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# Mapping the Underworld

## - The Efficacy of Stakeholder Networks

Professor Chris Rogers  
(University of Birmingham)



University  
of Southampton

## Why do we need to Map the Underworld ? Who benefits ? Who pays for research ?



TBE Group

We don't know where all pipes and cables are buried

Holes are dug to locate them

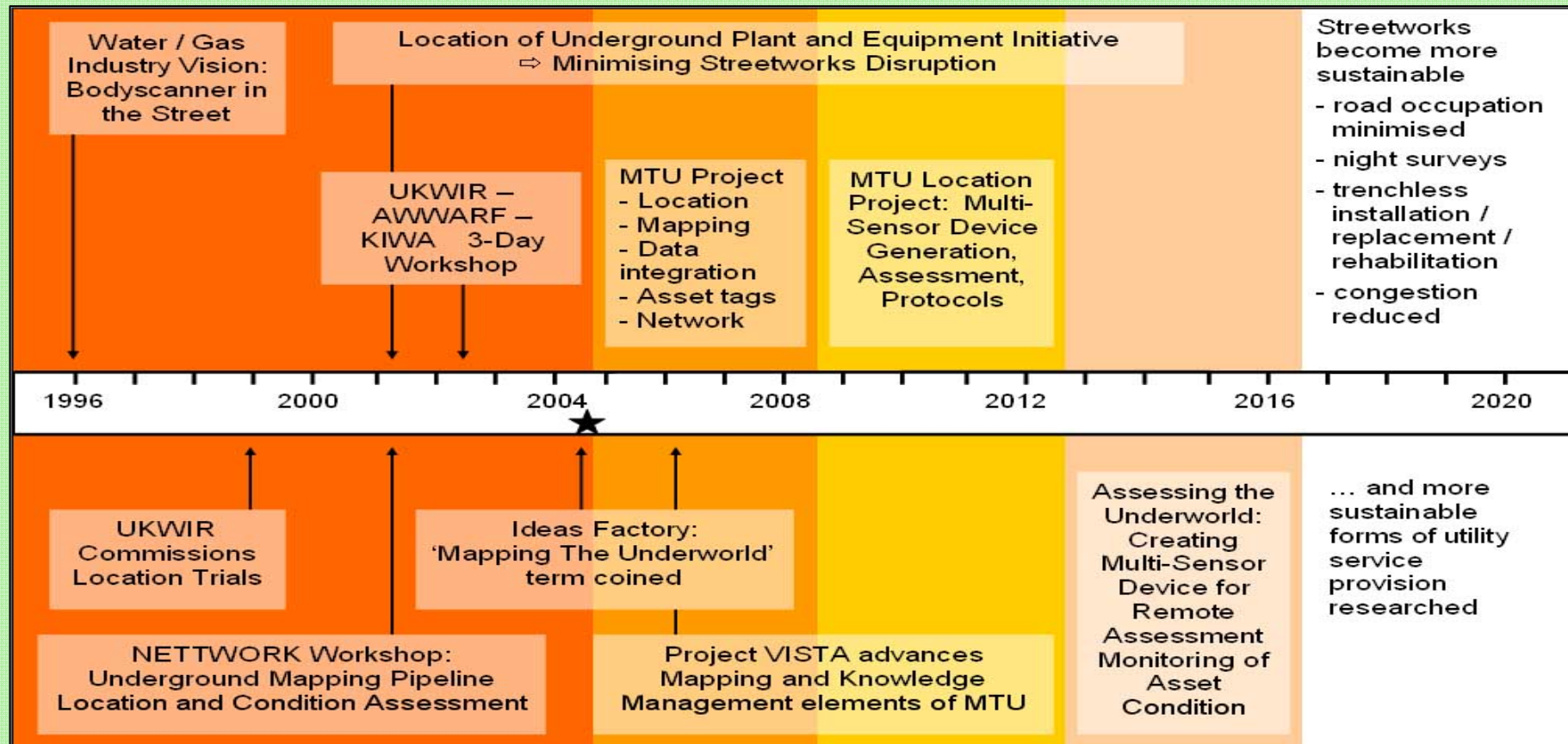
Street works cause traffic congestion ... allegedly

If we know where they are

- more efficient street works
- trenchless methods are viable
- we know where they are not
- ... and we can plan for this space

**Utility companies conceived of a multi-sensor scanner to locate buried utilities**

... part of a 25 year initiative to remove the need for excavation when finding utilities



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The aims of the network in trenchless technology  
(NETWORK) were:

