to when the reduced rates apply.

5.159 Most subscribers appear to know that reduced rates apply after 9.00pm at night and Figure 5.1 reflects the congestion in the network which is caused by the large number of calls that are made shortly after 9.00pm.

5.160 The Committee believes that there are two aspects which need improvement in the existing time of day rates. The first is to improve subscribers' understanding of the times when reduced rates apply and the second, which is necessarily related, is to reduce the range of time of day rates to allow more social calling.

5.161 The present rates according to time of day are divided into day, intermediate, night and economy rates. The Committee recommends that Telecom should reduce the range of time of day rates and ensure that sufficient resources are applied to educating subscribers on the application of these rates. The network should be better utilised, particularly on Saturday and Sunday.

Recommendation 14: Telecom should simplify the STD rate structure by having fewer scales with discounts applied in accordance with traffic loading over the hours of the day and the days of the week to encourage better usage of the network.

Service fees and rentals

5.162 In the course of the Inquiry, the Committee became aware that there is a general misunderstanding of the meaning of the term 'rental' and that the term 'service fee' is more appropriate.

5.163 Mr West of Telecom said

> "the sum of money called 'telephone rents' is most confusing in the minds of customers because they only perceive in their home an instrument, the value of which is obviously not high, and to rent that instrument for such a fee seems out of all proportion. What is not immediately apparent from the utilisation of that term is the telephone service, for which that fee is made, to provide for the rental of the line and for the access to the equipment and all the free service which a technican would give should there be a fault and for the free service that operators give in regard to finding telephone numbers and so on."(52)

5.164 In line with improvements in customer understanding Telecom could alter its practices so that the word 'rental' is no longer used. Rental of the actual telephone apparatus (i.e. handset) is only a small part of access and service costs normally covered by the fixed charge.

Recommendation 15: Telecom should introduce the concept of a service fee to replace the term 'rental'. The term, 'service fee' would more accurately reflect that rentals/service fees are designed to cover service and access costs in addition to rental of telephone apparatus.

Directory areas

5.165 The existing directory arrangements apply in outer metropolitan areas on the basis that directories relate simply to the STD code. This leads to a situation in outer metropolitan areas where it can be difficult to identify which directory is applicable to a particular area. For example, very few subscribers could be certain into which area a town falls when for the outer metropolitan areas of Sydney, 5 directories apply.

5.166 In addition, outer metropolitan subscribers who do most of their business in the central city area, have to arrange to obtain not only the city directory where the majority of their business will probably be conducted, but also the directories applicable to their surrounding areas.

5.167 Telecom in its submission has asserted that complaints about scope of the directories in the outer zones are very infrequent. Telecom goes on to say:

> 'In view of the lack of public complaint and the record of sales achievement in yellow pages in the outer Sydney zones it appears that the current directory product line is adequately serving the market.'(53)

5.168 The Committee does not accept this view. The Committee notes that it would be possible to have a set of 2 directories for Sydney, one for the 02 central city zone, and one for the outer metropolitan area which would be approximately the same size. For directory purposes outer metropolitan subscribers are

often treated as separate from the metropolitan region. This causes difficulty for residential subscribers in identifying other subscribers and affects business competitiveness.

Recommendation 16: Telecom should simplify its existing range of directories by amalgamating outer metropolitan directories and grouping directory areas in accordance with communities of interest.

Directory entries

5.169 At its public hearings the Committee was made aware of several anomalies in directory listings which arose out of the zonal boundary arrangements.

5.170 For charging and directory purposes the nearest telephone exchange determines the subscriber's location. Subscribers can be located outside the zone boundary yet are charged and listed according to the nearest exchange.

5.171 An example of this situation was brought to the Committee's attention in Beaudesert Shire, Brisbane where some subscribers are within the Brisbane telephone district, yet for charging and directory purposes are outside the Brisbane local call zone.(54) Those subscribers therefore do not appear in the Brisbane telephone directory.

5.172 The bewilderment of the average subscriber at these arrangements is illustrated below:

> 'They look through the local magazine or the 'Courier Mail' or whatever else and they see 'builder, 075', so they say: 'I will not ring him up; I will ring this one up on 208, which is Woodridge or Kingston'. It is a funny situation out there. I have never come across one like that in my life.(55)'

5.173 Telecom's reaction to these problems is that if customers feel strongly enough about a listing in another directory, an entry can be provided for a minimum fee of $25 pa.

5.174 The Committee considers that this is an unsatisfactory response. Where subscribers within a suburb are artificially divided by a zonal boundary, they should be entitled to listing in both directories at no charge.

Recommendation 17: Where Telecom's zonal boundaries divide a suburb, telephone subscribers in that suburb should be included in the directories for both zones free of charge.

Itemised accounts

5.175 Call Charge Recording (CCR) is already provided by Telecom as the standard way of recording and presenting the cost of automatically dialled international calls. Approximately 40% of all services in Australia have International Subscriber Dialling/Call Charge Recording.(56)

5.176 Telecom intends to introduce call charge records for STD calls as an optional customer facility and action is proceeding to upgrade exchanges so as to provide the service.

5.177 The service is expected to be provided in three phases:(57)

- Phase 1: covers introduction in metropolitan areas and those in country areas which have the ISD/CCR facility. It is expected that initial provision will be Melbourne/Hobart commencing on 1 July 1982, followed by other capital cities and certain country areas from 1 October 1984. Country areas which are likely to be early participants in the optional scheme are the Mornington Peninsula, Geelong and the Gold Coast.

- Phase 2: provides for expansion of the facility in metropolitan areas not included in Phase 1. This is scheduled to commence in July 1986 and by 1990 90% of all metropolitan subscribers should be offered optional STD/CCR.

- Phase 3: provides for the introduction of optional STD/CCR into country areas in conjunction with modernisation of the country network. It is scheduled to commence in 1987 and will initially focus on larger population centres.

5.178 The optional facility will be progressively offered to customers served by exchanges equipped with ISD/CCR facilities on an exchange by exchange basis.

5.179 The bills for customers who elect to have the optional STD/CCR facility will have STD calls shown as a separate charge item rather than included in metered calls as is currently the case for STD.

5.180 The billing system for those who have elected to use STD/CCR will also provide detailed statements of STD calls.

5.181 The information shown in respect of each call will comprise:

- called number (i.e. the dialled digits);
- time of connection;
- date of call;
- amount.

5.182 Telecom states that there may be additional charges associated with the connection, rental, utilisation and billing of the optional STD/CCR facility since it is more expensive for Telecom to provide individual itemised STD/CCR calls than bulk billed multi-metered STD facility calls.(58)

5.183 Telecom draws attention to the fact that with ISD/CCR the requests for statements have been extremely small (well under 1% of ISD/CCR services). By inference, Telecom seems to be suggesting that there is not a great deal of demand for detailed accounts.

5.184 The Committee has a contrary view. Submissions to the Committee have referred to the problems caused for subscribers in checking accounts.(59) Presently Telecom merely checks the meter to see if it is properly functioning before insisting on payment of disputed accounts. This system is unsatisfactory and leads to a considerable number of disputes with subscribers.

5.185 The attention of the Committee has been drawn to complaints to the Commonwealth Ombudsman concerning disputed accounts. In the 1982/83 Annual Report of the Commonwealth Ombudsman there were 663 complaints, most of which were about excessive telephone bills, especially for metered calls. This has to be considered in the context of 16m accounts which were issued in 1981/82.

5.186 The Commonwealth Ombudsman has focussed on ensuring that Telecom has taken the proper administrative steps to investigate complaints. Specifically that it has:

- checked the accounting records from which the disputed bill was compiled;
- conducted technical tests to ensure the customer's exchange meter is recording accurately;
- checked fault records to discover whether a fault may have caused excessive metering;
- interviewed the complainant to determine whether any special events may have been responsible for the usage complained about;
- in the light of those 4 steps made a judgement as to whether disputed charges should stand or not.

5.187 If the Ombudsman is satisfied that Telecom has properly followed this procedure and there is no evidence that the complainant has been overcharged generally, the complaint cannot be sustained. However, in about 30% of the cases Telecom reduced the charges as a result of the Ombudsman's action. The Ombudsman notes that a formal investigation is being conducted with the aim of identifying ways in which fault detection and rectification procedures might be made.

5.188 The Committee notes that disputed accounts is an area where formal complaints to organisations like the Ombudsman are probably only the tip of the iceberg. Most subscribers are well aware that itemised accounts are provided overseas and the question is continually raised why Telecom has not introduced a similar system in Australia. The optional system planned for introduction this year should go some way to alleviate many of the complaints. However, there is some concern that the system planned by Telecom is being introduced too slowly and may not satisfy customer requirements.

5.189 The Committee is particularly conscious of the privacy problems associated with the provision of itemised accounts.(60) Telecom must take these concerns into account in the provision of facilities which provide itemised billing. Subject to satisfactory recognition of the need to preserve individual privacy, the Committee believes that Telecom could do more to provide itemised accounts.

Recommendation 18: **Telecom should devote more resources to accelerating the introduction of systems which provide itemised accounts.**

Complaints handling

5.190 While the Commonwealth Ombudsman provides one avenue available to dissatisfied Telecom customers, the Committee was made aware of the considerable difficulties subscribers have in getting complaints handled effectively within Telecom.

5.191 The ability of Telecom to respond to customer complaints was improved with the establishment of a decentralised organisational structure in 1978. This followed the Vernon Committee of Inquiry(61) and proposals of management consultants engaged by Telecom. Customers' dealings with Telecom have been simplified and the responsibility of District Telephone Managers in handling complaints has been increased.

5.192 While these arrangements have been an improvement, at the district level there needs to be a greater responsiveness to customer needs. The Committee considers that this would be achieved by establishing an organisational unit within each Telecom District office with a specific responsibility for handling customer complaints.

Recommendation 19: Telecom should establish a Complaints Bureau in each State to handle and effectively respond to customer problems with its charging policies and difficulties with the provision of telecommunications services. The Complaints Bureau should be clearly identified in the telephone book.

Information on zonal boundaries

5.193 The Committee's attention was drawn to a number of anomalies which have been created over the years by the drawing of the zonal boundaries. For example, as can be seen from the map of the Melbourne zone in Appendix IV, there is a bulge around the south-eastern end of the zonal boundary. This includes what was referred to in the public hearings as the 'Mount Eliza Bulge'.

5.194 There was some criticism at the public hearings that Telecom was unable to provide information on charging arrangements and zonal boundaries when requested. For example, it was brought to the Committee's attention that in New South Wales Telecom refused to give information on zonal boundaries on the grounds that they are being constantly revised.

5.195 In addition, in the course of the Inquiry the Committee Secretariat had some difficulty in obtaining copies of the zonal boundaries which were up to date and accurate.

5.196 The information on the geographical location of the zonal boundaries is absolutely fundamental to Telecom's charging policies and that information should be freely available to the public.

Recommendation 20: Copies of the zonal arrangements should be available at each Telecom District Office and information on zonal boundaries should be available to the public on request. Abridged versions of this information should be provided in each telephone directory.

Information on STD Charging Rates

5.197 Customers find it extremely difficult to determine the charges applicable to particular calls as it is inconvenient and difficult to calculate the distance between zones prior to each call. A charging matrix listing some key calls and published in each directory might be one way of overcoming this problem.

Recommendation 21: Simplied information on the costs of calls between STD zones should be included in telephone directories.

Telecom's social research

5.198 Much of Telecom's research effort is directed towards marketing products and engineering. This is consistent with Telecom's view of itself as a marketing organisation.

5.199 However, the Committee has already expressed concern about the lack of emphasis which is placed by Telecom on its social obligations.

5.200 At present little social research is undertaken. There are 26 professional plus 15 support staff engaged directly in social research. Social research is important to enable Telecom to respond more effectively to social developments and to improve the decision-making process.

5.201 Telecom maintains that essential parts of Telecom's research and planning process include:

- analysing the ways in which it is expected that society will develop, for instance social and demographic trends;
- ascertaining the needs of Australian people for telecommunications services, including services presently available and expected to be available in future years;
- examining developments in technology and the new products produced as a result to see how they will match up with the Australian community's needs;
- forecasting the overall economic environment and the likelihood that market segments will require, and can afford, new products and/or services;
- field trials of products and services to see that they meet the needs of the Australian community;
- other environmental factors such as industrial relations.(62)

5.202 Telecom has contended throughout the Inquiry that the principles followed when the zonal arrangements were established in 1960 on a community of interest basis are still appropriate in 1984. However there appears to have been little social research undertaken within Telecom on how communities of interest have changed over the years.

5.203 Telecom was unable to adequately demonstrate to the Committee the extent to which its decison-making processes involve a careful consideration of social aspects in the provision of telecommunications services. It is not sufficient merely to have staff engaged in the proper fields of social research without ensuring that the results of their work are effectively communicated to those within the organisation. This communication could take a number of forms. These include:

- regular seminars for Telecom middle-level staff to be made aware of the social implications of the provision of telecommunications services;
- the provision on the Telecom Board of a Director with experience in social research;
- the provision of regular reports on social issues for circulation to Telecom staff;
- the recruitment of experts in social research able to communicate with telecommunications engineers.

5.204 The Committee came to the view that Telecom's existing social research activities were inadequate and were insufficient to contribute to its overall objective of meeting its social obligations. Telecom should expand its social research activities to allow much greater emphasis within the decision-making process on social obligations.

Recommendation 22: Telecom should undertake more research in the social field to improve its responsiveness to social developments and social concerns should play a greater role in Telecom's decision-making process.

Charging policy reviews and the Prices Surveillance Authority

5.205 Over the past 24 years since the introduction of the Community Telephone Plan, Telecom has undertaken an irregular series of reviews of its charging policies. These reviews have generally maintained the status quo and there has been no input from the public into the decision-making process.

5.206 Telecom has a social obligation to recognise the interests of its customers. The public should be given the opportunity to express views on the charging policies. Such an opportunity now exists with the regular price reviews being undertaken by the Prices Surveillance Authority.

5.207 Telecom is what is known as a declared person for the purposes of the Prices Surveillance Act 1983 and its charges for standard telephone service rentals, telephone calls made within Australia and telegrams lodged at a telegraph office have been declared as notified services for the purposes of the Act. This means that under section 22 of the Act it is required, as a declared person, to notify the Authority of proposed increases in prices to notified goods and services and to wait a statutory period, which is known as a prescribed period, before increasing those prices in a locality beyond the highest price previously charged in that locality.

5.208 In considering such notifications, the Prices Surveillance Authority has the option, firstly, of allowing the prescribed period to elapse without raising an objection to the proposed price or the proposed terms and conditions. That prescribed period is usually 21 days but can be extended with the consent of the notifying person. Secondly, the Authority may notify the person under section 22, before the expiry of the prescribed period, that it has no objection to the proposed price or the proposed terms and conditions. Thirdly, it may notify the person under section 22 that it would have no objection to a

specified lower price. Finally, it may recommend to the Treasurer under section 18 of the Act that an inquiry be held into prices charged or proposed by the declared person.

5.209 It does not follow automatically that there will be a public inquiry every time Telecom notifies price increases. That is subject to consideration on each occasion and subject to approval by the Treasurer on each occasion.

5.210 Telecom complains that:

- difficulties arising from pre-determined and restricted annual borrowing allocations will be aggravated by the operations of the Prices Surveillance Authority.

- funding for the capital program is normally determined by the Government in May/June in the context of Loan Council. Tariff increases and borrowing allocations are jointly determined in the light of the capital program for the following financial year.

- the operations of the PSA with regard to principal Telecom tariffs will add a major dimension of uncertainty to this process. The result of the PSA's examination of Telecom's proposed increases will not be known until well into the financial year when the capital program has been almost completely committed. Additionally, the time taken for the inquiry and report when added to Telecom's own lead times for altering charging equipment for new calling fees suggests that changes cannot be effected until January at the earliest. The three-month billing cycle plus the average time customers take to pay their bills would mean that

only a small proportion of the full-year receipts for tariff increases would be received in the initial financial year. Thirdly, the rejection of a tariff proposal by the PSA is likely to mean that expected funding from this source for the capital program will not be received at all.(63)

5.211 At the public hearings, the Treasury responded to complaints of possible delays by pointing out that the Treasurer in his second reading speech has indicated that public inquiries would generally be limited to 90 days. The Treasury representative observed:

> 'I think a 90-day period is certainly a lengthy period from one point of view but it is a very short period from the point of view of the Authority, for conducting an inquiry, given that it is required to advertise it and invite submissions from the public and then hear those submissions and prepare its report. The Treasurer's intention in announcing that in his second reading speech was to indicate that those inquiries would not be allowed to drag on but would be limited in time. Secondly, as I indicated in my earlier answer, there should not be any supposition that price notifications would always involve an inquiry, as I said, to the extent that the notifications are acceptable to the Authority; and to the extent that they can be fitted in within established principles or approaches, then there may not be a need for an inquiry on particular occasions. In that case, the notification would be handled within 21 days, or possibly a shorter period.'(64)

5.212 While the Committee acknowledges potential difficulties it is of paramount importance that Telecom is accountable to the public. Under the Prices Surveillance Act, Telecom has to justify increased standard telephone charges at the time of each price rise application. Telecom should take a positive attitude towards the operations of the Prices Surveillance Authority and use its hearings to explain its charging policies to the public.

Recommendation 23: Telecom should take the opportunity of Prices Surveillance Authority reviews of its standard telephone charges to re-examine its charging policies and to inform the community of the basis for its existing charging policies. This information should be made available to the public notwithstanding that notification to the PSA does not result in a public inquiry by that body.

LEO McLEAY, MP
Chairman

October 1984

ENDNOTES

Chapter 1

1. S.6 Telecommunications Act 1975, Submission No. 32, p.333.

Chapter 2

1. Exhibit No. 2.
2. Exhibit No. 1.
3. Exhibit No. 2.
4. Exhibit No. 3.
5. Exhibit No. 4.
6. Comparison of Telephone Tariffs in Australia with Those Applying in Overseas Countries: Australian Telecommunications Commission, May 1983.
7. Submission by the Australian Telecommunications Commission to the Prices Surveillance Authority, August 1984, p.2.

Chapter 3

1. Evidence, p. 476.
2. Logan, M.I., Whitelaw, J.S. and McKay, J. Urbanization - The Australian Experience, Melbourne, Shillington House, p.3.
3. ibid, pp.62-65.
4. Exhibit No. 2.
5. Exhibit No. 1, p.4.
6. ABS Census Data, Exhibit No. 12.
7. ABS Year Book Australia, 1984, p.92. Comprehensive statistics are more readily available for the 1966 census than for earlier censuses. Most of this chapter, therefore, focuses on Australia's population growth during the 1966-81 period.
8. ibid, p.92 and ABS census data, Exhibit No. 12. Figures shown in columns 2 and 4 of the table represent the actual increase in population from 1966-1981, rounded to 1 decimal place. 1966 figures used to calculate the absolute increase of population in capital cities are estimates only. See explanation, paragraphs 3.14 and 3.15.

9. Estimates of Australia's population by the year 2010 are not available. However, the ABS has estimated Australia's population by the year 2011 and these figures have been used.

10. Telecom's estimates are contained in Exhibit No. 2, Section II, p.4 and ABS figures are contained in an ABS information document, Cat. No. 3214.0, pp.10-11. No specific reference was made in the Telecom estimates to any of the Territories.

