

PEERING, TRANSIT AND PAYMENTS

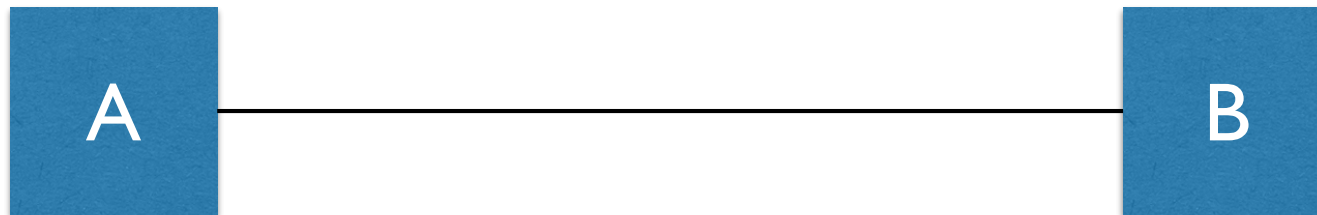
Patrik Fältström

Head of Engineering, Research and Development

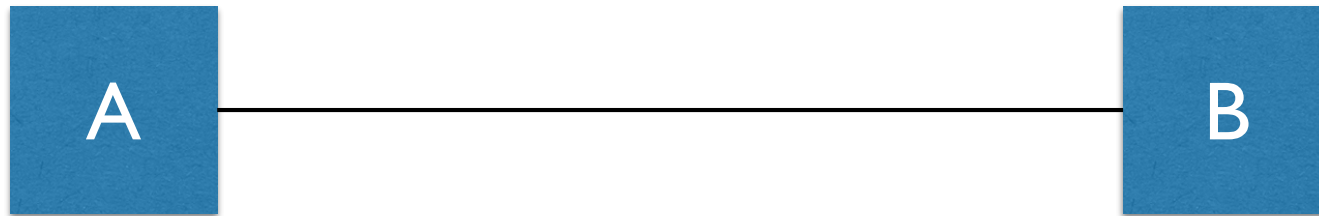
Netnod

paf@netnod.se

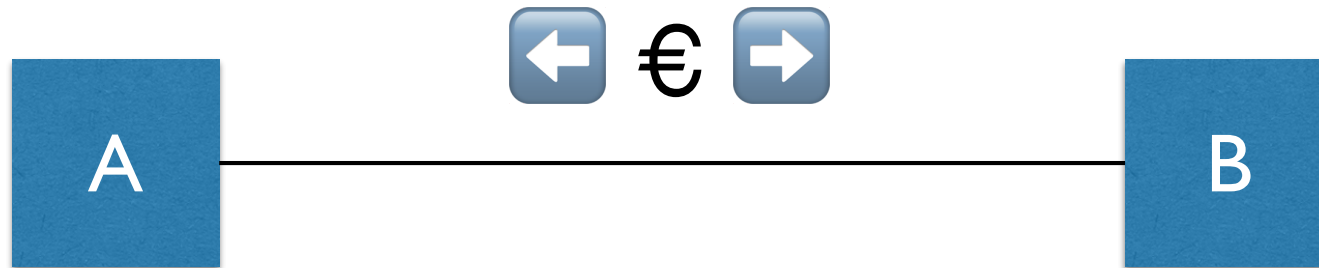
Traffic is to pass between two AS:es



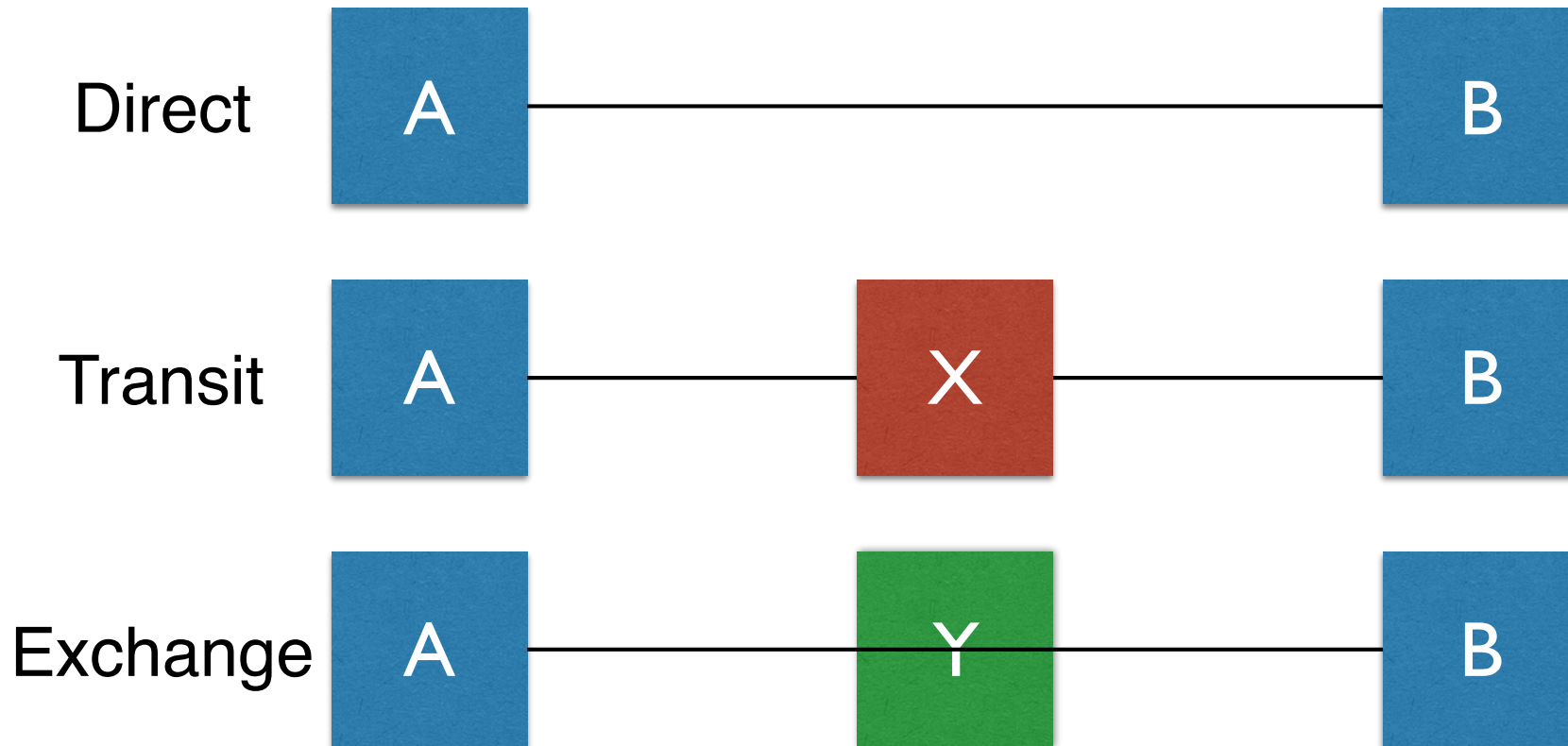
For example between eyeballs and service



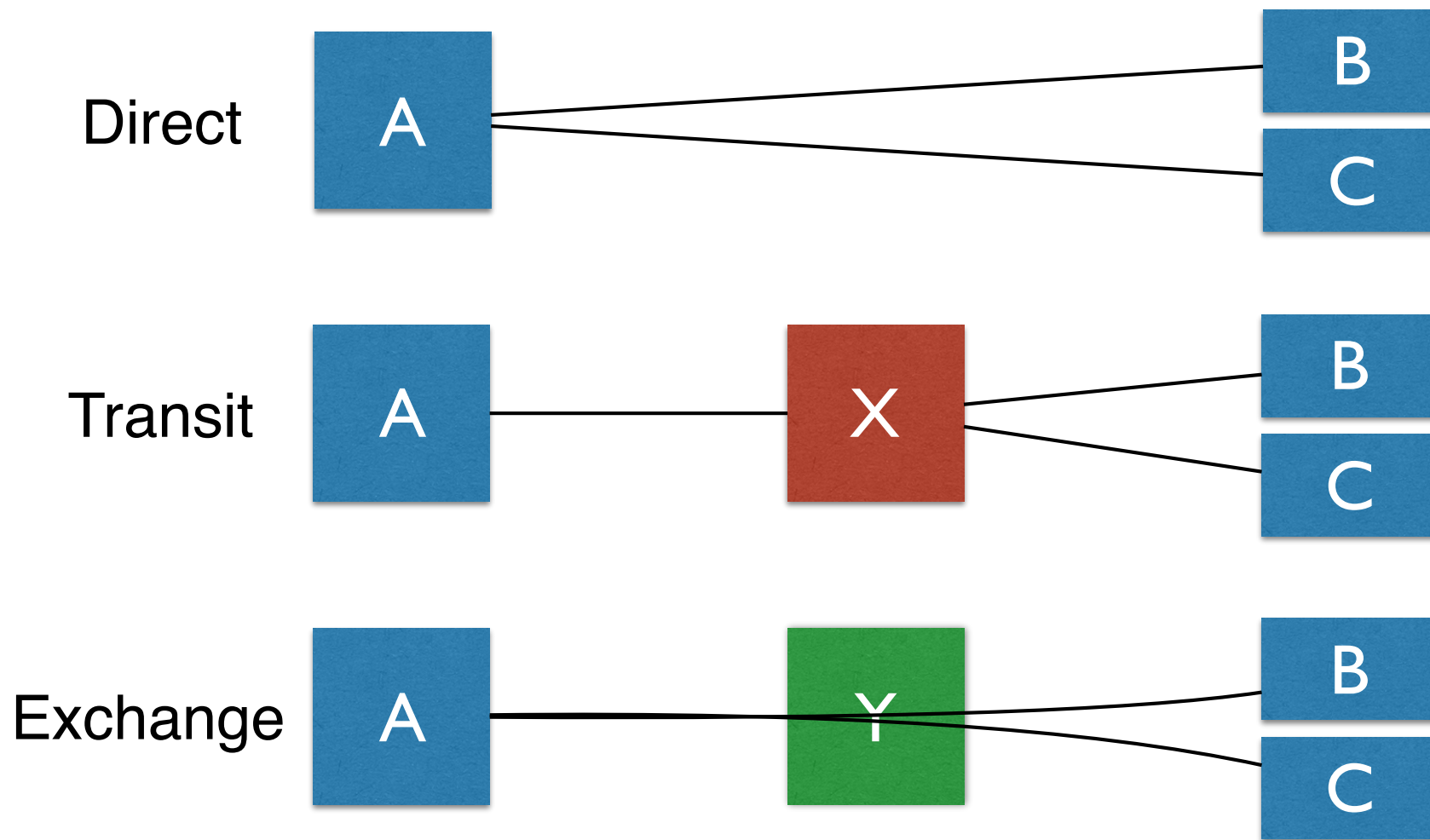
One question, is money moved?
If so, in what direction?



