



EGN WP 2: User/business requirements

**Review of existing studies on user requirements and market analysis
for utilization of Geo-information and geographical names**

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Aim / Target

- Should help interpretation of case studies from an industry point of view
- Contribute to identification of basic industry-specific requirements
- Contribute to Identification of common requirements
- Three-fold:
 - Research for existing Public / Academic resources
 - Research for existing Industry-related resources
 - Supplier interviews (ongoing)

Mapping the findings to a given structure

- Usable existing structure: MITRE Study requirement groups
 - Data requirements
 - User interface requirements
 - Requirements for search
 - Gazetteer-specific requirements

Public / Academic Sources

- MITRE Corporation study 2005 as main source for information
- Survey on gazetteer usage / requirements: „Common“ requirements
- Data requirements: problems with place names and dependent variants, attribute and localization issues
- User Interface: Easy access, data integration issues (easy integration into GIS required), many interface problems
- Search: foreign languages, phonetic and fuzzy search, must be fast
- Gazetteer-specific: multiple outputs (online, print, offline media). Customized gazetteers should be creatable

Academic resources

- Alexandria Digital Library as the major constituent for gazetteer services in the academic sector
- No user requirements studies for ADL project

Industry-specific resources

- Desk research for market analysis and surveys with defined TGs
 - Health
 - Tourism
 - LBS
- Not all TGs covered: lack of data
- Industry sectors added: Utilities (pipeline monitoring), Insurance

Industry-specific resources: Health

- UK (NHS)-focused analysis of GIS usage in Health context; compilation of survey results. Usage scenarios: mapping of area-specific data with disease georeferencing (source of, spread area, spreading forecast); analysis of health datasets combined with socio-economic and census data (aim: describe effectiveness of health policy issues)
- Data requirements: Demand for high data quality. Interfaces to GIS and GIS data required. Interfaces to third-party systems required. High security level for access of patient-specific data.
- User interface: expert usage, does not need to be easily accessible
- Search: Wildcards, fuzzy search, speed and multiple language support is not a priority. Standard analysis is grouped by patient postcode (census data).

Industry-specific resources: Tourism

- ESA Earth Observation programme: market study on spatial data requirements for tourism industry. Survey on tour operators, travel portals and agents.
- Data requirements: Demand for high resolution aerial photography; result for EGN names: scale issue. Completeness of coverage. Data formats should be appropriate for mobile devices.
- User Interface: Easy access for endusers. Interfaces to TPS (booking, CMS)
- Search: High flexibility. Phonetic search, wildcards, auto-corrections, suggestions.

Industry-specific resources: Location-based services

- ISHTAR project: EU-funded study on LBS issues (harmonization of technologies)
- Data requirements: Different output methods (voice, graphical, text). High positional accuracy. Absolute coordinates of person on map (people finder). Address data. Points of interest, class of place for proximity analysis: definition of class list and criterium for proximity (radius; descriptor: town; descriptor: region). Event localisation (absolute coordinates). High coverage level required.
- User interface: very simple, fast (real-time information), multiple platforms, location representation map-based, limited space, multi-language support
- Search: complex input issues (display size restrictions), „classical“ search criteria are not too relevant (postcode)

Industry-specific resources: Utilities (pipeline monitoring)

- ESA Earth Observation programme: market study on spatial data requirements for pipeline monitoring
- Data requirements: cross-border names, multi-language coverage (similar to rivers), export to TPS, proximity analysis
- User interface: expert usage
- Search: Exact location, event-driven notification

Industry-specific resources: Insurance

- ESA Earth Observation programme: market study on insurance sector requirements for usage of spatial data
- Data req.: Low-level data necessary (ground movement, soil type, vegetation areas, building location, wind speed, wind direction, elevation measurement...), urban area mapping (10m), interfaces to TPS, high data quality, security, combination of area-related and object-related information (vessel moving)
- User interface: expert usage, real-time information, fast, complex interfaces must be supported, multi-language
- Search: expert usage

Selected supplier: MapInfo Gazetteer management system

- **MapInfo Gazetteer Management System (GMS): Feature description of advantages of product:**
 - Simple interface
 - TPS export and integration: open formats
 - Integration into corporate IT infrastructure: „One“ corporation-wide gazetteer
 - Solution neutral gazetteers (interoperability)
 - Client-server architecture
 - Management for Gazetteer data in Oracle 9i
 - Scalable

Summary: common requirements

- Data import: EGN datasets will be imported into third-party systems
- Metadata issue
- Accuracy / data quality must be high (EGN as reference data)
- Standard address data elements (i.e. postcode)
- Completeness of coverage
- Cross-border object names
- Flexible output methods
- Phonetic transcription
- Solution neutral (integration)
- Interfaces to standard DBMS

Thank you!

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