



Success With GIS



International Federation of Surveyors
Fédération Internationale des Géomètres
Internationale Vereinigung der Vermessungsingenieure

SHAPING THE CHANGE

XXIII International FIG Congress October 8th– 13th, 2006

Innovation in Land Management: *Integrated Solutions For National Cadastre Projects*

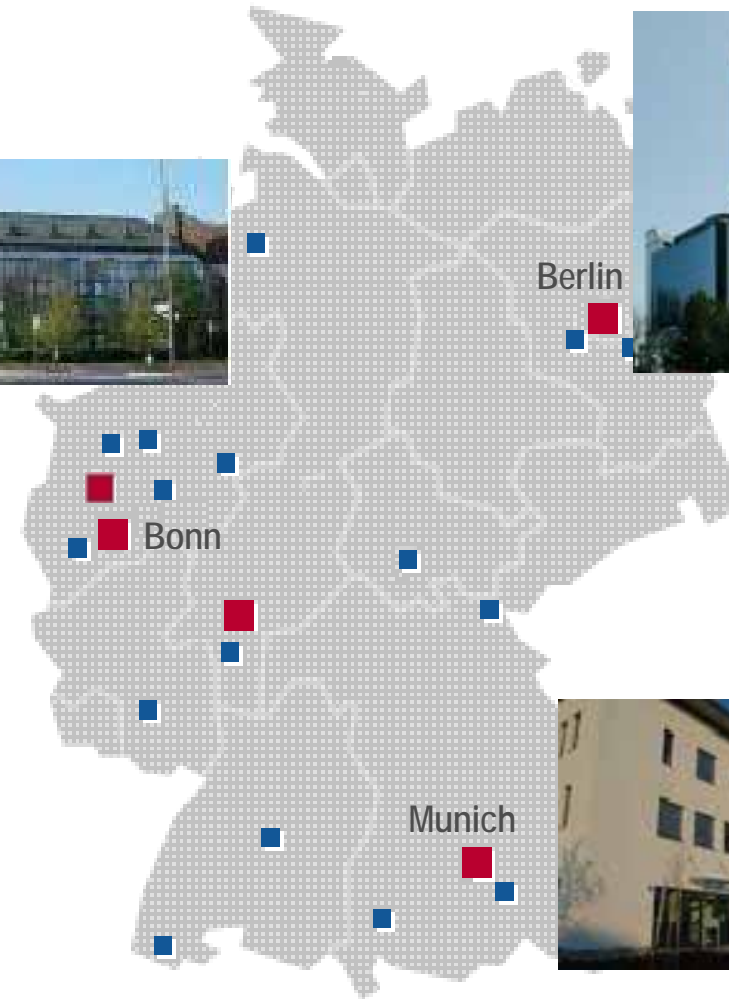
XXIII International FIG Congress Munich

These documents are only complete, when used in connection with the verbal paper; any isolated use may lead to misunderstandings.



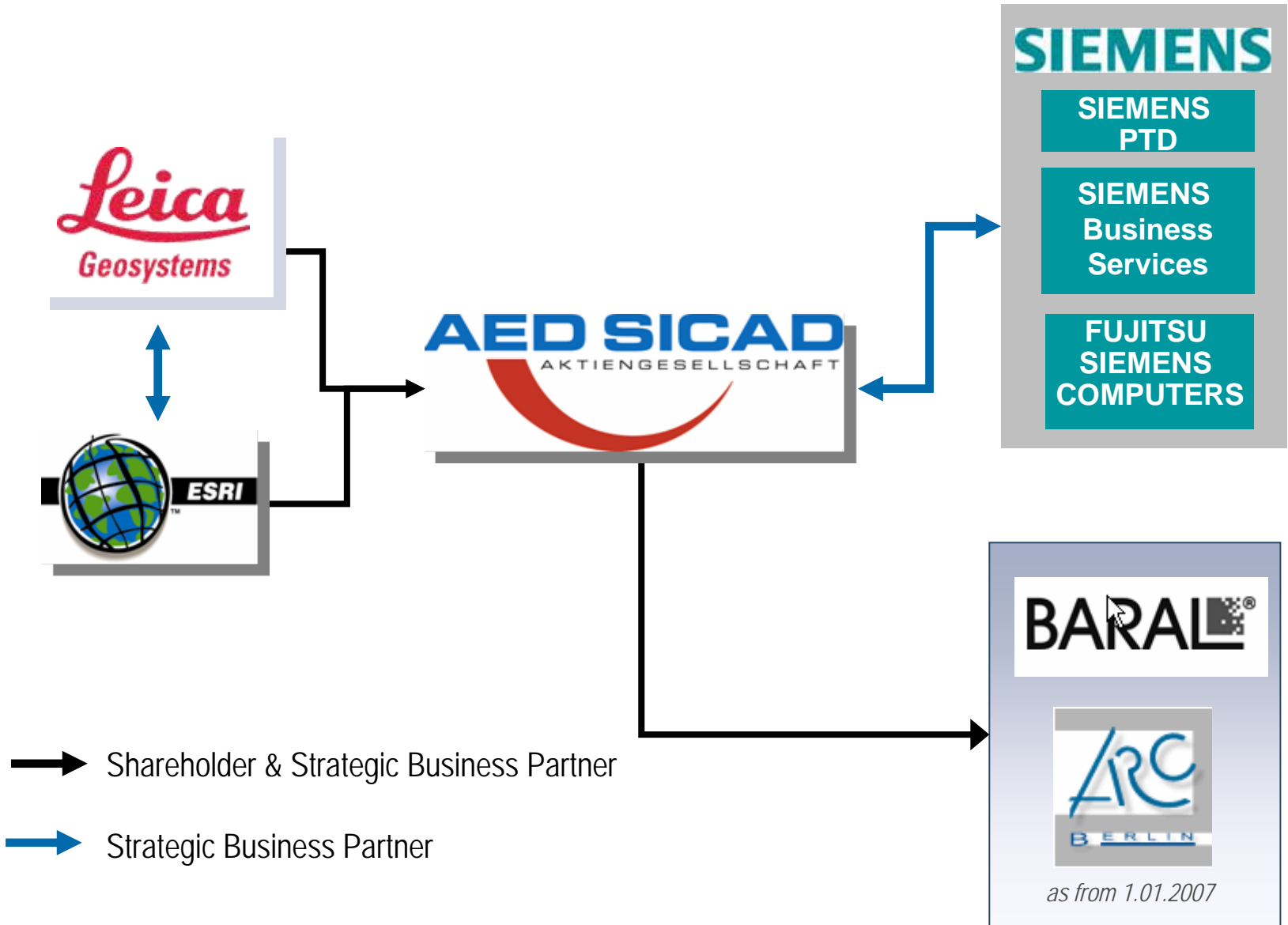
Innovation in Land Management – © AED-SICAD

