Mapping Ireland – the end and yet the beginning

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Ordnance Survey Ireland

OSi’s mandate
‘to provide a national mapping service in the State… creating and maintaining the definitive national mapping and related geographic records…….’

OSi Mapping Programmes

<table>
<thead>
<tr>
<th>Area</th>
<th>Scale</th>
<th>Coverage</th>
<th>Current %</th>
<th>Planned Revision Cycle</th>
<th>Planned Complete</th>
<th>Planned Revision Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>1:1,000</td>
<td>0.1m Ha</td>
<td>1 year</td>
<td>100%</td>
<td>1 year</td>
<td></td>
</tr>
<tr>
<td>Suburban</td>
<td>1:2,500</td>
<td>0.5m Ha</td>
<td>1 year</td>
<td>100%</td>
<td>1 year</td>
<td></td>
</tr>
<tr>
<td>Periurban</td>
<td>1:2,500</td>
<td>1.5m Ha</td>
<td>3 year</td>
<td>100%</td>
<td>3 year</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>1:5,000</td>
<td>4.7m Ha</td>
<td>n/a</td>
<td>100%</td>
<td>5 year</td>
<td></td>
</tr>
</tbody>
</table>

The 1:5,000 resurvey programme

Rural 1:5,000

Area
- Tile covers 1200 hectares (4 km by 3 km)

Vector
- 50 levels
- NTF, DXF, DWG, Unload DST

Raster
- 50dpi
- Tif

Source / Availability
- Air Photography
- New Release
- 5 year Revision Cycle

Mandate specifics
- Underlying physical infrastructure
- National mapping
- Encourage and promote its benefits
- Advice to Government
- Boundary surveys
- Archaeology and place names
- Protecting copyright
Orthophotography

**Raster (TIFF)**
- Entire Country available
- Registered to Irish Grid and ITM
- 1m Resolution
- Photo Scale 1:40,000
- Colour (256 tones)
- Date of Capture 2000-03

Outsourcing lessons

- Include a pre-production phase
- Collaborative working is essential
  - At all levels
  - Face-to-face whenever possible
- Acceptance testing methodology

Mapping methods used

- Photogrammetry
  - No ground completion
  - Use of existing mapping
  - ‘Trace off’
- In-house and outsourced
  - 6 production houses
  - Quality acceptance testing

Market lessons

- Specification development
- Responsive resourcing
- Leadership balanced with responsiveness
- Balancing time, cost and quality

Operational lessons

- Make maximum use of flexible data structures and coding
- Use of the old mapping
  - Complex and time-consuming
  - Essential component of completeness

Building on the mapping
**Market pressures**

- More intelligent data
- Interoperable data
- Wider range of customers
  - Corporate
  - Commercial
- Price

**Data developments**

- Structured upspeccing programme
  - Remove differences by scale
  - Full connectivity
  - Increased attribution
- Reducing revision cycles
- New coordinate reference system
- Better statistics on accuracy
- More accurate height information

**Systems developments**

- New master database implemented
  - Open, Oracle environment
  - Enables richer data structures
  - Topographic identifiers
- New editing tools
  - Large-scales elements delivered by Sysdeco
  - Leica developing live link to photogrammetry
  - Watching carefully developments on generalisation etc

**Conclusion**

- It’s all about balance!
  - Business versus social
  - Different customer requirements
  - All the data linkages (and tensions!)
  - In-house versus outsourced
- And it doesn’t get any easier!!

OSi………excellence in providing quality mapping and geographic information services to meet society’s needs