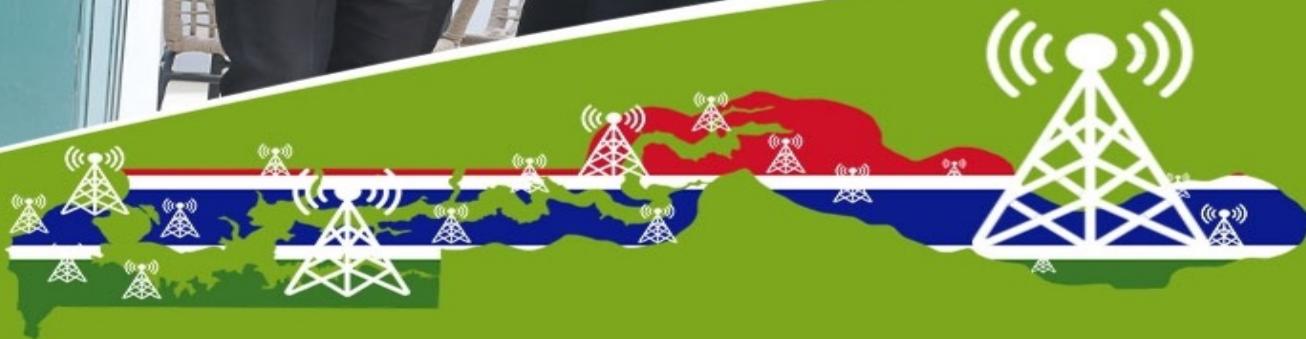




Gamcel



NEW DATA SITES, STRONGER INTERNET

Gamcel Data, faster and better!

20% XTRA DATA

Dial *302*DataAmount#

Company profile

- **Gamcel is the pioneer operator in the Gambia mobile market .**
- **Gamcel was established in the year 2000 as a wholly owned subsidiary of Gamtel.**
- **As the national operator, the company uses the trade mark phrase ‘Yaay borom’ which means our own.**

Technologies at Gamcel

- **2G GSM 900 /1800**
- **EDGE**
- **UMTS**

Gamcel products and services

- **SUBSCRIPTION SERVICE:**
- ***DADIMA PLAN***
- ***SUPER CLOUD 9***
- ***BUSINESS HOUR: 8AM TO 8PM***
- ***LEISURE HOUR: 7:30PM TO 7AM***
- ***WEEKLY***

Gamcel products and services

- **PREPAID_CUSTOMERS:** These customers use the service to make calls and browse the internet
- These customers can recharge by purchasing credit / Nopal (Electronic Voucher) to load their account. In the same vein, the credit can be converted to Data credit to browse the internet

Gamcel products and services

POSTPAID CUSTOMERS –

- internet and voice calls are billed at the end of the month. It is mostly offered to our corporate, institutions, NGOs and individual clients.
- **ELECTRONIC AIRTIME:** Locally known as Nopal which in our local dialect translates as ‘convenience’ and the credit is the airtime used to make calls and purchase data. This service is widely available throughout the country with dealers and agents at the helm of its distribution channels

Gamcel products and services

- **DATA BUNDLE-** Get the cheapest bundle at the most reasonable price.
- Procedure: *302*byes amount#
- **CUG-**
- This service is available for friends and family, institutions, corporate entities and other organizations:
- **Procedure:**
- Connect 5 numbers minimum
- Enjoy unlimited on net calls for duration of one month.
- Minimum charge on each number

Gamcel products and services

- **COLOCATION:**
- Gamcel also offer collocation services to telecoms and ISPs to collocate some of their equipment and other network materials on our premises which attract cost.

Gamcel products and services

- **CALL CENTRE:**

- The call center provides 12 hrs. services to our customers as follows:
 - Answer calls from our customers
 - Address customer's complaints
 - Send credit to customers for over scratching
 - Provide statistics to the relevant stakeholders on various issues raised by customers



QoS

According to the International Telecommunications Union standards body (ITU), **QoS** is the “totality of characteristics of a telecommunications service that bear on its ability to satisfy stated and implied needs of the user of the service.”

