APPENDIX A

List of Related Papers and Talks

A selection (partial list) of papers and talks related to, or excerpted from, this doctoral research.

2008

Special Academic Research Session On Ontologies For Crisis Management Session Id: Int-04, Iannella, R., Di Maio P, Giunchiglia, F. 5th International Conference on Information Systems for Crisis Response and Management Washington, DC, USA May 4-7, 2008 http://www.iscram.org

Di Maio, P., (2008) Ontologies for Network Centric Emergency Operations, Proceedings of the 5th International ISCRAM Conference - Washington, DC, USA

Di Maio, P., (2008) Digital Ecosystems, Collective Intelligence, ontology and the 2nd law of thermodynamics Digital Ecosystems and Technologies, 2008, DEST 2008, 2nd IEEE International Conference on Digital Object I

Di Maio, P., (2008) Digital Ecosystems and Technologies, 2008, DEST 2008, 2nd IEEE International Conference on Digital Objects, Digital Environments and Collaborative Intelligence in Practice

2009

Common vocabularies for collective intelligence - work in progress
Di Maio, P., (2009) Digital Ecosystems and Technologies, 2009, DEST '09. 3rd IEEE International Conference on Digital Object
Identifier: 10.1109/DEST.2009.5276706

2010

Di Maio, P., (2010) Exploratory Steps Toward Formal Analysis Methods for Knowledge Networks: A Socio-Technical Perspective Modelling and Analysis of Networked and Distributed Systems A SICSA Workshop 17th June 2010, University of Stirling

Special session - Collective intelligence
Digital Ecosystems and Technologies (DEST), 2010 4th IEEE International Conference on Digital Object Identifier: 10.1109/DEST.2010.5610675
Publication Year: 2010, Page(s): 28

Digital ecosystems For Knowledge Management in Systems Engineering
Di Maio, P., Digital Ecosystems and Technologies (DEST), 2010 4th IEEE International Conference on Digital Object I
Invited Expert at Academic Panel, 7th European Systems Engineering Conference EuSEC 2010, Stockholm, Sweden May 23-26, 2010

Tutorial Details: Just Enough Ontology for Systems Engineering

2011
Di Maio, P., (2011) Open Data in the Cloud, Cutter Consortium Advisory http://www.cutter.com/bia/fulltext/updates/2011/biau1108.html

Di Maio, P., (2011) Toward a Semantic Vocabulary for Systems Engineering Proceedings of the International Conference on Web Intelligence, Mining and Semantics ACM New York, NY, USA 2011

Di Maio, P., (2011) A Systematic Review of Open Access in Systems Engineering Research Proceedings of the 55th Annual Meeting of the ISSS, International Society for the Systems Sciences http://journals.isss.org/index.php/proceedings55th/article/view/1726

Di Maio, P., (2011) Towards a Reference Model for Open Access and Knowledge Sharing, Lessons from Systems Research, International Journal of Computer Science October

APPENDIX B

Pilot Survey, Questionnaire and Results

Questionnaire on Surveymonkey and results.

Knowledge Management for Systems Engineering

1. Your main location (in which region/country are you mostly based?)

	Response Percent	Response Count
Scotland	**66.7%**	**4**
Other UK	0.0%	0
Europe	16.7%	1
Other	16.7%	1
answered question		6
skipped question		0

2. How long have you been at this location?

	Response Percent	Response Count
Native, or near native (have always been where you are)	16.7%	1
<3 years	16.7%	1
<5 years	16.7%	1
<7	0.0%	0
<10	16.7%	1
>10	**33.3%**	**2**
answered question		6
skipped question		0

3. What is the role the best describes your work or area of practice? (select one)		
	Response Percent	Response Count
Aeronautical Engineering	16.7%	1
Architectural Engineering	0.0%	0
Audio Engineering	0.0%	0
Automotive Engineering	0.0%	0
Biomedical Engineering	0.0%	0
Chassis Engineering	0.0%	0
Chemical Engineering	0.0%	0
Civil Engineering	0.0%	0
Computer Engineering	0.0%	0
Design Engineering Jobs	0.0%	0
Electrical Engineering	0.0%	0
Electronic Engineering	0.0%	0
Environmental Engineering	0.0%	0
Forensic Engineering	0.0%	0
Industrial Engineering	16.7%	1
Manufacturing Engineering	16.7%	1
Marine Engineering	0.0%	0
Mechanical Engineering	0.0%	0
Mining Engineering	0.0%	0
Model Engineering	0.0%	0
Nuclear Engineering	0.0%	0
Ocean Engineering	0.0%	0
Petroleum Engineering	0.0%	0
Software Engineering	**33.3%**	**2**
Sound Engineering	0.0%	0
Structural Engineering	0.0%	0
Systems Engineering	16.7%	1

