Starting The Commercial Internet in the UK

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Setting The Context

- Not Objective – Houlder Musing's
- Peter C (techy) & Peter H (?)
- Does not directly include other key players: PIPEX, Demon, BT, JANET …
- Chronologically based to show how things developed
- UKUUG (membership !) / UKnet / GBnet
- EUUG / EUnet

1976

- Founding of UKUUG
- Forum for Unix discussion in UK
- Included UNIX gurus & "networking" people
- 2 meetings a year
- Peter Collinson brings Unix to Univ of Kent

1977

- EPSS (Experimental Packet switching System) goes public – first country in world to have a public packet switching network
- SERCNet starts using EPSS

1979

- UKUUG get Brian Kernighan & Ken Thompson to UKUUG conference
- First UUCP test service from UKC to Bell Labs in US – 300 baud modem (news feed & mail ☺)
- First UUCP emails in UK

1980

- High Speed Modems arrive ☺ - 1200/75 – legality unclear
- SERCnet – later JANET starts X.25 coloured book protocols
- First Email to Europe – Holland & Denmark
- EUUG starts
- EPSS becomes PSS & an (ISO X.25 standard)

1982

- EUnet starts – UK, Holland, Denmark & Sweden
- Unix scripting under cron schedules the first regular Dutch to UK email service

1983

- UKC networking now based on 2 * 300 & 2 * 1200 modems

- UKC takes first permanent member of staff (Mike Bayliss) to assist Peter C with networking

- Piet Beertema – The F protocol uucp over x25, adopted for use over JANET (UKUUCP)

- JANET formally adopts reversed email addresses – e.g. uk.ac.ukc

- cl (Chile) cs (Czechoslovakia – as then was)

c/o Rutherford Appleton Laboratory
Chilton, Didcot
Oxfordshire OX11 0QX

Your ref:

Our ref.   MW/MM

Telephone: Abingdon (0235) 21900
Telex: 83159

11 July 1983

Dr. Brian Spratt,
University of Kent,
Cornwallis Building,
Canterbury,
KENT
CT2 7NZ

Big End/Little End Controversy

On 6th July, I circulated a brief memorandum on the Big End/Little End controversy, as it affected the proposals for a Name Registration Scheme.   In that memo, I promised to let you have a decision on the style of address construction that would apply to the NRS.

As I see it, there are some rather weak technical arguments in favour of adopting a big-end approach.   There seem to be no technical arguments in favour of a little-end approach; the argument in favour is that ARPA mail and USENET mail both use the little-end approach.   Since ARPA is always accessed via UCL, and since it is very likely that USENET outside the UK will be accessed via a small number of gateways, any necessary address conversion can be performed at the gateways.   It is agreed that this will take place at UCL, and there is no reason to suppose it cannot be equally well implemented in the USENET gateways. Thus the only area of difficulty is when addresses occur imbedded in MAIL text; I accept that such occasions will occur, and will present problems.

In view of the pressure to accept the big-end approach from within the community my instruction to the JNT is that it should not change the earlier community decision on the form of NRS address construction.   As I said in my 6th July memorandum, this decision will not be popular in some quarters – for this I apologise, but I hope that this decision can be regarded as final.

M. Wells
Director of Networking.

1984

- UKC to MCVAX (Amsterdam) a 4.8k X.25 line news/mail
- £5000 (one quarter) bill paid for by EUUG loan & suddenly UKC has to start charging
- Sean Leviseur replaces Mike Bayliss
- Initial charges somewhat "arbitrary", Commercial/Academic, Like/Dislike ☹
- April Fools Day Joke "USSR on USENET" kremvax/chernenko

Path:
dutesta!mcvax!moskvax!kremvax!cher
nenko
From: chernenko@kremvax.UUCP
(K. Chernenko)

Well, today, 840401, this is at last the
Socialist Union of Soviet Republics
joining the Usenet network and saying
hallo to everybody.

So let's open a bottle of Wild Turkey and celebrate this (he says modestly) historical event: CHEERS!!!

From a CIA Outpost: Is this for real? Can we have confirmation from someone who is recognized as being in a position to know?

Redneck America: This isn't funny. I hope you get so much mail in response to this that you're reading it for a week straight. F**k you.

