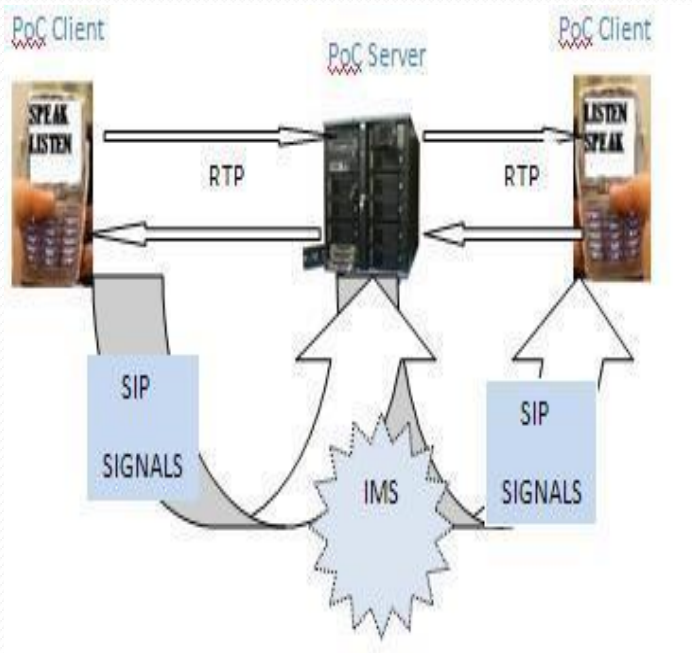# Supervisor: Dr W.D Tucker
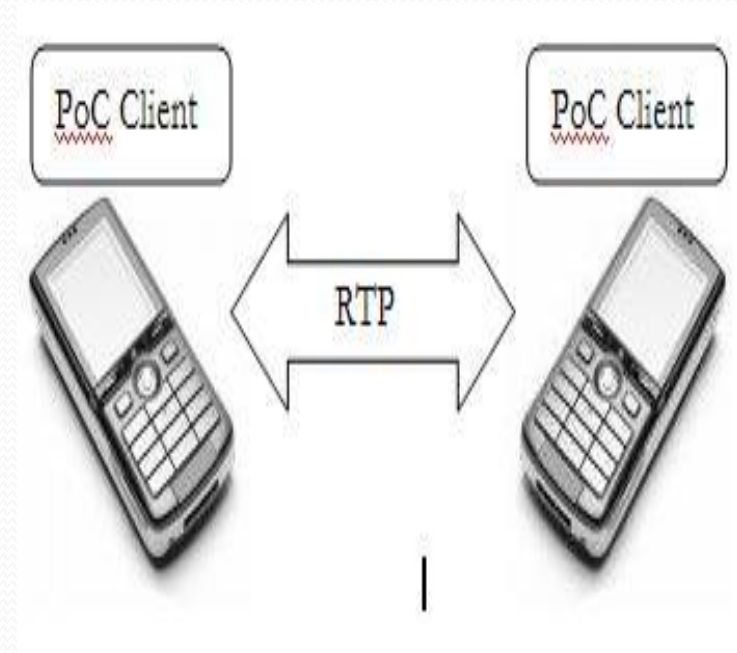# Co-Supervisor: Mr M.J Norman

Introduction

- Push to Talk (PTT)
  - Walkie-talkie concept
  - Voice instant messaging
  - Half-duplex communication
- IP-Based Push to Talk – PTT using IP as medium of transmission
- PoC - Push to Talk over a Cell phone

Overview

Client server

Peer-to-peer

Implementation

Mobile

- Peer to peer approach
- Code in Carbide C++
- Use Symbian Pjsip for SIP stack
- Test on the Emulator then to a phone

PC Implementation

- Client server approach
- Use Asterisk/Openser
- Code in Java
- Use Netbeans IDE
- Use SIP-communicator for SIP stack

Challenges

Mobile

- Client to server through emulator problems
- Audio streaming problems on the emulator

PC Implementation

- Quality of voice over the network

Project plan

Term	Task	Finish
1	Requirements & Analysis	Done
2	Design & Development	3 June 2009
3	Configure Openser and Asterisk SIP servers. Code in Carbide C++ Using Pjsip stack for the mobile phone. Code in java using SIP-communicator. ➤Half –duplex communication ➤floor control ➤PTT button control	9 September 2009
4	Port to Cell phone device Use Pjsip as SIP stack Code in Carbide C++ Test & Debugging	September – October 2009

DEMO

- PC implementation
- Make an half duplex connection
- The use of mouse clicks instead of press
  - Initiate a connection through button click
  - Closes the connection by clicking the same button
- Use Wireshark to analyze the packets

Thank you
Q&A