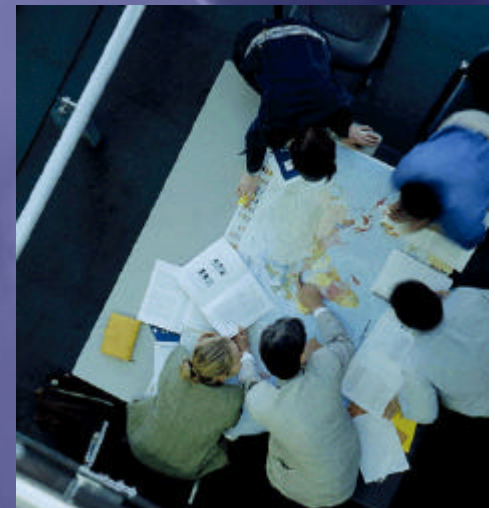


# **Facing the Facts: The extent of spatial data sharing**

TNO Strategy, Technology and Policy

**Dr. Uta Wehn de Montalvo**

GSDI 6, 16-19 September 2002, Budapest, Hungary



# Overview

- **Spatial data sharing: definition & research question**
- **Methodology**
- **Results**
- **Analysis & Conclusions**

# Spatial data sharing

## Definition

*... entails making the digital spatial data used in GIS accessible to, or from, other parties. These exchanges may or may not include barter, financial payment or payment in kind.*

## Research Question

- *What is the actual extent of such sharing activities?*

# Methodology

## Taxonomy

### Calkins & Weatherbe (1995):

- type of organisation
- spatial data role of the organisation
- type of spatial data exchange of the organisation
- types of sharing partners of the organisation
- schedule of spatial data exchanges
- frequency of spatial data exchanges
- most recent spatial data exchanges
- type of sharing arrangement
- charges for shared spatial data
- average quantity

## Methodology (2)

- Observation vs. self-reports of past behaviour
- Survey with multiple choice questions
- GIS community in South Africa:  
(n=112)

National government

Provincial government

Local authorities

Para-statal organisation

Academia/research institutes

GIS industry

Private sector

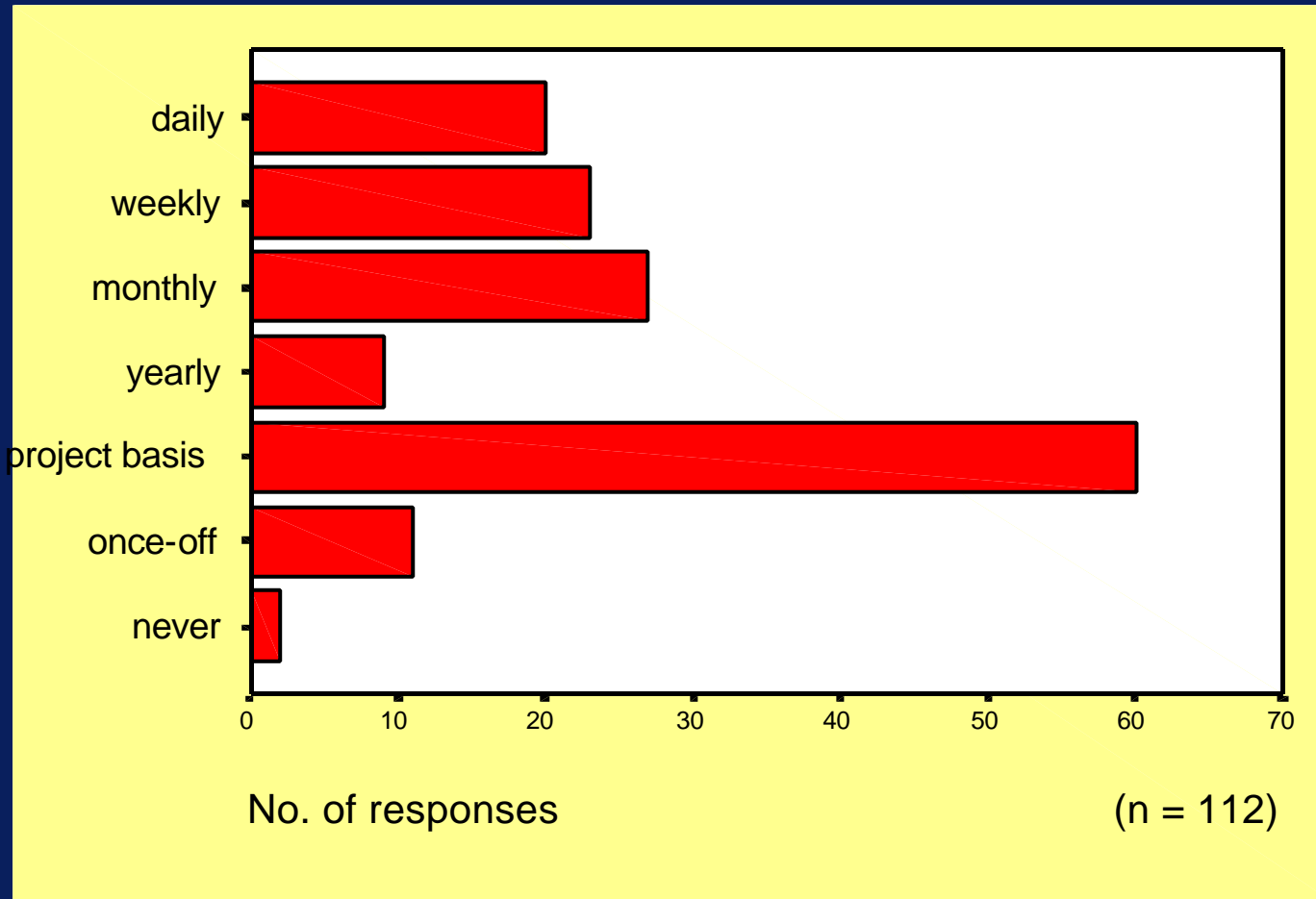
NGOs, not-for-profit

## Results

- **Magnitude of spatial data exchanges**
- **Who is sharing with whom ?**
- **Terms & conditions under which spatial data is shared**

