

Number	LANCS-D4.3-RN-Science-Precaution	A-PI--
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<b>Title</b>	Research Note (RN) for D4.3
<b>Subtitle</b>	Issues in Focus : <b>Science and precaution</b>

PROBLEM	<input type="checkbox"/>	SOLUTION	<input type="checkbox"/>	Research Note	<input checked="" type="checkbox"/>	Selected Annotation	<input type="checkbox"/>
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Categories: | | |

Summary:

This note addresses the challenge of precaution, prudence and preparedness in relation to new and emerging technologies. It addresses ordinary protocols for democratic decision making and takes example of non-permitted proposes of use.

## CONTEXT

ICT developments are notorious for challenging privacy and security. Identity-based data can be misused or incompletely processed and loss of privacy and equality is inevitable when citizens/consumers are subject to surveillance and sophisticated personal and activity profiling. Expansion of information services will also increase the risk of spamming, disclosure of private data and malicious attacks. 'Smart' applications can always go wrong or they do not function as expected. People are excluded from services due to lack of interoperability, inadequate profiling and data mismatches. Access to the technology is also persistently unequal.

Looking at potential issues and problems is integral to the reflexive practices of anticipating possible futures to be avoided -to exercise precaution.

(Key readings include, Wright, 2010; Wright et al, 2008; Van De Garde-Perik et al, 2008; Rodotà and Capurro, 2005; Aarts and Grotenhuis, 2009; ENISA, 2009; von Schomberg, 2011; von Schomberg, 2007; Kastenhofer, 2011; Gunnarsdóttir, 2010; Kjølberg et al, 2008; Bell et al, 2009; Giordano et al, 2009).

## FACTS

Pragmatism and preparedness dictate that we embrace progress as long as it is a viable good, and that we critically evaluate what the developments actually achieve for individuals and groups. A pragmatic stance can balance optimism and pessimism, hopes and fears, use and misuse. Preparedness and prudence also dictate that response to progress, in particular, the change engendered by new developments, occurs through the enactment of effective policy.

Questions and problems inherent to the development of advanced ICTs include:

1. effects and side effects, runaway effects and other unintended consequences.
2. the validity of presumed social acceptance or individual consent, given the expansive propagation of ICTs throughout the 'everyday' which is inhabited by both vulnerable and empowered persons.

3. preparing to contemplate how fair access to state-of-the-art technologies needs addressing, deliberation and articulation, should market models fail?
4. how legal claims will be handled in the absence of historical precedence?

## COMMENT

The question of whether or not it makes sense to ban outright specific types of ICT development, depends on what existing protocols for decision-making will deliver, in particular, methods of engaging stakeholders, formulating problems, assessing them and choosing issues for discussion and debate. In democratic secular societies, the legitimacy of particular decisions will have to be negotiated and renegotiated over and over again among those who are seen as stakeholders, bearing in mind that they always have agendas of their own. Conflicts over whether or not to ban or restrict developments of particular types of ICTs will mainly stem from inadequate consultation or incompatible views. The typical candidates for banning include:

- breaking existing law
- compromising individuals' control of their choices
- too dangerous to one's health
- breaching right to human dignity
- breaching God's will

The issue of banning may be less about particular types of ICT developments and more about particular types of uses or configurations for how to apply the technologies. There are examples where certain uses of ICT-controlled electronics will not obtain permission while ongoing developments of the technology are permitted:

- Brain implants are an invasive and highly risky technology which can only be used for therapeutic purposes within the EU, such as Parkinson's, epilepsy and severe motor impairment. The relative success of these applications however, invites speculations on the extent to which behavioural traits could be controlled with implants. These speculations push the boundaries of what counts as 'therapeutic purpose'.
- Brain implants in experimental and development stages have not been permitted except for therapeutic purposes for which no other method is available.

What we learn is that decisions to refuse permission rest on the risk that extreme scenarios result from implants failing in one or another way.

- The seat of implantation is the brain, a prioritised organ facilitating the lived person, identity and selfhood.
- The potential damages caused by an improperly implanted device or from procedural complications are far reaching and involve an unforeseeable deterioration of the person.