- About 200 employees
- Based in Germany
(Bonn, Munich, Berlin, Essen)
- Further competence centers
in Europe and Asia
- Strategic partnerships with worldwide
IT market leaders



- AED-SICAD offices
- Distribution partners

Innovation in Land Management – © AED-SICAD



■ A Team with State-of-the-Art Products and Technology

- ✦ Efficient solutions
- ✦ Modern and future-proof GIS and RDBMS platforms
- ✦ Professional cadastre and technological knowledge

■ We ensure a confident working relationship with our partners and clients



Prof. Benning
und Partner



AED-SICAD Application Framework

Land Management

Cadastre, Topography, Mapping

Local Government

Urban and Environmental Planning
Topography, Special Cadastre

Utilities

Electricity, Gas, Water, Sewage,
Heating, Telco

Others

Real Estate, Banking, Industry,
Insurances



International Land Management Solution LM on ArcGIS

based on



The Solution for Germany



ESRI ArcGIS Technology

ISO Standards



OGC Specifications

FIG Cadastre 2014

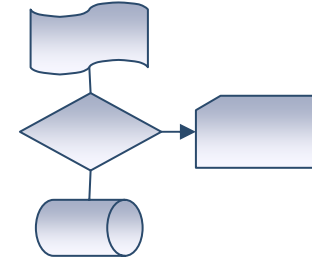


INSPIRE process

- **ALB**
 - ✦ Automated Real Estate Register
- **ALK**
 - ✦ Automated Real Estate Map
- **ALKIS**
 - ✦ Authoritative Real Estate Information System
- **ATKIS**
 - ✦ Authoritative Topographic-Kartographic Information System
- **AFIS**
 - ✦ Authoritative (Fixed) Point Information System
- **NAS**
 - ✦ Standardized XML based data interface for AFIS-ALIS-ATKIS

■ Process orientation

- ✦ As simple as possible
- ✦ Ergonomic
- ✦ Software adapts to business processes



■ Interoperability

- ✦ Between GIS systems
- ✦ Within the IT World



■ Continuous Data Flow

- ✦ From field to office and back



■ Investment security

- ✦ Smooth transition to new technologies
- ✦ Component-oriented architecture



- 19103 Conceptual Schema Language
- 19106 Profiles
- 19107 Spatial Schema
- 19109 Rules for Application Schema
- 19115 Metadata
- 19118 Encoding
- 19119 Services

