

DNSSEC Launch Day

TREX 17.5.2019

made
in
fi

DNSSEC

- Standard DNS queries and replies are unsecured and easy to intercept by third parties (man-in-the-middle)
- By intercepting and changing DNS replies, one can, for example, cause browser to open a wrong web-page with correct url at the address bar or re-route email traffic for eavesdropping
- Technique for protecting DNS queries and replies is DNSSEC
- DNSSEC = Domain Name System Security Extension

made
in
ofi

DNSSEC

> 2 prerequisites for implementing DNSSEC

1. Domain name must be DNSSEC signed

- Responsibility of domain name registrar or DNS provider
- Can be fully automatized with modern systems

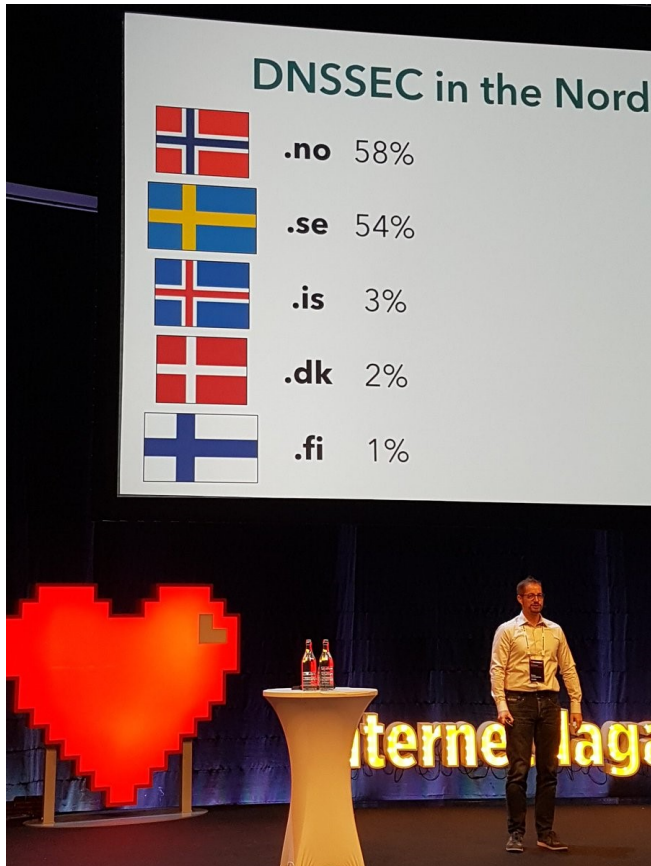
2. Resolvers must validate DNSSEC signatures

- Resolvers processes DNS requests by users
- If validation is turned on, resolver stops DNS replies reaching users if domain name is signed but signature is not correct
- Resolvers are typically provided by Internet Service Providers (ISPs) and it's their responsibility to turn validation on
- DNSSEC validation is a standard feature of modern DNS software

