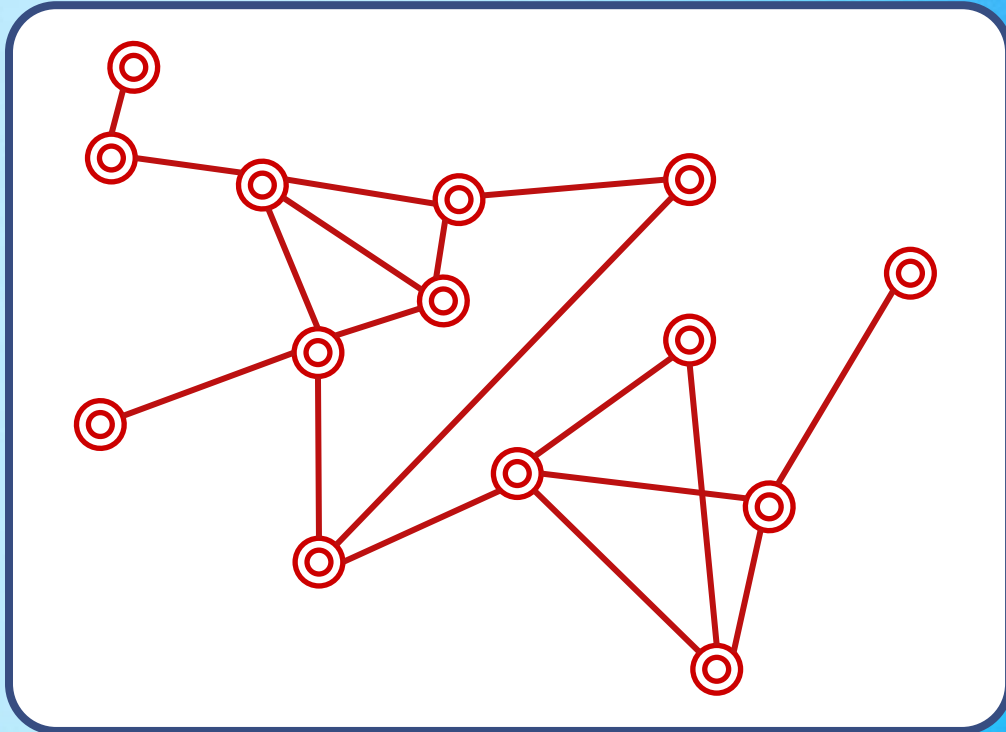# System-of-Systems

Part 2: Interconnected networks

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Interconnected systems

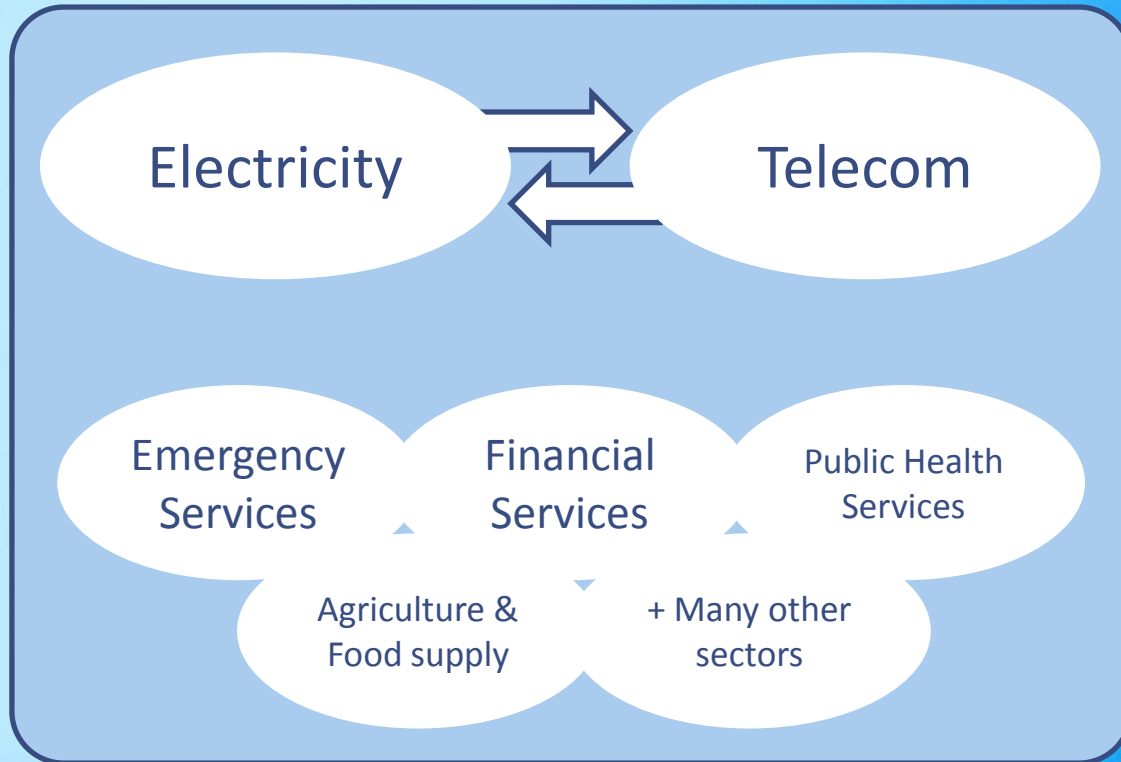# Partial blackout

Example: Vancouver, Canada

Brownout

Electricity	Region 1	Region 2
Monday	x	
Tuesday		x
Wednesday	x	
Thursday		x
Friday	x	
Saturday		x
Sunday	x	

