



**Southern African Development Community (SADC)
Clearing and Settlement Project**

Analysis of the use of the RTGS Systems by SADC countries

Prepared by the SADC Payment System Project Team

February 2009

1. EXECUTIVE SUMMARY

The survey was a result of a concern raised at the Committee of Central Bank Governors (CCBG) meeting in September 2007 that the Real-Time Gross Settlement (RTGS) systems in the SADC countries were possibly not being used efficiently.

The SADC Payment System project team (the project team) set out to establish if this were true, through a survey with the member countries at the beginning of 2008.

The survey focused on obtaining information related to the RTGS participants, the clearing process, statistics on values and volumes cleared and settled on the system, and the availability of the systems to users. It also sourced information separately for retail, securities, and real-time processing. The information was sourced in local currency and converted to US Dollar amounts.

The analysis highlights issues the different countries have to contend with, and is being used to identify whether countries need assistance, and isolates areas of their operations that they do.

2. GENERAL NOTES

- The analysis is done on 2007 data
- Values are displayed in millions in US Dollar amounts.
- Volumes are reflected as an exact amount.

3. THE FOLLOWING GRAPHS ARE DEPICTED

- Retail settlement as a percentage of total value settled
- Retail value settled as a percentage of retail value cleared
- Transactions rejected as a percentage of total transactions
- Rejected messages because of insufficient funds as a percentage of total rejected messages
- Wrongly formatted transactions as a percentage of total transactions rejected
- The average value settled per day in USD
- The total downtime for the year in minutes
- The number of times was the system not available to participants during the year
- The average downtime per incident in minutes
- The average downtime per month in minutes

Southern African Development Community Payment System Project

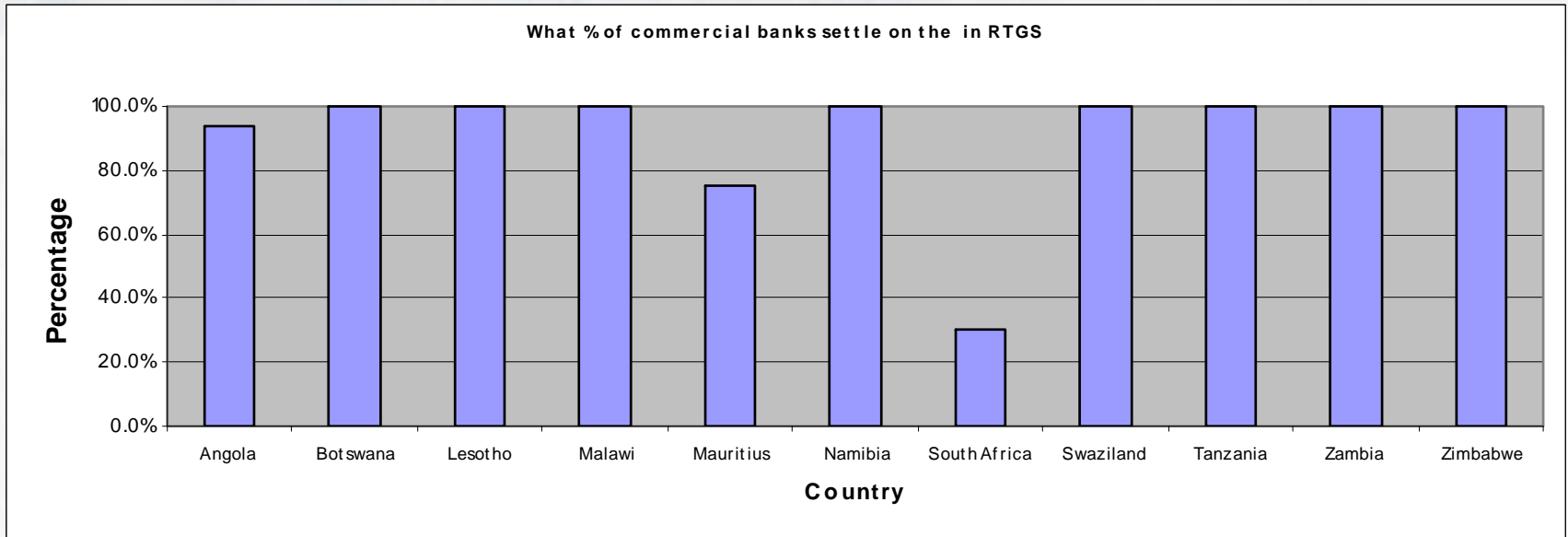
Analysis of the use of
Real-Time Gross Settlement (RTGS) systems
by SADC member countries



Notes

- All values are in millions, in US Dollars
- All volumes are reflected as an exact amount