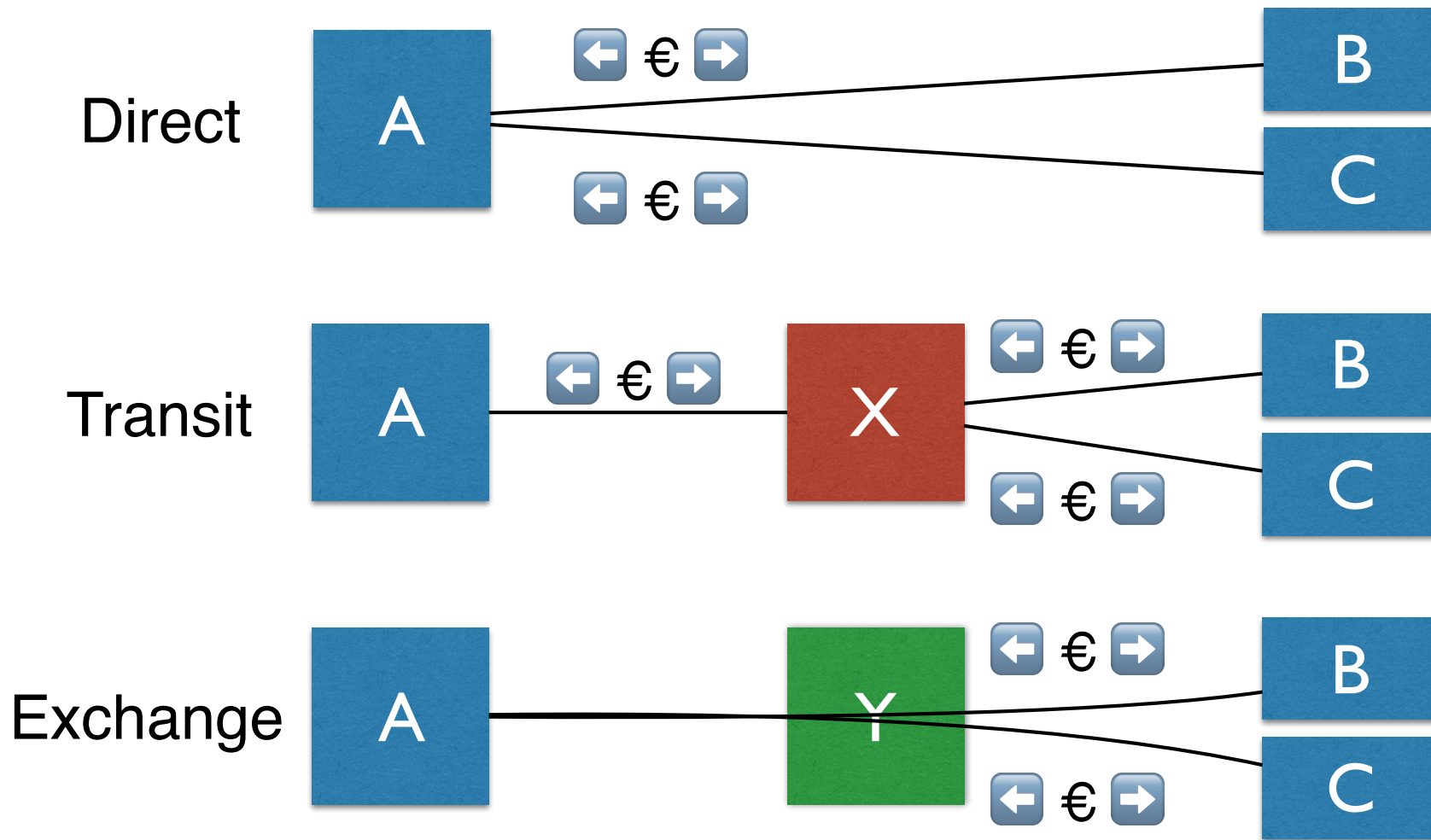
Another question, how is traffic exchanged?



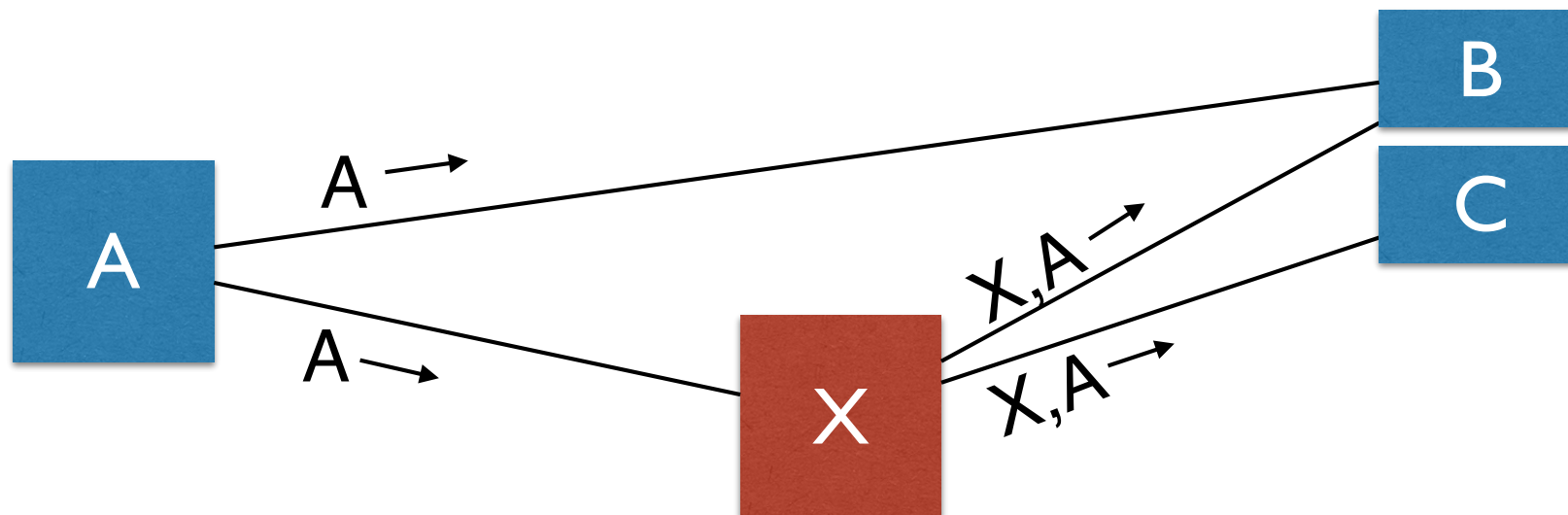
Difference is more visible with more players



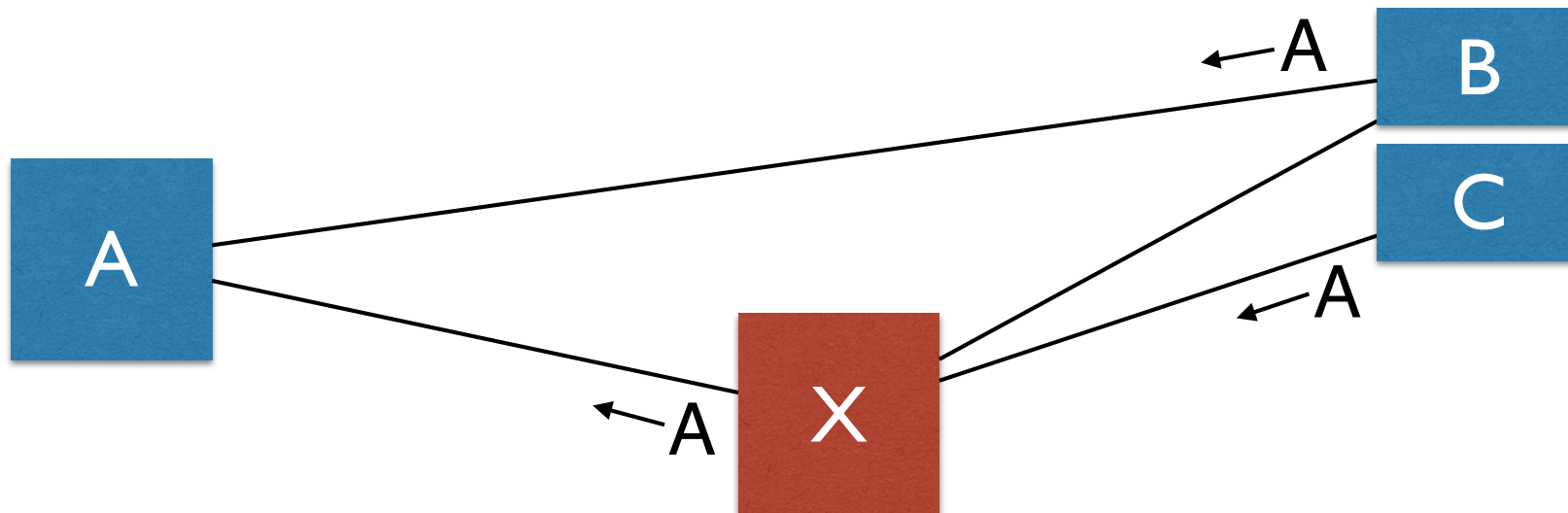
The money question pops up again and again



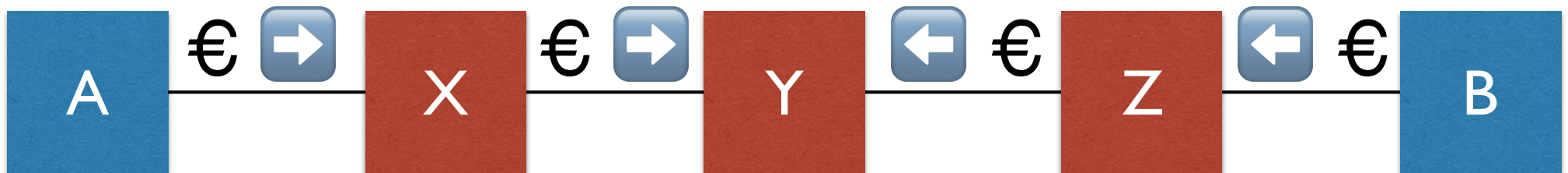
One announce routes over alternative paths,
here two of them



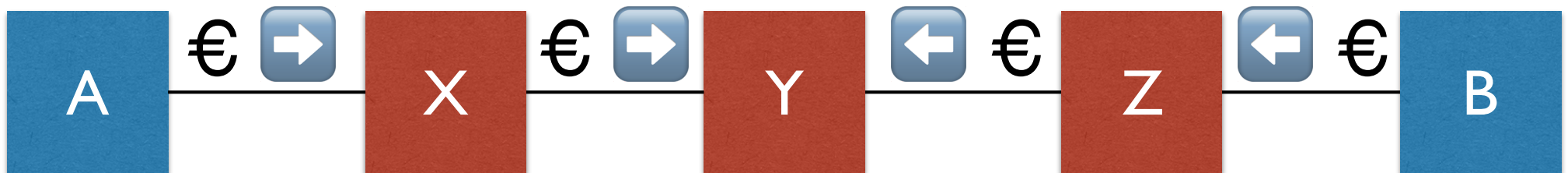
Traffic will go closest path



Everyone send money "upstream"

