

| **AY**  **CLASS** | **: 2023\_24**  **: BE E&TC** | **Sem**  **DATE** | **: II**  **:** |
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| **SUBJECT** | **: Mobile Computing** | **EXPT. No.** | **: 03** |

# ROLL NO : 42314

**TITLE**: GENERAL PACKET RADIO SERVICES (GPRS)

**OBJECTIVE:** List and elaborate GPRS services

## Theory:

GPRS is an expansion Global System for Mobile Communication. It is basically a packet- oriented mobile data standard on the 2G and 3G cellular communication network’s global system for mobile communication. GPRS was built up by European Telecommunications Standards Institute (ETSI) because of the prior CDPD, and I-mode packet switched cell advances. GPRS overrides the wired associations, as this framework has streamlined access to the packet information’s network like the web. The packet radio standard is utilized by GPRS to transport client information packets in a structured route between GSM versatile stations and external packet information networks. These packets can be straightforwardly directed to the packet changed systems from the GPRS portable stations.

GPRS was one of the main advances that empowered a cell system to interface with Internet Protocol systems, accomplishing across the board reception in the mid-2000s. The capacity to peruse the web from a telephone whenever through “dependably on” data networking, while underestimated in a great part of the world today, was yet an oddity when it was introduced. Indeed, even now, GPRS keeps on being utilized in parts of the world where ithas been too expensive even to consider upgrading cell organize framework to move up to newer alternatives. According to a study on the history of GPRS development Bernhard Walke and his student, Peter Decker, are the inventors of GPRS – the first system providing universal mobile Internet access.

## GPRS goals:

* 1. Consistent IP services
  2. Leverage industry investment in IP
  3. Open Architecture
  4. Service innovation independent of infrastructure

## GPRS services offered

* 1. SMS messaging and broadcasting
  2. Push-to-talk over cellular.
  3. Instant messaging and presence
  4. Multimedia messaging service
  5. Point-to-Point and Point-to-Multipoint services



## Supporting protocols

* 1. Internet Protocol (IP)
  2. Point-To-Point Protocol (PPP)

## Benefits of GPRS

* 1. **Mobility:** The capacity to keep up consistent voice and information interchanges while moving.
  2. **Cost Efficient:** Communication via GPRS is cheaper than through the regular GSM network.
  3. **Immediacy:** Allows customers to obtain connectivity when needed, regardless of location and without a lengthy login session.
  4. **Localization:** Enables customers to acquire data applicable to their present area.
  5. **Easy Billing:** GPRS packet transmission offers an easier to use billing than that offered by circuit switched administrations.

GPRS is an innovation that numerous GPS beacons are using to get up to the minute data with tracking. When the GPS gadget records the information, it would then be able to be transmitted through GPRS to another central location, for example, a PC or through an email. Itis the GPRS innovation that takes into consideration ongoing updates to GPS following frameworks. It is this direct GPRS association that gives the client of the GPS system the most reliable information available today.

# IV. CONCLUSION:

In our study experiment, we delved into General Packet Radio Services (GPRS). Beginning with a concise overview of the standard and its integration into cellular communication technologies, we explored the fundamental principles behind GPRS. Understanding its objectives and the range of services it provided at the time was pivotal to our investigation. We also delved into the supporting protocols and the advantages GPRS brought to the table. Additionally, we examined the application of GPRS in transmitting real-time GPS data, recognizing its multifaceted utility across various domains. This highlighted the diverse applications and potential of GPRS beyond traditional data transmission, underscoring its significance in modern telecommunications.

# SIGNATURE

**REFERENCES**:

1. “Mobile Communications” – Jochen Schiller.