11. Exhibit No. 2, Section II, p.3.

12. ABS Census Data, Exhibit No. 12. In its explanatory notes, the ABS has indicated that an LGA is the basic unit used to present census information. In most cases, the LGA boundaries correspond to recognised Local Government Authority areas e.g. city, shire or municipality. At the time of the 1981 census, there were three exceptions to this rule. Reference is made to these exceptions in Endnote 13. As noted in Endnote 7 above, 1966 census figures have been preferred because 1966 census information is more readily available than that for earlier censuses.

13. Unlike other capital cities, Brisbane, Darwin and Canberra do not have formal LGA's (see explanatory comments in ABS census publications, Exhibit No. 12). City suburbs have therefore been used as the unit of measurement. However, calculation of 1966 population estimates for such small geographical areas proved to be impracticable. Moreover, many of the suburbs had no population in 1966. Therefore, maps of these cities have been illustrated as follows:

Brisbane	-	growth in the City of Brisbane subdivision for the period 1971-81;
	-	growth in outer LGA's such as Albert, Caboolture, Ipswich and Pine Rivers for the period 1966-81;
Canberra	-	growth in areas in the ACT for the period 1971-81;
	-	growth in surrounding LGA's for the period 1966-81;
Darwin	-	growth for the period 1976-81 only.

The letter (a) appearing in the title of these maps indicates that City suburbs and not LGA boundaries are the unit of measurement.

14. Calculated on statistics provided in ABS Year Book Australia 1984, p.92.

15. ABS Census Data, Exhibit No. 12. The city population figures are shown by either ABS Statistical Divisions or ABS Statistical Districts. As indicated by the ABS, population

statistics for all capital cities are collected by Statistical Division. Generally, Statistical Divisions are areas with common economic and social links and are relatively urban in character. Population statistics for provincial cities are collected, generally by Statistical District. A Statistical District is similar in nature to a Statistical Division but is generally smaller in size. Most Statistical Districts contain an urban centre of 25,000 or more people. Boundaries of both Statistical Divisions and Statistical Districts have been set to include the anticipated urban development for approximately the next twenty years.

16. As noted in Endnote 13 above, 1966 estimates of population have not been calculated for the City of Brisbane subdivision, Canberra and Darwin. The percentage increase shown, therefore, is for the period 1976-81 for Darwin, 1971-81 for Canberra, and for Brisbane, a combination of the 1971-81 period for the City of Brisbane subdivision and the 1966-81 period for the remainder of the Brisbane Statistical Division.

17. Evidence, p.137.

18. Submission No. 34, p.412.

19. ibid, p.421.

20. Evidence, p.137.

21. ibid, p.137.

22. Evidence, p.172.

23. Evidence, p.374.

24. Evidence, pp.329 & 420.

25. Evidence, p.380.

26. Evidence, p.423.

27. Exhibit No. 33.

28. Evidence pp.519, 540, 554.

29. Evidence, p.541.

30. Evidence, pp.128, & 134.

31. Submission No. 40, p.537.

32. Submission Nos 30, p.295, 23, p.261 and 16, p.106.

33. Submission No. 32, pp.333-336, p.348.

34. Evidence, p.430.

35. Examples of the local and community call zones mentioned in the Table are shown in Chapter 2, Figures 2.2 and 2.3. If the present local call zone was extended outwards by one zone, all the hatched areas of the map would be included in the capital city telephone district. The hatched areas include Gosford, Richmond, Penrith, Campbelltown and Helensburg in Sydney and Bacchus Marsh, Gisborne, Kilmore and Mornington in Melbourne. If the present community call zone was extended outwards by one zone, the areas adjacent to the hatched areas of the map would be provided with the community calling facility. Community call access would therefore be available to residents of areas in Wyong, Peat's Ridge, Kurrajong Heights, Springwood and Picton in the Sydney region and Dromana, Warburton, Broadford, Woodend, Bannockburn and Geelong in the Melbourne region.

    The estimates for the year 2001 were made by using the 1981 figures shown in the Table and ABS population projections for the period 1981-2001. (See ABS document, Cat. No. 3214.0). The figures for 2001 are probably conservative but are included in the Table as a useful guide.

36. Evidence pp.179, 221 and 529.

37. Evidence, pp.167, 179, 229, 242, 250, 393.

38. Evidence, pp.381, 410.

39. Evidence. p.142.

40. Evidence, p.139.

41 As most of the Brisbane Statistical Division lacks formal LGA's (see Endnote 13), the City was not surveyed for statistics on age and income.

42. Average weekly earnings were calculated by the ABS to be $252.20 in the third quarter, 1981. (Figures for the second quarter, 1981 were not available). The third quarter amount equates to an annual income of approximately $13,100. In presenting statistics on income, the ABS uses ranges of figures. The range encompassing the annual income equivalent of average weekly earnings was the $12,001-$15,000 grouping. For this reason, the threshhold of $15,000 was chosen in reporting the income statistics in Table 3.7.

43. Evidence, p.411.

44. Evidence, p.419. The statement was contained in a telegram to Mr R.L. Chynoweth, MP, when he was a candidate for the Federal seat of Flinders.

45. Evidence, pp.374, 384 and 410.

46. Evidence, pp.374, 414.

47. Submission Nos 34, p.412, 31, p.301 and Exhibit No. 33.

48. Submission No. 16, p.100.

49. Submission No. 65, p.672.

50. Evidence, pp.221 & 414.

51. Submission No. 66, p. 678.

52. Evidence, pp. 139-140, 141, 179-191, 221-226, 306-307, 490-492.

53. Exhibit No. 1, p.5.

54. Submission No. 32, p.396. (Figures for ACT and NT were not provided.)

55. Telecom Australia, Annual Report 1982-83, p.69.

56. ABS document, Cat. No. 4110.0.

57. Communication with Committee Secretariat dated 15 August 1984.

Chapter 4

1. Exhibit No. 2, p.8.

2. Submission No. 32, p.347.

3. ibid, p. 347.

4. Exhibit No. 3.

5. Submission No. 32, p. 351.

6. Submission No. 32, p. 357.

7. Exhibit No. 3, p.7.

8. ibid, p. 7.

9. Exhibit No. 2, p.8.

10. Exhibit No. 2, p.3.

11. Exhibit No. 3, p.8.

12. ibid, p.8.

13. Submission No. 39, p.491.

14. Evidence, p.272.

15. Exhibit No. 3, p.15.

16. Evidence, p.246.

17. ibid, p. 246.

18. Evidence, p.130.

19. Evidence, p.374.

20. Evidence, p.142.

21. Evidence, p.375.

22. Evidence, p.142.

23. Submission No. 20 and Supplementary Submission Nos 20(a) and 20(b).

24. Evidence, p.244.

25. Submission No. 20 and Supplementary Submission Nos 20(a) and 20(b).

26. ibid.

27. Section 6(2)(b), Submission No. 32, p.333.

28. Telecommunications Act 1975, Section 73.

29. Minister for Communications, Press Release, No. 108 of 83, 20 October 1983.

30. Minister for Communications, Press Release, No. 25 of 83, 9 February 1983.

31. Submission No. 32, p.351.

Chapter 5

1. Service and Business Outlook for 1984/85, Australian Telecommunications Commission, August 1984, p.2.

2. Submission No. 32, p.339.

3. Reinecke, I and Schultz, J. The Phone Book - the Future of Australia's Communications on the Line, Ringwood, Penguin Books, p.80.

4. ibid, p.90.

5. Submission No. 10, p.58.

6. Exhibit No. 3, p.6.

7. Report on the Request by the Minister to review zoning and charging arrangements for the Sydney (02) telephone district area, Australian Telecommunications Commission 1983, p.1.

8. Submission No. 32, p.330.

9. ibid.

10. Submission No. 32, p.402.

11. Evidence, p.573.

12. Taylor, L D. Telecommunications Demand: A Survey and Critique, Cambridge, Ballinger Publishing Company.

13. Exhibit No. 38.

14. Submission No. 32, p.363.

15. Submission to Prices Surveillance Authority, p.30.

16. Submission No. 32, p.363.

17. Report of the Committee of Inquiry into Telecommunications Services in Australia, pp.145, 146 and Submission No. 32, p.381.

18. Submission No. 32, p.374.

19. Evidence, pp.343-348.

20. Evidence, p.347.

21. Evidence, p.563.

22. Evidence, p.564.

23. Submission No. 32, p.371.

24. Submission Nos. 30, p.295, 23, p.261 and 16, p.106.

25. Exhibit No. 38.

26. Submission No. 16, p.117.

27. Submission No. 40, p.534.

28. Submission No. 19, p.233.

29. Submission No. 16, p.103.

26. Submission No. 16, p.104.

31. Submission No. 32, p.405.

32. Evidence, p.428.

33. Submission No. 11, p.73.

34. Comparison of Telephone Tariffs in Australia with those Applying in Overseas Countries: Australian Telecommunications Commission, May 1983.

35. Report of the Committee of Inquiry into Telecommunications Services in Australia, p. 151.

36. Government Response to Davidson Inquiry in Telecommunications and Bradley Inquiry on Postal Services, Press release, 9 February 1983, The Hon. N.A. Brown, Q.C., M.P., Minister for Communications.

37. Australian Labour Party Rural Policy Speech, Griffith, N.S.W., 20 February 1983.

38. Submission No. 32, p.399.

39. Evidence, p.350.

40. Evidence, p.589.

41. Evidence, p.579.

42. Appropriate Financing and Investment Policies for Telecom Australia, Australian Graduate School of Management, April 1984, p. 30.

43. Evidence, pp. 577-584.

44. Capital and Policy Requirements for the 1980's: Telecom Australia; McKinsey and Company Inc. June 1980.

45. Davidson Report, Vol. 1, p.135.

46. Evidence, p.43.

47. Davidson Report, Vol. 3, Section 2.

48. Evidence, p.46.

49. Evidence, p.355.

50. Submission No. 32, p.362.

51. Submission No. 32, p.363.

52. Evidence, p.357.

53. Submission No. 32, p.384.

54. Evidence, p.58.

55. Evidence, p.68.

56. Submission No. 32, p.384.

57. Submission No. 32, p.385.

58. Submission No. 32, p.386.

59. For example, Submission No. 8, p.14.

60. Note, for example, Information Bulletin, Labour Council of New South Wales, p.1.

61. Report of the Commission of Inquiry into the Australian Post Office (April 1974), Parliamentary Paper No. 123 of 1974.

62. Communication with Committee dated 12 July 1984.

63. Submission No. 32, p.343.

64. Evidence, p.642.

APPENDIX I

CONDUCT OF INQUIRY

Hearings and Inspections

The Committee resolved on 7 February 1984 to conduct an inquiry into Telecom's zonal charging policies. A Sub-committee was appointed to conduct the inquiry with Mr R V Free as Chairman.

On 16 and 17 March 1984 the Sub-committee advertised nationally inviting submissions. Numerous submissions were received as a result of the advertisement [see Appendix III]. The Sub-committee conducted public hearings in most State capitals and Canberra. These were held on 22 May [Brisbane], 23 May [Sydney], 24 May [Penrith], 25 May [Melbourne and Mornington], 12 June [Perth] and 13 July [Canberra]. In association with the hearings the Sub-committee inspected Telecom facilities in Sydney.

The inquiry procedures have given interested individuals and organisations ample opportunity to present evidence and comment on matters raised. In the final phase of the inquiry, the Sub-committee drafted this report.

WITNESSES

	Dates of appearance before Sub-committee
COMMONWEALTH GOVERNMENT	
Australian Telecommunications Commission [Telecom Australia]	
Mr William James Bell Pollock Managing Director	13. 7.84
Mr Kenneth Vincent Loughnan Assistant Director, Business Development	13. 7.84
Mr Keith William West Manager, Trunk Network Services	25. 5.84 13. 7.84

Department of Finance

Mr Harold Gordon Heinrich Acting First Assistant Secretary Transport and Industry Division	13. 7.84
Mr Robert Ian Campbell Chief Finance Officer Communications Section	13. 7.84
Mr Brian Davis Senior Finance Officer Communications Section	13. 7.84

Department of the Treasury

Mr Neil Francis Hyden First Assistant Secretary Incomes, Prices and Development Division	13. 7.84
Mr Peter Andrew McLaughlin First Assistant Secretary Revenue, Loans and Invesment Division	13. 7.84
Mr Nicolo Stuparich Chief Finance Officer Financial Institutions Division	13. 7.84

ORGANISATIONS

Mr Michael Winston Blyth Shire President, Shire of Mornington	25. 5.84
Mr Raymond Roy Baker, Chairman, Serpentine-Jarrahdale Committee, Armadale and Districts Chamber of Commerce	12. 6.84
Ms Marilyn Brown, Federal President, Australian Telephone and Phonogram Officers Association	25. 5.84
Mr Thomas Oliver Colless, Secretary, Blue Mountains Tourist Association	24. 5.84
Mr John Henry Davenport, President, Decentralisation and Development Association of Victoria	25. 5.84
Mr Phillip Lloyd Thomas Davies Government Liaison Officer, Small Business Development Corporation Perth	12. 6.84
Mr Ronald Fennell, Town Clerk Blue Mountains City Council	24. 5.84
Mr Raymond Gordon Fischer Acting Building Surveyor Shire of Wanneroo	12. 6.84
Mr Keith Laurence Garling Town Clerk Campbelltown City Council	24. 5.84

Mr Arthur David Gorham General Manager Rockingham Chamber of Commerce	12. 6.84
Mr Peter Alan Hocking Regional Economist Geelong Regional Commission	25. 5.84
Mr Gary George Holland Shire Clerk Rockingham Shire Council	12. 6.84
Mr Richard Oliver Jackson-Hope President Springwood Chamber of Commerce	24. 5.84
Mr Gary Kendall, Councillor Shire of Mornington	25. 5.84
Mr Barry Bennet Long, Town Clerk Penrith City Council	24. 5.84
Mrs Lindsay MacDonald Assistant Secretary, Rural Telephone Subscribers Association	22. 5.84
Mr Garry Martin McMahon Executive Officer, Australian Telecommunications Users Group	23. 5.84
Mr Howard Manley Federal Industrial Officer, Australian Telephone and Phonogram Officers Association	25. 5.84
Mr Leslie Ernest Mann, Shire Clerk Shire of Serpentine-Jarrahdale	12. 6.84
Mr Robert R Maxwell, Member, Executive Committee Rockingham Chamber of Commerce	12. 6.84
Mr Wilfred Desmond Asquith Mays President Rockingham Shire Council	12. 6.84
Mr Graham Lewis Oke Committee Member, Albury-Wodonga Telecommunications Committee	25. 5.84
Mrs Pamela Anne Pownall, Secretary Rural Telephone Subscribers Association	22. 5.84
Mr Warwick Reader Economic Development Planner Town Planning and Development Department, Wollongong City Council	23. 5.84
Mr Ross Bertram Smith, Member, Executive Committee Rockingham Chamber of Commerce	12. 6.84
Mr Geoffrey David Wilmoth, Head, Central Policy Division, Department of Environment and Planning, NSW	23. 5.84
Major-General John Whitelaw, AO, CBE Executive Director National Farmers Federation	13. 7.84

Mrs Helen Withers, Secretary Isolated Children's Parents' Association New South Wales	23. 5.84

COMPANIES AND INDIVIDUALS

Mr Vernon Arthur Atkins, Frankston	25. 5.84
Mr Cecil Allen Blanchard Federal Member for Moore	12. 6.84
Mr Robert Leslie Chynoweth Federal Member for Flinders	25. 5.84
Mr Robert Fitzgerald Cooper Endorsed Liberal Party candidate for Mornington Electorate	25. 5.84
Mr Henry Ergas S W Brooks Visiting Lecturer in Economics, University of Queensland	22. 5.84
Ms Wendy Fatin Federal Member for Canning	12. 6.84
Mr Derek R Giles, Frankston	25. 5.84
Mr David Lindsay Hassett Victorian State Member for Dromana	25. 5.84
Mr Robert Hungerford, Frankston	25. 5.84
Mrs Ronniet Orlando, Orlando Realty and Travel Service, Byford	12. 6.84
Mr Peter Reith, Mount Eliza	25. 5.84
Mr Eric Turner Rigg, Frankston	25. 5.84
Mr Alan Charles Graham Ruff, NUS International Pty Ltd, North Sydney	23. 5.84
Mr Norman James Taylor, Chambers Flat	22. 5.84
Dr Ronald James Herbert Wells Endorsed Liberal Party candidate for Dromana Electorate	25. 5.84
Mr Thomas William Yeates, Park Ridge	22. 5.84

APPENDIX II

INQUIRY INTO TELECOM'S ZONAL CHARGING POLICIES

INDEX OF EXHIBITS

Exhibit No	
1	The Australian Post Office 'Progress - Policy - Plans' August 1959
2	Director General, Posts and Telegraphs '*Community Telephone Plan for Australia 1960*' March 1960
3	Australian Telecommunications Commission 'Community Access 80' June 1979
4	Australian Telecommunications Commission 'Countrywide Calling' (Customer Brochures) undated
5	Australian Telecommunications Commission Schedule of Basic Telephone Charges (1 October 1983)
6	Australian Telecommunications Commission Summary Table of STD Call Charges
7	Australian Telecommunications Commission State Charging Districts (7 maps)
8	Australian Telecommunications Commission Capital and major provincial city charging zones (47 maps)
9	Australian Telecommunications Commission 'Annual Analysis, Telephone Exchanges, Services and Stations, 1983' New South Wales (including ACT), Victoria, Queensland, South Australia (including NT), Western Australia and Tasmania.
10	Australian Telecommunications Commission 'Annual Analysis, Telephone Exchanges, Services and Stations, 1981' Extracts, capital and major provincial city charging zones.

11 Australian Telecommunications Commission
'Annual Analysis, Telephone Exchanges, Services and Stations, 1976'
Extracts, capital and major provincial city charging zones.

