Intellectual Property Rights and Data Quality Issues Associated with Geospatial Information

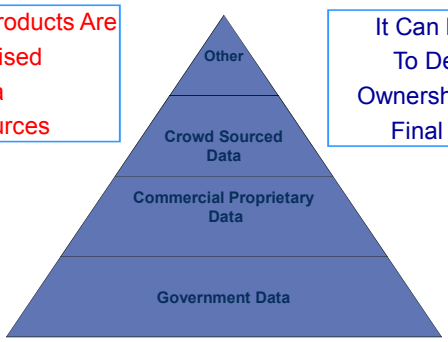
International Workshop
on Legal and Policy Frameworks
for Geospatial Information

Objectives

- Understand the key legal issues in a geospatial information license.
- Understand key legal and operational risks associated with geospatial information licenses.
- Understand how these risks can be addressed in geospatial information license agreements.

Intellectual Property Rights

Geospatial Information Products Are Frequently Comprised of Data From a Variety of Data Sources



It Can Be Difficult To Determine Ownership Rights in Final Products

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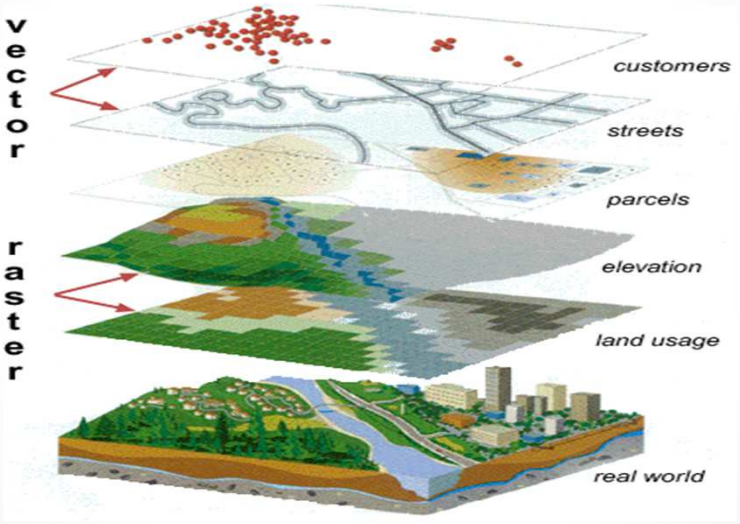
Presents a challenge from IP standpoint



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Complexity of Products/Services

- Geospatial information products/services frequently include a mixture of data sources:
  - Government
  - Commercial Proprietary Sources
    - Many types of licensing arrangements
  - The "Crowd"
- Have to abide by all legal and contractual obligations.
- Obligations are not always clear or evident.

Copyright Issues (databases)

- Data is very different from software with respect to copyright
  - Hard to protect databases through copyright protection
  - Some jurisdictions protect intellectual property rights in databases
- "Very serious copyright issues around places databases"

  Eric Schmidt,
  Chief Executive Officer
  Google, Inc.
  (attributed to)
- Important cases:
  - Feist Publications v. Rural Telephone Service, Co. 111 S Ct. 1281 (1991)
  - Telstra Corporation Limited v Phone Directories Company Pty Ltd [2010] FCA 44 (2010)
  - European Database cases

Copyright Issues (maps)

- Maps (see e.g.)
  - Mason v. Montgomery 967 F.2d 135 (5th Cir. 1992)
    - Action was brought for infringement of copyright in land ownership maps based on United States geological survey maps.
    - Addressed "merger doctrine"
    - "Although the competitors' maps and Mason's maps embody the same idea in the placement, they differ in the placement, size and dimensions of numerous surveys, tracts and other features."
    - "The record also contains affidavits…the differences between Mason's maps and those of competitors are the natural result of each mapmaker's selection of sources, interpretation of those sources."

Challenges

- As visualization applications become more common, questions of infringement will increase.
- Can be difficult to combine free and open data with proprietary data protected by copyright.
- Will this impact value of geospatial information?

Nike Used OpenStreetMap Data

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Other Considerations

- Derivative products
  - What constitutes a derivative product?
- Meta Data
  - Great importance to geospatial information
    - Impacts data quality
  - What is geospatial information meta data from a legal standpoint?
    - Part of product/service?
    - Documentation?
  - How is it accounted for in legal documents?
    - In description of what is being licensed?
    - In representations and warranties?
    - In indemnification language?