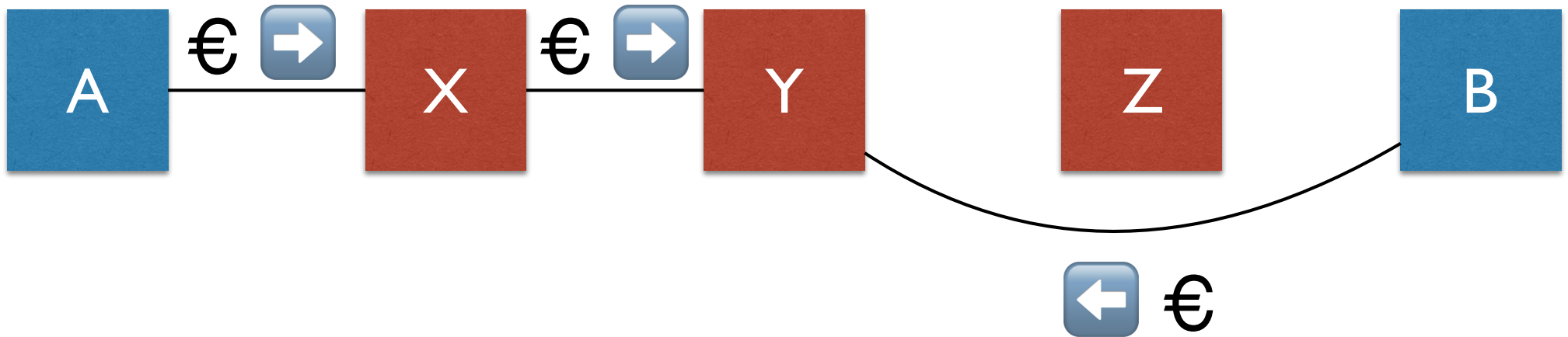


How do you decrease your costs?



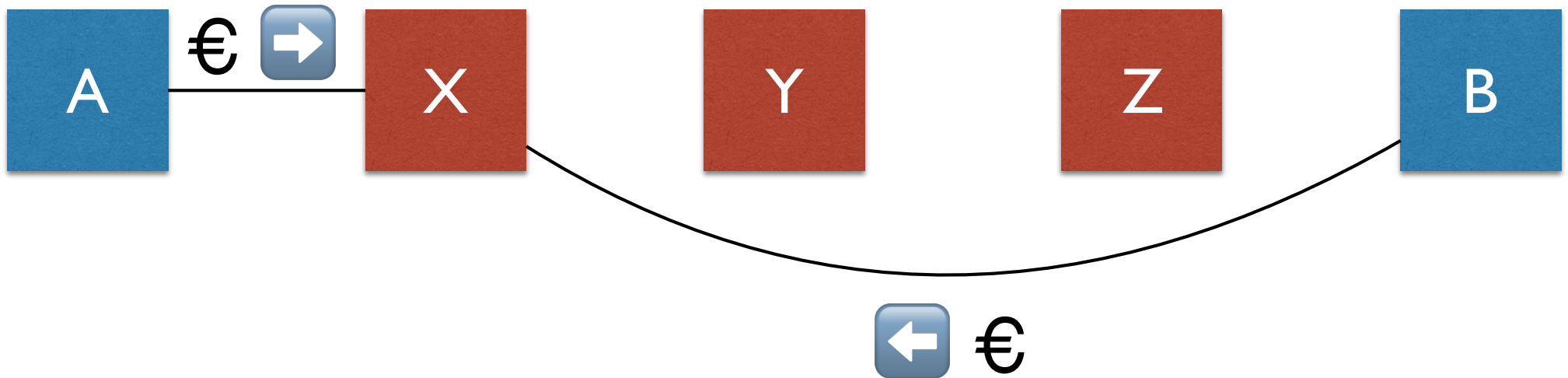
By making investments...

How do you decrease your costs?



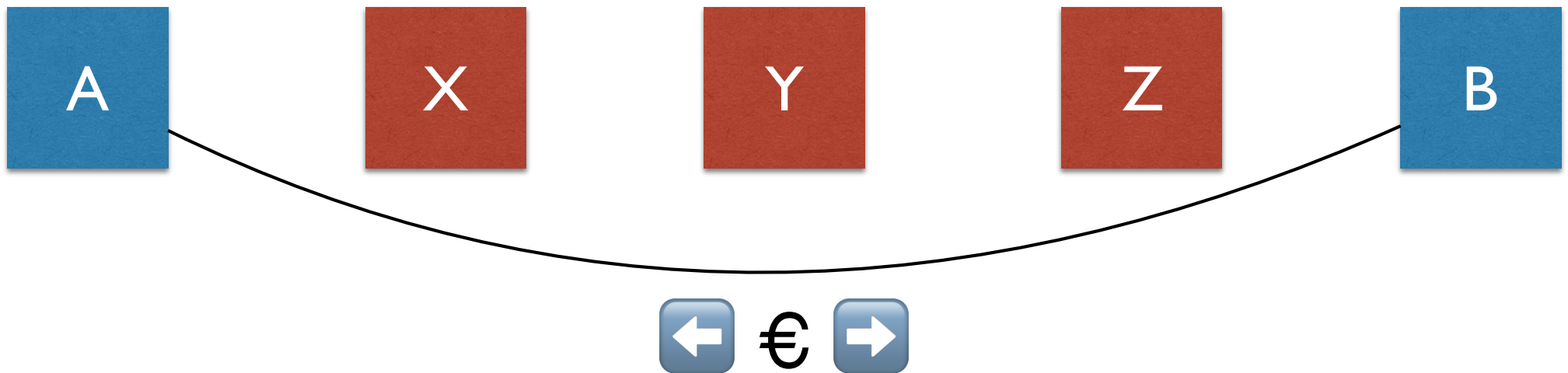
By making investments...

How do you decrease your costs?



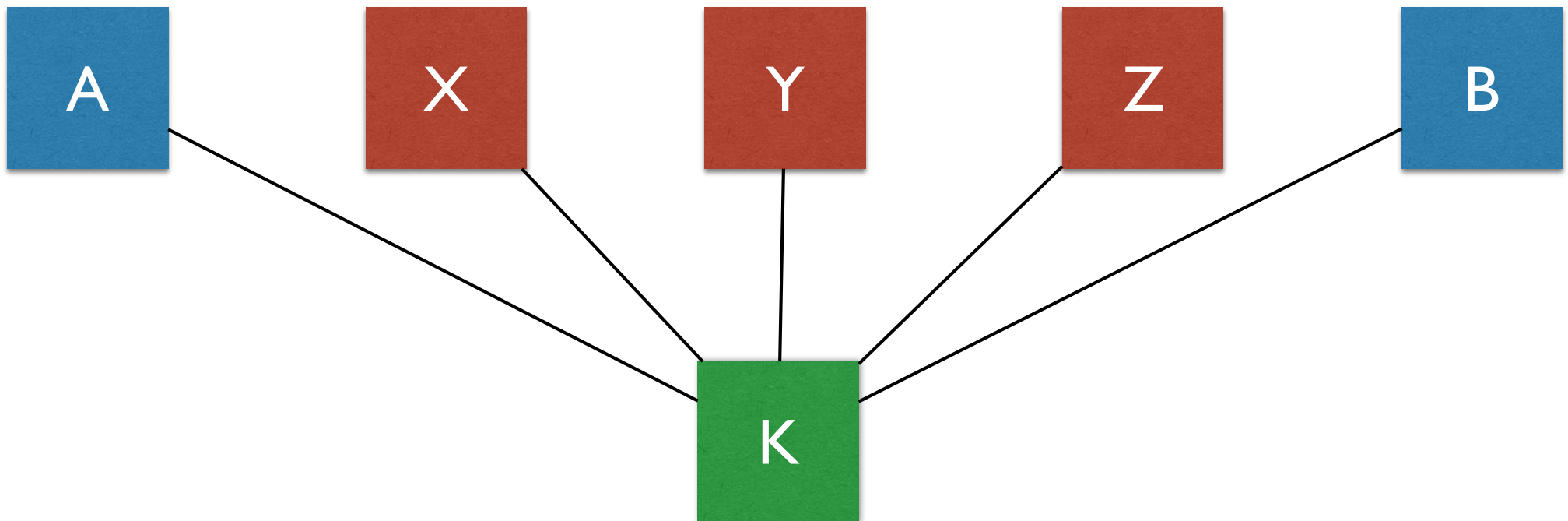
By making investments...

How do you decrease your costs?

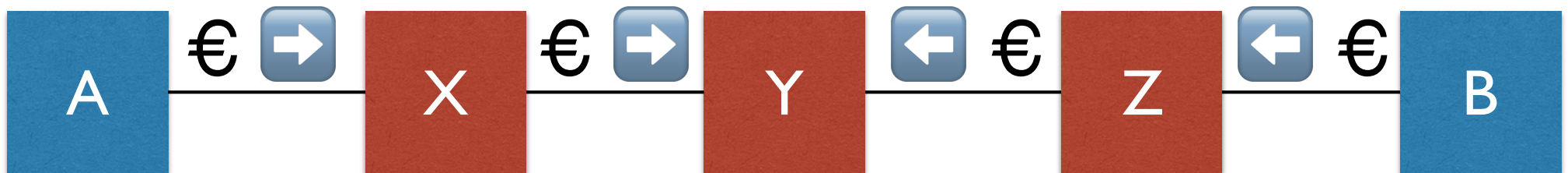


By making investments...

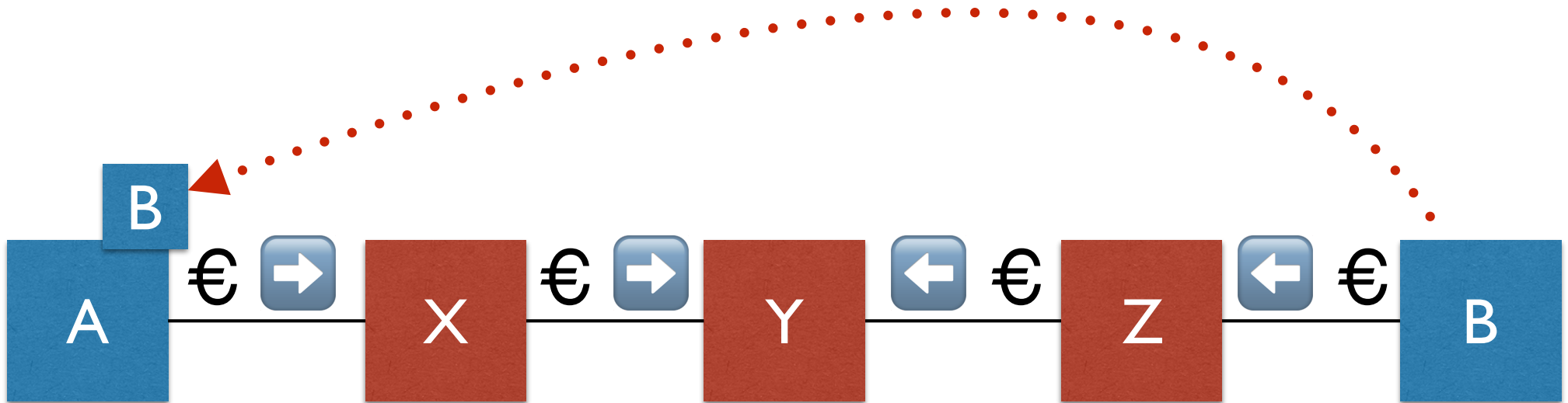
Implementation can still differ, here for example by using an IX (K)



Or by making different investments...



