

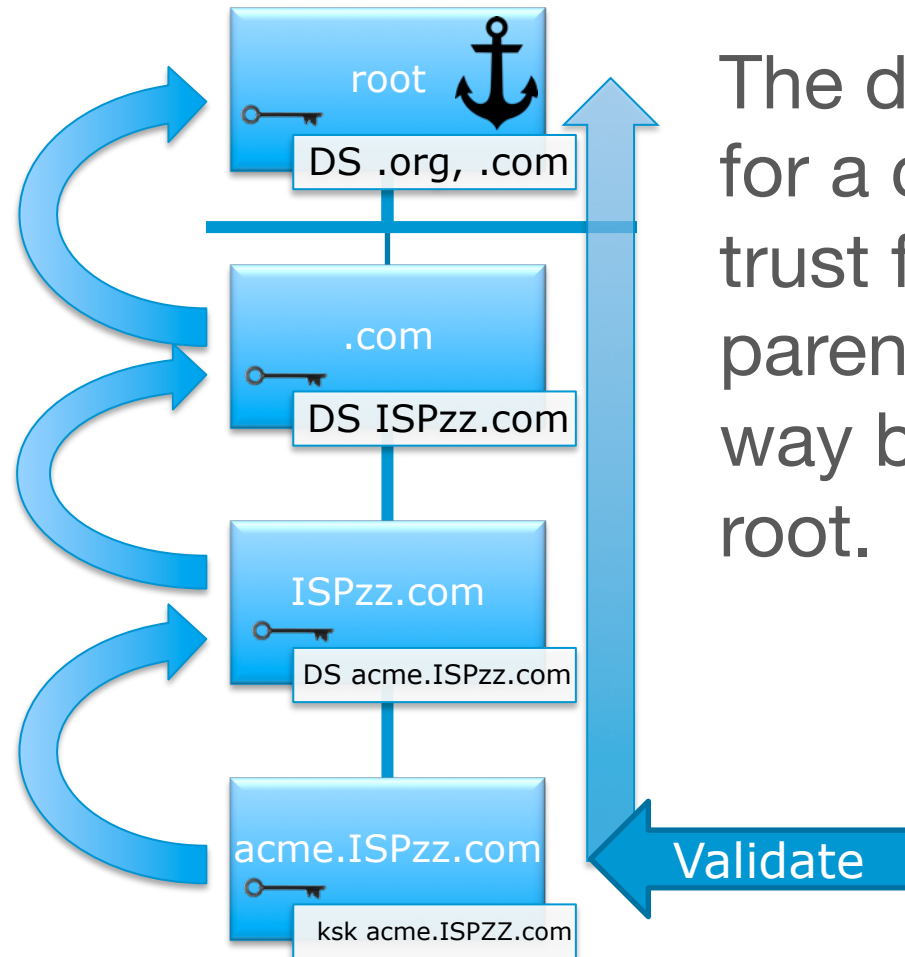
Sunset for the DLV?



