

FIG
2018
ISTANBUL



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May 6-11, 2018 in Istanbul, Turkey

6-11 May 2018

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EMBRACING OUR SMART WORLD WHERE THE CONTINENTS CONNECT:
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EMBRACING OUR SMART WORLD WHERE THE CONTINENTS CONNECT:

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What is the quality of your valuation data?

Ruud M. Kathmann

Netherlands Council for Real Estate Assessment

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Program

- Introduction
- Data management for mass valuation
- Quality of data
- Control protocol on quality of valuation data (object characteristics)
 - Also for reliability and topicality
- Concluding remarks

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Introduction



- The Netherlands
- Kingdom
- 17 million inhabitants
- 380 municipalities
- 9 million properties
- Total value: 2 trillion Euro

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Introduction

- The Dutch property tax system:
 - Decentralized system
 - Annual valuation
 - Market value
 - Municipalities responsible for annual assessments and data quality
 - Multiple use of assessed values by other government organization's
 - Centralized quality control by Netherlands Council for Real Estate Assessment

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Introduction

- The Netherlands Council for Real Estate Assessment (or in Dutch; Waarderingskamer):
 - Independent government organization
 - Professional staff of 22 employees
 - Quality control and advisory body
 - Quality of assessments
 - Quality of data



Introduction

- Quality control system of municipality:
 - Collecting data (e.g. newly built property) including data checks
 - Verifying data (e.g. at sale of property) leads to improved quality
 - Systematic audits (completeness, consistency (also compared to other sources))
 - Samples
 - Measures to improve quality
- Oversight by the Netherlands Council for Real Estate Assessment



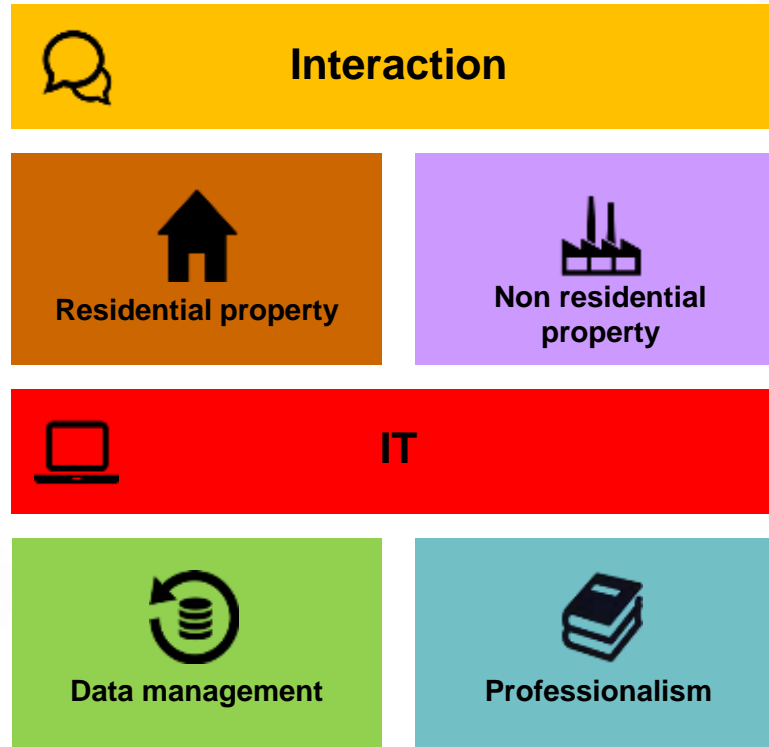
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Data management for mass valuation



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Data management



1. Information derived from the system of base registers
2. Information derived from real estate ads
3. Specific information collected by municipalities
4. Specific information derived from interaction with taxpayers