Or by making different investments
In this case, invest in local cache

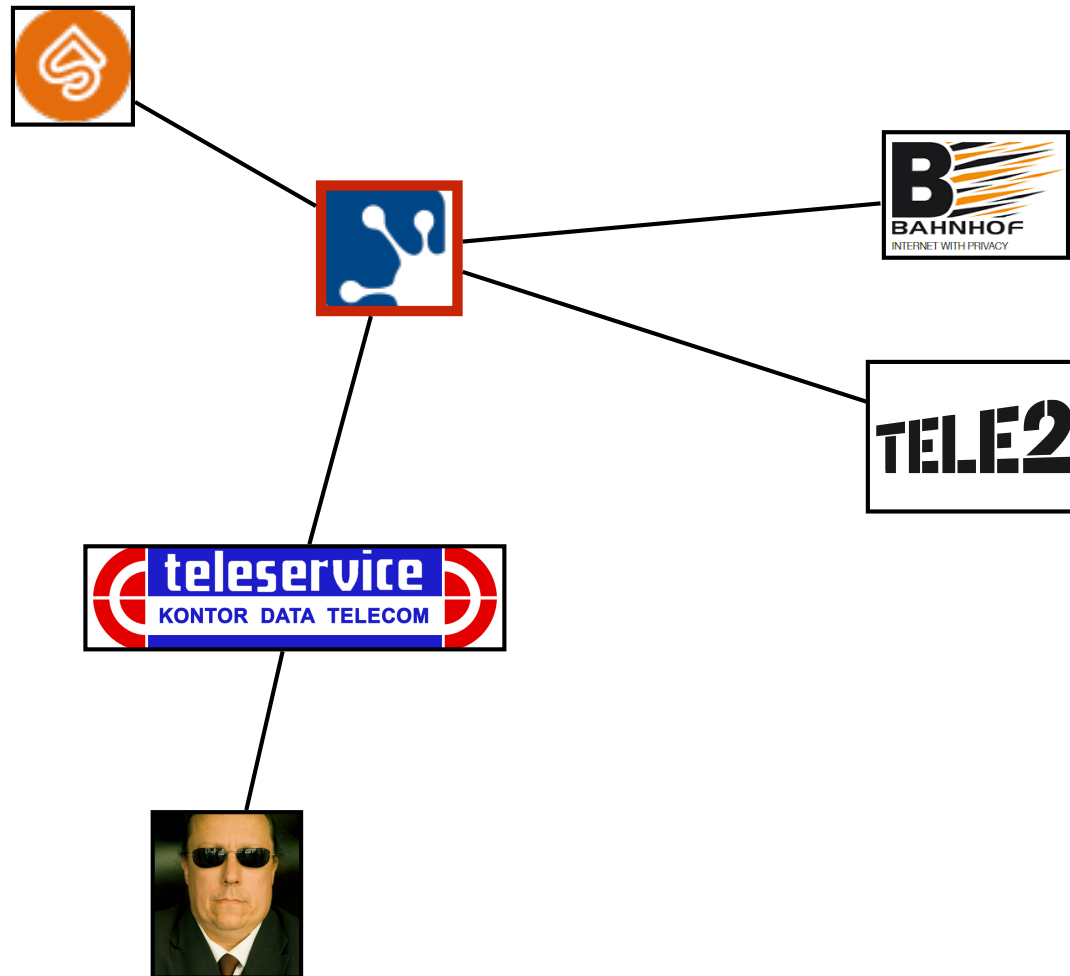


Now a real world example...

