

**SemanticWeb.com webcast, December 2010**

**Linked data at fire department Amsterdam**



149









BW

GAS ALERT MAX

Low ALARM

000  
H<sub>2</sub>S ppm

000  
CO ppm

19.5 000  
O<sub>2</sub> % LEL %

①



CAL

MAX  
TWA

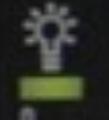
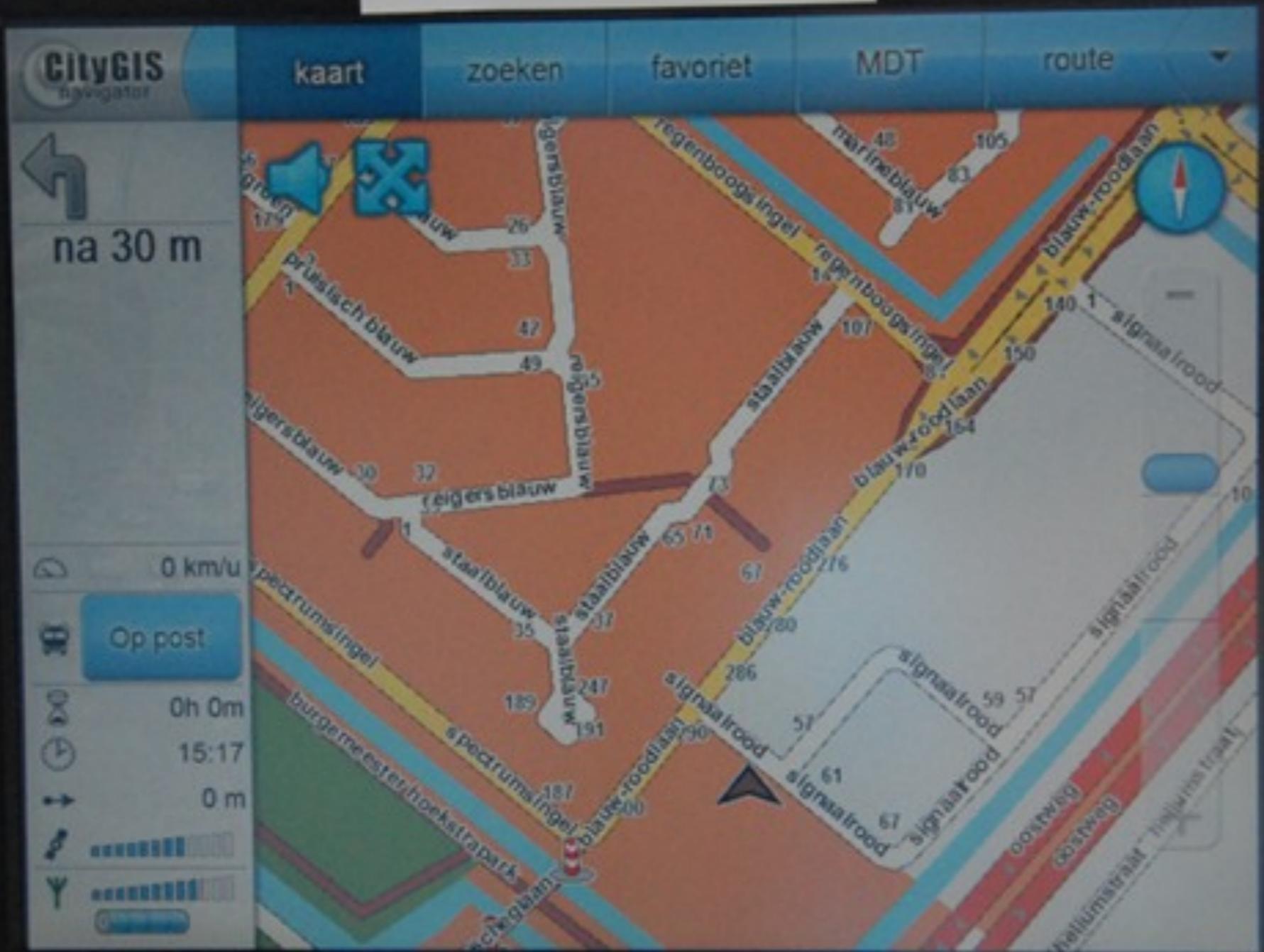
OK