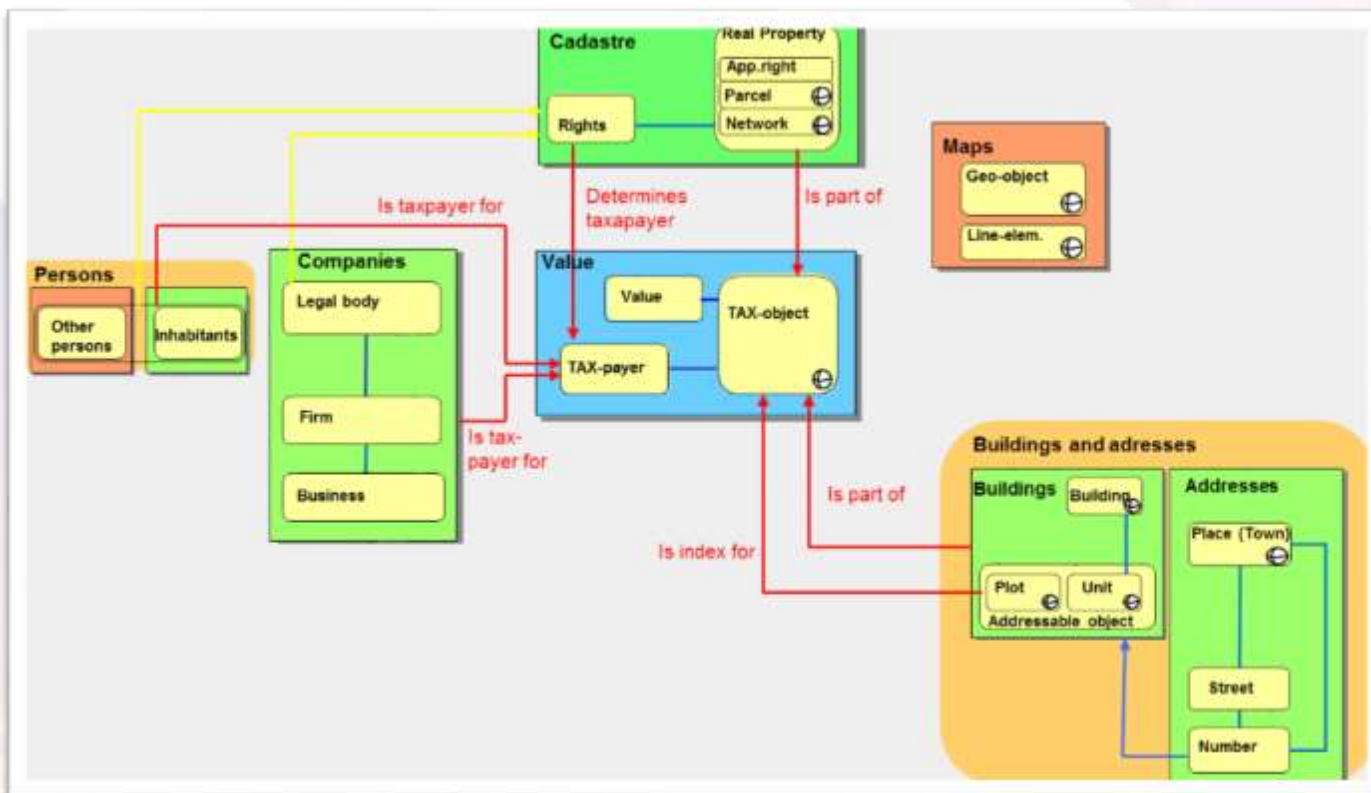
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System of base registers



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System of base registers

- Cadastral registration
 - Ownership, size of parcel, geometry of parcel
- Registration of buildings and addresses
 - Size of building, building year, geometry of building
- Registration of inhabitants
- Registration of non-inhabitants (foreigners)
- Registration of companies
- Large scale base maps



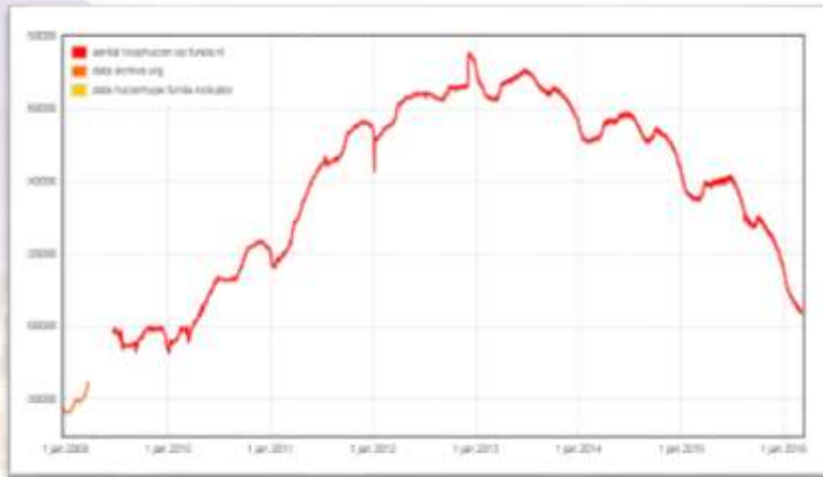
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Information derived from real estate listings



- More than 200,000 houses for sale
- 2 million ads in central historical database
- Several systems available on the internet

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iWOZ®

Woningen

Bedrijven

Parkeren

Agrarisch

Bouwgrond

Recreatie

Mijn iWoz ▾



Nachtegaalstraat 118 1021GE Amsterdam

Buurt: IJplein/Vogelbuurt
Wijk: Stadsdeel Noord
Gemeente: Amsterdam
Provincie: Noord-Holland

iWOZnr: 1348072

€ 189.000 k.k.