1985

- 29/1/85 – 29 sites paying UKC for mail & news including – BT Axion
- Peter Houlder gets involved …

1987

- Uknet name used for first time
- First FTP public info service in UK- via email to info-server@ukc
- First formal charging structure
  - Subs £70 per quarter
  - News £30 per site
  - Mail 15p per international kbyte
  - Mail 5p per national kbyte
- UKC's X.25 line disappears (Good Old BT) 24/12/87 to 7/1/88 following Oct hurricane

1987 contd

- News Feeds – 40Mbits per month
- UKnet
- Primary Nodes – fed directly from uknet
- Feed nodes – at least 4 sites fed
- End Nodes

1988

- New 9.6k X.25 line
- UKUUCP becomes part of Berkeley Unix
- First IP over X25 tests ukc to mcsun
- Nigel Titley supplies uknet with 9600 baud Trailblazer modem

1989

- May 1989 RIPE Starts
- Peter C leaves UKnet
- Peter H takes over and get ICL involved in a business plan to launch Internet Services – "declined"
- 9600 baud Trailblazer launched to public
  - Dazzling speed 9600 baud
  - Sensational Price £1395 but yours for only £995
- t protocol added to UUCP allowing UUCP over IP
- UKC router Cambridge ring to IP
- I get Internet at Home ☺

1989 continued

- Dec12-Dec 13 UKUUG Cardiff Conference ISO versus IP
- JANET X25/X400/X500
- PP mailer introduced
- NRS & DNS still a big issue, warning sent to not just register in co.uk. …
- 450 sites at end of 1989
- Richard Almeida & UKC's IP gateway
- Uknet in "News of World" alt.sex newsgroups …

1990

- TCP/IP questionnaire sent to Uknet Sites to assess demand for IP services
- Peter H presents business case to UKC
- Dec – 64k leased line to Amsterdam installed
- NRS registrations now automatically in DNS with UKnet setting up the MX records
- Move to SMTP over IP (fr & de)

1990 continued

- Plans for X400 & X500 ?
- Uucp pathalias weighting
- Uknet not carrying rec.arts.erotica newsgroup ☺
- Uknet's Class B network 1 phonecall ☺

1991

- Feb '91 9.6k leased line installed to Ireland to bring Ireland IP connectivity.
- (N.B. – we briefly cut Ireland off the net for non-payment !)
- Mar 1991 – Specialix systems connected to UKnet with a 64k leased line
- Ian Harding, Tim Goodwin & me.
- June 91 – First 4 * X25 over Ip sites
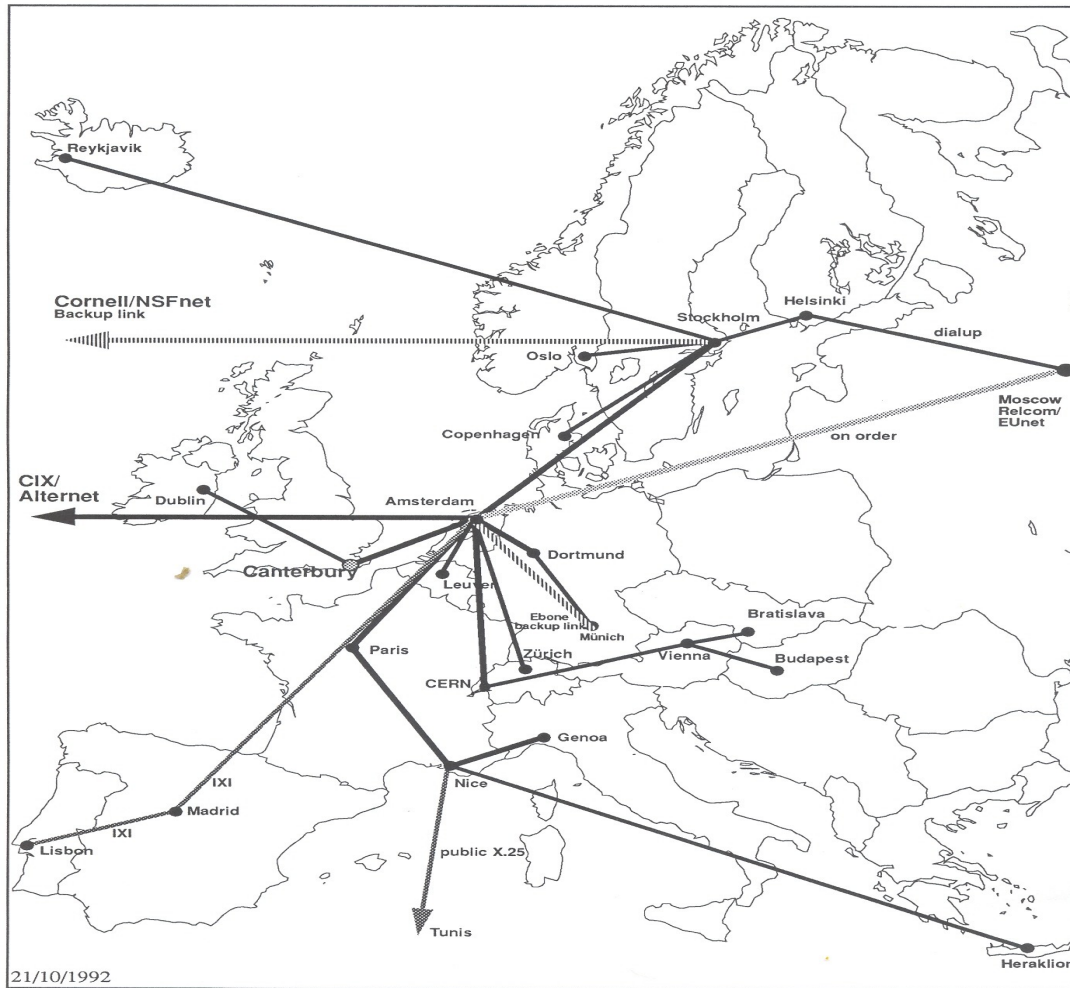- 48k PSS-Plus Service ..