## SCHERM AAN LATEN STAAN



Microbus

AC



# Bart's fear

# Where to start

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- Infinite amount of data sources
- Model the world will not work
- Start where it hurts you most
- **Navigation system does not work**

# What do we need as firefighters?

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- System without interaction
- Overview of station and incident location
- Structured incident details

# P2000Maps

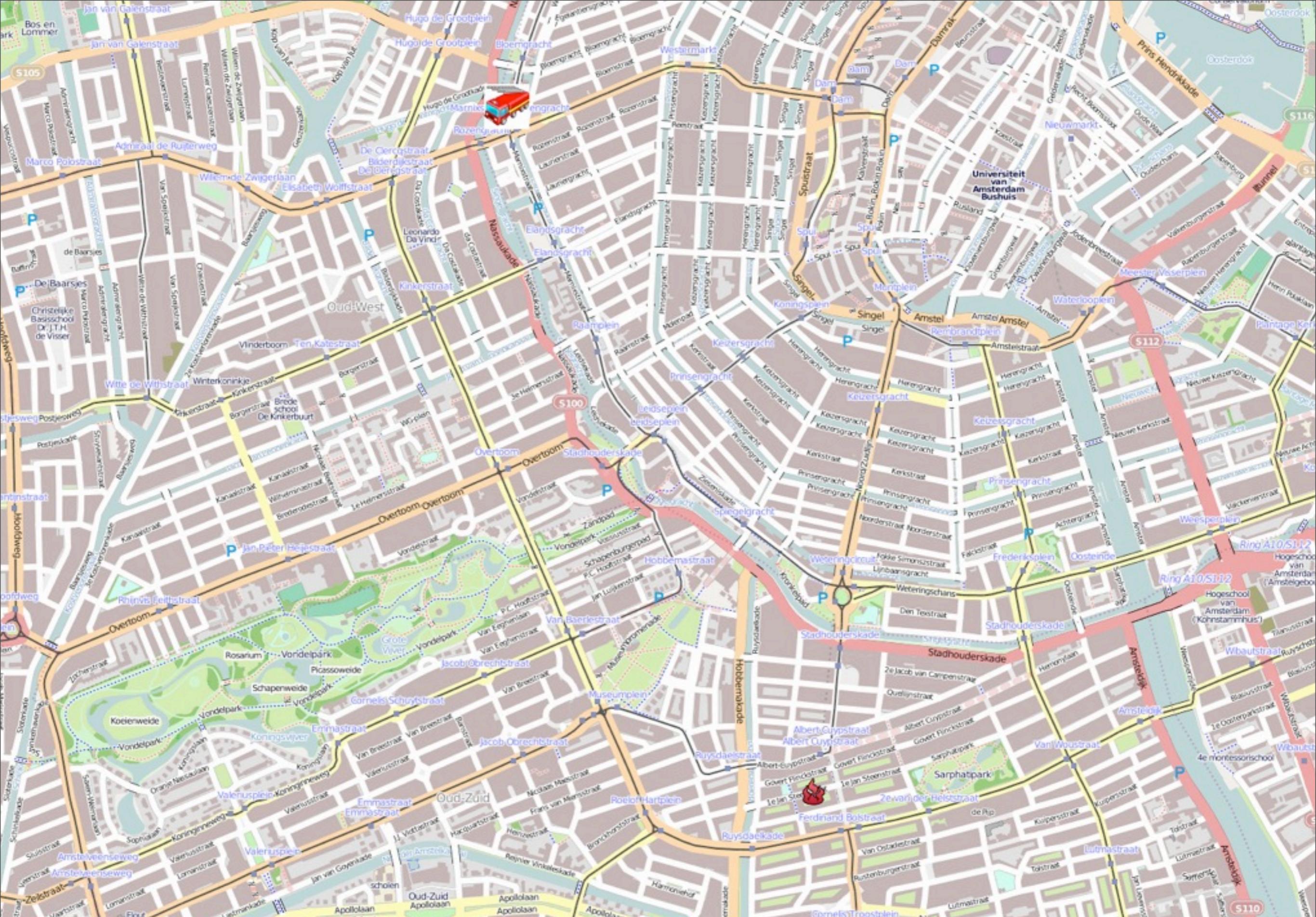
---

- P2000 digital text broadcasting for emergency response services
- Messages look like:

BR 1 BINNENBRAND WONEN ( Inc.net: 2 ) EERSTE JAN  
STEENSTRAAT ASD [ NET02 3352C 3332 3331 ]
- This is now converted to RDF automatically

```
-<rdf:Description rdf:about="http://data.brandweeraa.nl/data/messages/c4223b2dec83e54631e5040a5760453fa0393b02">
  <rdf:type rdf:resource="http://vocab.resc.info/communication#DispatchMessage"/>
  <dcterms:language>nl_NL</dcterms:language>
  <dcterms:identifier>c4223b2dec83e54631e5040a5760453fa0393b02</dcterms:identifier>
-<dcterms:title>
  BR 1 BINNENBRAND WONEN ( Inc.net: 2 ) EERSTE JAN STEENSTRAAT ASD [ NET02 3352C 3332 3331 ]
-</dcterms:title>
  <dcterms:type rdf:resource="http://standaarden.overheid.nl/owms/terms/webpagina"/>
  <overheid:authority>brandweer</overheid:authority>
  <dcterms:publisher>Brandweer Amsterdam-Amstelland</dcterms:publisher>
  <dcterms:creator rdf:resource="http://bart.netage.nl/foaf.rdf"/>
  <dcterms:modified>2010-12-09T12:59:46</dcterms:modified>
  <dcterms:format>application/rdf+xml</dcterms:format>
  <rdfs:label>BINNENBRAND WONEN</rdfs:label>
-<rdfs:comment>
  BR 1 BINNENBRAND WONEN ( Inc.net: 2 ) EERSTE JAN STEENSTRAAT ASD [ NET02 3352C 3332 3331 ]
-</rdfs:comment>
  <communication:capcode>0102998</communication:capcode>
  <communication:date>09-12-10</communication:date>