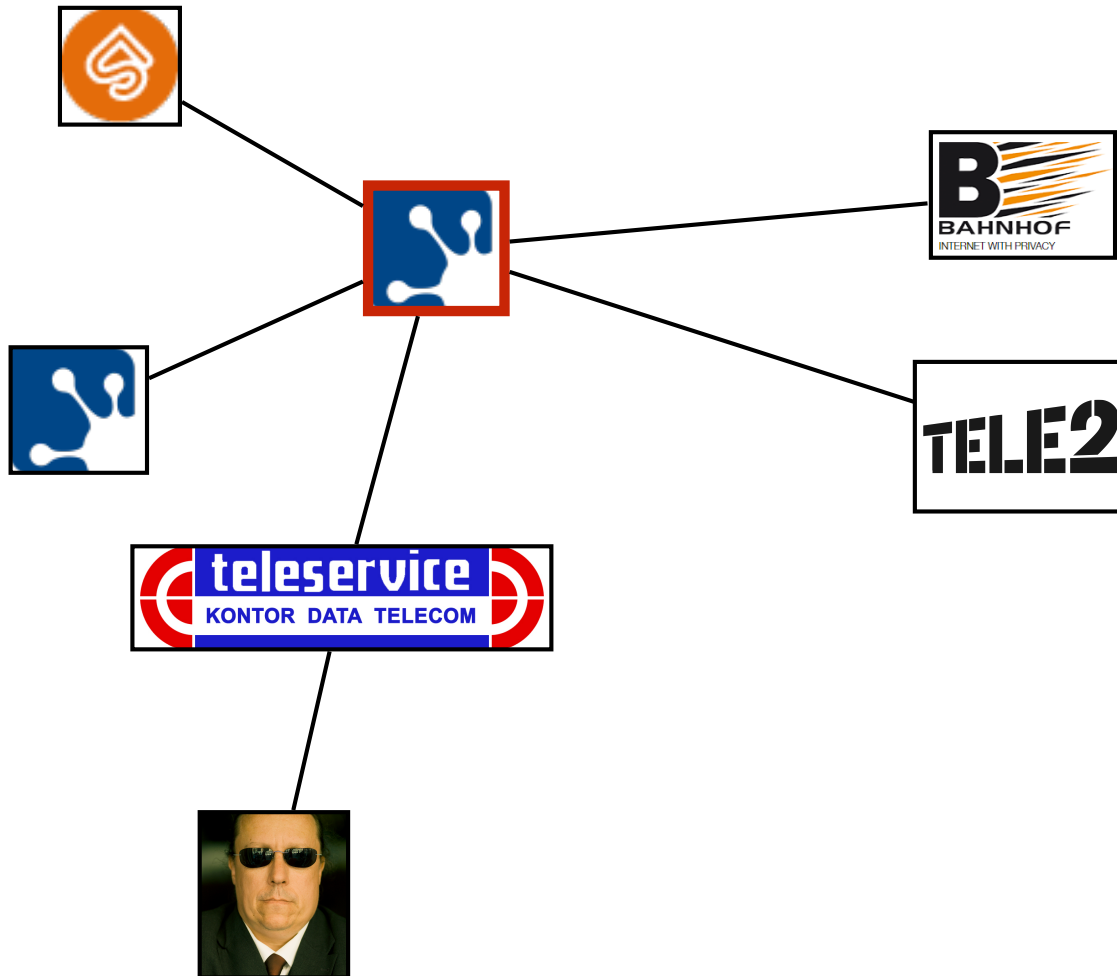
My internet access



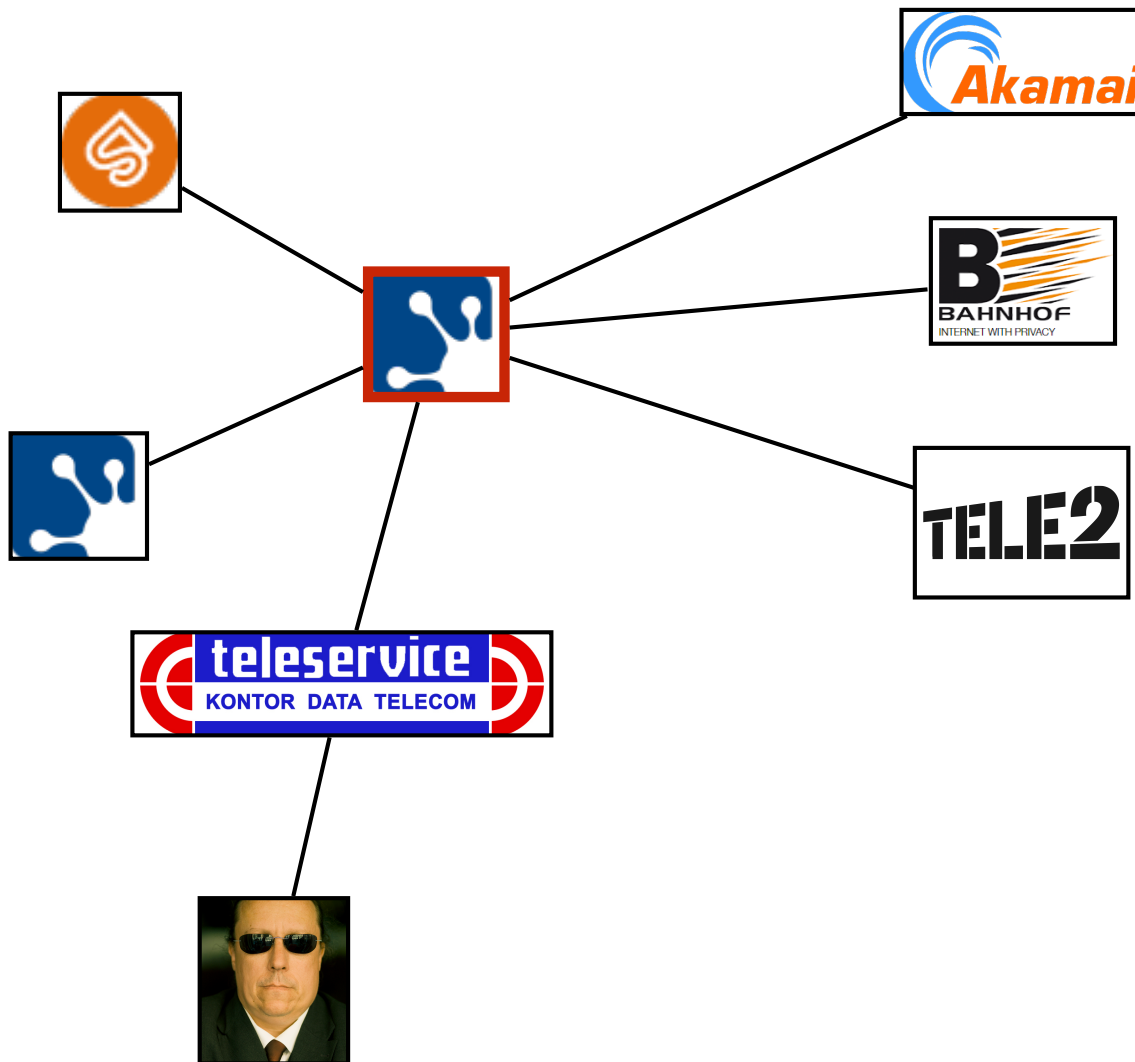
Netnod Copenhagen



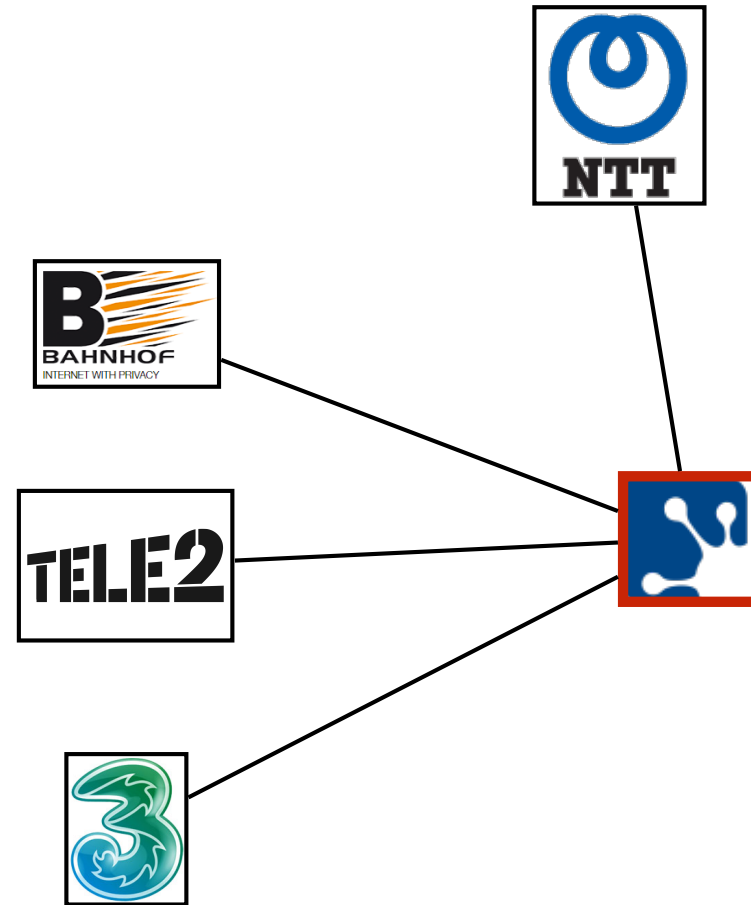
Netnod Copenhagen



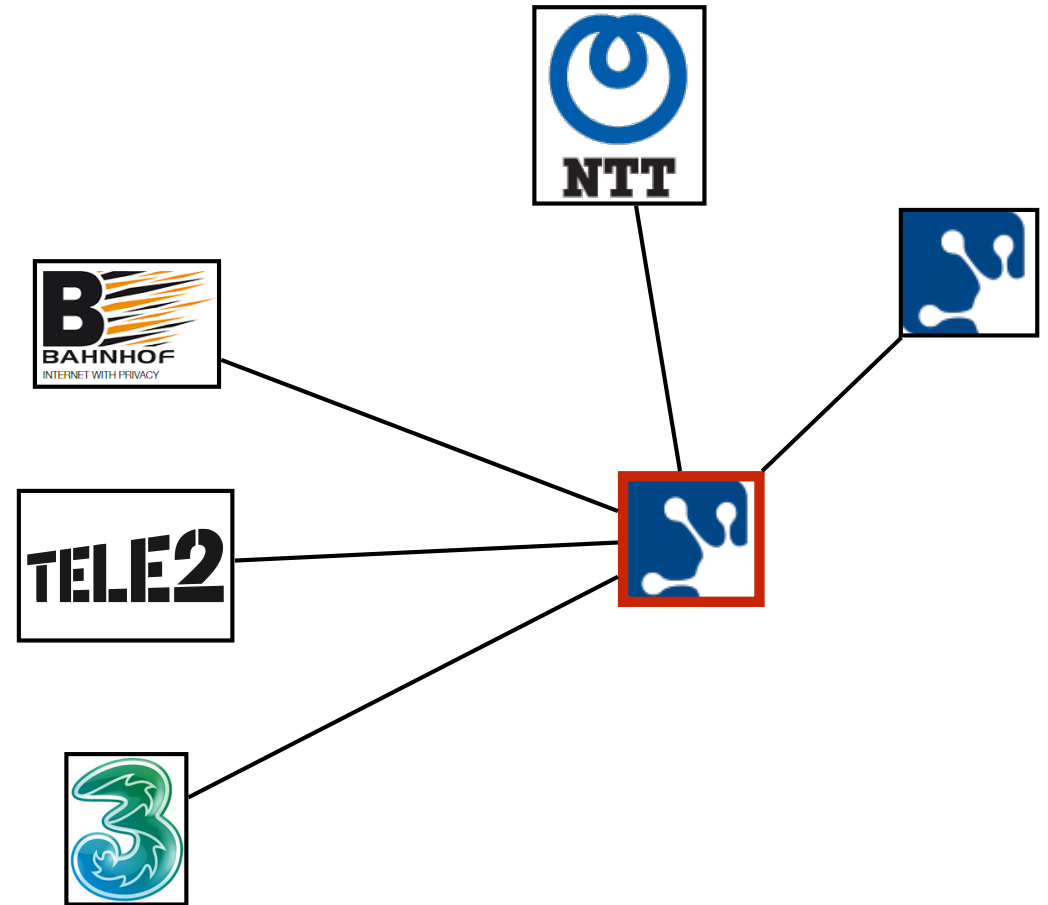
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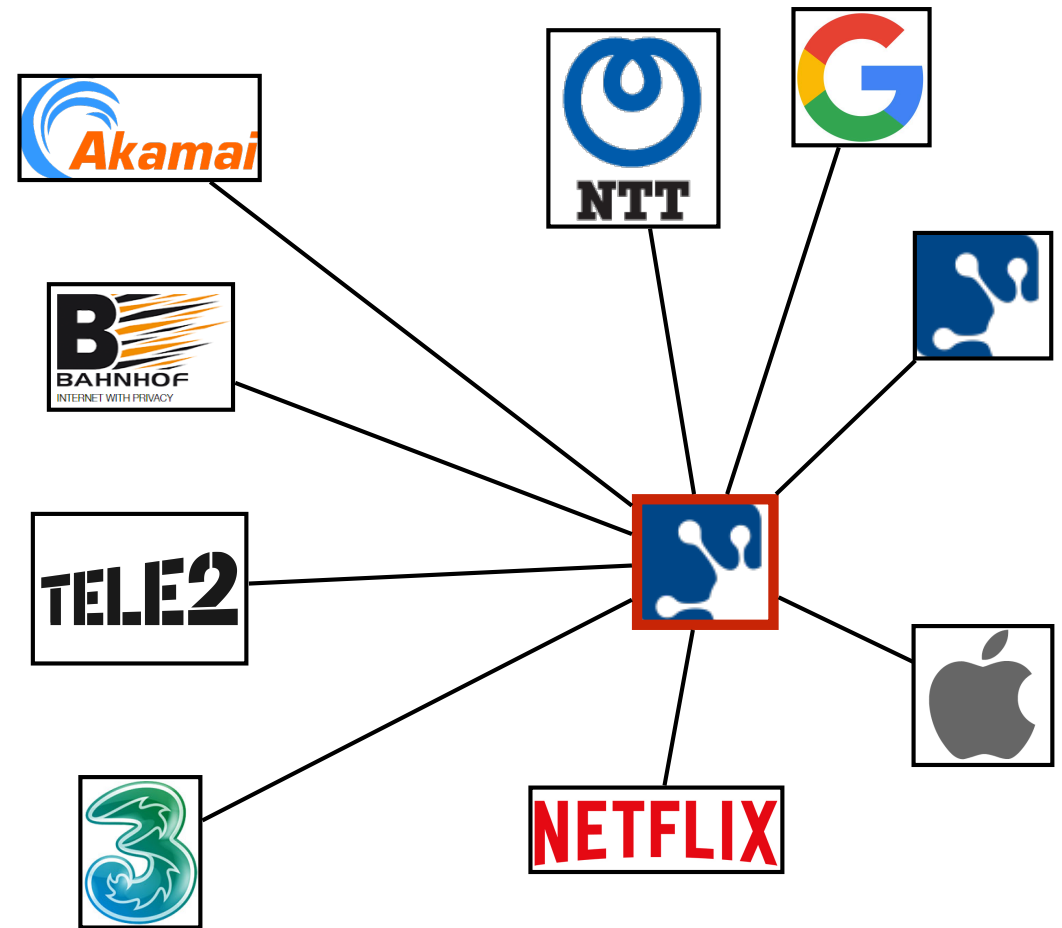
Netnod Stockholm



