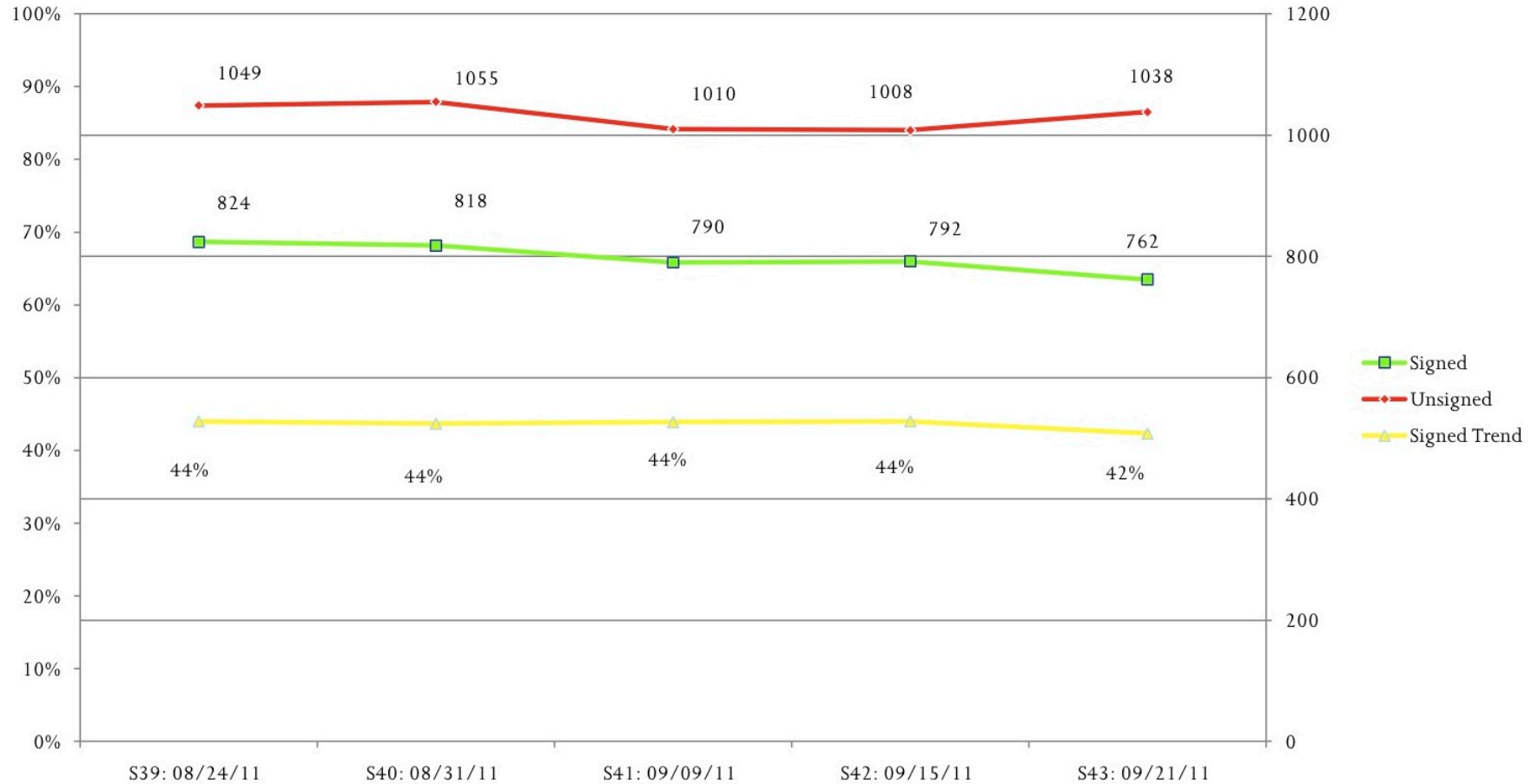# DNSSEC Deployment in the .GOV TLD

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DHS Federal Cybersecurity Conference