Percentage of commercial banks that settle on the RTGS



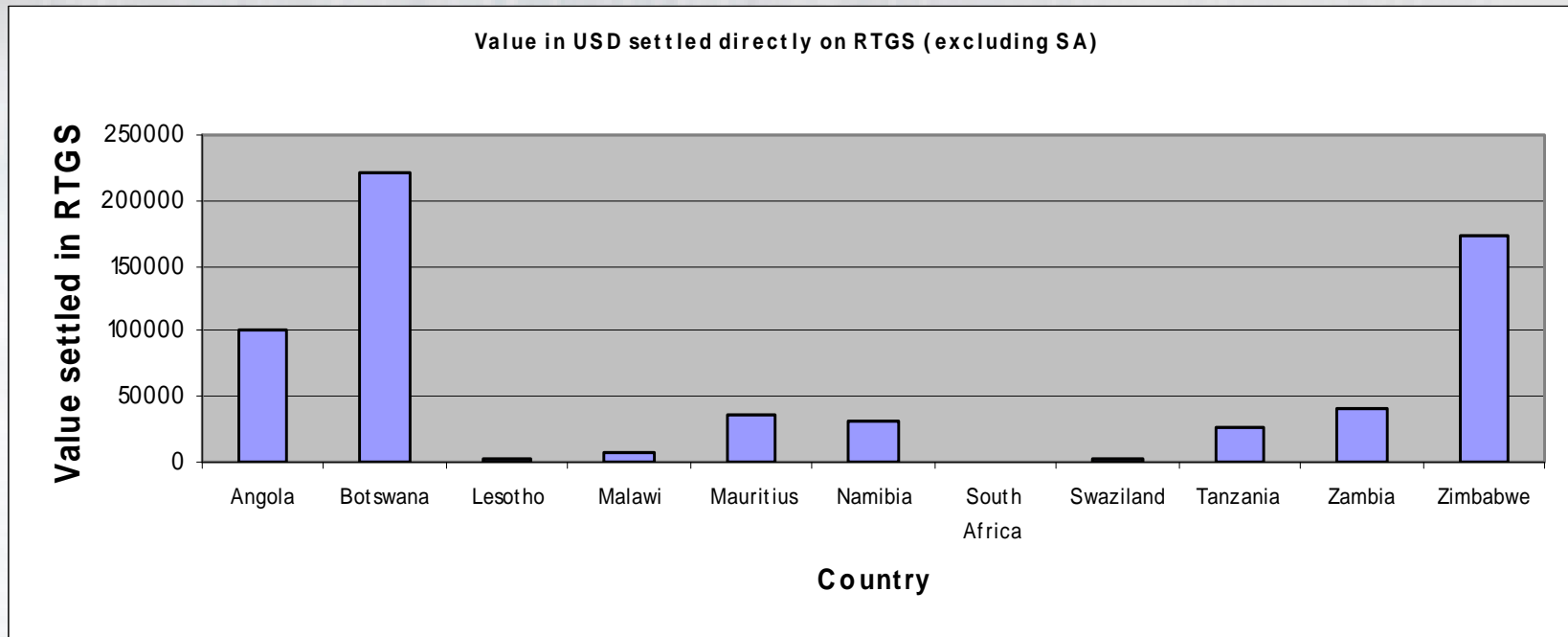
Angola	Botswana	Lesotho	Malawi	Mauritius	Namibia	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe
94.0%	100.0%	100.0%	100.0%	75.0%	100.0%	30.3%	100.0%	100.0%	100.0%	100.0%

Notes

1. Banks that settle on the RTGS system have accounts in the settlement system at central bank. Funds are transferred across these accounts.



Value in USD settled directly on RTGS (Excluding SA)



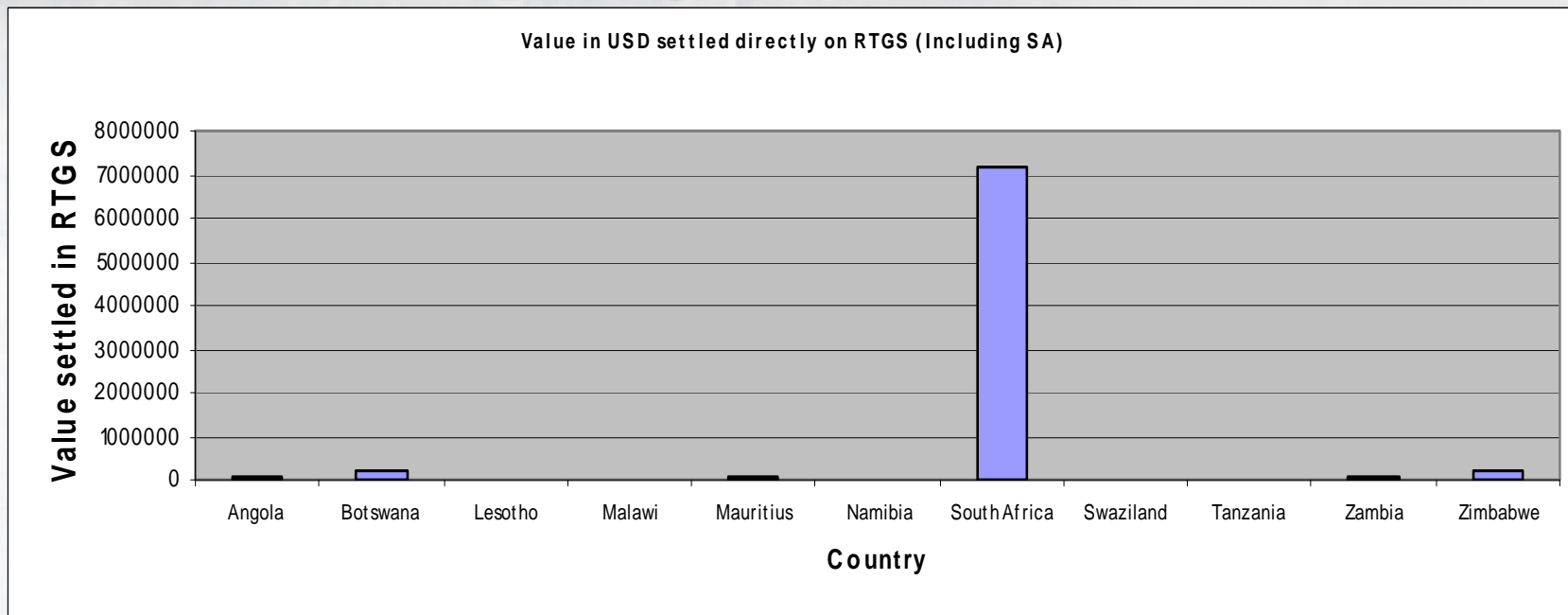
Angola	Botswana	Lesotho	Malawi	Mauritius	Namibia	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe
99934	221051	1890	7995	36127	30148	0	2093	27161	41771	173641

