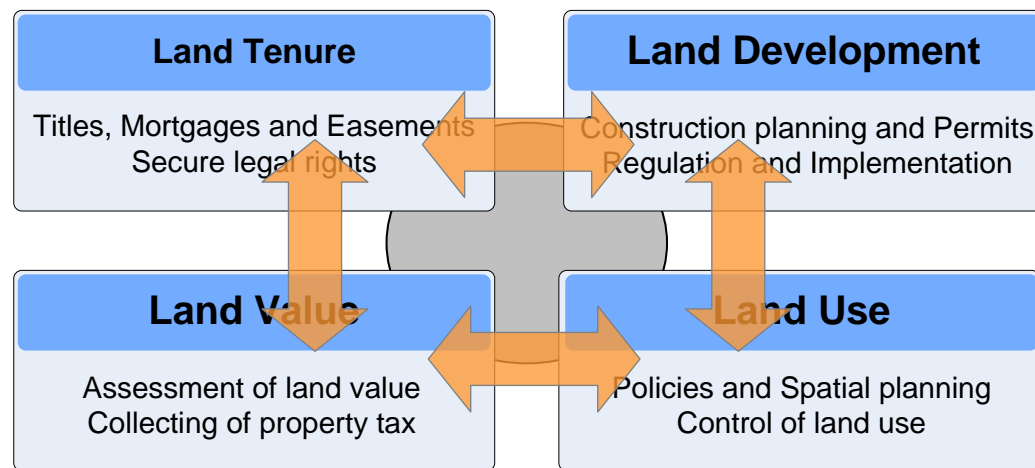


Awareness as a key factor for developing inter-organizational collaboration in land administration systems

**Christian Thellufsen, M.Sc., Land Surveyor
National Danish Survey and Cadastre**

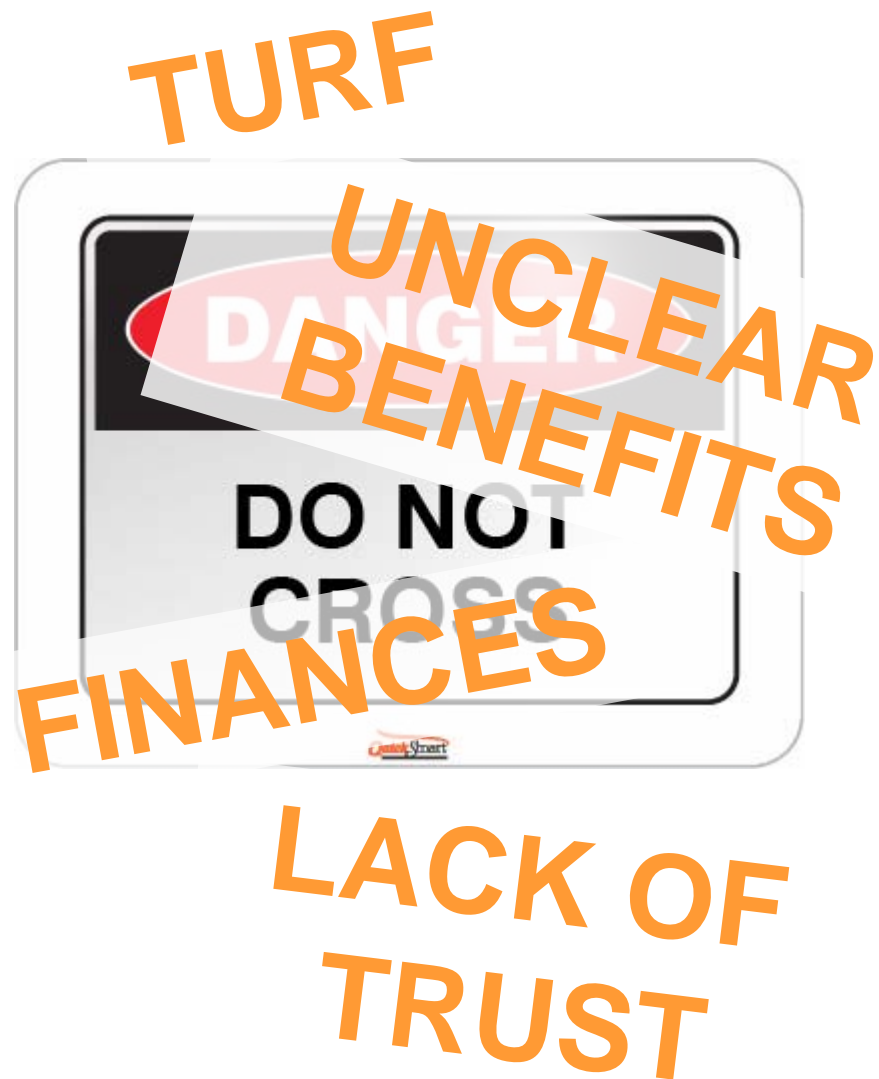
Inter-organizational collaboration is demanded in land administration systems

