Sky IPv6 Update
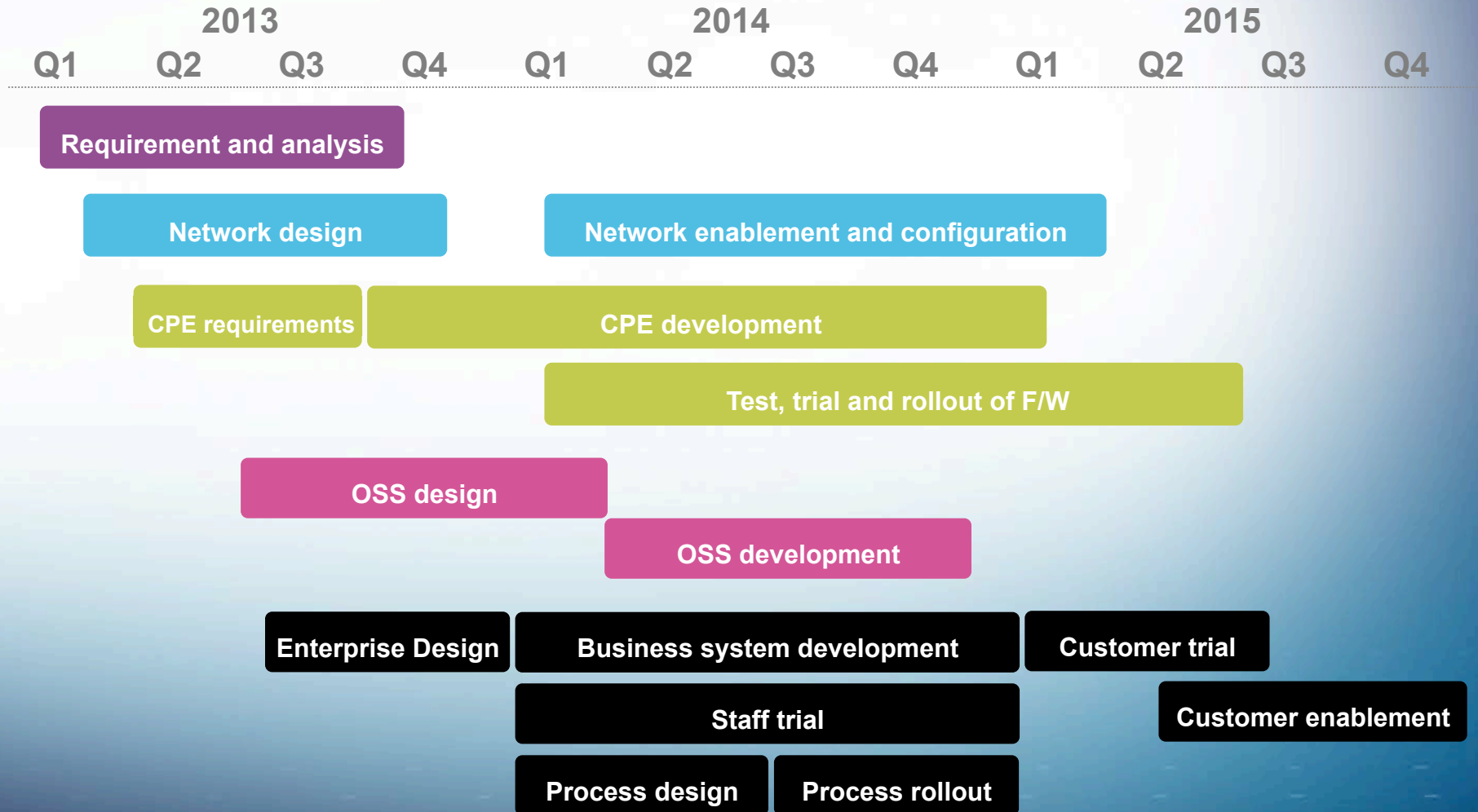
Ian Dickinson

ian.dickinson@sky.uk

One of our longer rollout projects

	2013				2014				2015		
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4