- to bring academics and industrialists together to synthesise knowledge in the broad field of trenchless technologies
- agree research needs in a priority order
- disseminate this information widely
- formulate research teams and proposals

Achieved via five literature reviews

... and **five stakeholder workshops**



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In 1998 the International Trenchless Technology Research Colloquium was created

- meeting of international researchers
  - ... rotated around the participating countries
  - ... **with local stakeholders invited**
- agreed international priorities
- this leads to international letters of support
  - ... and **international stakeholder collaboration**

The outcomes of the NETTWORK workshops were presented and debated → **international interest and support**



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An informal, interested steering group of five was created

- UKWIR leadership
- Water and gas representation
- Academia (NETWORK)

Stakeholder workshops were held to raise awareness and garner support for a plan of action

- government departments invited

An international workshop was staged

- UK, US and Dutch water research bodies
- wide stakeholder involvement



3 days in a London  
hotel ...

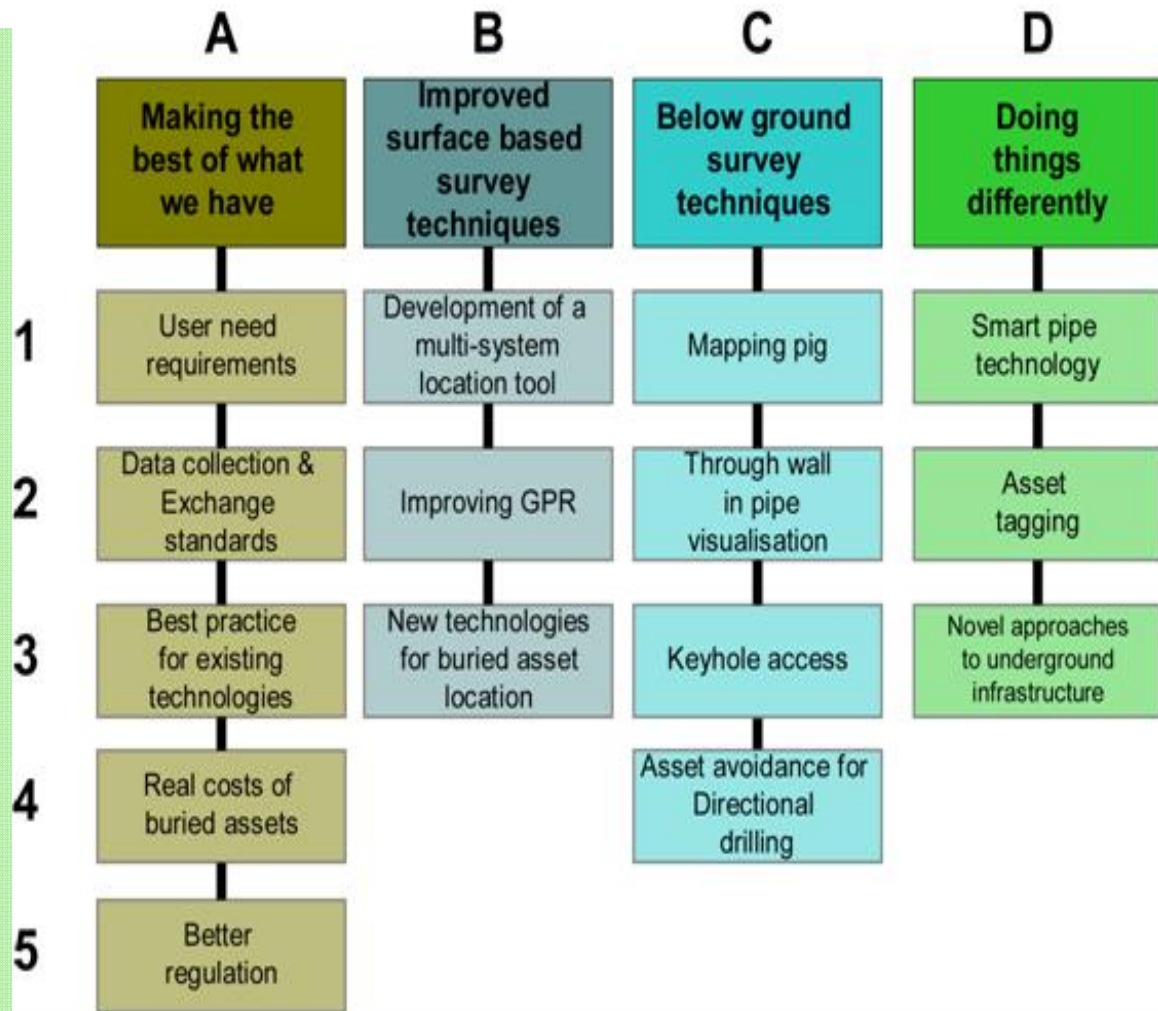
... 15 complementary  
research projects  
scoped and costed

... short-term and  
long-term projects

~£10 million needed

A4 → £5.5 billion

UK social costs due to  
traffic congestion



(Farrimond and Parker, 2008)

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This provided the necessary evidence base ...

