

Digital TV/Radio Transmission vs Analogue

The benefits of digital over analogue transmission are around:

- How much data can be transmitted
- How consistent the data remains over large distances
- The type of data which can be carried
- Greater interactivity and improved picture quality.

In terms of power usage, digital transmission is more efficient than analogue, but as more data is being sent the power usage will be higher. It is proposed that although the current analog transmission system will no longer be used for TV signals, new services/uses are being planned on the existing radio spectrum released by switchover.

Greater use of additional electronic equipment for digital television has increased consumer power usage. Set Top Boxes tend to be less energy efficient than Integrated Digital TVs as they have a separate power supply from the TV and also consume a significant amount of electricity in stand-by mode, the commonest setting when not in use. The extra energy costs for consumers for each terrestrial Set Top Box could be around £2 per year. This is an increase of around 0.1-0.4 kWh per day, 1-3% of total electricity consumption for an average household.

From the Digital Switchover website:

The Government anticipates that switching to only digital terrestrial TV and turning the analogue signal off will:

- Benefit the UK economy as a whole by £1.1 to £2.2 billion in net present value terms
- Bring Digital TV signals to the 20 to 25% of the UK households who live in areas that cannot currently receive them because of spectrum limitations with the analogue system;
- Enhance reception in areas of existing Digital TV coverage;
- Increase choice for viewers;
- Reduce costs for broadcasters, who will no longer have to transmit services in both formats, or replace old analogue transmission equipment;
- Release about a third of the spectrum