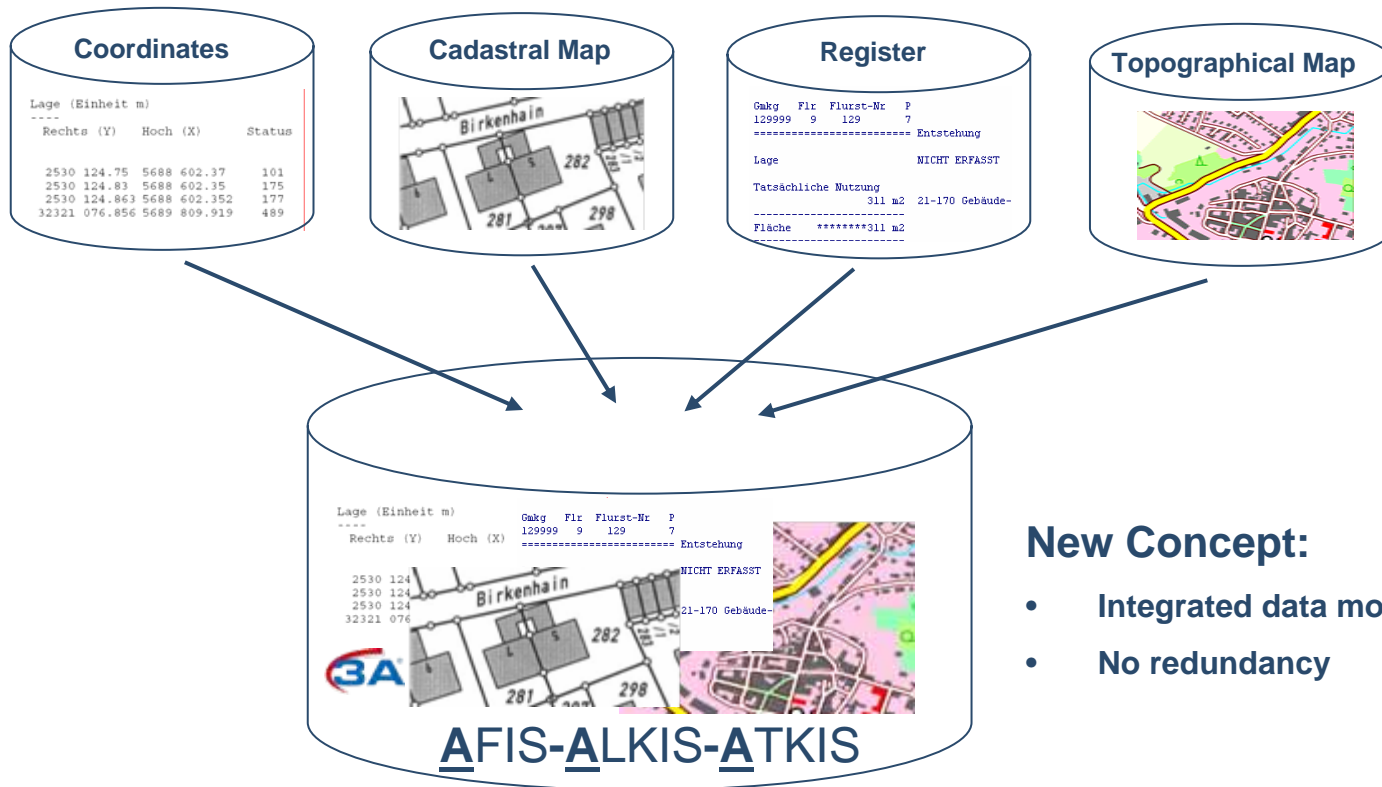
- 19128 Web Map Server Interface
- 19136 Geographic information - Geography Markup Language
- 19139 Metadata – Implementation Specification

