

Increase infrastructure resilience

How to deal with failure of critical infra and cascading effects

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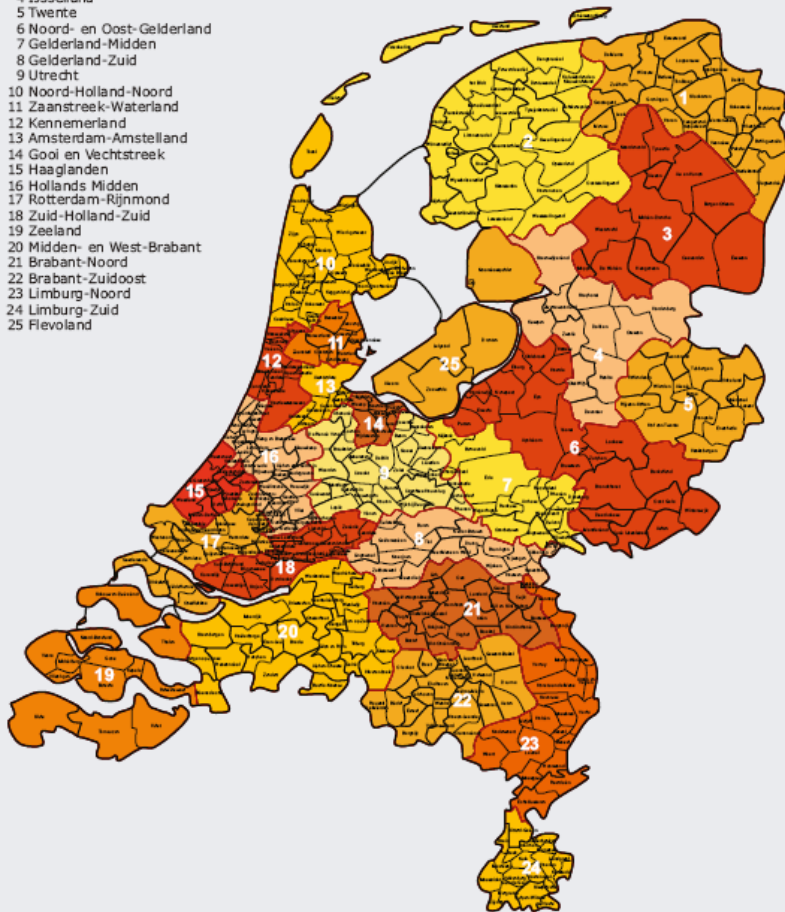
Safety Region South-Holland South



Safety regions

Concern

- 1 Groningen
- 2 Fryslân
- 3 Drenthe
- 4 IJsselland
- 5 Twente
- 6 Noord- en Oost-Gelderland
- 7 Gelderland-Midden
- 8 Gelderland-Zuid
- 9 Utrecht
- 10 Noord-Holland-Noord
- 11 Zaanstreek-Waterland
- 12 Kennemerland
- 13 Amsterdam-Amstelland
- 14 Gooi en Vechtstreek
- 15 Haaglanden
- 16 Hollands Midden
- 17 Rotterdam-Rijnmond
- 18 Zuid-Holland-Zuid
- 19 Zeeland
- 20 Midden- en West-Brabant
- 21 Brabant-Noord
- 22 Brabant-Zuidoost
- 23 Limburg-Noord
- 24 Limburg-Zuid
- 25 Flevoland



Average 664.000 inhabitants
(SHS: 480.000)