Background

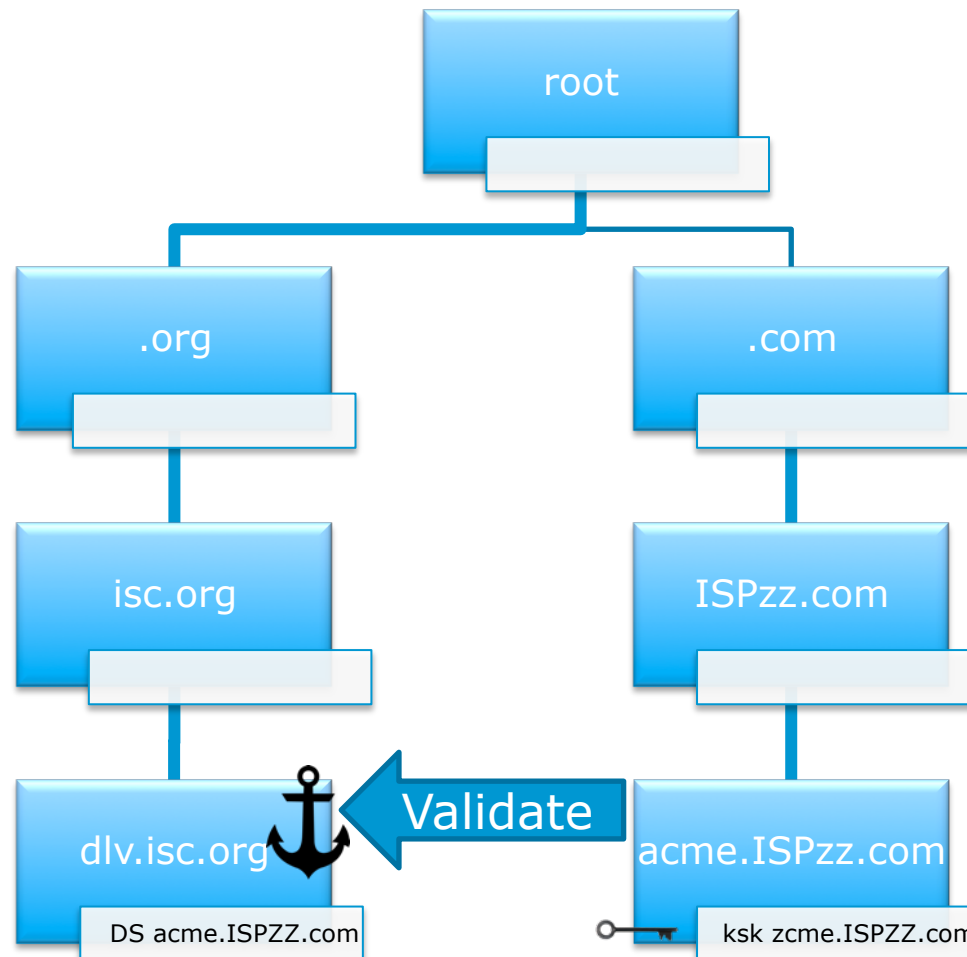


DNSSEC Validation



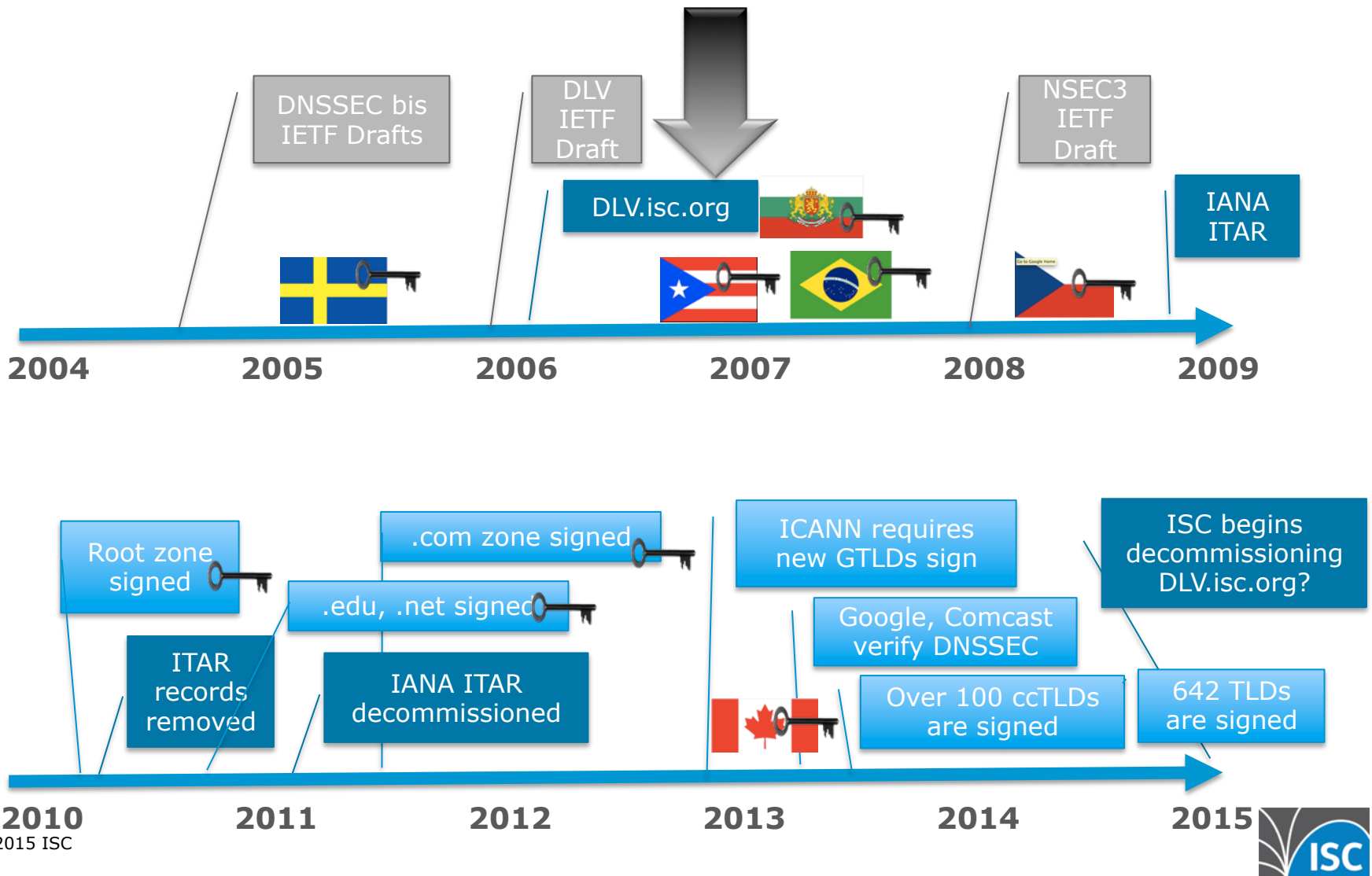
The design calls for a chain of trust from child to parent, all the way back to the root.

