Croatian Web portals: from obscurity to maturity

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Introduction

- Web portals among the most popular type of Web sites in Croatia (according to Gemius ratings)
- From simple Web pages to very complex software structures
- The Croatian Web Archive – central point in Croatia for research of Web site development (for .hr domain)
- Research problem: tracking and understanding development of Web portals over time – growth in content and complexity of implemented Web technologies + design changes

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The Croatian Web Archive

- Established as full service in 2004 in collaboration with the University of Zagreb University Computing Centre (Srce)
- Based on the concept of selective capturing of Web resources up to 2011 - by use of home made crawler called DAMP
- From 2011 harvesting of the Croatian Internet domain (.hr) was done annually .hr + building thematic collection (10 collections) - by use of HERITRIX
- Online access to the Web archive publicly available

15 YEARS HAW Hrvatski arhiv weba / Croatian Web Archive

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Analysis of the Croatian Web portals

- Steps in the analysis:
  - Select **10 most popular / most visited Web portals in Croatia** (Gemius ratings)
  - Retrieve **two archived copies per year of portals from the Croatian Web Archive**
  - Test the archived copies of Web portals in Croatia against a group of parameters:
    - **Size in the archive** (of the whole portal) **and on client / user side** at the level of the starting page of a Web portal
    - **Loading time** (starting page)
    - **Size of content by types: HTML, CSS, JS and Images** (starting page)
    - **Type of a portal** (mostly news portals)
    - **Correct and complete copies of Web portals in the Croatian Web Archive**
    - Design changes in Web portals
  - Drawing the conclusion about changes made in the last 15 years (or less if the portal was not archived for such a long period of time)

