

GOVERNMENTS ENABLED WITH IPv6

IPv6 Readiness & Public Administration in Europe

Zuzana Duračinská (CZ.NIC Association),
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Public administration in 21st century



- Demand for *e-services* in public administration
- Europe as a *competetive* player
- *Information technologies* in public services



CZ.NIC and IPv6

- *Trainings* for IPv6 implementation in our academy
- Publishing *blogs* posts IPv6 issues
- Published „free to download“ *book* on IPv6
- Co-organization of *IPv6 day* in Czech republic

How to reach the public sector?

What we've been looking for?



- Unique *research* on IPv6 deployment in *public administration* only
- Digital Agenda for Europe, action 89
- „Member States should make eGovernment services fully interoperable overcoming organisational, technical or semantic barriers and supporting IPv6.“



One methodology fits all

- Prepared methodology for collecting the data
- Comparing comparable

Only Governmental institutions are involved!

- Collection of data by GEN6 project partners

Data available from: Czech Republic, Germany, Greece, Luxembourg, the Netherlands, Slovenia, Slovakia, Spain and Turkey

IPv6 Government benchmarking



3 levels of government are involved:

National: ministries, legislative bodies, judicial authorities...

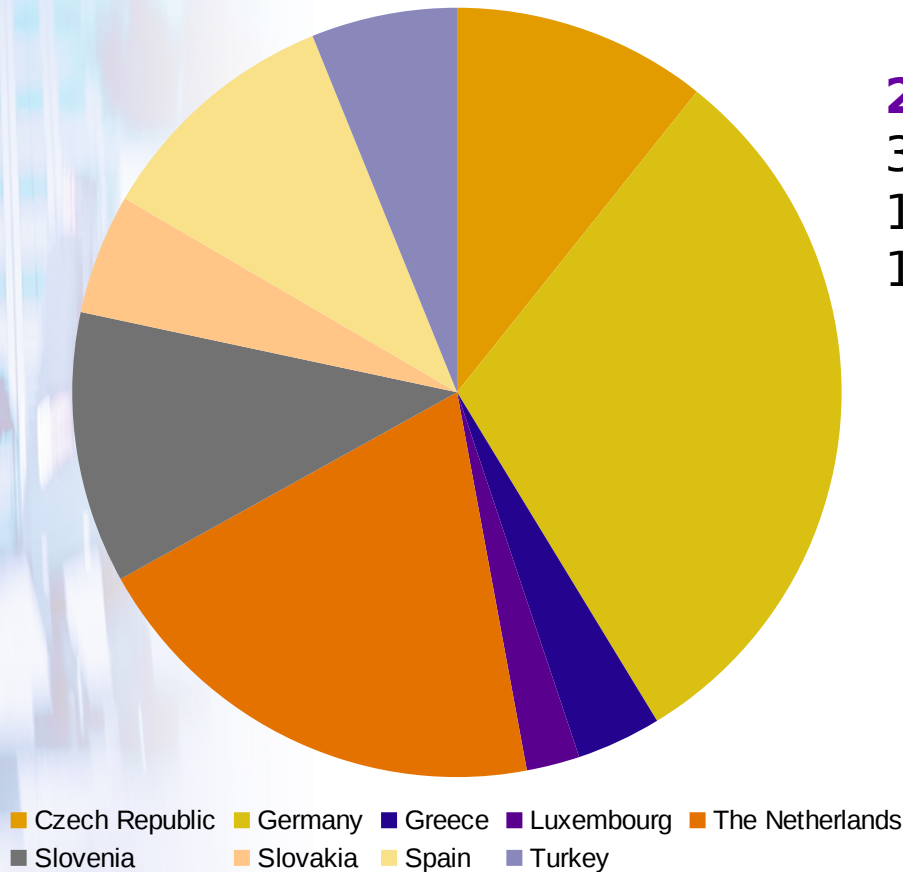
Regional: representatives of regions (only in some countries)

Local: largest cities in each country

IPv6 Government benchmarking



URLs according countries



2 332 websites analysed

347 national level

122 regional level

1863 local level

IPv6 Government benchmarking

<https://github.com/ULAKBIM/ipv6-smt>



- IPV6-SMT – IPv6 Services Monitoring Tool
- Tool monitors *http, dns and smtp* services

Are these services available over IPv6?