- OGC Web Feature Server 1.0
- OGC Filter Encoding 1.0



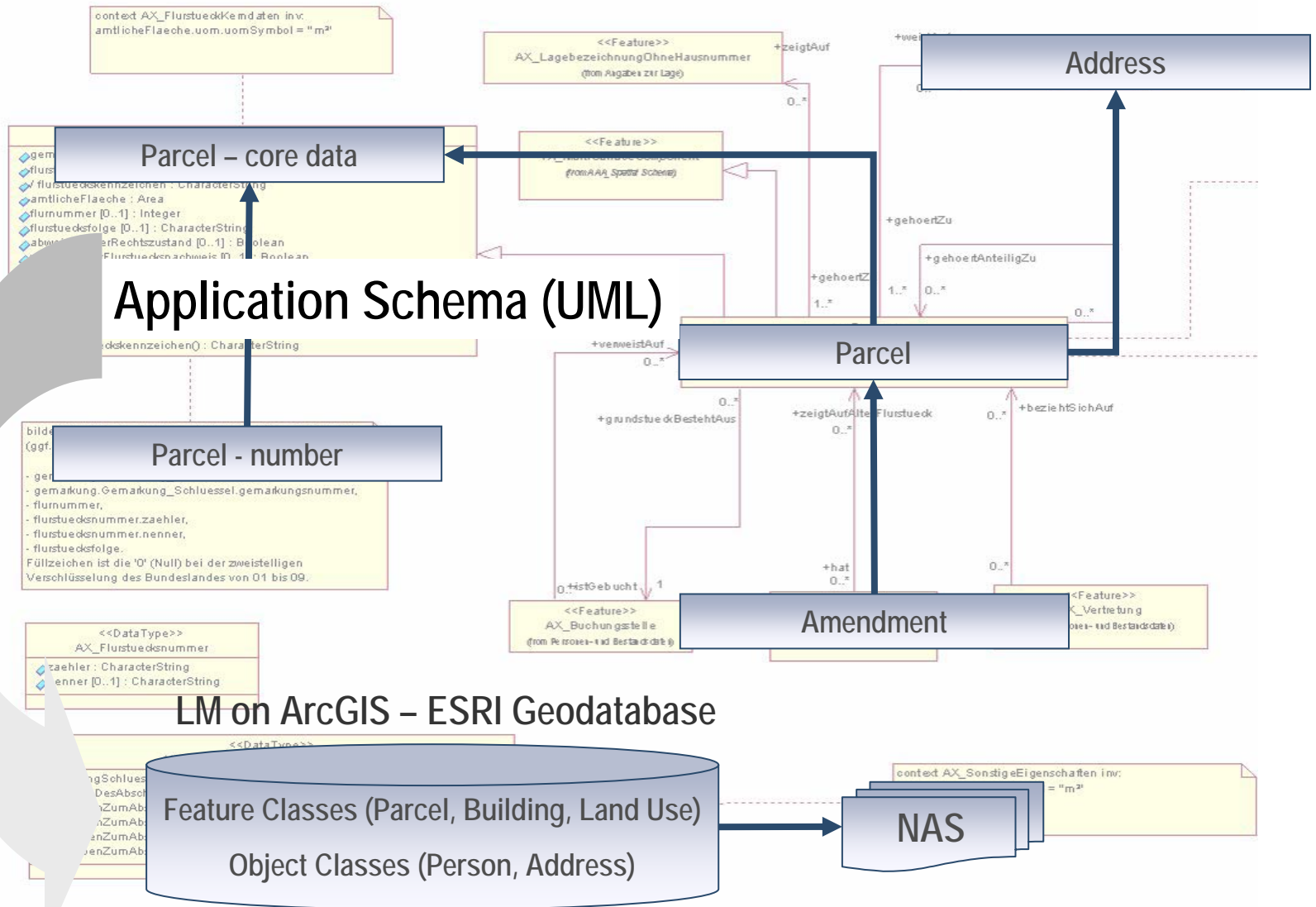
Old Concept:

- Different data models and databases
- Partly redundant information



New Concept:

- Integrated data model
- No redundancy

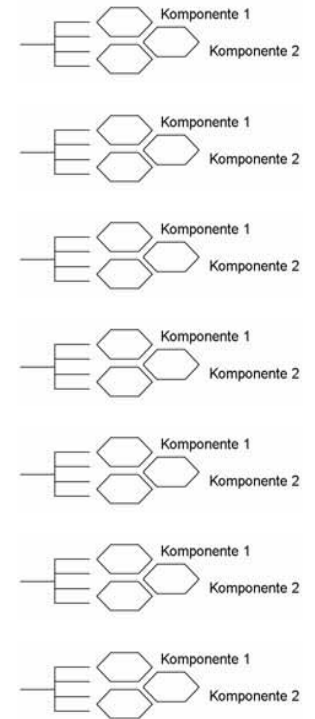
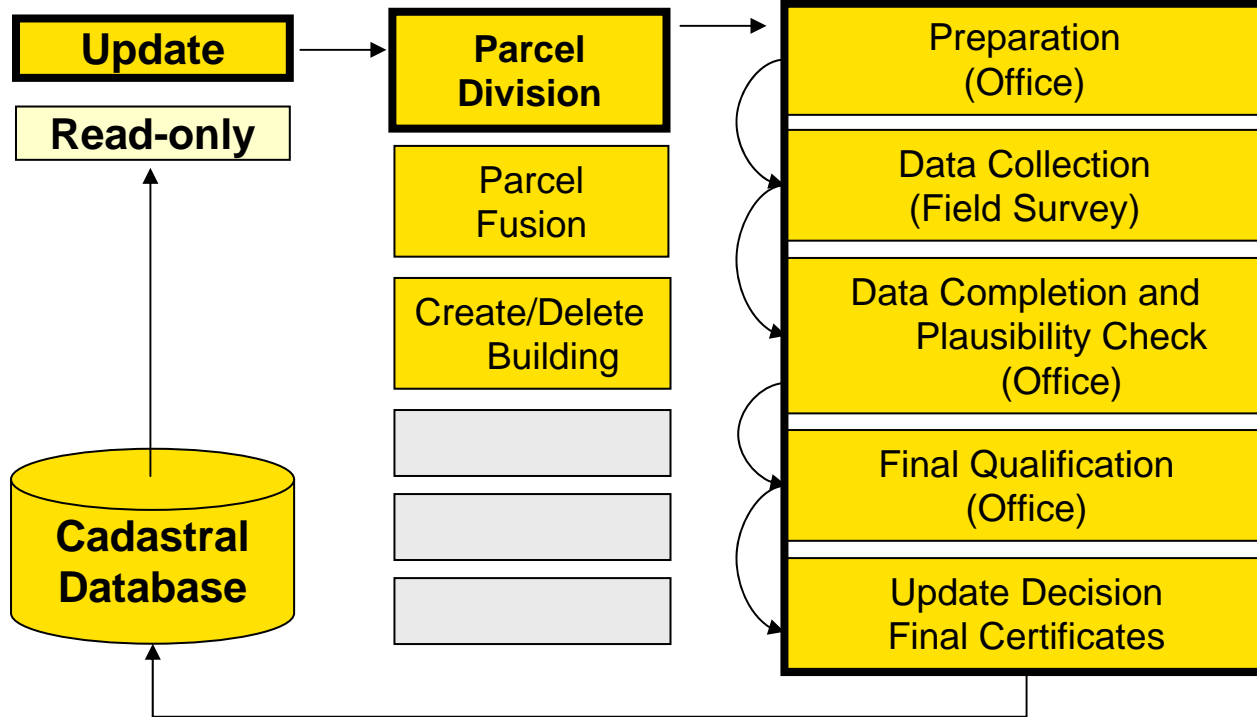