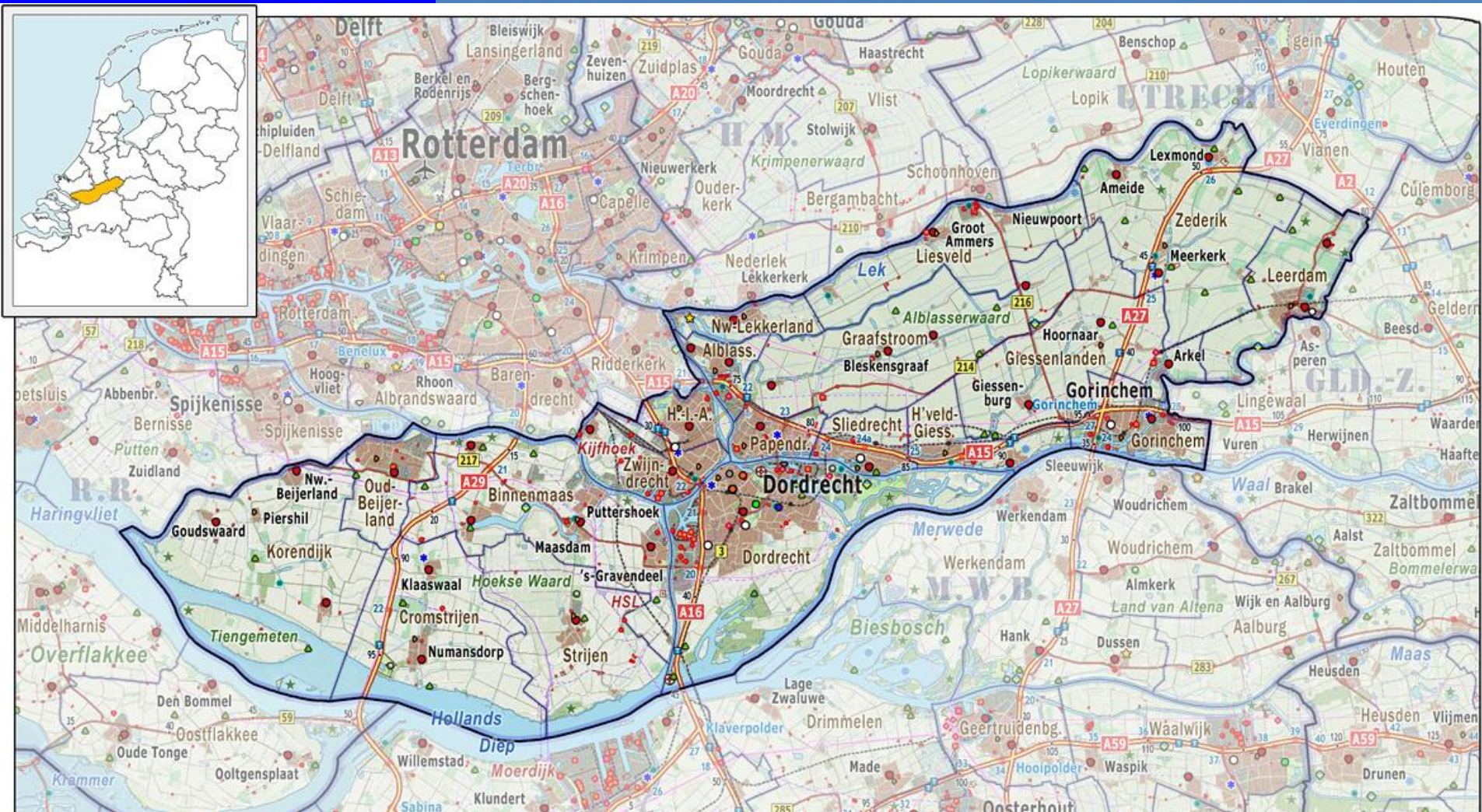
Board of Mayors

Responsible for:

- Fire brigade
- Crisis and disaster management
- Medical emergency management
- 112 emergency room
- Advice on risk management

Safety region SHS

Concern



Safety region SHS

Concern

- 478.000 inhabitants
- 2 main rivers
- 2 important railways for dangerous substances
- 5 important highways
- Pipelines, Gas transport, drink water supply
- Heavy industry within the region and close to the border
- Staff: 300 fte. & ca. 835 volunteers (fire brigade)

Disaster management structures

Concern

Overall responsible:

local incidents:

Mayor

Incident with impact in more municipalities

chairman board safety region

Incident with impact in more regions

One of the chairmen involved coordinates

National impact:

Ministers

Disaster management structures

Concern

Other bodies with responsibilities:

Different ministries

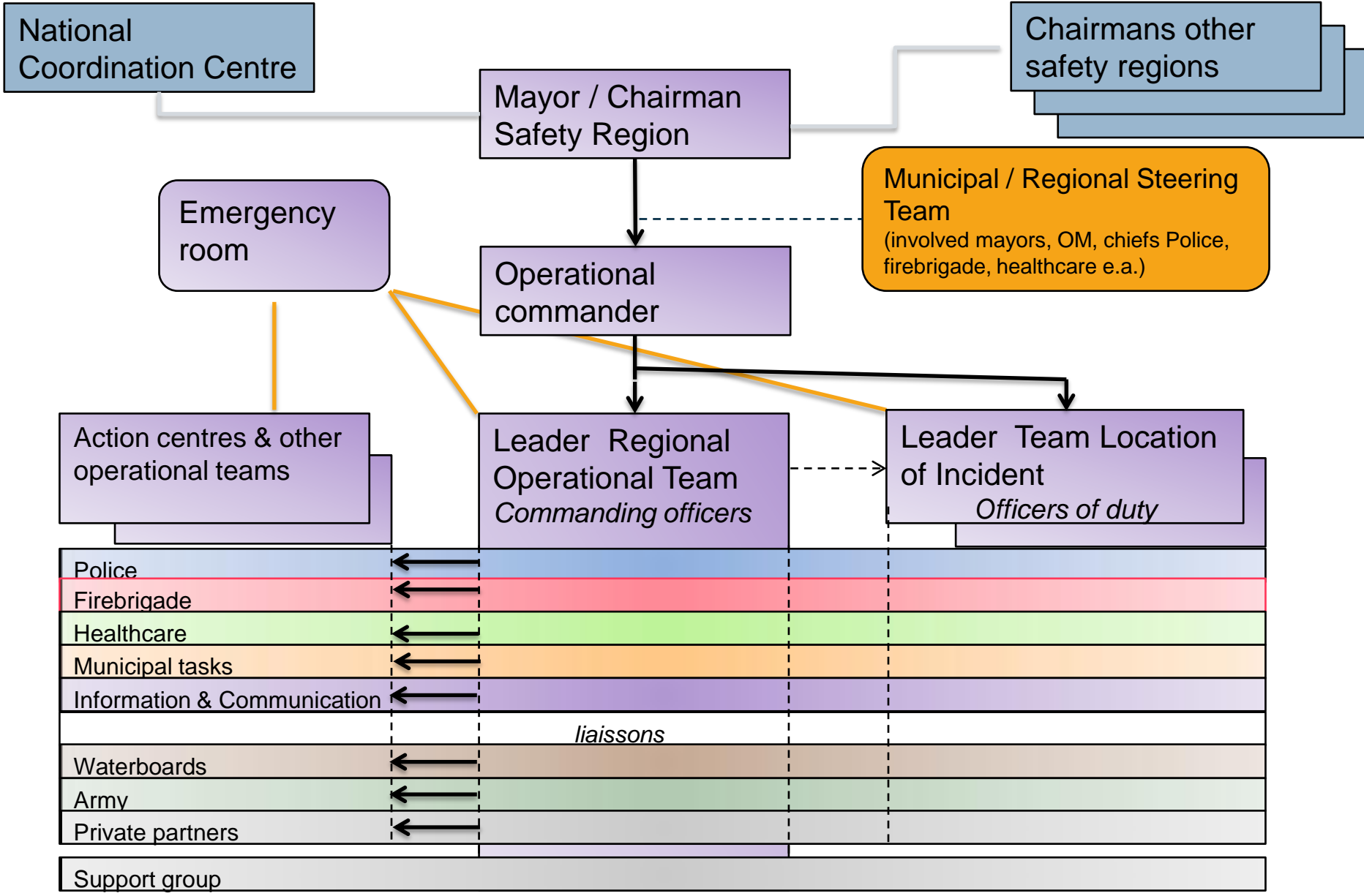
I&M, EZ, V&J, VWS

Other government bodies

OM, Waterboards

Private companies

Water, electricity, transport



Safety & Critical Infra

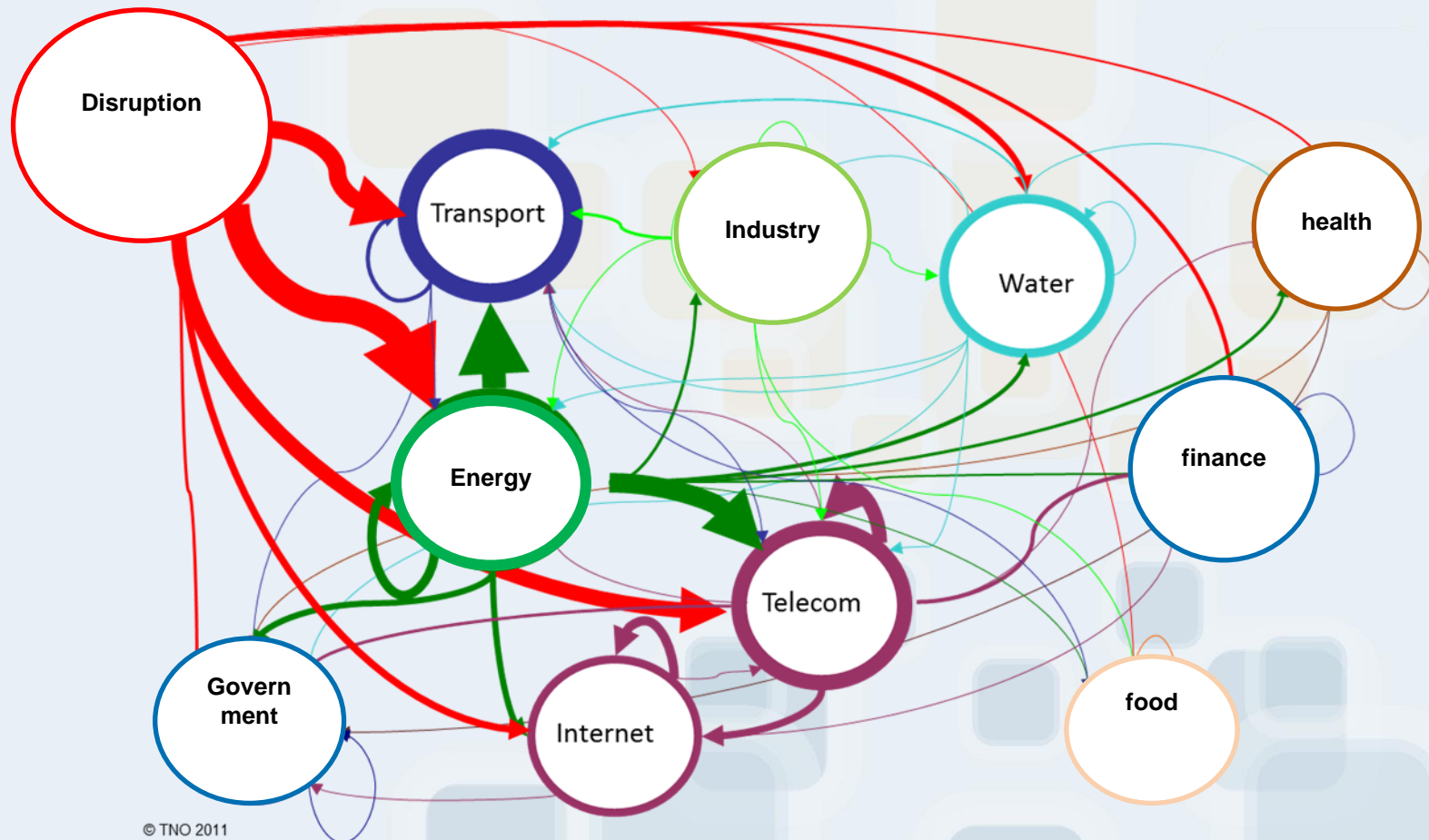
Concern

The Dutch list of “Vital Infrastructure

- Chemical & Nuclear industry
- Drinkwater supply
- Energy (gas & electricity)
- Finance
- Food
- Healthcare
- Justice
- Public administration
- Public order & Safety
- Telecom / IT
- Transport
- Water management