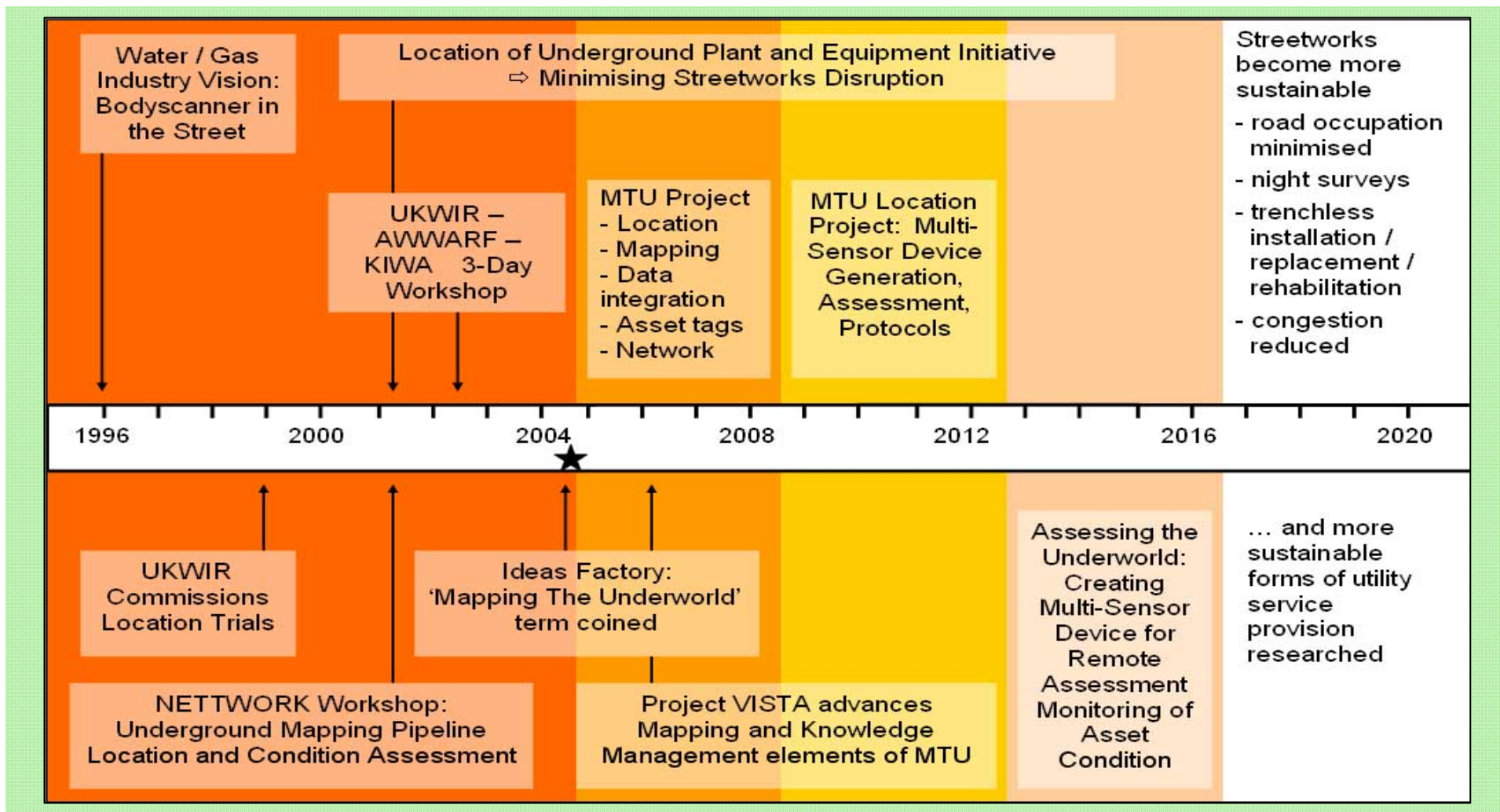
EPSRC Ideas Factory was devoted to the problem

