



# Successful governance of technical innovations in waterborne transport systems

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**Navigating the Future of European Waters with Autonomous Innovation**

7 November 2023, Rotterdam



These projects have received funding from the European Union's Horizon 2020 research and innovation programme under grant agreements N° 815012, 859992, 861678.

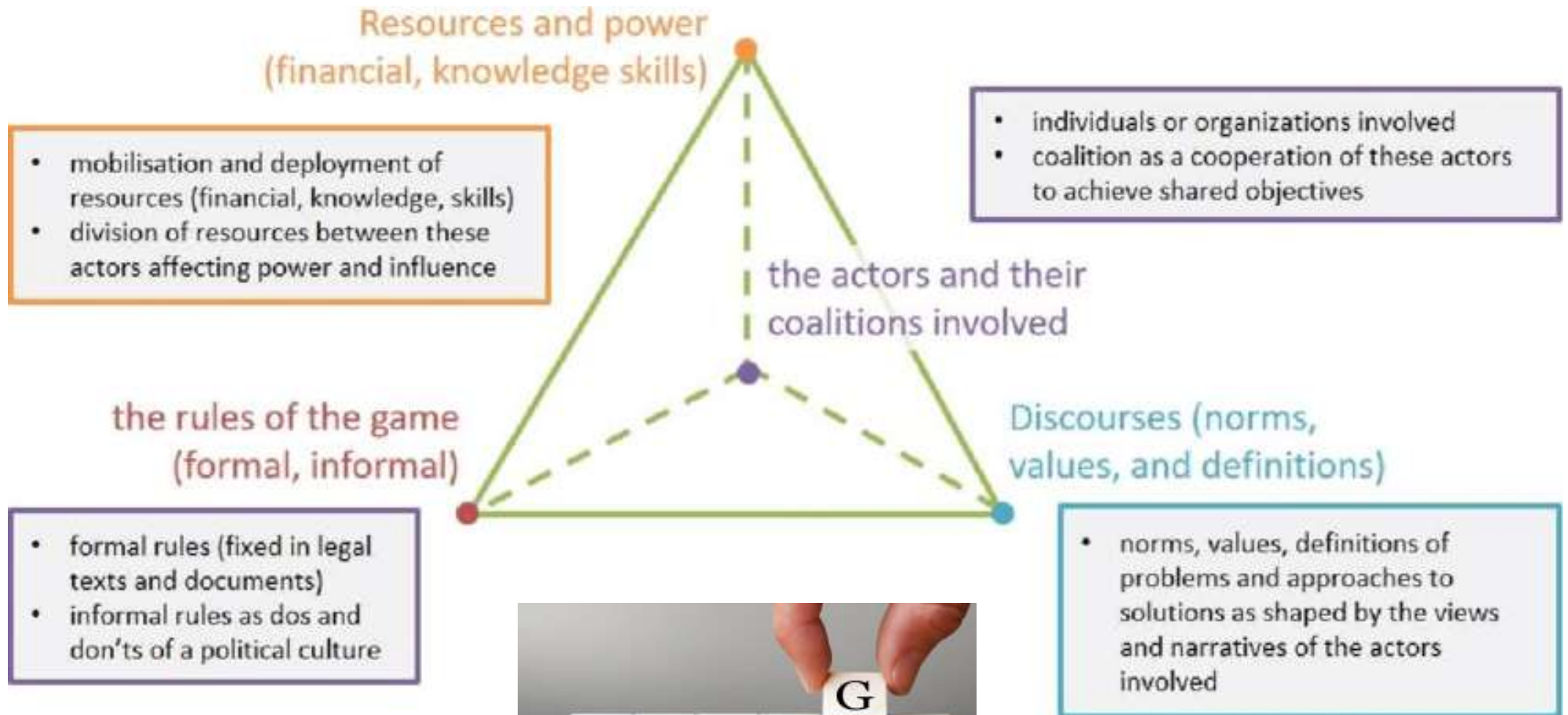
# Setting the AEGIS scene



- Technical innovations
  - Ship design (autonomy and remote pilotage)
  - Cargo handling (on-board and at dock)
  - Digital connectivity
  - Low-emission propulsion systems
- Governance is about decision-making
  - The problem of regime fragmentation in waterborne transport
  - Examples from AEGIS
- Key to successful governance



