



ICT for Land Consolidation Processes

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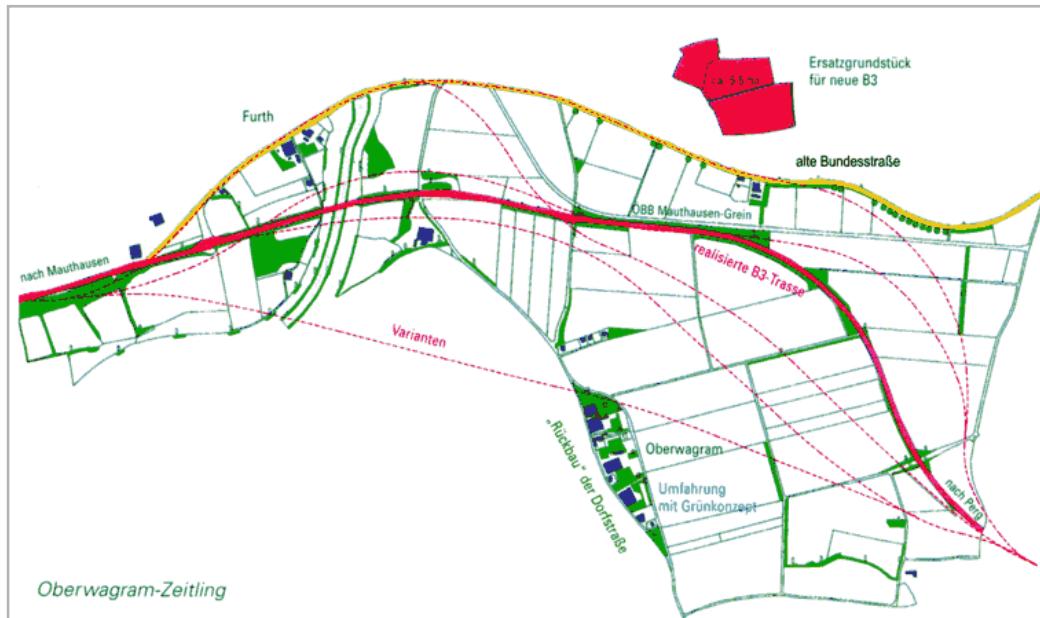
Aktion Österreich – Ungarn
Osztrák-Magyar Akció Alapítvány

Open GIS Conference, Székesfehérvár, 19.03.2009

Land Consolidation: Objectives



- Improvement of agricultural land use structures
- Implementation of land related public development strategies like traffic infrastructure, flood protection, nature conservation and housing development



Content



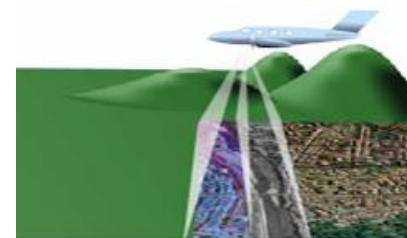
- Project Description
- Approach of Implementation: Methodology
- Selected Results:
 - Use of Geodata
 - Use of Modern Information & Communication Technology
 - Education
- Conclusions and Recommendations

Objective of Project



Investigation on the use and potential of

- existing geo-data,
- new instruments and methods of data acquisition,
- modern data processing technologies
- new communication technologies



for processes of land consolidation

Topics to be Investigated



- New Challenges for Land Consolidation Authorities (LCA)
- Availability and Use of Geodata at LCA
- Methods and Processes of ICT used at LCA
- Communication of Performances of LCA to the Public
- Education, Training and Continuous Personal Development for and at LCA

Approach of Implementation: Methodology



Input:

REALITY
CHECK

ANALYSIS

Output:

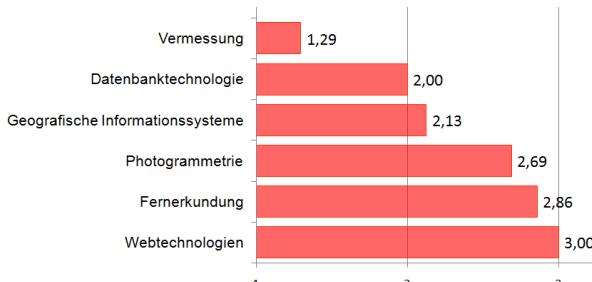
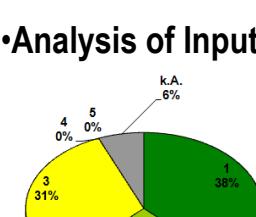
FINAL REPORT
Recommendations

Methodology:

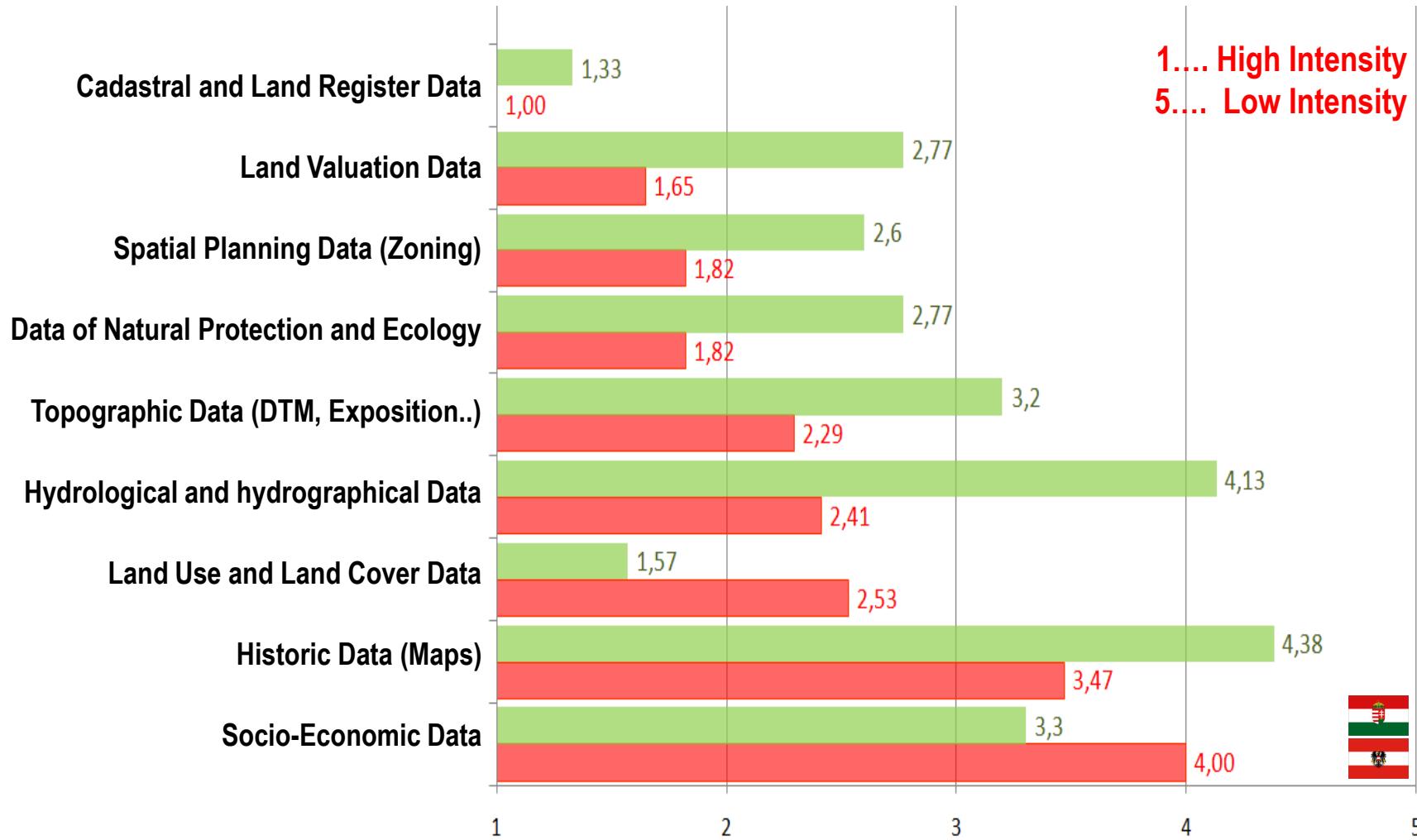
- Questionnaire
 - Interviews
 - On-site visits



