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Domain Name Take Down and
Blocking Trends in the Baltics
What's "blocking"?

Excerpts from "Online censorship and its security impact", 05.10.2017.



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Censorship Blocking Filtering



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Control of information that is considered undesirable

censorship = filtering = blocking

The goal of a censor is to disrupt free flow of information

stop the publication of information,

prevent access to information (e.g. by disrupting the link between the user and the publisher),

to directly prevent users from accessing information.



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Motivation



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politics and power
social norms and morals
security
economic interests
business goals
enforcement



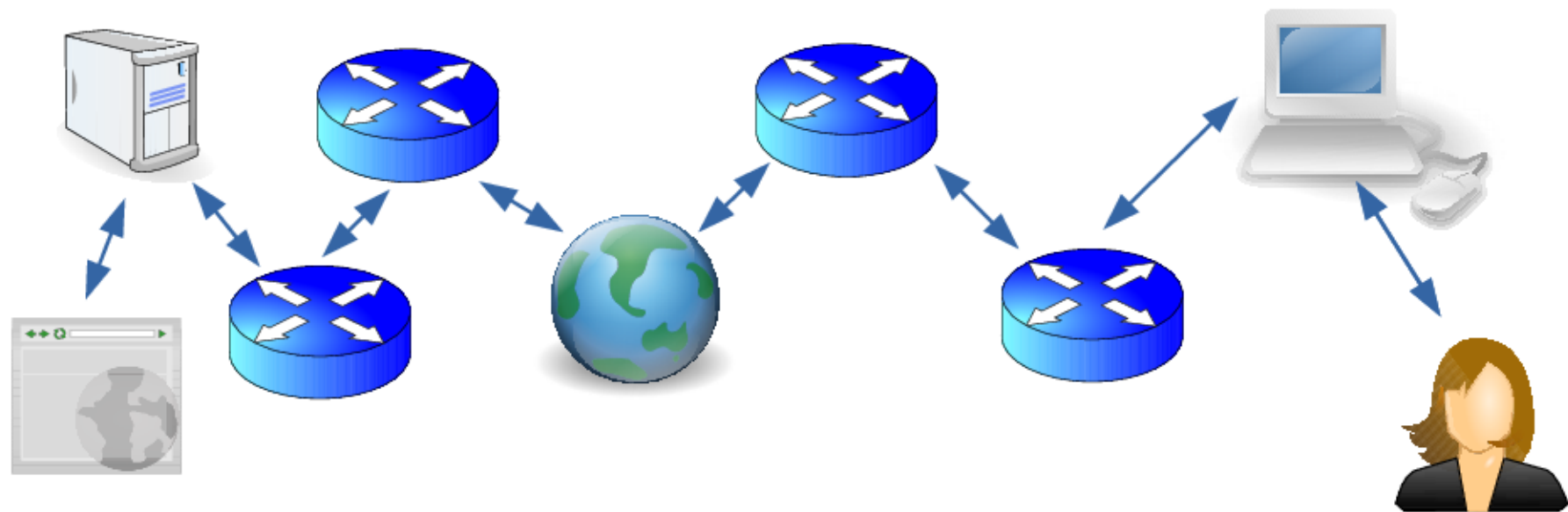
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Point of blocking



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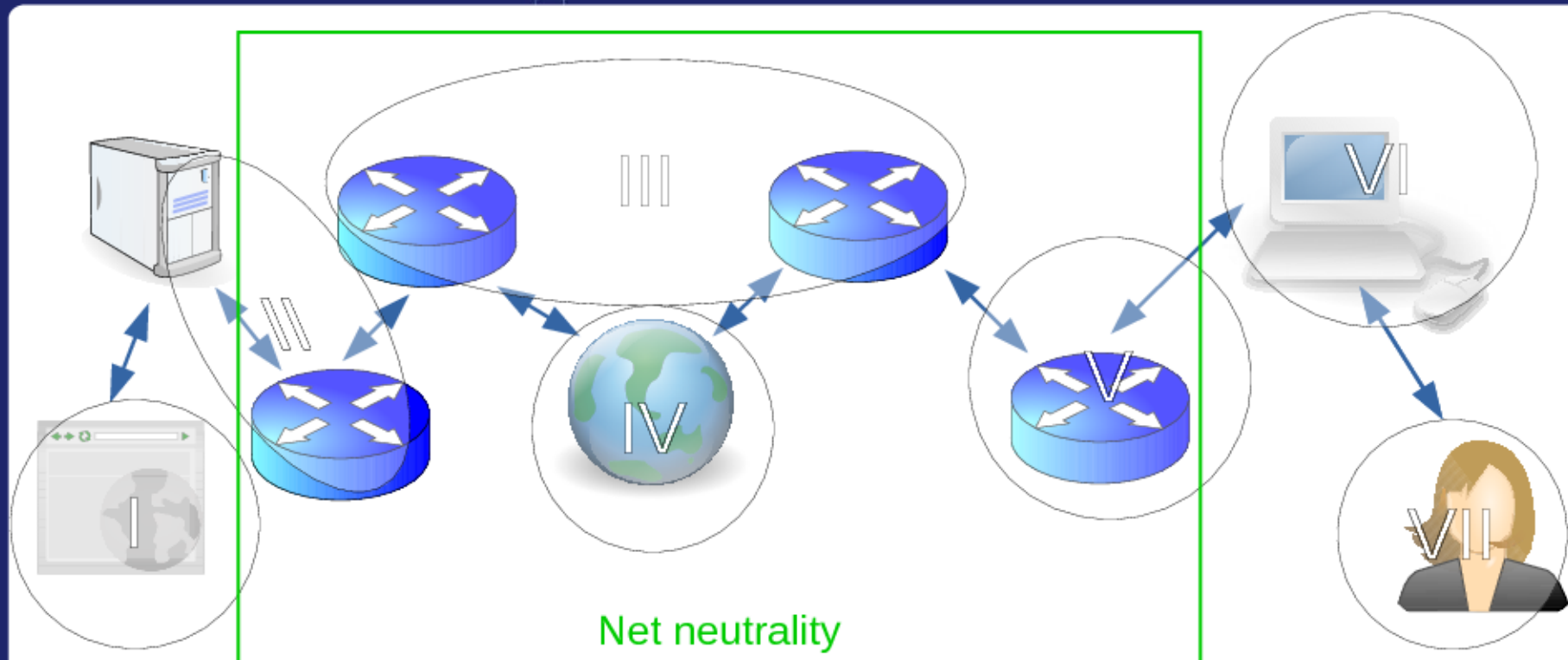
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Point of blocking