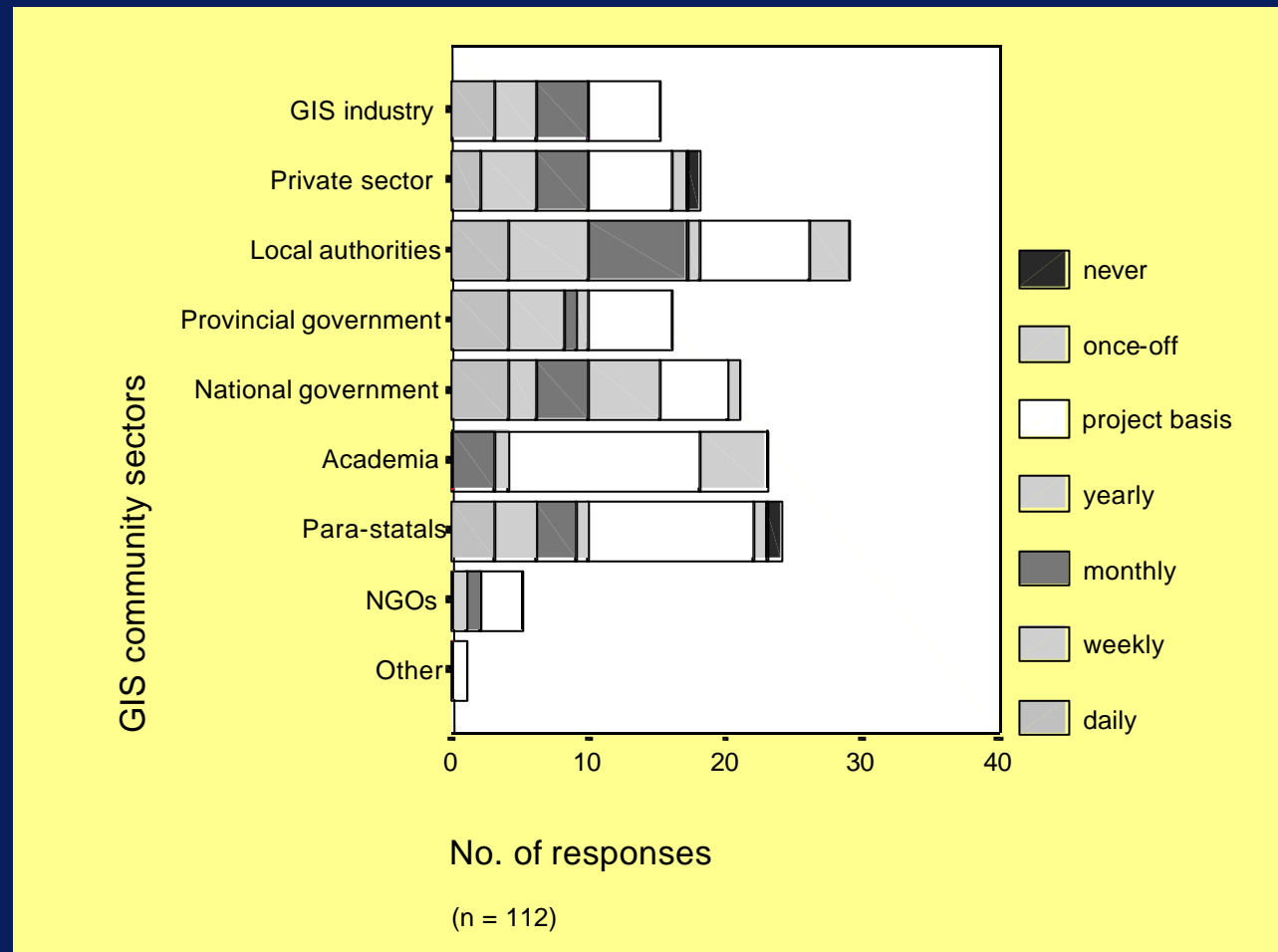
# Magnitude of spatial data exchanges (1)

## Frequency of spatial data exchanges



# Magnitude of spatial data exchanges (2)

Frequency of spatial data exchanges *by sector*



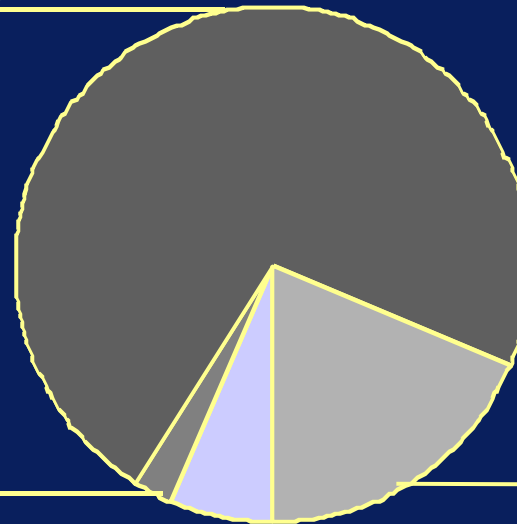
# Magnitude of spatial data exchanges (3)