10/6/2011
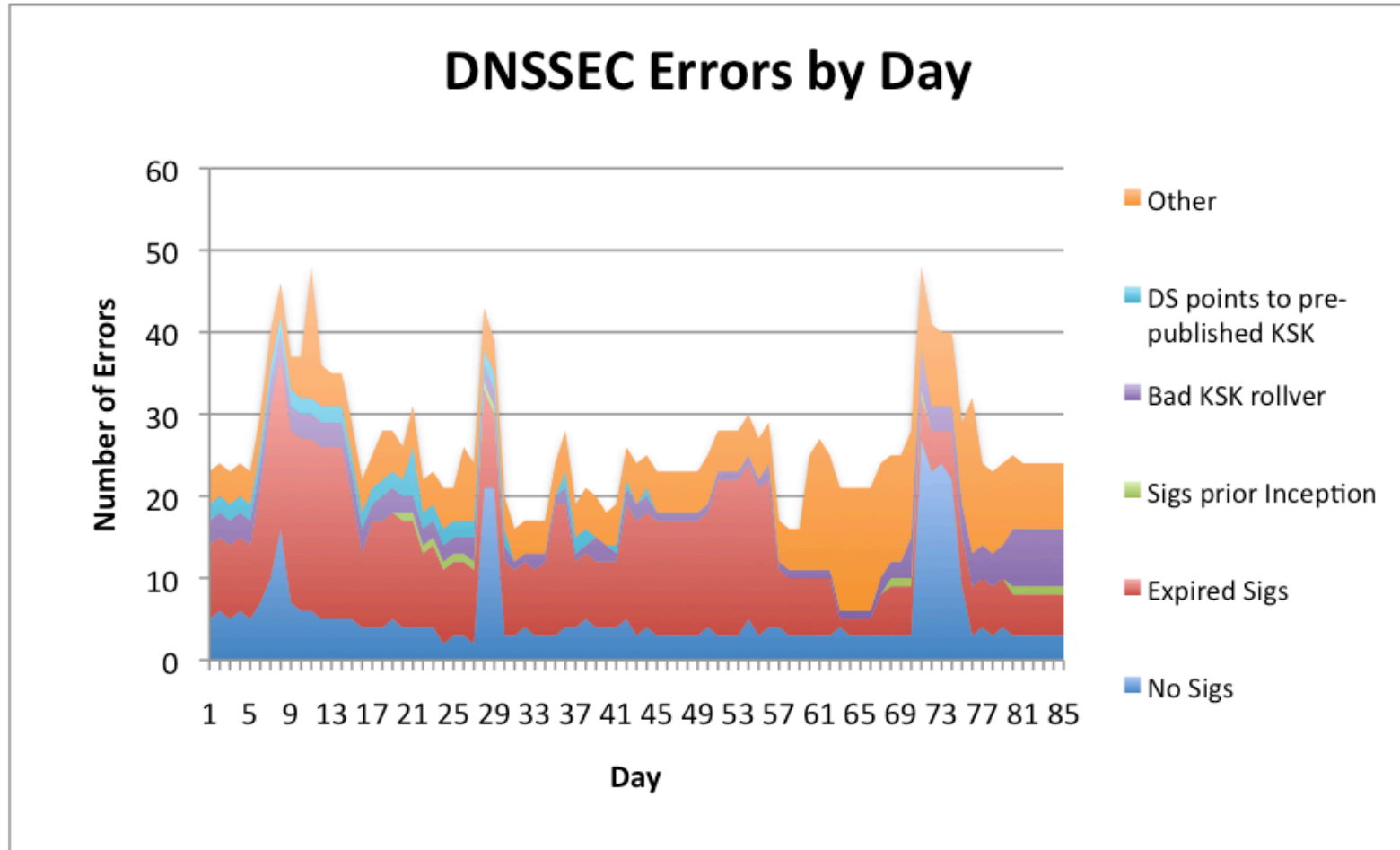
Cyber and Network Security Program
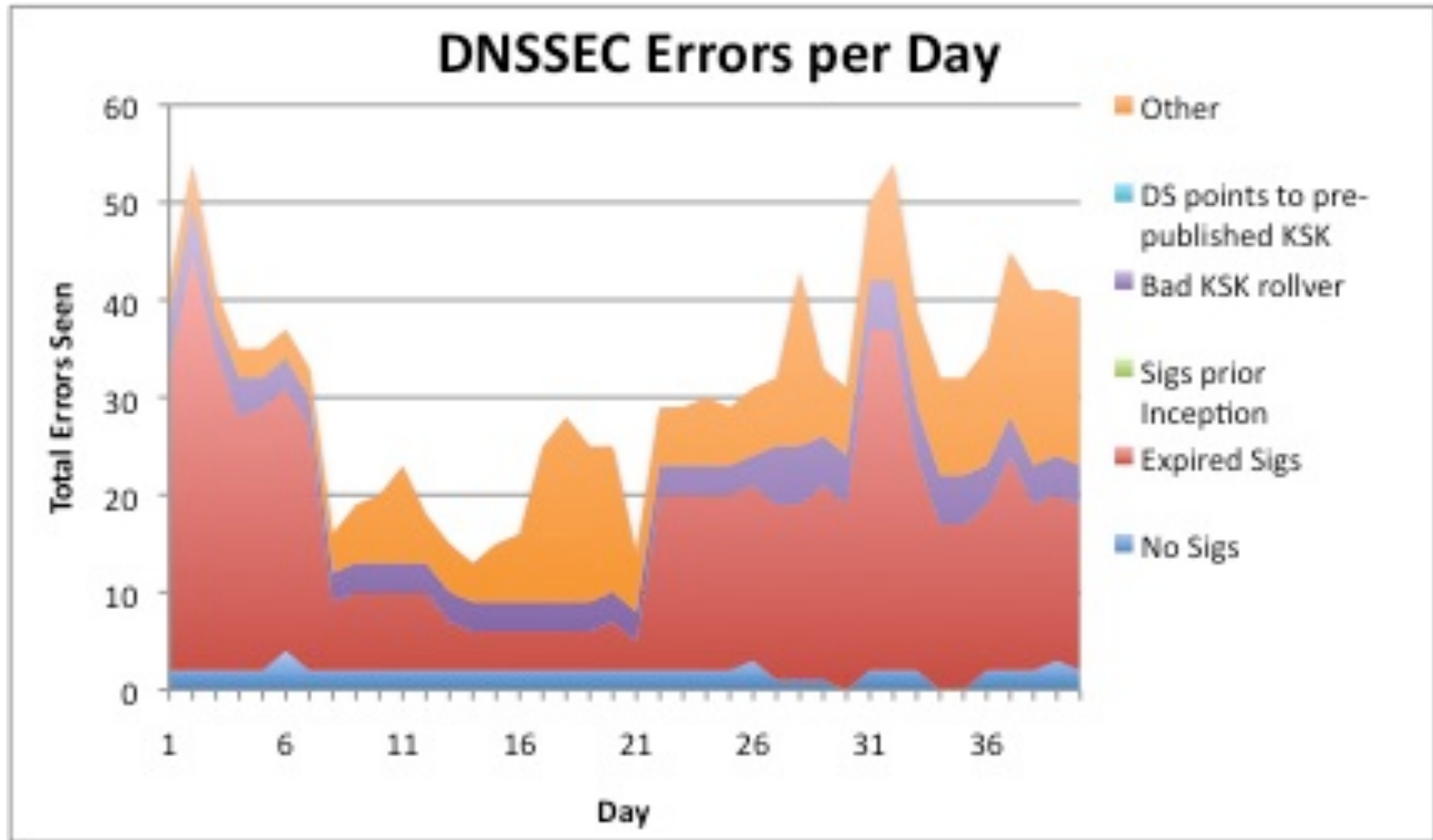
Current State of Deployment

Charting the Errors, April-July 2011

More Recently

Definition of Errors Seen

- No Sig: Zone was signed and DS in .gov, but signatures or keys missing.

- Expired Sigs: RRSIG RR's expiration time has passed (no longer valid)

- Sigs prior to inception: RRSIG inception time in the future.

- Bad KSK rollover: Key mismatch between .gov and zone

- DS points to pre-published key: DS in .gov points to KSK not in use in zone

- Other: Some non-DNSSEC error e.g. server down, etc.

Snapshot of Error Resolution (Apr – May)

Type	Number	Min	Max	Average
No Sigs	41	1	20	2
Expired Sigs	21	1	27	6
Prior to Inception	1	9	9	9
Bad KSK rollover	3	1	27	14
DS points to pre-published KSK	6	1	27	9
Other	21	1	2	1

Error Resolution Rate (Aug-Sept)

Type	Number	Min	Max	Average
No Sigs	3	2	4	2
Expired Sigs	30	1	13	3
Prior to Inception	0	0	0	0
Bad KSK rollover	1	2	2	2
DS points to pre-published KSK	0	0	0	0
Other	44	1	5	1