

Number LANCS-D4.1-SN-C A-PI--

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| Title | Summary Note (SN) for D4.1 |
| Subtitle | Ethical aspects of development C : <i>Internet of Things</i> |

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| PROBLEM | | SOLUTION | | Research Note | X | Selected Annotation | |
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Categories: | | |

Summary:

This note summarises the vision of an internet of things and takes as example complications relating to the idea of 'seamlessness'.

CONTEXT

The internet of things is a vision of mundane and specialised objects on a network of interconnected things to exchange information, sensory data and share data-managing capabilities. The envisioned environments include mundane settings: the home, the workplace, public spaces and transits.

FACTS

The vision of seamlessness is at the core of the conception of an internet of things—an idealized engineering vision which promises full automation and interoperability with emphasis on the absence of manual intervention. These conceptions draw attention away from what has actually been achieved so far. Connecting things together on an infrastructure has already a range of practical purposes for commerce, industries, environmental monitoring and agriculture. Recent developments however, aim to include ordinary objects in the home and at work, as well as human bodies, thus introducing both mundane things and our bodies-as-things onto a network.

(Key readings include Aarts and Encarnaç o, 2006; Bibel, 2005; European Communities, 2007; European Commission, 2008; Robinson et al, 2009; Aarts and Marzano, 2003; European Commission, 2007; European Commission, 2010; European Policy Outlook RFID, 2007; Hildebrandt, 2009; Van De Garde-Perik et al, 2008; Denning, 2002; Weiser, 1991; ISTAG, 2001)

COMMENTS

Key concerns relate to what is expected of problem-solving in areas such as:

1. capturing the identity and state of objects
2. capturing the state of bodies and/or identity of persons
3. processing information in order to 'notify' other objects and humans what is the case and what to do next

These developments inevitably challenge privacy and data protection protocols but there are also 'natural' limits to the range of objects for which 'smartness' is meaningful and relevant, thus, sustainable for business. Infrastructures are never entirely seamless and the conditions that call for human interception require reflection on a range of issues that relate to the protection of privacy and challenge existing data protection protocols, for example:

1. Who or what intercepts the 'things' on the internet of things (legitimately and illegitimately)?
2. Who is responsible and who / what is in control of data propagating through constellations of service provisions operating on the internet of things?