Notes

1. These figures exclude batches.



Value in USD settled directly on RTGS (Including SA)



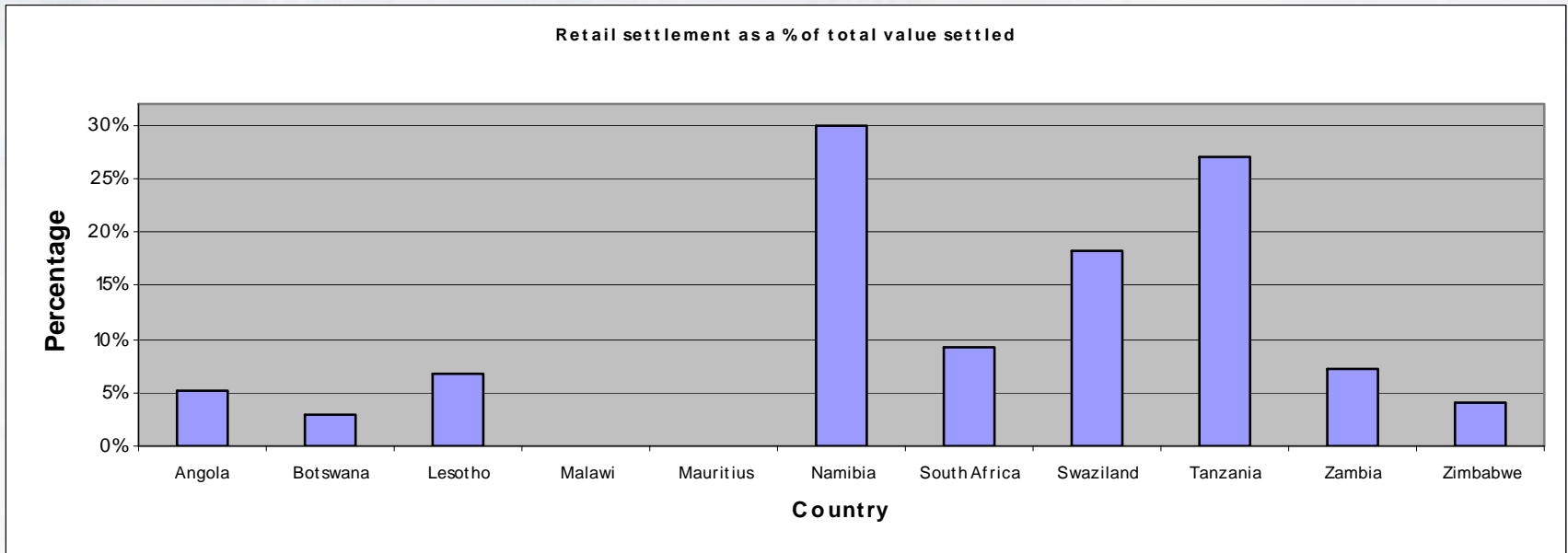
Angola	Botswana	Lesotho	Malawi	Mauritius	Namibia	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe
99934	221051	1890	7995	36127	30148	7202443	2093	27161	41771	173641

Notes

1. Same as previous slide, with South Africa now included.



Retail settlement as a percentage of total value settled



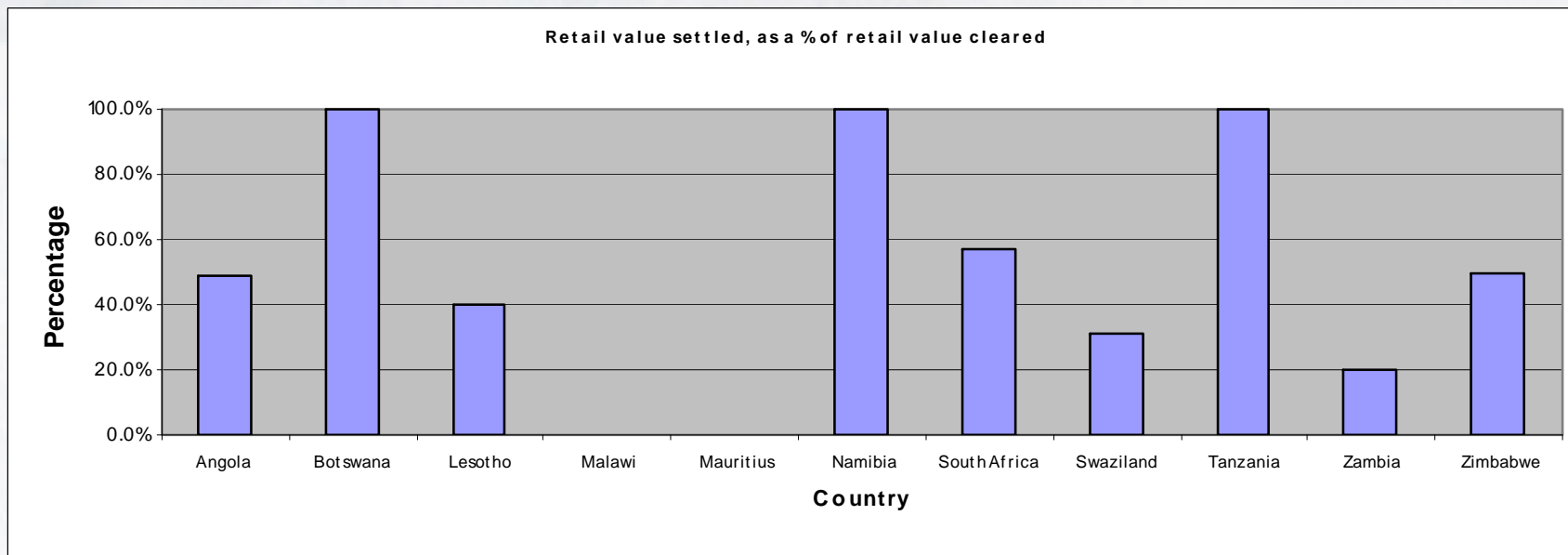
Angola	Botswana	Lesotho	Malawi	Mauritius	Namibia	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe
5.3%	2.9%	6.8%	0.1%	0.0%	30.0%	9.3%	18.3%	27.1%	7.1%	4.1%

