

# **Electricity generated and available for distribution September 2005**

**Embargoed until:  
3 November 2005  
13:00**

**Preferred supplier of quality statistics**

**Table A – Selected key figures regarding electricity generated and available for distribution for September 2005**

**Estimates**

	<b>September 2005</b>	<b>% change between September 2004 and September 2005</b>	<b>% change between July to September 2004 and July to September 2005</b>	<b>% change between January to September 2004 and January to September 2005</b>
Electricity available for distribution (Gigawatt-hours)	18 371	-0,0	-1,0	+0,1
Index of the physical volume of electricity production (2000=100)	115,2	-0,4	-1,8	-0,2

**Seasonally adjusted estimates**

	<b>September 2005</b>	<b>% change between August and September 2005</b>	<b>% change between April to June 2005 and July to September 2005</b>
Electricity available for distribution (Gigawatt-hours)	18 685	+1,7	-0,9
Index of the physical volume of electricity production (2000=100)	115,4	+1,1	-1,6

**Key findings regarding electricity generated and available for distribution for September 2005**

**Consumption of electricity decreases less markedly**

*The estimated volume of electricity consumed (available for distribution) for the three months ending September 2005, after seasonal adjustment, decreased by 0,9% (-488 Gigawatt-hours) compared with the previous three months ending June 2005 (see table B). Furthermore, the estimated consumption of electricity for the three months ending September 2005 decreased by 1,0% (-564 Gigawatt-hours) compared with the corresponding three months of 2004 (see table C). The estimated consumption of electricity in September 2005 was on the same level as reported for September 2004 (see table 7a).*

**Production of electricity decreases**

*The estimated production of electricity for the three months ending September 2005, after seasonal adjustment, decreased by 1,7% (-1 065 Gigawatt-hours) compared with the previous three months ending June 2005 (see table B). The estimated production of electricity for September 2005 was lower (0,4% or -90 Gigawatt-hours) than for September 2004 (see table 7a).*

**Table B - Percentage change in the seasonally adjusted quantity of electricity generated and available for distribution between the current quarter and the previous quarter**

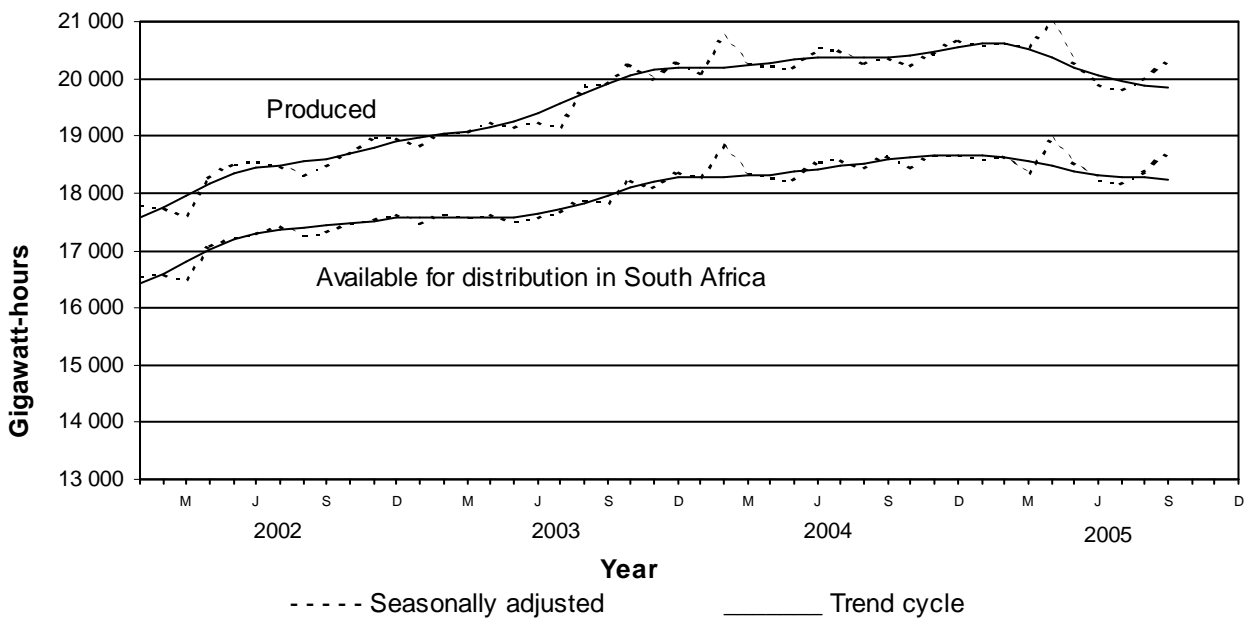
	Seasonally adjusted quantity April to June 2005	Seasonally adjusted quantity July to September 2005	Percentage change between April to June 2005 and July to September 2005	Quantity difference between April to June 2005 and July to September 2005
	Gigawatt-hours	Gigawatt-hours		Gigawatt-hours
Electricity produced	+61 176	+60 111	-1,7	-1 065
Electricity available for distribution in South Africa	+55 718	+55 230	-0,9	-488