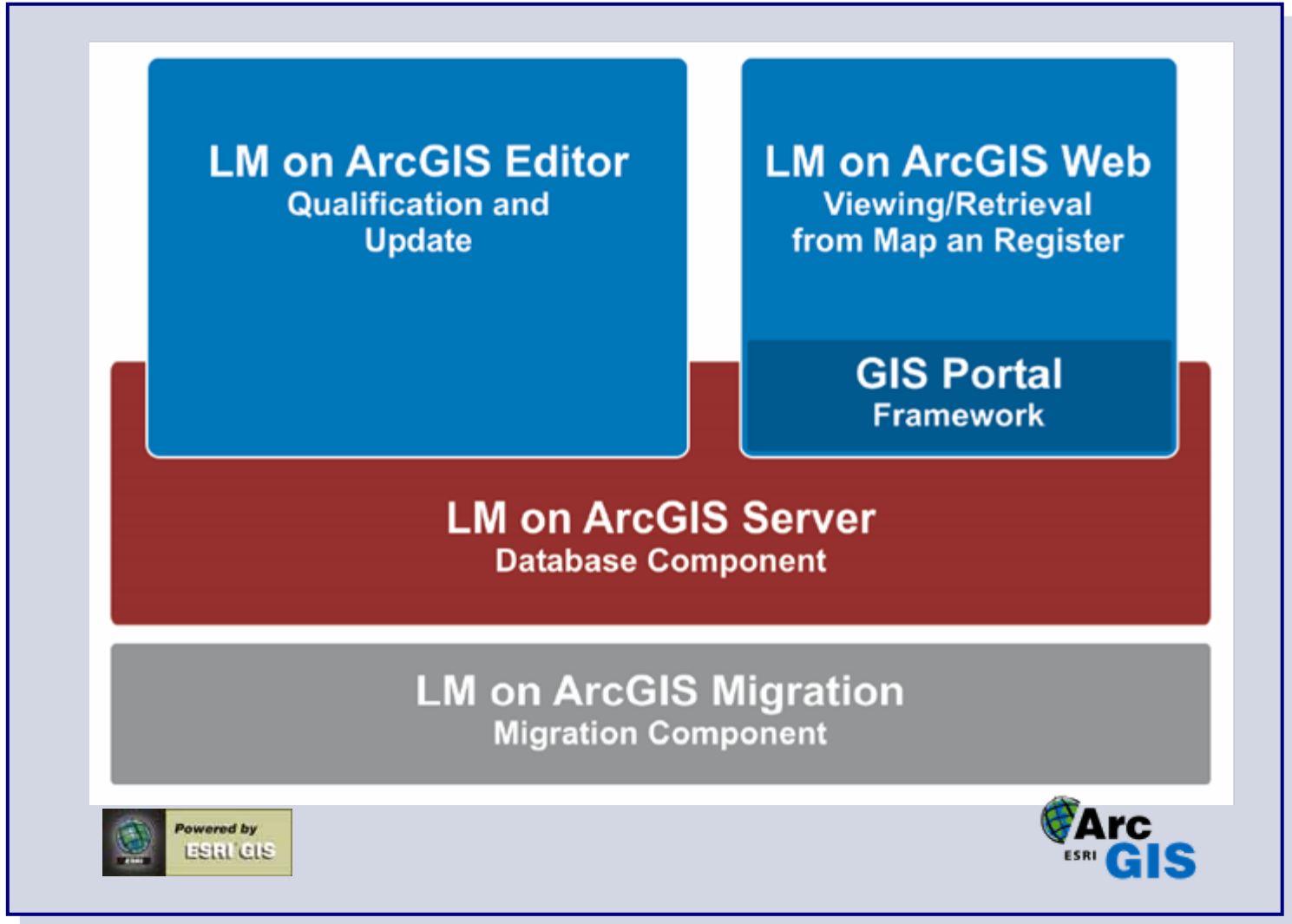
Project

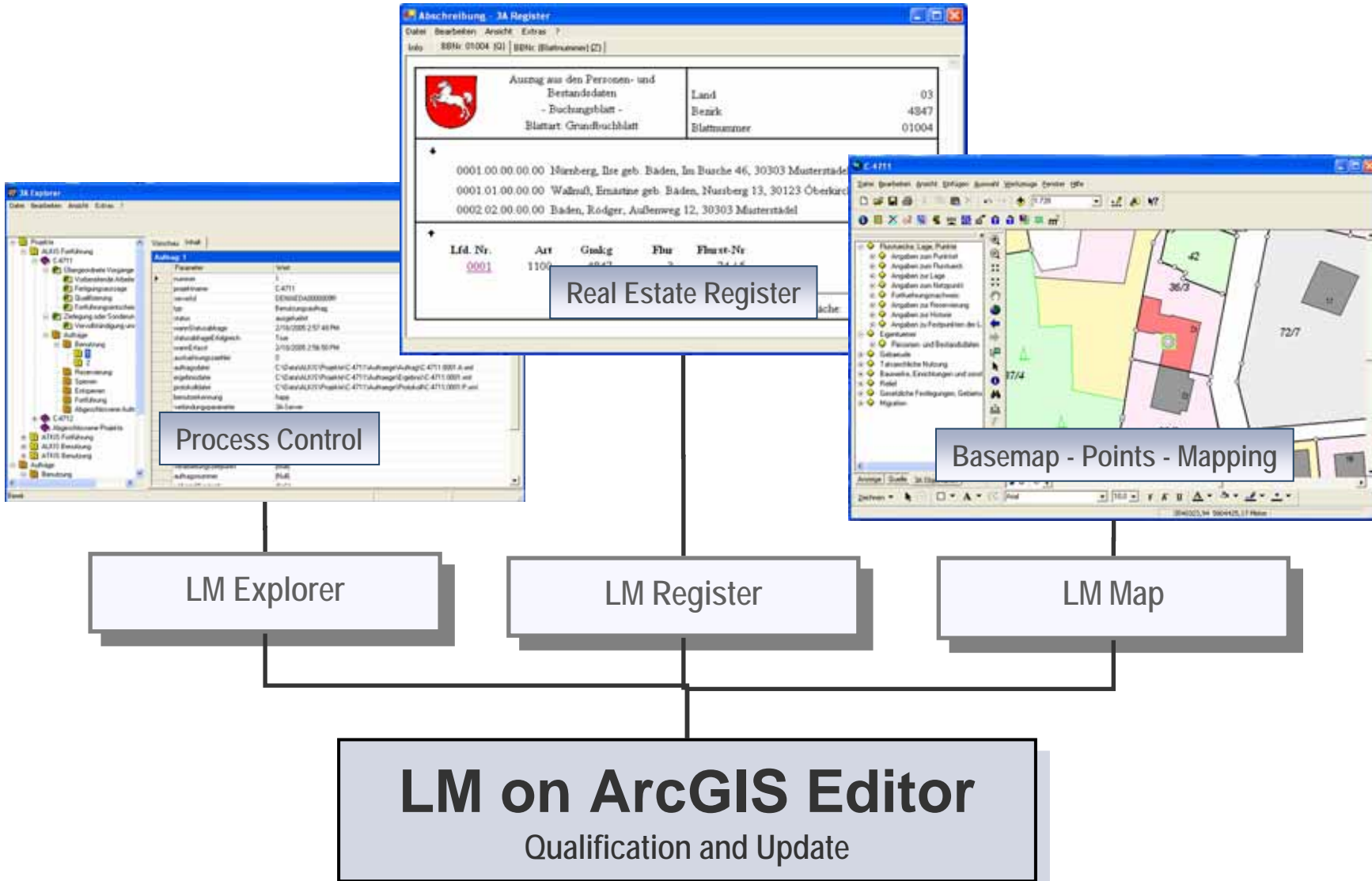
Business Process