12 Australian Bureau of Statistics
Census of Population and Dwellings, 30 June 1981
'Persons and Dwellings in Local Government Areas and Urban Areas'

New South Wales	ABS Catalogue No 2401.0
Victoria	ABS Catalogue No 2402.0
Queensland	ABS Catalogue No 2403.0
South Australia	ABS Catalogue No 2404.0
Western Australia	ABS Catalogue No 2405.0
Tasmania	ABS Catalogue No 2406.0
Northern Territory	ABS Catalogue No 2407.0
Australian Capital Territory	ABS Catalogue No 2408.0

13 Telecom Australia
'Annual Report 1982-83'

14 Telecom Australia 'Telecom and Australia's Future Communications: Commitments and Objectives' October 1983.

15 Telecom Australia
'The Telecommunications Service Business Some Relevant Notes'
4 April 1984

16 Telecom Australia
Zone Charging Tables

16-1 NSW : Sydney
16-2 NSW : Albury
16-3 NSW : Bathurst
16-4 NSW : Canberra
16-5 NSW : Gosford
16-6 NSW : Orange
16-7 NSW : Newcastle
16-8 NSW : Wollongong
16-9 VIC : Melbourne
16-10 VIC : Ballarat
16-11 VIC : Bendigo
16-12 VIC : Geelong
16-13 QLD : Brisbane
16-14 QLD : Beaudesert
16-15 QLD : Cairns
16-16 QLD : Nambour
16-17 QLD : Rockhampton
16-18 QLD : Toowoomba

16-19 QLD : Townsville
16-20 SA : Adelaide
16-21 NT : Darwin
16-22 WA : Perth
16-23 TAS : Hobart
16-24 TAS : Launceston

17 Isolated Children's Parents Association, brochure, ICPA

18 Agri Data Australia Pty Ltd - letter introducing new service with attached brochure

19 Australian Telecommunications Users Group, document, history, objects, services and membership

20 NSW Department of Environment and Planning, article, David Wilmoth 'Communication in the Urban System'

21 NSW Department of Environment and Planning, monograph, David Wilmoth, 'Population Issues and Metropolitan Planning in Sydney'

22 NSW Department of Environment and Planning, discussion paper, 'Sydney Region Population Estimates for Local Government Areas, 1981-2001', 1983

23 NSW Department of Environment and Planning, monograph, 'A Review of Recent Population Trends in NSW, Number 4', January 1984

24 NSW Department of Environment and Planning, State Planning Authority of NSW, 'Sydney Region: Outline Plan: 1970-2000 AD', March 1968

25 NSW Department of Environment and Planning, NSW Planning and Environment Commission, 'Review of the Sydney Region Outline Plan', June 1980

26 NSW Department of Environment and Planning, 'NSW Urban Development Program, Sydney Region, 1983-84', 1983

27	Blue Mountains Tourist Association, miscellaneous brochures
28	Australian Telecommunications Commission 'Telecom 2000: an exploration of the long-term development of telecommunications in Australia', December 1975
29	Australian Telecommunications Commission 'Outcomes from the Telecom 2000 Report', July 1978
30	Australian Telecommunications Commission 'Remote Area Telecommunications Study, National Report', August 1980
31	Shire of Mornington, brochure, 1984
32	Western Australia, Report of Government Regulations Review Committee, February 1983
33	Map. The Perth Metropolitan Region (Re - Submission No. 52)
34	Demographic growth of Perth Metropolitan region; 1901-2021 (Re - Submission No. 10)
35	Regional Location Figure 1 (Re - Submission No. 53)
36	Perth Closed Numbering Area Maps. National Access Code 09. Perth Charging District 092-4 (Re - Submission No. 56)
37	A book entitled 'Joondalup Regional Centre, A Plan for a Metropolitan Regional Centre in Western Australia'
38	Tables - The costs of extending local call zones to incorporate adjoining zones
39	Telecom Australia - news release - dated 13 July,1984

APPENDIX III

INDEX OF SUBMISSIONS TELECOM'S ZONAL CHARGING POLICIES

Submission No	
1	Submission from A Ranyard, Ambarvale, New South Wales dated 17 March 1984
2	Submission from Hon Secretary, National Party of Australia (NSW), Ganmain, New South Wales dated 23 March 1984
3	Submission from the General Secretary, Mobile Mission Maintenance Ltd, Whittlesea, Victoria dated 27 March 1984
4	Submission from Mrs M W Smith, Via Australind, Western Australia undated
5	Submission from the President, The Livestock & Grain Producers Association of New South Wales, Sydney, New South Wales dated 3 April 1984
6	Submission from Mr I Henderson, Grassmere North, Victoria dated 7 April 1984
7	Submission from the Secretary, Ganmain Progress Association, Ganmain, New South Wales dated 6 April 1984
8	Submission from Mr R D Caldwell, Charnwood, Australian Capital Territory dated 2 April 1984
9	Submission from the Acting Secretary to the Treasury, Parkes, Australian Capital Territory dated 5 April 1984

10	Submission from the Acting Shire Clerk, Wanneroo, Western Australia dated 9 April 1984
11	Submission from the Manager, NUS International P/L, North Sydney, New South Wales dated 16 April 1984
12	Submission from Mrs M Terry, Stamford, Queensland dated 7 April 1984
13	Submission from the Manager, Katoomba Brake & Clutch Service, North Katoomba, New South Wales dated 9 April 1984
14	Submission from Les Kapp, Katoomba, New South Wales dated 9 April 1984
15	Submission from the President, Hughenden Branch, Rural Telephone Subscribers Association, Hughenden, Queensland dated 14 April 1984
16	Submission from the Chairman, The Albury-Wodonga Telecommunications Committee, Wodonga, Victoria dated 17 April 1984
16(a)	Submission from the Albury-Wodonga Telecommunications Committee dated 25 May 1984
16(b)	Submission from the Albury-Wodonga Telecommunication Committee dated 29 May 1984
17	Submission from the Co-ordinator General, Dept of the Chief Minister, Darwin, Northern Territory dated 16 April 1984
18	Submission from Mr R L Chynoweth MP, Frankston, Victoria dated 16 April 1984
18(a)	Submission from Mr R L Chynoweth MP dated 25 May 1984
19	Submission from the Town Clerk-General Manager, Wollongong City Council, Wollongong East, New South Wales dated 18 April 1984
20	Submission from the Town Clerk, Penrith City Council, Penrith, New South Wales dated 18 April 1984

20(a)	Submission from the Penrith City Council dated 24 May 1984
20(b)	Submission from the Town Clerk, Penrith City Council, Penrith, New South Wales dated 5 July 1984
21	Submission from the President, Katoomba Retail Traders' Association, Katoomba, New South Wales dated 13 April 1984
22	Submission from the Decentralisation & Development Assoc'n of Victoria, Shepparton, Victoria dated 17 April 1984
23	Submission from the Executive Officer, Wagga Wagga *Chamber of Commerce & Industry, Wagga Wagga, New* South Wales dated 18 April 1984
24	Submission from Mrs Judith Venn, Registered Tax Agent, Springwood, New South Wales dated 26 April 1984
25	Submission from the Town Clerk, Blue Mountains City Council, Katoomba, New South Wales dated 18 April 1984
25(a)	Submission from the Blue Mountains City Council dated 29 May 1984
26	Submission from the State Secretary, Isolated Children's Parents Accociation, Wentworth, New South Wales dated 16 April 1984
26(a)	Submission from the Isolated Children's Parents' Association dated 23 May 1984
26(b)	Submission from the Isolated Children's Parents Association dated 23 May 1984
27	Submission from Mr K T Power, Bittern, Victoria dated 12 April 1984
28	Submission from the Secretary, Rural Telephone Subscribers' Association, Carfax, Nebo, Queensland dated 12 April 1984
28(a)	Submission from the Rural Telephone Subscribers' Association undated

29	Submission from the Secretary, Thredbo Chamber of Commerce, Thredbo, New South Wales dated 12 April 1984
30	Submission from the Executive Officer, Mackay District Cane Growers' Executive, Mackay, Queensland dated 12 April 1984
31	Submission from the Town Clerk, Campbelltown City Council, Campbelltown, New South Wales dated 30 April 1984
31(a)	Submission from the Campbelltown City Council dated 24 May 1984
32	Submission from the Australian Telecommunications Commission dated 19 April 1984
32(a)	Submission from the Australian Telecommunication Commission dated 25 May 1984
33	Submission from the Town Clerk, Albany, Western Australia dated 18 April 1984
34	Submission from the Director, Department of Environment & Planning, Sydney, New South Wales dated 30 April 1984
34(a)	Submission from the Acting Assistant Director, Department of Environment and Planning, Sydney, New South Wales dated 29 June 1984
34 (b)	Submission from the Director, Department of Environment and Planning, Sydney, New South Wales dated 30 July 1984
35	Submission from the Executive Director, National Farmers' Federation, Canberra, Australian Capital Territory dated 1 May 1984
36	Submission from the Director, Department of Industrial Development and Decentralisation, Sydney, New South Wales undated
37	Submission from the Minister for Police and Emergency Services, Sydney, New South Wales dated 18 April 1984

38	Submission from the Director of Secretariat, Australian Council of Local Government Associations, Canberra, Australian Capital Territory dated 4 May 1984
39	Submission from the Assistant Secretary, Rural Telephone Subscribers Association, Blackall, Queensland dated 7 May 1984
40	Submission from the Chairman, Geelong Regional Commission, Geelong, Victoria dated 4 May 1984
41	Submission from the Hon. Secretary, Blue Mountains Tourist Association, Katoomba, New South Wales dated 27 April 1984
41(a)	Submission from the Blue Mountains Tourist Association dated 24 May 1984
42	Submission from the Acting Shire Clerk, Livingstone Shire Council, Yeppoon, Queensland dated 9 May 1984
43	Submission from the Senior Vice President, Penrith and District Chamber of Commerce and Industry, Penrith, New South Wales dated 11 May 1984
43(a)	Submission from the Penrith and District Chamber of Commerce and Industry dated 24 May 1984
43(b)	Submission from the President, Penrith and District Chamber of Commerce, Penrith, New South Wales dated 20 June 1984
44	Submission from the Chief Executive Officer, Royal District Nursing Service, Melbourne, Victoria dated 14 May 1984
45	Submission from the Co-ordinator General, Premier's Department, North Quay, Queensland dated 10 May 1984
46	Submission from the Australian Telecommunications Users Group, Sydney, New South Wales dated 14 May 1984

47	Submission from the Federal Secretary, Australian Telephone and Phonogram Officers' Association, Melbourne, Victoria dated 22 May 1984
48	Submission from the President, Mornington Shire Council, Mornington, Victoria dated 25 May 1984
49	Submission from Mr Derek Giles, Frankston, Victoria dated 25 May 1984
50	Submission from Mr David Hassett, MLA, Mornington, Victoria dated 25 May 1984
51	Submission from Mr Peter Reith and Ors, Melbourne, Victoria dated 25 May 1984
52	Submission from the Acting Shire Clerk, Shire of Rockingham, Rockingham, Western Australia dated 22 May 1984
53	Submission from the General Manager, Rockingham Chamber of Commerce, Rockingham, Western Australia dated 28 May 1984
54	Submission from the Shire Secretary, Shire of Hastings, Hastings, Victoria dated 28 May 1984
55	Submission from Mr A J Flynn, Katoomba, New South Wales dated 24 May 1984
56	Submission from the Secretary, Western Australia Department of the Premier and Cabinet, Perth, Western Australia dated 1 June 1984
56(a)	Submission from the Western Australia Department of the Premier and Cabinet dated 12 June 1984
57	Submission from the Director, Armadale and Districts Chamber of Commerce, Armadale, Western Australia dated 5 June 1984
58	Submission from the Shire Clerk, Shire of Serpentine, Mundijong, Western Australia, dated 5 June 1984
59	Submission from the Executive Secretary, Regional Development Officer, Blacktown, New South Wales dated 7 May 1984

60 Submission from the Maranoa Graziers Association, Roma, Queensland dated June 1984

61 Submission from the Town Clerk, Camden, New South Wales dated 21 May 1984

62 Submission from the Town Clerk, Cessnock, New South Wales dated 3 July 1984

63 Submission from the Hon. Secretary, Trunkey Progress Association, Trunkey Creek, New South Wales dated 20 April 1984

64 Submission from the Chairman of Investigation Committee, Northam Chamber of Commerce, Northam, Western Australia dated 6 July 1984