- From a single-purpose to a multi-purpose perspective
- Spatially enabling of government
- Technology push and market pull

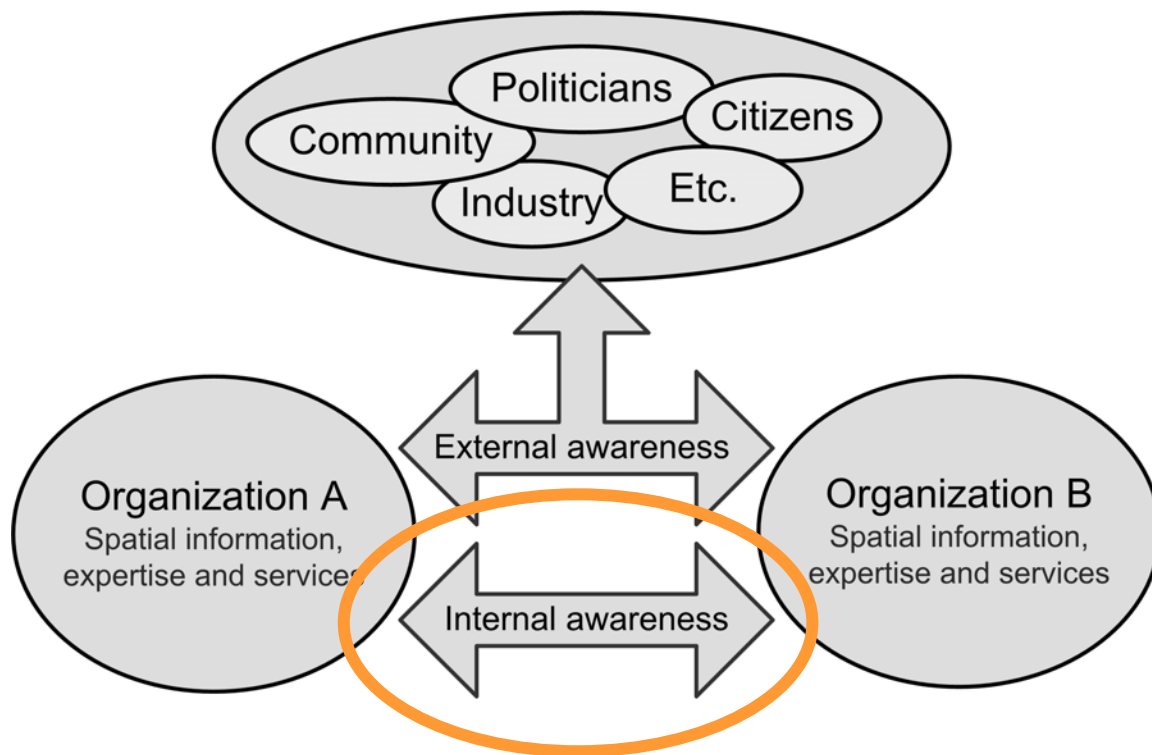


But barriers exist...

"There exist just as many reasons for not engaging in inter-organizational collaboration, than for doing it"

