Exchanging geographical information to prevent excavation damage to cables and pipelines in the Netherlands; a usecase of INSPIRE

Utility Services

GWF2014

Ad van Houtum
Cadastre, Land Registry and Mapping Agency, NL
Topics

• KLIC, cables and pipelines information centre
• WION, legal obligations
• Klic-online, the conceptual design
• Future needs
• European directive: INSPIRE theme Utility Services
• KLIC-WIN: matching WION & INSPIRE US
KLIC, cables and pipelines information centre

- An initiative of network operators (1967)
- Goal: decrease the number of excavation incidents
- Reported excavations are dispatched to network operators
- Network operators send their maps directly to the excavator
- Characteristics:
  - Simple procedure,
  - Effective and well established
  - Based on voluntary participation
  - Labor-intensive
  - Unstandardized maps
WION, legal obligations

- Commissioning party: ensure that the work can be performed with due care
- Excavator: report the mechanical digging plans and work with due care,
- Network operator: participate in WION and deliver information to the system (Klic-online)
- Kadaster: develop, maintain and service the system
- Agency Telecom: monitoring and enforcement
Klic-online, the conceptual design
KLIC-nummer: 13G143928 - 1

Verzamelkaart alle thema's

<table>
<thead>
<tr>
<th>Zaaktype</th>
<th>Uitvoering</th>
<th>Datum aangifte</th>
<th>Datum vaststelling</th>
<th>Datum inzending</th>
<th>Datum beëindiging</th>
<th>Datum verwijdering</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA</td>
<td>Groene Ruimte</td>
<td>25-04-2013</td>
<td>11:08</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Uw ref. TESTMELDING Ad's Meiding
Datum eenvraag: 25-04-2013 11:08
Schaal: 1:500
Futere needs

• High quality demands: ubiquitous
  – Continuously available (24x7)
  – Without waiting (near real-time)
  – Presented at any location and on any user platform
• Multiple maps e.g. planned topography, type of soil, ground water, cadastral boundaries, addresses, etc.
• A controlled process for reporting excavations
• Authenticated users which specify their requests
• Authorization based on applicant’s profile and intended use
• Web services
  – Viewservice (WMS)
  – Downloadservice (WFS)
European directive: INSPIRE US

- Annex III subtheme 6a Utility Services
- Obligatory for 80% of the Dutch network operators
- Strict roadmap
  - Metadata published (2013)
  - Webservices (WMS/WFS) data as is (2013)
  - Data harmonised (2020)
- High quality demands
  - 24x7 available
  - 99% uptime
  - Respons viewservice < 5 s
  - Start download < 20 s
  - Simultaneous > 20 users
KLIC-WIN: matching WION & INSPIRE US

- One system that fits both WION and INSPIRE US
- Letter of intent
- Steering committee
- Outlines, synergy, program plan
- Challenges
  - A3: authentication, autorisation, accounting?
  - How to fit in the private sector (e.g. telecom)?
  - Datawarehouse central / distributed / hybride?
KLIC-WIN (data exchange in a hybride model)