# Governance in four dimensions



# Regime fragmentation



Short-sea shipping



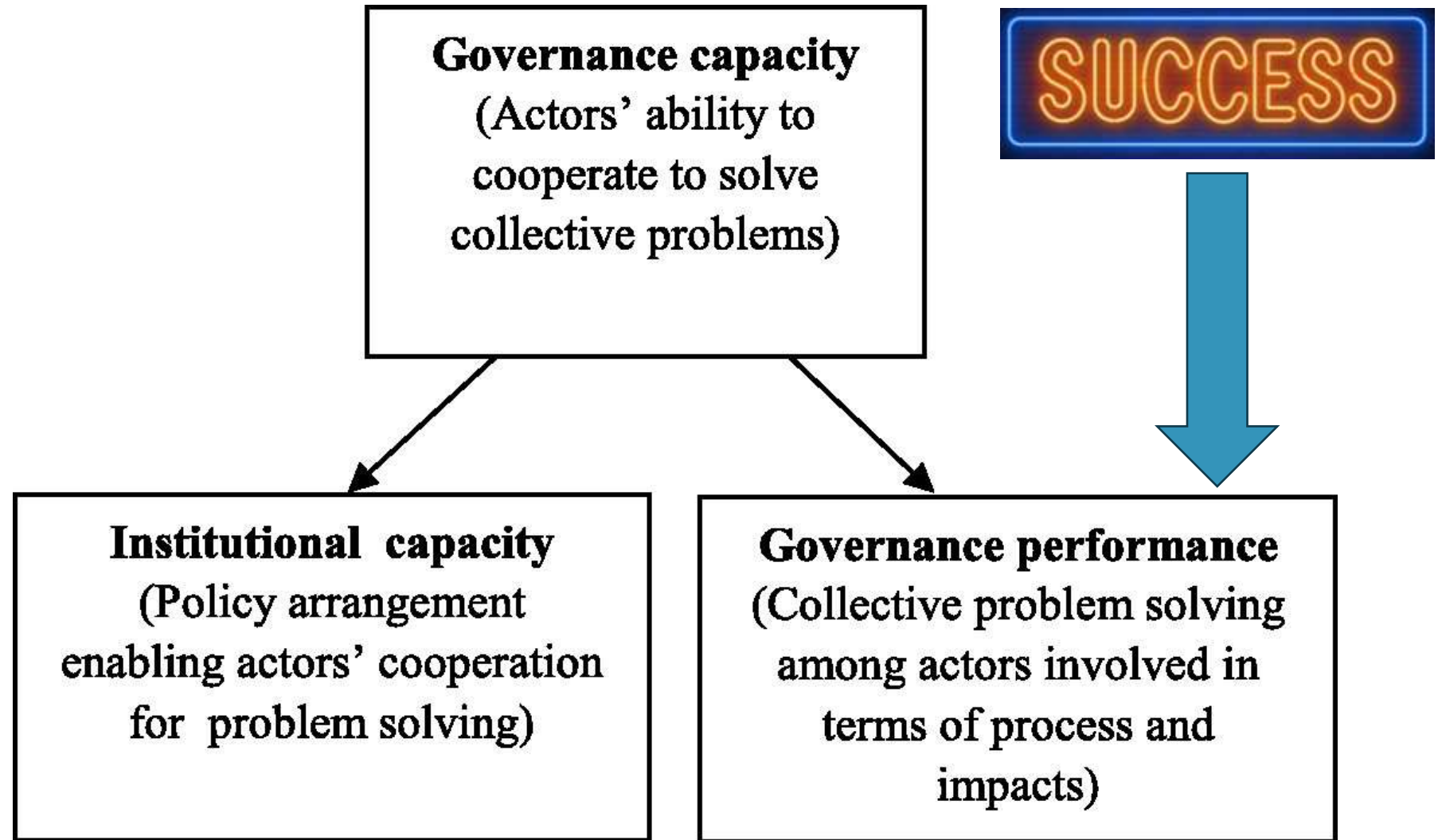
Inland waterway transport



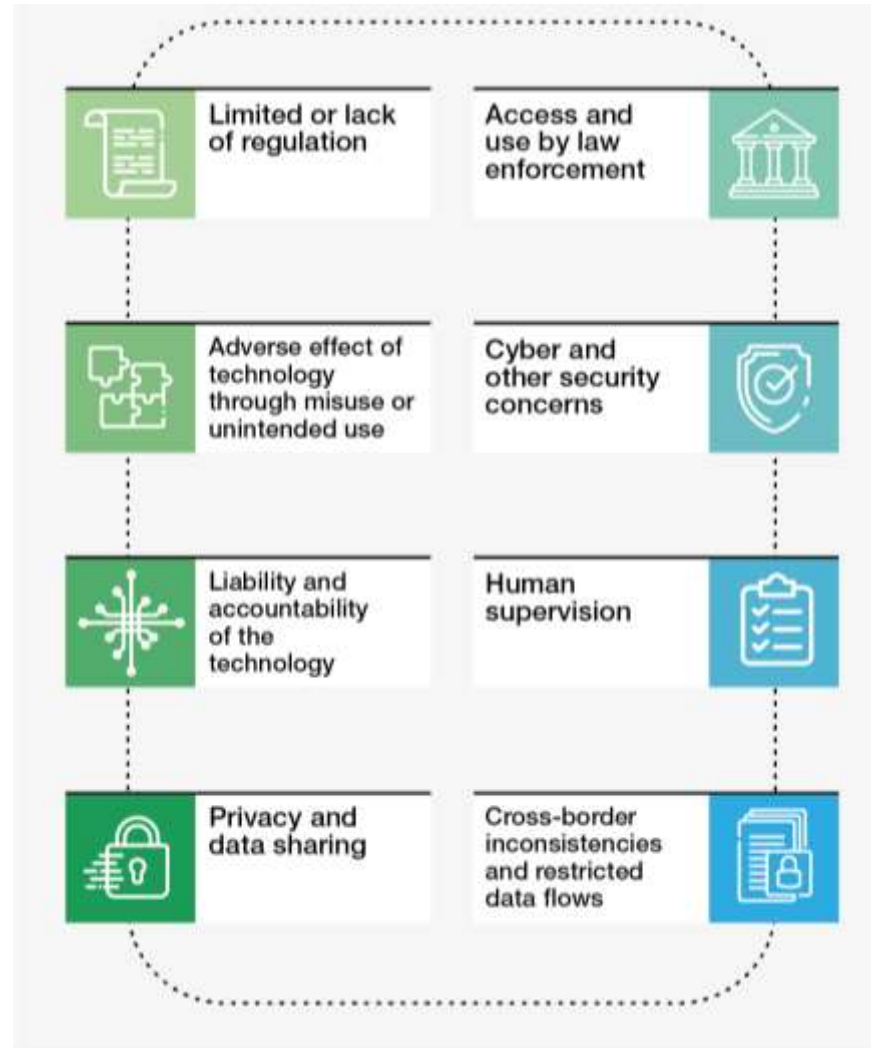
SME port development



# Governance



# Technology governance gaps



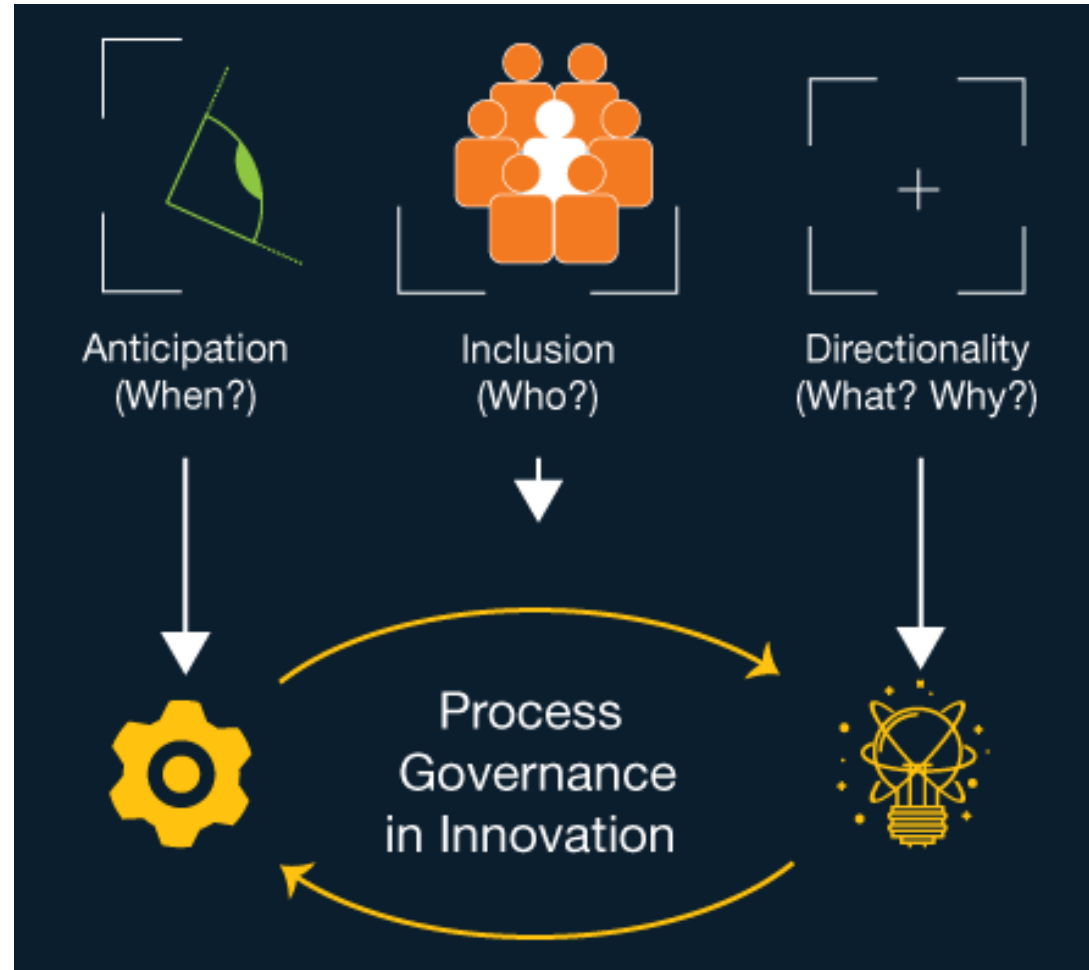
# Examples from AEGIS



- Dependency on global rules for international transport (e.g. IMO)
- Infrastructural adaptation for autonomous operations (bridges, locks)
- Customs reporting for intra-EU maritime journeys
- Lack of clarity on how to insure autonomous vessels
- Economic incentives to road users
- Regulatory changes are not high in the agenda at national level
- Lack of integration between modalities (e.g.
- Residents may oppose increased port-operations and navigation
- Funding for infrastructure development shows path dependency towards less flexible solutions



# What needs to be done?





# Key to success



- Partnerships: industry driven codes of good practice become the guiding standard, temporarily replacing the need for new law
- Agility: local derogations on general rules and bilateral international agreements allow the deployment of new ships before global consensus
- Incentives: focus on policy priority of shifting cargo from road to sea to design fiscal and economic policy around transport corridors
- Participation: include road and rail operators in the policy-making on waterborne transport, as they also collaborate in the last mile
- R&D: integrate inputs from publicly-funded scientific projects into policy-making processes





Thank you

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