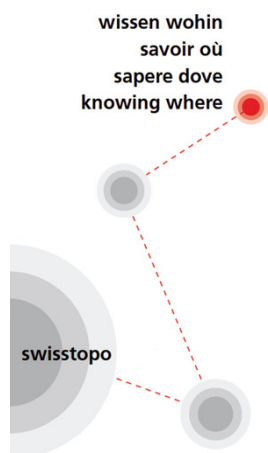




Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Federal Office of Topography swisstopo
Federal Directorate for Cadastral Surveying



Common Vision Conference 2017 – Wrap-up

CVC 2017 "Tradition meets Innovation"
Vienna, Austria, 5/6 Oct. 2017

Dr. Daniel Steudler



Welcome Session

- warm welcome by BEV, celebrating 200 years of the Austrian cadastre
- CVC2017 supported by 7 organizations:
 - WPLA
 - EuroGeographics
 - PCC
 - EULIS
 - ELRA
 - FIG
 - CLGE
- *Matti Nykänen: Life is the best time for a human being!*
- *Napoleon: If you want to rule a country, you need to know its boundaries!*





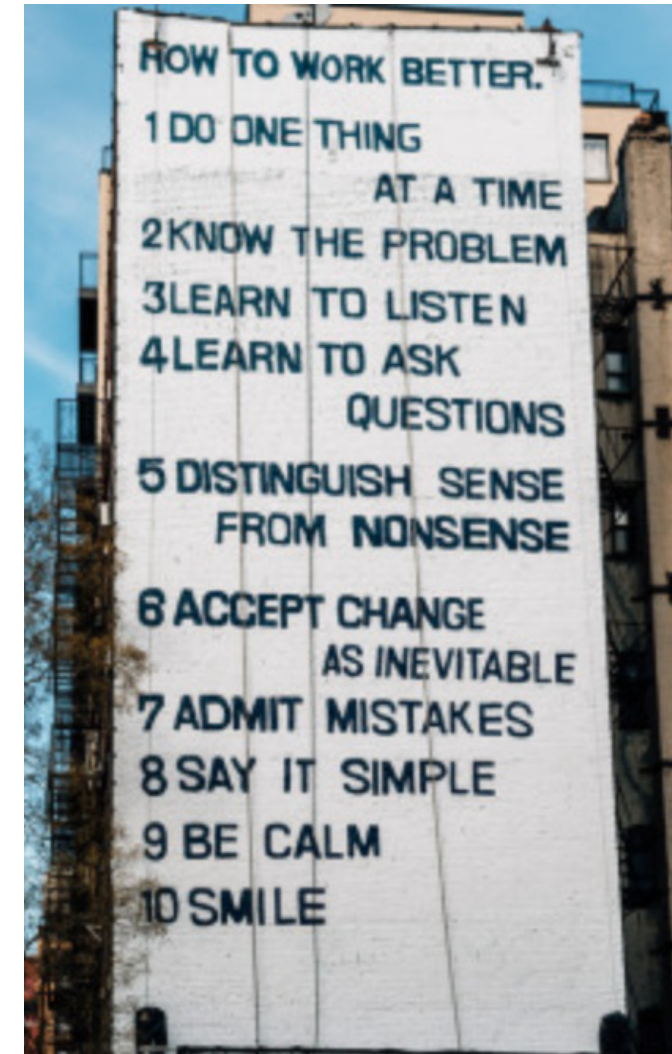
Keynote – LAS from an information manager's point of view



- **In the confrontation between rock and stream, the stream will always win; not through strength, but through perseverance!**
- The multipurpose aspects of a LAS: ownership protection, taxation, strategic planning, controlling, decision-making, asset for new products, statistical evaluation, publicity vs privacy.
- Do the right things! → analyse and think carefully about the changes, define the purpose and goal in a way that is measureable, benefit must be obvious, be aware of barriers, pilot study before final decision, be aware of your own strengths and capacities.
- Then do the right things right! → priorities, careful with shortcuts and bypasses, professional project management, finish the changes to the very end, avoid starting another change within a change.



Keynote – LAS from an information managers point of view



(Peter Fischli and David Weiss,
How to Work Better, 1991)



Session 1 – Tradition, a representation for sustainability?



- **Austria – Cadastre Made in Austria:** from a fiscal (1817) to a legal cadastre, from a documentation system to an information system, link between cadastre and land registry, upcoming innovations: improve institutional cooperation, inclusion of 3D and PLR, closer to market needs, tools to visualize CLR information.



- *If the wind of change blows, some will build windmills, others will build walls! (Chinese saying)*

- Size matters!