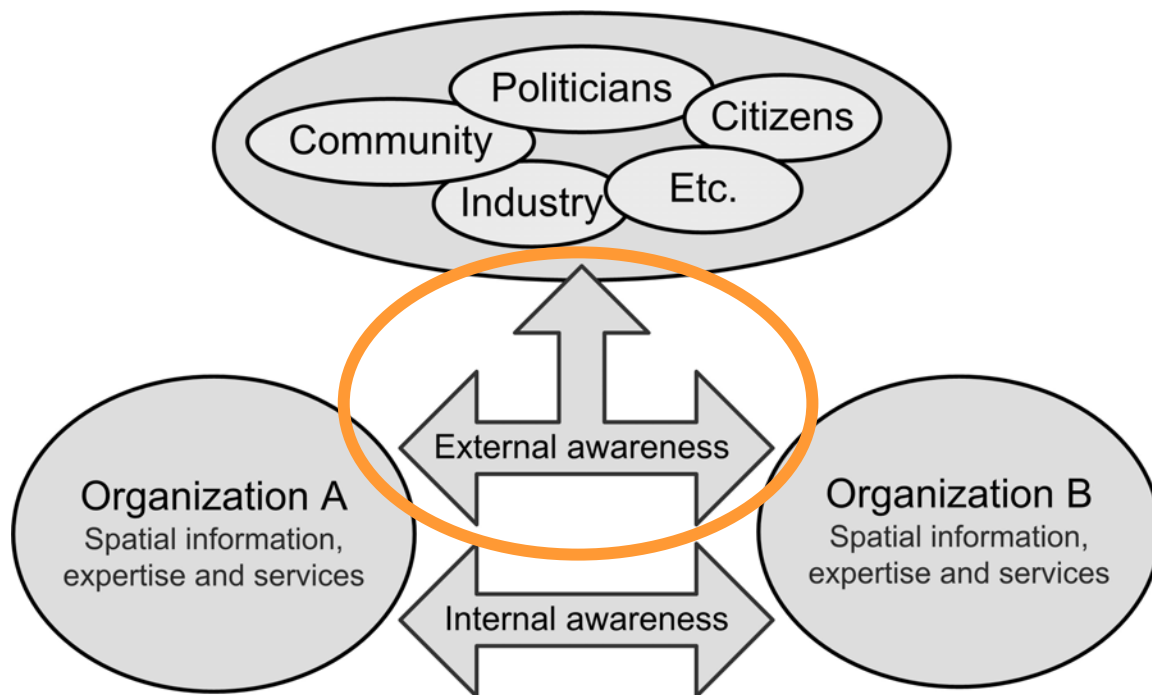


Awareness as a foundation for inter-organizational collaboration



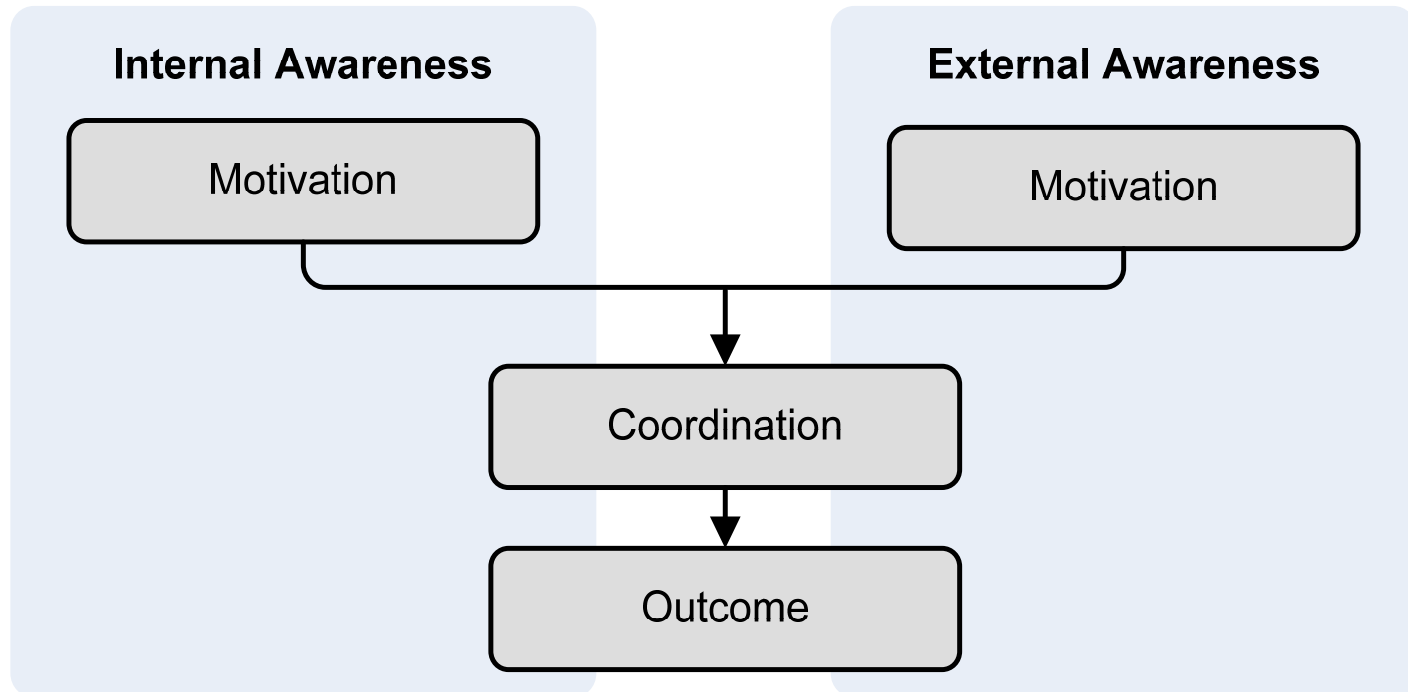
Internal awareness involves the phases of recognition that allows organizations to make sound decisions in solving problems or developing solutions regarding handling of spatial information, expertise and services between the organizations