Critical infrastructure
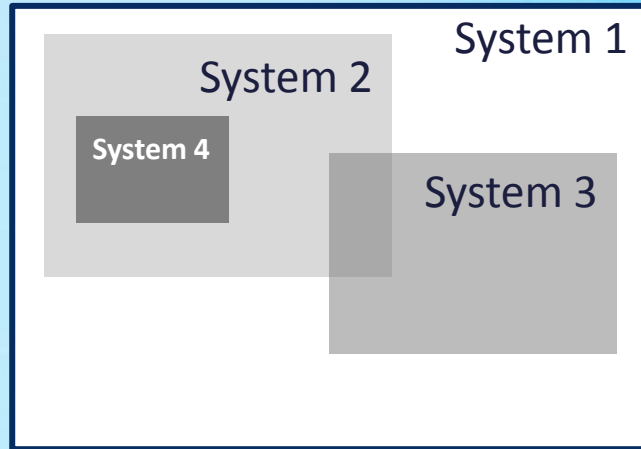
Critical infrastructure

Interdependencies

Different types of interdependencies:

- Physical/functional
- Geographical
- Digital
- Logical/organisational

Interdependencies

Vulnerability

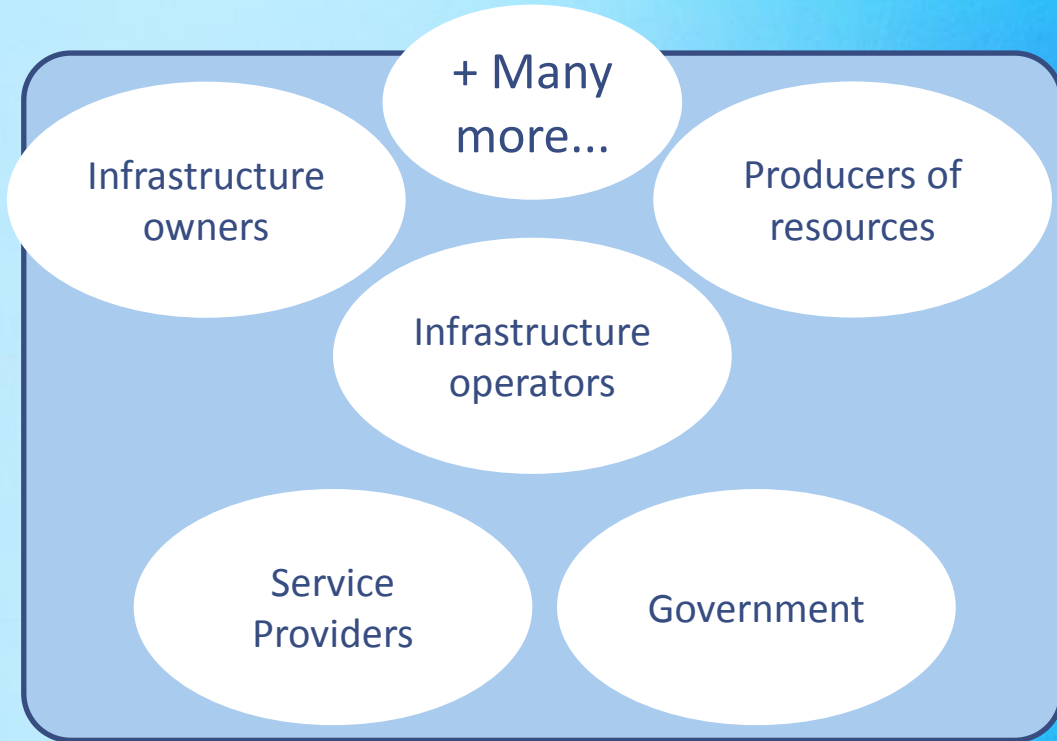Emergency power generator in a hospital

Vulnerability

The vulnerability of the system-of-infrastructure systems can be reduced in many ways, e.g.:

- Keeping strategic reserves of critical resources
- Building redundancy in critical conversion units
- Building redundancy in transportation network

System-of-systems character

Thank you for your attention!

Please post any questions you may have on our discussion forum.

Reference

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http://www.rtlnieuws.nl/sites/default/files/styles/landscape/public/content/images/2013/07/23/trein%20gestrand_0.jpg?itok=uQneebNd

https://www.flickr.com/photos/steena/112329897/

http://www.mikroe.com/chapters/view/64/chapter-1-introduction-to-microcontrollers/