Schedule of spatial data exchanges *by sector*

On demand: 72,6 %

Other: 2,4 %

Not relevant: 6,5 %

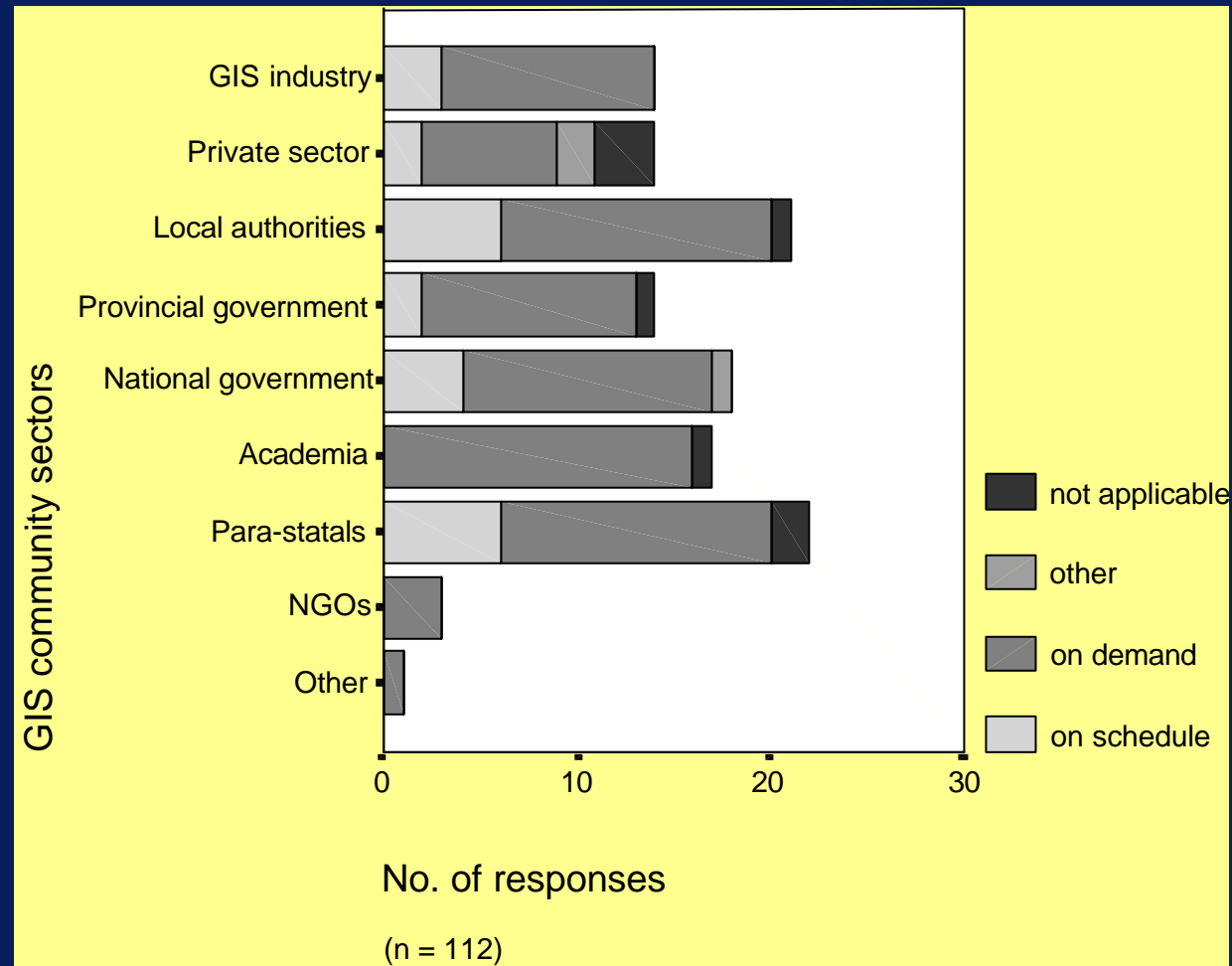


On schedule: 18,5%

(n = 112)

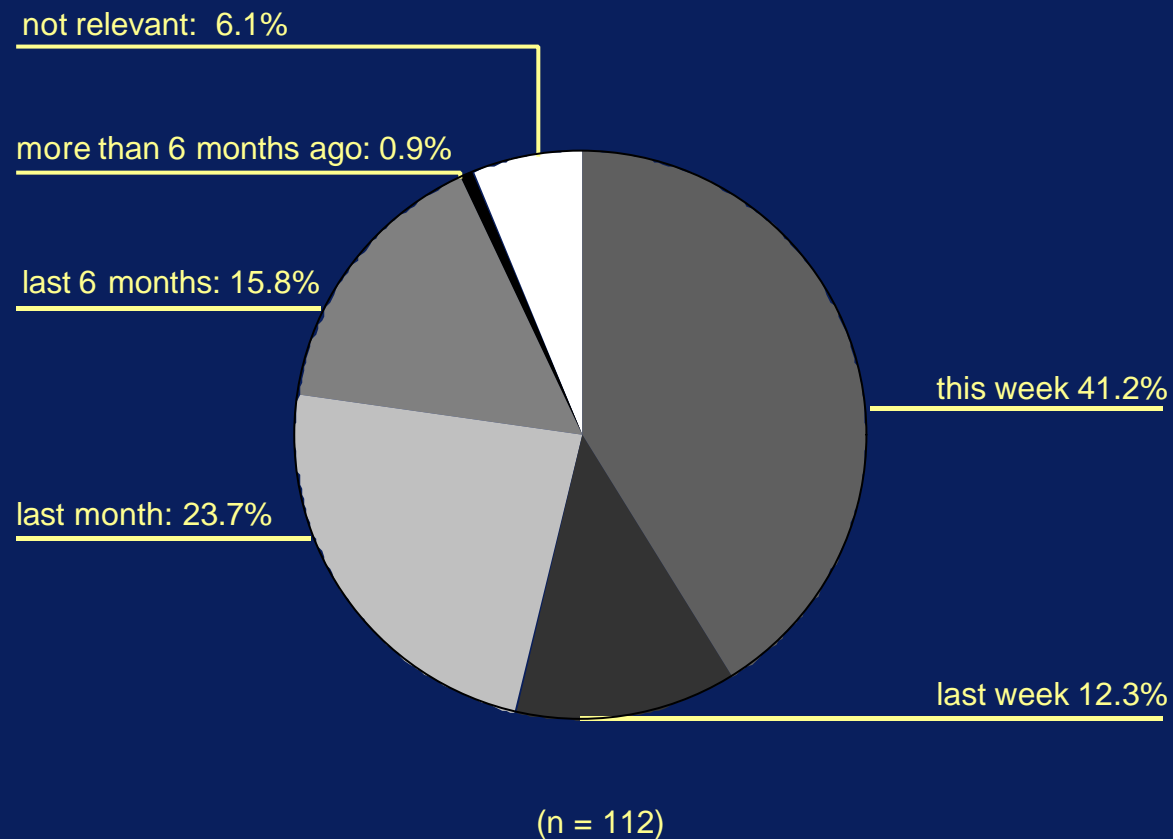
# Magnitude of spatial data exchanges (4)