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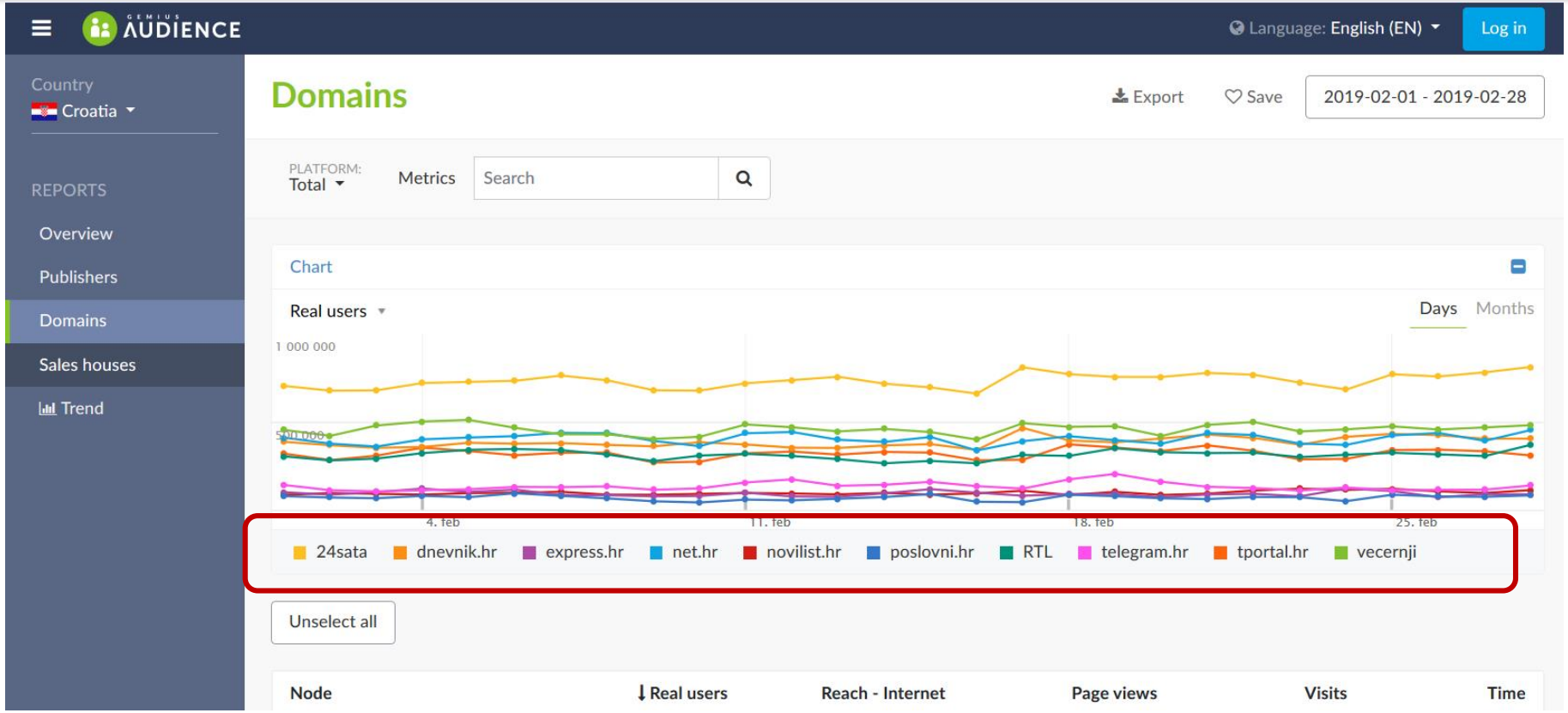
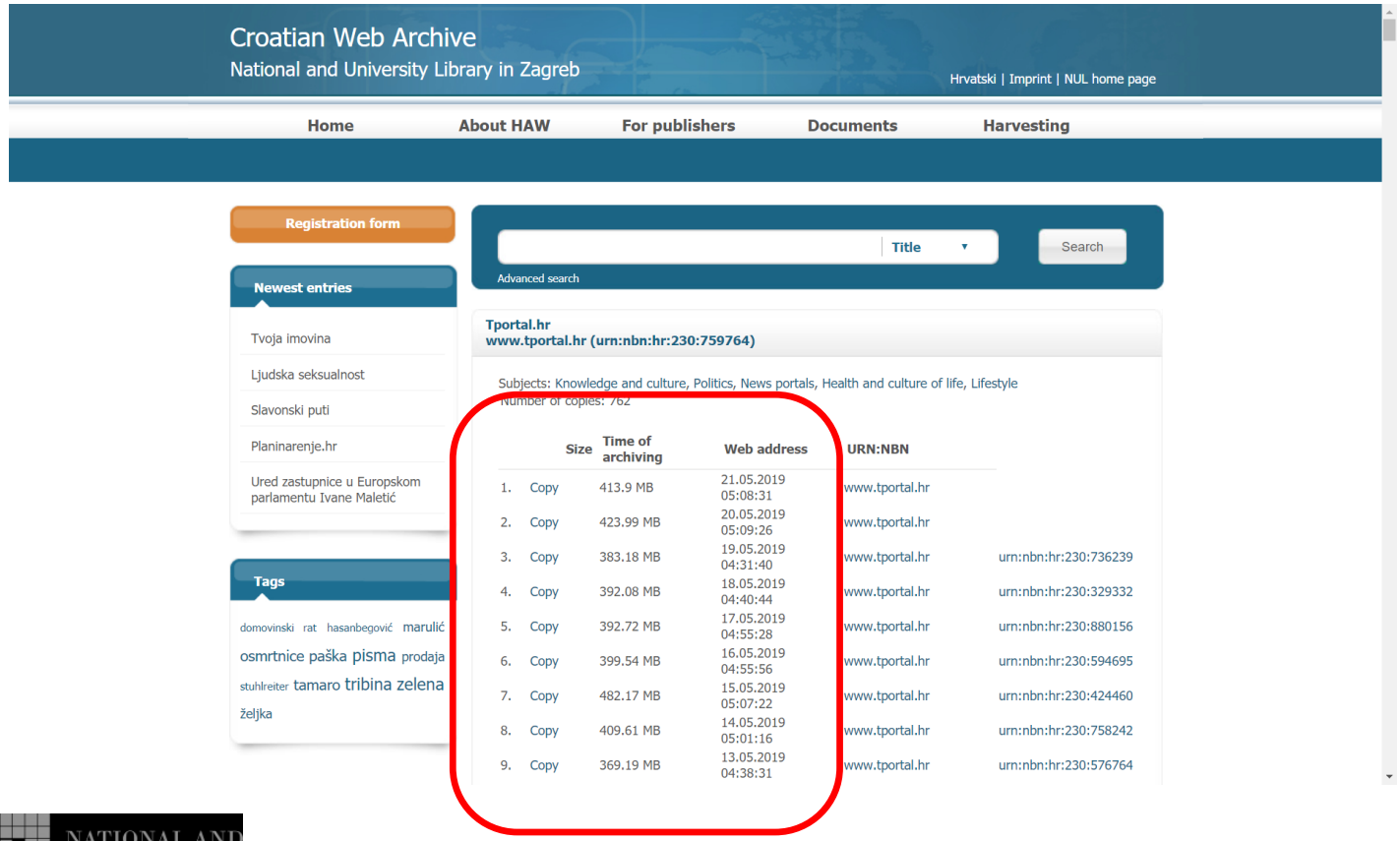
Analysis


AUDIENCE
Language: English (EN)
Log in
Country
Croatia
REPORTS
Overview
Publishers
Domains
Sales houses
Trend
Domains
Export
Save
2019-02-01 - 2019-02-28
PLATFORM:
Total
Metrics
Search
Chart
Real users
Days
Months
1 000 000
500 000
4. feb
11. feb
18. feb
25. feb
24sata
dnevnik.hr
express.hr
net.hr
novilist.hr
poslovni.hr
RTL
telegram.hr
tportal.hr
vecernji
Unselect all
Node
Real users
Reach - Internet
Page views
Visits
Time