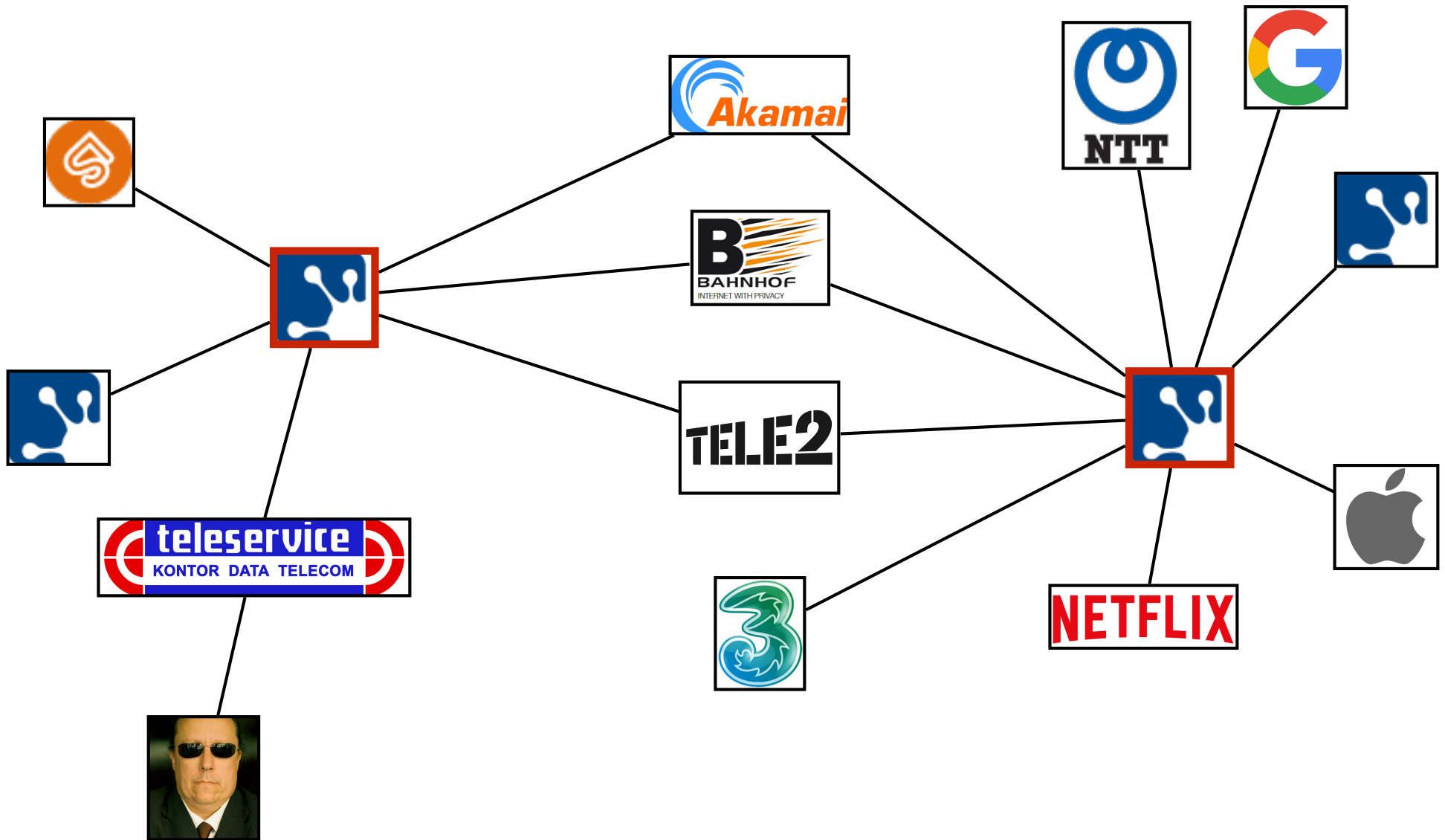
Netnod Stockholm



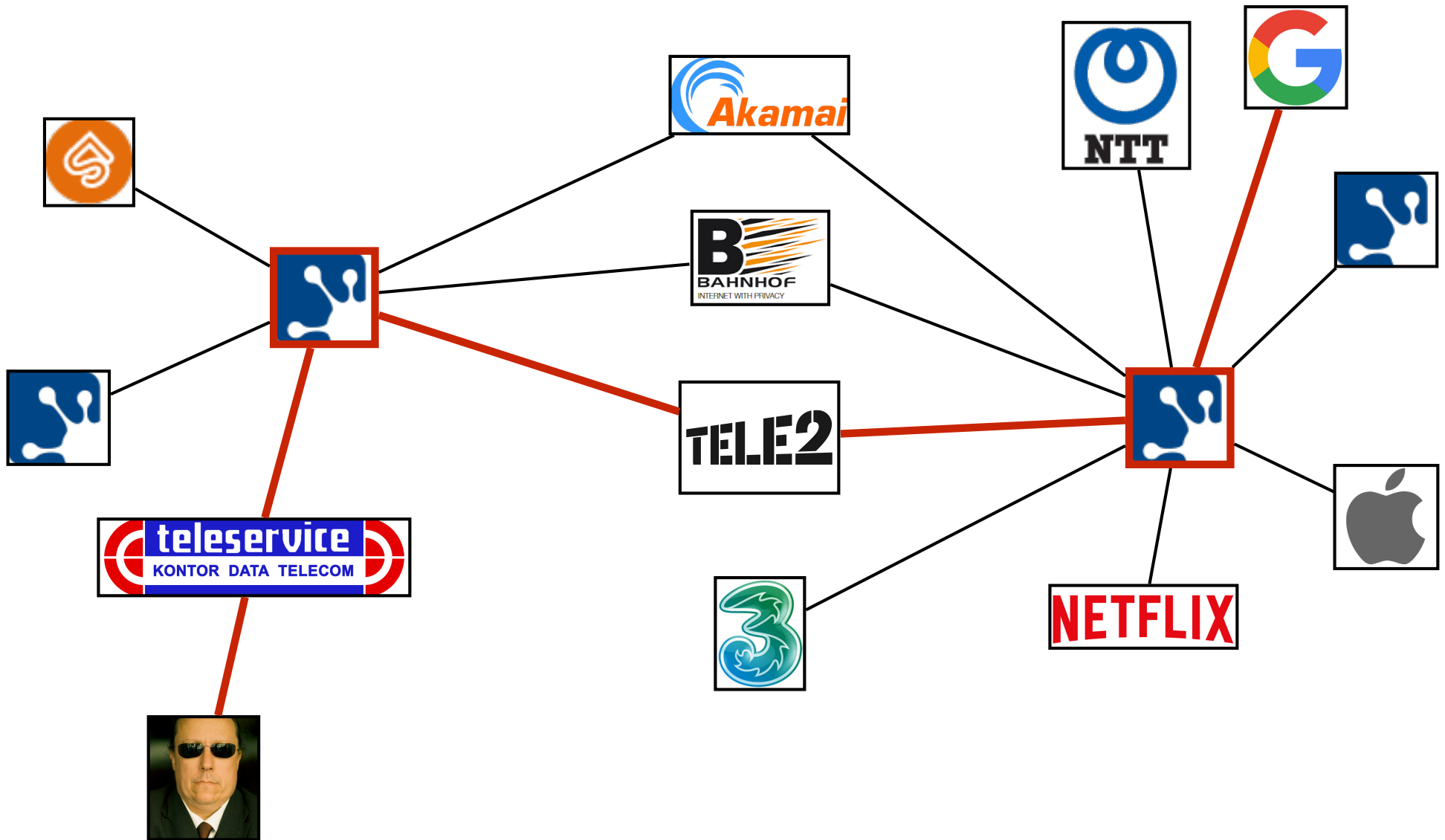
Netnod Stockholm



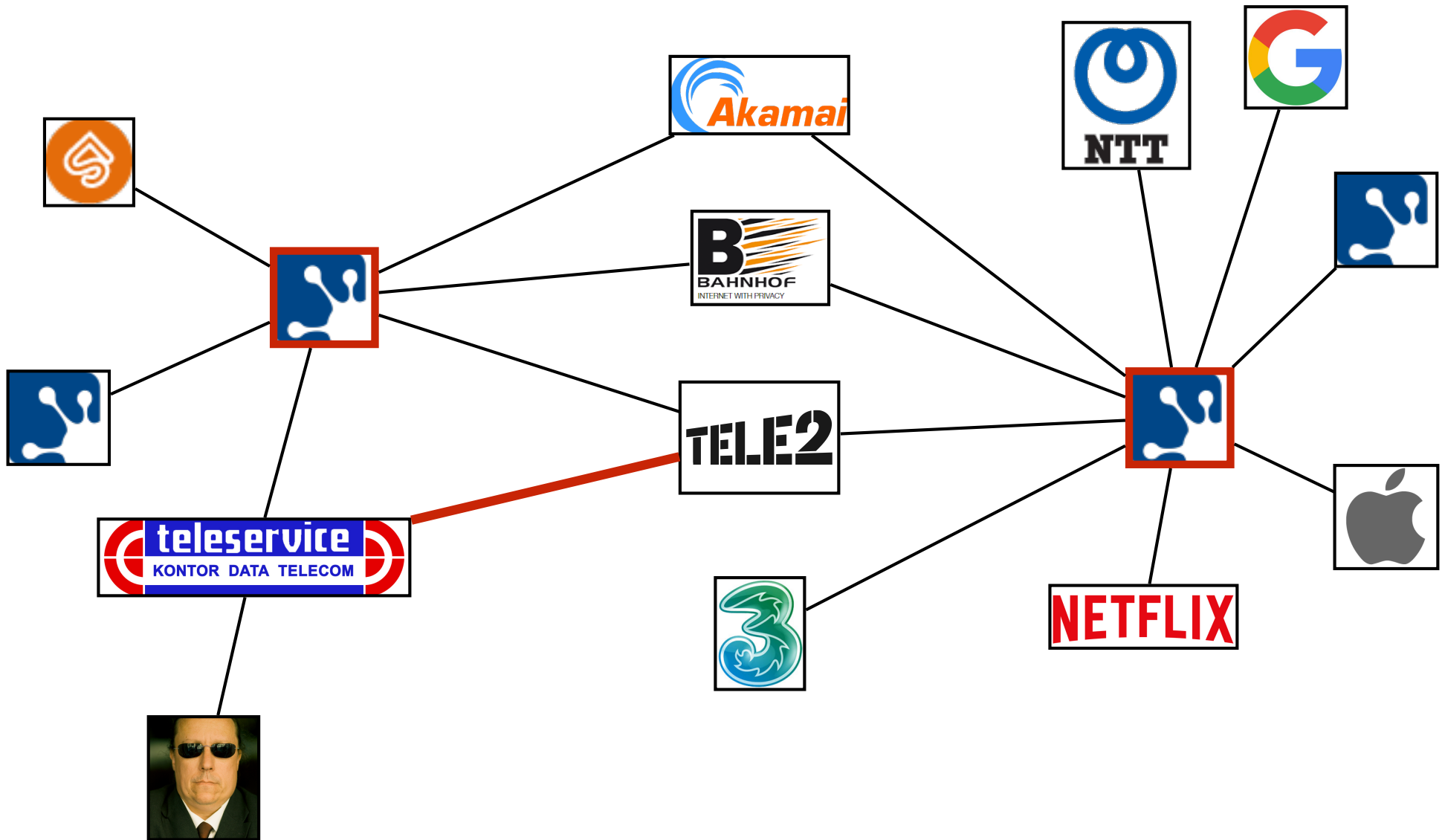
Stockholm & Copenhagen



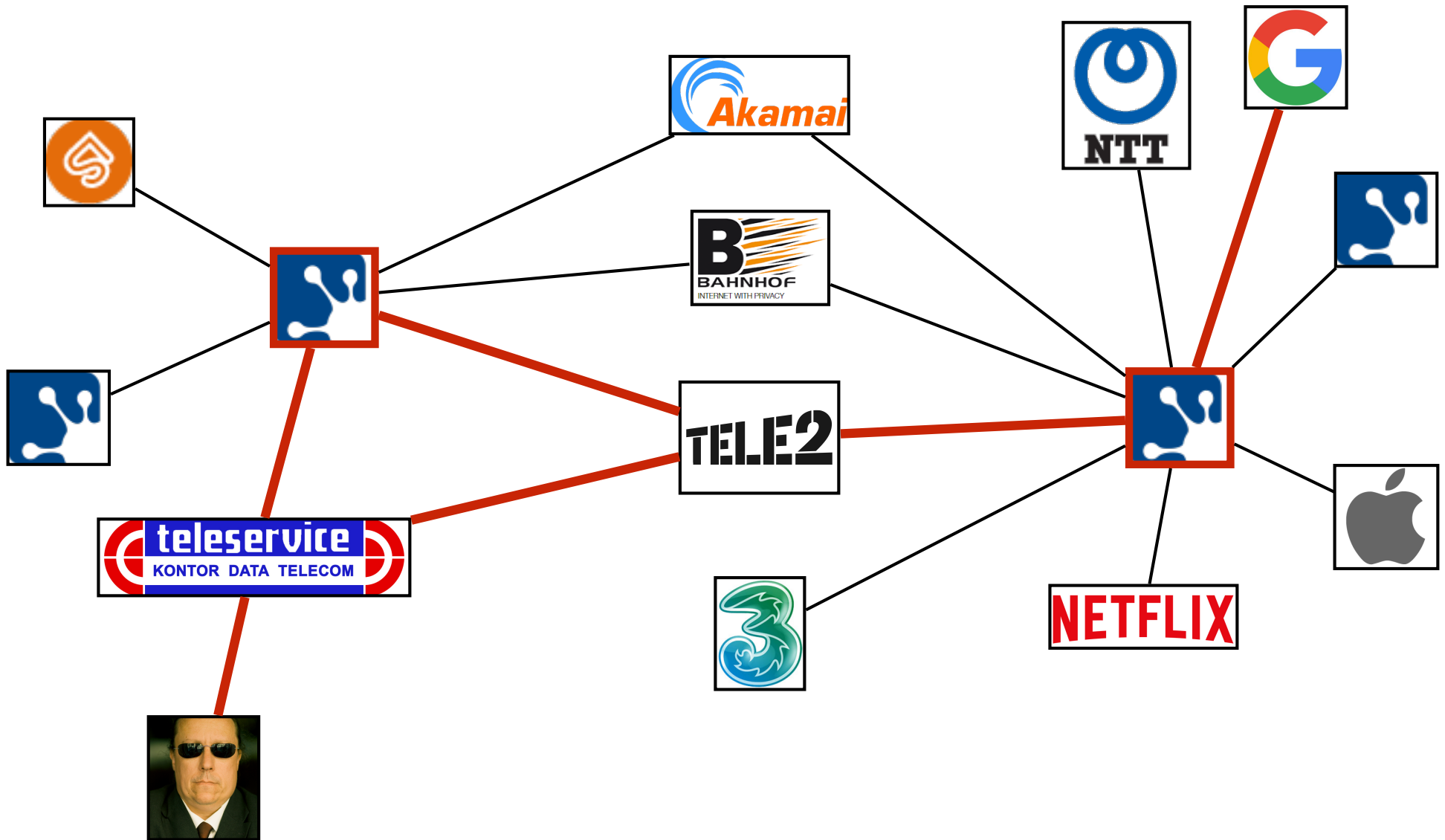