- **Netherlands Kadaster:** the power of the image, society is adapting to new ways of communication, for example: ;-) 😊
Kadaster tries to satisfy needs of users / Drivers are developments in technology, policy, market and society
Ambitions of Kadaster: certainty of ownership above and below ground level, platform for geoinformation, open to all 24/7.



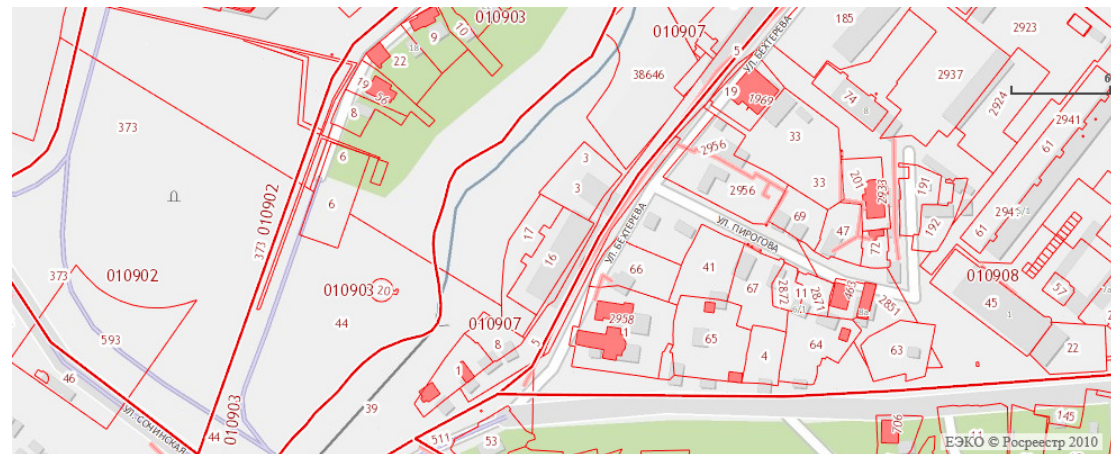
Session 1 – Tradition, a representation for sustainability?

- **Austrian Land Register:** 1862 first registration, 2012 big bang with an end-to-end digital LR, fully structured data, payment, end-to-end IT solution, participation in EU project "LRI".
- **New Federal Law in Russia regulating the cadastral surveyors activities:** in force since 2016, aim is to unify the certification process for cadastral surveyors, 37'000 surveyors have actually this certificate, National Chamber of Cadastral Engineers has 12 associations as members, new roles for the Chamber and the State, appeal commission:
- European requirements for cadastral surveyors activities (2006), CLGE takes up the project again, new questionnaire soon.



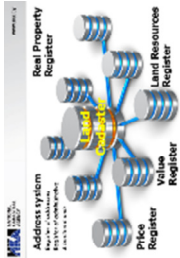
Session 2 – Change of cadastral purpose

- **Cadastral System in Russian Federation:** 25 years of evolution; initially to document the land plots; methodical registration of ownership titles since 1994; top-down standards, bottom-up data collection; centralization of authorities (Rosreestr); unified registration procedure; impressive web portal with 160million objects (parcels + buildings).





Session 2 – Change of cadastral purpose



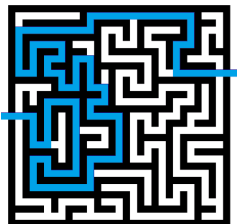
- **Use of cadastral data for mass appraisal in Belarus:** land cadastre consists of address system, real property register (land plots and buildings), price register (of land transactions), value register, land resources register; surprises from the inside.
- **Property registration from slow to efficient – experiences by an international expert:** at first, processes just have been accelerated with electronic tools, but they remain the same; with ICT instruments, procedures can be done in different ways.
- **CLGE – Surveyor in a changing world:** (r)evolutions of data, identifiers, mapping, communication, cadastre, and citizens. Where are we going? No answers yet, we all are looking for them.





Session 3 – Challenges of the digital era

kadaster



- **Impact of digitization:** Observation 1: at the moment, we are going forward by looking in the rear-view mirror (we proudly look back, how well we digitized our existing cadastral functions and procedures and think that we can so predict the future). Observation 2: all parties in the land market offer – digital – services in their own domain; but this approach does not solve the demand for overall certainty. Suggested way forward: participatory approach, all parties need to be digitally enabled, re-design of the procedures, establish clear operating rules for all, learn from examples.
- **Austria – Step by Step:** Franz I. → punch cards → databases/ terminals → vector data → digital mapping → digital distribution process, web products, digitization of cadastral archives, structured PDF, geospatial PDF. Recommendations: provide useful services, be digital enough, find partners, get the timing right.



