## Question 4

In the 1980s and 90s, the telecommunication companies proposed an alternative to TCP/IP called "ATM" or "B-ISDN". It had the following characteristics:

- 1. Virtual circuits were established end-to-end.
- 2. A separate control plane for establishing circuits
- 3. Virtual circuits carried small, fixed length packets (called "cells")
- 4. Virtual circuits could have different qualities of service.

What are the pros and cons of such a design? Why do you think it didn't succeed?