Schedule of spatial data exchanges *by sector*



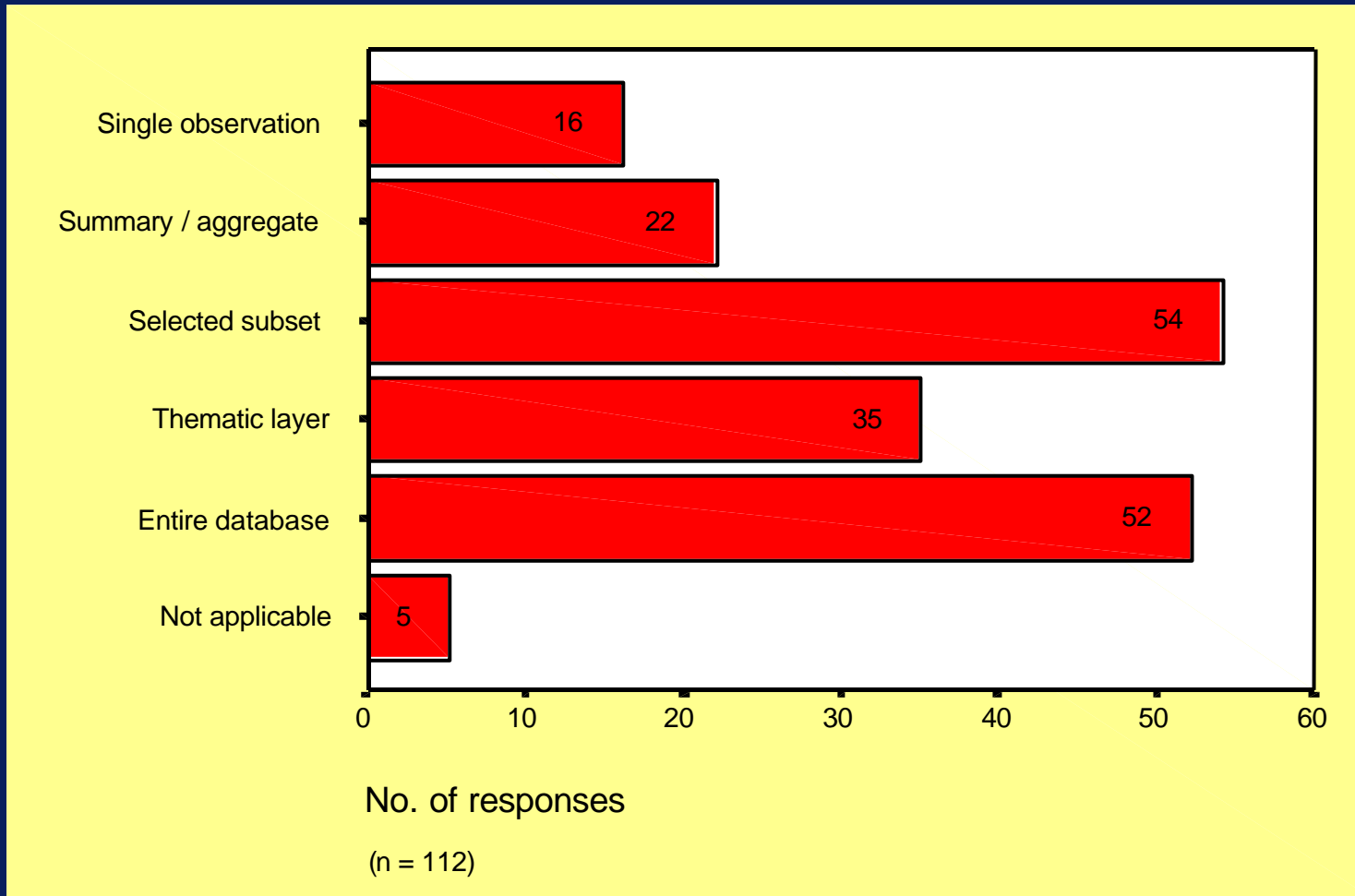
# Magnitude of spatial data exchanges (5)

