

# [Gsm compresses data after sends down a channel](https://assignbuster.com/gsm-compresses-data-after-sends-down-a-channel/)

GSMGSM stand for Global System for Mobile communication isa digital mobile telephony system that is used by Europeand around of the world. GSM uses variation of TDMA is the most widely used of the three digital wireless telephony technologies which is TDMA, GSM, and CDMA. Global System for Mobile communication compresses dataafter sends down a channel with two other streams of user data, each in its owntime slot and run at either the 1800 MHz or 900 MHz.   . Global System for Mobile communication technology are the first launched inFinland in 1991. There are many Global System forMobile communication network operators have roaming agreements with foreignoperators, all user  can  continue to use  mobile phones when they go others countriestravels. SIM cards isthe holding home network access configurations that can be switch to thatmetered local access, the action will continuity reduce the roaming costswhile not effect in service.

GSM(case study)InJuly 1999, the reigning President of the country announced plans to privatiseNigeria Telecommunication Limited (NITEL, as it is known), which previouslymonopolised telecommunication operation in Nigeria. Since then a number ofoperators have entered the market, including Em international (EMIS), PrestCable, Motophone Nigeria and Wireless Systems Nigeria. So far these companieshave concentrated their services on urban. Nigeria has had a very limitedtelephone network for many years and the waiting list is estimated to be over10 million prospective subscribers who have applied to the operators for theirservices.

About 6 cities have IDD (International Direct Dialing). The replacement of Nigeria’s outdatedtelecommunications infrastructure through both multilateral and Nigerianfunding still constitutes a priority program of the Nigerian government. NITELhas approved eight private firms to be connected to its switching system inorder to provide services to different Nigerian zones. Seven of these firms, VGC Communications, Mobitel, Multilinks, Intercellular, EMTelecommunications, Spar Communications and GSM Celia commenced operation in Lagos area. In August 2001 the first Global System forMobile (GSM) communications call was made under a democratic government. Thisevent heralded the dawn of a new era, “ the era of GSM technology”, which has completely changed the way of doing business in Nigeria. Prior to2001, the number of connected phone lines in the country were a mere 450, 000for an estimated population of 120 million at the time and the level ofinvestment in the telecommunications sector was just about US$50 million only.

Six years after, the growth in telecommunications sector is unmatched by anyother sector and it has recorded a phenomenal growth both in terms ofsubscribers’ base and infrastructural development in the country. In January2001, the commission conducted an auction for digital mobile licenses. Thisauction was acclaimed locally and internationally as one of the best in theworld due to its high level of transparency. The auction brought about theemergence of three mobile Operators: ECONET Wireless now (Zain), MTN and MTEL, an offshoot of the incumbent operator NITEL. In 2002 a fourth Digital MobileLicense (DML) was issued to Globacom (Glomobile) through another transparentauction process. To further increase competition, a fifth mobile license (withGSM spectrum) was awarded to Emerging Market Telecommunications ServicesLimited, otherwise known as Starcoms, in 2005. However, four years after the first GSM trailwas blazed, the GSM industry in Nigeria has changed tremendously. Competitionfor subscribers is getting fierce.

Operators have resorted to “ pricewars” in order to win subscribers. Subscribers, on the other hand, havemore choices than ever regarding which GSM operator to use. To attract, maintain and move subscribers to high-value services such as voice, data and multimediaapplications, network operators must provide high quality services. Providingquality services will require monitoring and quality assurance with a view tooptimize the network. The ever increasing number of GSM operators with itslower tariffs on calls has led to continuously increasing number ofsubscribers, which has made Nigeria the largest GSM market in Africa overtakingand beating South Africa   UMTS Universal Mobile Telecommunications System it also knows as “ third-generation(3G),”   packet -basedtransmission of text, broadband, video, digitized voice,  and multimedia at data rates up to and possiblyhigher than 2 megabits per second ( Mbps ), providea efficient set of services to mobile device such as phone and laptop  where user at any place around  the world. The major standards bodies andmanufacturers is endorsed GSM  communication standard, UMTS is the standard specialplan for 2002 mobile users in the world. Once the UMTS is completed implementthe users’ computer and phone device can be efficiently attached on Internetduring they travel or roaming service havethat capabilities where they are anywhere.

The combination of terrestrial wireless and satellite transmissionscan be access by users. After UMTS is fully implemented to public, the users isable to multi-mode devices that switch to GSM 900 and 1800 during the UMTS isstill unavailable.     Case study (utms)MTNL, 1986 is theestablished of the government-owned operator, the 3G is the first things thatdeployment during 2009. The company has objective to ensure that   adequate coverage, reduce the dropped callsand having an ability to calls, send or receive data correctly for itssubscribers. The increased of bandwidth requirements and network to reach theincreasing data demand and maintain food customer satisfaction are prepare byMTNL.

The infrastructure vendorsand end-to-end network performance audit for the cities of new Delhi is inputby Qualcomm ESG reviewed MTNL’s 3G UMTS network design and dimensioning inputs. There are network audit involve , but was not restrict to, such as Review the networkconstraints, UTRAN and core network high-level dimensioning u audit andassessments of MTNL’s current network performance-benchmark drive test andpost-processing of data log-inter-RAT performance for both voice and PS uComprehensive RF network design: comparisons of ideal and site-specificconstraints with both single and multiple carriers, including sensitivityanalysis for antenna height and other network variables.