**Table C - Percentage change between the current quarter and the corresponding quarter of the previous year**

	Actual quantity July to September 2004	Actual quantity July to September 2005	Percentage change between July to September 2004 and July to September 2005	Quantity difference between July to September 2004 and July to September 2005
	Gigawatt-hours	Gigawatt-hours		Gigawatt-hours
Electricity produced	63 953	62 777	-1,8	-1 176
Purchased outside South Africa (import)	1 815	2 425	+3,3	+610
Consumed in power stations and auxiliary systems	4 748	4 603	-3,1	-145
Sold outside South Africa (export)	3 237	3 380	+0,4	+143
Electricity available for distribution in South Africa	57 783	57 219	-1,0	-564

Figure 1 below shows the seasonally adjusted and trend patterns for electricity produced and available for distribution in South Africa between January 2002 and September 2005. There was a gradual upward movement in the trend cycles until the end of 2003. From March 2004, the increase in electricity produced was less marked and is currently showing a declining trend since March 2005. The trend of electricity available for distribution in South Africa has shown a similar pattern, although the latest decline is starting to phase out.

**Figure 1 – Electricity produced and available for distribution in South Africa from 2002 to 2005**



**P J Lehohla**  
**Statistician-General**

## Contents

	<b>Page</b>
<b>Notes</b> .....	5
<b>Tables</b>	
Table 1 Total volume of electricity available for distribution in South Africa: 2000 to 2005 .....	6
Table 2 Seasonally adjusted total volume of electricity available for distribution in South Africa: 2000 to 2005 .....	6
Table 3 Indices of the physical volume of electricity production: 2000 to 2005 .....	7
Table 4 Seasonally adjusted indices of the physical volume of electricity production: 2000 to 2005 .....	7
Table 5 Total volume of electricity imported: 2000 to 2005 .....	8
Table 6 Total volume of electricity exported: 2000 to 2005 .....	8
Table 7 Electricity produced and consumed in power stations, purchased and sold outside South Africa and available for distribution in South Africa .....	9
Table 8 Electricity distributed by Eskom by province for 2004 and 2005 .....	10
<b>Explanatory notes</b> .....	11
<b>Glossary</b> .....	13
<b>General information</b> .....	14

**Notes**

<b>Forthcoming issues</b>	<b>Issue</b>	<b>Expected release date</b>
	October 2005	1 December 2005
<b>Purpose of the survey</b>	The results of the monthly electricity generated and available for distribution survey are used to compile estimates of the Gross Domestic Product (GDP) and its components, which are used in monitoring the state of the economy and formulation of economic policy.	
<b>Response rate</b>	The response rate for the survey on electricity generated and available for distribution for September 2005 was 100%.	