65 Submission from the State Government of South Australia, Adelaide, South Australia dated 9 July 1984

66 Submission from the State Government of Tasmania, Hobart, Tasmania dated 11 July 1984

67 Submission from Mr G Troy, State Member for Mundaring, Western Australia dated 28 August 1984

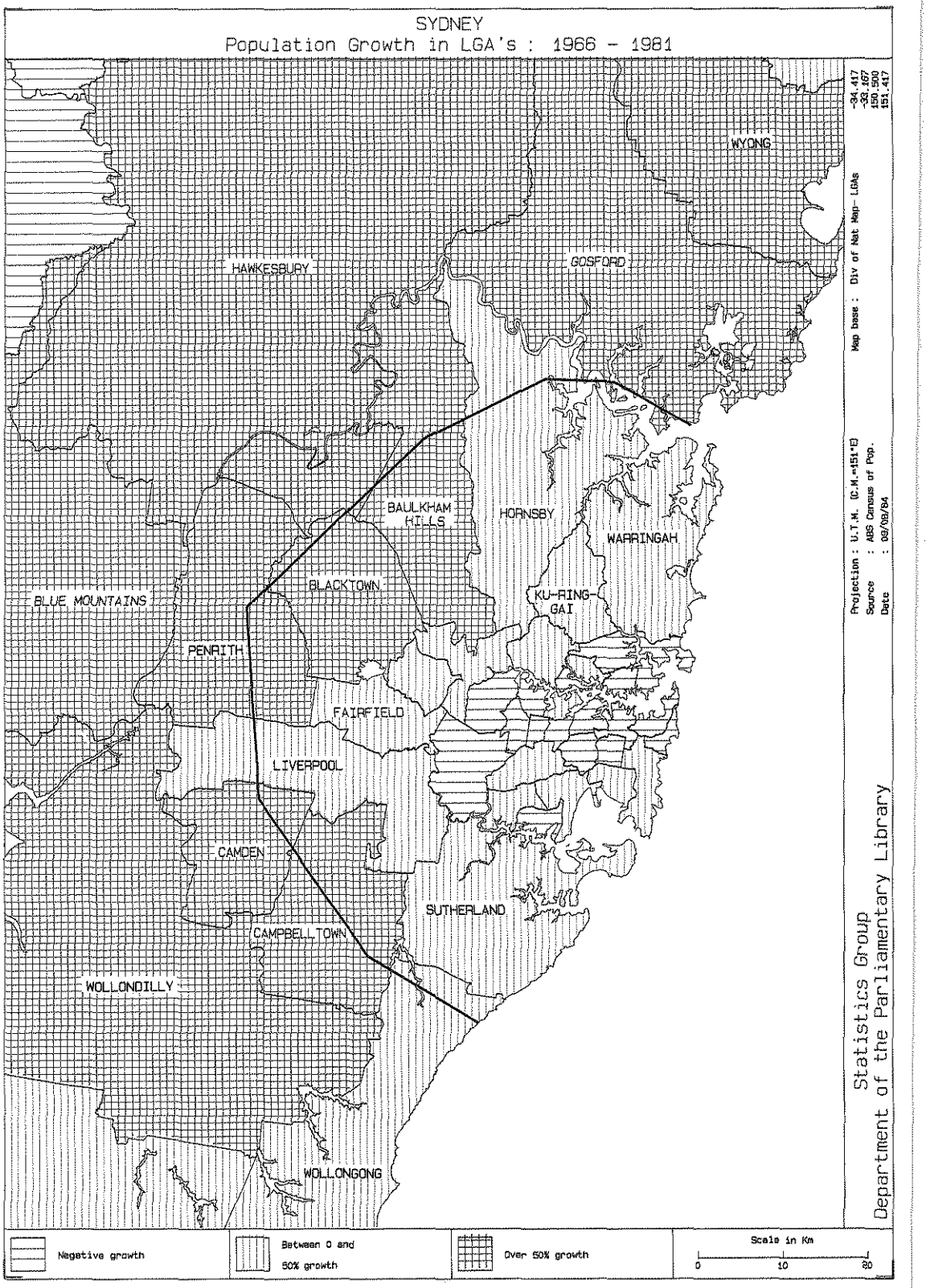
APPENDIX IV

Maps of Population Growth in Local Government Areas: 1966-1981

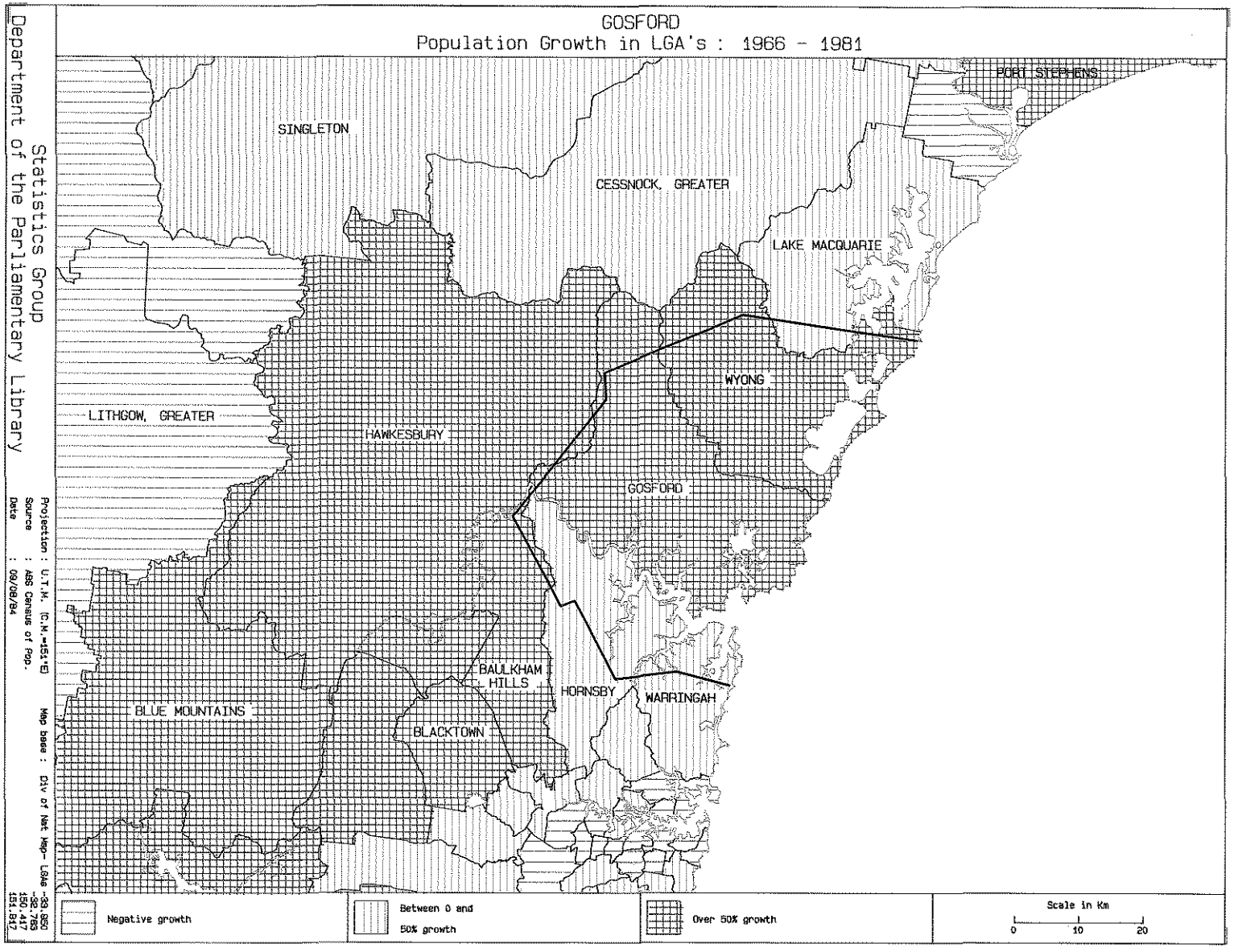
NEW SOUTH WALES

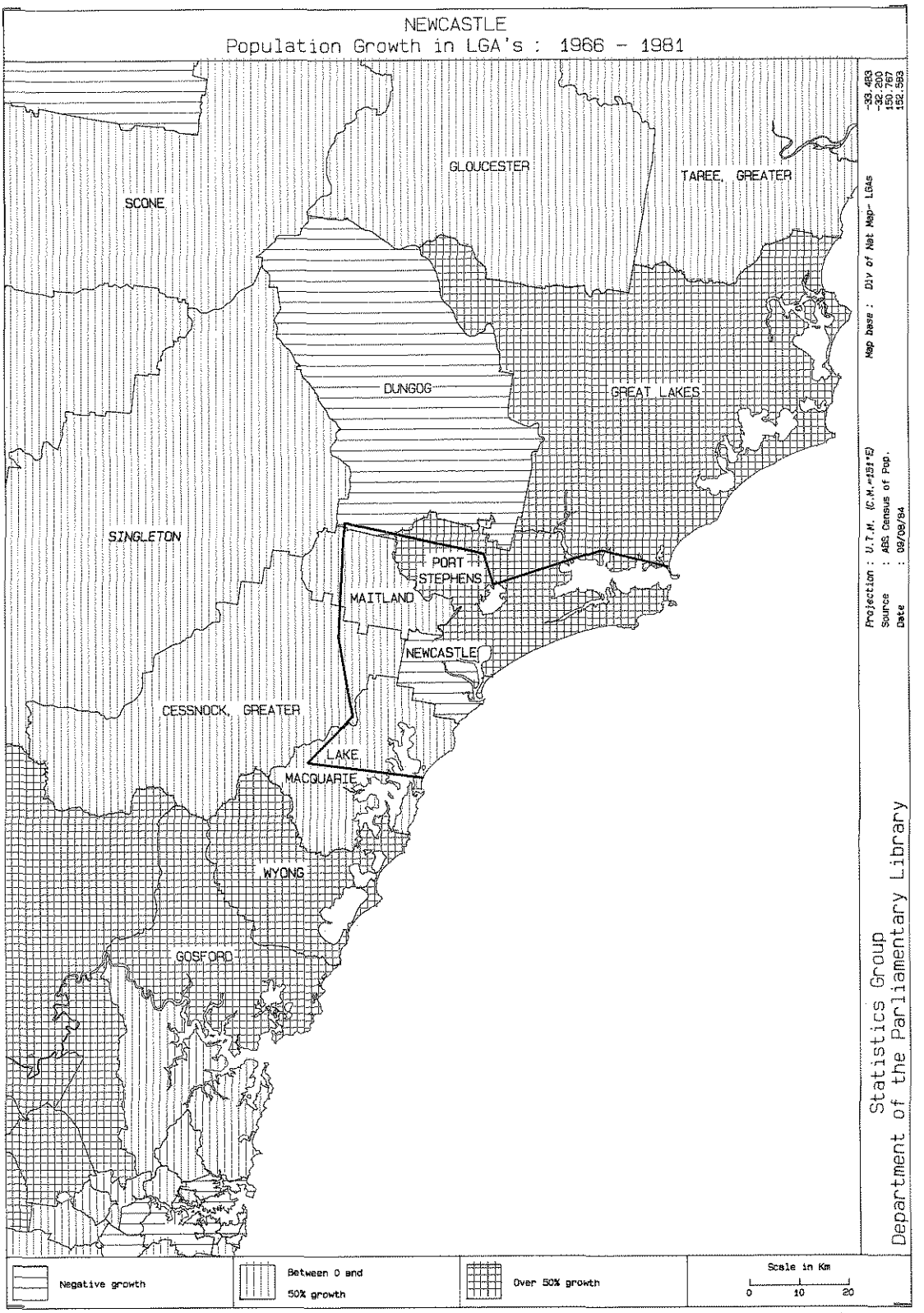
- Sydney
- Gosford/Wyong
- Newcastle
- Wollongong
- Albury/Wodonga
- Bathurst/Orange
- Wagga Wagga

(NB: ——— /— — — denotes Telecom's Local Call Boundary)

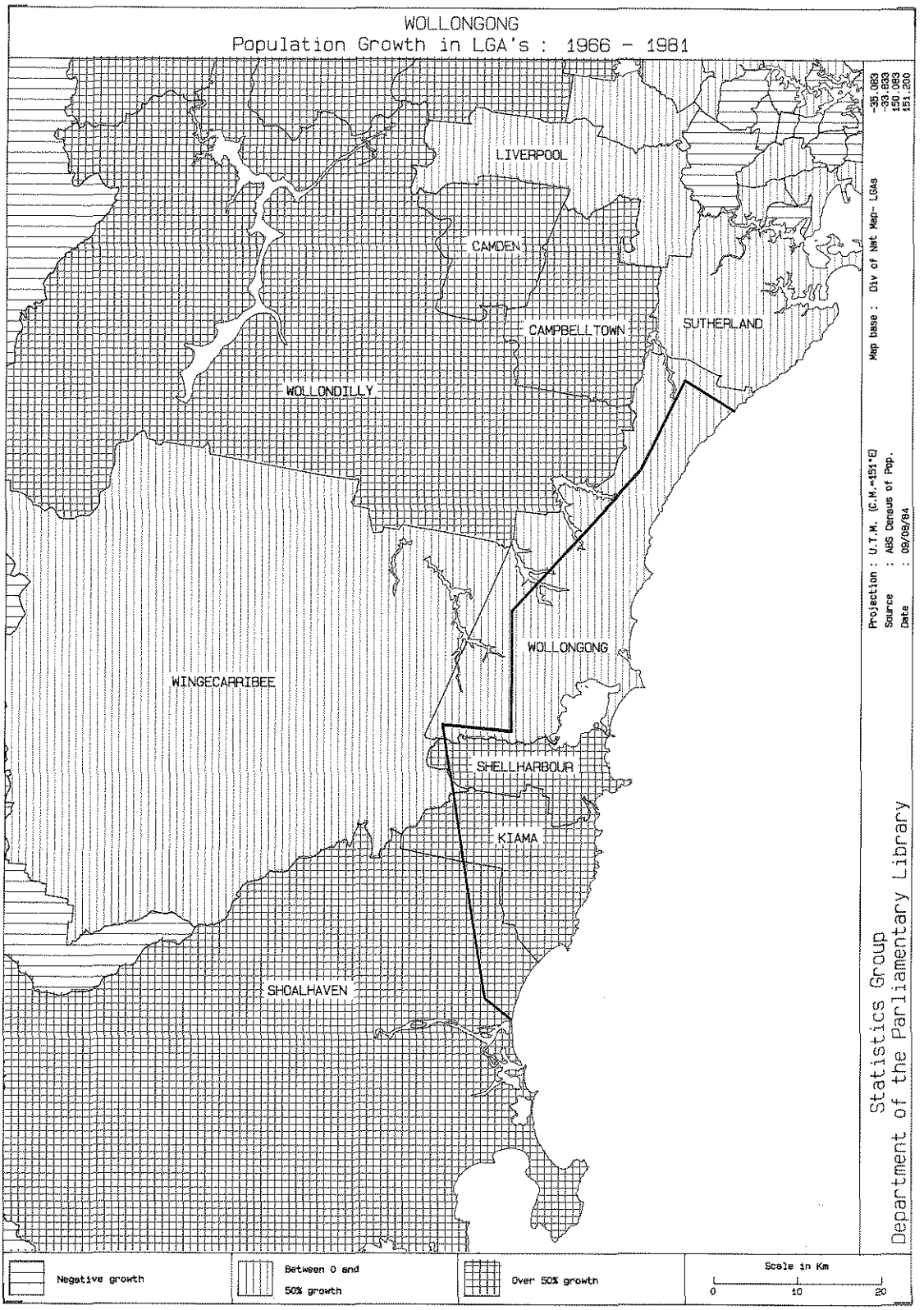

SYDNEY
Population Growth in LGA's : 1966 - 1981
WYONG
HAWKESBURY
GOSFORD
BAULKHAM HILLS
HORNSBY
WARRINGAH
BLACKTOWN
BLUE MOUNTAINS
KU-RING-GAI
PENRITH
FAIRFIELD
LIVERPOOL
CAMDEN
SUTHERLAND
CAMPBELLTOWN
WOLLONDILLY
WOLLONGONG
Map base : Div of Nat Map- LGAs
Projection : U.T.M. (C.M.=151°E)
Source : ABS Census of Pop.
Date : 09/08/84
-34.417
-33.167
150.500
151.417
Statistics Group
Department of the Parliamentary Library
Negative growth
Between 0 and 50% growth
Over 50% growth
Scale in Km
0
10
20

MAP 1

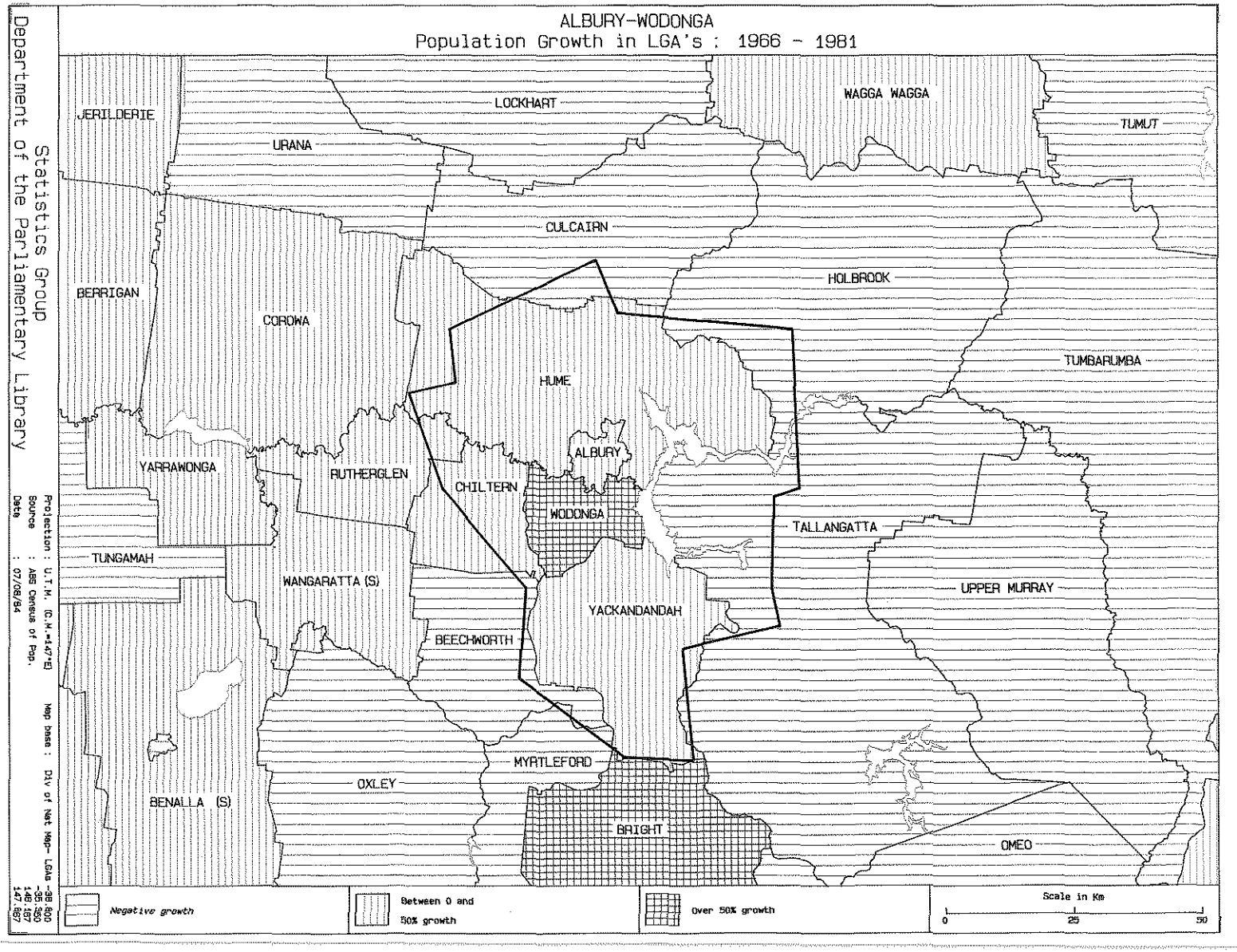

GOSFORD
Population Growth in LGA's : 1966 - 1981
SINGLETON
CESSNOCK, GREATER
PORT STEPHENS
LAKE MACQUARIE
WYONG
LITHGOW, GREATER
HAWKESBURY
GOSFORD
BAULKHAM HILLS
HORNSBY
WARRINGAH
BLUE MOUNTAINS
BLACKTOWN
Negative growth
Between 0 and 50% growth
Over 50% growth
Scale in Km
0
10
20
Department of the Parliamentary Library
Statistics Group
MAP 2
Projection : U.T.M. (C.M.=151°E)
Source : ABS Census of Pop.
Date : 09/08/84
Map base : Div of Nat Map- LGAs
-33.850
-32.785
150.417
151.917


NEWCASTLE
Population Growth in LGA's : 1966 - 1981
SCONE
GLOUCESTER
TAREE, GREATER
DUNGOG
GREAT LAKES
SINGLETON
PORT STEPHENS
MAITLAND
NEWCASTLE
CESSNOCK, GREATER
LAKE MACQUARIE
WYONG
GOSFORD
-33.483
-32.200
150.767
152.583
Map base : Div of Nat Map- LGAs
Projection : U.T.M. (C.M.=151°E)
Source : ABS Census of Pop.
Date : 08/08/84
Statistics Group
Department of the Parliamentary Library
Negative growth
Between 0 and 50% growth
Over 50% growth
Scale in Km
0
10
20

MAP 3

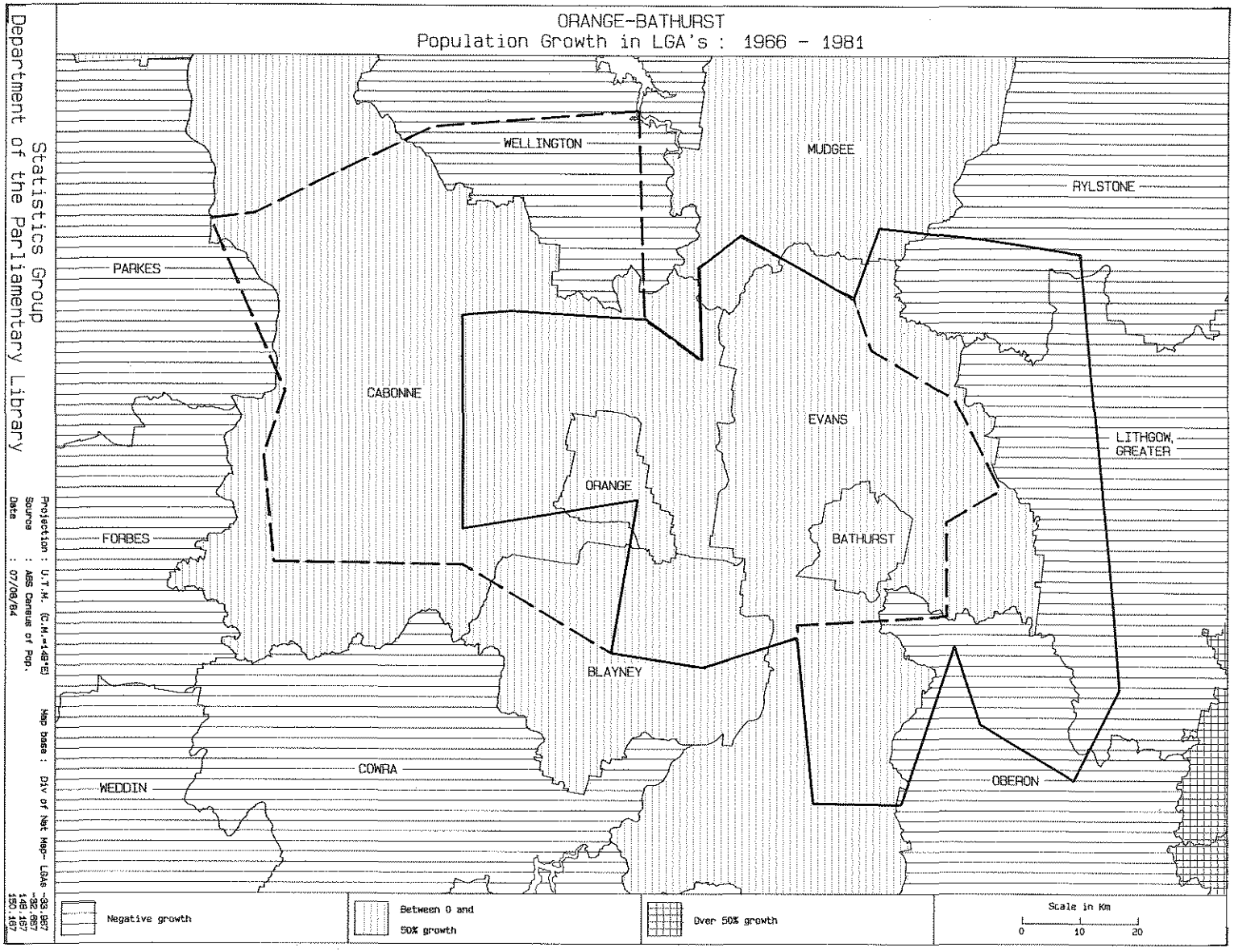

WOLLONGONG
Population Growth in LGA's : 1966 - 1981
LIVERPOOL
CAMDEN
CAMPBELLTOWN
SUTHERLAND
WOLLONDILLY
WOLLONGONG
WINGECARRIBEE
SHELLHARBOUR
KIAMA
SHOALHAVEN
-35.083
-33.833
150.083
151.200
Map base : Div of Nat Map- LGAs
Projection : U.T.M. (C.M.=151°E)
Source : ABS Census of Pop.
Date : 09/09/84
Statistics Group
Department of the Parliamentary Library
Negative growth
Between 0 and 50% growth
Over 50% growth
Scale in Km
0
10
20