- EPSRC responding to industry need
- £1 million to test feasibility of multi-disciplinary solutions (plus £200k to support industry liaison)
- 4 research projects and a MTU network

All four research projects have continuity

- £2.2million from DTI (22 partners)
  - One-year EPSRC follow-on funding
  - £3.5 million from Responsive Mode (~40 partners)
- ... and funding to continue the MTU network



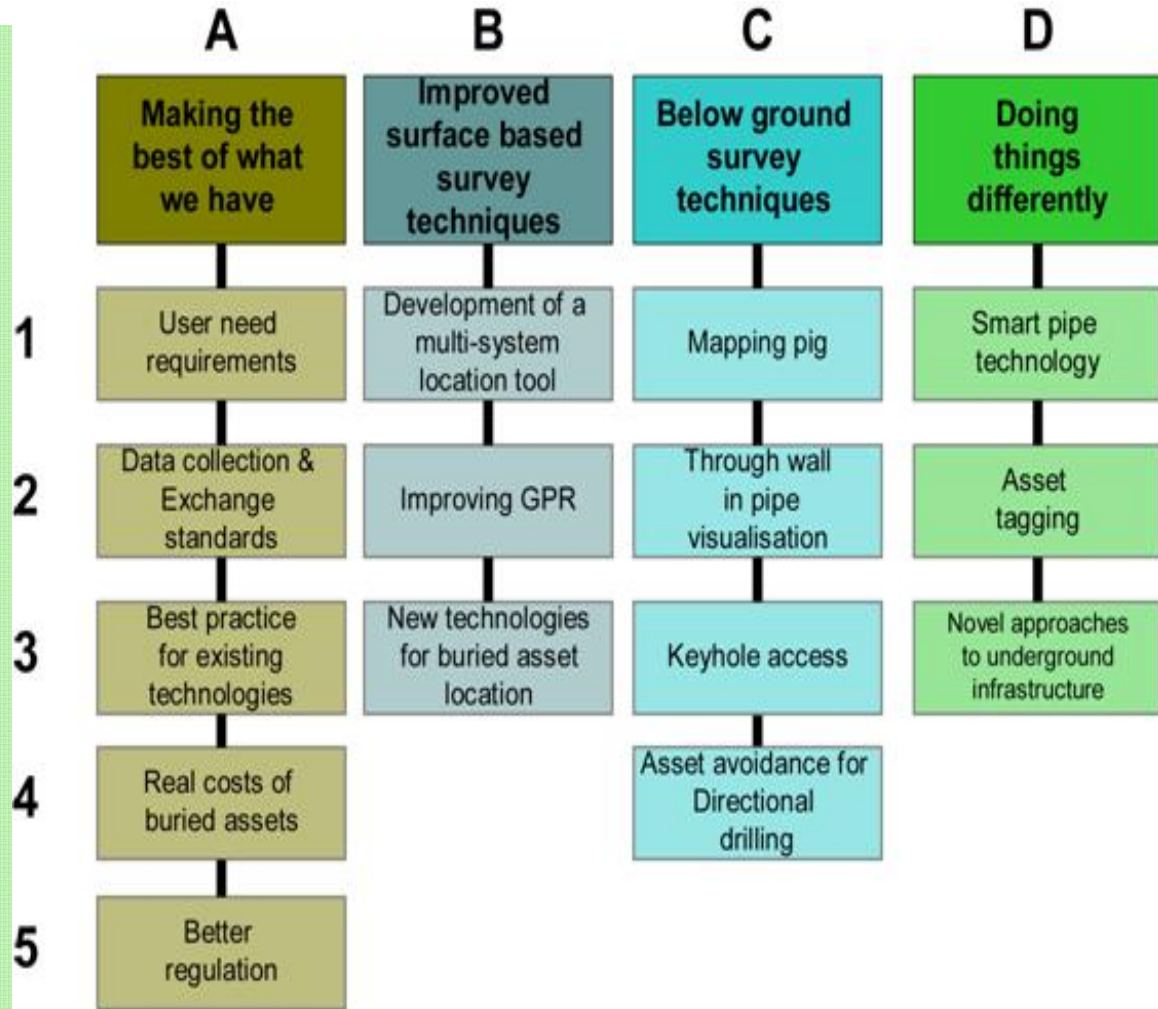


D3 relates to SUE

- Eastside
- Urban Futures

A small, but  
significant and  
integral, part of  
~£4.5 million ...

... and we took our  
stakeholders with us



(Farrimond and Parker, 2008)

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