**Table 1 - Total volume of electricity available for distribution in South Africa: 2000 to 2005**

Gigawatt-hours						
Month	2000	2001	2002	2003	2004	2005
January	15 512	16 064	16 191	17 095	17 850	18 149
February	15 224	14 871	15 215	16 168	17 278	17 169
March	16 225	16 320	16 551	17 655	18 477	18 487
April	15 399	15 515	16 362	16 905	17 524	18 132
May	17 064	16 929	17 852	18 159	18 909	19 224
June	16 818	16 788	18 016	18 331	19 336	18 983
July	17 759	18 021	18 956	19 183	20 156	19 657
August	17 214	17 300	18 064	18 713	19 265	19 191
September	16 180	16 277	17 125	17 526	18 362	1/ 18 371
October	16 709	16 794	17 741	18 479	18 714	
November	16 161	15 960	17 234	17 790	18 314	
December	15 395	15 224	16 713	17 456	17 754	
Year	195 660	196 063	206 020	213 460	221 939	

1/ Preliminary

**Table 2 - Seasonally adjusted total volume of electricity available for distribution in South Africa: 2000 to 2005**

Gigawatt-hours							
Month	2000	2001	2002	2003	2004	2005	% change between current and previous month
January	15 837	16 400	16 535	17 468	18 263	18 584	-0,4
February	16 621	16 204	16 583	17 627	18 782	18 660	+0,4
March	16 210	16 236	16 458	17 555	18 335	18 353	-1,6
April	16 160	16 175	17 070	17 663	18 291	18 935	+3,2
May	16 384	16 268	17 186	17 489	18 234	18 560	-2,0
June	16 158	16 140	17 299	17 574	18 542	18 223	-1,8
July	16 423	16 643	17 500	17 699	18 589	18 175	-0,3
August	16 383	16 494	17 272	17 899	18 435	18 370	+1,1
September	16 321	16 472	17 365	17 816	18 661	18 685	+1,7
October	16 433	16 535	17 456	18 238	18 465		
November	16 468	16 244	17 519	18 112	18 645		
December	16 385	16 131	17 635	18 385	18 653		

**Table 3 - Indices of the physical volume of electricity production:  
2000 to 2005**

Base : 2000=100

Month	2000	2001	2002	2003	2004	2005
January	92,5	98,6	98,5	104,2	111,0	113,5
February	91,2	90,1	91,8	98,5	107,2	106,6
March	100,9	98,5	99,7	108,0	114,7	116,5
April	95,9	93,6	99,0	104,7	110,1	114,1
May	106,3	103,0	109,4	113,0	119,1	119,6
June	104,9	101,1	110,2	114,5	122,1	118,2
July	107,8	111,1	115,5	119,2	127,3	122,7
August	105,5	108,0	109,9	119,1	121,3	119,8
September	99,1	100,5	104,9	112,8	115,7	1/ 115,2
October	103,1	102,7	109,6	118,9	118,7	
November	99,1	97,4	106,3	112,0	114,5	
December	93,8	92,1	101,7	109,3	111,6	
Year	100,0	99,7	104,7	111,2	116,1	

1/ Preliminary

**Table 4 - Seasonally adjusted indices of the physical volume of electricity production:  
2000 to 2005**

Month	2000	2001	2002	2003	2004	2005	% change between current and previous month
January	94,5	100,9	101,0	107,1	114,4	117,2	-0,5
February	99,8	98,8	100,9	108,3	117,9	117,1	-0,1
March	101,0	98,7	100,0	108,5	115,2	117,0	-0,1
April	101,0	98,4	103,9	109,7	115,2	119,3	+2,0
May	102,1	99,0	105,3	108,9	115,0	115,6	-3,1
June	100,6	96,9	105,7	109,7	117,2	113,5	-1,8
July	99,3	102,4	106,5	109,9	117,5	113,4	-0,1
August	100,1	102,6	104,6	113,4	115,5	114,1	+0,6
September	99,4	100,9	105,3	113,1	115,8	115,4	+1,1
October	100,3	99,8	106,4	115,5	115,2		
November	101,0	99,1	108,1	113,9	116,5		
December	100,5	98,3	108,0	115,6	117,8		