Other engineering	0.0%	0
	answered question	**6**
	skipped question	**0**

4. Which Sector?(pick one)

	Response Percent	Response Count
Mining	0.0%	0
Finance and Insurance	0.0%	0
Real Estate, rental and leasing	0.0%	0
Manufacturing	**33.3%**	**2**
Wholesale Trade	0.0%	0
Retail Trade	0.0%	0
Transportation	0.0%	0
Information	16.7%	1
Management of companies & enterprises	16.7%	1
Utilities	0.0%	0
Construction	0.0%	0
Administrative, support, waste management & remediation service	0.0%	0
Educational services	0.0%	0
Health care & social assistance	0.0%	0
Arts, entertainment, & recreation	0.0%	0
Accommodation & food services	0.0%	0
Professional, scientific, & technical services	**33.3%**	**2**
Other	0.0%	0
answered question		**6**
skipped question		**0**

5. Select which of the options below best describes your organisation (or team)

	Response Percent	Response Count
Most people/teams work in the same location	33.3%	2
Most people/teams work in different locations (distributed)	**66.7%**	**4**
answered question		**6**
skipped question		**0**

6. If you wish to receive a copy of the final study, enter your name and email respectively in the boxes below - your details will not be disclosed and your answers will not be associated with your personal details

	Response Percent	Response Count
Name	**100.0%**	**2**
Email	**100.0%**	**2**
answered question		**2**
skipped question		**4**

7. If you like, please enter your own definition or distinction for how you differentiate information from knowledge

	Response Percent	Response Count
Information	**100.0%**	**4**
Knowledge	**100.0%**	**4**
answered question		**4**
skipped question		**2**

8. Use the scale below to rate the following statement: I obtain most of the knowledge/information that I need to carry out my job using web searches		
	Response Percent	Response Count
Strongly disagree	0.0%	0
Disagree	33.3%	2
Neither agree nor disagree	16.7%	1
Agree	**50.0%**	**3**
Strongly agree	0.0%	0
answered question		**6**
skipped question		**0**

9. Uptodate Knowledge is very important to perform well in my job		
	Response Percent	Response Count
Strongly disagree	0.0%	0
Disagree	0.0%	0
Neither agree nor disagree	0.0%	0
Agree	**66.7%**	**4**
Strongly agree	33.3%	2
answered question		**6**
skipped question		**0**

10. Add any additional comment about this section	
	Response Count
	0
answered question	**0**
skipped question	**6**

11. How do you check if your knowledge is 'complete'? For example, how do you check if what you know is enough? Or if there something else you should know? (choose as many as applicable)

	Response Percent	Response Count
I don't check often	0.0%	0
I know from experience	40.0%	2
I ask around what people think	**80.0%**	**4**
I consult the relevant manuals	0.0%	0
I make sure I read as much as possible about the subject	**80.0%**	**4**
I check with my boss or other senior	60.0%	3
I make some assumption that the knowledge I have is complete	20.0%	1
Other (please specify)	20.0%	1
	answered question	5
	skipped question	1

12. How do you know if the knowledge you hold is accurate, for example, that what you know is true?

	Response Percent	Response Count
I don't check for accuracy, unless I have some doubt	20.0%	1
I double check every possible fact my knowledge relies upon	60.0%	3
I rely on my experience and expertise	40.0%	2
I make some assumptions where necessary	**80.0%**	**4**
Other (please specify)	0.0%	0
	answered question	5
	skipped question	1

13. How do you check the timeliness of your knowledge?(is it uptodate? or is it obsolete?)

	Response Percent	Response Count
I don't check, or check rarely	0.0%	0
I read relevant publications to stay uptodate	40.0%	2
I try exchange knowledge with people in my field	**60.0%**	**3**
Other (please specify)	0.0%	0
answered question		5
skipped question		1

14. In relation to what you consider 'knowledge' please describe in a short sentence how do you define and distinguish fact, belief, or opinion?