Notes

1. Retail payments are settled in batches.
2. Mauritius settle only real time.



Retail value settled, as a percentage of retail value cleared



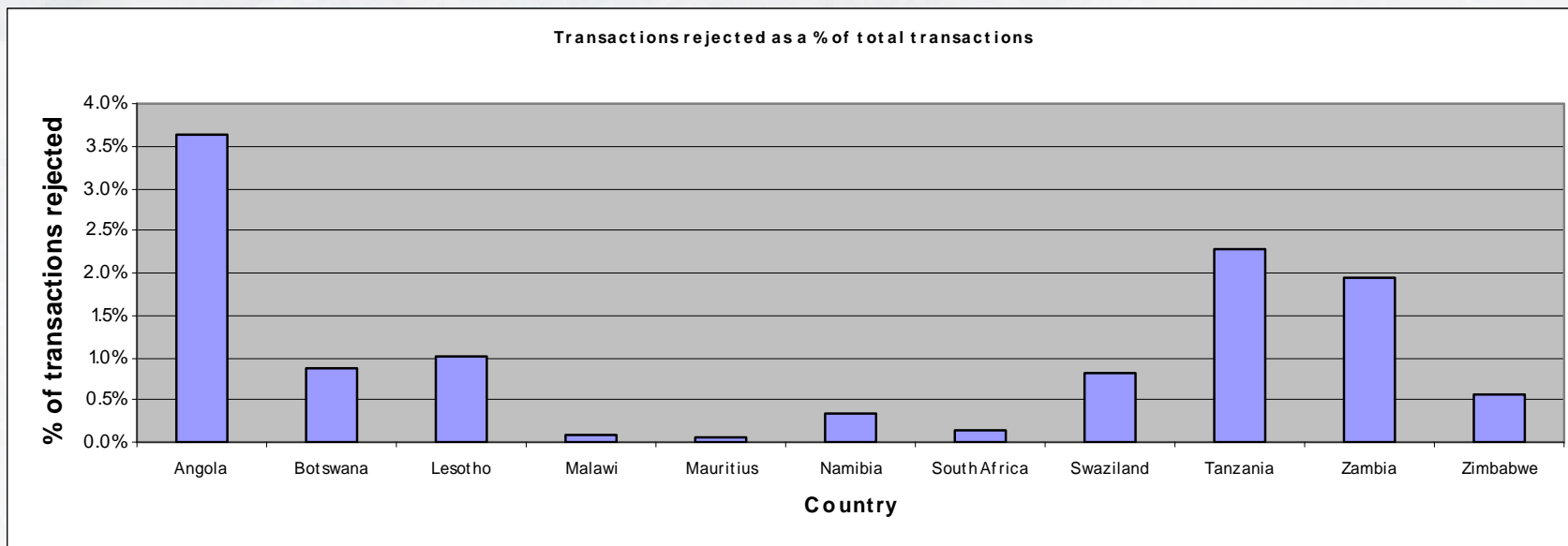
Angola	Botswana	Lesotho	Malawi	Mauritius	Namibia	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe
49.1%	100.0%	39.8%	0.3%	0.0%	100.0%	57.3%	31.2%	100.0%	20.3%	50.0%

Notes

1. The purpose of this slide is to evaluate the effect of netting on the settlement process.
2. This has an effect on liquidity management.
3. Mauritius settle only real time.



Transactions rejected as a percentage of total transactions



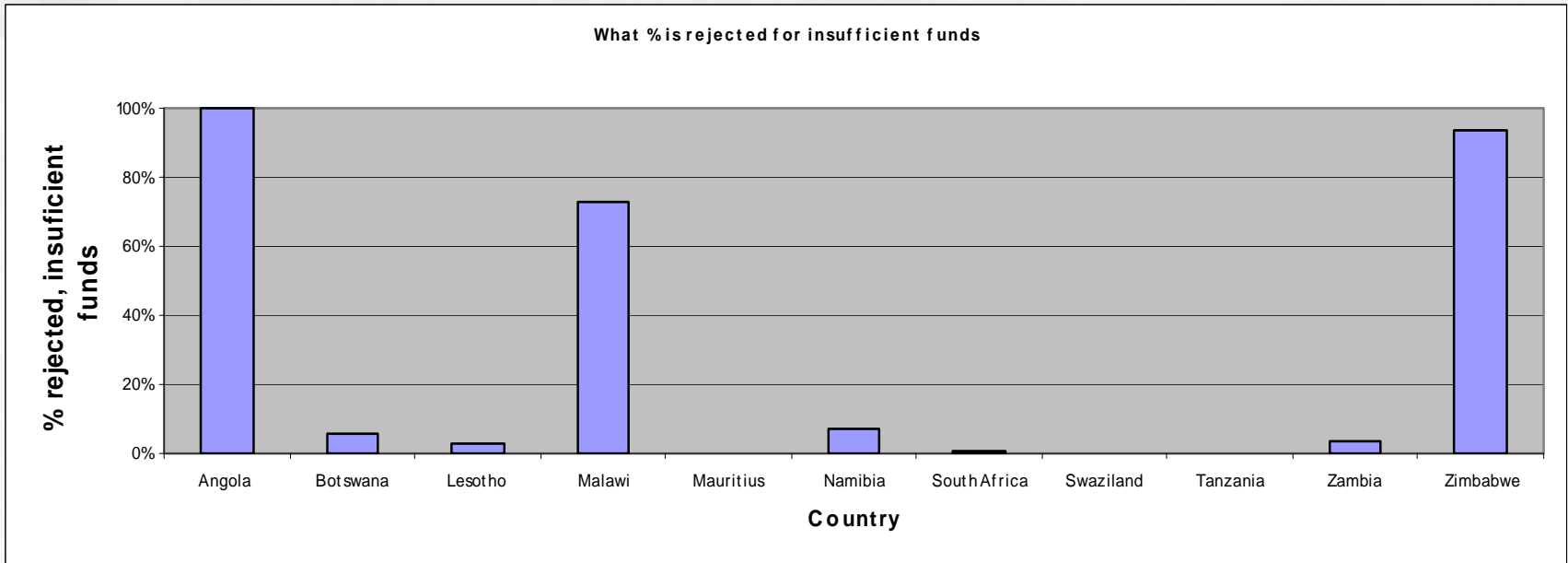
Angola	Botswana	Lesotho	Malawi	Mauritius	Namibia	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe
3.6%	0.9%	1.0%	0.1%	0.0%	0.3%	0.1%	0.8%	2.3%	1.9%	0.5%