**Table 5 - Total volume of electricity imported: 2000 to 2005**

Gigawatt-hours						
Month	2000	2001	2002	2003	2004	2005
January	683	569	670	705	828	729
February	529	488	643	637	811	714
March	6	665	783	706	863	533
April	24	774	733	547	641	598
May	20	629	658	569	547	849
June	2	797	704	518	560	813
July	599	479	702	792	607	856
August	476	282	721	424	618	883
September	495	507	637	266	590	1/ 686
October	506	713	454	272	536	
November	601	636	477	583	746	
December	778	708	691	720	679	
Year	4 719	7 247	7 873	6 739	8 026	

1/ Preliminary

**Table 6 - Total volume of electricity exported: 2000 to 2005**

Gigawatt-hours						
Month	2000	2001	2002	2003	2004	2005
January	197	616	558	578	1 037	1 030
February	169	470	478	508	977	901
March	196	498	529	607	1 027	968
April	155	463	525	619	951	991
May	213	508	578	805	944	1 083
June	193	496	601	798	1 057	1 096
July	363	543	614	944	1 140	1 102
August	389	569	605	1 030	1 049	1 144
September	458	581	628	1 051	1 048	1/ 1 134
October	540	630	626	1 116	1 112	
November	525	598	600	1 025	1 082	
December	609	547	608	1 055	1 029	
Year	4 007	6 519	6 950	10 136	12 453	

1/ Preliminary.

**Table 7a - Electricity produced and consumed in power stations, purchased and sold outside South Africa and available for distribution in South Africa**

Gigawatt-hours

Description	September 2004	August 2005	September 2005 1/	% change between September 2004 and September 2005	Difference between September 2004 and September 2005
<b>Total - All producers</b>					
Electricity produced	20 310	21 024	20 220	-0,4	-90
Purchased outside South Africa (import)	590	883	686	+16,3	+96
Consumed in power stations and auxiliary systems	1 490	1 572	1 401	-6,0	-89
Sold outside South Africa (export)	1 048	1 144	1 134	+8,2	+86
Electricity available for distribution in South Africa	18 362	19 191	18 371	+0,0	+9
<b>ESKOM</b>					
Electricity produced	19 341	19 890	19 271	-0,4	-70
Purchased outside South Africa (import)	590	883	686	+16,3	+96
Consumed in power stations and auxiliary systems	1 415	1 477	1 319	-6,8	-96
Sold outside South Africa (export)	1 048	1 144	1 134	+8,2	+86
Electricity available for distribution in South Africa	17 468	18 152	17 505	+0,2	+37

1/ Preliminary.

**Table 7b - Electricity produced and consumed in power stations, purchased and sold outside South Africa and available for distribution in South Africa (concluded)**

Description	January to September 2004	January to September 2005	% change between January to Sept. 2004 and January to Sept. 2005	Difference between January to Sept. 2004 and January to Sept. 2005
<b>Total - All producers</b>				
Electricity produced	184 066	183 649	-0,2	-417
Purchased outside South Africa (import)	6 065	6 661	+9,8	+596
Consumed in power stations and auxiliary systems	13 745	13 496	-1,8	-249
Sold outside South Africa (export)	9 230	9 449	+2,4	+219
Electricity available for distribution in South Africa	167 157	167 363	+0,1	+206
<b>ESKOM</b>				
Electricity produced	175 605	174 508	-0,6	-1 097
Purchased outside South Africa (import)	6 065	6 661	+9,8	+596
Consumed in power stations and auxiliary systems	12 996	12 663	-2,6	-333
Sold outside South Africa (export)	9 230	9 449	+2,4	+219
Electricity available for distribution in South Africa	159 446	159 059	-0,2	-387