## Recency of spatial data exchanges



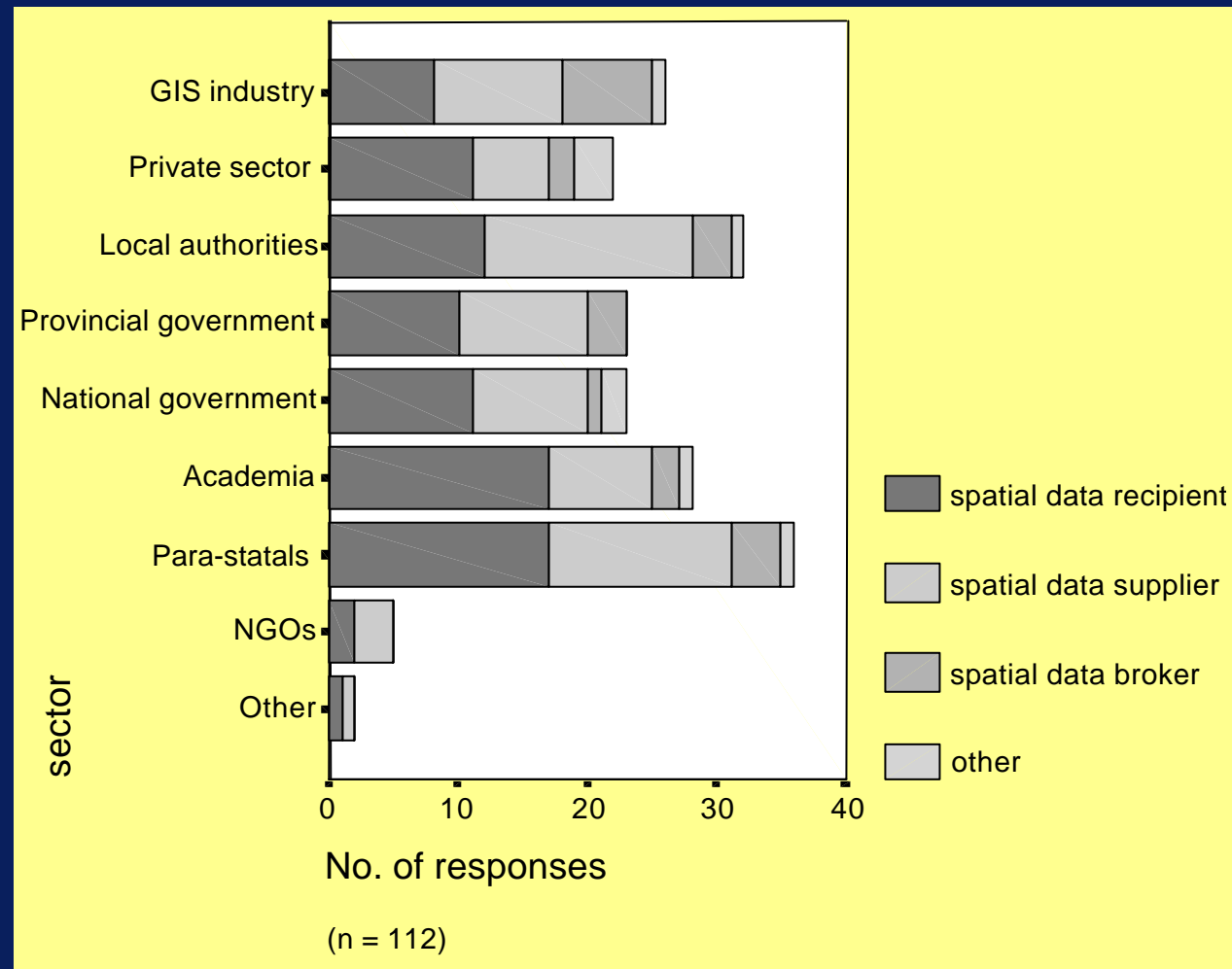
# Magnitude of spatial data exchanges (7)

Average quantity of spatial data exchanges



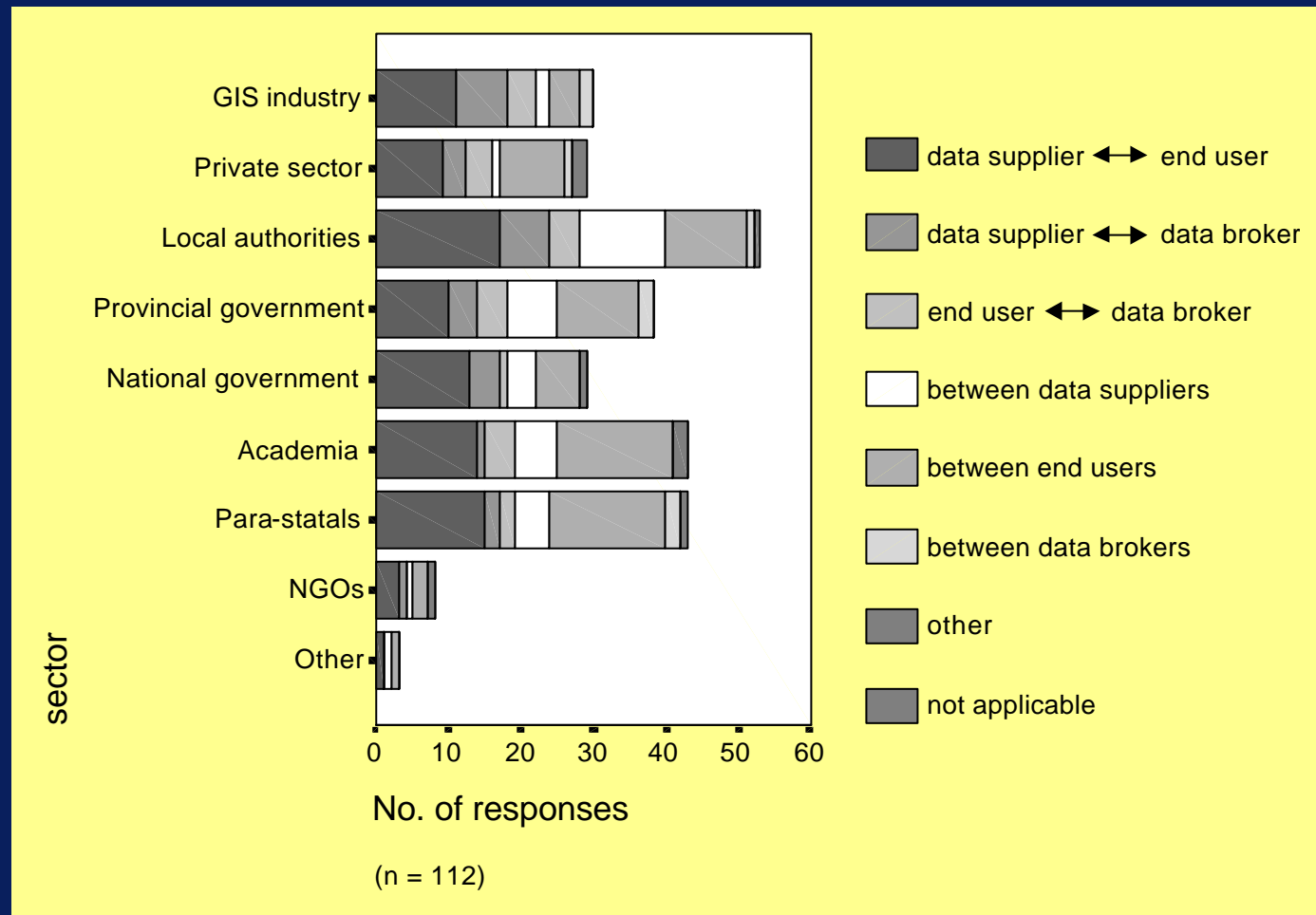
# Who is sharing with whom? (1)

