'Keyrelay'

15 July 2015

IETF-93, Prague

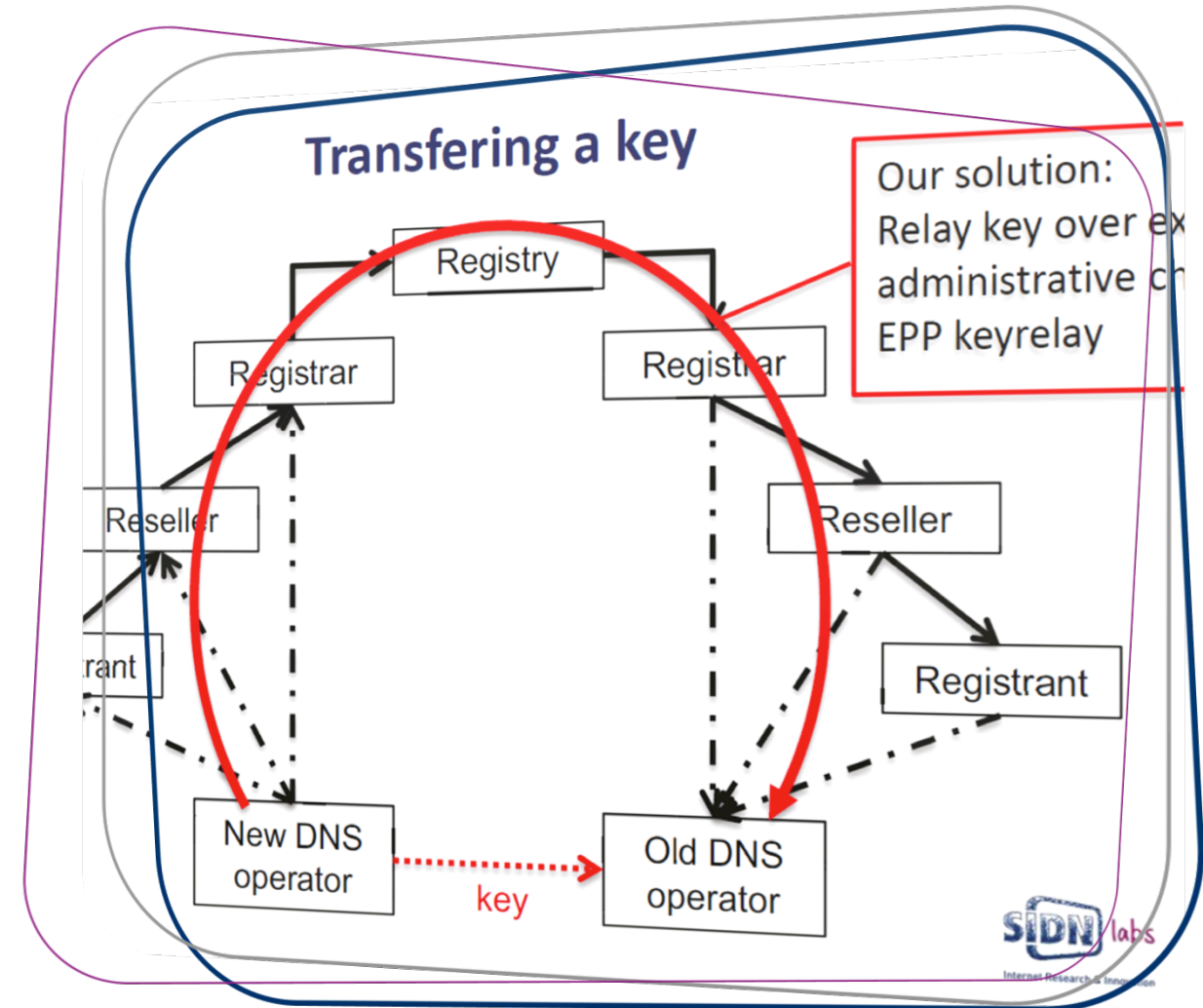## Rik Ribbers

Agenda

- Secure key transfer

- Transfers in .nl zone

- What has happened?
