



## What is 'Quality of Service'?

'Quality of Service' is the level of performance (or 'quality') that a service provider provides to its subscribers.

## What levels of service should the consumer expect?

The consumer is entitled to expect the following levels of service – or 'Quality of Service' provision:

- Value for money
- Ease of use of the service or product
- Professionalism, on the part of the service provider, in the provision of the service
- Flexibility in the use of the service on the part of the consumer
- That the product or service should perform according to expectations
- That the service be reliable
- That the service be secure in terms of privacy of ALL data sent and received.

## What about technical 'Quality of Service'?

There are certain technical indicators, which serve as benchmarks by which the 'Quality of Service' delivery may be judged. Such benchmarks are, of necessity, of a technical nature, but they are crucial in assessing the profile of the service delivered. They are:

<b>Latency:</b>	the time taken to send a signal across a network
<b>Jitter:</b>	what variability may be expected as regards the above
<b>Packet loss:</b>	the number of 'packets' of data lost during transmission
<b>Rate:</b>	the rate at which signals are transferred
<b>Errors:</b>	the amount of traffic units that have been corrupted
<b>Delivery failure:</b>	the amount of data which is misdirected or incorrectly duplicated

## How 'Quality of Service' is monitored

The 'Quality of Service' offered to the consumer is monitored by various means.

The table below shows the parameters employed in such evaluations, and may prove useful to the consumer in compiling their own 'Quality of Service' assessments:

### Service parameters

Parameter	Definition
<b>Accessibility</b>	The degree to which a system is capable of servicing a request
<b>Integrity</b>	The degree of quality with which the system maintains the correctness of the interaction



<b>Reliability</b>	The degree to which the delivery of the service is assured
<b>Availability</b>	The amount of time during which network resources are available to the consumer
<b>Call centre answer time</b>	The amount of time between successful call set-up and call-receipt by the consumer in relation to; operator-assisted calls, directory-assisted calls and emergency calls
<b>Bill complaint rate</b>	The number of complaints lodged against a provider (and the rate at which they occur) in relation to the submission of inaccurate accounts. Such complaints may be in regard to; incorrect call data, incorrect rates of charge, incorrect account submission, incorrect application of discounts/debits/credits
<b>Complaint resolution time</b>	The time between the service provider's receipt of a complaint to the time at which it is resolved to the satisfaction of the consumer
<b>Miscellaneous complaint rate</b>	The rate at which Complaints regarding incidences other than disconnection (verbal, personal or written) are received
<b>Fault repair time</b>	The amount of time between the service provider's receipt of a valid fault report and the time at which it is satisfactorily resolved
<b>Service activation/provisioning</b>	The time between the service provider's acceptance of a service request and the time at which the service is restored to optimum use

### Technical parameters

<b>Completed calls</b>	Calls successfully set up and received by the called party (including release failed calls)
<b>Call set-up rate</b>	The percentage of calls successfully set-up (to a valid number, properly dialed and during which the 'party busy' tone, 'ringing' tone or 'answer' signal is recognized at the network termination point
<b>Call drop-rate</b>	The percentage of calls, which are unintentionally disconnected mid-conversation without the user's intervention
<b>Call success rate</b>	The percentage of calls that are successfully set up and terminated (as a percentage of the total call attempts and excluding dropped-calls, 'no network' connection, inferior speech quality and calls experiencing long set-up time)
<b>Call block rate</b>	The percentage of calls that are unsuccessful due to lack of connection capacity
<b>Speech quality</b>	The clarity of the speech delivered (without noise/echo/interference)
<b>Congestion</b>	The condition that arises when a system or network experiences a level of calling activity or message traffic that exceeds its capacity
<b>Hand over success rate</b>	The percentage of successful 'handovers' out of the total 'handover' requests made Note: A handover is a process in which a mobile subscriber engaged in a telephone conversation is seamlessly transferred from one base station to another base station without the call being interrupted.
<b>Call setup time</b>	The time from which a 'send' button is pressed (or address information supplied to the network) to when the 'party busy' tone, 'ringing' tone or 'answer' signal is received by the user