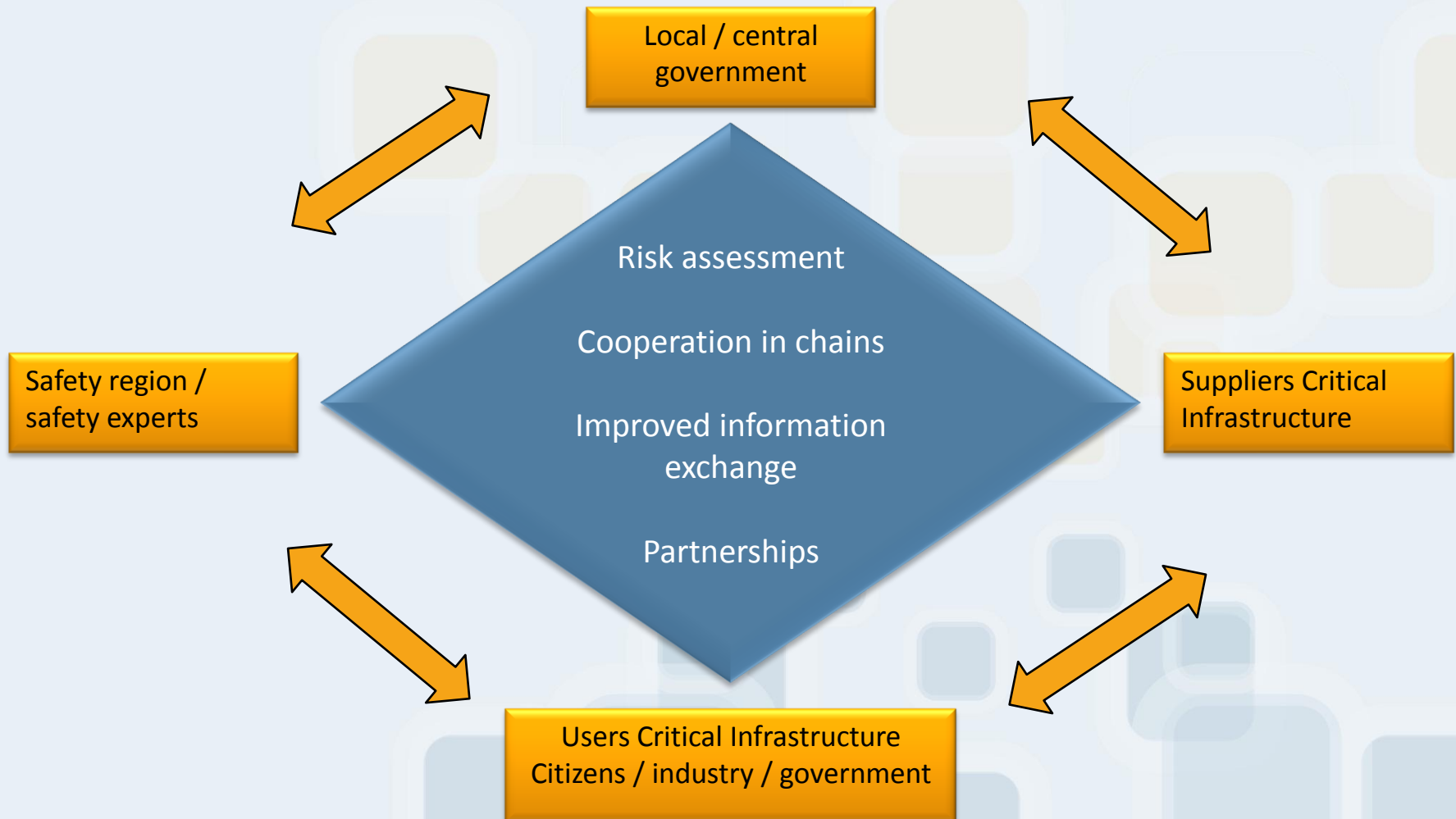
Safety & Critical Infra

Concern



Safety & Critical Infra

Concern



Safety & Critical Infra

Concern



(Possible) Examples Dordrecht

Concern

- No gas pipelines in regular flooded areas
- Electricity / drinkwater / gas network follows dike areas
- Main roads on high level
- Self protection Industry
- Self supporting citizens / industry / organizations

(Possible) Examples Dordrecht

Concern

Questions?