1991 continued

- July 1991 IP peering between AS-286 EUnet, AS-786 JANET & AS-1290 UKnet using EGP

- Janet (JIPS) service launched IP over X25 over IP in some cases – may be apocryphal

- New SUN Sparc 2 & the move to PP mailer

- Sites could no longer be .uucp as EUnet no longer propagating the "uucp" maps service

- First Cisco AGS+ router

- UKC/UKnet control of .co.uk, .org.uk namespace

1992

- Unipalm connected to UKnet via a 9.6k X.25 link – springboard to start PIPEX

- Peter Dawe's UKIC concept

- GBnet Ltd formed – as dispute with UKUUG meant that use of UKnet name not allowed

1992 continued

- UNIX link dying – no longer a need to be a member of UKUUG
- **POLITICS – University (Cash-cow), EUnet (club), UKUUG (history), UKIC (Peter Dawe)…**
- UKnet monopoly widely disliked ☹
- Massive Lowering of Internet connection charges

EUnet
Connecting Europe since 1982

Reykjavik

Cornell/NSFnet
Backup link

Stockholm

Helsinki

dialup

Oslo

Moscow
Relcom/
EUnet

Copenhagen

on order

CIX/
Alternet

Dublin

Amsterdam

Canterbury

Dortmund

Leuven

Ebone
backup link

Bratislava

Münich

Zürich

Vienna

Budapest

Paris

CERN

Genoa

IXI

Nice

Madrid

IXI

Lisbon

public X.25

Tunis

Heraklion

21/10/1992

European EUnet Infrastructure

1993

- 5/1/93 A small PC company in North London called Demon Systems connects to UKnet
- PIPEX launches 2nd commercial internet provision
- 25/4/93 ElectricMail launches Email gatewaying. Cambs Council CC:Mail to uucp gateway …
- CC:Mail, MSMail, Groupwise …

1993 continued

- James Aldridge joins UKnet
- RIPE starts CIDRisation of the IPv4 world
- UKnet allocated 193.112.0.0/23
- UKnet allocating networks on bit boundaries
- Appointment of Sales Director

1994 ?

- GBnet Ltd becomes EUnet GB Ltd
- Club mentality gone, but university owned
- Jim Omand (EUnet GB – Chairman) works with EUnet Europe to form a pan-European Eunet …
- EUnet DE purchased by UUnet
- Domain Charging a big business
- LINX formed – just 5 ISPS at the start

1995 ?

- EUnet GB Ltd sold to PSI – July 21st 1995
- My direct involvement in Internet ends