Notes

1. These are real-time submissions of settlement transactions.
2. The following two slides indicate reasons for the rejection.
3. The percentage on the slides add to 100% of each country. If figures do not add up to 100% it could be for reasons other than formatting and insufficient funds.



What percentage is rejected for insufficient funds



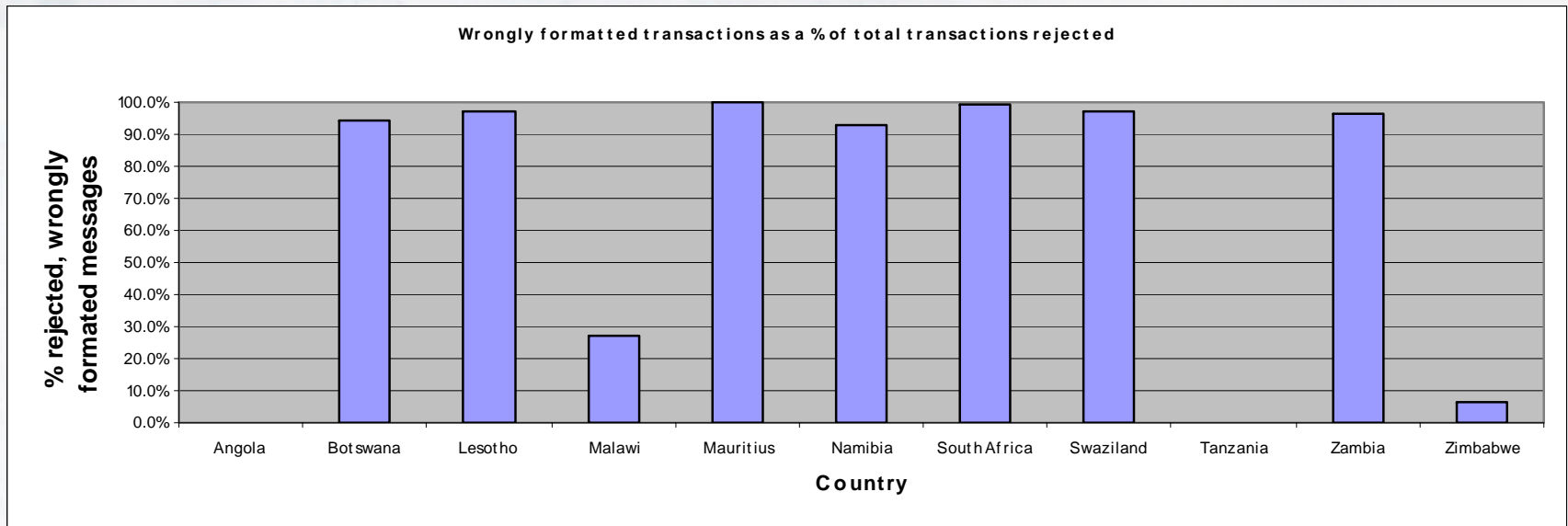
Angola	Botswana	Lesotho	Malawi	Mauritius	Namibia	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe
8.1%	5.4%	2.7%	72.6%	0.0%	7.0%	0.4%	2.7%	26.6%	3.7%	93.5%

Notes

1. This data should be interpreted in conjunction with the previous slide “transactions rejected as a percentage of total transactions”.
2. This could indicate issues in liquidity management..