  <communication:time>12:59:46</communication:time>
  <communication:classification rdf:resource="http://data.brandweeraa.nl/data/messages/c4223b2dec83e54631e5040a5760453fa0393b02#classification"/>
  <communication:network>Inc.net: 2</communication:network>
  <communication:incident-address rdf:resource="http://data.brandweeraa.nl/data/messages/c4223b2dec83e54631e5040a5760453fa0393b02#addr"/>
  <communication:incident-location rdf:resource="http://data.brandweeraa.nl/data/messages/c4223b2dec83e54631e5040a5760453fa0393b02#location"/>
  <communication:unit rdf:resource="http://brandweeraa.resc.info/data/units/3352"/>
  <communication:unit rdf:resource="http://brandweeraa.resc.info/data/units/3332"/>
  <communication:unit rdf:resource="http://brandweeraa.resc.info/data/units/3331"/>
</rdf:Description>
-<rdf:Description rdf:about="http://data.brandweeraa.nl/data/messages/c4223b2dec83e54631e5040a5760453fa0393b02#classification">
  <rdf:type rdf:resource="http://vocab.resc.info/communication#Classification"/>
  <communication:type>BR</communication:type>
  <communication:prio>1</communication:prio>
  <rdfs:label>BRAND 1</rdfs:label>
-</rdf:Description>
-<rdf:Description rdf:about="http://data.brandweeraa.nl/data/messages/c4223b2dec83e54631e5040a5760453fa0393b02#addr">
  <rdf:type rdf:resource="http://www.w3.org/2006/vcard/ns#Address"/>
  <rdfs:label/>
  <v:street-address>EERSTE JAN STEENSTRAAT </v:street-address>
  <v:locality>Amsterdam</v:locality>
  <v:country-name>Nederland</v:country-name>
-</rdf:Description>
-<rdf:Description rdf:about="http://data.brandweeraa.nl/data/messages/c4223b2dec83e54631e5040a5760453fa0393b02#location">
  <rdf:type rdf:resource="http://www.w3.org/2003/01/geo/wgs84_pos#SpatialThing"/>
  <geo:lat>52.3538936</geo:lat>
  <geo:long>4.8896225</geo:long>
-</rdf:Description>
</rdf:RDF>
```