Operation

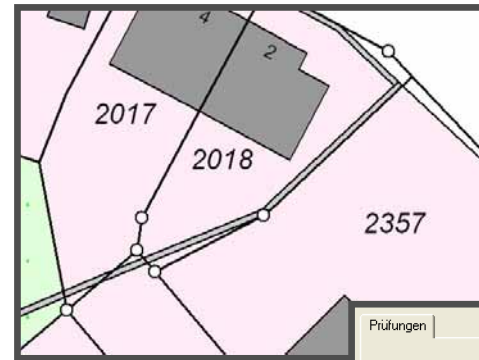
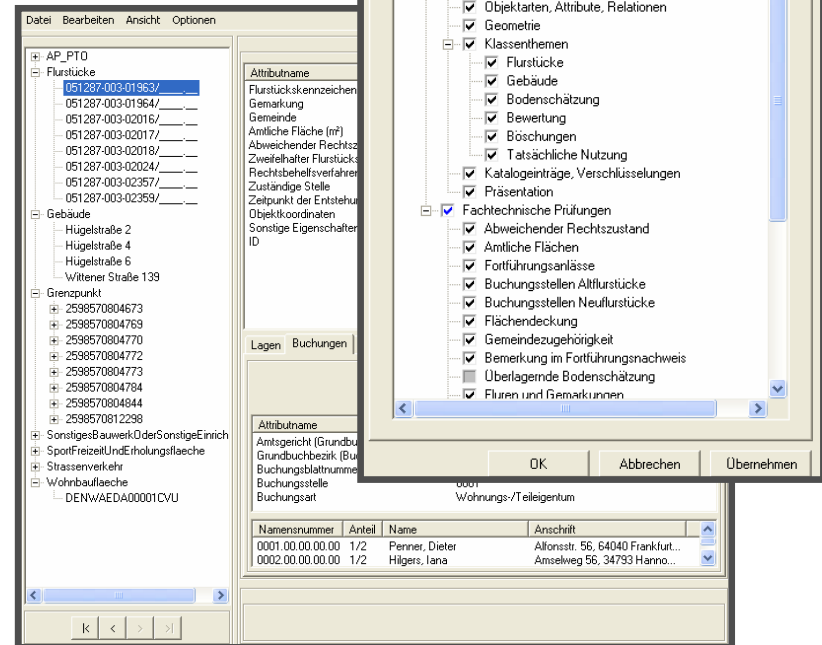
Action