**Table 8a - Electricity distributed by Eskom by province for 2004 and 2005 1/**

Gigawatt-hours					
Month	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal
2004	21 491	7 510	4 502	9 625	42 264
2004					
January	1 782	516	384	839	3 416
February	1 741	599	369	772	3 373
March	1 826	643	385	791	3 496
April	1 693	567	317	740	3 293
May	1 792	656	354	822	3 570
June	1 734	648	353	837	3 971
July	1 905	693	383	892	3 642
August	1 904	676	371	841	3 559
September	1 771	647	378	772	3 455
October	1 786	646	400	801	3 583
November	1 783	646	411	769	3 450
December	1 774	573	397	749	3 456
2005					
January	1 795	616	424	765	3 599
February	1 516	585	380	727	3 406
March	1 650	633	437	747	3 642
April	1 583	627	335	742	3 534
May	1 871	667	358	779	3 558
June	1 860	672	359	761	3 536
July	1 895	690	380	793	3 713
August	1 991	659	375	785	3 666
September 2/	1 837	672	385	735	3 531
Year to date	15 998	5 821	3 433	6 834	32 185

**Table 8b - Electricity distributed by Eskom by province for 2004 and 2005 (concluded) 1/**

Gigawatt-hours					
Month	North West	Gauteng	Mpumalanga	Limpopo	Total South Africa
2004	28 187	54 970	25 925	9 791	204 267
2004					
January	2 389	4 335	2 087	788	16 537
February	2 230	4 144	2 097	727	16 052
March	2 443	4 454	2 161	798	16 997
April	2 218	4 296	2 065	761	15 950
May	2 418	4 749	2 308	839	17 508
June	2 303	4 940	2 104	816	17 706
July	2 504	5 488	2 206	859	18 572
August	2 430	4 898	2 178	878	17 735
September	2 398	4 575	2 029	833	16 857
October	2 411	4 576	2 213	817	17 233
November	2 326	4 375	2 222	828	16 811
December	2 117	4 140	2 255	847	16 309
2005					
January	2 172	4 402	2 206	858	16 837
February	2 057	4 052	2 285	815	15 823
March	2 171	4 494	2 378	854	17 006
April	2 089	4 489	2 676	676	16 751
May	2 173	4 730	2 581	909	17 626
June	2 068	4 760	2 449	899	17 364
July	2 042	5 057	2 498	925	17 993
August	1 936	4 866	2 319	932	17 530
September 2/	1 996	4 493	2 373	860	16 882
Year to date	18 704	41 343	21 765	7 728	153 812

1/ Wholesale energy as delivered by Eskom to the various provinces.

2/ Preliminary.