made
in
fi

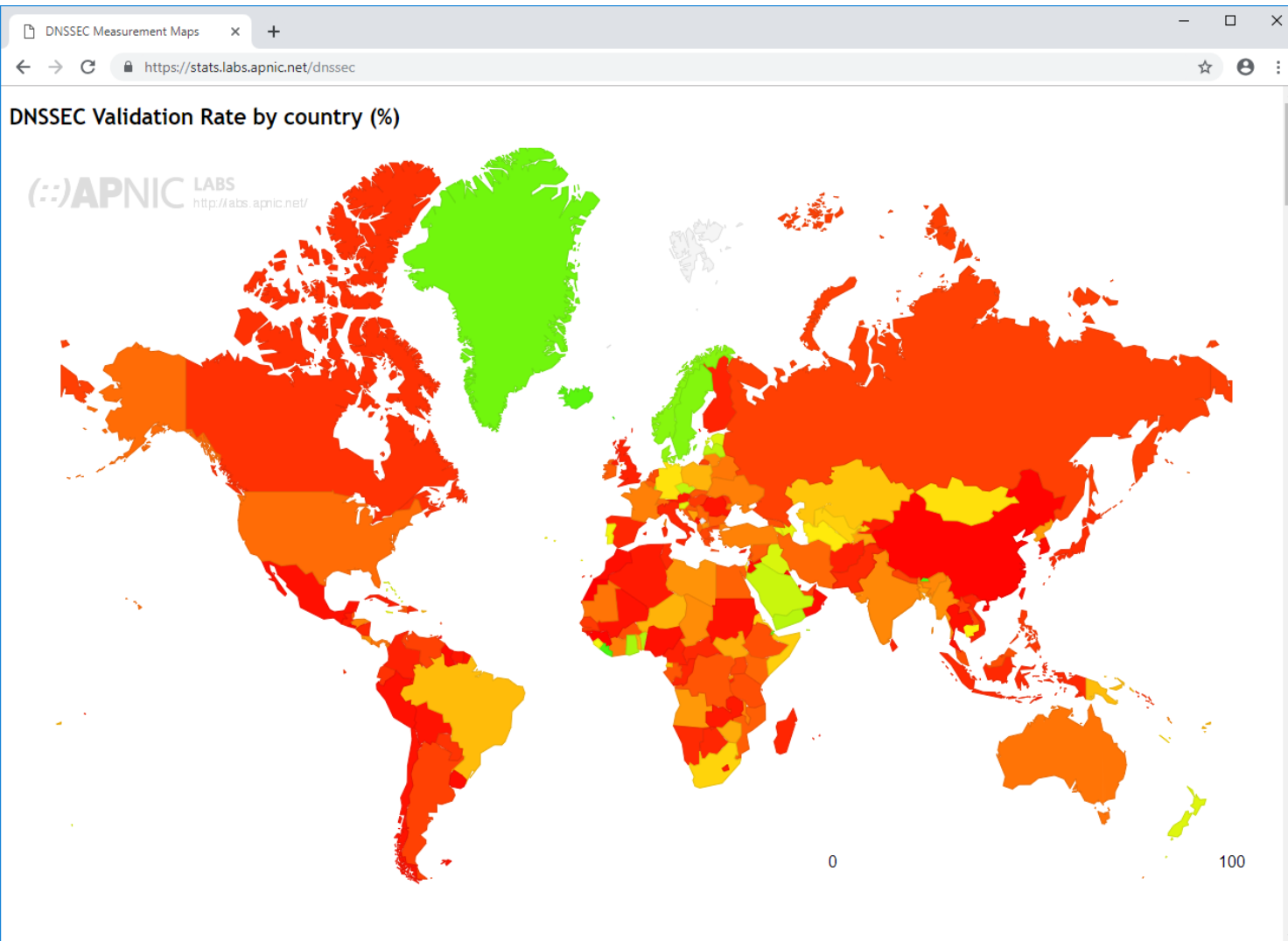
DNSSEC in Finland

- > 5 123 signed .fi domains ($\approx 1\%$)
 - > More than 70% signed by non-Finnish registrars
- > .no (58 %) and .se (54 %)



made
in
fi

DNSSEC in Finland



> Internet traffic going through validation:

- > **Finland: 7%**
- > Russia: 13%
- > Estonia: 58%
- > Denmark: 75%
- > Norway: 78%
- > Sweden: 78%
- > Egypt: 20%
- > South-Africa: 43%
- > Ghana: 70%

*made
in
fi*

DNSSEC – We should do something!

> **DNSSEC Launch Day**

- > A national common effort to boost DNSSEC implementation
- > Target group: domain name registrars, ISPs, companies running critical infrastructure or services
- > Information, advice, media visibility
- > Web-site for basic information about DNSSEC and a real-time list of participants and their efforts for supporting DNSSEC
- > Launch Day **September 5th**

made
in
fi

DNSSEC

Interested in more information:

Juhani.Juselius@traficom.fi



made
in
ofi

TRAFICOM

Liikenne- ja viestintävirasto

Thank you!

made
in
fi