- Object-orientated Model Building
- Uniform Editing Tools
- High Quality Visualization
- Comprehensive Checking Functions
- Integrated Process Control
- Interoperable and Standard-based
- Application Programming Interfaces (API) for the Tools
- ...

The screenshot displays a software interface with a hierarchical data tree on the left, a main workspace, and a 'Prüfungen' (Checks) dialog box on the right. The data tree includes categories like 'Flurstücke' (lots) and 'Gebäude' (buildings). The 'Prüfungen' dialog box is titled 'Auswahl der Prüfungen für die Plausibilisierung' and contains a list of check categories with checkboxes. The 'Alle Prüfungen' (All Checks) category is selected, and several sub-categories are also checked, including 'Allgemeine Prüfungen' (General Checks), 'Klassenthemen' (Class Themes), and 'Fachtechnische Prüfungen' (Technical Checks).

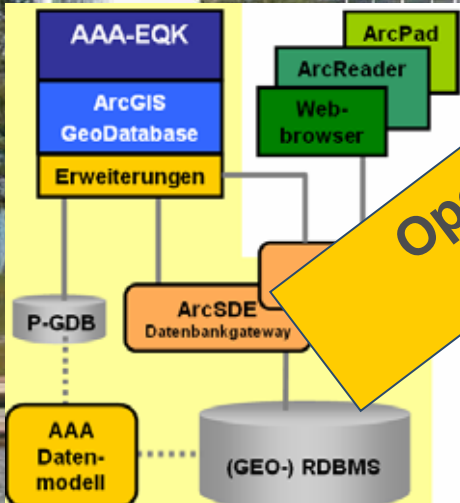
Namensnummer	Anteil	Name	Anschrift
0001.00.00.00.00	1/2	Penner, Dieter	Alfonstr. 56, 64040 Frankfurt...
0002.00.00.00.00	1/2	Hilgers, Iana	Anselweg 56, 34793 Hanno...



■ **New cadastral Solution of the Federal State of Lower Saxony**

- ◆ Modern ESRI-based GIS- and IT technology
- ◆ Roll-out of the LM on ArcGIS products, planned for 2006
- ◆ Up to 2000 ArcGIS desktop clients (hereof 1000 "GIS" clients)
- ◆ Up to 3000 end users who will be using in addition to work the GIS Portal and the LM on ArcGIS Web solution

Operational approval for the 3A Editor since 10-01-2006



Wolfsburg, headquarters of the German car manufacturer "Volkswagen"



- Comprehensive Cadastre Solution for Two Federal States
 - ✦ Migration, Editor and Web Solutions
- Internet Geoserver for Hamburg and Schleswig-Holstein
 - ✦ An important step towards e-Government in Northern Germany

AFIS-ALKIS-ATKIS-Portal

Projekt: LGV-4711-3003

- Ziellegung
 - Vermessungsschiffen
 - Voraussetzung Objektbildung
 - Grenzniederschiff
 - Dokumentation
 - Koordinatenberechnung
 - Flurstückflächenberechnung
 - Katastermliche Ergänzung
 - Fortführungsentscheidung
- Aufträge
 - Verwaltung
 - Workflow
 - Antragsarten
 - Benutzung ATKIS
 - Benutzung des Liegenschaftskatasters
 - Fortführung ATKIS
 - Fortführung des Liegenschaftskatasters
 - Geschäftsprozessarten
 - Vorgangsarten
 - Aktivitätsarten
 - Benutzerverwaltung
 - Personen
 - Benutzer
 - Benutzergroups
 - Buchdaten
 - Grundriss
 - Punkte

Gib Info zu...

- ...Eigentümer
- ...Gebäude

Suche...

Gehe zu...

Erzeuge...