Awareness as a foundation for inter-organizational collaboration



External awareness involves the phases of recognition that makes organizations recognize why and how they alone and together can make their spatial information, expertise and services available to society in order to support a social, economic and sustainable development.

Stages of awareness



Stages of awareness – Internal awareness

Internal Awareness

Motivation

Existence awareness

Awareness of other organizations in the inter-organizational network

Collaboration awareness

Awareness of shared role in the inter-organizational network

Cooperation awareness

Awareness of capabilities, resources, visions, and a need for partnership in the inter-organizational network

Stages of awareness – External awareness

Need defining awareness

Awareness of society's needs and interests of the organization's information, expertise and services

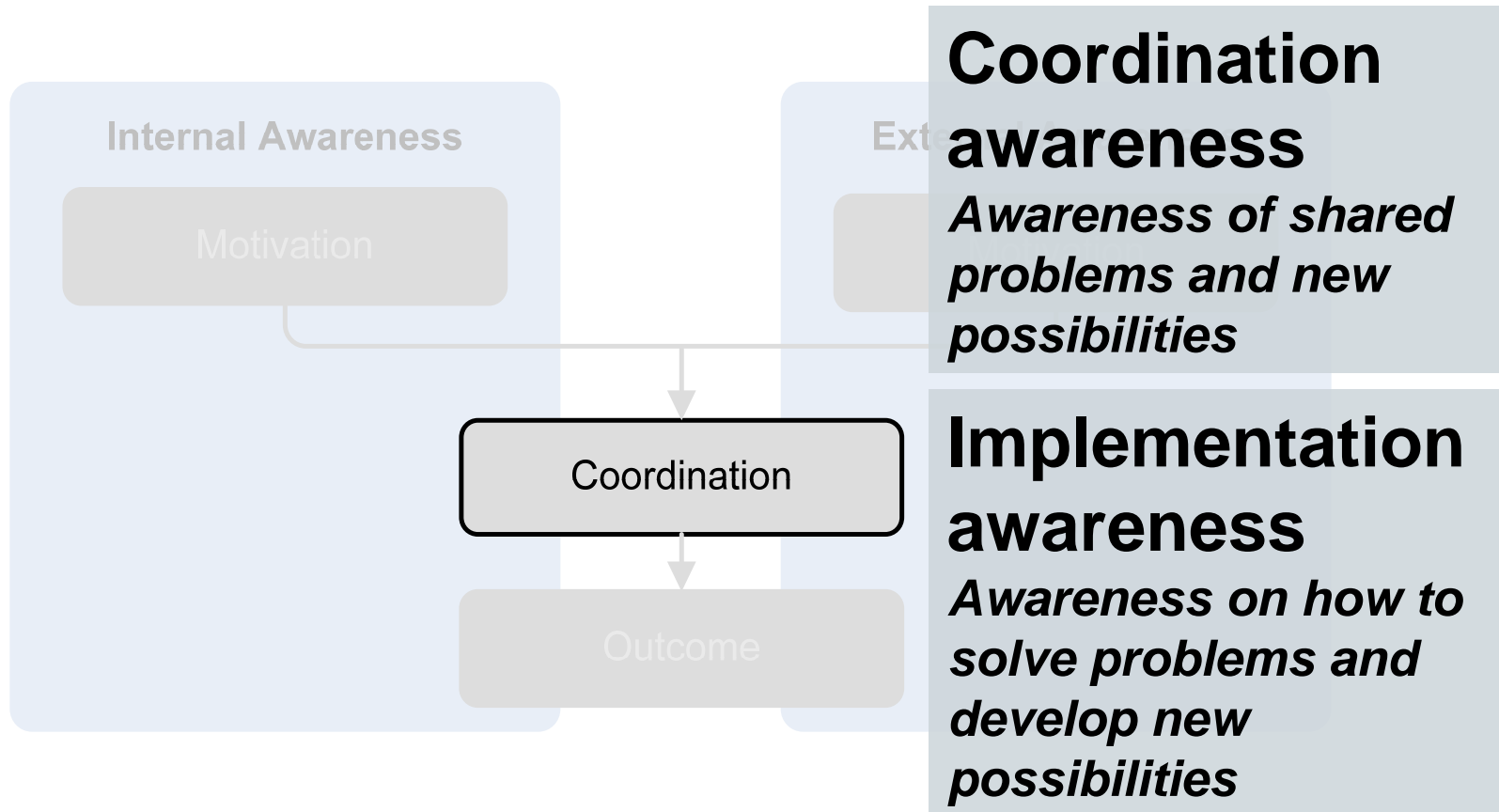
Collaboration awareness

Awareness of the role of the inter-organizational network in society, and of the interdependency in the network in order of fulfilling the demands in society