## Explanatory notes

- |                                      |    |   |
|--------------------------------------|----|---|
| <b>Introduction</b>                  | 1  | Statistics South Africa (Stats SA) conducts a monthly sample survey of the electricity industry covering electricity undertakings and establishments (branches). This statistical release contains information regarding the number of electricity units generated and available for distribution in South Africa, the number of units purchased and sold outside South Africa and the number of units distributed by Eskom by province on a monthly basis. Both actual and seasonally adjusted figures are published.  |
|                                      | 2  | This statistical release reflects indices of the physical volume of electricity production on the basis of 2000=100. In accordance with international practice, the indices have to be rebased every five years to a new base year.   |
|                                      | 3  | In order to improve timeliness of the publication, some information for the current month may have been estimated due to late submission by respondents. These estimates will be revised in the next statistical release(s) as soon as actual information is available.   |
| <b>Scope of the survey</b>           | 4  | This survey covers electricity undertakings and establishments conducting activities concerned with the generation or transmission and distribution of electricity, including electrical power installations, which, as subsidiary divisions of undertakings, produce electricity for regular use by these undertakings.  |
| <b>Classification</b>                | 5  | The 1993 edition of the <i>Standard Industrial Classification of all Economic Activities (SIC)</i> , Fifth Edition, Report No. 09-90-02, was used to classify the statistical units in the survey. The SIC is based on the 1990 <i>International Standard Industrial Classification of all Economic Activities (ISIC)</i> with suitable adaptations for local conditions. Each statistical unit is classified to an industry, which reflects the predominant activity of the electricity undertaking or establishment.  |
| <b>Statistical unit</b>              | 6  | The basic statistical unit for the collection of information is the electricity undertaking or establishment. The electricity undertaking or establishment is the smallest economic unit that functions as a separate entity. Each statistical unit is classified to an industry (see paragraph 5).   |
| <b>Survey methodology and design</b> | 7  | All statistical units are stratified by type of economic activity according to the <i>Standard Industrial Classification of all Economic Activities (SIC)</i> and measure of size, where measure of size is the volume of electricity generated by the electricity undertaking or establishment. All large undertakings or establishments (size category one cases) are completely enumerated. A sample is drawn from medium and small size undertakings and establishments by systematically selecting undertakings or establishments within each size category. An electricity undertaking or establishment with a total generating capacity of less than 500 kilowatt is excluded from the sample.   |
|                                      | 8  | The survey is conducted by mail each month collecting information from a sample of 22 electricity undertakings or establishments.   |
| <b>Monthly production indices</b>    | 9  | The calculation of the monthly production indices is based on the number of electricity units produced.   |
| <b>Benchmarking</b>                  | 10 | The index of physical volume of electricity production should provide an accurate reflection of the trend of activities of the relevant industry. The level of activities as measured by the monthly electricity generated and available for distribution survey is based on information received from a sample of electricity undertakings and establishments, which are weighted according to the original sample, designed in order to represent the population of electricity undertakings and establishments. It is necessary to adjust the level of activities as measured by the monthly sample survey to the level of activities as measured periodically by the Census of electricity, gas and steam. This procedure, whereby the latest results of an economic census are used to compile more accurate level estimates for a certain year, is known as benchmarking. |

- 11** The results of the 1995 Census of electricity, gas and steam served as benchmarks to verify or adjust the level of the monthly physical volume of electricity production indices collected through the monthly sample survey. The level adjustments were done on the volume indices for July of the relevant census year (the 1995 census year covered the period 1 January 1995 to 31 December 1995 and therefore, the benchmarking was done using the index of July 1995 as reference point).
- Seasonal adjustment** **12** Seasonally adjusted estimates of all items are generated each month, using the X-11 Seasonal Adjustment Program developed by US Bureau of the Census Economic Research and Analyses Division, 1968. Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences on the series can be more clearly recognised. Seasonal adjustment does not aim to remove irregular or non-seasonal influences, which may be present in any particular month. Influences that are volatile or unsystematic can still make it difficult to interpret the movement of the series even after adjustment for seasonal variations. This means the month-to-month movements of seasonally adjusted estimates may not be reliable indicators of trend behavior.
- Trend cycle** **13** The trend is the long-term pattern or movement of a time series. The X-11 Seasonal Adjustment Program is used for smoothing seasonally adjusted estimates.
- Related publications** **14** Users may also wish to refer to the following publications which are available from Stats SA -
- *Bulletin of Statistics.*
  - *SA Statistics.*
- Unpublished statistics** **15** In some cases Stats SA can also make available statistics, which are not published. The statistics can be made available as computer printouts, on diskette or CD. Generally a charge is made for providing unpublished statistics.
- Rounding-off figures** **16** The figures in the tables have, where necessary, been rounded off to the nearest digit shown. There may, therefore, be slight discrepancies between the sums of the constituent items and the totals shown.
- Pre-release policy** **17** Stats SA pre-release policy may be inspected at its website, [www.statssa.gov.za](http://www.statssa.gov.za).
- Symbols and abbreviations** **18**
- |          |   |
|----------|---|
| GDP      | Gross Domestic Product  |
| ISIC     | International Standard Industrial Classification              |
| SIC      | Standard Industrial Classification of all Economic Activities |
| Stats SA | Statistics South Africa                                       |
| *        | Revised figures   |