Traffic between me and Google



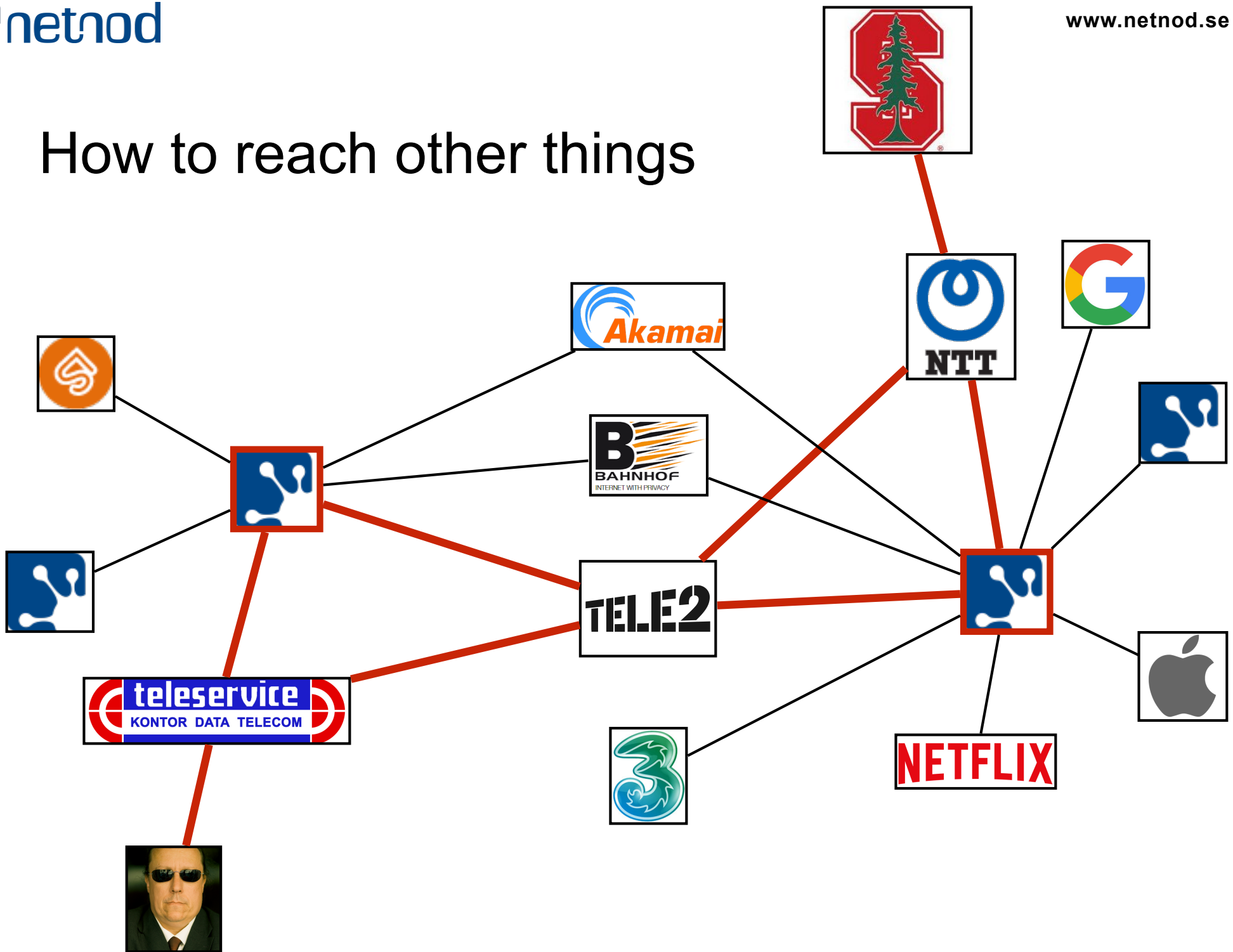
For reliability



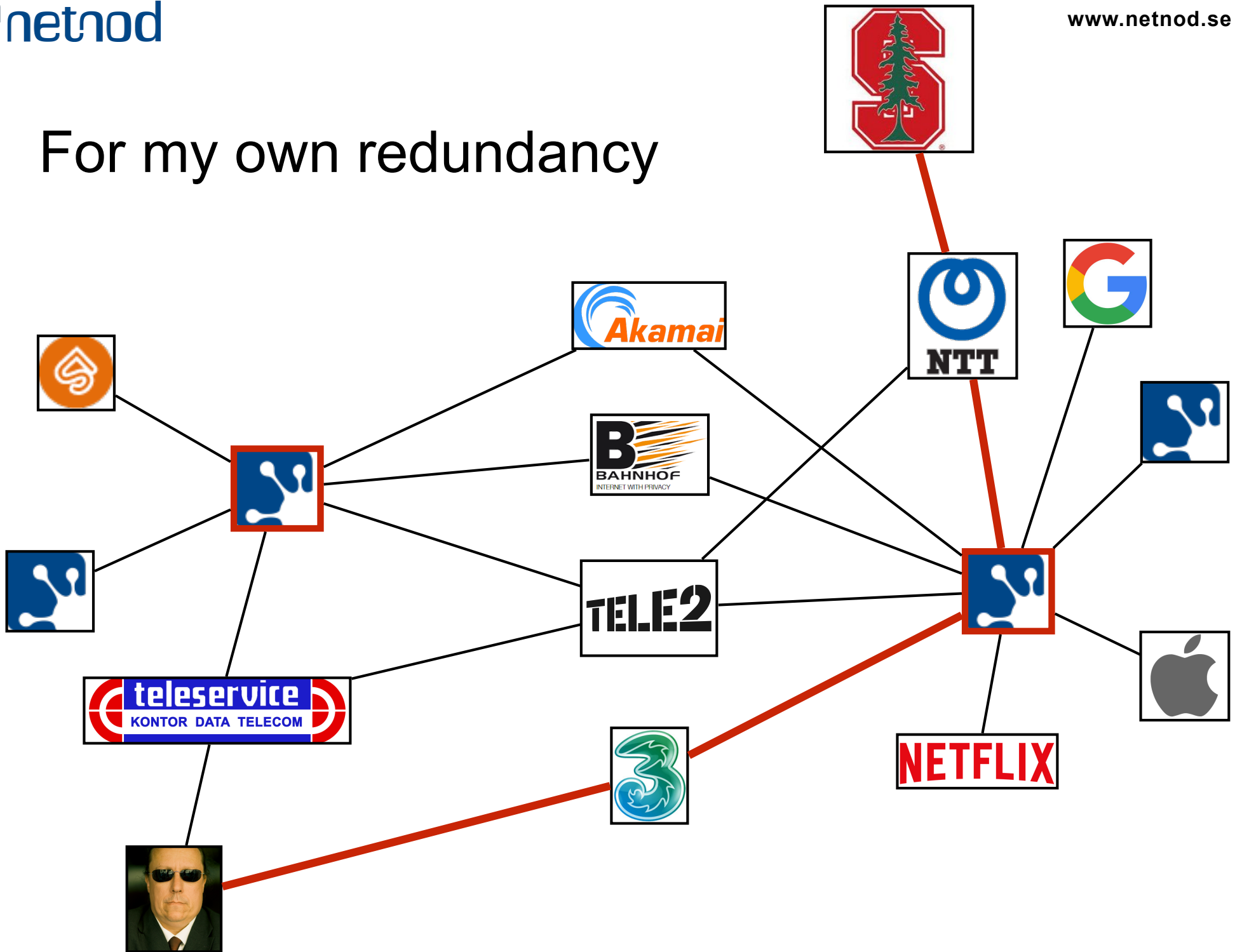
For reliability



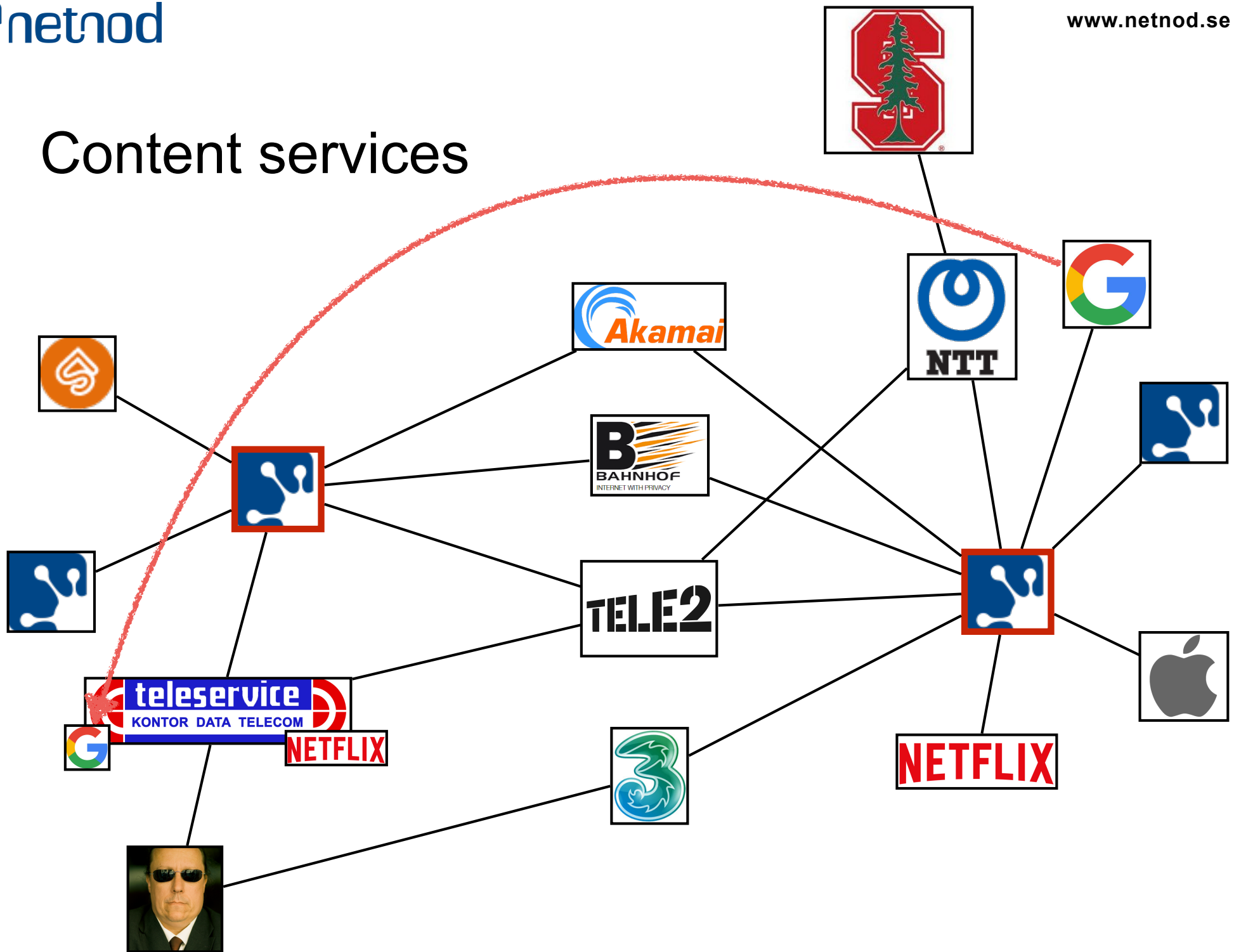
How to reach other things