Spatial data role of the organisation *by sector*



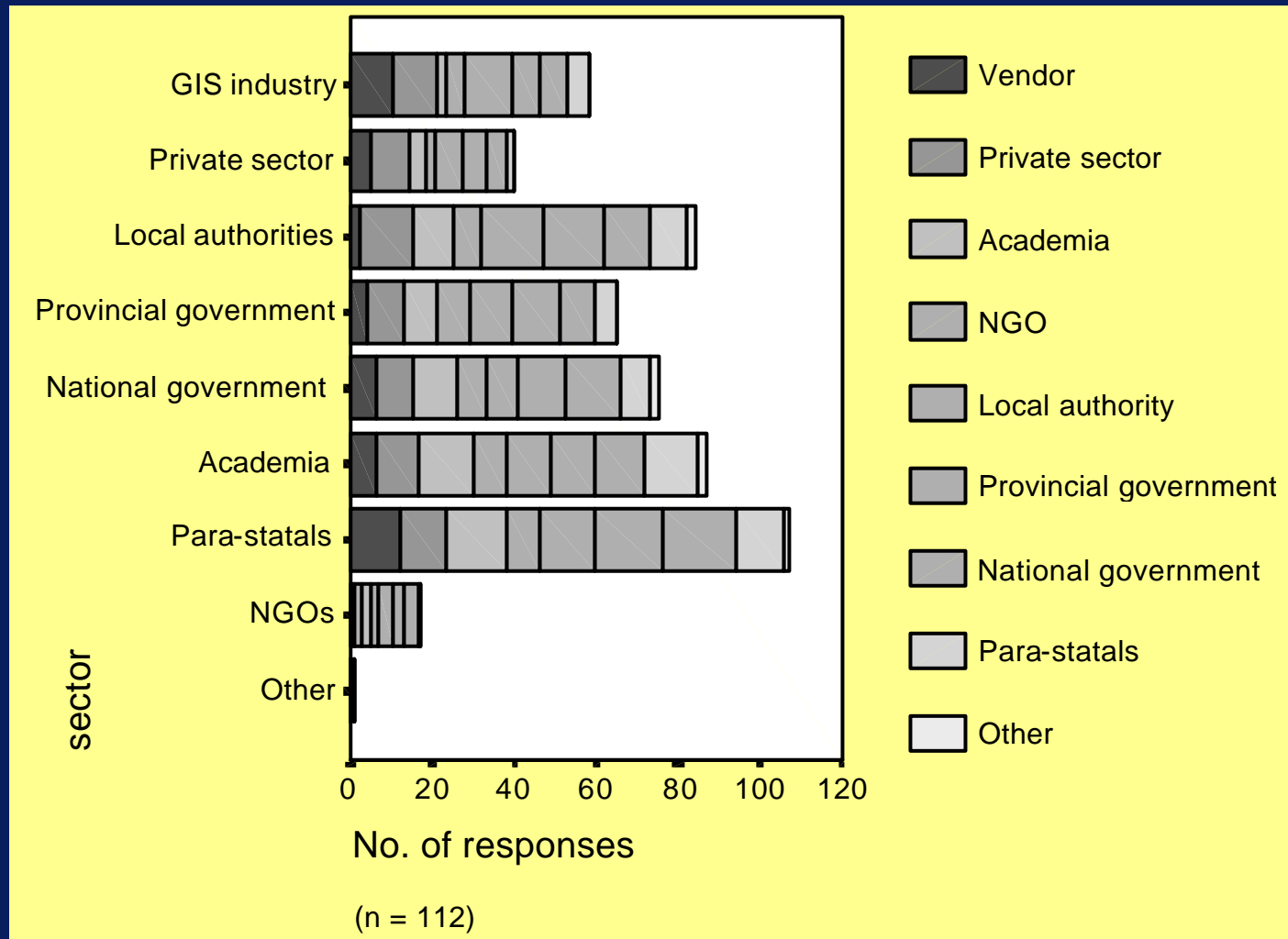
# Who is sharing with whom? (2)