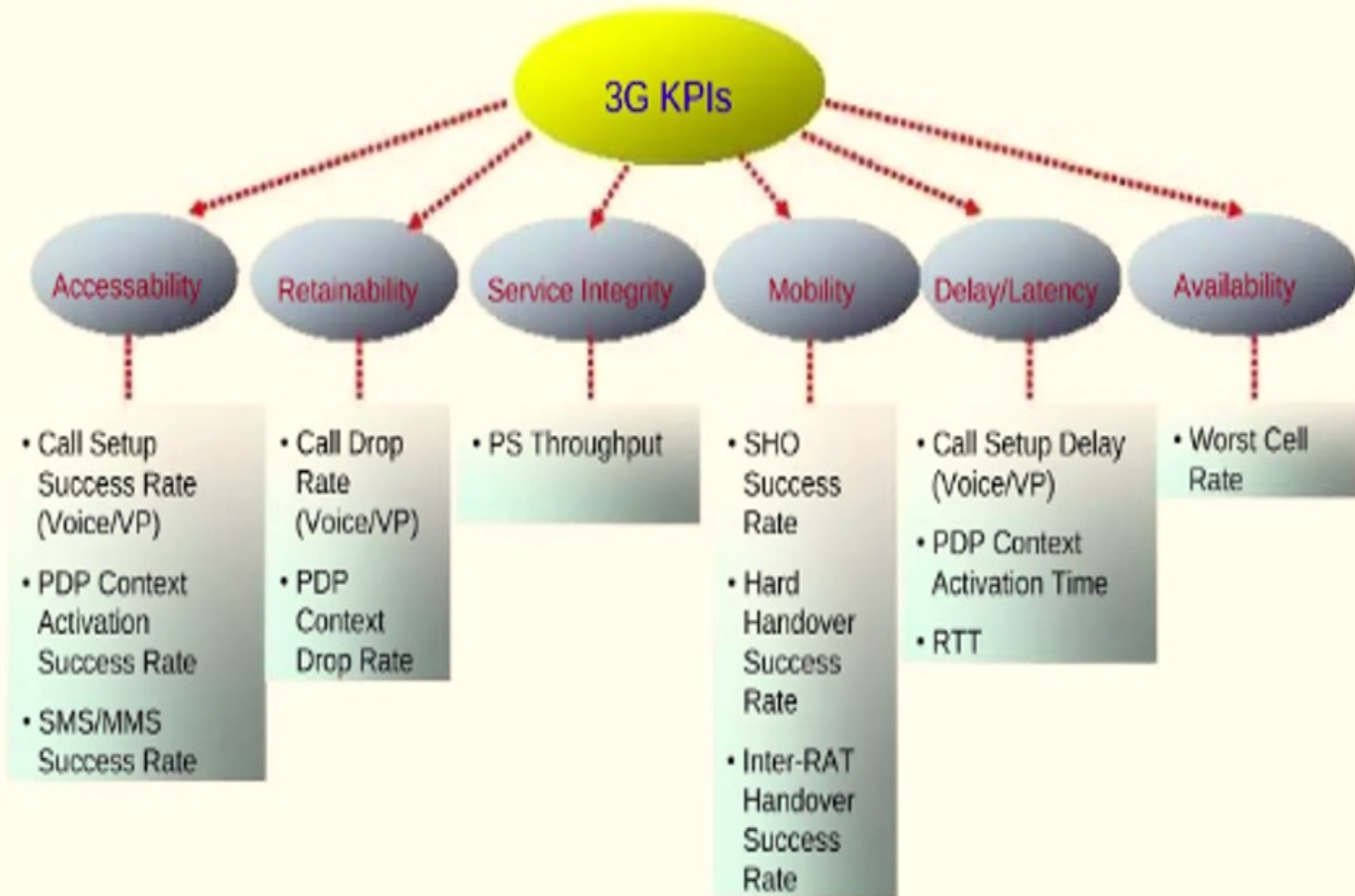
Tool use to measure QOS in Gamcel.