	Response Percent	Response Count
Fact	**100.0%**	**5**
Opinion	**100.0%**	**5**
Belief	**100.0%**	**5**
answered question		5
skipped question		1

15. Add any additional comment about this section

	Response Count
	0
answered question	0
skipped question	6

16. Would you say that in your work you create new knowledge?		
	Response Percent	Response Count
Yes	80.0%	4
No	20.0%	1
answered question		5
skipped question		1

17. Would you say that in your work you Innovate?		
	Response Percent	Response Count
Yes	80.0%	4
No	20.0%	1
answered question		5
skipped question		1

18. Add any additional comment about this section	
	Response Count
	0
answered question	0
skipped question	6

19. By reading relevant literature

	Response Percent	Response Count
Strongly disagree	0.0%	0
Disagree	0.0%	0
Neither agree nor disagree	0.0%	0
Agree	40.0%	2
Strongly agree	**60.0%**	**3**
	answered question	**5**
	skipped question	**1**

20. By asking people in my organisation

	Response Percent	Response Count
Strongly disagree	0.0%	0
Disagree	20.0%	1
Neither agree nor disagree	20.0%	1
Agree	20.0%	1
Strongly agree	**40.0%**	**2**
	answered question	**5**
	skipped question	**1**

21. By asking people in my professional social circle

	Response Percent	Response Count
Strongly disagree	0.0%	0
Disagree	0.0%	0
Neither agree nor disagree	20.0%	1
Agree	**40.0%**	**2**
Strongly agree	**40.0%**	**2**
	answered question	**5**
	skipped question	**1**

22. Whatever way I can

	Response Percent	Response Count
Strongly disagree	0.0%	0
Disagree	20.0%	1
Neither agree nor disagree	0.0%	0
Agree	**40.0%**	**2**
Strongly agree	**40.0%**	**2**
	answered question	**5**
	skipped question	**1**

23. Add any additional comment about this section

	Response Count
	0
	answered question **0**
	skipped question **6**

24. I am at liberty of sharing professional knowledge with whoever I like

	Response Percent	Response Count
Strongly disagree	0.0%	0
Disagree	0.0%	0
Neither agree nor disagree	20.0%	1
Agree	**40.0%**	**2**
Strongly agree	**40.0%**	**2**
answered question		**5**
skipped question		**1**

25. I can only share professional knowledge after obtaining clearance from my organisation

	Response Percent	Response Count
Strongly disagree	0.0%	0
Disagree	20.0%	1
Neither agree nor disagree	**60.0%**	**3**
Agree	0.0%	0
Strongly agree	20.0%	1
answered question		**5**
skipped question		**1**

26. Most of the knowledge pertaining to my professional sphere can be shared 'publicly'

	Response Percent	Response Count
Strongly disagree	0.0%	0
Disagree	0.0%	0
Neither agree nor disagree	0.0%	0
Agree	**80.0%**	**4**
Strongly agree	20.0%	1
answered question		**5**
skipped question		**1**

27. Most of the knowledge pertaining to my professional sphere is 'private' and belongs to the organisation I work for

	Response Percent	Response Count
Strongly disagree	0.0%	0
Disagree	**60.0%**	**3**
Neither agree nor disagree	20.0%	1
Agree	0.0%	0
Strongly agree	20.0%	1
answered question		**5**
skipped question		**1**

28. What is your preferred way to share and exchange professional knowledge? (select one)

	Response Percent	Response Count
Face to face, for example in person at meetings/conferences	**60.0%**	**3**
Via correspondence (email)	20.0%	1
Using web based tools	20.0%	1
Other (please specify)	0.0%	0
answered question		5
skipped question		1

29. Add any additional comment about this section

	Response Count
	1
answered question	1
skipped question	5

30. Are you aware of knowledge sharing policies within your organisation?

	Response Percent	Response Count
Yes	0.0%	0
No	**100.0%**	**5**
Other (please specify)	0.0%	0
answered question		5
skipped question		1

31. What tools or environments does your organisation provide for you to share knowledge in relation to your job? Give details.IF none, write none	
	Response Count
	5
answered question	5
skipped question	1