Requirement and analysis

Network design **Network enablement and configuration**

CPE requirements **CPE development**

Test, trial and rollout of F/W

OSS design

OSS development

Enterprise Design **Business system development** **Customer trial**

Staff trial **Customer enablement**

Process design **Process rollout**
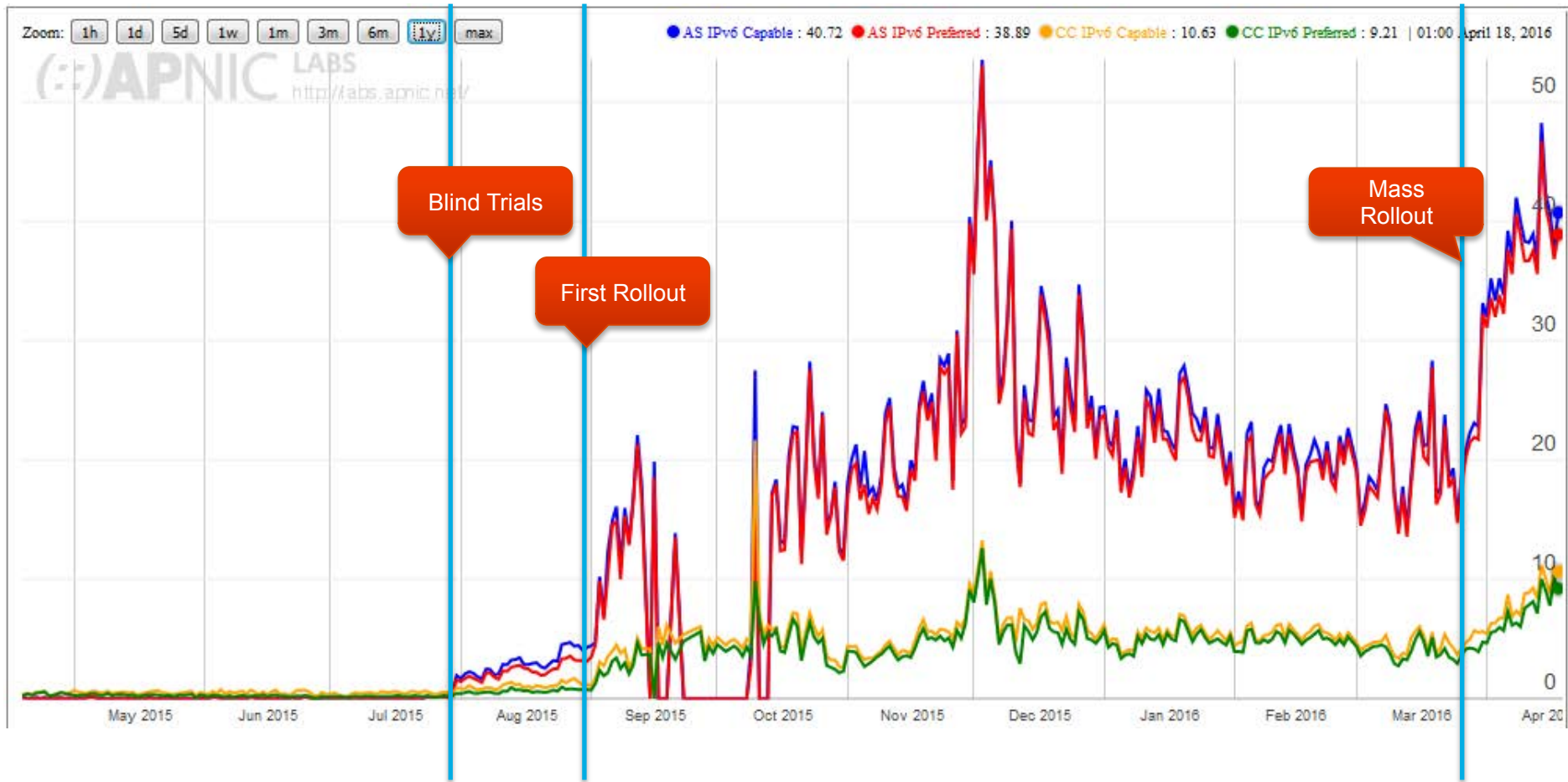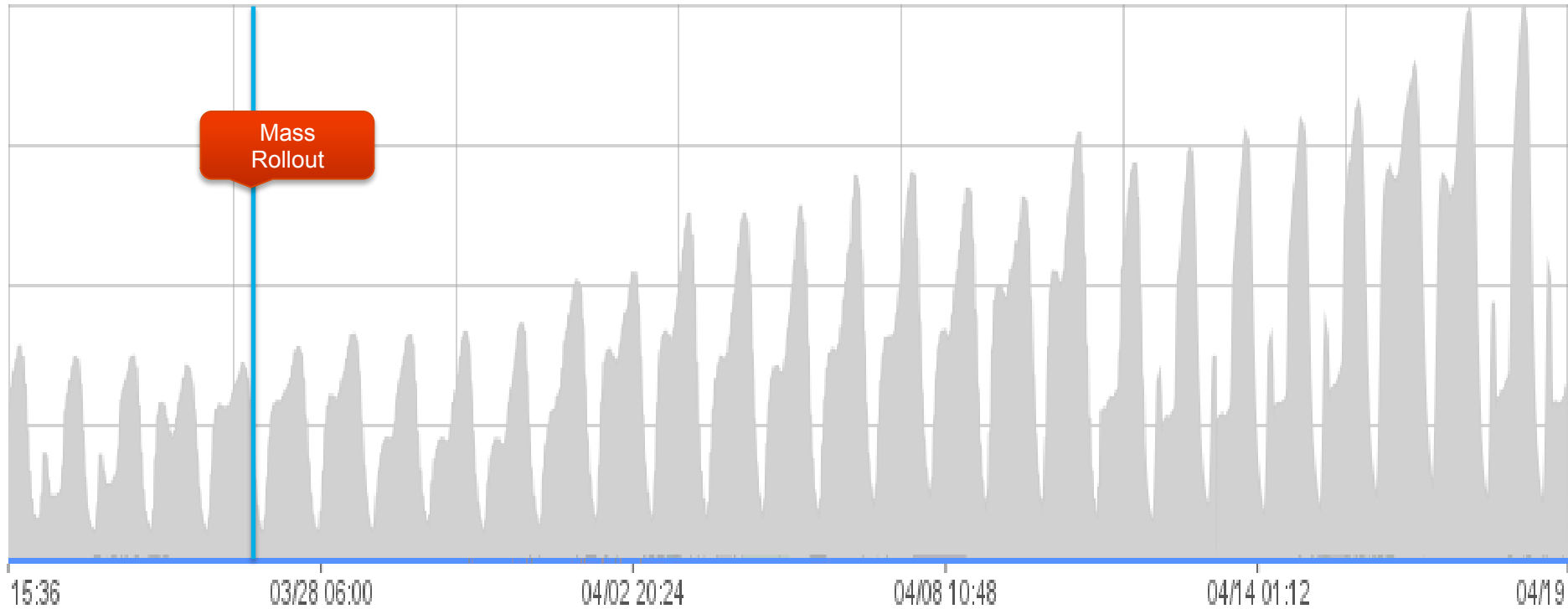
UK IPv6 User Count (from 6lab.cisco.com)
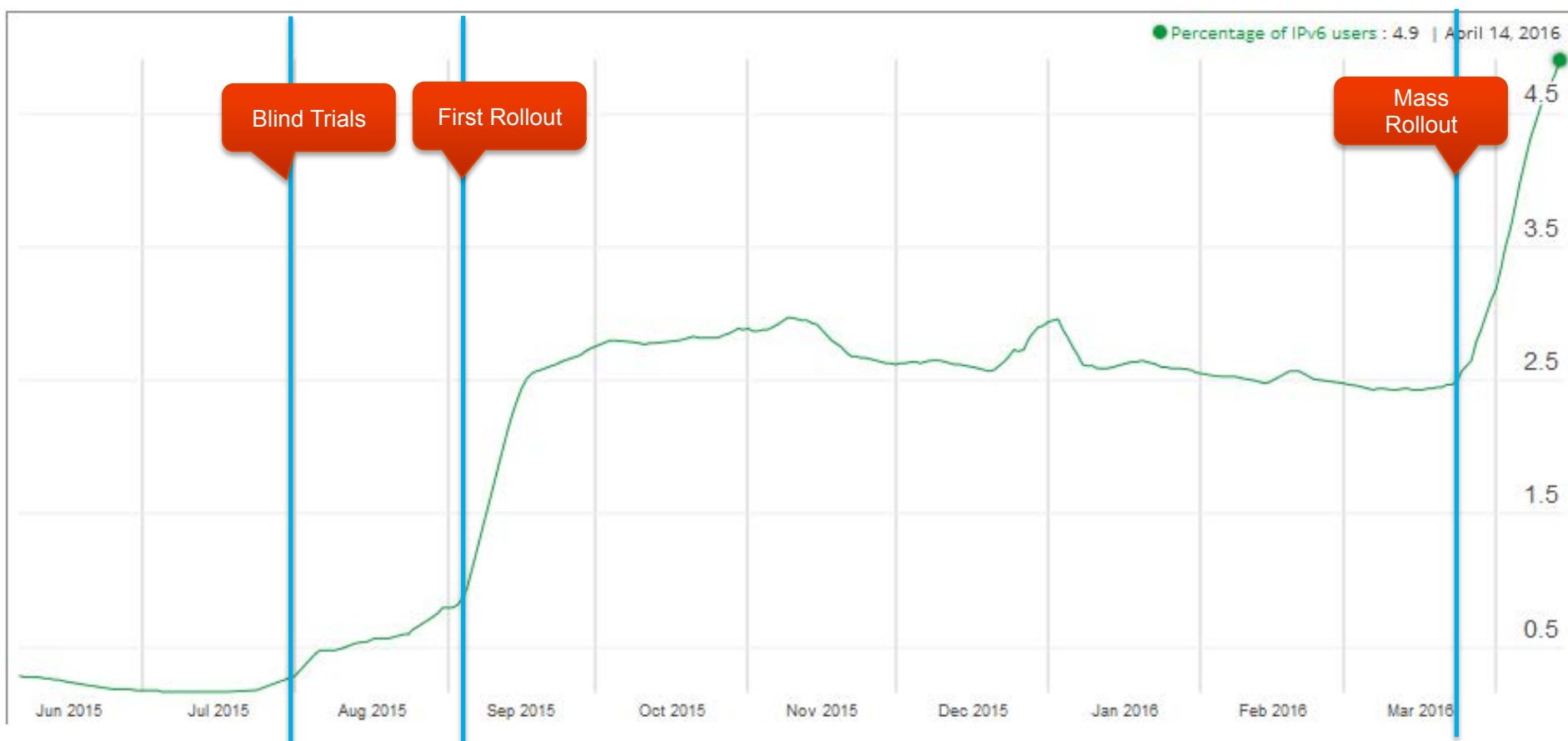
Sky IPv6 User Count (from APNIC)