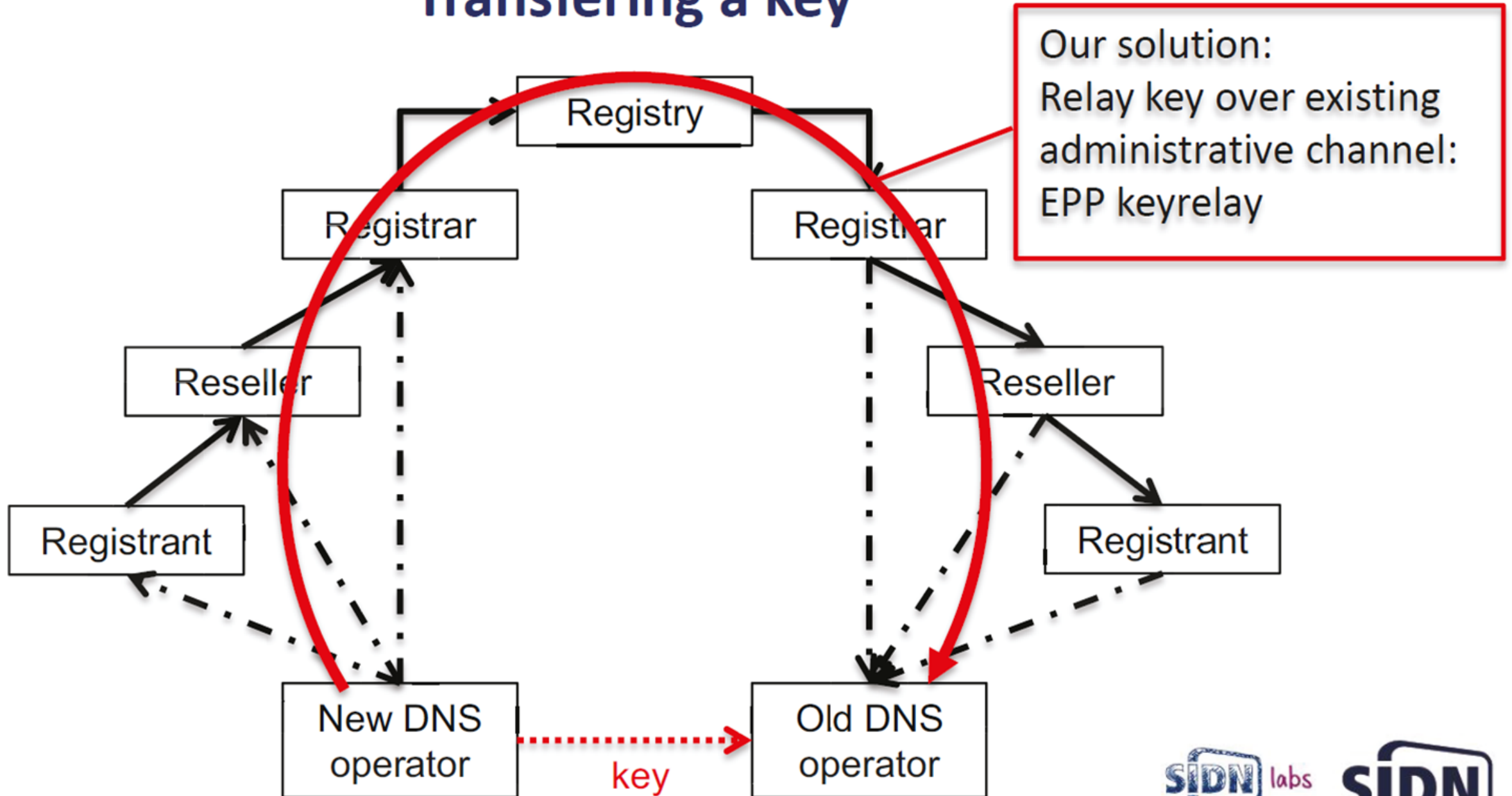
- What's next

SIDN

What is the problem we are trying to solve?

Change the DNS-operator of a domain while keeping the DNSSEC chain of trust intact

