



Constructing SuperJANET4

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4 UCISA, Harrogate, 1999 ...

- bandwidth must stop being an issue
- tools to support content delivery
- increased availability & robustness
- local loop provision beyond delivery to educational establishments

4 SuperJANET4 components

SuperJANET4 =

high bandwidth national and regional network

+ national standards

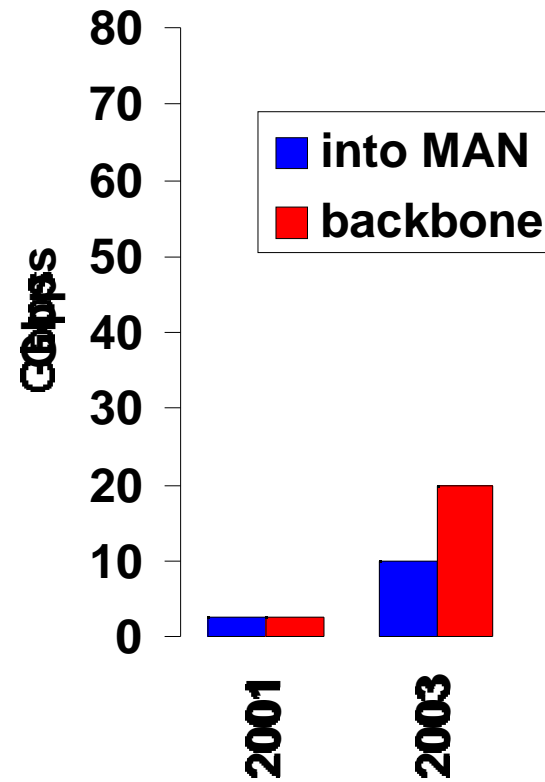
+ local and global connectivity

+ services to deliver content



4 Backbone - what we want ...

- Gigabit levels of bandwidth



superJANET

4 Backbone - what we want ...

- national reach - covering all MANs
- resilience within backbone and to MAN entry points
- test-bed to facilitate research and development of successor network
- affordable as bandwidth demand grows

4 Procurement timetable

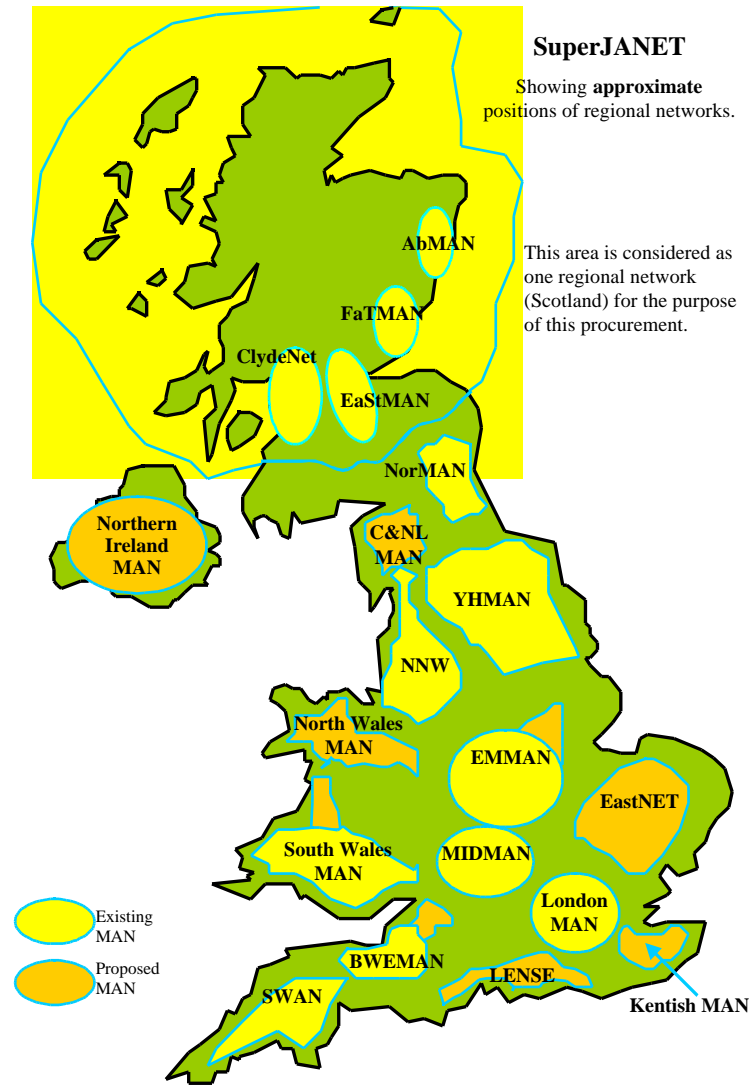
- initial offers:
by 9 February
- best and final offers:
by 3 April
- selection by:
27 April
- **10** responses
- **7** short-listed
- **1** supplier to
be selected

4 What we think we'll get ...

- core based on DWDM technology
- bandwidth will follow development of DWDM equipment
- IP technology to form the network and provide resilience
- entry to MANs via dual access links or single protected links

4 The MANs

- they're (almost) everywhere
- differing sizes
- differing aims
- differing technologies and operations



4 Work to be done in MANs

- operational standards
 - diversity within common standards
 - gradually reaching consensus
- upgrade programmes
 - resilience in MAN backbones
 - capacity upgrades
 - network management initiative
 - address in autumn 2000

4 Content delivery services

- use of core PoPs as hosts
- agreements with content suppliers
 - e.g. UfI content farm
- bandwidth guarantees within the IP network
- “middleware” - from early work to a network-wide programme?

4 Local connectivity

- interest is broadband to workplace, home and “learning centres”
- wired and wireless
- support for location independence
- challenge to MANs and nationally
- need to decide directions during 2000

4 Global connectivity

- Gbps required by late 2001 / early 2002
- good news: prices are dropping fast again
- key question:
balance between intercontinental bandwidth and transit

4 Further information

- procurement documentation
- emerging standards, strategies and programmes
- everything else about SJ4 ...

<http://www.superjanet4.net>