Analysis



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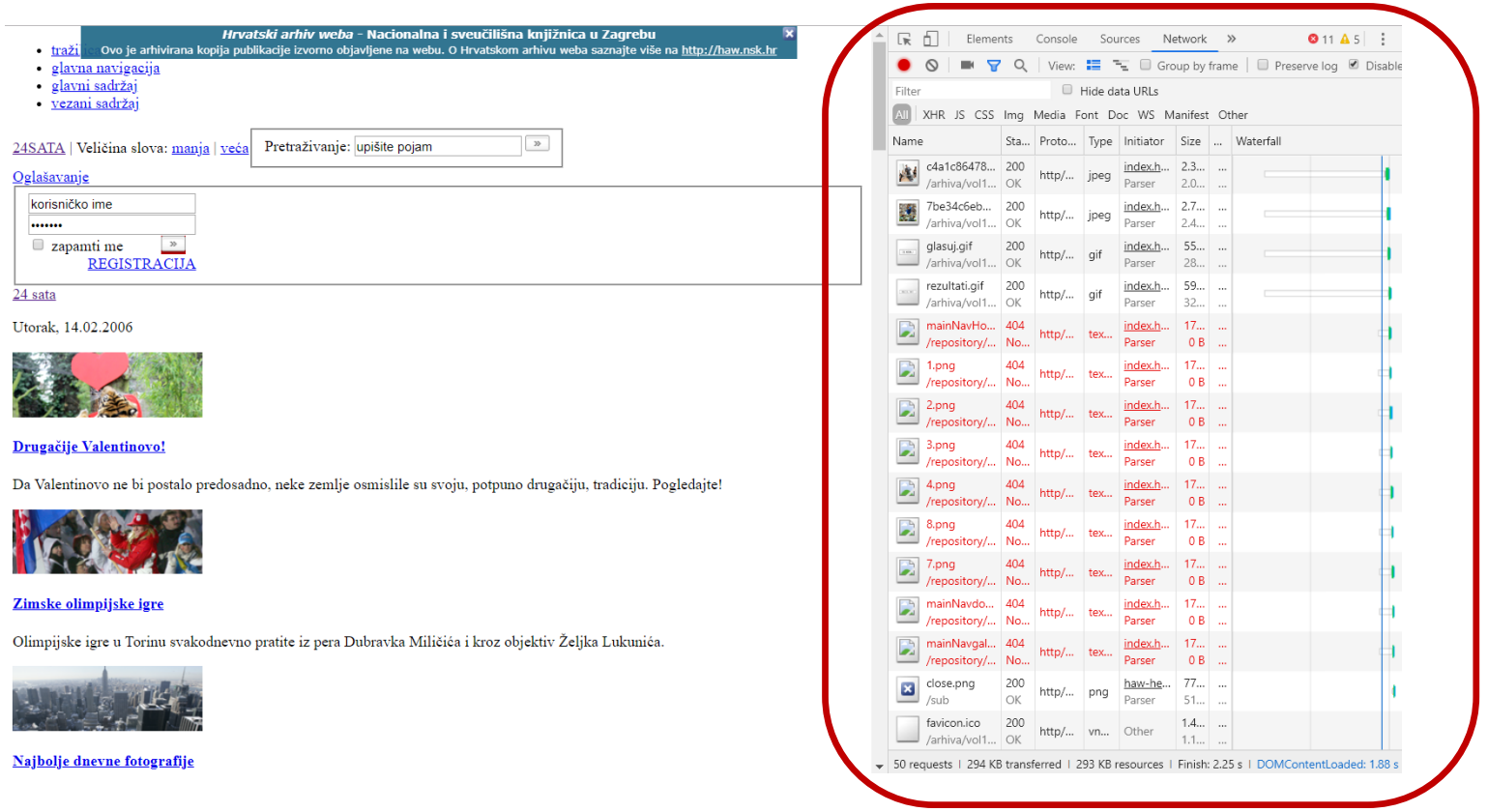
Analysis



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Analysis

- Software used for preparation and analysis
  - Software used in the Croatian Web archive custom made by the University computing centre in Zagreb, Croatia
    - Selection of the archived versions of portals
  - Software used on the client / user side: Google chrome Web browser
    - Developer tools – simple yet powerful
- All other software discarded due to insufficient functions for the harvested Web site analysis

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Results

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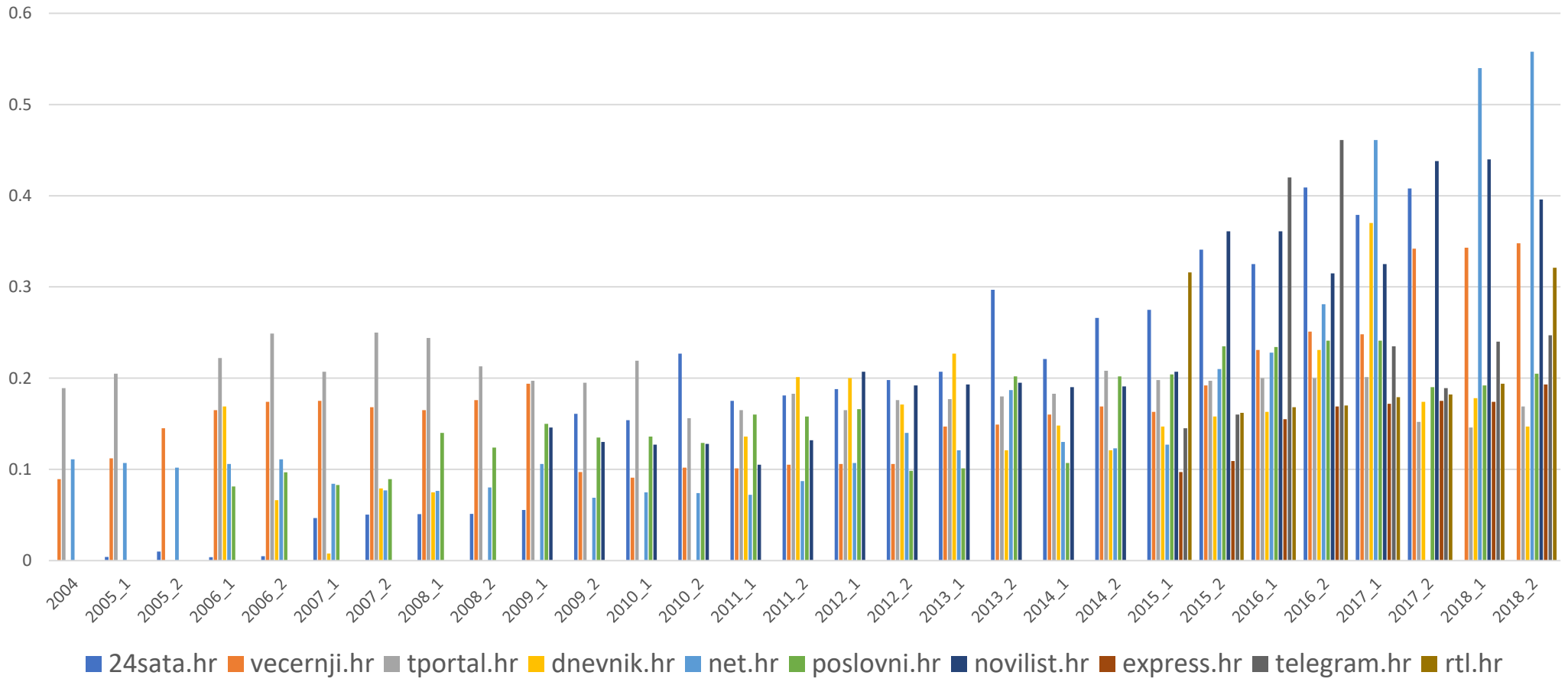
Web content - HTML (in MB)



