

Data mining, immovables and
commodification:
Towards a “land data passport”?

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Data Passport

- 1. Introduction
- 2. New legal objects
- 3. New legal subjects
- 4. New legal relations
- 5. To whom “belong” the data?
- 6. Data mining regarding immovables
- 7. Commodification of immovable property data
- 8. Towards a “digital passport”?
- 9. What should the passport contain?
- 10. Concluding remarks



Data Passport

- Problems to be analysed from a property viewpoint:
 - I. New legal objects?
 - II. New legal subjects?
 - III. New (types) of legal relations?

Data Passport

- A common vocabulary: What is ‘property law’ about? A comparative law answer:
 - *Property law is about (a) legal relations between (b) a subject and a substantial and relevant group of other subjects regarding an object*

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- New legal objects (1)
 - Numerus clausus of objects
 - Physical things
 - Monetary claims
 - Human creativity
 - Data?

Data Passport

- New legal objects (2)
 - How to define 'data'?
 - Data are non-rivalrous (can be copied)
 - From 'facts', to 'information', to 'data', but which data (specificity)?
 - How to define 'facts', 'information' and 'data'?

Data Passport

- New legal objects (3)
 - Personalised data
 - Privacy protected ('personal' data)
 - Non-privacy protected ('non-personal')
 - Non-Personalised data ('non-personal' or 'anonymous' data)

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- New legal objects (4)
 - Raw data
 - Metadata
 - Derived data
 - Processed data
 - Data in a hybrid world ('Internet of Things')



Data Passport

- ISO definition of data (ISO/IEC 2382-1, revised by ISO/IEC 2382:2015 – Information technology – Vocabulary):

“Reinterpretable representation of information in a formalized manner suitable for communication, interpretation, or processing.”

Data Passport

- Article 4(1) Data Protection Regulation:

“personal data’ means any information relating to an identified or identifiable natural person (‘data subject’); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person”

Data Passport

- Article 3 (1) Regulation on Free Data Flow of Non-Personal Data:

“data' means data other than personal data as defined in point (1) of Article 4 of Regulation (EU) 2016/679;”

Data Passport

- New legal subjects (1)
 - Persons in the 'real' world
 - Natural persons
 - Legal persons
 - Electronic personality: Robots (self-driving cars, computer trading)
 - Persons in a 'hybrid' or 'blended' reality ('avatars')

Data Passport

- New legal subjects (2)
 - Legal subjects have a 'patrimony', their shadow of assets, representing economic wealth
 - Does a robot have a patrimony?
 - A self-driving car or a computerized trading system 'has' data, which have economic value

Data Passport

- New legal relations
 - New types of 'ownership' or 'possession'?
 - Different answers based on:
 - Area of law (private law, public law)
 - Type of object (tangible, intangible, digital)
 - Purpose (full control, security, management)
 - Nature of the data carrier (physical, human)
 - Distance of data from a subject ('dispossession')

Data Passport

- Who can still perceive the difference between AI, a human being, an object or a subject?
 - Example: The next [Rembrandt](#)

Data Passport

- Data mining regarding immovables
 - Satellites
 - Farming equipment ('Internet of Things')
 - Mobile phones

Data Passport

- Commodification of data: data as an object of trade

Data Passport

- To whom “belong” the data?
 - Subject – ‘data’subject, personal data
 - Which subject?
 - Copyright, database right
 - Object – ‘accessio’ of data
 - Data cannot exist without a carrier (could be an object or a subject)

Data Passport

- Should we introduce registration of data next to traditional registration?
- Various subquestions (1):
 - Part of land registry?
 - Part of movable property registry?
 - The use of distributed ledger technology (“block chain”) to create a unique object

Data Passport

- Should we introduce registration of data next to traditional registration?
- Various subquestions (2):
 - What should be registered: pointers or substantial data?
 - Which right(s) should be registered?
 - Whose right(s) should be registered?
 - Multiple types of “owners”?
 - How is the passport transferred?

Data Passport

- Final remarks

- Data mining regarding immovable property
- Should such data be stored as part of a land registration system?
- Is the data personal or non-personal?
- Should a “land data passport” be introduced?

Data Passport

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