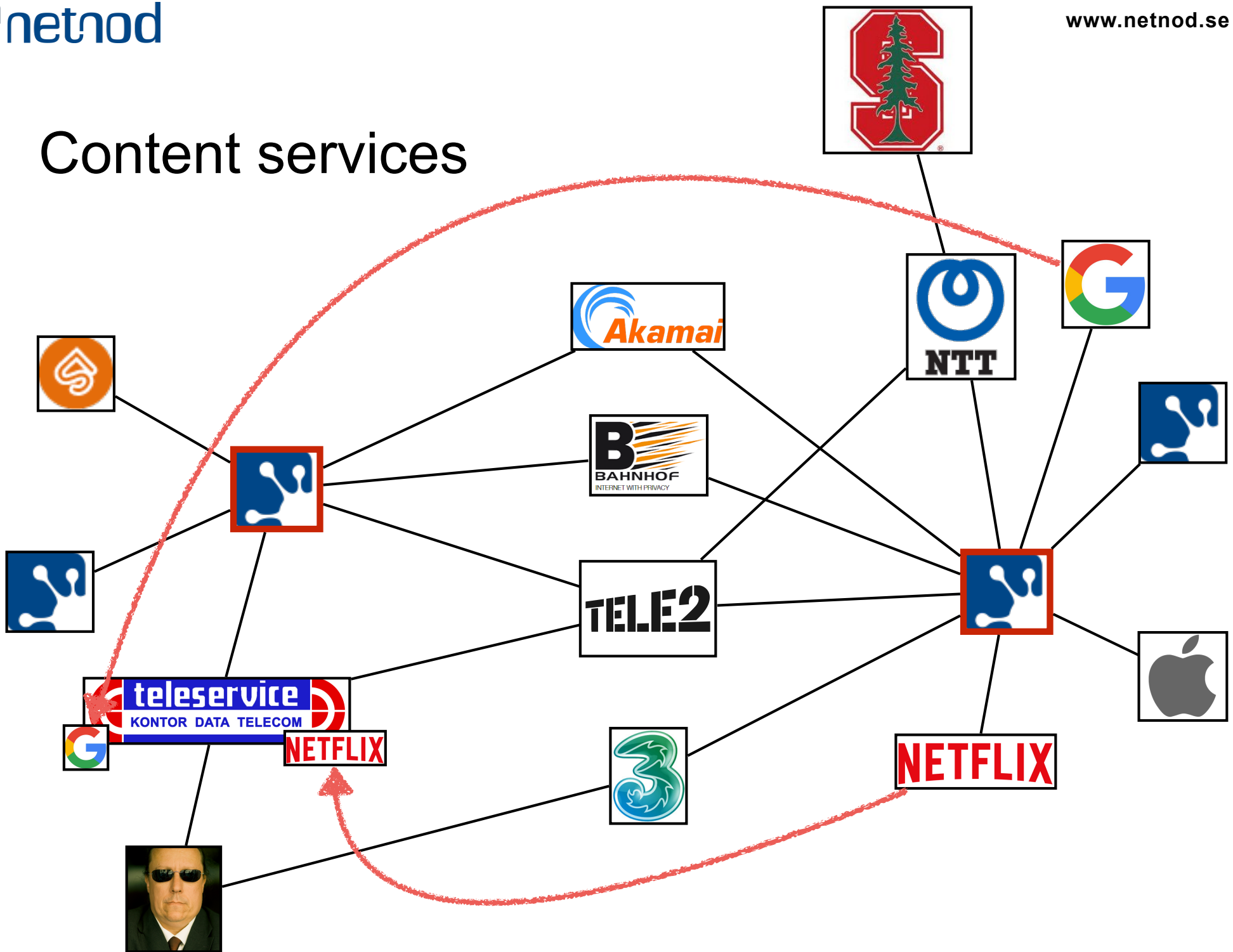
For my own redundancy



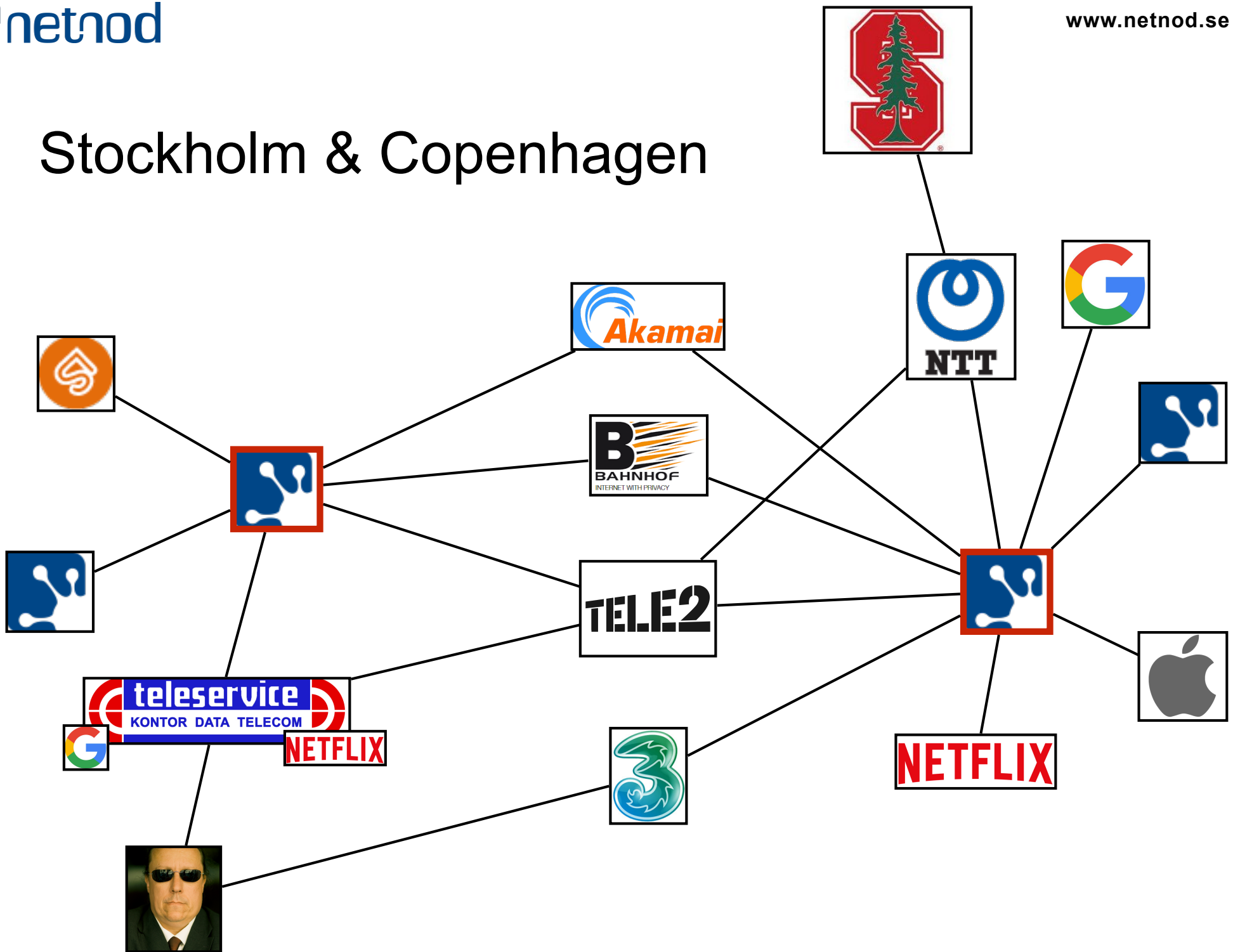
Content services



Content services



Stockholm & Copenhagen



THANKS!

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