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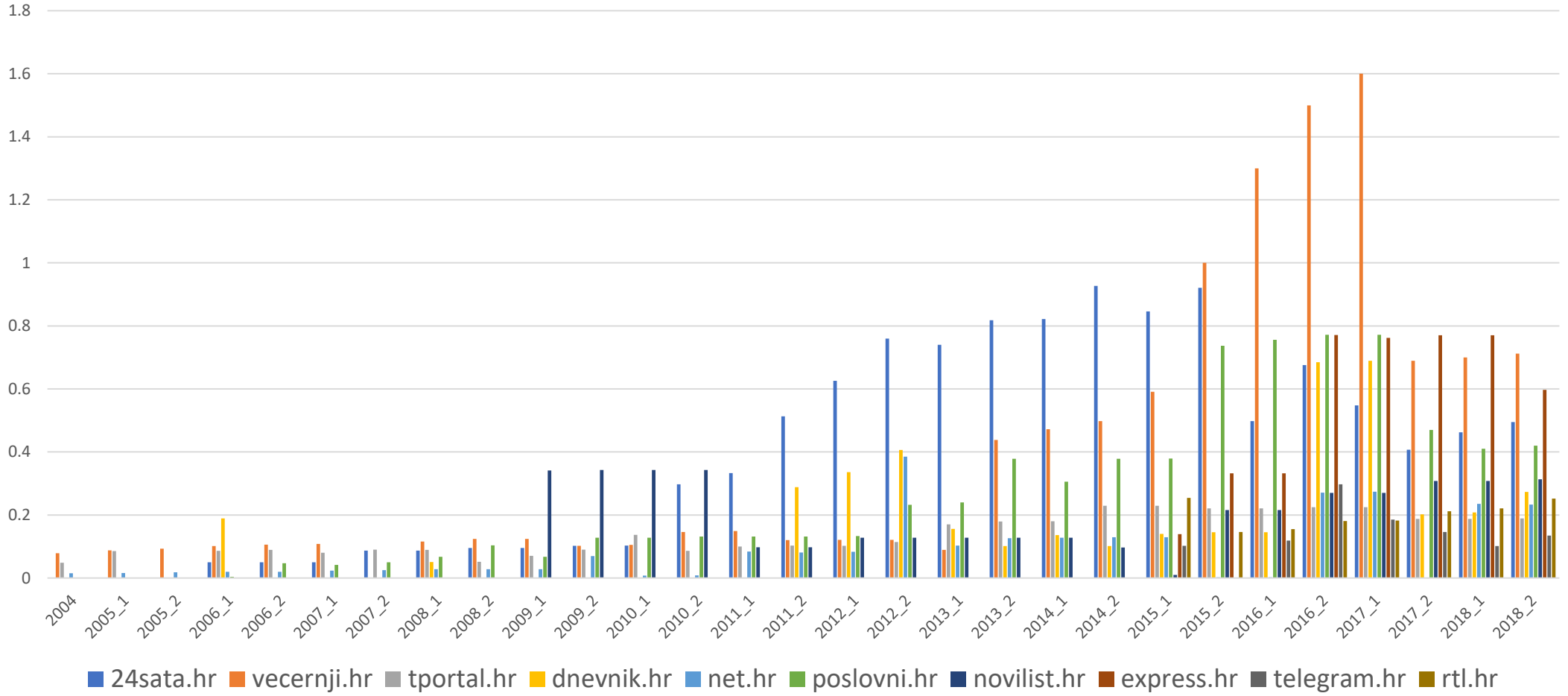
Web content - CSS (in MB)