## Glossary

<b>Electricity undertaking</b>	An electricity undertaking is an undertaking concerned with the generation or transmission and distribution of electricity, including electrical power installations, which as subsidiary divisions of undertakings produce electricity for regular use by these undertakings.
<b>Establishment (branch)</b>	An establishment (branch) is defined as the smallest economic unit, which operates as a separate entity for which comprehensive financial records are kept.
<b>Index of physical volume of electricity production</b>	The index of physical volume of electricity production or a production index is a statistical measure of the change in the volume of production. The production index of electricity is the ratio between the volume of production of electricity in a given period and the volume of production of electricity in the base period. The base period is 2000. The production in the base period is set at 100.
<b>Industry</b>	An industry consists of a group of undertakings or establishments engaged in the same or similar kinds of economic activity. Industries are defined in the 1993 System of National Accounts (1993 SNA) in the same way as in the <i>Standard Industrial Classification of all Economic Activities (SIC)</i> , Fifth Edition, Report No. 09-90-02.
<b>Unit of electricity</b>	One unit of electricity is equal to 1 kilowatt-hour (kWh). One gigawatt-hour (gWh) of electricity is equal to one million kilowatt-hours.

## General information

Stats SA publishes approximately 300 different statistical releases each year. It is not economically viable to produce them in more than one of South Africa's eleven official languages. Since the releases are used extensively, not only locally but also by international economic and social-scientific communities, Stats SA releases are published in English only.

Stats SA has copyright on this publication. Users may apply the information as they wish, provided that they acknowledge Stats SA as the source of the basic data wherever they process, apply, utilise, publish or distribute the data: and also that they specify that the relevant application and analysis (where applicable) result from their own processing of the data.

## Advanced release calendar

An advanced release calendar is disseminated on [www.statssa.gov.za](http://www.statssa.gov.za)

## Stats SA products

A complete set of Stats SA publications is available at the Stats SA Library and the following libraries:

National Library of South Africa, Pretoria Division  
National Library of South Africa, Cape Town Division  
Natal Society Library, Pietermaritzburg  
Library of Parliament, Cape Town  
Bloemfontein Public Library  
Johannesburg Public Library  
Eastern Cape Library Services, King William's Town  
Central Regional Library, Polokwane  
Central Reference Library, Nelspruit  
Central Reference Collection, Kimberley  
Central Reference Library, Mmabatho

Stats SA also provides a subscription service.

## Electronic services

A large range of data is available via on-line services, diskette, CD and computer printouts. For more details about our electronic data services, contact (012) 310 8600/8390/8351/8496/4892/8095.

You can visit us on the Internet at: [www.statssa.gov.za](http://www.statssa.gov.za)

## Enquiries

Telephone number: (012) 310 8600/ 8390/ 8351/ 8496/ 4892/ 8095 (user information services)  
(012) 310 8249 (technical enquiries)  
(012) 310 8161 (orders)  
(012) 310 4883/4885/8018 (library)

Fax number: (012) 310 8310 (technical enquiries)

email: [gerdab@statssa.gov.za](mailto:gerdab@statssa.gov.za) (technical enquiries)  
[cleopatram@statssa.gov.za](mailto:cleopatram@statssa.gov.za) (technical enquiries)  
[info@statssa.gov.za](mailto:info@statssa.gov.za) (user information services)  
[distribution@statssa.gov.za](mailto:distribution@statssa.gov.za) (orders)

Postal address: Private Bag X44, Pretoria, 0001

*Produced by Stats SA*