# Internet Engineering

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Research into new transport protocols techniques consider the tradeoffs over different Internet paths provided by satellite, wireless, 4/5/6G mobile, fibre,DSL, etc ...

- to optimise the throughput performance for application
- to reduce the latency experienced by users
- to avoid harm to other users sharing the network
- to assure resilience and prevent collapse of the Internet infrastucture.
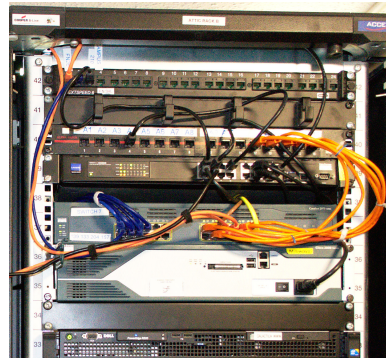
European Space Agency (ESA) funding has developed the Careful Resume (CR) technique that enables web browsers to significantly reduce download times. Results were derived using simulation for a range of Internet paths, and then implemented and measured in the Internet Engineering research tested. The implemented techniques were finally evaluated over live communications paths. This design is one of many developed by the Internet Engineering team that is being standardised by the Internet Engineering Task Force (IETF).
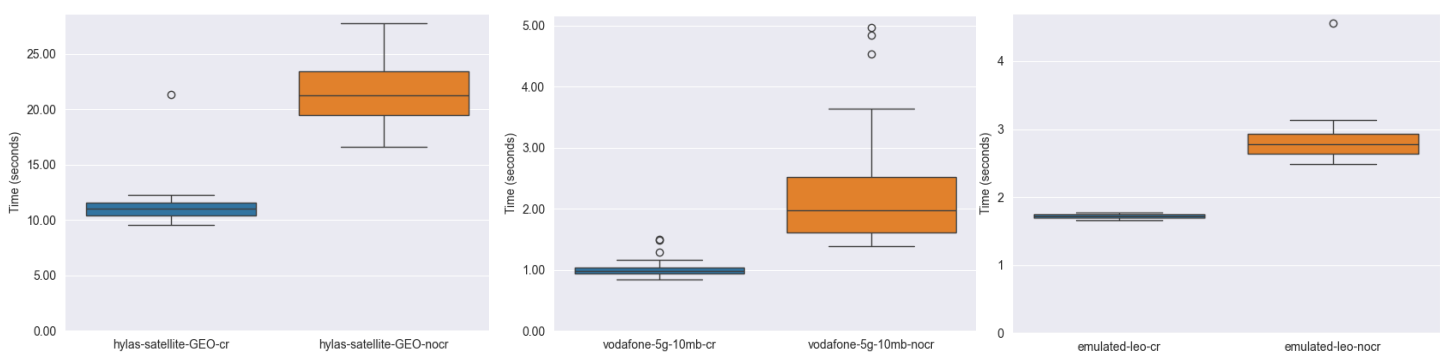
Other current research topics include:

- Measurement to support evolution of the Internet Protocol Stack
- Prioritising transmission of latency-sensitive data
- Optimise video over varying cellular networks.

Recent industry collaboration includes:
Indra; DLR (Munich); Apple Computer; BT; Mozilla; Alcatel Lucent; RIPE and Cloudflare.

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