Wrongly formatted transactions as a percentage of total transactions rejected



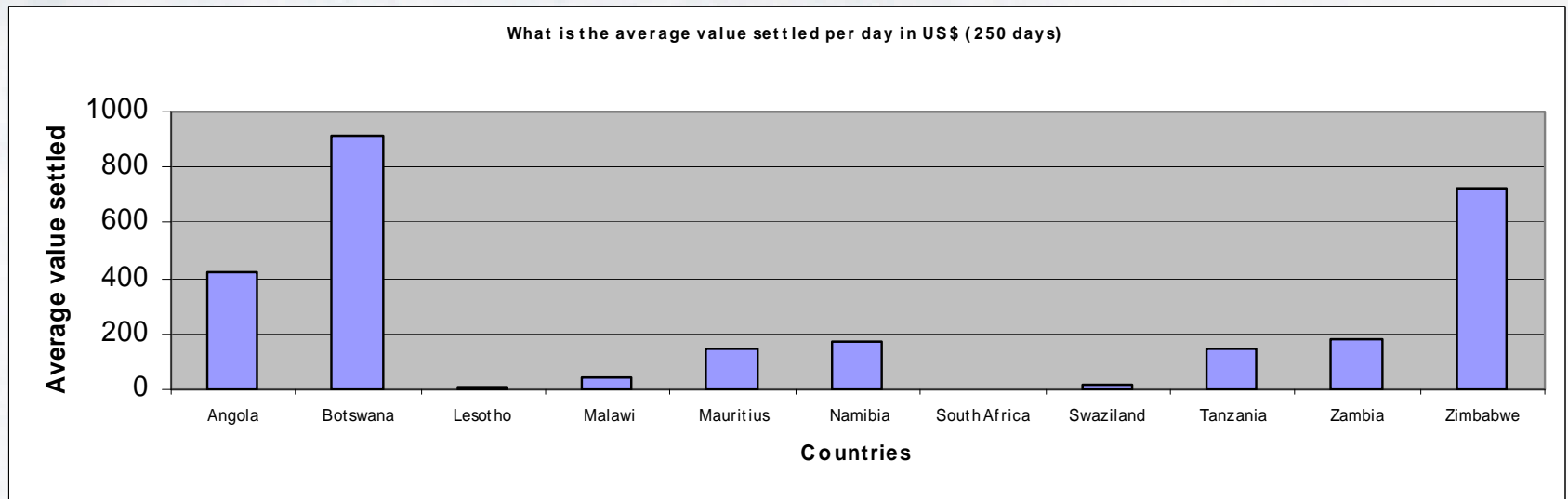
Angola	Botswana	Lesotho	Malawi	Mauritius	Namibia	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe
91.9%	94.6%	97.3%	27.4%	100.0%	93.0%	99.6%	97.3%	73.4%	96.3%	6.5%

Notes

1. This data should be interpreted in conjunction with the previous slide “transactions rejected as a percentage of total transactions”.
2. This could include a lack of interoperability between systems.
3. It could also be Straight Through Processing issues or a requirement in training for personnel.



What is the average value settled per day in US\$ (250 days) (excluding SA)



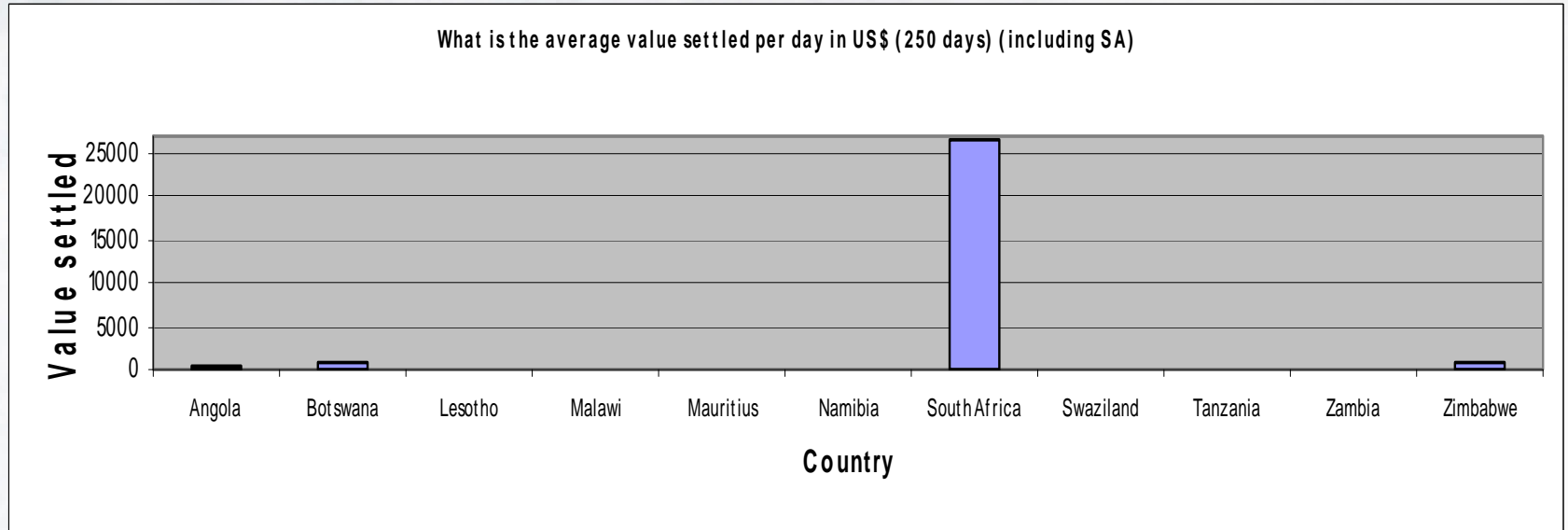
Angola	Botswana	Lesotho	Malawi	Mauritius	Namibia	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe
422	910	8	43	145	172	0	20	149	180	724

Notes

1. The total value settled for the year divided by 250 days.



What is the average value settled per day in US\$ (250 days) (including SA)