MAP 4



Department of the Parliamentary Library
Statistics Group

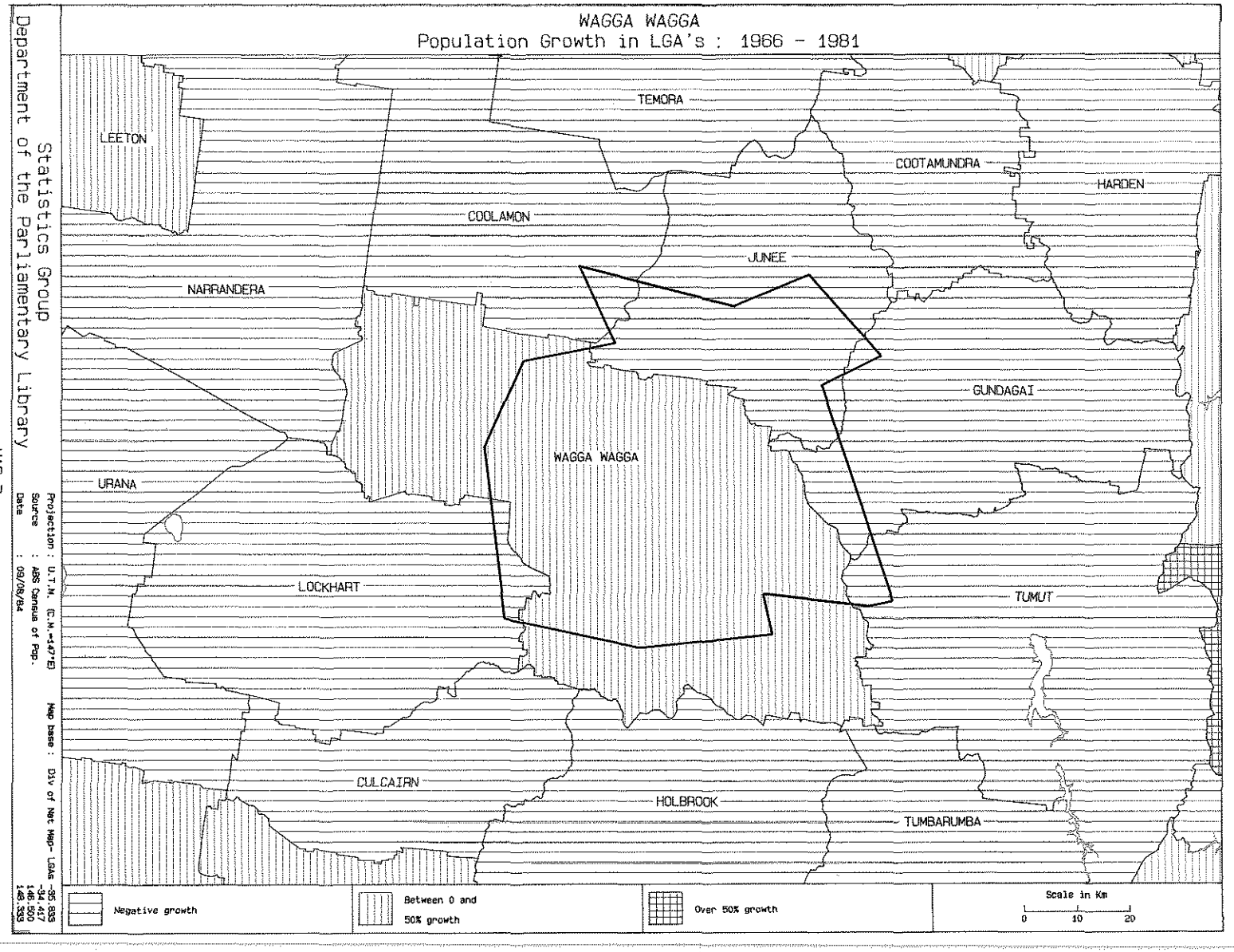
MAP 5



Department of the Parliamentary Library

Statistics Group

MAP 6


WAGGA WAGGA
Population Growth in LGA's : 1966 - 1981
TEMORA
LEETON
COOTAMUNDRA
HARDEN
COOLAMON
JUNEE
NARRANDERA
GUNDAGAI
WAGGA WAGGA
URANA
LOCKHART
TUMUT
CULCAIRN
HOLBROOK
TUMBARUMBA
Negative growth
Between 0 and 50% growth
Over 50% growth
Scale in Km
0
10
20
Projection : U.T.M. (C.M.=147°E)
Source : ABS Census of Pop.
Date : 09/08/84
Map base : Div of Nat Mapp
LGAs
-35.833
-34.417
146.500
148.333
Department of the Parliamentary Library
Statistics Group
MAP 7

APPENDIX IV

Maps of Population Growth in Local Government Areas: 1966-1981

VICTORIA

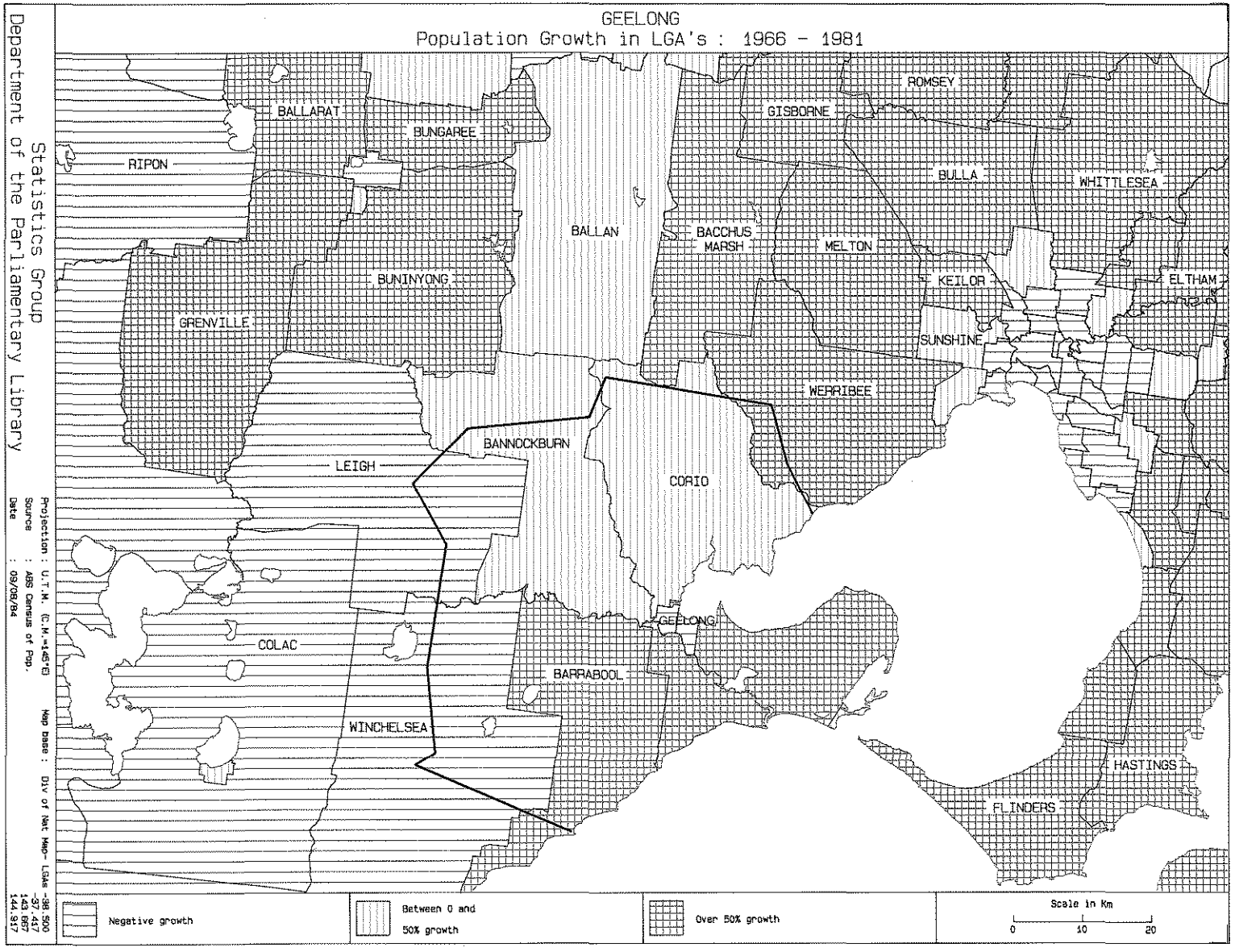
- Melbourne
- Geelong
- Ballarat
- Bendigo

(NB: ———/— — — denotes Telecom's Local Call Boundary)

Department of the Parliamentary Library

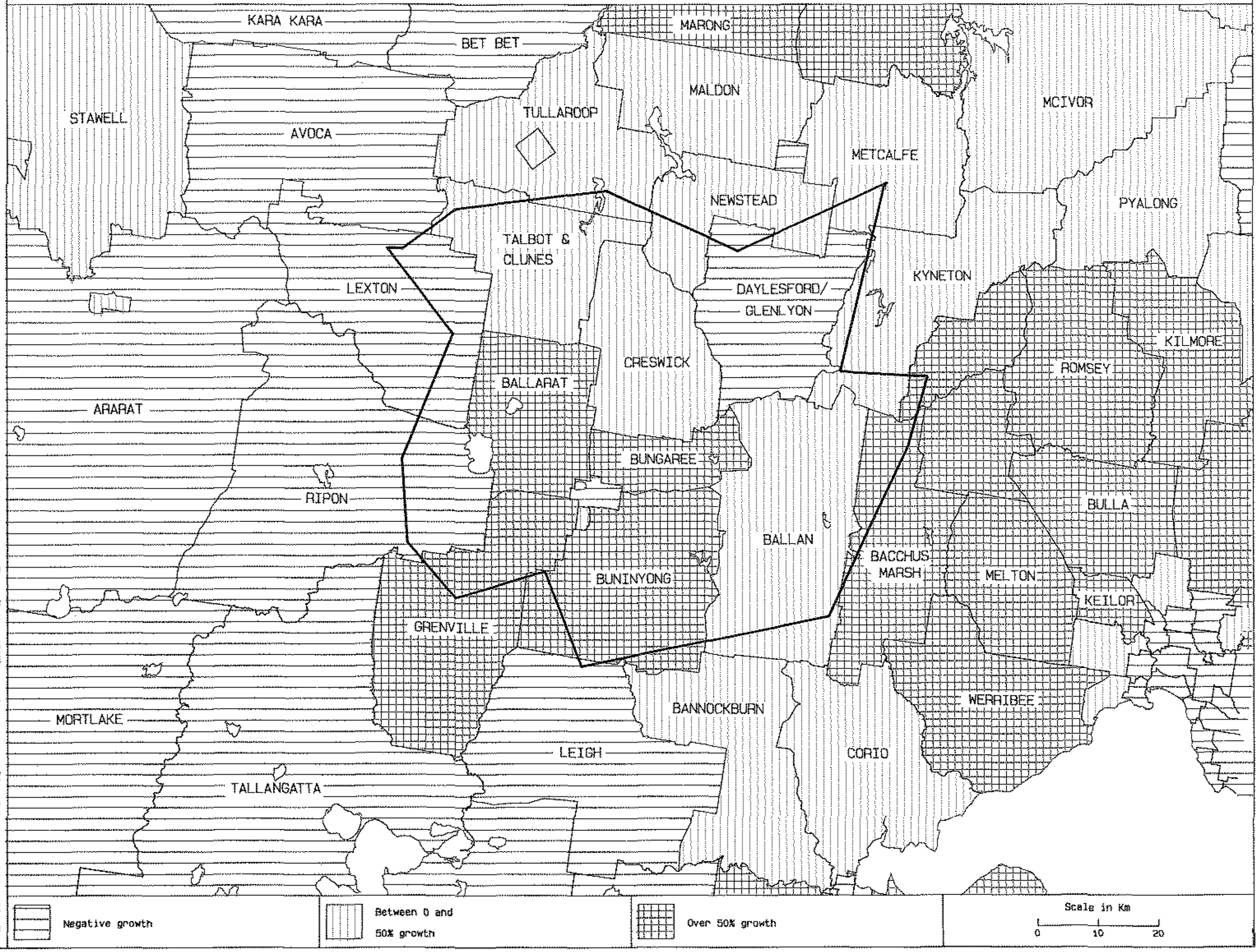
Statistics Group

MAP 8



MAP 9

BALLARAT
Population Growth in LGA's : 1966 - 1981

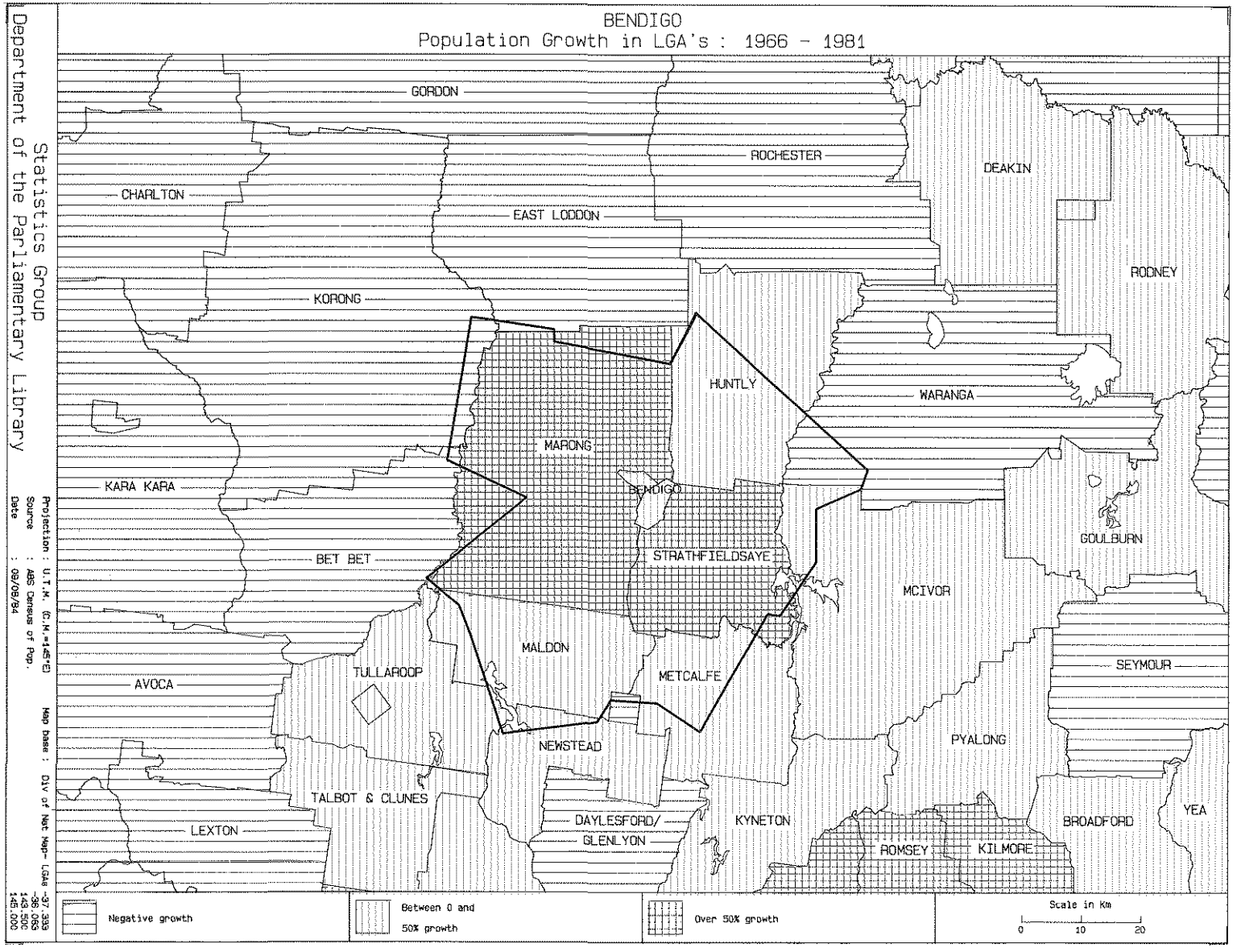


Statistics Group
Department of the Parliamentary Library

Projection : U.T.M. (C.M.=143°E)
Source : ABS Census of Pop.
Date : 09/08/84

Map base : Div of Nat Map- LGAs -38.167
-36.833
143.167
144.887

MAP 10


BENDIGO
Population Growth in LGA's : 1966 - 1981
GORDON
ROCHESTER
DEAKIN
CHARLTON
EAST LODDON
RODNEY
KORONG
HUNTLY
WARANGA
MARONG
KARA KARA
BENDIGO
GOULBURN
BET BET
STRATHFIELDSAYE
MCIVOR
MALDON
SEYMOUR
TULLAROOP
METCALFE
AVOCA
NEWSTEAD
PYALONG
TALBOT & CLUNES
DAYLESFORD/
GLENLYON
KYNETON
BROADFORD
YEA
LEXTON
ROMSEY
KILMORE
Negative growth
Between 0 and
50% growth
Over 50% growth
Scale in Km
0
10
20
Department of the Parliamentary Library
Statistics Group
Projection : U.T.M. (C.M.=145°E)
Source : ABS Census of Pop.
Date : 09/08/84
Map base : Div of Nat Map- LGAs
-37.333
-36.083
143.500
145.500

MAP 11

APPENDIX IV

Maps of Population Growth in Local Government Areas: 1966-1981

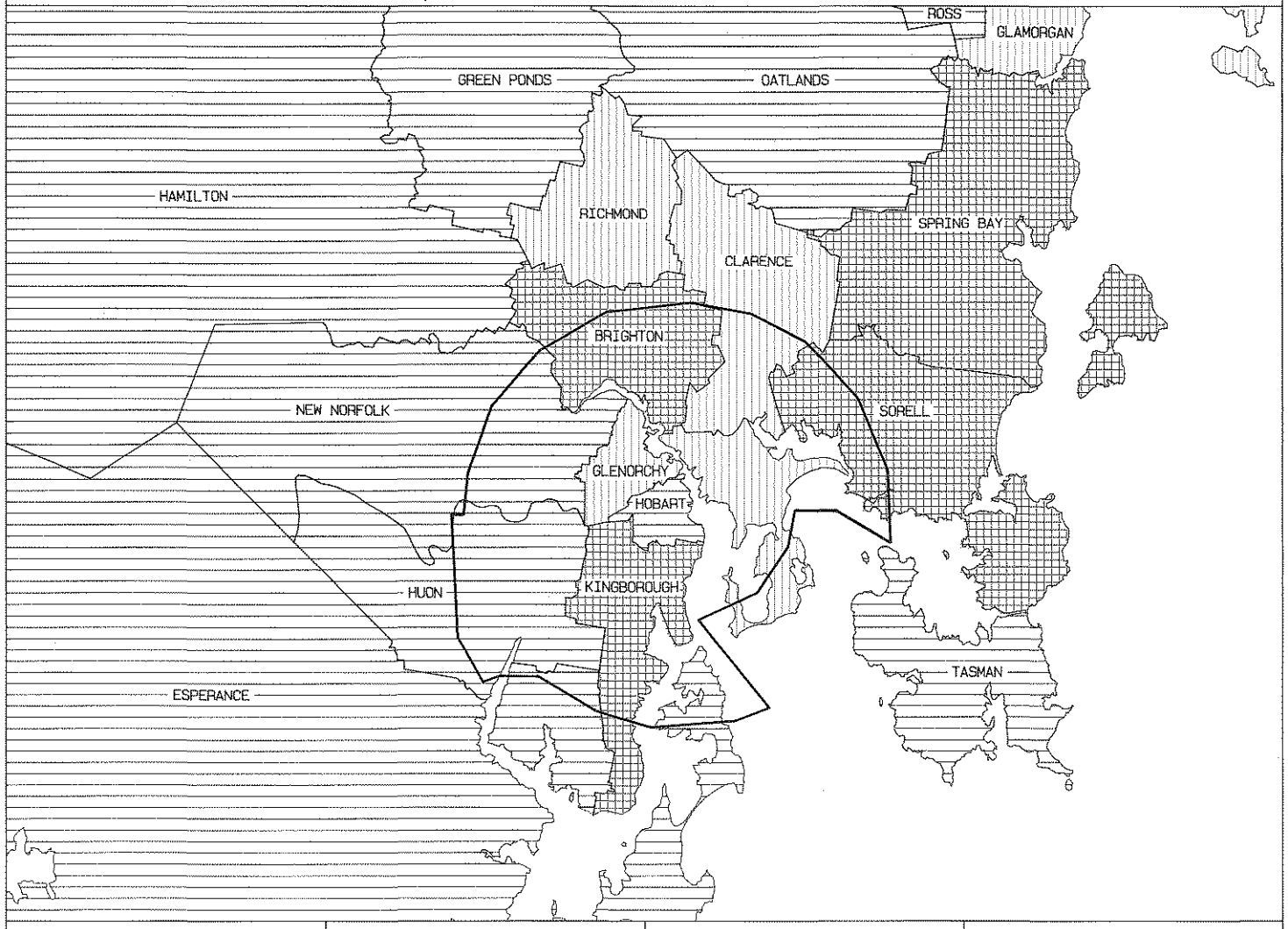
TASMANIA

- Hobart
- Launceston
- Burnie/Devonport

(NB: ———/— — —denotes Telecom's Local Call Boundary)