## Types of spatial data exchanges *by sector*



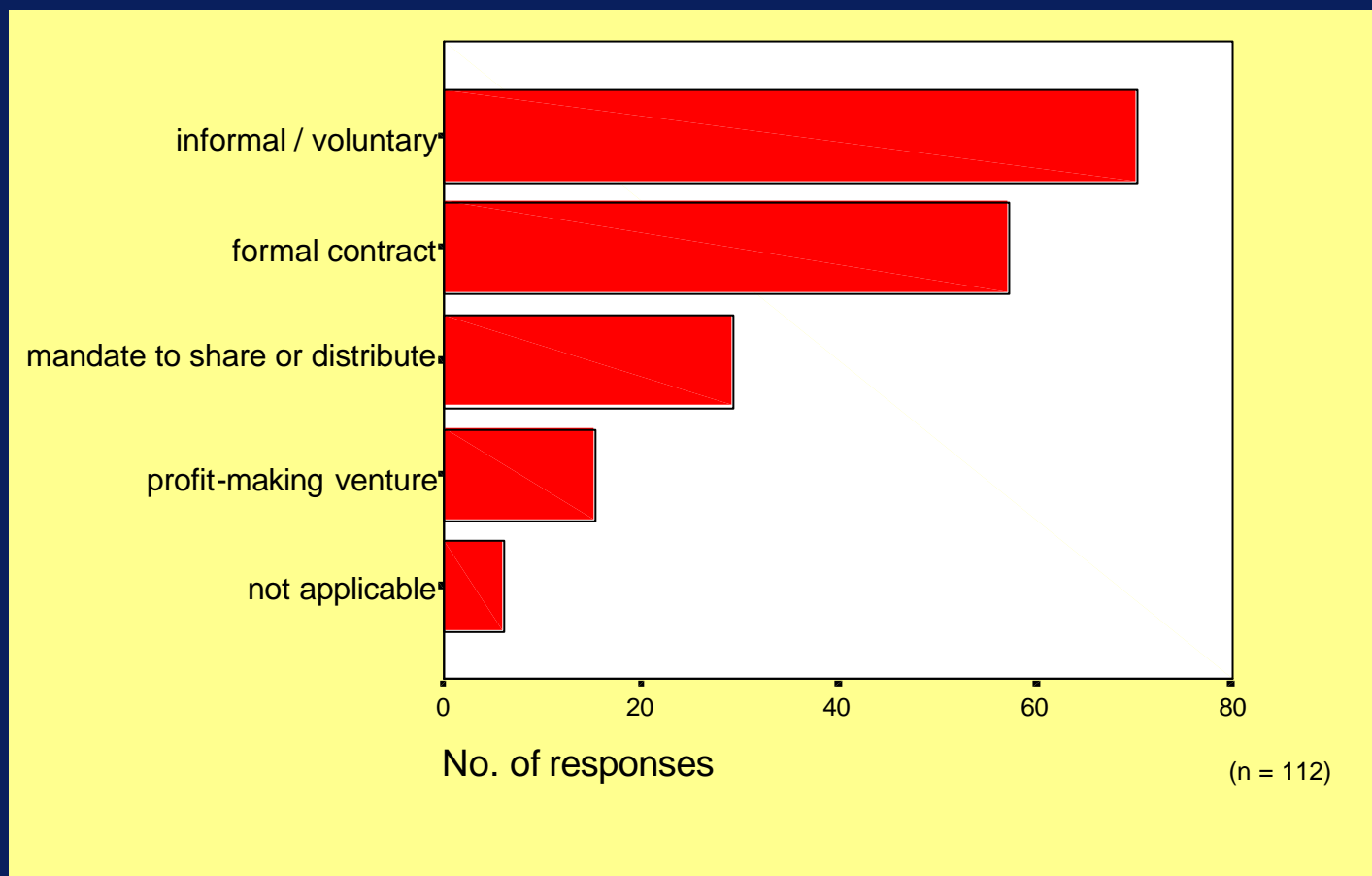
# Who is sharing with whom? (3)

Types of sharing partners *by sector*



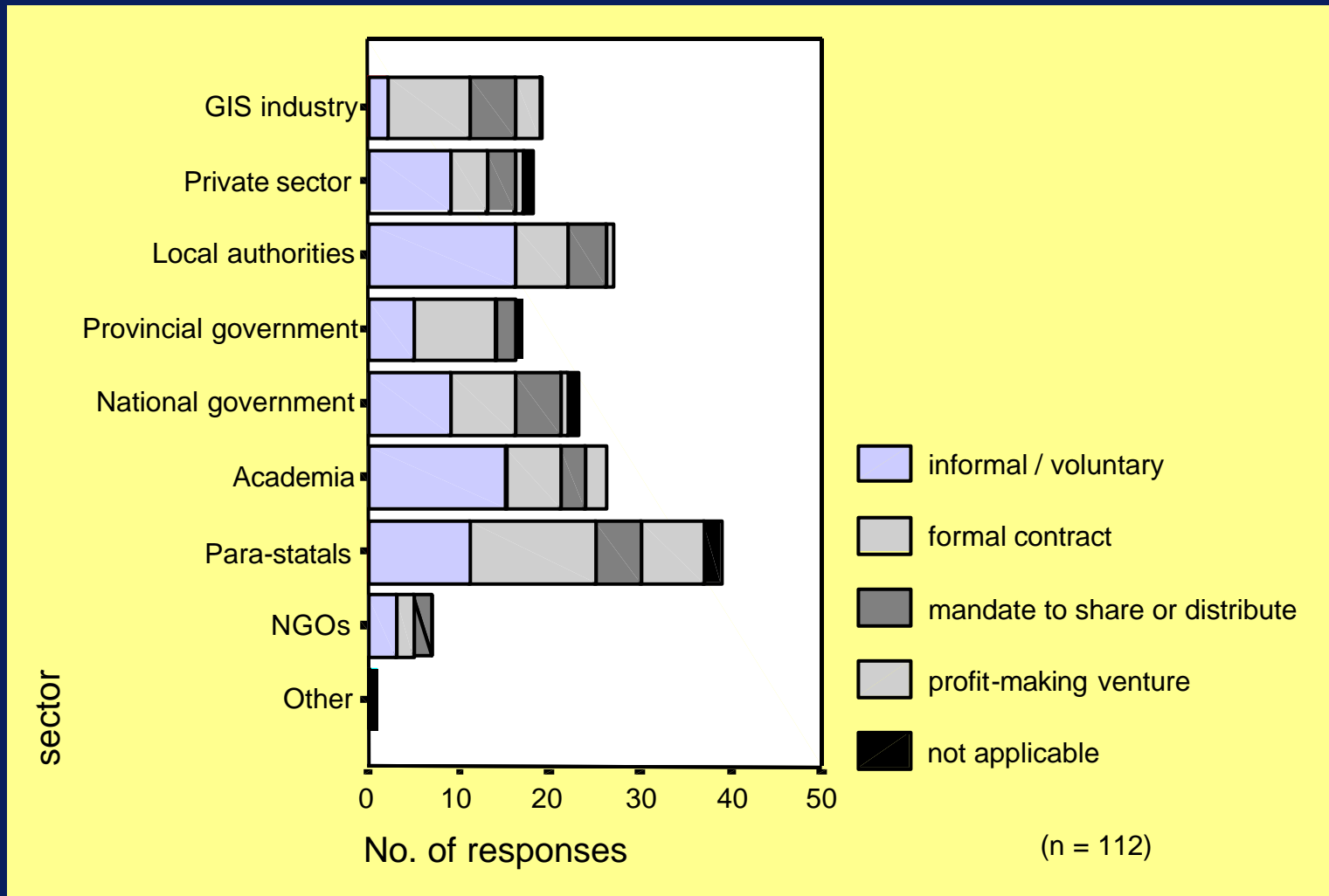
# Terms & Conditions under which spatial data is shared (1)