32. While at work, my organisation does not restrict nor constrain me in my access nor usage of my personal social networks accounts		
	Response Percent	Response Count
Strongly disagree	0.0%	0
Disagree	0.0%	0
Neither agree nor disagree	20.0%	1
Agree	**60.0%**	**3**
Strongly agree	20.0%	1
answered question		5
skipped question		1

33. Add any additional comment about this section	
	Response Count
	0
answered question	0
skipped question	6

34. If answered yes to question 8/1 Give some details or examples of what knowledge sharing policies are in place in your organisation	
	Response Count
	0
answered question	0
skipped question	6

APPENDIX C

Examples of Contradictory Correspondence (anonymised)

Anonymised excerpts of correspondence showing contradictory/ambiguous information provided by different members of staff in relation to the same project.

1) Correspondence with Project Officer stating that the 'knowledge project' is not publicly funded

The knowledge project undertaken at the AURC is not publicly funded, it is part of the core research programme for the centre which is funded through membershi ees paid for by the companies who have joined. The work we do in here isn't open access im afraid!

NAME REMOVED
Quality and Projects Manager

2) Correspondence with Research Director:

Most of the project work in AURC is not EPSRC funded. We do have ongoing EPSRC projects and the outputs will be dissemir through papers (conference and journal) and through web sites. We will run seminars and similar events if this is deemed to be an appropriate mechanism. The knowledge that is generated by EPSRC grants is clearly project dependent - we can clearly identify the work that is EPSRC funded and ensure that it is appropriately disseminated.

DIRECTORS NAME REMOVED

3) Correspondence with FOI Officer stating public funding in AURC and knowledge transfer activities

a) the funding structure for AURC (how much public funding is received, when, for what etc)

PUBLIC BODY invested £16 million over four years. This investment went towards the capital costs of establishing the industrially driven research centre. This funding does not directly support research activity. However, at present the is in receipt of public grants of £620,033 from the Technology Strategy Board and £2,055,076 from EPSRC, to participate in the PROJECT NAME project in collaboration with other research organisations and industrial partners.

and

b) what knowledge/data is going to be generated with this funding

PROJECT NAME will focus on productivity and environmental improvements including reductions in raw material usage, efficient advanced manufacturing processes and lower engine fuel consumption. The programme aims will be achieved by developing new technologies and delivering a number of knowledge transfer initiatives, it will be closely linked with the advanced manufacturing research centres (in Sheffield, Glasgow, and Ansty near Coventry) and so strengthen the position of UK aerospace manufacturing and its supply chain.

APPENDIX D

List of Systems Engineering and Open Access Events Attended During Research

Partial list of research related events attended where ethnographic observations were carried out.

1st Scottish Space Systems Symposium, University of Strathclyde 22nd June 2010
http://www.strath.ac.uk/space/newsevents/1stscottishspacesystemssymposium/

EPSRC Systems Science Through to Engineering Workshop
15th February 2011, Copthorne Tara Hotel, London Kensingston

PSI Workshop, May 2011, Bruxelles, Removing the Roadblocks to a Pan-European Market for Public Sector Information Re-use

7th European Systems Engineering Conference EuSEC 2010, Stockholm, Sweden May 23-26, 2010

ISSS International Society of the System Science, Hull 2011

BKCASE, Body of Knowledge Advance Systems Engineering, Stevens Institute of Technology http://www.bkcase.org/

APPENDIX E

KAF/OAM Examples of Communication

Examples of correspondence to be used in conjunction with auditing procedures (KAF/OAM) to be used purely as guidelines (they need to be customised by auditors).

1) A note to inform the funding body of audits taking place, describing the purpose, scope and process:

Dear *Person at Funding Body
I am writing to inform you that I am carrying out a study that involves performing project audits of publicly funded research. The projects funded by your funding body (insert name) which we intend to audit are enclosed in a list attached. Each project leader will be contacted in the next few days to be informed of the audit procedure, which takes place remotely and unobtrusively via searches and via the respective project websites, so that they can point us to relevant repositories and sources of knowledge that can be publicly evaluated. A copy of the summary findings will be emailed to you as soon as available. Please do let me have any questions you may have at this stage.
Best Regards
*Your Signature

2) Example letter to project leader/principal investigator:

Dear *Project Team Leader
I am writing to inform you that I am carrying out a study that involves performing project audits of publicly funded research. The rationale and motivation and methodology are listed on this publicly accessible website: (point to audits website here). The audit procedure takes place remotely and unobtrusively via web searches and through the project website, but in case the some of the information the audit aims to identify cannot be easily accessed on your website, I would be most grateful if you could provide it by filling out the relevant portion of the attached form (for example, are there project team members in charge of knowledge sharing, so that any further questions can be directed to them). Also feel free to point me to relevant repositories which are not listed on the project website, and that we can include when performing the inventory. I enclose the preliminary information gathered about your project in a form enclosed A copy of the summary findings will be emailed to you as soon as available, so that you can approve them or correct them, and then a final version of the inventory will be included in a public audit report. Do not hesitate to ask questions you may have at this stage.
Best Regards
*Your Signature
Encl 1. Preliminary Project information obtained from funding body

3) An email to verify the preliminary finding:

Dear *Project Leader Name
Following our email dated …
I am writing to inform you about the findings of the knowledge inventory carried out on your project, as discussed.
The findings are enclosed in the following summary
name of project, project details
name of person in charge of KM
number of publicly available knowledge resources for this Project

Please do let me know if the above is correct, or please point us to any information we may have missed out within the next working week when the summary needs to be finalised and published.
Thanks in advance
Best regards
*Name of Auditor

4) A note to communicate the findings and issuing recommendations

Dear *Project Leader Name
Following our email exchanges I am enclosing the final summary of the findings of the knowledge audit performed under KAF/OAM methodology, as well as some recommendations based on the evaluation of your findings in relation to good knowledge sharing practices. As part of this project we develop instruments and methods to maximise knowledge sharing and innovation in the field of systems engineering, and we would be very happy to advise you and your team further.
We would welcome your feedback on your experience working with KAF/OAM, and your suggestions on how to improve the framework for future reference.
*Your Name
Encl. 1 Summary Findings
Encl. 2 Recommendation from Best Practices

APPENDIX F

Correspondence with EPSRC Policy Officer/FOI Officer

Examples of conflicting information from correspondence and references from three different sources providing ambiguous information as to when the Open Access policy started taking effect.

1) From the Digital Curation Report (discussion in Chapter 4) where it is stated that EPSRC has an Open Access Policy:

Curation policies and support services of the main UK research funders

	Policy coverage		Policy stipulations					Support provided			
Research Funders	Published outputs	Data	Time limits	Data plan	Access / sharing	Long-term curation	Monitoring	Guidance	Repository	Data centre	Costs
Arts and Humanities Research Council	●	●	●	●	●	◐	○	●	○	◐	○
Biotechnology & Biological Sciences Research Council	●	●	●	●	●	●	●	●	●	◐	●
Cancer Research UK	●	●	●	●	●	●	●	◐	●	○	○
Engineering and Physical Sciences Research Council	●	●	●	○	●	●	●	◐	○	○	●
Economic and Social Research Council	●	●	●	●	●	●	●	●	●	●	◐
Medical Research Council	●	●	●	●	●	●	○	◐	●	○	○
Natural Environment Research Council	●	●	●	●	●	●	●	●	●	●	◐
Science and Technology Facilities Council	●	○	●	○	●	○	○	◐	●	◐	○
Wellcome Trust	●	●	●	●	●	●	●	●	●	◐	●

KEY:
● full coverage
◐ partial coverage
○ no coverage

See related guidance at: www.dcc.ac.uk/resources/policy-and-legal/overview-funders-data-policies

2) From Policy Officer:

From: (EPSRC, CIS) @epsrc.ac.uk]
Sent: Friday, June 17, 2011 11:06 AM
To: Paola Di Maio
Cc:
Subject: RE: auditing and monitoring the EPSRC OA Policy

Dear Paola,

The recently announced policy is our first formally adopted policy on the issue of open access to published research outputs, but it is by no means the first step we have taken in this direction: in June 2005, the Executive Group of Research Councils UK (RCUK), of which EPSRC is a member, issued a draft position statement on access to research outputs, and followed this with an updated position statement in June 2006; a clear indication of the specific policy EPSRC would adopt was published on our website in 2009.