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Censorship methods



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End-point malware (I, VI)

Transit degradation (II, III, V)

Self-censorship (I, VII)

“chilling effect”

Content manipulation (I, II, V)

Routing corruption (III, IV)

Corruption of other protocols (II, III, IV, V)



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Censorship concerns



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Intentional abuse of power

Mistakes when creating a block list

Reusing existing capability for other goals (via policy change)

Enforcement slippery slope ending with:

- banning of entire types of services, e.g. VPNs

- disconnecting the country from the internet altogether



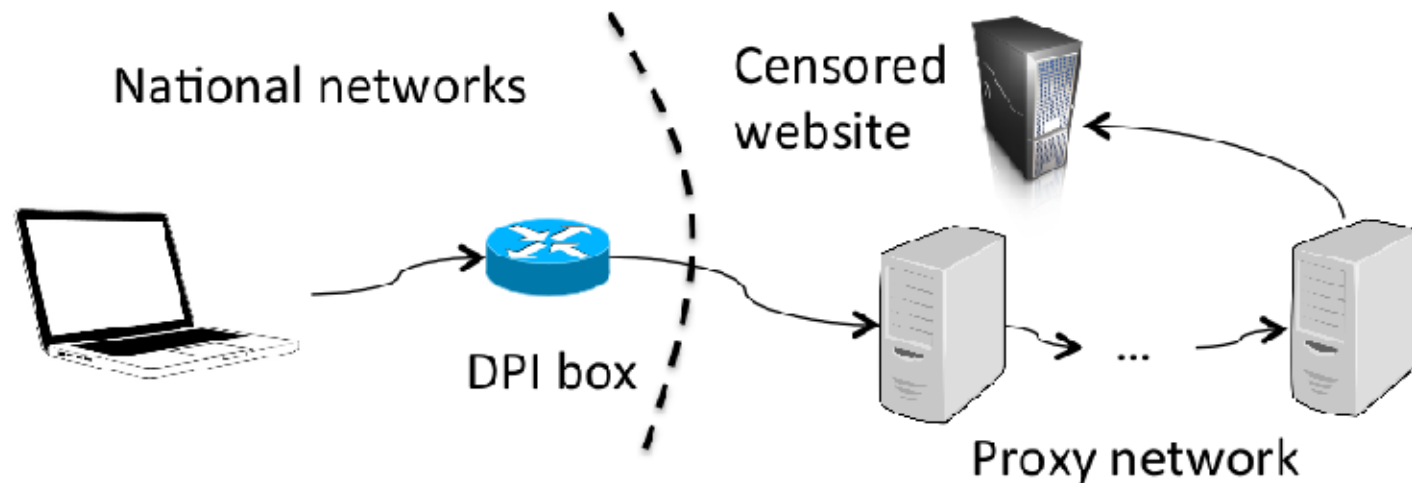
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Circumvention



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Security consequences negative



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Erodes trust in integrity of available information

Chilling effect on end-users and publishers

won't speak up against e.g. illegal activities

Banning VPNs leads to lower availability of encryption services

Internet shutdown = no communication even in emergency

Wartime: Censorship system if overtaken by enemy can be used to paralyze legitimate traffic



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Security consequences positive



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Allows for quick reaction to IT threats

e.g. malware

Allows enforcing global regulations and moral norms

e.g. child abuse imagery

Wartime: Can be used to resist enemy propaganda



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Conclusions



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Block

for moral reasons at I, II

for security reasons at I, II, III, IV, V

Do not block

for other reasons

at VI, VII for any reasons

Block ad hoc and on case-by-case basis

Never implement a centralized dragnet censorship system



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