BINNENBRAND WONEN		
BINNENBRAND WONEN	creator	<a href="http://bart.netage.nl/foaf.rdf">http://bart.netage.nl/foaf.rdf</a>
	format	application/rdf+xml
	Identifier	c4223b2dec83e54631e5040a5760453fa0393b02
	language	nl_NL
	modified	2010-12-09T12:59:46
	publisher	Brandweer Amsterdam-Amstelland
	title	BR 1 BINNENBRAND WONEN ( Inc.net: 2 ) EERSTE JAN STEENSTRAAT ASD [ NET02 3352C 3332 3331 ]
	type	<a href="http://standaarden.overheid.nl/owms/terms/webpagina">http://standaarden.overheid.nl/owms/terms/webpagina</a>
	authority	brandweer
	capcode	0102998
	classification	BRAND 1
	date	09-12-10
	Incident address	
	location	<a href="#">location</a>
	network	Inc.net: 2
	time	12:59:46
	unit	Autospuit Hendrik
		<a href="http://brandweeraa.resc.info/data/units/3332">http://brandweeraa.resc.info/data/units/3332</a>
		<a href="http://brandweeraa.resc.info/data/units/3352">http://brandweeraa.resc.info/data/units/3352</a>
	type	DispatchMessage
	comment	BR 1 BINNENBRAND WONEN ( Inc.net: 2 ) EERSTE JAN STEENSTRAAT ASD [ NET02 3352C 3332 3331 ]
BRAND 1	label	BINNENBRAND WONEN
	prio	1
	type	BR
	type	<a href="#">Classification</a>
	label	BRAND 1
	type	vCard Address Class
	label	
	country	Nederland
	locality	Amsterdam
	street	EERSTE JAN STEENSTRAAT
location	type	SpatialThing
	latitude	52.3538936
	longitude	4.8896225



BRAND 1 Inc.net: 2 BINNENBRAND WONEN EERSTE JAN STEENSTRAAT , Amsterdam ( )

Ladder Dirk / Autospuit Dirk / Autospuit Hendrik

NETAGE.NL

# Where is the web of data?

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- Road construction
- Structural hazards
- Fire investigation results
- ...

# Lessons learned

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- Practical lessons
  - START! It generates buzz
  - Driver safety, less distraction
  - Based on user requirements
- Technical lessons
  - Publishing URIs makes it flexible
  - Flexibility of the backend needed on interface level
  - Data driven interfaces

# Where do we want to go?

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- All information about incidents is linked data
- Interfaces have no exclusive access to data
- Information requirement is based on
  - person
  - situation
  - time
  - device
- E.g. phone numbers of emergency contacts

# How do we go there?

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- Data driven interfaces
- Specific selection of triples generates the information
- Not necessarily in the same graph/ontology
- Selection independent from its representation
- Selections are
  - expressed in RDF
  - generated by the consumer

# Partners

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- **netlabs.org**

Interface framework

- **netage.nl**

Implementation

- **Vrije Universiteit Amsterdam**

Linked Data Research

# Contact

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- **netlabs.org**

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