- IPV6-SMT queries a given list of domain and check for AAAA records

Government benchmarking: Czech republic:

<https://devpub.labs.nic.cz/ipv6-smt-new/country/>



Data for 07-10-2013				
Name	Domain	WWW	NS	MX
Select another date from archives:		<input type="text" value="<- Select Date ->"/>		
Národní úroveň				
Prezident	hrad.cz		2/2/2	0/0/4
Vláda ČR	vlada.cz	✓ IPv6	3/3/3	0/0/2
Poslanecká sněmovna Parlamentu ČR	psp.cz		0/0/2	0/0/2
Senát	senat.cz		0/0/2	0/0/1
Ministerstvo dopravy	mdcr.cz	✓ IPv6	0/0/3	5/5/5
Ministerstvo financí	mfcr.cz	✓ IPv6	3/3/3	2/2/2
Ministerstvo kultury	mkcr.cz		2/2/3	0/0/2
Ministerstvo obrany	army.cz		0/0/3	0/0/2
Ministerstvo práce a sociálních věcí	mpsv.cz	✓ IPv6	2/2/3	4/4/4
Ministerstvo pro místní rozvoj	mmr.cz		0/0/2	0/0/2

Government benchmarking: Czech republic:

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Service	Legend	Description
WWW	✓ IPv6	Web server fully supports IPv6
		Web server has IPv6 address, but HTTP request over IPv6 is NOT successful.
		Web server has NO IPv6 address yet.
NS MX	2/2/2	2 NS (MX) requests over IPv6 are successful / 2 NS (MX) has been assigned IPv6 addresses / There are 2 NS (MX)
	1/2/3	1 NS (MX) requests over IPv6 are successful / 2 NS (MX) has been assigned IPv6 addresses / There are 3 NS (MX)
	0/1/2	0 NS (MX) requests over IPv6 are successful / 1 NS (MX) has been assigned IPv6 addresses / There are 2 NS (MX)

- Results**

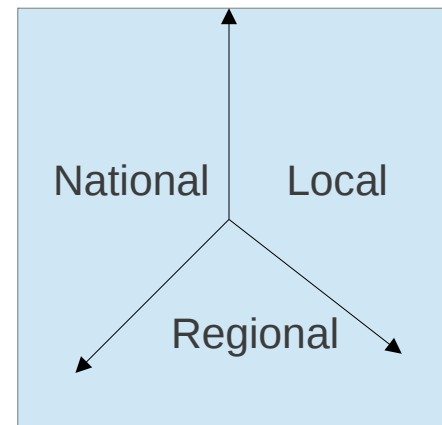
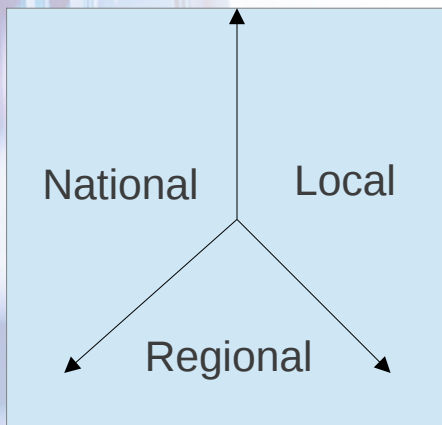
Total: 250	179	126	223
	3	75	14
	68	49	13

IPv6: Government benchmarking



Provided results:

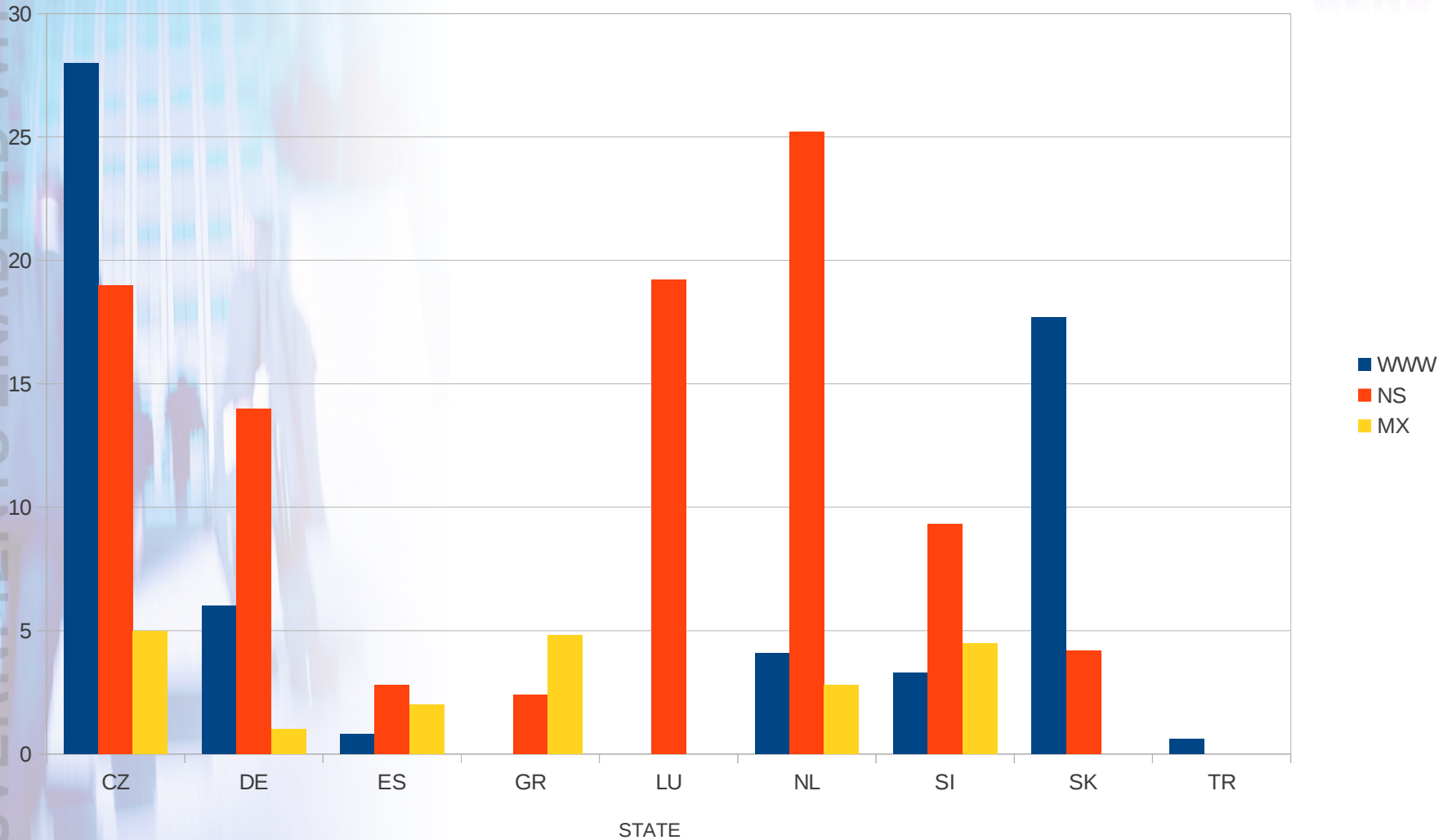
- Possible to make comparison **within the state itself**
- Possible to **compare the states**