Sky IPv6 Bandwidth

Top IPv6 ASNs by estimated population (from APNIC)

Rank	ASN	AS Name	CC	Users (est.)	Value	% of country	% of Internet	V6 Users ▼	% of AS	% of country	%of internet
6	AS7922	COMCAST-7922 - Comcast Cable Communications, Inc.	US	41963905	2261266984830	14.94	1.2713	26213472	62.47	38.76	15.02
16	AS7018	ATT-INTERNET4 - ATT Services, Inc.	US	24018443	1294257819498	8.55	0.7276	19519251	81.27	28.86	11.19
24	AS2516	KDDI KDDI CORPORATION	JP	19478043	708981287157	17.01	0.5901	8397570	43.11	44.73	4.81
13	AS28573	CLARO S.A.	BR	31086406	349038166568	27.45	0.9417	8109730	26.09	56.54	4.65
90	AS22394	CELLCO - Cellco Partnership DBA Verizon Wireless	US	6590180	355118439480	2.35	0.1996	5897143	89.48	8.72	3.38
18	AS17676	GIGAINFRA Softbank BB Corp.	JP	22435319	816623176281	19.59	0.6797	5368287	23.93	28.59	3.08
52	AS3320	DTAG Deutsche Telekom AG	DE	10099803	484214855229	14.52	0.306	5219529	51.68	35.29	2.99
43	AS5607	BSKYB-BROADBAND-AS Sky UK Limited	GB	12928451	594799245157	22.16	0.3917	5030046	38.91	74.93	2.88
26	AS18881	Global Village Telecom	BR	19433211	218196093108	17.16	0.5887	4702434	24.2	32.78	2.7
5	AS6830	LGI-UPC Liberty Global Operations B.V.	AT	43330191	2211399627876	628.01	1.3127	3866528	8.92	97.5	2.22
42	AS12322	PROXAD Free SAS	FR	13292206	582424590302	24.71	0.4027	3598652	27.07	42.3	2.06
27	AS3215	AS3215 Orange S.A.	FR	19271046	844399422582	35.83	0.5838	3530120	18.32	41.49	2.02
126	AS852	ASN852 - TELUS Communications Inc.	CA	4639338	229076592426	13.55	0.1405	3173594	68.41	91.75	1.82
31	AS4788	TMNET-AS-AP TM Net, Internet Service Provider	MY	16216931	179197087550	78.52	0.4913	2880976	17.77	99.37	1.65
111	AS14420	CORPORACION NACIONAL DE TELECOMUNICACIONES - CNT EP	EC	5427084	33604504128	43.03	0.1644	2858104	52.66	99.94	1.64
156	AS31334	KABELDEUTSCHLAND-AS Vodafone Kabel Deutschland GmbH	DE	3843041	184246914663	5.53	0.1164	2775220	72.21	18.76	1.59
163	AS6848	TELENET-AS Telenet N.V.	BE	3697194	173220933288	39.65	0.112	2526053	68.32	53.61	1.45
51	AS6147	Telefonica del Peru S.A.A.	PE	10475898	67098126690	79.43	0.3174	2357346	22.5	99.8	1.35
115	AS20001	ROADRUNNER-WEST - Time Warner Cable Internet LLC	US	5156329	277853944494	1.84	0.1562	2212391	42.91	3.27	1.27
129	AS21928	T-MOBILE-AS21928 - T-Mobile USA, Inc.	US	4525168	243843202848	1.61	0.1371	2142421	47.34	3.17	1.23

http://stats.labs.apnic.net/cgi-bin/v6pop?d=3

Get a badge!
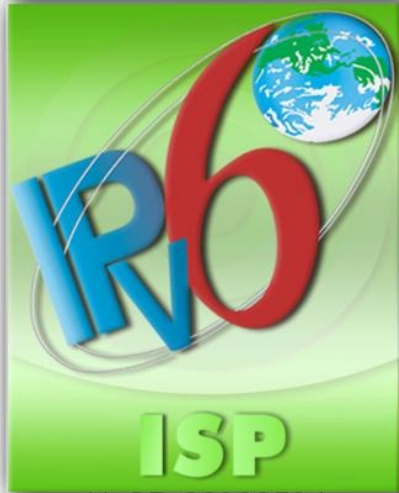
I1-GB-00000504

from the IPv6 Forum…

…and be very visible in the World IPv6 Launch measurements

Show 100 ▾ entries			Search: 5607
Rank ▲	Participating Network ⇕	ASN(s) ⇕	IPv6 deployment ⇕
27	British Sky Broadcasting	5607	10.90%

Showing 1 to 1 of 1 entries (filtered from 257 total entries)

First   Previous   1   Next   Last

Q1 Deliverables

✓ Some tasks completed during Q1CY2016

- – Additional assurance features

- – Additional abuse features

- – Additional recursive DNS capacity

- – Final CPE firmware rollouts

Q2 Enablement

- ✓ Default-On for new customer provides
- ✓ Bulk enablement for existing customers

Expected Outcome

- 92% IPv6 target for H1CY2016
  - Will improve with time, but will exceed 5m subscribers
  - More than 1.5Tbps IPv6 traffic delivered to subscribers
- 3% CPE too old
  - Normal hardware replacement and churn will fix this
- 3% technology problems
  - Old platforms will be retired
- 2% on non-Sky CPE
  - Not officially supported, though some proven to work