- Imaster MAE
- Nemo drive test tool

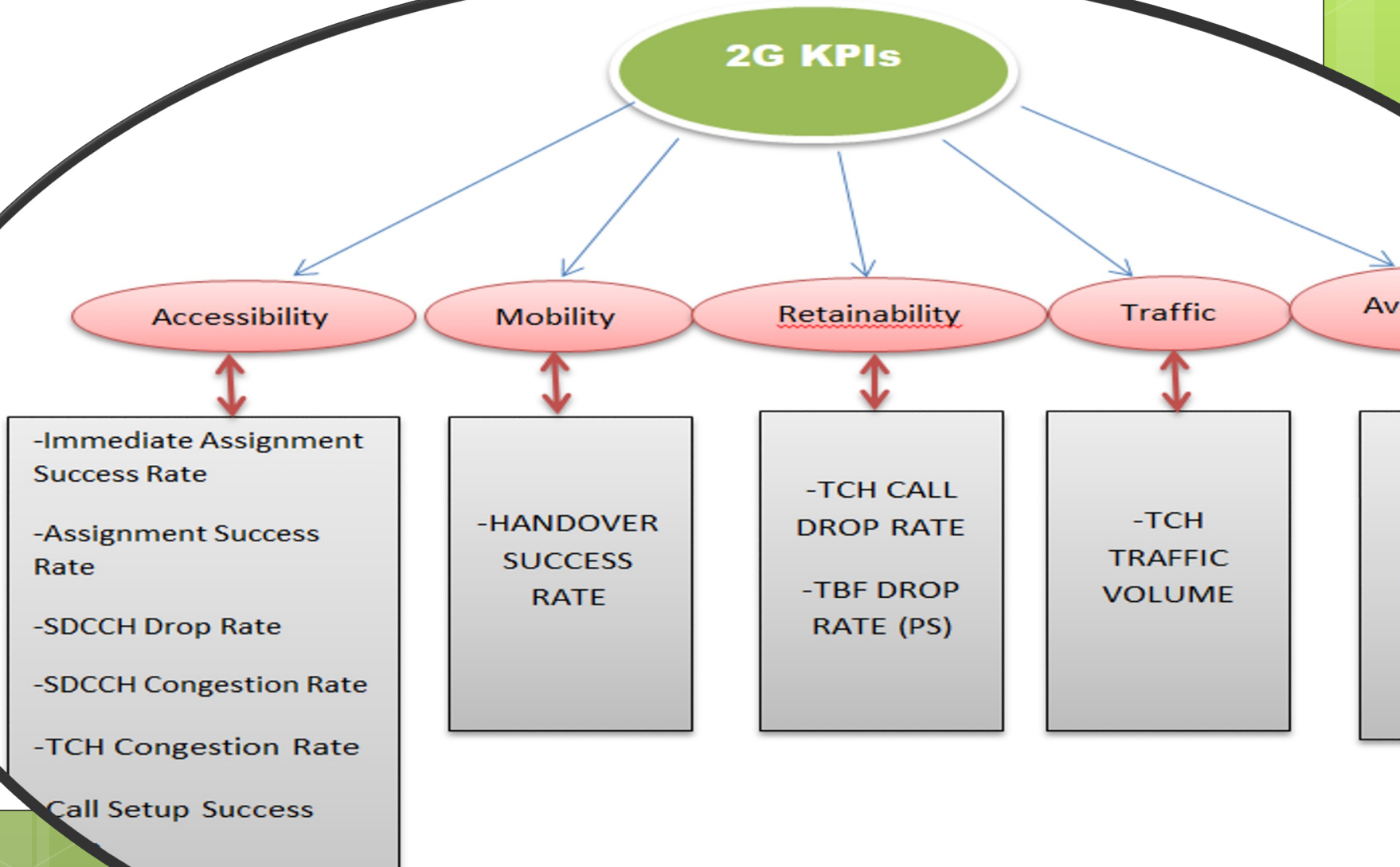
Challenges degrading QOS and QOE in Gamcel

- Power
- Frequent fiber cuts
- Limited network Coverage
- Lack of a modern billing system.

Impact on the 3G network



Impact on the 2G network



Impact on the network

- 51% of cells have TCP usage >70%
 - Average throughput is 1.5Mbps
 - The 3G low throughput root cause -:
 1. Bad coverage 31%
 2. Interference 35%
 3. High number of users 14%
- Causing Gamcel to lose 25.43% of traffic at busy hour.

Impact on the network

- Both CS and PS Call drop rate high
- Thereby affecting user experience
- Making cell availability poor.

SOLUTIONS

- Improve network coverage
 1. Deploy more 3g sites
 2. Deploy U900 network to enhance network coverage.
- Network strategy and evolution-:
 1. maximize network quality of service and utilization
 - a. U2100 capacity expansion
 - b. optimize KPIs to improve user experience
 2. New LTE network deployment in hotspot area to improve user experience.
- Resilient transmission network (e.g. microwave)
- More than one primary power source in each site.



Your National GSM Operator

THE END

Thank You



Your National GSM Operator

WIDER COVERAGE

FASTEST AND MOST RELIABLE INTERNET



Gamcel products and services