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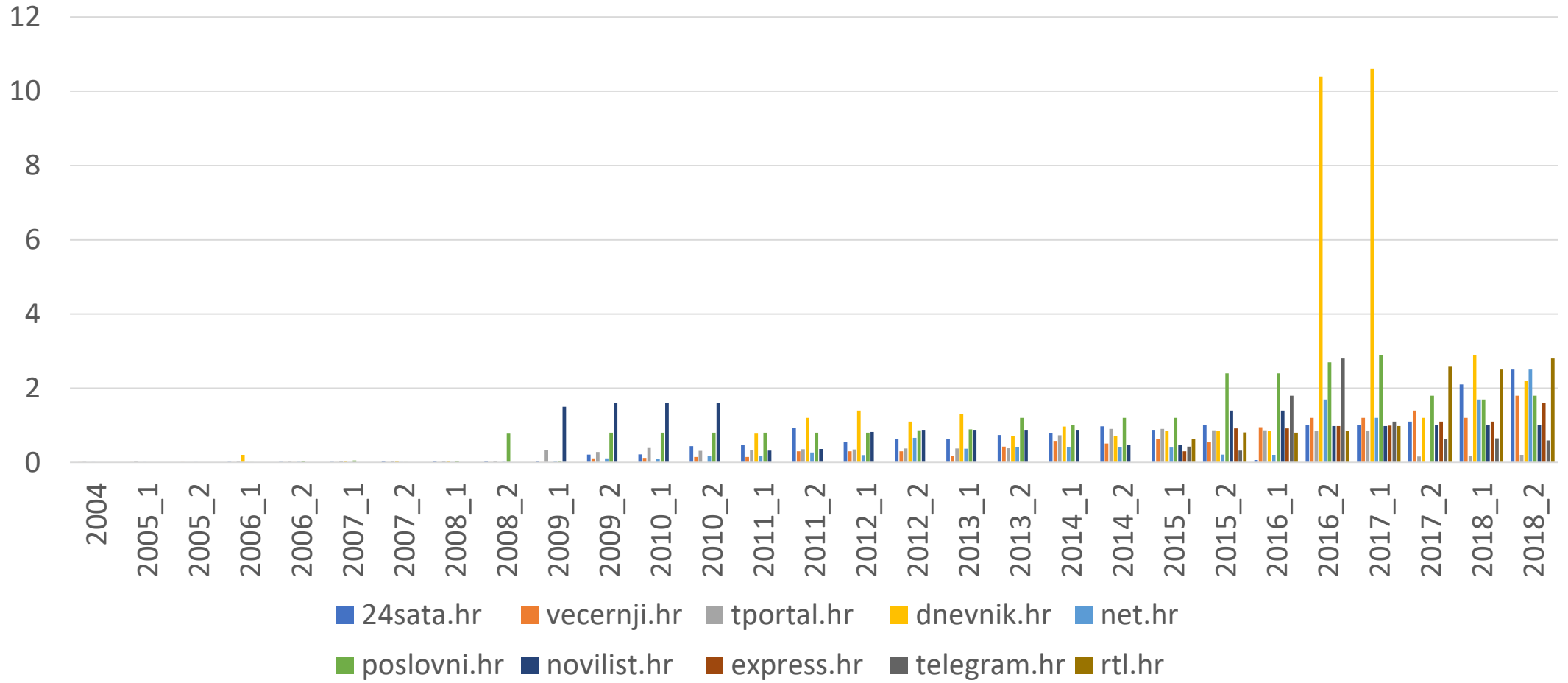
Web content - JS (in MB)



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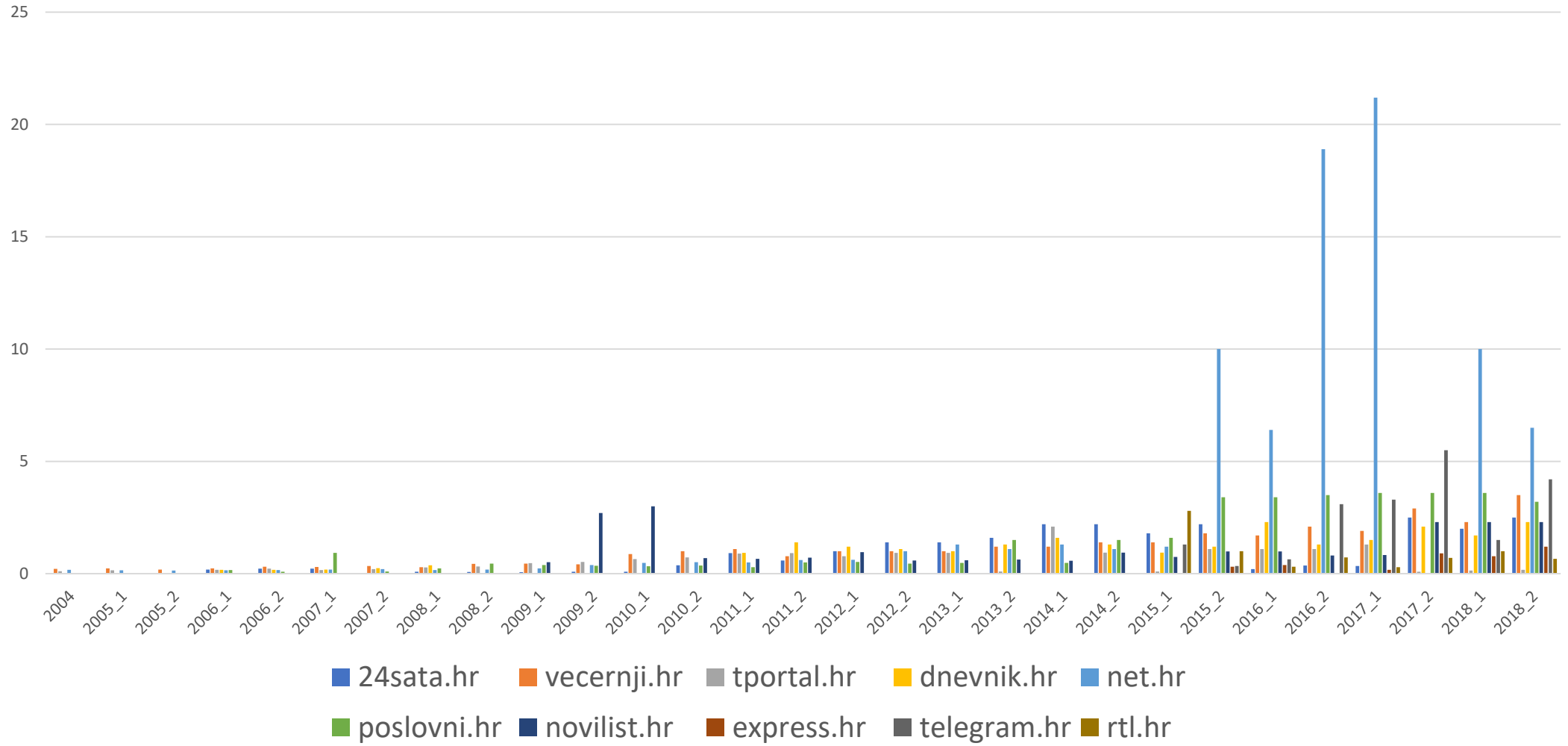
Web content - images (in MB)



