

# **CS25010/CSM5010 Assignment Academic year 1997-98**

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## **1 Introduction**

To answer this assignment's tasks, you may find several sources of information useful. Libraries have many books and journals, several daily newspapers contain education or IT supplements once a week, magazines exist in newsagents, several TV news and documentary programmes contain relevant material and of course you have the notes made during the course.

The first task requires you to prepare a report for the governors of an isolated school.

The second task requires you to locate information about a LAN technology which has not been formally covered in lectures and summarize it.

You are expected to complete both tasks, they will be assessed equally and together contribute 20 percent of the marks for this module.

## **2 Recommendations to the governors of an isolated school.**

You have been approached by the governors of an isolated rural school located on a island five miles from the mainland. The school is located in an area where both Welsh and English are used as daily languages. The school caters for children between the ages of 4 and 13 and in total has only 30 pupils. The school has three members of staff. One member of staff is a teacher who also acts as the school headmaster. The second member of staff is a just a teacher. The third member of staff is a 'general assistant' who has several roles. The third member acts as filing clerk, typist, cooks the childrens lunches and also cleans the school.

The school has a good working relationship with the area education authority and with several other schools on the mainland. The other schools are all 25 miles or more away. The island has a ferry service which provides a service on two days of the week.

The government has introduced a new 'national curriculum' and the governors of the school are worried that all the children will not get a complete education unless some telematic technology is introduced to help the teachers. The school administration is also difficult and requires the head teacher to take a ferry trip once a week to a regional meeting.

You are required to write a short report to the governors (3-6 pages) describing various choices of communications or telecommunications equipment together with supporting computer hardware

and software that they might buy to help them achieve their aims both in regard to the childrens education and in improving administration. Other than the outline given above, you may make any other assumptions you wish, but they must be clearly stated. Other than a simple telephone, the school currently owns no other computing or communications equipment, and so the report should be written in a non-technical style.

### **3 Alternative Local Area Network (LAN) Technologies**

Several different technologies already exist for Local Area Networks. In the lectures of CS25010 we only cover Ethernet / IEEE 802.3 in any detail. You are required to choose one of the following technologies

- Token Ring
- FDDI
- Cambridge Ring

and produce a three to six page summary of its main characteristics. Diagrams should be included. You may assume that the ‘reader’ has approximately the same background as a typical student attending CS25010/CSM5010.

### **4 Effort Allocated to the Assignment**

You should spend at most about 15 hours on this assignment. Note: This is very much intended as an upper bound, I do not expect everyone to spend this much time.

### **5 Submission Date and Time**

You should either hand in your work to the appropriate ‘collection box’ on or before 3.30pm on Monday 8th December 1997.