Session 3 – Challenges of the digital era



- **ELRA – Role of land registries in the digital era:**
Why does LR exist: human right, lever for growth and social peace, asset of mortgage and capital market, space of sovereignty, element of modern state → LR is the instrument through which the state provides strong property rights.
Important when implementing new technologies in LR: speed, ease, simplicity and efficiency of procedures! But: benefit for citizens and users? damage for LR's core function?
Why interconnection? → single access point to justice → LRI is a multiannual European e-justice action plan 2014-2018 providing information and registering judicial decisions.
LRI enhances judicial cooperation in land registry matters and is an instrument, through which national LR can enhance fairness and effectiveness of judicial decisions in civil and criminal matters, prevent fraud, improve effectiveness for liability, foster investment relying on juridical security.



Session 3 – Challenges of the digital era



- **E-Services to Citizens, Government and Businesses - Lithuania experience:** Central databank and e-services at SECR, main principles for implementing smart conveyancing, need for data, 300 different services, for 7mio. parcels and 3mio. population.
Numerous elements: geoinformation system, land valuation model, mass valuation results openly published on the Internet, regional geoinformation portals, cloud principle, REGIA, easy to use tools, increasing visitor statistics, mobile mapping e-services, location service for emergencies, virtual address service, etc.
→ Impressive results of a "young" 25-years-old system without legacy issues: broad and efficient service to society.



Session 4 – Continuous need for innovation



- **Ukraine – Blockchain technology in the cadastre:** National Cadastre launched in 2013; web services, also for error correction; however, extracts in paper form still prevail. Implementation of Blockchain technology: aim is to transfer land register to Blockchain, decentralized structure, possibility to search, browse, validate; main benefits: transparent, secure. Transactions require digital signature. Only agencies can make entries into the Blockchain. Smart contracts will be in 2nd phase.



- **UN-GGIM : Europe: Core Data Themes:** core data is priority data, useful to achieve SDGs, core data is complementing INSPIRE. Themes: Cadastral Parcels, Addresses, Administrative Units, Buildings, Area Management, Land Cover/Land Use. Expectations: feedback on themes, share experiences, follow recommendations.



Session 4 – Continuous need for innovation

- **Land Registry Interconnection portal – when to happen:** LRI to provide online access through the e-Justice portal, and thus a continuation of EULIS project; need to develop PSP (for payment), time frame foresees first countries in 2019; issue list to the Commission; slow to no response from Commission; interest is fading. Decision by EULIS: close down organization and portal, but establish LRI user group.
- **Strength of Authoritative Data – Cadastre of Aeronautical Obstacles:** Cooperation of public with private surveyors; benefits when data collection done in private sector.
Wish list: unite our forces, smart deregulation, but public appointment is best.



Session 5 – Future aspects

- **The Land Code, Switzerland:** the 4th revolution in land information; land administration in relation to smart world: documenting land objects (→ big data, data mining, etc.) / connecting these objects (→ linked data, IoT, meta platforms) / transactions that these objects are undergoing (→ Blockchain technology).
The land will document itself through sensors, smart devices leading to "The Land Code". Future role of Governments is to provide platforms that allow to connect users and providers.
- **Embracing the global transformative forces:** inclusion of young generation, contribution to SDGs, change agents, client expectations, vs. perceived performance, transparency, quality. Clearly, there will still be a role for Government agencies, but more flexibility and agility required, regulatory changes, new ways of marketing; focus on core competencies





Session 5 – Future aspects



Aalto University



- **Cadastral 2035 in Finland:** Research project taking into account global themes, megatrends, users and stakeholders. Two rounds of Delphi questionnaire, main results with anticipated impacts: digital culture, ubiquitous intelligence, trend towards openness and transparency, urbanization, business ecosystems, new patterns of mobility, global risk society, knowledge-based society and economy.
Conclusions: megatrends are rather opportunities than threats; cadastral development is technology-driven; need to rethink role of cadastral system.
- **Cadastral 4.0 – integrating the community for global security on land tenure:** evolving global relevance: Taxation → Planning → Real estate market → Security. Technological developments. New business models. Changing paradigm and new roles.
Cadastral 4.0: services on demand, flexible processes, transparent to users, creating trust.



Concluding remarks

- Pekka: we need a vision, in order not to get lost.

Herzlichen Dank für Eure
Gastfreundschaft und dass
wir mit Euch feiern durften!!!