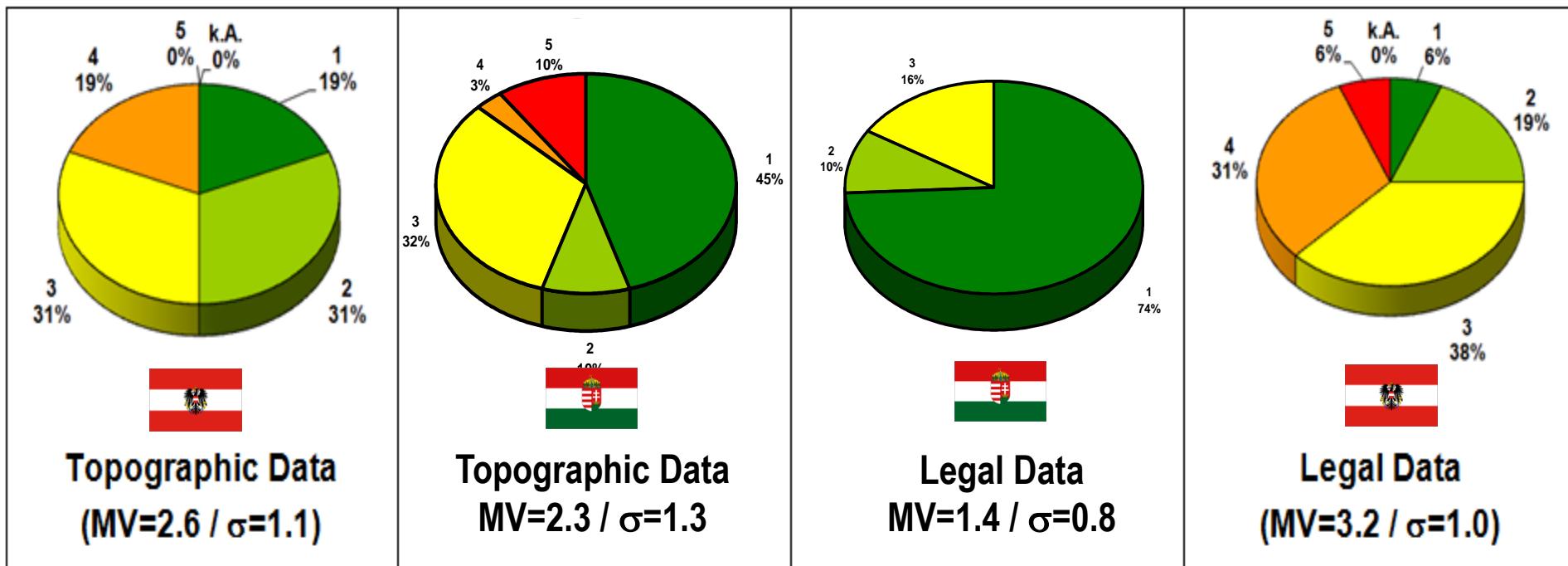
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Use of Geodata: Intensity of Use of Specific Geodata at LCA