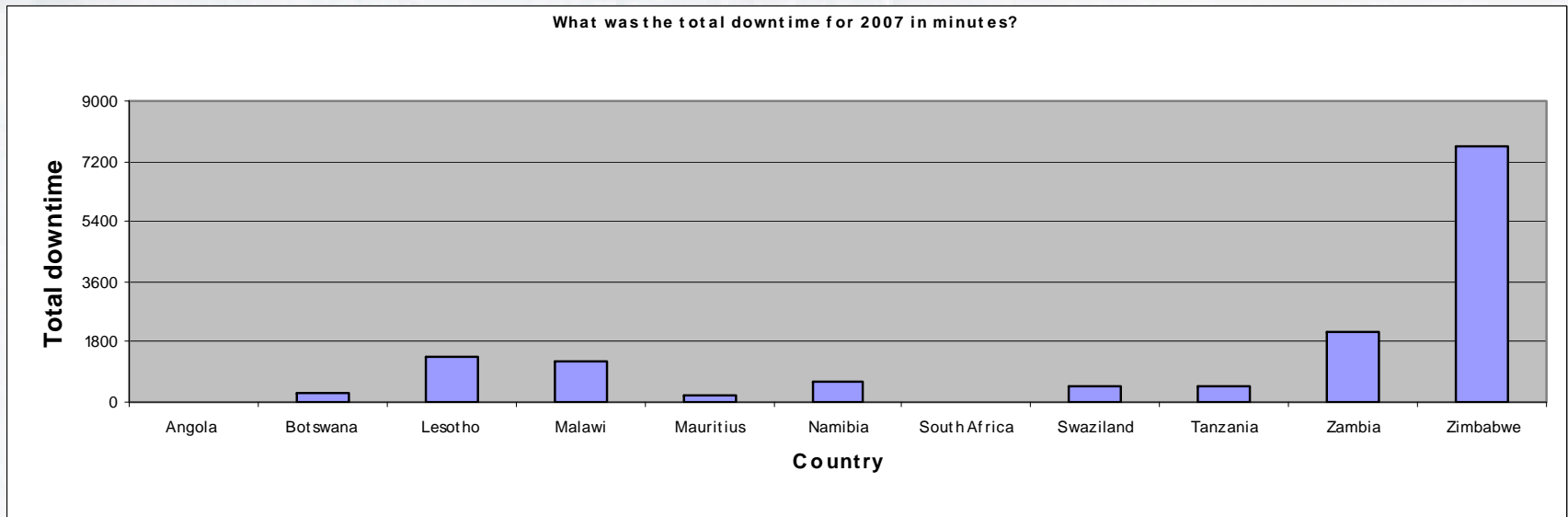
Angola	Botswana	Lesotho	Malawi	Mauritius	Namibia	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe
422	910	8	43	145	172	26471	20	149	180	724

Notes

1. The total value settled for the year, in the case of South Africa divided by 300 days, as South Africa settles on Saturdays.



What was the total downtime for 2007 in minutes?



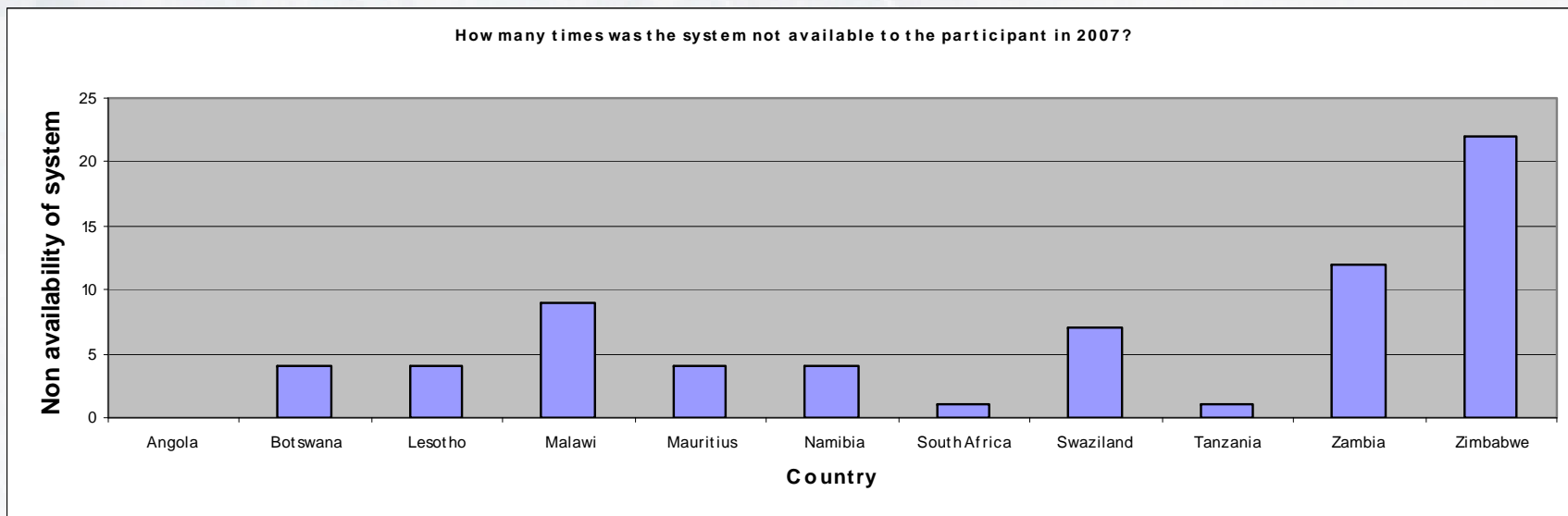
Angola	Botswana	Lesotho	Malawi	Mauritius	Namibia	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe
0	264	360	1,200	180	600	31	443	480	2,100	7,654

Notes

1. Total time the RTGS system was not available to the users.
2. The figure for Angola was not submitted.



How many times was the system not available to the participant in 2007?