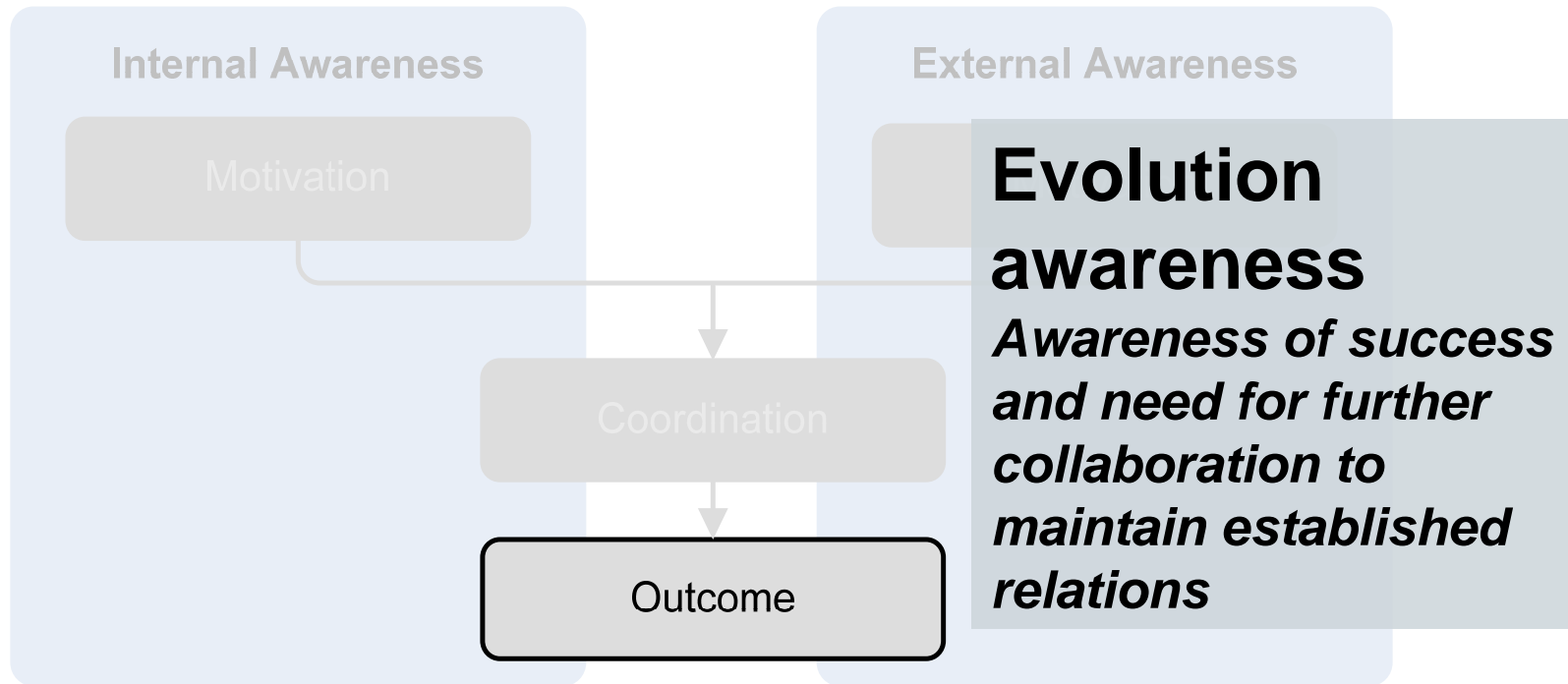
External Awareness

Motivation

Stages of awareness



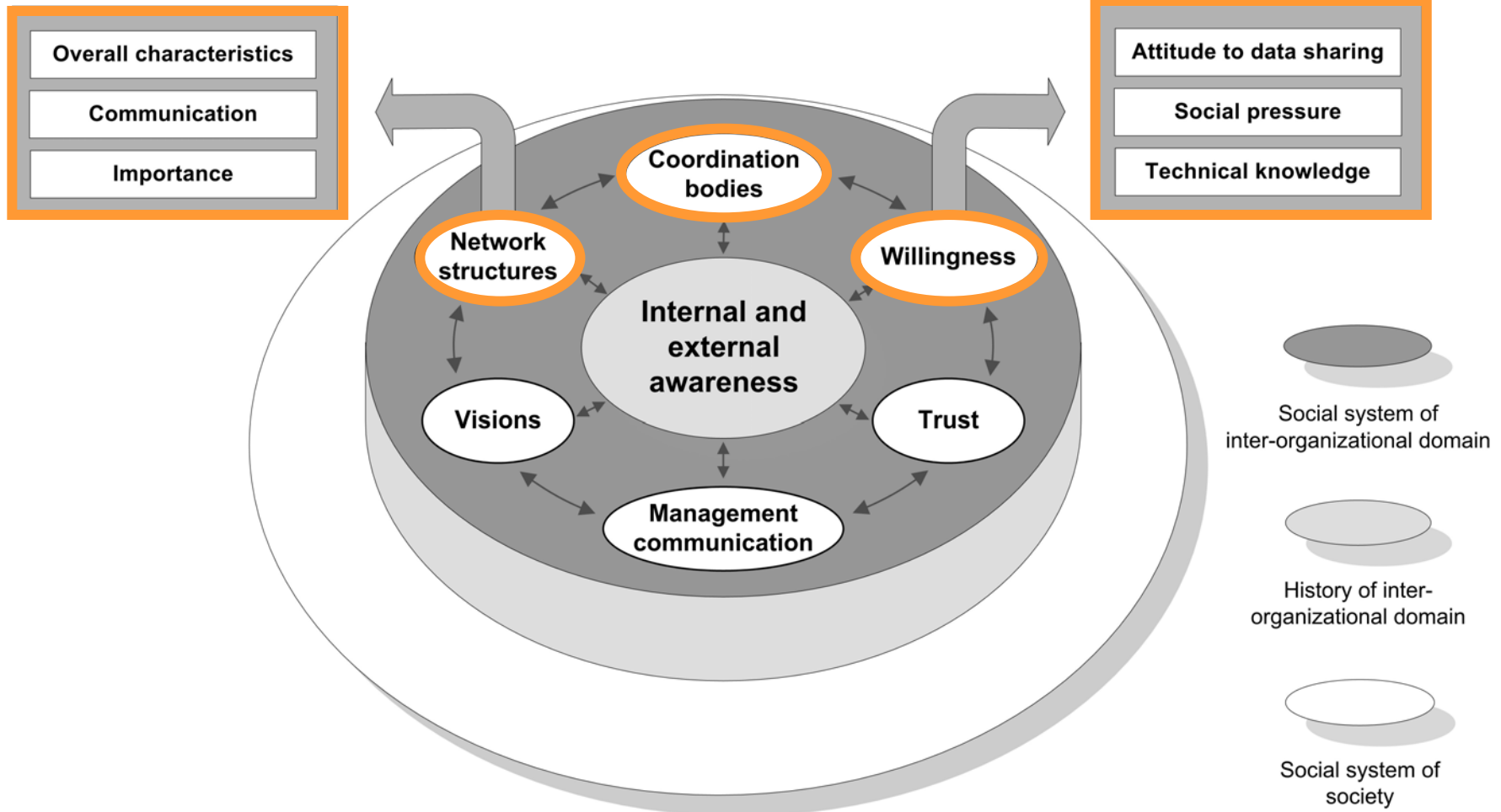
Stages of awareness



Four case studies on cadastral systems



Evaluation Factors



Danish cadastral system as a case



A separated cadastral system

Ministry of Environment

National Survey
and Cadastre

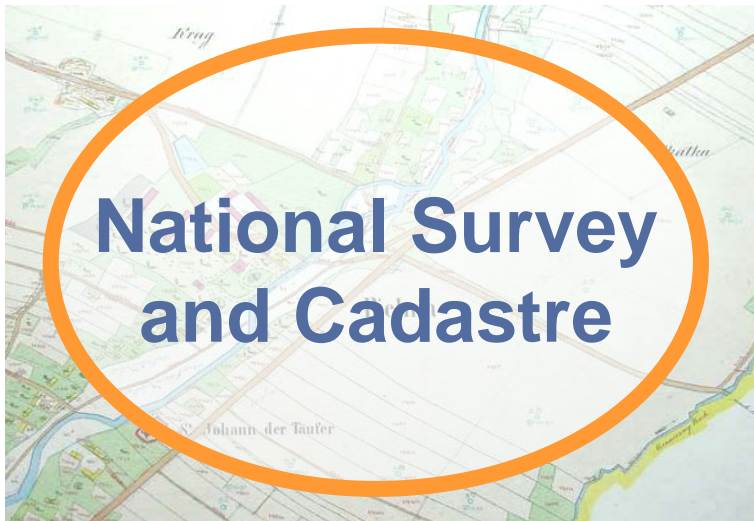
- Cadastral mapping

Ministry of Justice

Court
Administration

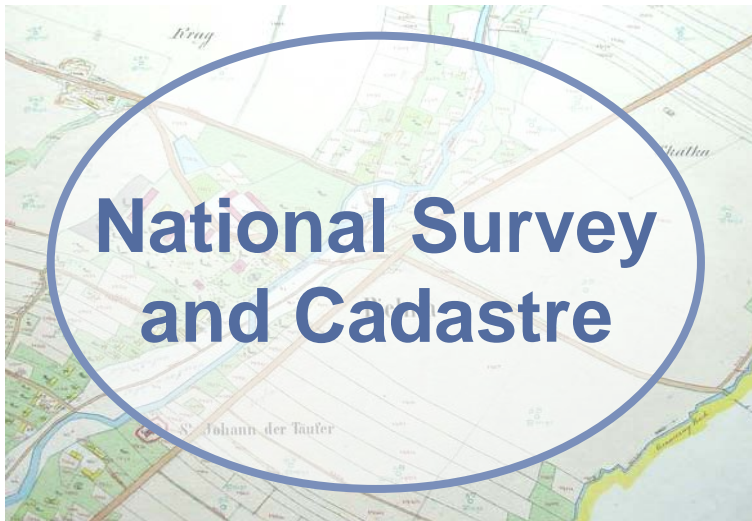
- Titles
- Mortgages
- Easements

Denmark as a case



- High focus on other organizations and its own role and position in society (coordinator for SDI)
- Numerous links exist to the Court Administration
- Highly developed communication strategies