DLV = alternate path to trust anchor



Before the planned chain of trust was available, the DLV provided a substitute.

A lot has changed since 2006



Is DLV now DELAYING deployment?



Benefits

- Allows a signed zone to be validated even if the parent is not signed
- Accepts DS records from anyone
- Free service



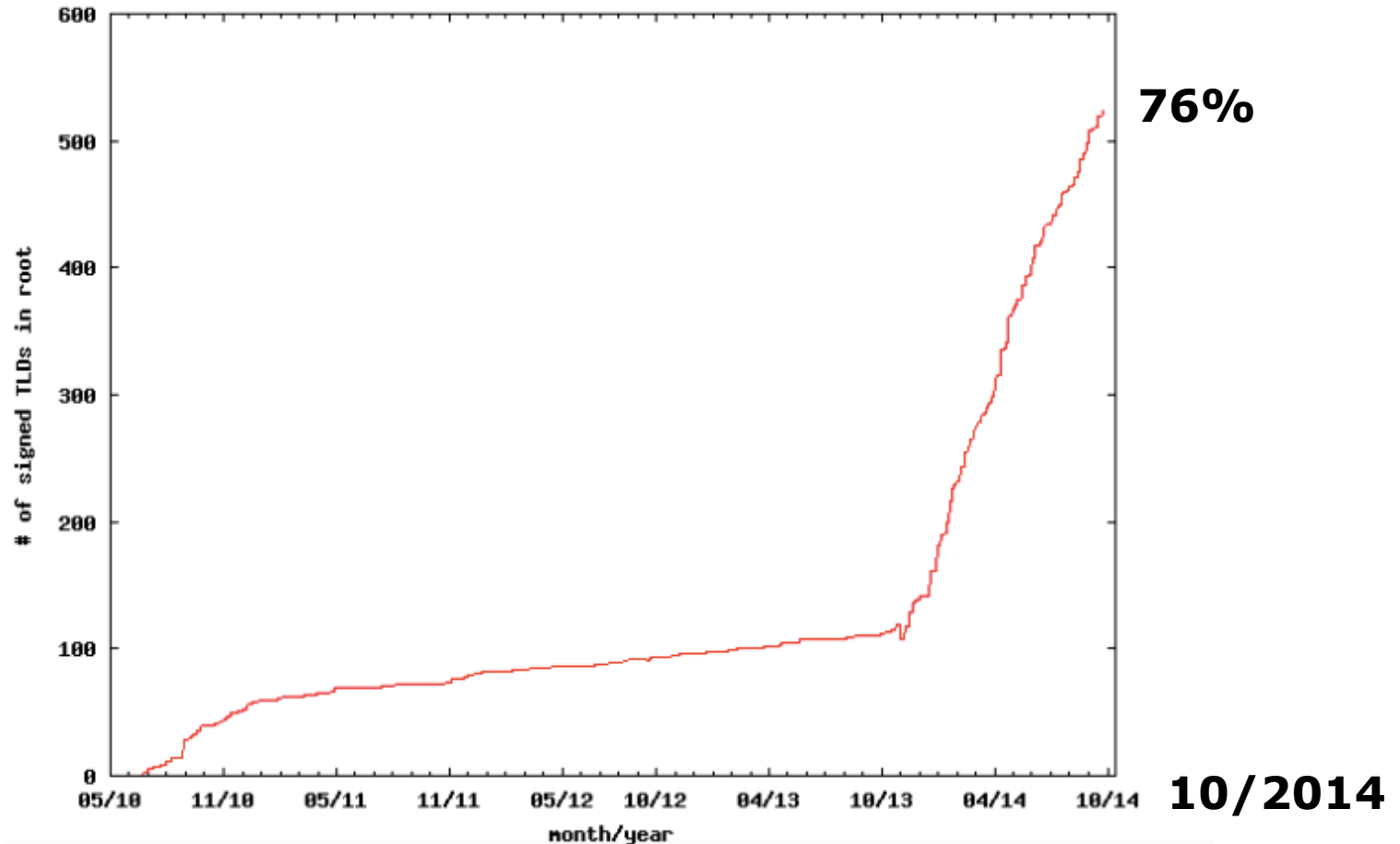
Disadvantages

- Reduces pressure on parent to get signed
- Reduces pressure on registrars to accept DS records
- Validator has to perform an additional query to the DLV when validating

Who Needs the DLV?

- Entities with signed zones under **unsigned parent zones** (i.e., signed 2nd level domains under unsigned parents)
- Entities that **Registrars that don't accept DS records.**
- Signed zones moving from one registrar to a new registrar may benefit from temporary coverage by DLV, esp if first registrar is uncooperative in the move

DNSSEC Deployed on 586 out of 771 TLDs



Registrar Support

- Registrar support for DS records is available but not universal
 - The 2013 ICANN Registrar Accreditation Agreement requires support
- Some DLV users will have to switch registrars, putting appropriate pressure on registrars to support DS records

Registrars that support end user DNSSEC management, including entry of DS records

<https://www.icann.org/resources/pages/deployment-2012-02-25-en>

Last updated: 15 December 2014

Updates to: dnssec@icann.org

Ready to Sunset DLV?

- ✓ Root signed
- ✓ TLDs signed (79%)
 - ✓ TLDs have trust anchors in root
- ✓ Registrars supporting DNSSEC validation records for child domains
 - ✓ Announcing sunset plan for DLV will encourage this
- Remaining gap with registrar transitions

1st Step = Clean Up the Zones

4568 zones configured

- 2867 fully configured/
working zones
 - only 397 are in an unsigned parent
- ~20% fully validate from the root
- Notify, and Remove unnecessarily delegated zones
- Stop adding new zones
- Eventually, remove all zones



Proposed timeline for shrinking the DLV zone list

Request owner remove the zone if:

1. If the zone already has DNSSEC records in the parent, and can be validated to the root outside of DLV.
2. The zone could be properly signed (i.e. all of the parent zones are signed up to the root), but for some reason isn't.

