



Ministerie van Verkeer en Waterstaat



## **Co-ordinated at-sea and shoreline pollution response in the Netherlands**

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# Facts and Figures of the Netherlands

• Population	16.6 million
• Government type	Constitutional monarchy
• Capital city	Amsterdam
• Government seat	The Hague
• Official language	Dutch
• Municipalities	441
• Safety regions	25
• Provinces	12
• Currency	Euro
• Area	41.526 km <sup>2</sup>
• Coastline	451 km





# DG Public Works and Watermanagement, Rijkswaterstaat, mission:



- Safe and efficient management of traffic highways (3260 km, tunnels, bridges, traffic centres)
- Safe and efficient management of shipping on rivers, canals, open water (1656 km, locks, traffic centres)
- Protect against flooding (dykes, flood barriers, pumping stations)
- Adequate supply of good quality water for all users (oil/chemical spill response, monitoring)
- Reliable information for users and partners
- Construct and maintain roads, waterways and water system



## Responsibility and preparation Rijkswaterstaat for spills on inland waters, North Sea, coast and inland shorelines

- Water law and law for protection of bottom and soil gives responsibility to Rijkswaterstaat
- Law requires contingency plans, training and exercising.
- Preparation with own equipment and private sector
- Ships, booms, skimmers, beach clean equipment
- 1200 spills per year on inland waters and port areas
- 7-10 % clean up inland waters
- 450 spills per year at North Sea
- 2-5 % clean up at sea
- National plan for Coastal Pollution







## Appearance Dutch coast

- Sandy coast in the west middle
- Wetland area Waddensea in north west
- Estuaries Wester schelde en Easter schelde in south west
- Entries to ports of Delfzijl, Den Helder, Amsterdam, Rotterdam, Flushing, Gent and Antwerp
- Dykes, floodbarriers, shipping locks.



## Effects of pollution Dutch coast

- Beach and tourism sandy coasts
- Yachts tourism and eco tourism
- Ecological damage to birds, seals, plants etc
- Fishery and shell fish
- Pollution of dykes, flood barriers
- Shipping, ports and industry



# Wadden Sea

- World Heritage list
- Wetland area
- Birds
- Seals
- Shellfish banks
- Fish and shrimps
- Salt water plants
- Breeding area for birds and fish
- North Sea







# Netherlands Coast guard organisation

- Political responsibility Minister of Transport Public Works and Water Management
- Operational command and coordination for the North Sea
- Participation 7 Ministries
- Spill response executed by Rijkswaterstaat
- Area of command for spill response North Sea up to high water line coast





# Civil Protection in the Netherlands

- Civil protection policy: federal responsibility
- 25 safety regions responsible for disaster relief management, each in their own region;
  - Fire services, Police services, Health services are assigned to regions
- Reinforcement of the regions disaster relief forces coordinated by National Operations Centre (LOCC);
  - Assets are mainly coming from (not affected) regions, (national) rescue organisations and the Army
- New development;
  - National Command and Control on disaster relief in case of large scale (national) disaster





# Crisis management basics Civil Protection

- **Command on local level** and as low as possible
- **Mayor supreme commander**
- **Safety region is the key organization**
  - and the Ministry of the Interior and Kingdom Relations
  - responsible for the system and a national co-ordination
- **organizations and procedures** based on the first responders red, yellow and blue (fire service, medical sector and the police) – and green (municipalities)
- **Additional organizations and procedures** on the second responders (defence, waterboards, rijkswaterstaat, coastguard, ports, airports, energy, industry).





## 1. Alarming government & operational services

- 2. Fighting fire and dangerous substances
- 3. Saving and technical assistance
- 4. Observing and measuring chemicals
- 5. Checking and organizing contaminating
- 6. Warning the public
- 7. Clearing roads for rescue services

- 11. Keeping public order
- 12. Closing roads
- 13. Managing traffic
- 14. Evacuating people
- 15. Guiding rescue services
- 16. Identification deceased
- 17. Criminal investigation