## Sharing arrangements



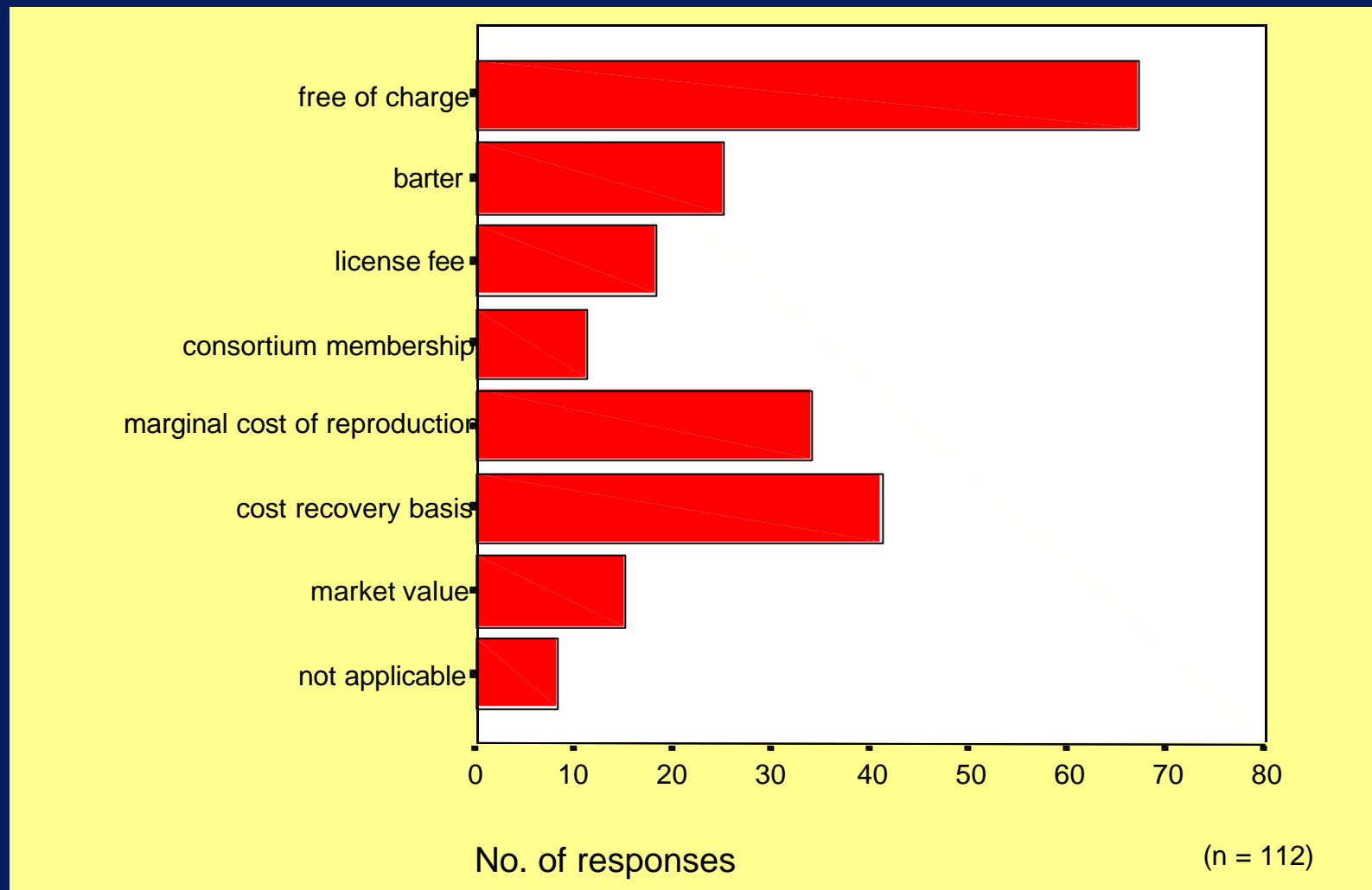
# Terms & Conditions (2)

Types of sharing arrangements *by sector*



# Terms & Conditions (3)

## Charges for spatial data



# Analysis & Conclusions

## Classification of spatial data sharing:

(Obermeyer & Pinto 1994, Pinto & Onsrud 1995)



a) situation-specific, project-driven,  
non-routine, non-recurring

b) regular sharing, exchange of info  
using protocols and procedures for limited  
sharing parties

c) routine sharing, standardised,  
generalisable patterns of exchange,  
accessible to all parties in terms  
of location & format

## **Analysis & Conclusions**

- **Results show some involvement in data sharing but extent still limited**
- **Coupling Calkins & Weatherbe taxonomy with the classification of spatial data sharing presents useful approach**

# Thank you!

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