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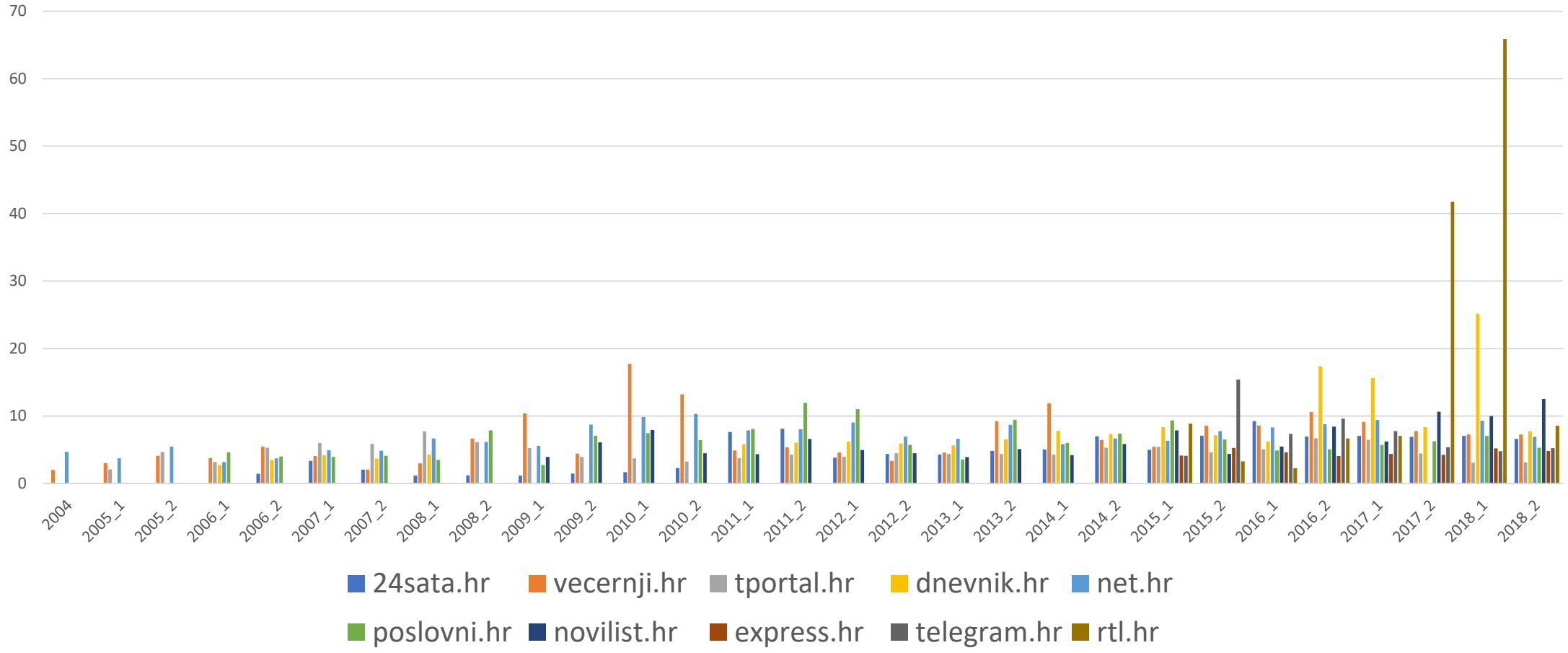
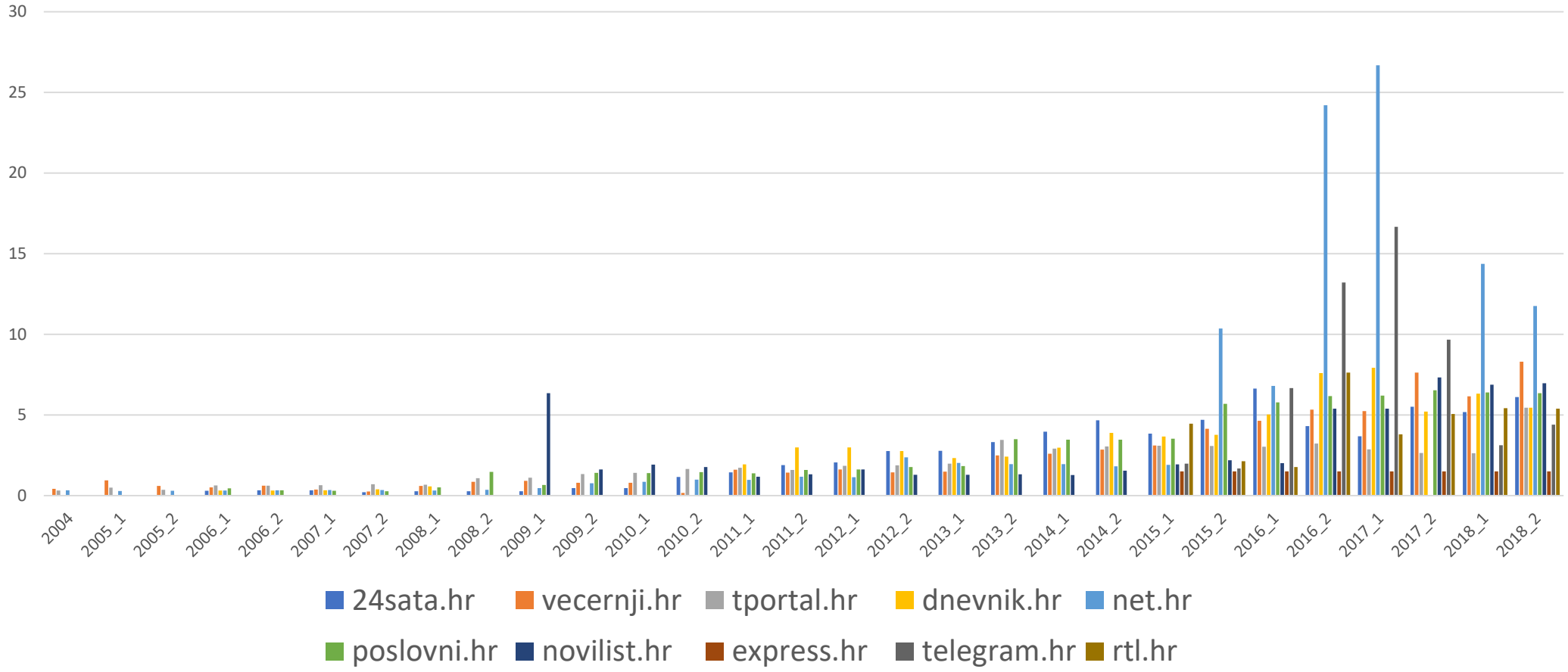
Web page loading time (in seconds)



