University of BRISTOL

Participant Information Sheet

How does complexity affect the successful engineering of systems throughout a system lifecycle?

I would like to invite you to take part in my research project. Before you decide whether or not to participate, I would like you to understand why the research is being conducted and what it would involve for you. You are welcome to talk to others about the study if you wish and please ask me questions if anything is unclear.

I would like to talk to you about your personal experiences with system complexity and how it is evaluated in the early phases of a system lifecycle. I would be asking you several questions around complexity evaluation and recording (audio only, recorded using an encrypted mobile telephone) our interview and taking notes during the interview.

These interviews are being conducted as part of a Systems Key Technology Domain research programme.

Background:

There is academic literature concerning aspects of complexity evaluation from a theoretical perspective, however, there is little information about how systems are evaluated in practice, especially early on in their lifecycle. Several organisations have proprietary decision support tools to aid complexity evaluation, however, there is little information about how easy these are to use and how successfully they can be utilised.

Why have you been selected?

You have been selected as an interviewee as you are someone who has engaged with system complexity evaluation within Thales Group and I am expecting to interview 15 Thales personnel. I would however welcome any suggestions you have on other people I should consider interviewing.

What will be involved in the interview?

The interview should take around 90 minutes, and I have 17 questions to ask you, however we may diverge to discuss more pertinent points and we may skip some questions if they are not relevant. You will be asked several questions concerning your thoughts on evaluating system complexity and your thoughts on a complexity evaluation decision support tool.

I will be recording the interview on a mobile device, I will also be making my notes during the interview. The recording will be transferred and secured on an encrypted drive. My notes, when not in use, are stored in a locked cabinet. This data will be stored until the PhD is accepted for publication, whereupon the raw data will be deleted. From the notes and recording, I will be creating secondary data in form of textual excerpts from the interviews, this document will be open access, stored for 10 years on the University of Bristol data repository and stored in accordance with the UK Research Council Data Management Guidelines.
Your responses will be kept confidential. I will be ensuring anonymity by randomly assigning you a number and referring to anything you say using only this number. Only I have access to the notebook containing the translation from assigned number and identify. Your identity

may be disclosed in publications, for example a published PhD thesis, however, it should never be possible to attribute interview findings with individuals. I will provide you with the draft analysis of the interviews to enable feedback and ensure you have not been misrepresented.

You do not need to take part in this interview and your participation is entirely voluntary. You do not need to discuss anything with me that you are uncomfortable with and you can terminate the interview (withdraw consent) at any time without having to give a reason. However, if you wish to withdraw at a later date please note that once the data has been anonymised and analysed your data cannot be withdrawn.

Further information and contact details:
If you would like any further information in relation to this study or have any questions you are welcome to contact me using any of the methods below:

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