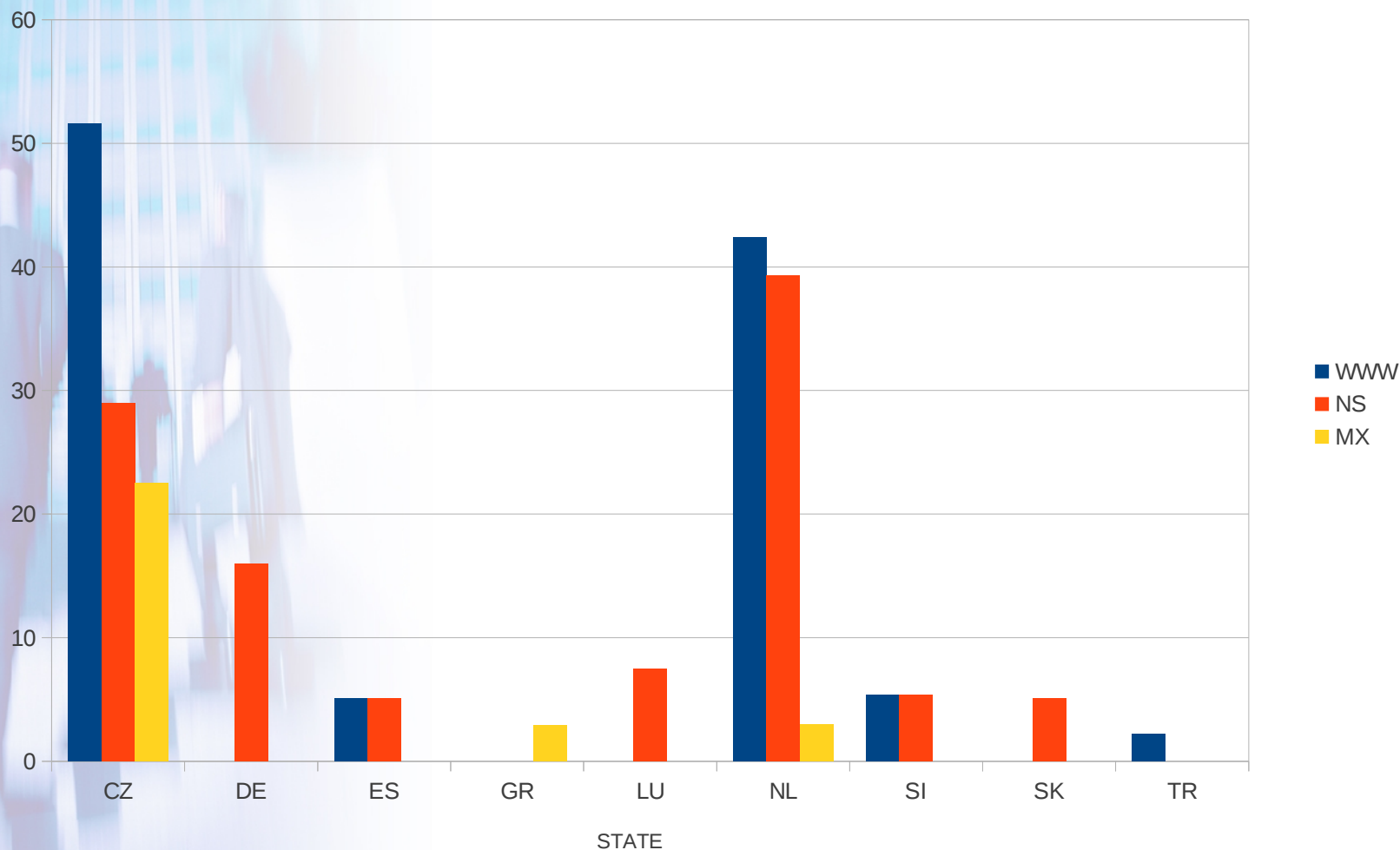
IPv6 in public administration

<https://devpub.labs.nic.cz/ipv6-smt-new/country/>



IPv6 in public administration: NATIONAL LEVEL

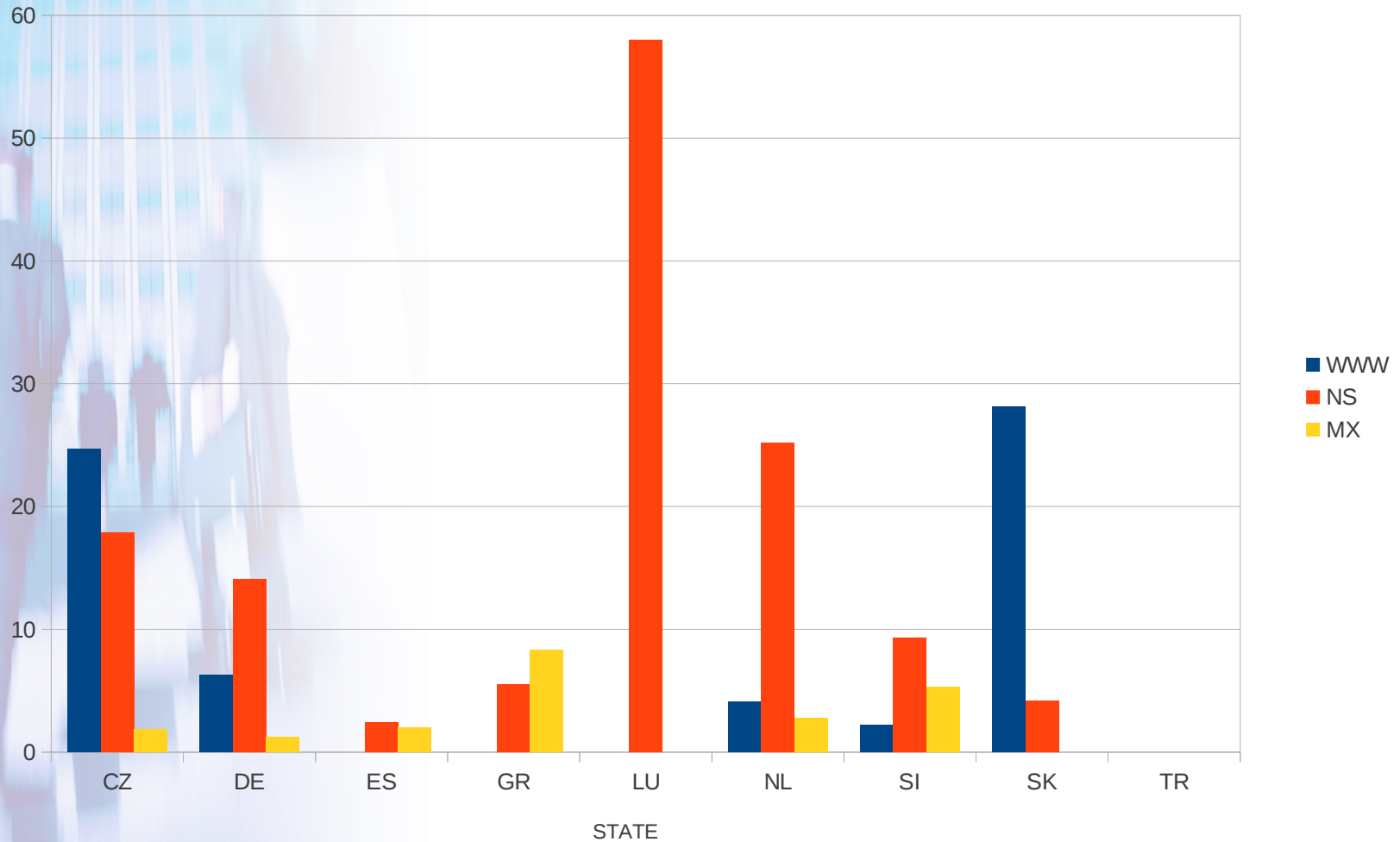
<https://devpub.labs.nic.cz/ipv6-smt-new/country/>





IPv6 in public administration: LOCAL LEVEL

<https://devpub.labs.nic.cz/ipv6-smt-new/country/>



IPv6: Czech republic

Legislation has a power to support IPv6 deployment

- government resolution from 08/06/2009
(it is recommended for regional and local institution)

NATIONAL LEVEL	WWW	NS	MX
16/01/2013	16,6%	16,6%	3,2%
07/10/2013	51,6%	29%	22,5%

IPv6: Czech republic



Involvement of IPv6 criterion in various „**the best website**“ competitions

LOCAL LEVEL	WWW	NS	MX
16/01/2013	7,7%	16,5%	0,4%
07/10/2013	24,7%	17,9%	1,9%

PUBLIC SERVICES

METHODOLOGY

DATA COLLECTION

REGULAR CHECK-UPS

???



- Do research
 - Collaborate
 - Network
- Keep learning
 - Ask for help
- Question everything



Thank you for your attention:)

zuzana.duracinska@nic.cz

CZ.NIC