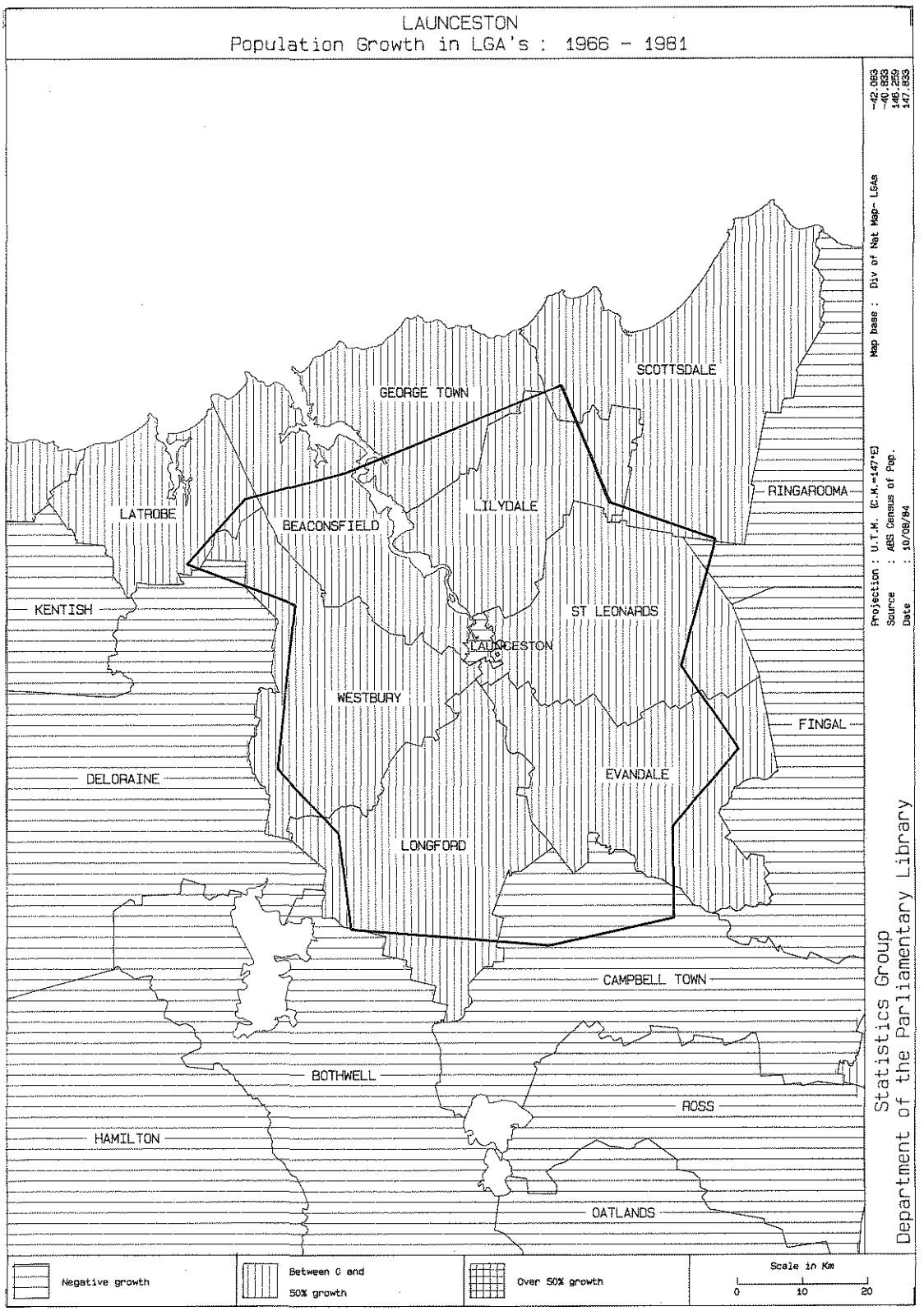
MAP 12

HOBART
Population Growth in LGA's : 1966 - 1981

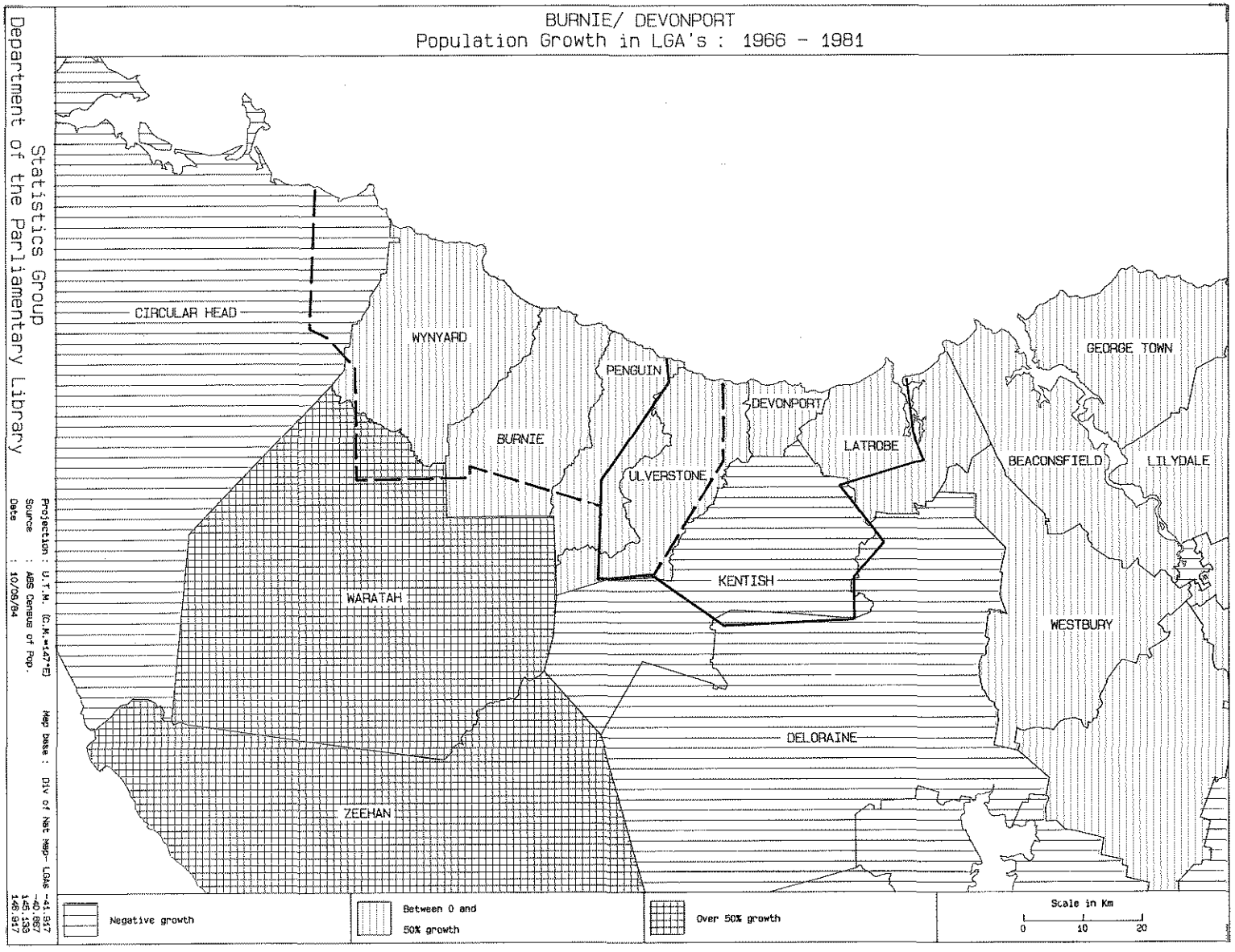


Projection : U.T.M. (C.M.=147°E)
Source : ABS Census of Pop.
Date : 20/08/84

Map base : Div of Nat Map- LGAs
-43.417
146.583
147.917


LAUNCESTON
Population Growth in LGA's : 1966 - 1981
GEORGE TOWN
SCOTTSDALE
LATROBE
BEACONSFIELD
LILYDALE
RINGAROOMA
KENTISH
ST LEONARDS
LAUNCESTON
WESTBURY
FINGAL
DELORAINE
EVANDALE
LONGFORD
CAMPBELL TOWN
BOTHWELL
ROSS
HAMILTON
OATLANDS
Negative growth
Between 0 and 50% growth
Over 50% growth
Scale in Km
0
10
20
Map base : Div of Nat Map- LGAs
Projection : U.T.M. (C.M.=147°E)
Source : ABS Census of Pop.
Date : 10/08/84
-42.083
-40.833
146.259
147.833
Statistics Group
Department of the Parliamentary Library

MAP 13


BURNIE/ DEVONPORT
Population Growth in LGA's : 1966 - 1981
CIRCULAR HEAD
WYNYARD
PENGUIN
BURNIE
DEVONPORT
LATROBE
ULVERSTONE
GEORGE TOWN
BEACONSFIELD
LILYDALE
KENTISH
WARATAH
WESTBURY
DELORAINE
ZEEHAN
Negative growth
Between 0 and 50% growth
Over 50% growth
Scale in Km
0
10
20
Department of the Parliamentary Library
Statistics Group
MAP 14
Projection : U.T.M. (C.M.=147°E)
Source : ABS Census of Pop.
Date : 10/08/84
Map base : Div of Nat Map- LGAs -41.917 -40.867 145.135 146.917

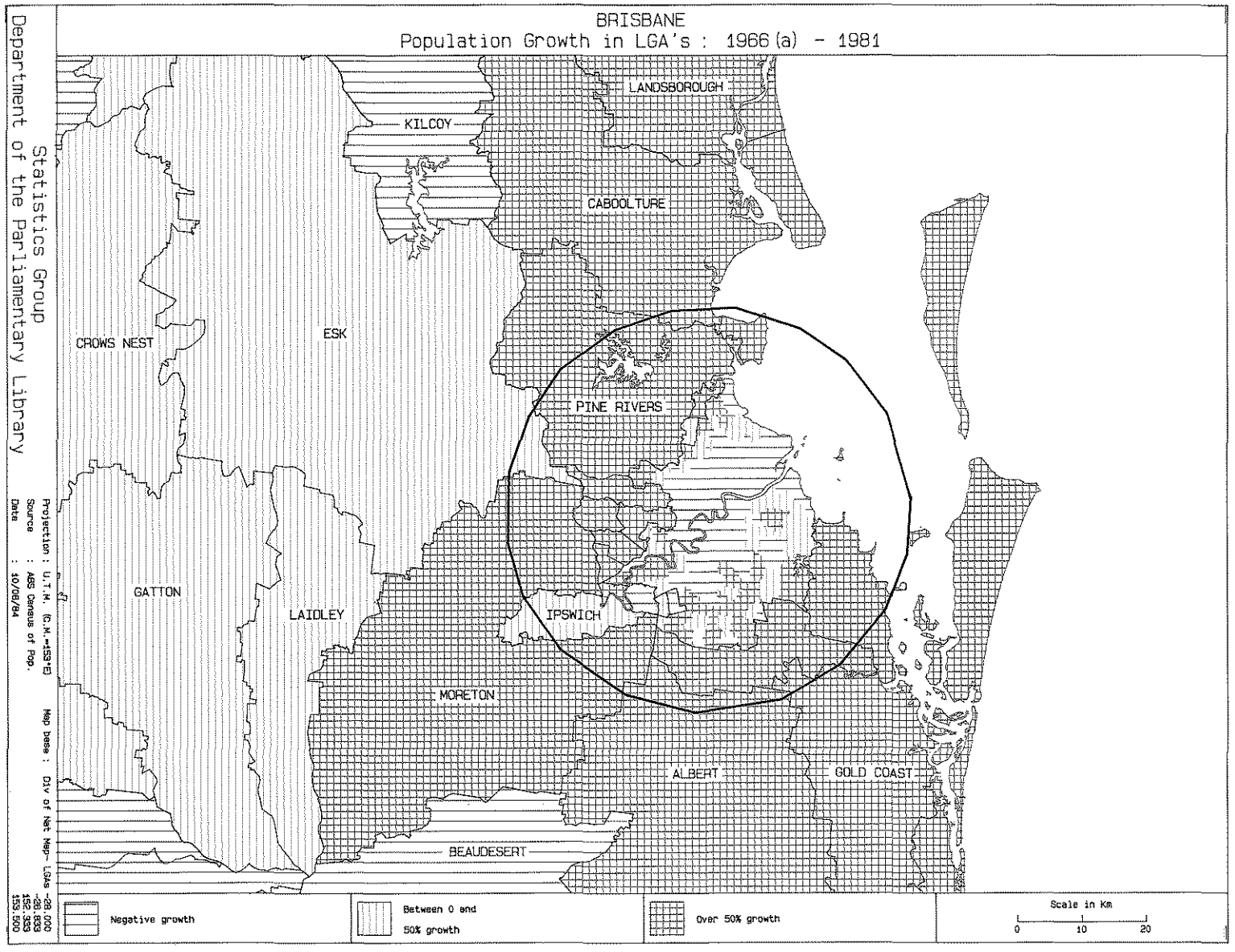
APPENDIX IV

Maps of Population Growth in Local Government Areas: 1966-1981

QUEENSLAND

- Brisbane
- Gold Coast
- Sunshine Coast
- Toowoomba
- Mackay
- Rockhampton
- Townsville
- Cairns

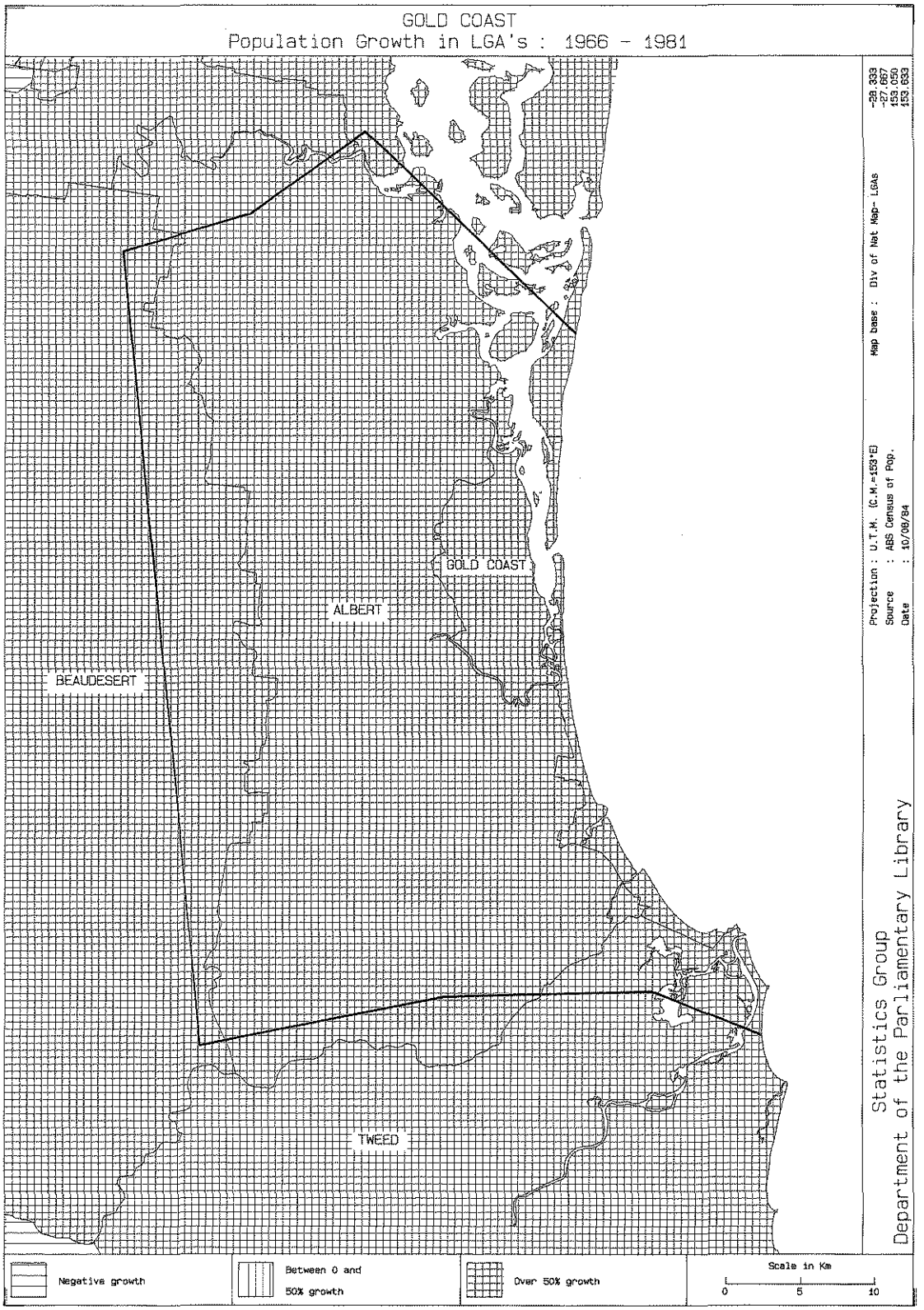
(NB: ———/— — — denotes Telecom's Local Call Boundary)



