



SHERPA PROJECT

# Shaping the ethical dimensions of information technologies – a European perspective (SHERPA)

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 786641





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# Informed Consent

Please first read the 'Information Sheet'

When you are satisfied with the information,  
then please sign and date the consent form

Thank you



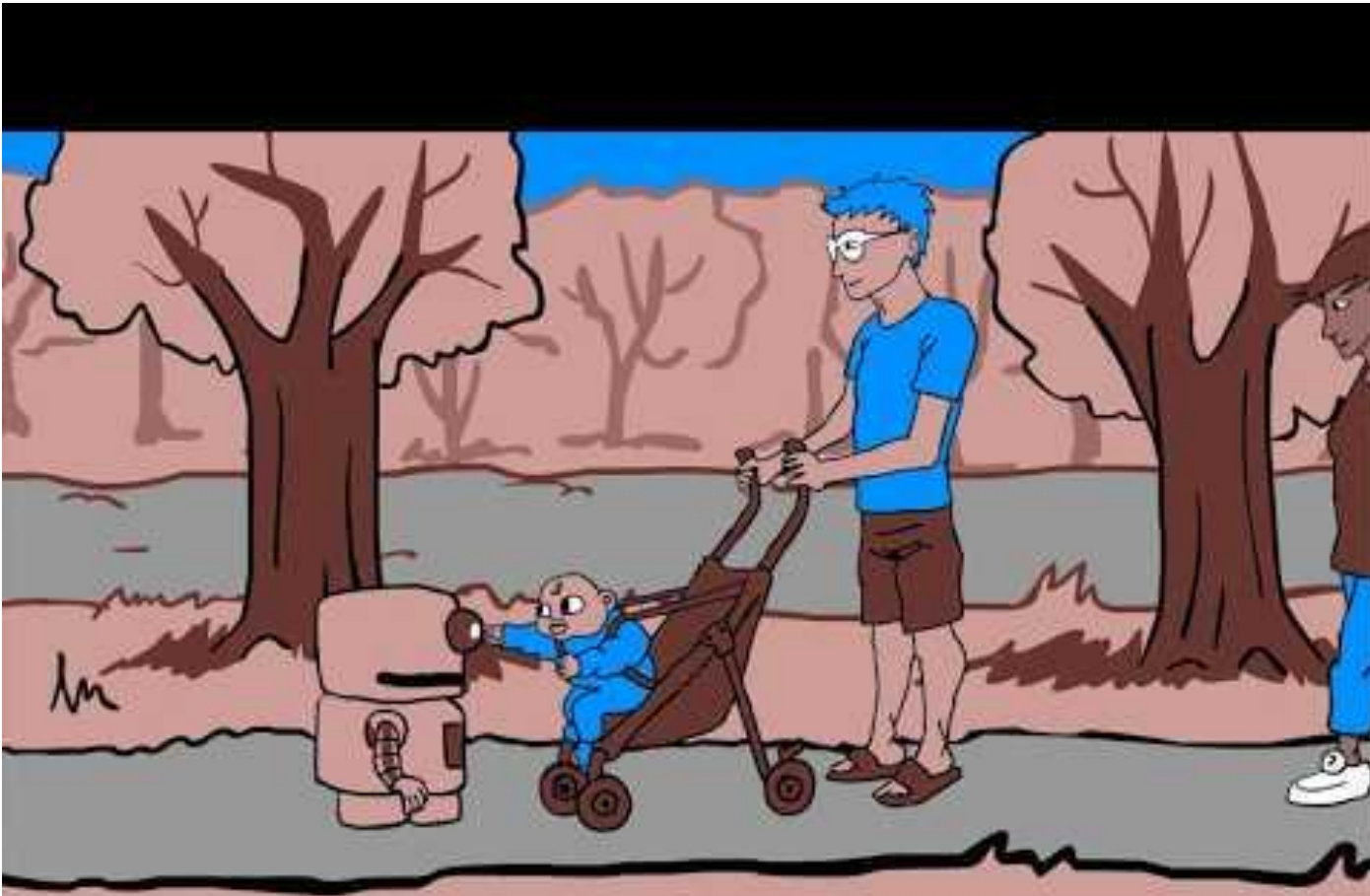
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# Introduction



