OpenData, imports and after...
OpenData

- A fact: always more OpenData
- A problem: heterogeneity
  - Spatial: covered area
  - Quality: made for a specific use
  - Attribute: originally GIS designed
- OSM as platform: integrating OpenData
  - Uniformisation
  - World wide
  - Contributive
Step 1: Quality evaluation

- Geo location accuracy
- Available attributes
- Freshness of data

→ worth to import?
Step 2: Extraction / Conversion

- Projection → WGS84
  - From everything
  - From unspecified and moving
- Format CSV, .OSM
  - From Excel, CSV and Shape or scraping
- Specifics: Shp2osm, Shp2pgsql
- Qgis: Shp or CSV → Shp
- JOSM: OpenData plugin: Shp or CSV → .osm
Step 3: Import

- Discouraged
  - Bad effect: “TIGER syndrom” mainly due to low quality data
  - “better than nothing” not always better
  - but... Good effect with high quality data
- Technical: not for everybody → team work
- Merge identical object
  - Output → list of non automatic mergeable objects
Step 3b: Import $\rightarrow$ Integration

- Half-manual integration
- Non auto mergeable $\rightarrow$ made by hand
- Non integrable data
  - Bad quality
  - Too many conflict with OSM data
Tools

• Specifics
• JOSM
  • By hand
  • Conflation plugin: by distance / similarity
• Osmose
  • Quality assurance tool (QA)
  • Half-manual proposed integration
  • Helps detecting missing features using OpenData
  • “OpenData by OSM” as derivate product
Corine Land Cover 2006 in France

- 160 000 polygons imported in 2009
- 2 week of upload
- 11 000 polygons added manually
- 95 000 still unimported polygons
Buildings added from cadastre data in France

- 2008: 0.6 million
- 2009: 3.8 million
- 2010: 14.8 million
- 2011: 9.6 million
- 2012: 8 million
- 2013: 3.2 million

**Millions buildings added / year (source=* based)**
Missing buildings graph trend

geodesic building All

Addresses

- Nantes: 8 month of half-manual integration (150k+)
- Toulouse
- Bruxelles
- ...
- Todo: Lyon, Bordeaux, Montpellier... France
School open data integration

http://osmose.openstreetmap.fr

Bug!

Opendata update
Challenges...

- Update OpenData after integration
  - How, feasible?
- Send back data improvement to producer
  - Need of external stable ref