Disk usage – client / user side (in MB)



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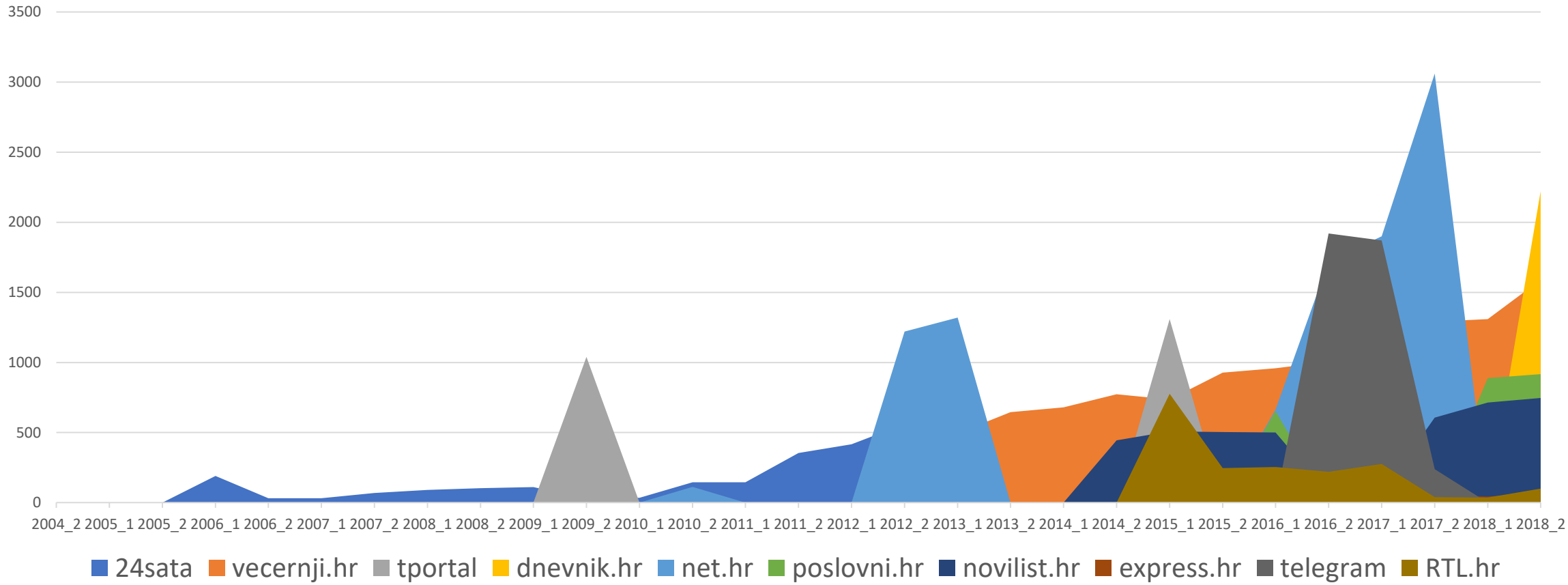
Disk usage - complete copy of a Web portal at admin side (in MB)