https://tools.ietf.org/html/draft-koch-dnsop-dnssec-operator-change-06

Transfering a key

Our solution:
Relay key over existing administrative channel:
EPP keyrelay
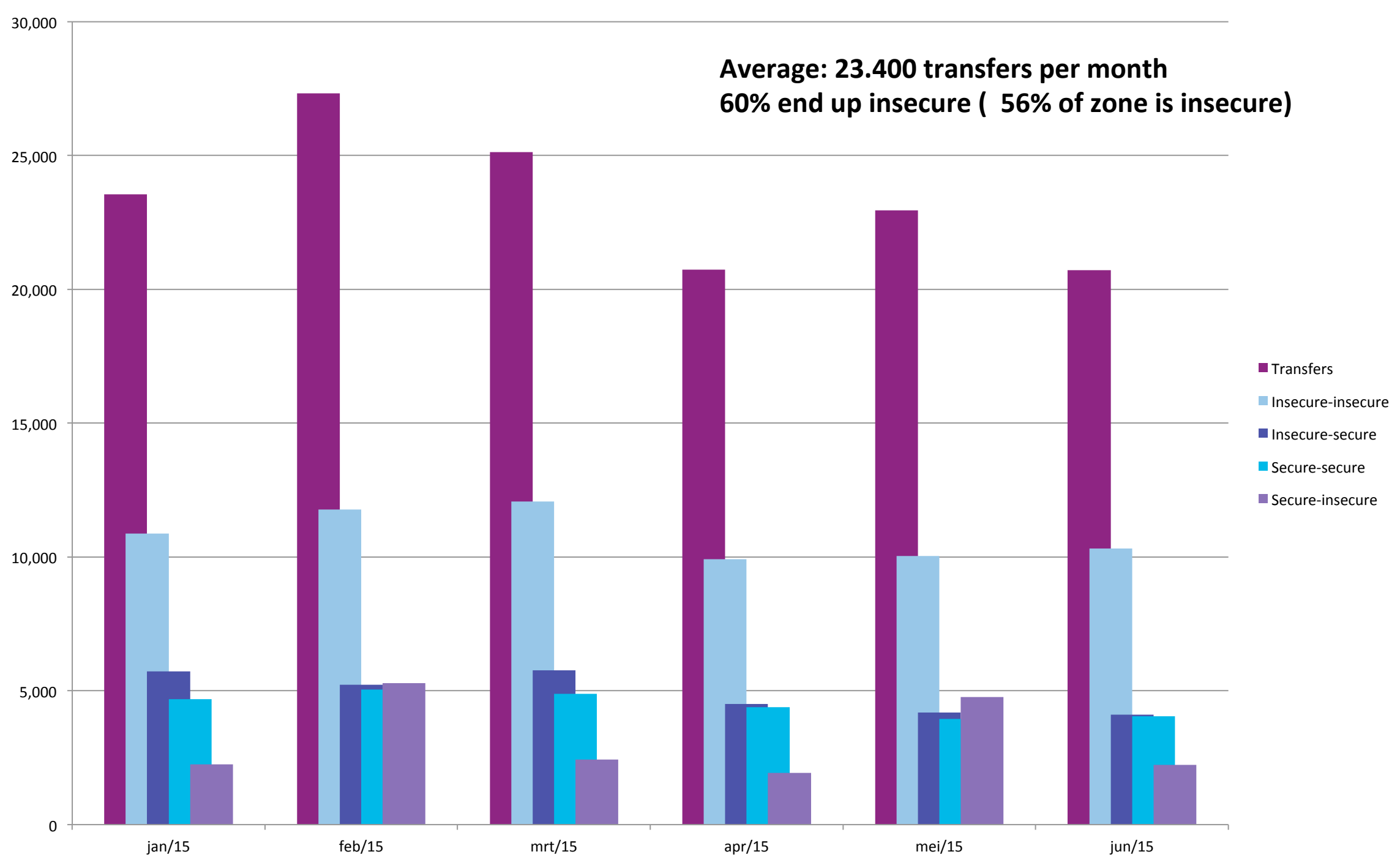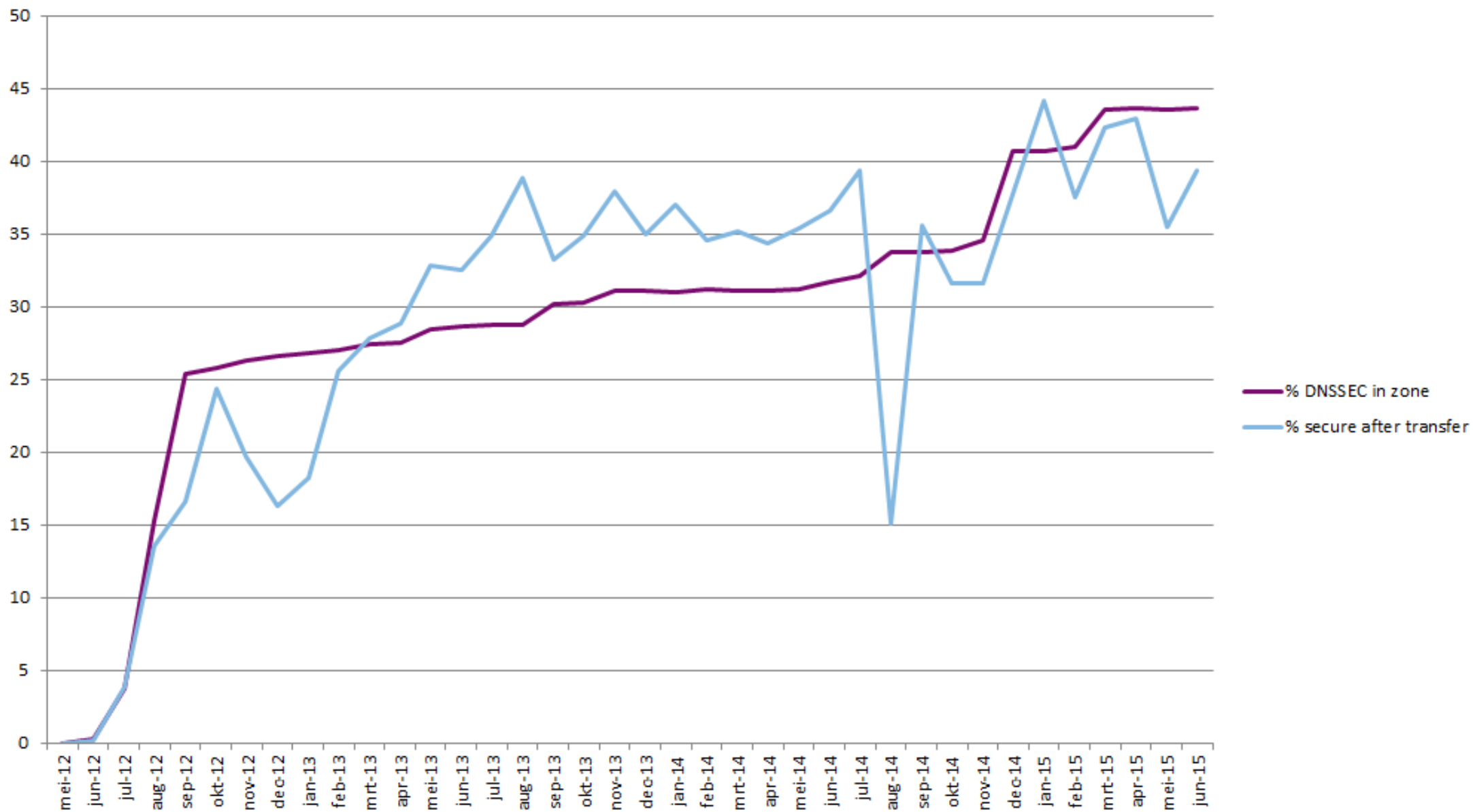
Transfers in .nl

