

Lecture 2a – Additional Notes

GSM - (Global System for Mobile Communications, originally Groupe Spécial Mobile), is a standard developed by the European Telecommunications Standards Institute (ETSI) to describe the protocols for second-generation (2G) digital cellular networks used by mobile phones, first deployed in Finland in July 1991.[2] As of 2014 it has become the de facto global standard for mobile communications - with over 90% market share, operating in over 219 countries and territories.[3]

UMTS - The **Universal Mobile Telecommunications System (UMTS)** is a [third generation](#) mobile cellular system for networks based on the [GSM](#) standard.

multiplexing (sometimes contracted to muxing) is a method by which multiple analog or digital signals are combined into one signal over a shared medium. The aim is to share an expensive resource.

The Lindbergh Operation was a complete tele-surgical operation carried out by a team of French surgeons located in New York on a patient in Strasbourg, France (over a distance of several thousand miles) using telecommunications solutions based on high-speed services and sophisticated surgical robotics. The operation was performed successfully on September 7, 2001 by Professor Jacques Marescaux and his team from the IRCAD (Institute for Research into Cancer of the Digestive System). This was the first time in medical history that a technical solution proved capable of reducing the time delay inherent to long distance transmissions sufficiently to make this type of procedure possible. The name was derived from that of American aviator Charles Lindbergh, because he was the first person to fly solo across the Atlantic