- 8. Public health
- 9. Urgent medical assistance
- 10. Psycho-social assistance

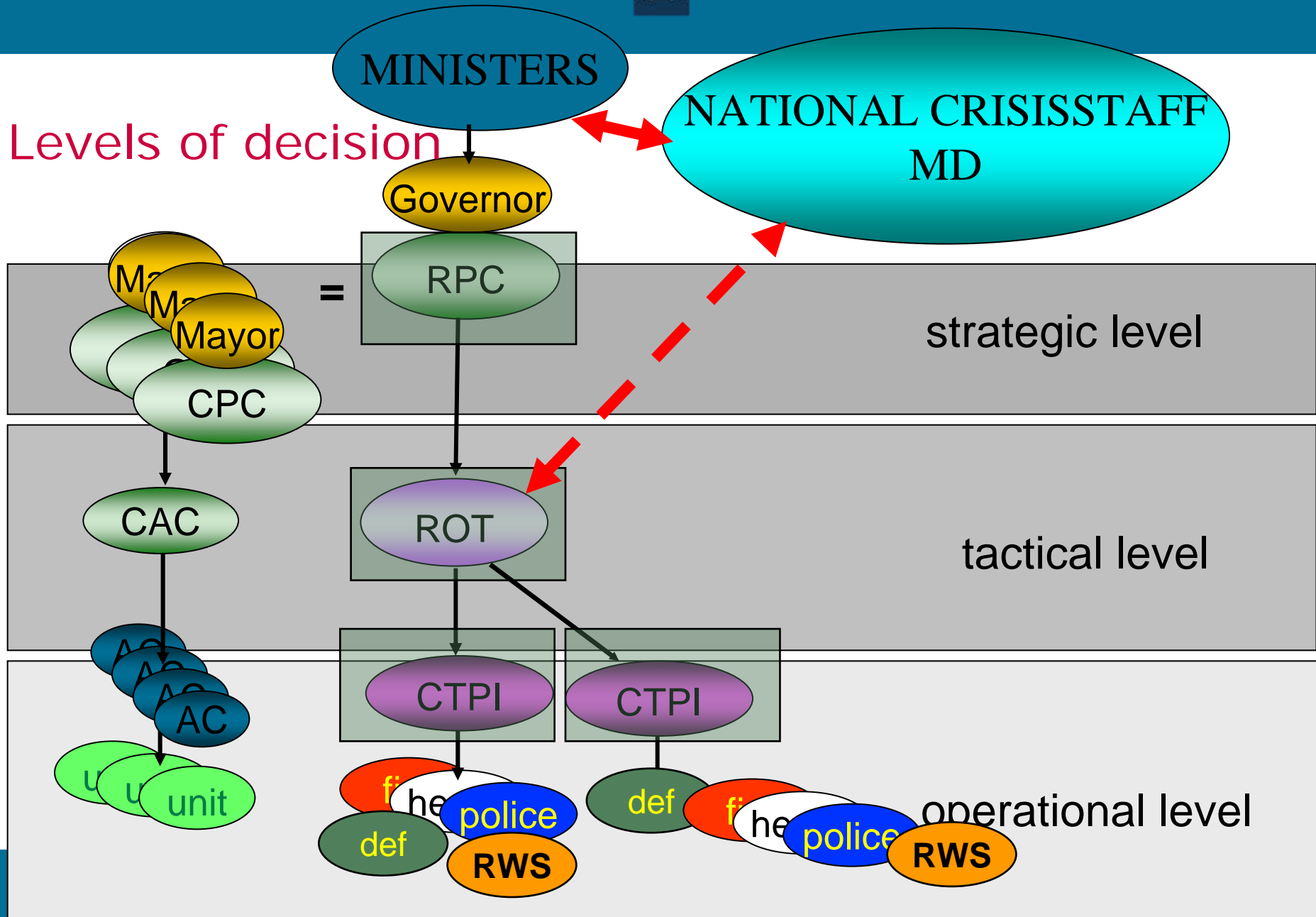
- 18. Registration of victims
- 19. Information
- 20. Damage control
- 21. Funeral ceremonies
- 22. Accommodations
- 23. Primary necessities of life
- 24. Environmental care
- 25. Recovery

- 26. Water quantity management
- 28. Shipping Traffic management

- 27. Water quality en shoreline management
- 29. Search and Rescue



## Levels of decision





## Beach and shore cleaning principles

- Main policy mechanical recovery
- Additional manual recovery
- Separation and temporary storage on beach
- High pressure cleaning dykes, objects and ships
- Ecological consideration effects of clean up or natural dispersion and break down in situ.



## Spills on the coast in the Netherlands

- Tanker Katina 1982 (1600 ton fuel oil)
- Bulk carrier Borcea 1988 (300 ton)
- Freighter Amer Fuji 1992 (90 ton)
- Car carrier Tricolour 2002 (100 ton)
- Every year 2-5 small spills (1-10 ton) of oil and/or paraffin and vegetable oils



# Finally

- Is he waiting for co-ordinated at-sea and shoreline pollution response ?
- Co-ordination of operations or co-ordination of responsibility ?



- Thank you for your attention