Use of Geodata: Potential for Improvement of Data Quality



1 High Potential

5.... Low Potential

k.A. ... No Answer

Use of Geodata: Quality of Data Exchange with other Institutions



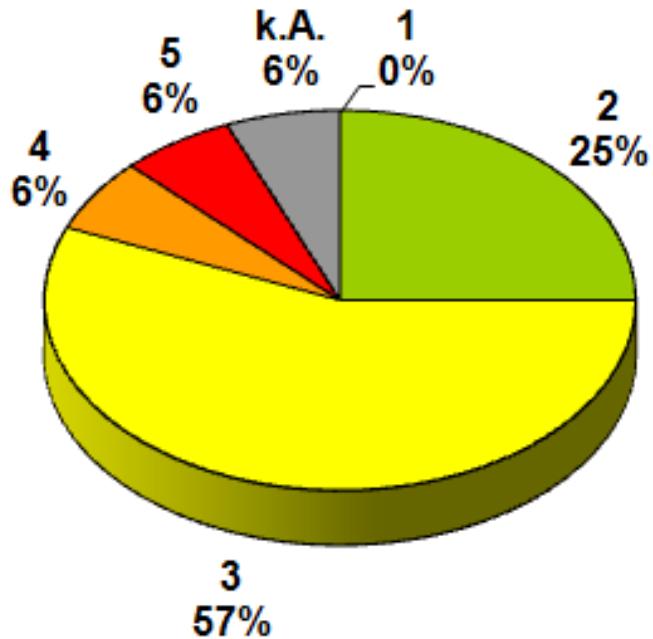
Technologies:

Degree of ICT–Competence at LCA



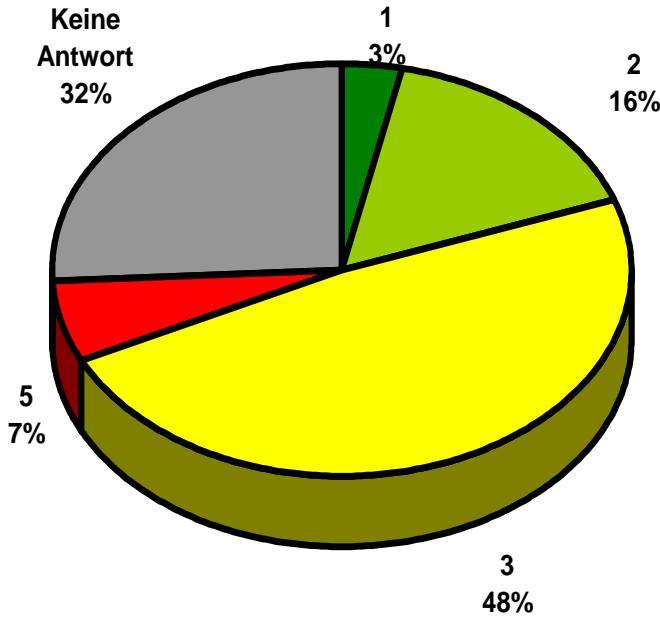
Education & Training

Academic Education meeting Requirements for LCA



(MW = 2.8 / σ = 0.8)

1 High Satisfaction



(MW = 2.9 / σ = 0.9)

5.... Low Satisfaction

k.A. No Answer

Conclusions and Recommendations



- Hungarian and Austrian land consolidation processes hardly can be compared - Austria: specific land consolidation law; one authority with all competences within an area of land consolidation
- Various geodata are required and used in an extended way for land consolidation processes
- The use of GIS – modelling techniques and modern communication technologies for LC processes is at the very beginning
- Data exchange between public institution is to improve (especially from a financial point of view)

Conclusions and Recommendations ... cont.



- Academic education and training as well as continuous professional development (CPD / LLL) have to be improved
- The success of land consolidation processes has to be communicated to the public
- Non-monetary value-added has to be considered for costing
- Hungary should follow the Austria model and implement a specific land consolidation law and a unique authority for performing land consolidation processes

What remains to be said . . .



**THANK YOU
for Your Attention**

Questions ?