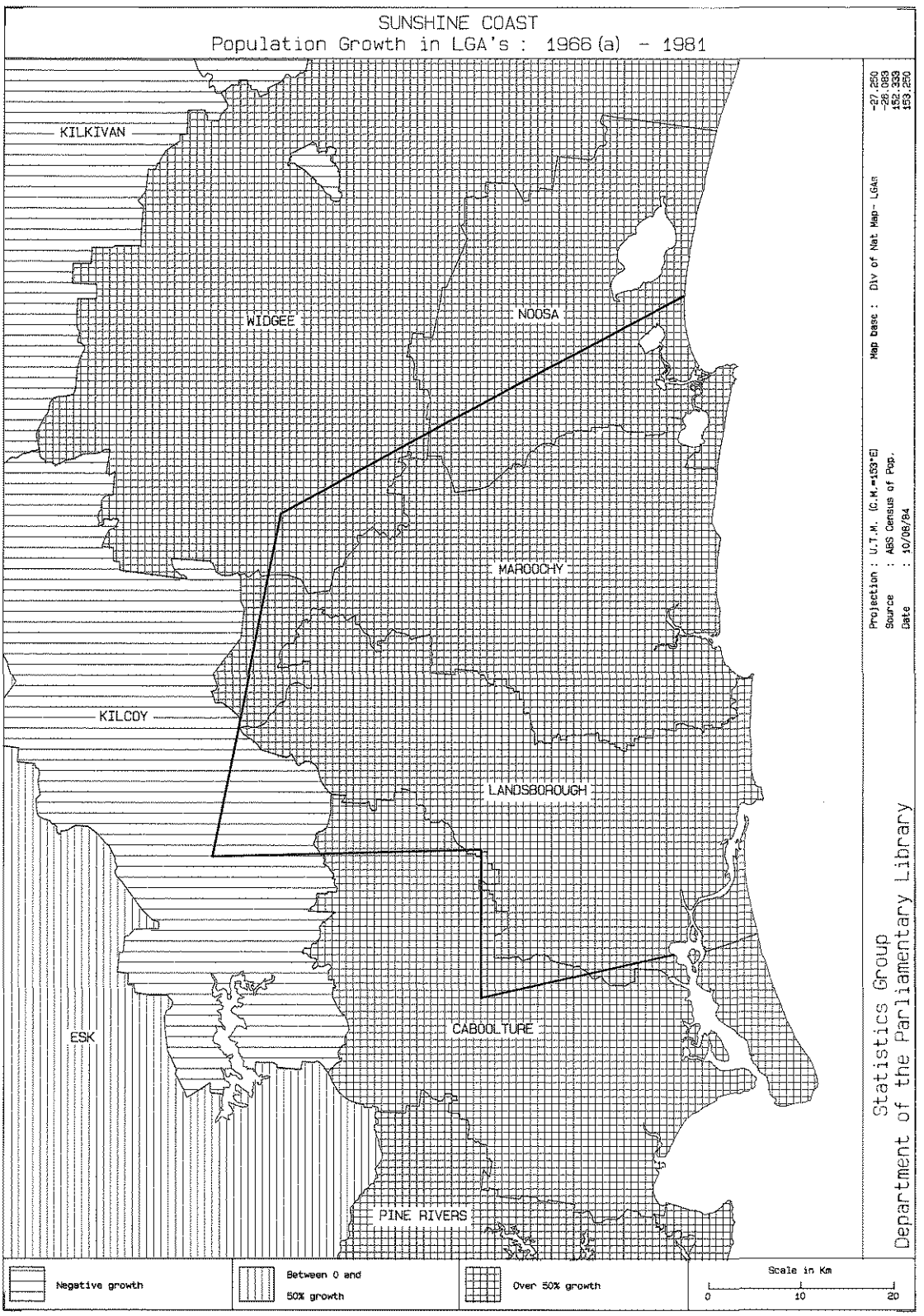
Department of the Parliamentary Library

Statistics Group

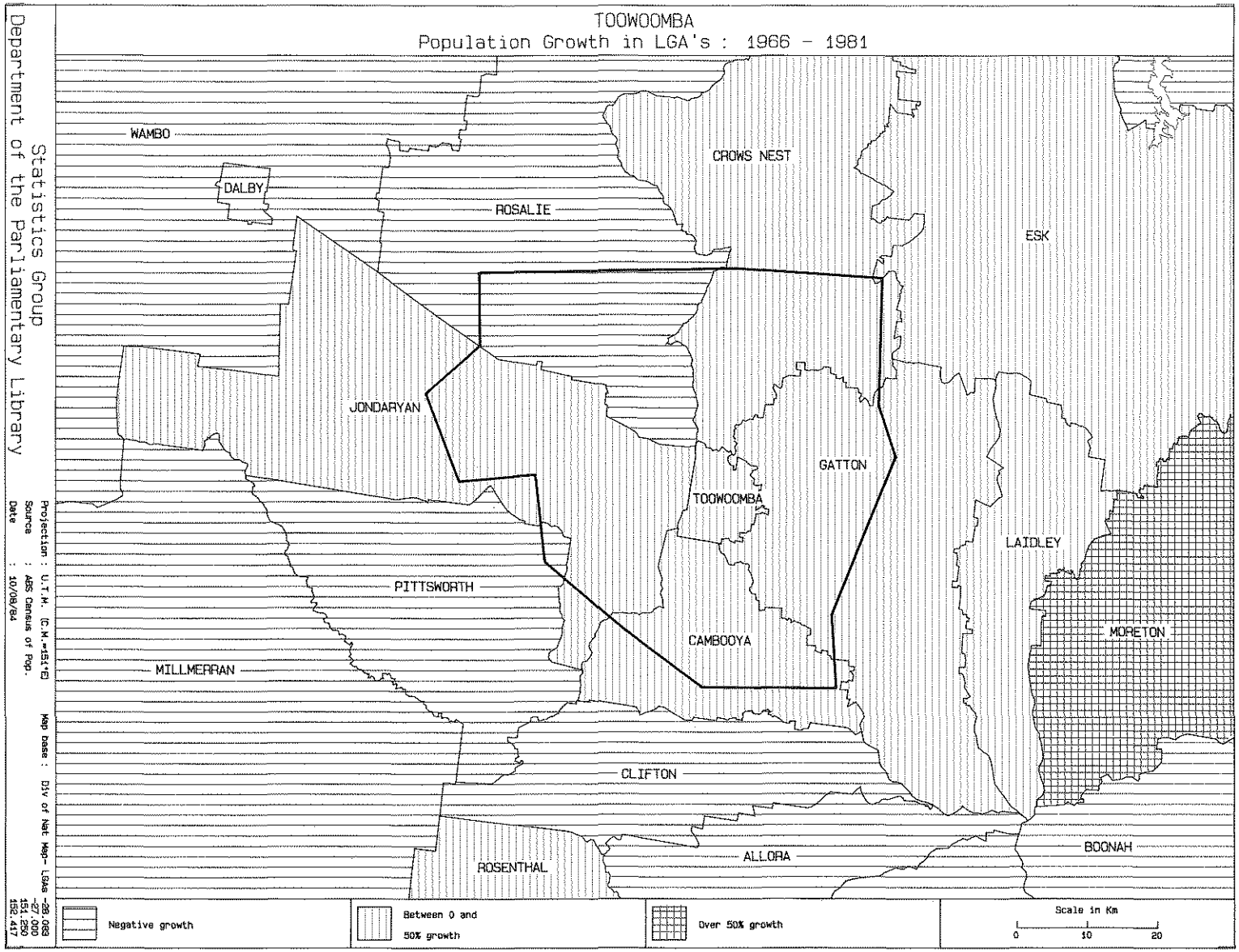
MAP 15


GOLD COAST
Population Growth in LGA's : 1966 - 1981
GOLD COAST
ALBERT
BEAUDESERT
TWEED
Projection : U.T.M. (C.M.=153°E)
Source : ABS Census of Pop.
Date : 10/08/84
Map base : Div of Nat Map- LGAs
-28.333
-27.667
153.050
153.633
Statistics Group
Department of the Parliamentary Library
Negative growth
Between 0 and 50% growth
Over 50% growth
Scale in Km
0
5
10

MAP 16


SUNSHINE COAST
Population Growth in LGA's : 1966(a) - 1981
KILKIVAN
WIDGEE
NOOSA
MAROOCHY
KILCOY
LANDSBOROUGH
CABOOLTURE
ESK
PINE RIVERS
Projection : U.T.M. (C.M.=153°E)
Source : ABS Census of Pop.
Date : 10/06/84
Map Base : Div of Nat Map- LGAs
-27.250
-26.983
152.383
153.250
Statistics Group
Department of the Parliamentary Library
Negative growth
Between 0 and 50% growth
Over 50% growth
Scale in Km
0
10
20

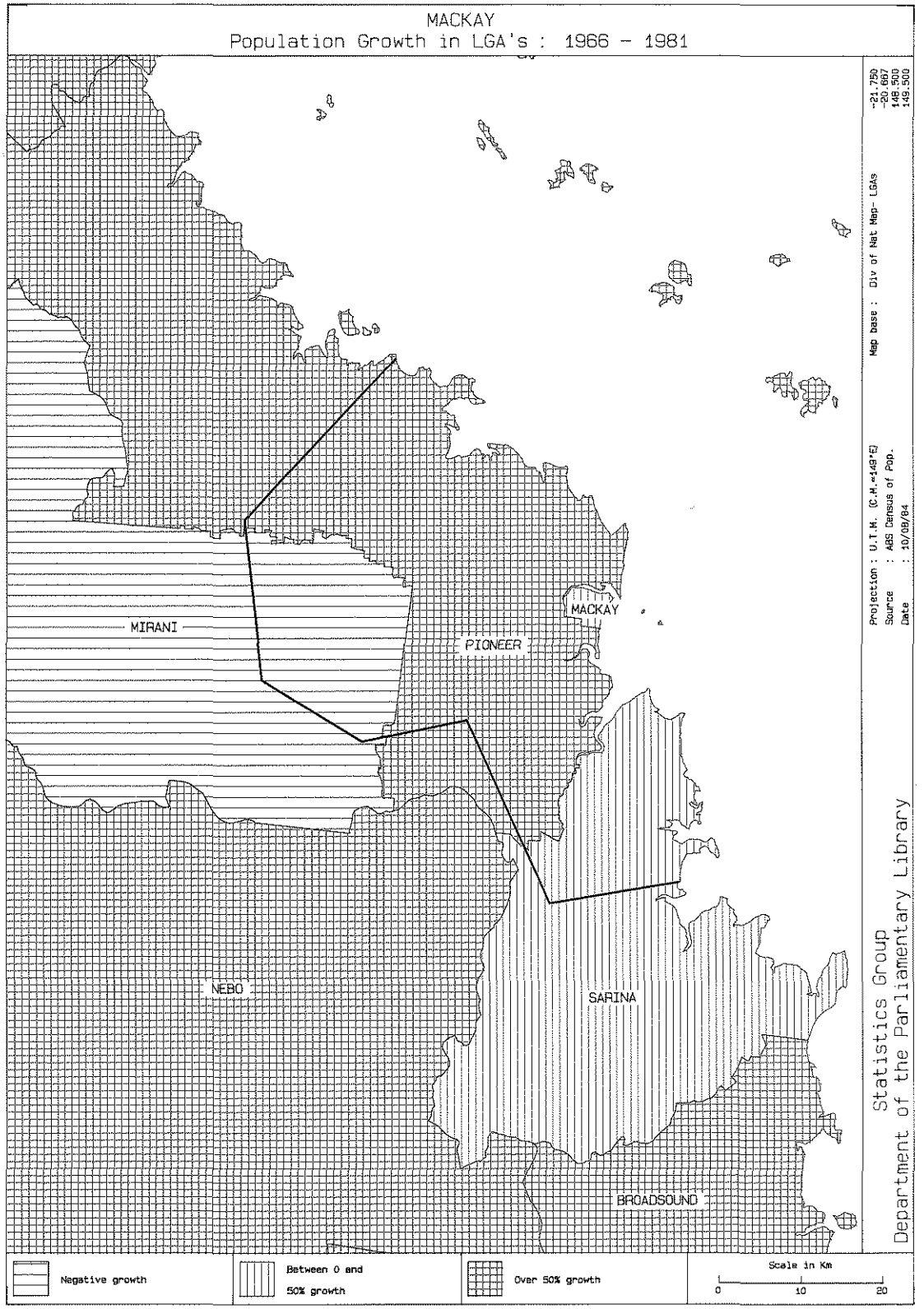
MAP 17



Department of the Parliamentary Library

Statistics Group

MAP 18

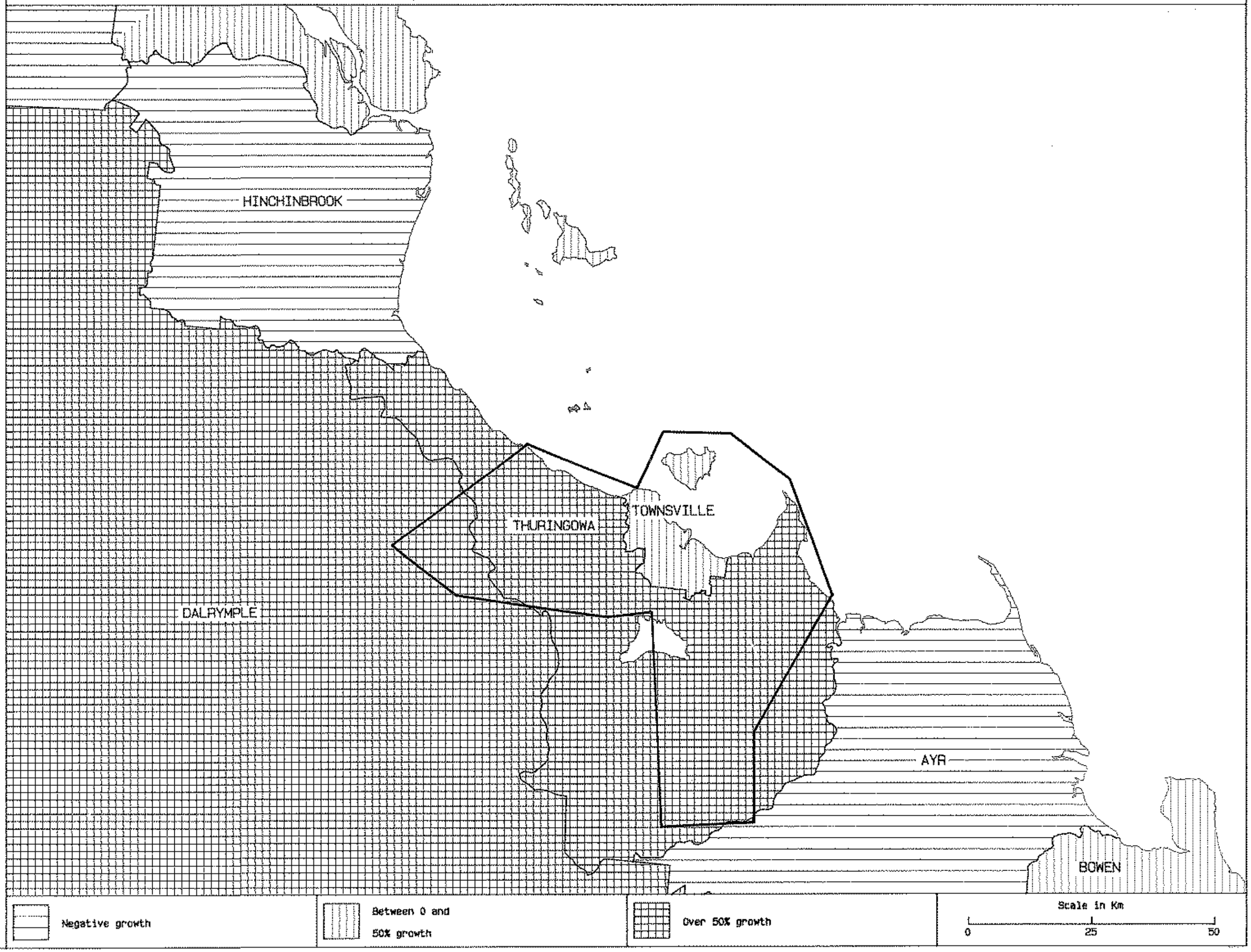

MACKAY
Population Growth in LGA's : 1966 - 1981
MIRANI
PIONEER
MACKAY
NEBO
SARINA
BROADSOUND
Projection : U.T.M. (C.M.=148°E)
Source : ABS Census of Pop.
Date : 10/08/84
Map base : Div of Nat Map- LGAs
-21.750
-20.667
148.500
149.500
Statistics Group
Department of the Parliamentary Library
Negative growth
Between 0 and 50% growth
Over 50% growth
Scale in Km
0
10
20

MAP 19

ROCKHAMPTON
Population Growth in LGA's : 1966 - 1981
LIVINGSTONE
FITZROY
ROCKHAMPTON
MOUNT MORGAN
CALLIOPE
BANANA
DUARINGA
Scale in Km
0
25
50
Over 50% growth
Between 0 and 50% growth
Negative growth
Statistics Group
Department of the Parliamentary Library
Projection : U.T.M. (C.M.=151°E)
Source : ABS Census of Pop.
Date : 10/08/84
Map base : Div of Nat Map- LGAs
-24.187
-22.700
149.750
151.250

MAP 20

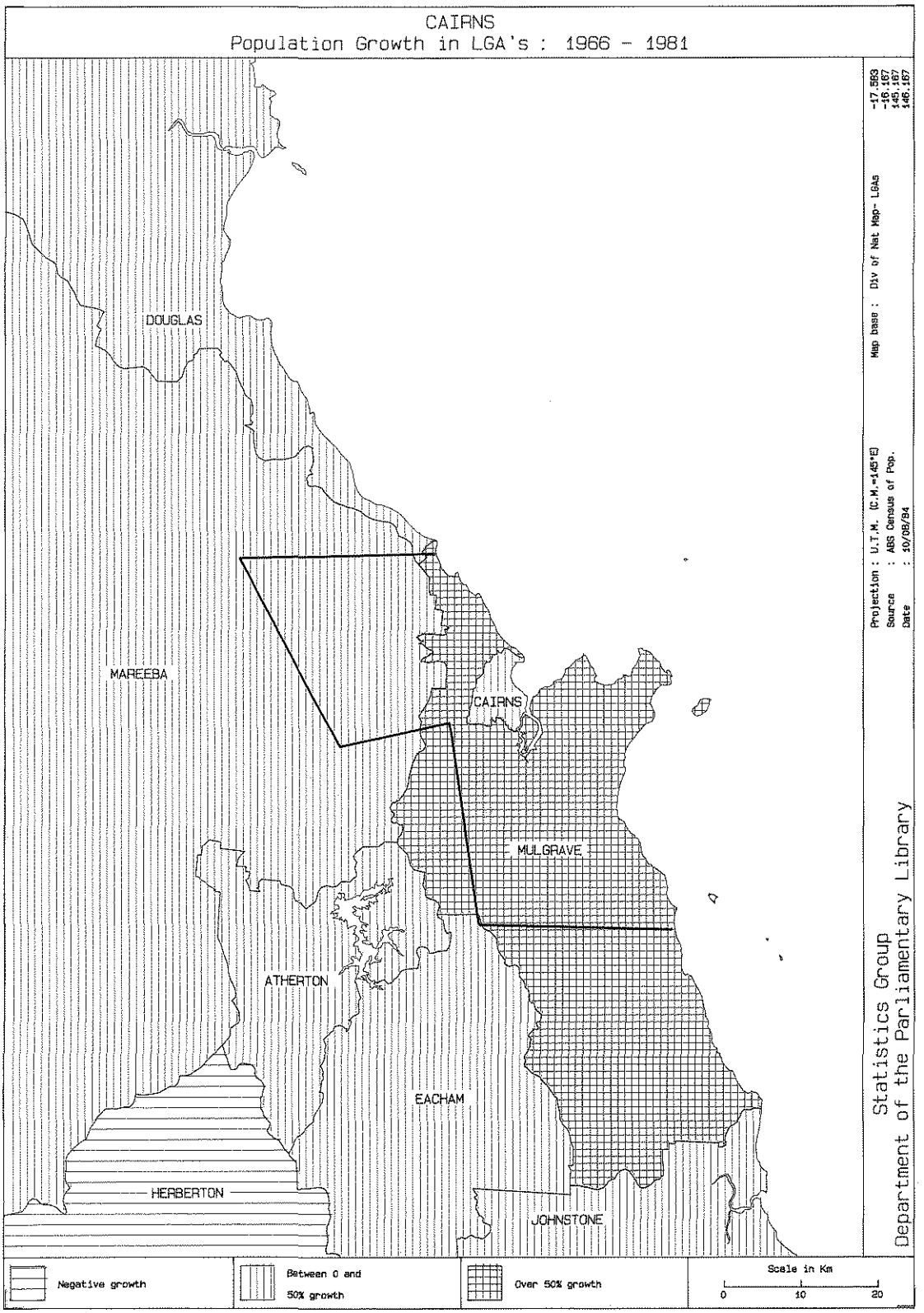
TOWNSVILLE
Population Growth in LGA's : 1966 - 1981



Statistics Group
Department of the Parliamentary Library

Projection : U.T.M. (C.M.=147°E)
Source : ABS Census of Pop.
Date : 10/08/84
Map base : Div of Nat Map- LGAs -19.917
-18.300
146.083
147.333