Best wishes,

Senior Evaluation Manager
EPSRC

3) From FOI Officer:

Hi Paola,
EPSRC's policy on open access does not come into effect until 1 September 2011. My expert and author of all the relevant documents in this area is currently away on holiday until 22 August but I have left your email with him and I have asked him to respond to me regarding the questions you have raised. I will respond to you on or before 8 September 2011.
Kind Regards

APPENDIX I

PRISMA Checklist

Quality Checklist Excerpted from PRISMA Statement.[1]

[1] www.prisma-statement.org

Title	1	Identify the sections as a systematic review, meta-analysis	√
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	√
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	√
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	√
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	√
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	√
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	√
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	√
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	√
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	√
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis.	√

APPENDIX K

Project Partners Spreadsheet

Existence of a project partner where audit score is either ’0’ or ’15’.

SCORE			PROJECT PARTNER	does the project have a partner? no=0, yes=1
0	EP/C528212/1	Identification and Analysis of Non-Linear Systems in the Time and Frequency Domain	none	0
0	EP/D032741/1	System Identification and Model Validation for Spatio-Temporal Dynamical Systems	none	0
0	EP/D035759/1	Applications of Algebraic Topology	none	0
0	EP/D064554/1	Functional Hybrid Modelling	none	0
0	EP/D067170/1	Algorithms for computing equilibria in games	none	0
0	EP/D076226/1	Radio frequency identification and tracking of individual ants engaged in colony scale division of labour	none	0
0	EP/D078636/1	Generic Handover investigation	none	0
0	EP/E003257/1	Two timescale immunological learning for idiotypic behaviour mediation	none	0
0	EP/E006213/1	Enhancing Networks and Wireless Research at Loughborough University's Communications Research Group - A Case for Platform Grant Support	none	0
0	EP/E017304/1	A Systems-Theory Approach to Flow Control	none	0
0	EP/E021948/1	Resource Analysis and Verification for Dependable Embedded Software	none	0
0	EP/E022030/1	Games for Quantitative Analysis of Real Time Systems	none	0
0	EP/E02761X/1	Global stability and robustness analysis of oscillators with application to biology and robotics	none	0
0	EP/E042171/1	Mobile negotiated interaction	none	0
0	EP/E046290/1	Three Theoretical Problems in the Control of Rotating Machines	none	0
0	EP/E047017/1	Guaranteed Performance of Dynamic Behaviour of Multiple Unmanned Aerial Vehicles	none	0
0	EP/E049281/1	Discrete Dynamical Systems with Memory: A New Tool for Modelling Complexity	none	0
0	EP/E056644/1	Feedback control of translation termination in yeast	none	0
0	EP/E056644/1	Feedback control of translation termination in yeast	none	0
0	EP/E056733/1	Transgenic modelling of beta-cell homeostasis	none	0
0	EP/E056733/1	Transgenic modelling of beta-cell homeostasis	none	0
0	EP/E057012/1	Feedback control of translation termination in yeast	none	0
0	EP/E057136/1	Modelling and Measurement of Cochlear Gain Control	none	0

