



The above is a **SAMPLE**. The **schematic** diagram should contain the following elements:

- All company sites (named as in case study)
- All traffic flows between those sites
 - Each traffic flow should indicate its direction (use arrows)
 - Each traffic flow should indicate its type (voice, data, video – use different colours)
 - Each traffic flow should indicate its volume or size (use different thickness of arrows)
 - *Each traffic flow should be supported by assumptions, calculations or research**
- Additional products, services or features (in red) – see above for ideas

* For example, flow X may indicate **data** traffic between two sites A and B. You estimate the daily volume of traffic to be made up from:

- 100 emails a day (in both directions)
- The average size of a plain email (no attachment) is 1KByte
- 50% of emails contain an attachment
- The average size of an attachment is 1Mbyte
- So the total volume of data flowing across link X is: $(100 \times 1KB) + (50 \times 1MB) = 50.1 MB$

There are sites on the web that can provide such real-world traffic flow statistics – try and use them for a more realistic basis for your assignment – just fully reference them. Do a similar traffic flow analysis for voice and video. For voice state the average length of each conversation and the average number of conversations per day per link. Then convert those figures into bytes by doing some research – how much data is needed to convey the human voice? For video traffic do a similar thing for emails as above. All this research and modelling is the foundation for the later network design.