MAP 21


CAIRNS
Population Growth in LGA's : 1966 - 1981
DOUGLAS
MAREEBA
CAIRNS
MULGRAVE
ATHERTON
EACHAM
HERBERTON
JOHNSTONE
Negative growth
Between 0 and 50% growth
Over 50% growth
Scale in Km
0
10
20
Projection : U.T.M. (C.M.=145°E)
Source : ABS Census of Pop.
Date : 10/08/94
Map base : Div of Nat Map- LGAs
-17.563
-16.167
145.167
146.167
Statistics Group
Department of the Parliamentary Library

MAP 22

APPENDIX IV

Maps of Population Growth in Local Government Areas: 1966-1981

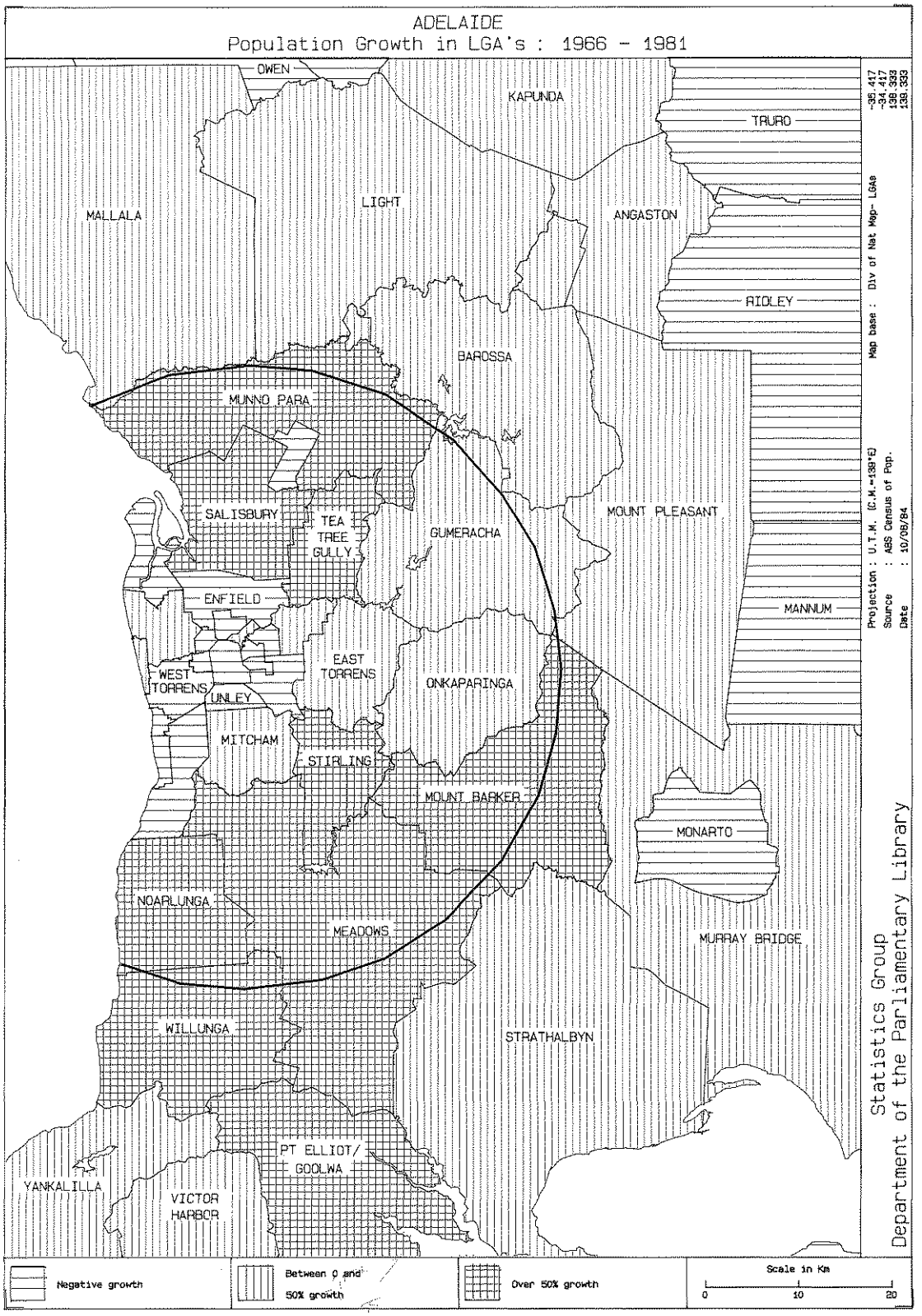
SOUTH AUSTRALIA

. Adelaide

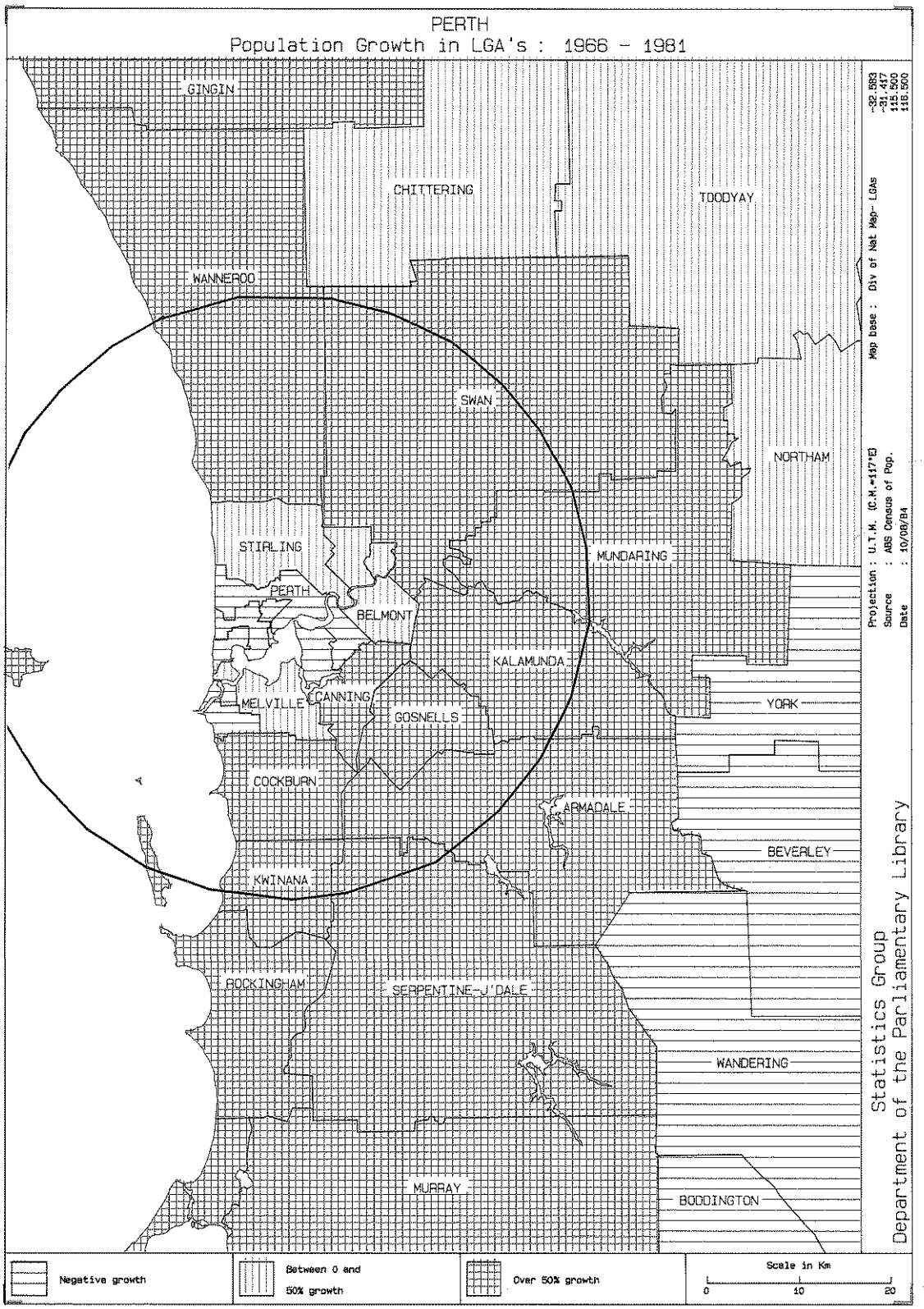
WESTERN AUSTRALIA

. Perth

(NB: ———/— — — denotes Telecom's Local Call Boundary)


ADELAIDE
Population Growth in LGA's : 1966 - 1981
OWEN
KAPUNDA
TRURO
MALLALA
LIGHT
ANGASTON
RIDLEY
BAROSSA
MUNNO PARA
SALISBURY
TEA TREE GULLY
GUMERACHA
MOUNT PLEASANT
ENFIELD
MANNUM
EAST TORRENS
WEST TORRENS
ONKAPARINGA
UNLEY
MITCHAM
STIRLING
MOUNT BARKER
MONARTO
NOARLUNGA
MEADOWS
MURRAY BRIDGE
WILLUNGA
STRATHALBYN
PT ELLIOT/ GOOLWA
YANKALILLA
VICTOR HARBOR
-35.417
-34.417
138.333
139.333
Map base : Div of Nat Mapping LGAs
Projection : U.T.M. (C.M.=138°E)
Source : ABS Census of Pop.
Date : 10/06/84
Statistics Group
Department of the Parliamentary Library
Negative growth
Between 0 and 50% growth
Over 50% growth
Scale in Km
0
10
20

MAP 23


PERTH
Population Growth in LGA's : 1966 - 1981
GINGIN
CHITTERING
TOODYAY
WANNEROO
SWAN
NORTHAM
STIRLING
MUNDARING
PERTH
BELMONT
KALAMUNDA
CANNING
MELVILLE
GOSNELLS
YORK
COCKBURN
ARMADALE
BEVERLEY
KWINANA
ROCKINGHAM
SERPENTINE-J'DALE
WANDERING
MURRAY
BODDINGTON
Map base : Div of Nat Map- LGAs
Projection : U.T.M. (C.M.=117°E)
Source : ABS Census of Pop.
Date : 10/08/84
-32.583
-31.417
115.500
116.500
Statistics Group
Department of the Parliamentary Library
Negative growth
Between 0 and 50% growth
Over 50% growth
Scale in Km
0
10
20

MAP 24

APPENDIX IV

Maps of Population Growth in Local Government Areas

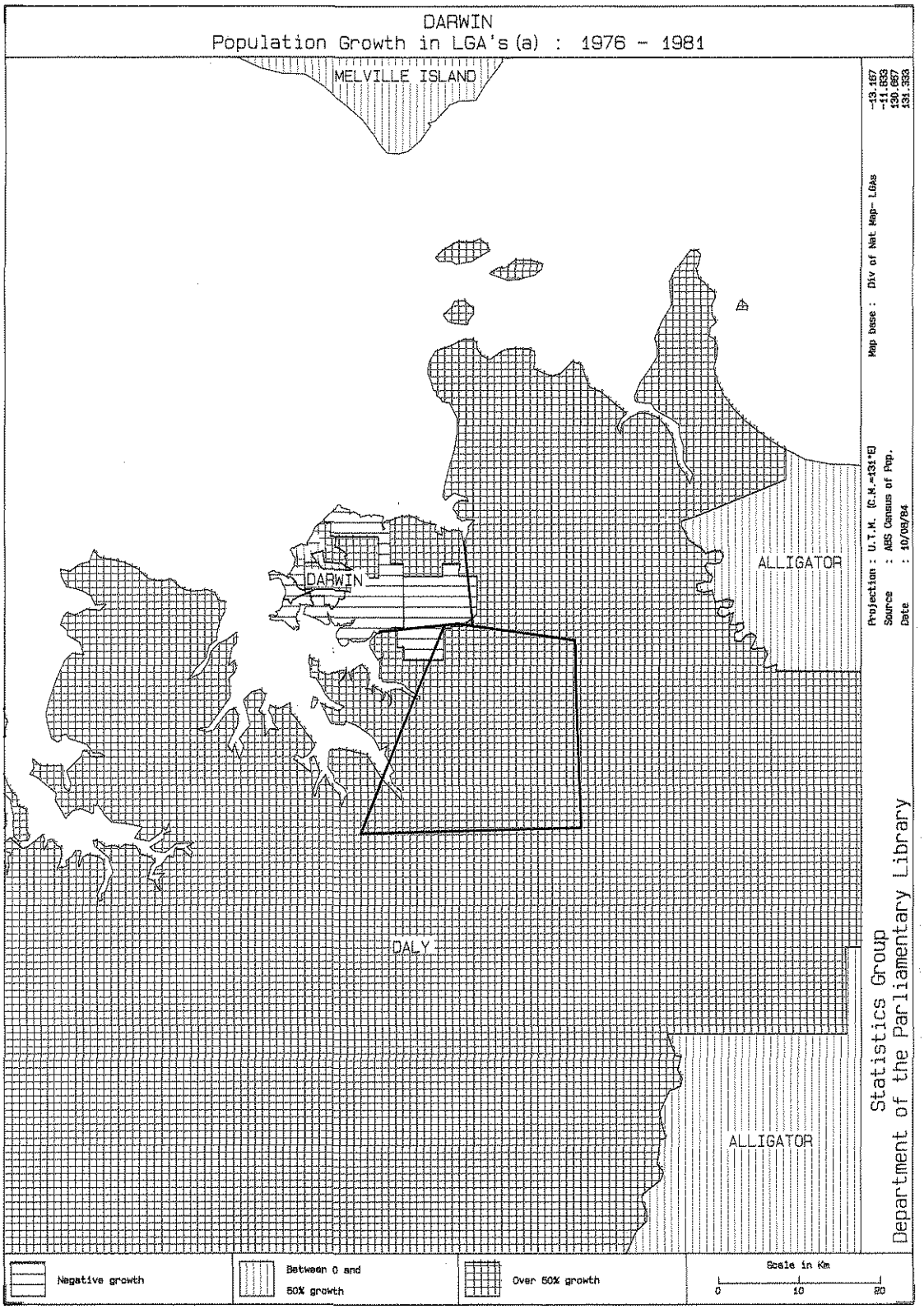
NORTHERN TERRITORY

. Darwin
(1976-1981)

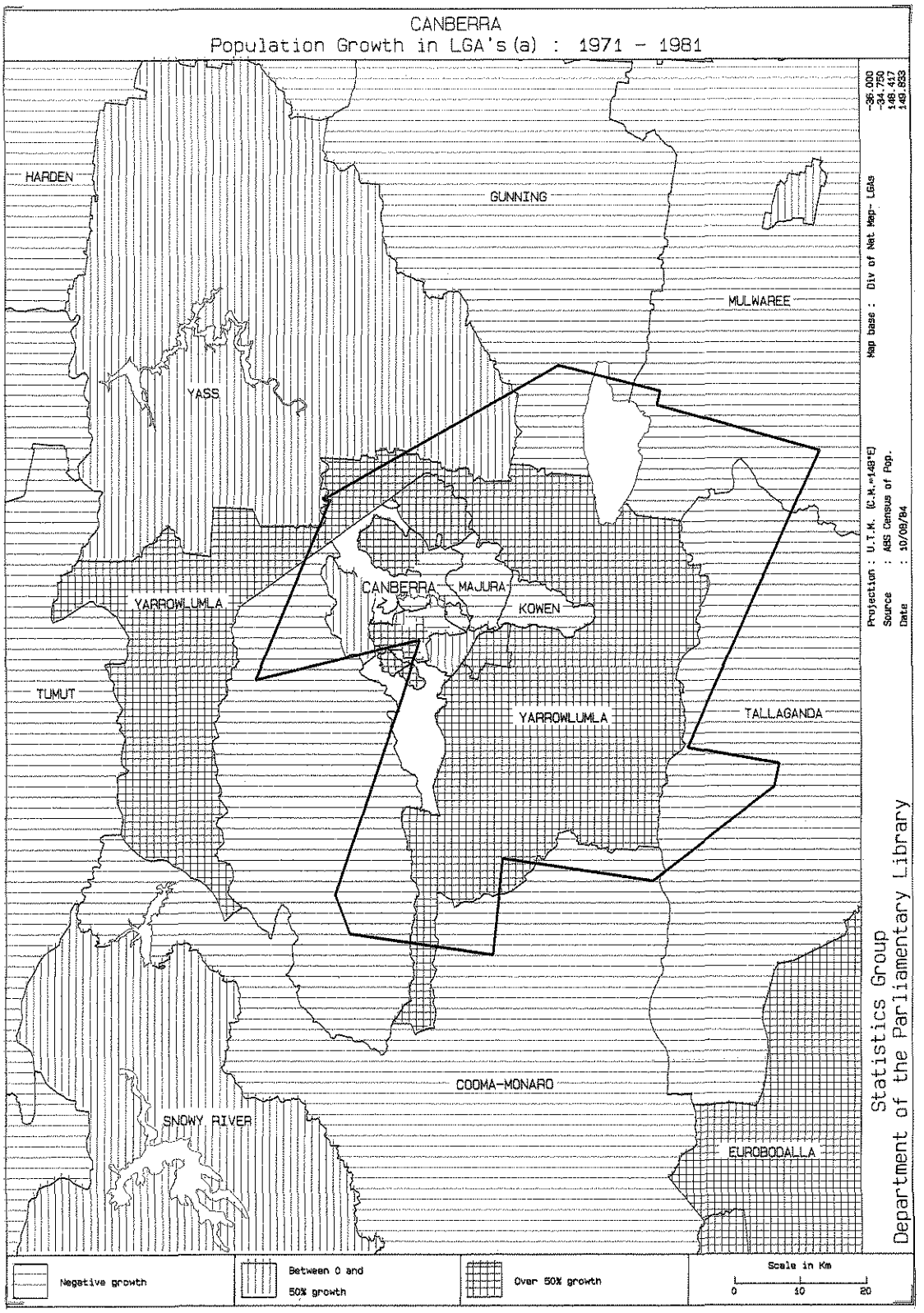
AUSTRALIAN CAPITAL TERRITORY

. Canberra
(1971-1981)

(NB: ——— / — — — denotes Telecom's Local Call Boundary)


DARWIN
Population Growth in LGA's (a) : 1976 - 1981
MELVILLE ISLAND
DARWIN
ALLIGATOR
DALY
ALLIGATOR
Projection : U.T.M. (C.M.=131°E)
Source : ABS Census of Pop.
Date : 10/08/84
Map base : Div of Nat Map- LGAs
-13.167
-11.833
130.667
131.333
Statistics Group
Department of the Parliamentary Library
Negative growth
Between 0 and 50% growth
Over 50% growth
Scale in Km
0
10
20

MAP 25


CANBERRA
Population Growth in LGA's (a) : 1971 - 1981
HARDEN
GUNNING
MULWAREE
YASS
CANBERRA
MAJURA
KOWEN
YARROWLUMLA
TUMUT
YARROWLUMLA
TALLAGANDA
COOMA-MONARO
SNOWY RIVER
EUROBODALLA
Negative growth
Between 0 and 50% growth
Over 50% growth
Scale in Km
0
10
20
Map base : Div of Net Map- LGAs
Projection : U.T.M. (C.M.=149°E)
Source : ABS Census of Pop.
Date : 10/08/84
-36.000
-34.750
148.417
149.833
Statistics Group
Department of the Parliamentary Library

MAP 26