Expected Evolution of Users’ behaviour

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Generation X:
- Web and e-Mail applications from a PC

Generation Y (born in 80s and 90s):
- All day connected → ubiquity, reliability
- Connectivity is the key

New Generation born in the 21st century?
- Used to continuous changes → change is common
- Early adopters for new applications
- More knowledge about technology and communications
  → ready to use advanced network services?

Modelling End Users’ Internet behaviour

Future Internet connectivity
- New traffic demands
- Reliability
- Ubiquity
- Security
- Flexibility
- Openness
- Neutral
- Fairness
- Advanced Network Services
Internet Traffic Analysis and Predictions

- **2005 predictions**: traffic will grow up **100-300% per year**
- **2007 data**:
  - MINTS 2007 ➔ traffic is growing up 50-60%
  - Cisco 2007 data:
    - traffic is growing at 60% per year
    - near future (up to 2011) 50-60% per year

Thinking on the Future…
- Main components of Internet traffic?
- How expected to evolve?
- … But first, we need to estimate the near future

![Internet Traffic Analysis and Predictions](image)

**What are the Future Internet expectations?**

- **Users’ behaviour is hard to predict**, but:
  - They will be connected any time from different devices ➔ Connectivity Perceived Value increases
  - They will ask for different applications with different traffic profiles ➔ The network must be able to manage all apps with guarantees

- **Reliability and guarantees are required** to manage some services (e.g. emergency calls, corporate services, e-health, etc.

- **No place for walled gardens**
  - None of the most popular Internet applications share the same Application protocol
  - IMS, AMS, what is the next one?

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By 2015 an innovation friendly framework to support changes in demands:

- Higher capacities in wired and wireless
- Guaranteed network performance (overlay apps, 3D contents)
- Open network interfaces to allow users to show their preferences