0	EP/E057241/1	Modelling the osteocyte network and its control of the mechanotransduction and remodelling of bone	none	0
0	EP/E057357/1	Analysis, Predictive Modelling and In Vitro Validation of Gene Expression During 2-aminoethylphosphonate Metabolism in Sinorhizobium meliloti 1021.	none	0
0	EP/E057535/1	Indistinguishability analysis for model discrimination in Systems Biology: A Feasibility Study applied to Bacterial Peptidoglycan Biosynthesis	none	0
0	EP/E061982/1	How self-regulatory social systems work.	none	0
0	EP/E061982/1	Defying the rules: How self-regulatory social systems work	none	0
0	EP/E502350/1	Immortal Information & Through-life Knowledge Management (IITKM): Strategies & Tools for the Emerging Product-Service Paradigm	none	0
0	EP/F016573/1	Evolvable Process Design	none	0
0	EP/G036411/1	A sliding mode approach for control and estimation in active aircraft	none	0
0	EP/G037841/1	Deconvolving of Dynamic Cell Cycle Parameters from Flow Cytometry Data	none	0
0	EP/I000909/1	Polynomial Algebraic Methods for Modeling, Analysis and Control of Distributed Physical Systems	none	0
15	EP/E042171/1	Multimodal, Negotiated Interaction in Mobile Scenarios	none	0
15	EP/E042171/1	Mobile negotiated interaction	none	0
15	EP/E05708X/1	Control Theory Tools for Eludicating the Phosphotransfer Network in Rhodobacter Sphaeroides: A Feasibility Study	none	0
15	EP/E05708X/1	Chemotaxis in Rhodobacter sphaeroides: A Feasibility Study	none	0
15	EP/F031858/1	Next Generation Manufacturing Supply Chains and Digital Economy Research Collaboration	none	0
15	EP/H019782/1	Low Carbon Shipping - A Systems Approach	none	0
0	EP/C014006/1	Stochastic model predictive control: theory and application to air-traffic control	Eurocontrol	1
0	EP/C516303/1	Integrative Computation For Autonomous Agents: A Novel Approach Based On The Vertebrate Brain	B A E Systems Plc	1
0	EP/C526422/1	INDUSTRIAL NONLINEAR CONTROL AND REAL TIME APPLICATIONS	B A E Systems Avionics Ltd, National Instruments	1
0	EP/C540891/1	Lean Powertrain Development (LPDev)	Ford Motor Company	1
0	EP/C54630X/1	ESPACENET: Evolvable Networks of Intell't & Secure Integrated & Dist'd Reconfigurable System-On-Chip Sensor Nodes for A'space Based Monitoring & Diag'	Epson Scotland Design Centre NASA Jet Propulsion Laboratory Spiral Gateway Ltd Surrey Satellite Technology Ltd	1

0	EP/D004152/1	Active Multi-Axle Steering of Heavy Goods Vehicles	Arvin Meritor Arvin Meritor (Clwyd) Denby Transport Ltd F M Engineering Ltd Firestone Industrial Products Inc. Fluid Power Design Ltd Freight Transport Association Ltd Haldex Brake Products Ltd Mektronika Systems Ltd MIRA Ltd QinetiQ Tinsley Bridge Limited Volvo Trucks	1
0	EP/D03292X/1	Discrete stochastic processes in complex systems	QinetiQ (Malvern)	1
0	EP/D05088X/1	Developing theory for evolving socio-cognitive systems	Hewlett Packard	1
0	EP/D053048/1	Optimising Resource Efficiency in Future Mobile Communications	VCE Mobile & Personal Communication	1
0	EP/D076900/1	Wireless Sensor Networks for Industrial Processes	Health and Safety Laboratory Satake Corporation UK Division	1
0	EP/E018858/1	System risks in information-rich environments: monitoring for safe and cost-effective operation	University of Strathclyde	1
0	EP/E025811/1	DESIGN OF HIGH POWER ULTRASONIC DEVICES FOR BONE SURGERY AND MANUFACTURING THROUGH CONTROL OF PARAMETRIC AND NONLINEAR VIBRATIONS	MECTRON MEDICAL TECHNOLOGY	1
0	EP/E02727X/1	METHODS OF RELIABILITY-CONTROL FOR AUTONOMOUS UNDERWATER VEHICLES	National Oceanography centre	1
0	EP/E033032/1	The Truth about Unmanned Aerial Vehicles	Newark Notts & Lincs Air Museum Ltd QinetiQ (Boscombe Down) Royal Air Force Museum	1
0	EP/F026781/1	Nonlinear High Performance Real Time Control	SELEX Sensors and Airborne Systems Ltd, Applied Control Technology Consortium	1
0	EP/G005826/1	Grid Applications Performance Prediction Tool	Rolls-Royce plc	1
15	EP/C513703/1	spatially-embedded-complex-systems-engineering	Institute of Scientific Information	1
15	EP/D063965/1	Optimised configuration of sensing elements for control and fault tolerance applied to an electro-magnetic suspension system	BAE Systems Advanced Technology Centre	1
15	EP/D080207/1	Copy of RRUK 2: Universities' Centre for Rail Systems Research	Network Rail Ltd, Rail Safety & Standards Board	1
15	EP/E025250/1	NETWORK: UK-Japan Network on Human Adaptive Mechatronics	Hiroshima Institute of Technology, Nagoya University,Okayama University,Ritsumeikan University, Tokyo Denki University, Tokyo Institute of Technology,University of Tsukuba	1
15	EP/F059442/2	SLIM : SLIcing state based Models	Berner and Mattner, Motorola Ltd	1