Map
Print

Beoordeling: ★★★★★ 3.4

Looptijd: 82 d / 125 d

Meterprijs: € 3.436 / € 3.090



Kenmerken

Omschrijving

Foto's

Prijsinfo

Plattegronden

< Terug naar zoekresultaten

< Vorige Volgende >

3 Items gevonden

Plattegrond 1



Plattegrond 2



Kadastrale Kaart



Geselecteerde objecten

Tak van Poortvlietstraat 47 B I

3038 NW Rotterdam
Noord - Bergpolder
€ 164.500 k.k. **€ 1.567 / 105 m2**



Nachtegaalstraat 133

1021 EZ Amsterdam
Stadsdeel Amsterdam-Noord - IJplein ...
€ 285.000 k.k. **€ 2.938 / 97 m2**



Nachtegaalstraat 118

1021 GE Amsterdam
Stadsdeel Noord - IJplein/Vogelbuurt
€ 189.000 k.k. **€ 3.436 / 55 m2**



Oranjelaan 77 -79

7431 AB Diepenveen
Diepenveen - Dorp Diepenveen
€ 395.000 k.k. **undefi / m2**



Statensingel 61 B

3038 LD Rotterdam



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Information collected for valuation



- Size: 120 m²
- Year of construction: 1850
- Size parcel: 600 m²



- Size: 120 m²
- Year of construction: 1850
- Size parcel: 600 m²

Object characteristics for valuation

- Primary characteristics
 - Type of property
 - Size
 - Building year
 - Annexes and outbuildings
 - Geometry
- Secondary characteristics
 - Quality of material
 - Quality of facilities
 - Maintenance situation
 - Appearance
 - Efficiency
 - Energy efficiency



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Quality of data

- For valuation we are primarily interested in:
 - Completeness (everybody has to pay)
 - Consistency (trust of taxpayer)
 - Accuracy (equity)
 - Also accuracy of comparison
 - Topicality (few corrections after objection)
 - Reliability (few corrections after objection)

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Auditing data quality

- Completeness
 - Comparing data sources
 - All cadastral parcels, all buildings must be related to “taxable object”
 - Total area of “taxable objects” must equal size of municipality
 - Procedures for “reporting” changes to other registrations
 - Mapping
 - Blind spots are easily recognised in a map

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Auditing data quality (2)

- Consistency
 - Consistency between data sources
 - Building year in registration of buildings equals valuation report
 - Procedures for “reporting” changes/corrections to other registrations
 - Consistency between characteristics of an object
 - For instance building year is 2018 and maintenance is “very poor”
 - Queries for related characteristics
 - Consistency between objects
 - Mapping can show inconsistencies

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Legend

Attribuutkaarten

Ligging Maastricht

- 2
- 3
- 4
- 5



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Auditing data quality (3)

- Accuracy
 - Collecting of data
 - Accuracy will not change in time
 - Quality control during data collecting and registration process
 - Important for
 - Plot size, building size etc.
 - Geometry

Auditing data quality (4)

- Topicality and reliability
 - Quality of registration deteriorates fast
 - each characteristic must be checked at least once every five years
 - But extent of changes varies
 - A registration of five year old can have more “correct” data than a registration of one year old
 - Depends on kind of characteristics, but also type of property, region
 - Must be checked by comparing with the property itself
 - On the spot, recent picture

Standards and control protocol for data management

- Relevant standards:
 - Property measuring instructions (national, but also IPMS)
 - accuracy
 - IAAO standard: frequency of quality checks
- Control protocols
 - Comparison of valuation data and cadastral data
 - Completeness and consistency
 - Comparison of valuation data and building registration
 - Completeness and consistency

Control protocol for reliability and topicality

- Measuring reliability and topicality needs inspection on the spot
- Protocol gives guidelines for sample size needed
- Protocol gives guidelines to calculate percentage of “incorrect” or “dated” data
- Protocol stimulates to draw conclusions about the reliability of the registration
- Protocol stimulates to formulate measures to optimize data quality

Concluding remarks

- Managing data quality is expensive
- Measuring data quality is necessary for efficient optimizing data quality
- Comparing data sources, consistency queries and mapping are useful instruments
- Measuring reliability and topicality needs inspection on the spot (or recent pictures)
- Samples are part of systematic measuring reliability and topicality
 - Sample size etc. are part of control protocol for data quality
- For efficient measuring results of objections and market analysis are used

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Q & A

- Now
 - or
- R.Kathmann@waarderingskamer.nl
 - or

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10 – 14 MAY

Smart Surveyors for Land and Water
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