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What Can Data Providers Do?

- Geospatial Information Audits
  - Vendor and supply agreements
- Education
  - User conferences, etc.
  - Websites
- Clearly Define Rights in Agreement
  - Licensed Geospatial Information
  - Metadata

Geospatial Information is Versatile

Urban Planning

SatNav Devices

Location Based Services

But Data Set May Not Be Suitable For All Purposes

- The quality of data required for a particular application varies:
  - Accuracy
  - Completeness
  - Timeliness
  - Currency
- How to allocate risk between parties?
  - Contract
  - Legislation
  - Insurance
  - Courts

Satellite Navigation Devices

- According to 2009 study "2% of British drivers crashed or nearly crashed because of sat-nav device
- Another 18% claimed satnav "reduced their awareness" while driving
- Questions to consider:
  - How accurate must the data be?
  - How timely must the data be?
  - How often should data be updated?
  - Is having a voice telling you to turn different than reading a map?
  - Who decides?

Satellite Navigation Marketing: Raising Consumer Expectations

- Helps You Avoid Traffic
- Will Save You On Gas
- "Arrive Safely on Time… Every time"
- "May Everyone, Everywhere Find Their Way"
  - TomTom Commercial

Response of Geospatial Community

- Fault lies with driver
- Drivers need to use "common sense"
- Shouldn't rely on GPS devices
  - "Bring a Map"
- "Isn't bringing a map because GPS might be wrong like throwing a bike in car because car might break down."

Particularly an Issue for Consumer Products

- Consumers do not really understand geospatial technology
- Law tends to protect consumers
  - Especially for vehicles
- Plaintiffs will wait for favorable fact patterns

Liability - Contract

- Product vs. Service?
  - Uniform Commercial Code
- Express warranties
  - Are there industry standards?
- Implied warranties
  - Merchantability – **"goods must be at least of average quality, properly packaged and labeled, and fit for the ordinary purposes they are intended to serve"**
  - Fitness for a particular purpose – **"if the seller knows the purpose for which the goods are to be used, the seller impliedly warrants that the goods being sold are suitable for that specific purpose"**

Liability - Negligence

- Causes of Action
  - Duty of care – ordinary prudent person
  - Breach of duty
  - Causation
  - Damages

Liability - Product Liability

- Aetna Casualty and Surety Co. v. Jeppesen & Co., 642 F.2d 339 (9th Cir. 1981)
  - **The "defect" in the chart was that the graphic depiction of the profile, which covers a distance of three miles from the airport, appears to be drawn to the same scale as the graphic depiction of the plan, which covers a distance of 15 miles.**
  - **"While the information conveyed in words and figures …was completely correct, the purpose of the chart was to translate this information into a instantly understandable graphic representation"**
  - **"It was reliance on this graphic portrayal that Jeppesen invited"**

Location Based Services

- Authentication
  - Banks linking debit cards with cell phone locations
  - "geofencing"
- Falsifying location is possible
  - Foursquare false check-ins
- Future applications will require even a greater degree of accuracy, timeliness and completeness
  - Authentication
  - Autonomous Vehicles
  - Insurance

Other Examples

- Data Quality Issues
  - Garmin recalls maps due to inaccurate indications of water depth
  - Columbia Venture LLC v. Dewberry & Davis, 604 F.3d 924 (4th Cir.2010)
    - Hydrographic model flawed and inaccurate
    - Professional malpractice, civil conspiracy, injurious falsehood and violation of Unfair Trade Practices Act
- Human Factor
  - Georgia contractor destroys wrong house using GPS coordinates rather than street address
  - Proposed legislation in New York
    - Fine for truck drivers if use GPS device and hit bridge

Where Are We Going?

- Future applications will include geospatial information wider sources
  - Crowdsourcing
  - Internet of Things
  - Smart Grid
- Future applications will require even a greater degree of accuracy, timeliness and completeness
  - Authentication
  - Autonomous Vehicles
  - Insurance
- Increases risks of error and damages

What Organizations Can Do

- Use of Standards
- Internal Procedures
  - Quality Control/Quality Assurance
- Contract
  - Allocation of risk
  - Indemnification
- Insurance
  - What Are You Insuring Against?

Discussion

- How important are concerns over intellectual property rights and data quality to your organization?