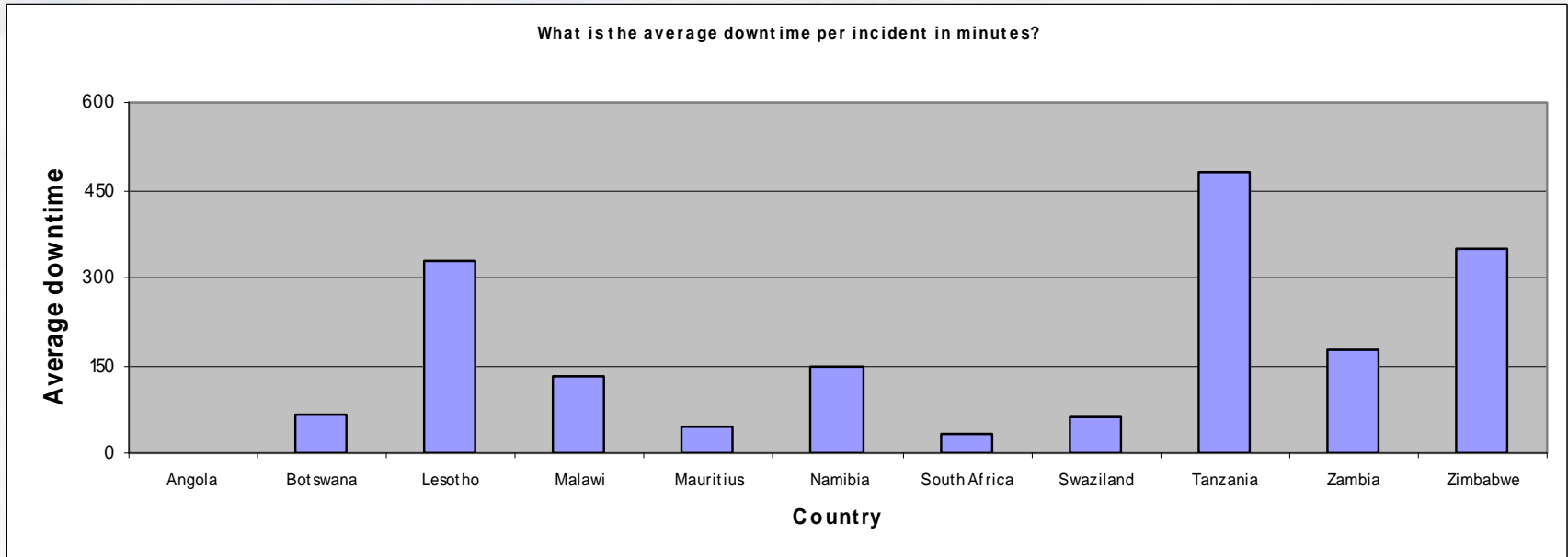


Angola	Botswana	Lesotho	Malawi	Mauritius	Namibia	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe
0	4	4	9	4	4	1	7	1	12	22

Notes

1. The figure for Angola was not provided.

What is the average downtime per incident in minutes?



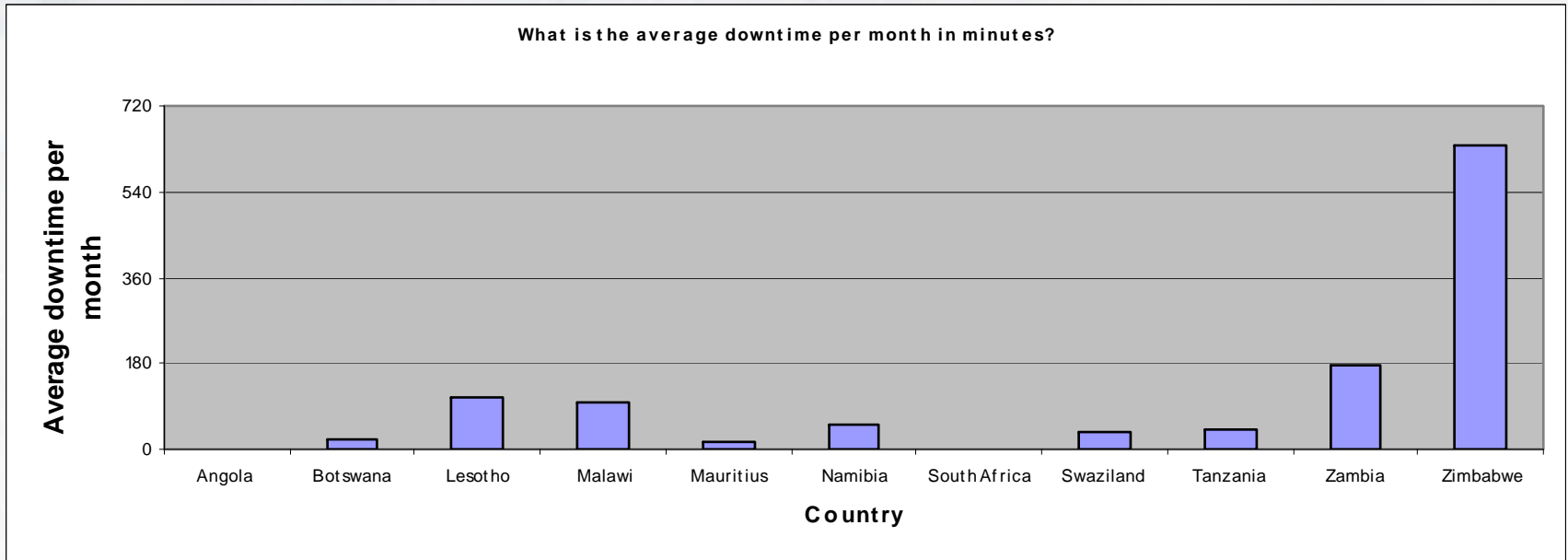
Angola	Botswana	Lesotho	Malawi	Mauritius	Namibia	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe
0	66	330	133	45	150	31	63	480	175	348

Notes

1. Total down time divided by number of incidents.
2. The figure for Angola was not provided.



What is the average downtime per month in minutes?



Angola	Botswana	Lesotho	Malawi	Mauritius	Namibia	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe
0	22	110	100	15	50	3	37	40	175	638

Notes

1. Total downtime divided by 12 months.
2. The figure for Angola was not provided.