S-72.423 Exercise 4.

Return your answer no later than on Tuesday 23.11.2004, 16:00 into the course's P.O. box at the third floor of the E-wing.

Please, include the following information in your answers:
- Your name (+ team member names)
- Your student number (+ team member student numbers)

Answers in English, please.

1. Solve the ADSL part from exercise 3.

2. DECT:
   a) How many DECT digital channels need to be combined to get the ISDN's 144 kbit/s basic rate access?
   b) Describe (using a few sentences) the meaning of the following DECT acronyms:
      - GAP
      - GIP
      - IAP and IIP
      - RAP
      - CAP
   c) Explain the differences between closed-loop power control and open-loop power control. Why open-loop power control can be used in DECT?

3. TETRA:
   a) What is the main difference between GSM and TETRA in terms of authentication?
   b) List TETRA Teleservices
   c) List TETRA Bearer Services for data transfer.

4. UMTS: Describe (using a few sentences) the meaning of the following UMTS features and acronyms:
   - FDD / TDD
   - UTRAN
   - Spreading factor
   - Processing gain
   - Soft handover
   - RRC
   - Outer loop power control
   - AMR
   - Admission control