- EPP Domain transfers

  - Change of Registrar

  - Change of DNS operator

  - Definitions:
    - insecure = no DNSSEC keys in SRS after/before a transfer
    - secure = DNSSEC keys in SRS after/before a transfer

SIDN

Average: 23.400 transfers per month
60% end up insecure (56% of zone is insecure)

Legend:
- Transfers
- Insecure-insecure
- Insecure-secure
- Secure-secure
- Secure-insecure

Months: jan/15, feb/15, mrt/15, apr/15, mei/15, jun/15

SIDN

Transfers in .nl

- ## Result are preliminary
  - Want to integrate with DNSSEC resolving (ENTRADA platform)
  - More in-depth analysis on how registrars handle DNSSEC key material
  - No validity check on DNSSEC keys
  - Add keyrelay usage to the picture

SIDN

What has happened with keyrelay I-D

- XML Structure discussion closed

- Review by Board of Registars .nl

- Introduced revoking and extending lifetime of DNSSEC key material

- Review by the WG: James Gould and Patrick Mevzek

SIDN

What's next

- Update our current implementation (planned for end of 2015)

- In .nl focus shifting from implementing DNSSEC towards DNSSEC resolving
      —> secure key transfer is needed.
      —> proper key management is needed.

- Ready for WG last call?

- Interest in a generic relay concept in EPP?

SIDN

Questions?

Thank you!

rik.ribbers@sidn.nl

SIDN