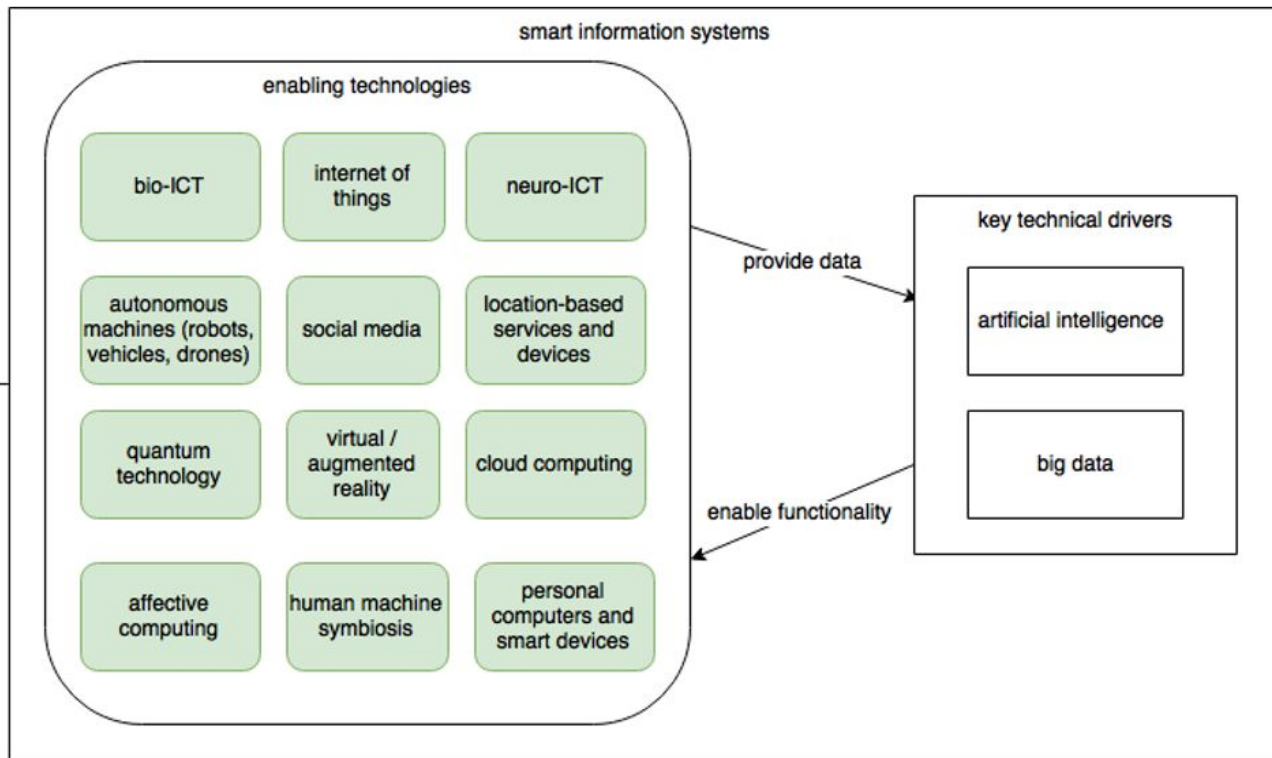
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UNIVERSITY  
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# Smart Information Systems



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# Ethics - Desired Outcomes

- Addressing **global challenges** (Sustainable Development Goals) & societal missions
- **Economic growth** for all
- **Better (personalised) services**
- Increased **human capabilities** (compensate disabilities)
- **Inclusion** & democratic participation
- **Empowerment**



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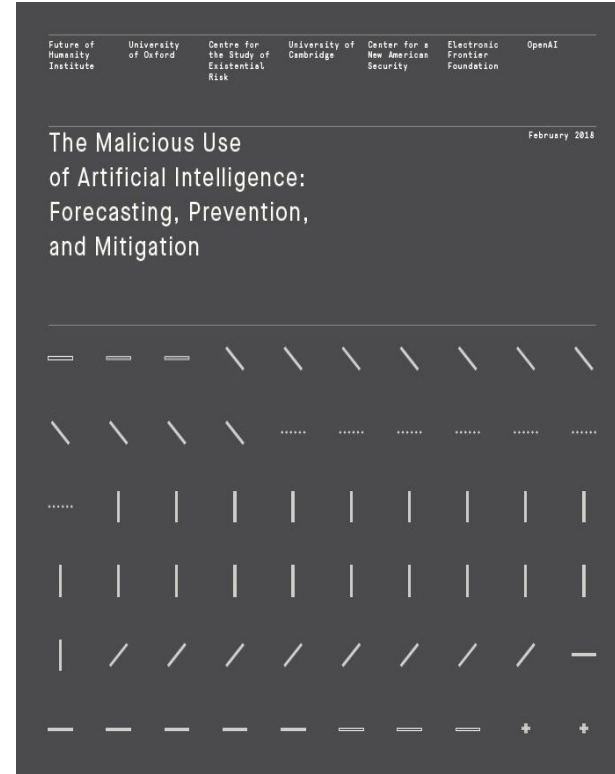




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# Ethics - Concerns

- **Data** protection / privacy
- Social problems & **inequality**
  - unemployment
  - alienation
- Concentration of power / money
- Loss of control
- Human enhancement
- Lack of **transparency**
  - algorithmic biases
  - increased (personal) discrimination
- **Security**, dual use (of concern), misuse
- Infringements of **human rights**



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# Challenge 1: Agreement on the Ethics and Human Rights Implications of SIS

Analyse, represent and visualise the issues

- 10 case studies of current SIS
- 5 scenarios of future SIS
- Analysis of cyber threats
- Analysis of ethical impacts and social tensions
- Review of relevant human rights framework