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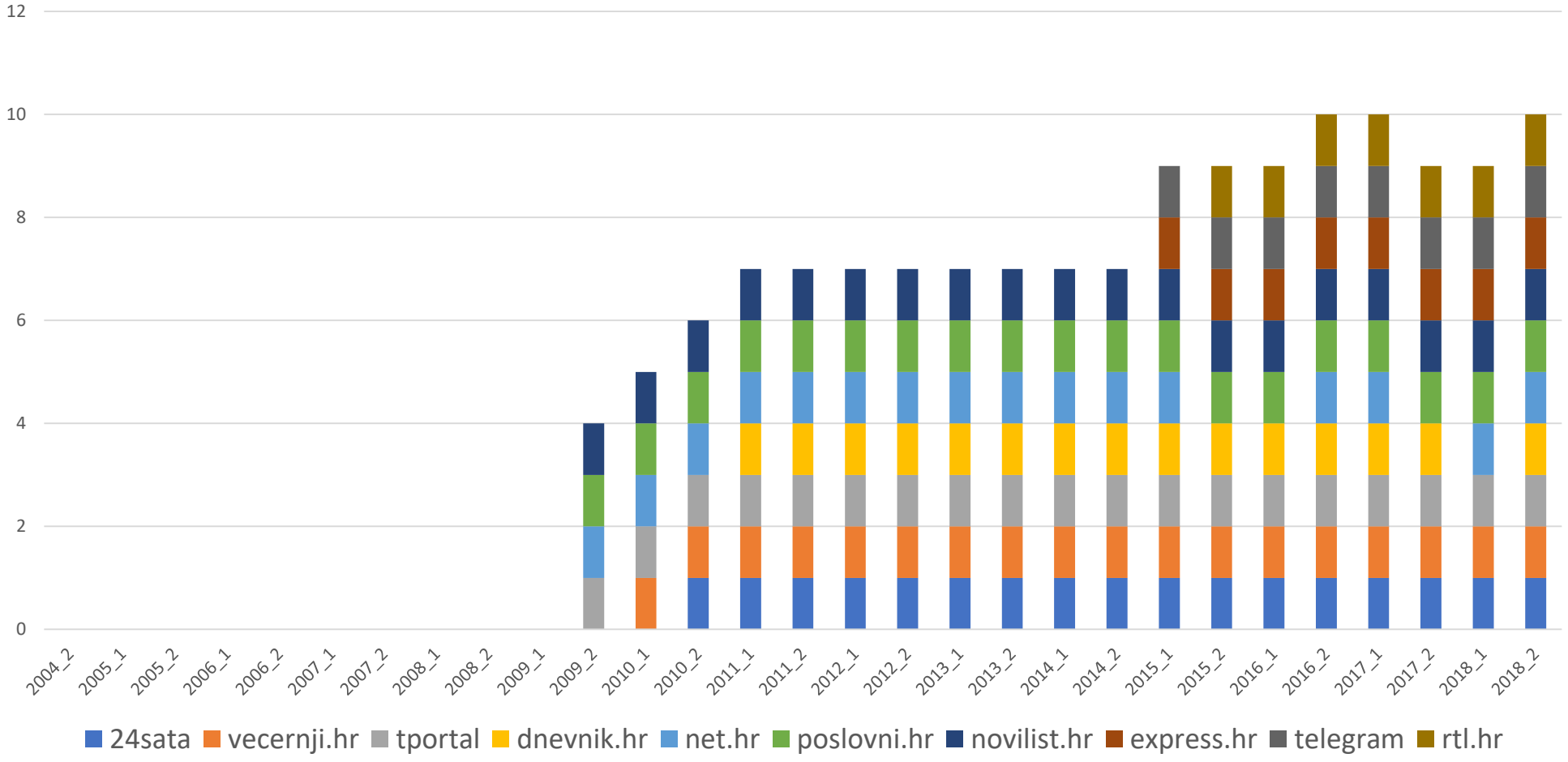
Social networks links on Web portals



Design, title and URL change

	24sata	vecernji.hr	tportal	dnevnik.hr	net.hr	poslovni.hr	novilist.hr	express.hr	telegram	rtl.hr
2006_1					new design, title change, URL change					
2008_2			new design, title change, URL change			new design				
2009_1		new design				title change				
2009_2		title change	new design							
2010_1	new design									
2010_2	new design		new design							
2011_1				new design			new design			
2011_2										
2012_1					new design					
2012_2						new design, title change				
2013_1		new design								
2015_1			new design							
2015_2										new design
2016_1	new design									
2016_2					new design					
2017_1		new design		new design						
2017_2			new design							

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Conclusion

- Web portals constantly adopting new tehcnologies
- Growth in size of important elements of the Croatian Web portals
- Design changes to adapt to new types of devices
- Challenge: optimal design, size and technologies

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Thank you!