Sonstiges

LM on ArcGIS Web Application

Maßstab: 1:8800

ALKIS - Freie und Hansestadt Hamburg

- Flurstücke
- Gebäude
- Grenzpunkte
- DGK5
- Luftbild

Aktualisieren

R: 3569460,76
H: 5932199,86

LM on ArcGIS Editor Application

Status - Online | 14.10.2003 | 19:33

- **Longtime Expertise for the Realization of Land Management Solutions**
 - ✦ Member of the AdV (Working Committee of Survey Administration)
Board of Coordination with the GIS industry
 - ✦ Realization of a complete LM Product Line
- **Process-orientated Workflow Management**
 - ✦ Integrable and scalable in urban IT Infrastructures
 - ✦ Compliant with national and international Standards
- **GIS Functionality on every Desktop**
 - ✦ ESRI ArcGIS as Base for Geodata Management
- **Continuous Data Flow From field to office and back**
 - ✦ LM on ArcGIS Mobile Solutions
- **Internet Information and Sales Portal for Land Agencies and Municipalities**
 - ✦ Component of many eGovernment Solutions

The new all-in-one Software Generation!

**The Innovative Software Platform
for all Tasks in Land Management**

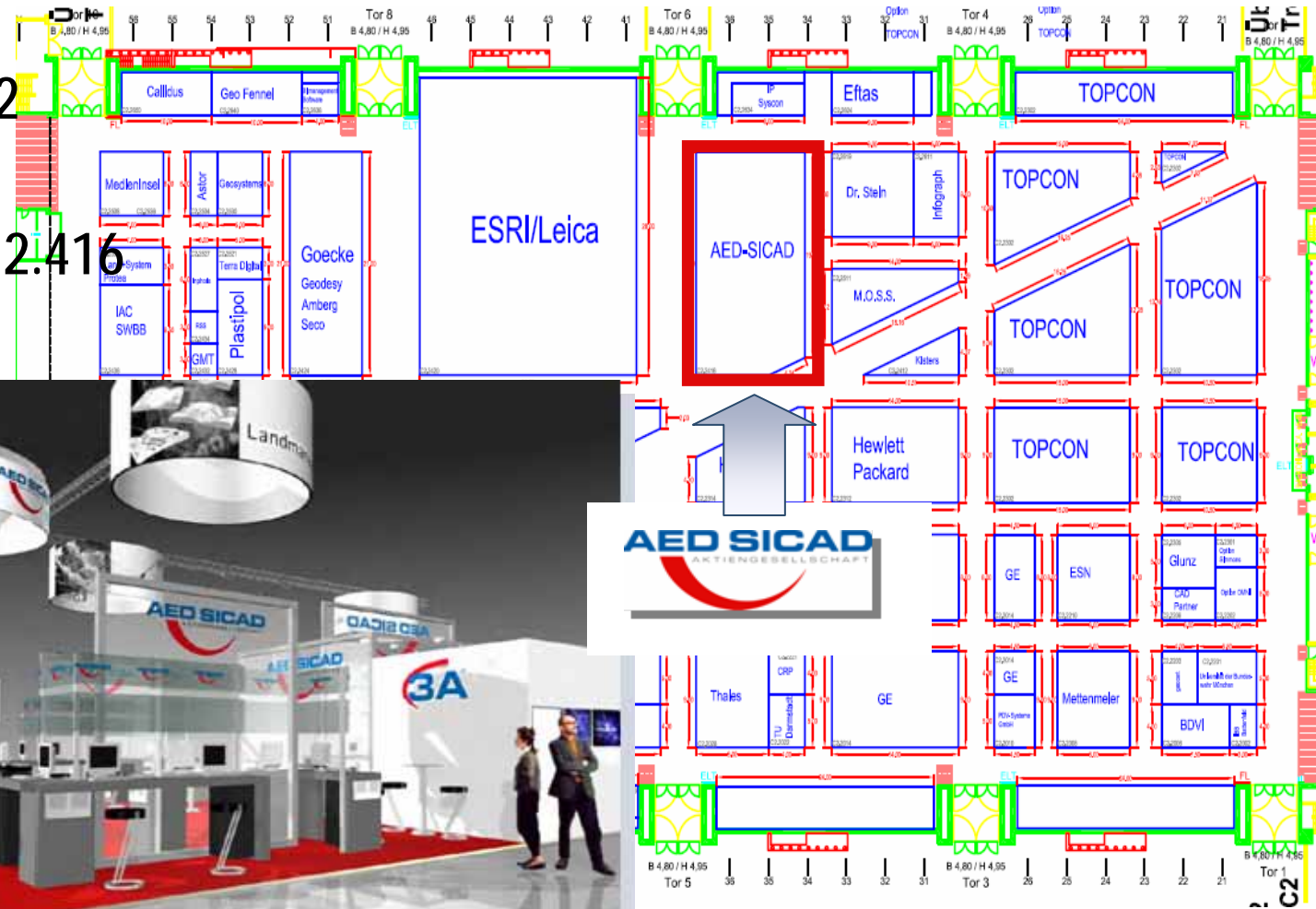


LM For Professionals!

AED-SICAD at INTERGEO Exhibition

■ Hall C2

■ Stand 2.416





Thank you for your interest!

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