3. No more new registrations for zones that could validate outside of DLV

4. No new users or zones registered with DLV.

5. Existing zones that could be validated outside of DLV will be **purged** (~1 year notice)

6. Remaining DLV records will be **removed** (~1-2 yrs notice)

2015

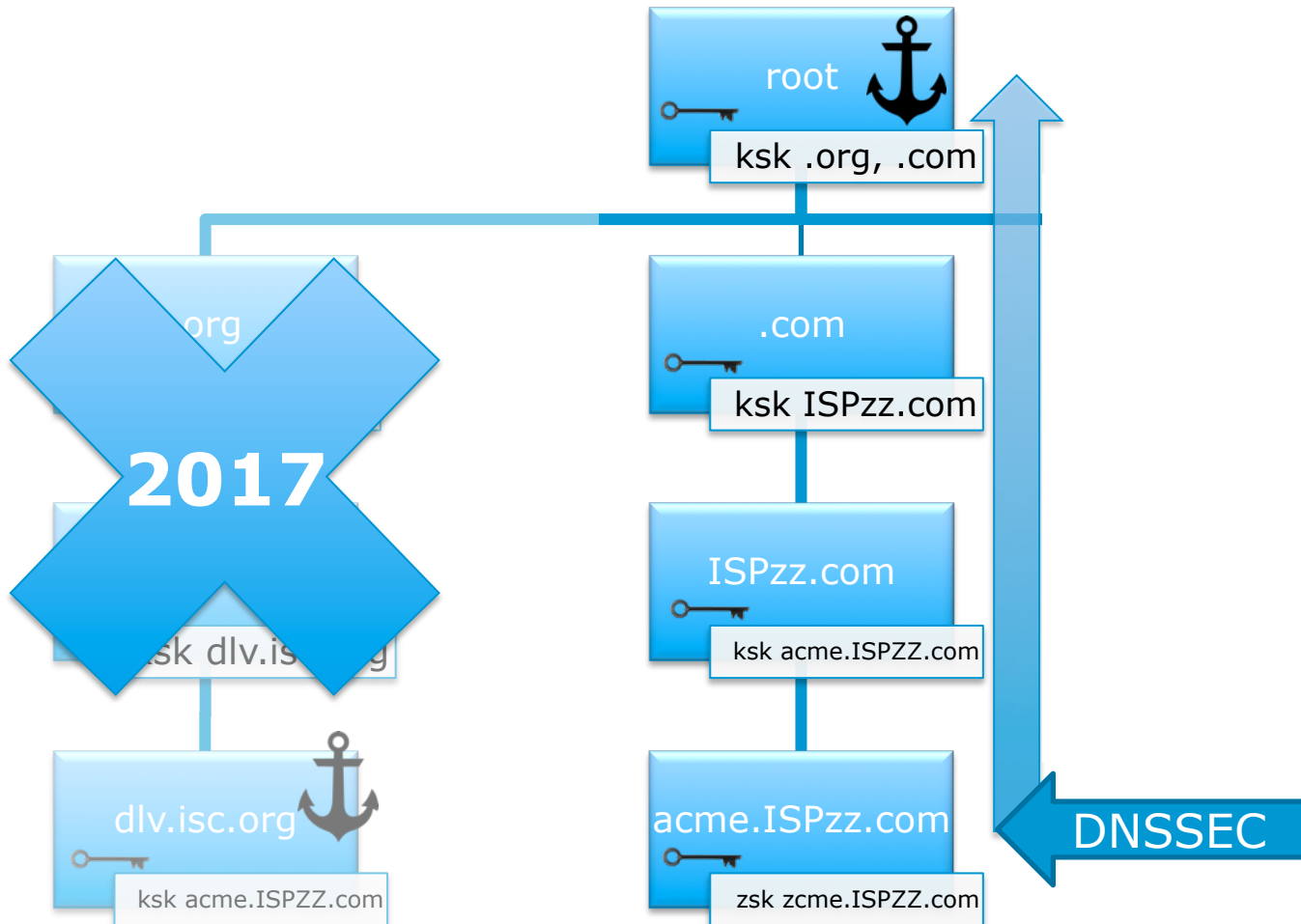
2016

2017

Communications Plan

- Discuss with participants at ICANN, DNS-OARC, RIPE, operator meetings
 - Email to DNS tech discussion lists
- Notify current DLV users
- Discuss with validating resolver publishers (incl OS packagers)

Goal: DNSSEC Validation





dlv@isc.org

Balaji.D