- High level of willingness to share data
- High level of technical knowledge

Denmark as a case



- Other organizations not mentioned in strategies
- Only a few links exist to the National Survey and cadastre
- Individual courts call for collaborative constraints
- Limited willingness to share data (political constraints)
- Limited technical knowledge

Case study results

External Awareness				
Overall step	Stages of awareness	Description	The National Survey and Cadastre	The Court Admin.
Motivation	Need defining awareness	Awareness of society's need and interest of the spatial information, expertise and services that the organizations in the cadastral system possess and/or can deliver	☒☒☒	☒☐☐
	Collaboration awareness	Awareness of the role of the cadastral system in society	☒☒☒	☒☐☐
	<i>Problem-setting</i>	Awareness of organizational interdependency in order to reach shared goals and visions	☒☒☒	☒☒☐
ration	Coordination awareness <i>Structuring</i>	Awareness of shared problems and/or new possibilities	☒☒☒	☒☒☐

Conclusion

- Awareness is an important foundation for inter-organizational collaboration in LAS
- Awareness can be separated into stages
- Awareness can be investigated through a number of associated factors
- It is not possible to measure awareness precisely
- Instead, the methodology provides a helpful tool in pointing out general collaborative problems in inter-organizational relationships in LAS

Thank you for your attention

Christian Thellufsen
e-mail: chcla@kms.dk