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# Case Studies

IoT



Government



Agriculture



Sustainability - Smart Cities



Science



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# Case Studies

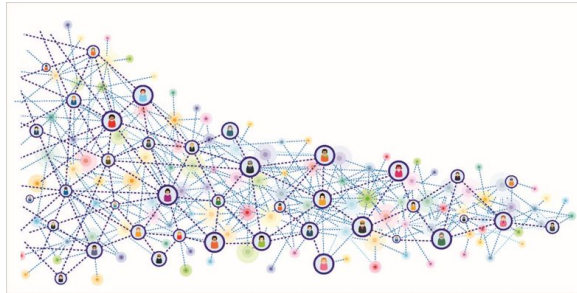
Insurance



Energy and Utilities



Communication, Media



Retail and Trade



Manufacturing



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# Scenarios



**Predictive  
Policing**



**Warfare**



**Mimicking  
Technologies**



**Education**



**Self-Driving  
Cars**



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<https://www.project-sherpa.eu/future-scenarios/>





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## Challenge 2: Social Perceptions of Competing Rights and Interests

Consult stakeholders:

- Stakeholder board
- 45+ interviews with experts and stakeholders.
- Online survey with 1,000+ respondents
- Delphi study with 60+ experts





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## Challenge 3: Options for Ethics and Human Rights in SIS

Collect and propose solutions:

- [SIS Workbook](#)
- Guidelines for research and innovation of SIS
- Regulatory options
- Assessment of standardisation potential
- Technical options and interventions
- TOR for regulator



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## Challenge 4: Testing and Validating Possible Solutions

Test range of options through stakeholder consultation:

- Evaluation strategy
- Stakeholder evaluation and validation
- 6 Focus groups with stakeholders
- Prioritisation and finalisation of recommendations







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# Challenge 5: Implementation

Disseminate, exploit and advocate outcomes:

- Dissemination
- Communication
- Online Presence
- Artistic representation
- Exploitation
- Advocacy



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# Are You Interested?

- Check our website: [www.project-sherpa.eu](http://www.project-sherpa.eu)
- Sign up and stay in contact
- Join the stakeholder network
- Spread the word



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# Rules of Engagement

- Please can only 1 person speak at a time
- Please listen and allow others to speak
- Please remember that what is said here, will only be used in an anonymised form



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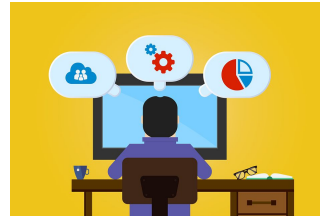


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# Development Questions I

## Overall questions:

1. You have now read our guidelines on development of AI and big data systems; we have also produced guidelines for the use of such systems, which although they often overlap (sometimes we want to protect end-users by requiring developers to adapt their systems), they are supposed to provide different guidance when appropriate.
  - a. Reflecting on that, do you see any reasons for revisions?
  - b. Do you think that there are requirements in these guidelines that are more appropriate for organizational users?
2. The guidelines are supposed to be easy for practitioners to read and understand.
  - a. Do you see any need for adjustments because of a risk of misunderstanding, connotations, or ambiguous language, either because it not clear enough or because it includes too much jargon?
3. The guidelines are supposed to be engaging, which is always a problem for relatively long instructional documents.
  - a. How would you judge the guidelines relative to engagement?
4. What is your impression of the use of graphics (tables, figures, pictures) in the document?
  - a. Should any changes be made, if so, in what way and why?
5. Have you read many other guidelines?
  - a. How do you compare these guidelines to other guidelines relative to: understandability, engagement, and usefulness?



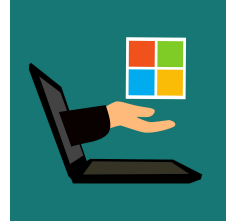
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# Development Questions II



## For the specific parts:

6. What is your evaluation of the “Introduction”?
7. What is your evaluation of the “High-level requirement section”?
8. What is your evaluation of section 3 (i.e., models/methods for development)?
9. What is your overall evaluation of section 4 (the specific operational ethical requirements)?
10. What is your evaluation of section 5 (special topics)?

## For each section:

- Does it cover what it needs to?
- Does it contribute to the overall guidelines?
- Is it well adapted for practitioners?
- Is it engaging, too long/short, appropriate language (understandable, no jargon)
- Anything you think could be added/removed?
- Is there any use/development conflation?



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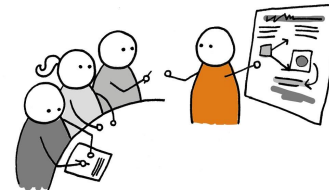






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# Use Questions I



## Overall questions:

1. You have now read our guidelines on the use of AI and big data systems; we have also produced development guidelines, and although these guidelines often overlap (e.g., because we sometimes want users to protect end-users by requiring developers to adapt their systems), they are supposed to provide different guidance when appropriate.
  - a. Reflecting on that, do you see any reasons for revisions?
  - b. Do you think that there are requirements in these guidelines that are more appropriate for development?
2. The guidelines are supposed to be easy to apply for users to read and understand.
  - a. Do you see any need for adjustments because of a risk of misunderstanding, connotations, or ambiguous language, either because it not clear enough or because it includes too much jargon?
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# Use Questions II

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## For each section:

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