WINES Strategy & Impact Workshop
16-17th March 2011
Radcliffe House, University of Warwick

Executive Summary:

The Wired and Wireless Intelligent Networked Systems (WINES) initiative was funded by EPSRC over three calls between 2003-2007. EPSRC invested a total of £22M in 17 projects focussed on transport monitoring, body sensors, urban system, sport monitoring, market trading, airports, aerial vehicles, home and industrial systems.

This 2nd WINES workshop was held four years after the 1st workshop, with the aims to bring together researchers involved in projects from all three calls, to assess whether the challenges identified at the outset have been addressed and to scope future opportunities for WINES-related research, including maximising impact from the projects in the initiative.

The first day of the workshop focussed on setting the scene and gaining project-specific perspectives of WINES and information gathering exercises (specifically on public engagement and exploitation) to collate experiences and best practice from across all WINES projects. An invited panel, comprising of respected members of the academic and industry community, sought to obtain a view of the WINES initiative and whether it aligned with original objectives. The panel highlighted the strengths of the initiative, such as the establishment of the original vision, the vibrant community support and the facilitation of a diverse range of industry and academic collaborations on the projects. However, the opportunity to maintain and refresh this vision throughout the three calls was not taken. The ongoing challenge to maintain the level of engagement with industry and communicating the outputs of WINES was noted.

The second day of the workshop looked towards the future and began with EPSRC and Industry perspectives on the research landscape, followed by a session to explore future opportunities and impacts for WINES related research. A final panel discussion revisited the successes and failures of WINES and highlighted opportunities for the future.

There was an overall consensus (from academia, industry and EPSRC) that the WINES initiative was successful in many ways. There was recognition that the world (and focus of the research challenges) had changed since WINES was initiated and the future success of research in this area relies on continuing dialogue with the community, industry and other users as well as taking appropriate opportunities to inform EPSRC strategy going forward. To provide greater impact, the community should work at cultivating the successes of WINES in some form.

The workshop had been useful in enabling a collective assessment of the WINES initiative and had promoted a discussion on how the community could explore the impacts of WINES into the future. The engagement between EPSRC, industry representatives and academia had also raised awareness of ongoing research challenges in this area and informed future strategy.

Background to the WINES initiative

In 2002 EPSRC received financial commitment from EPSRC Council to establish an initiative in the broad area of Wired and Wireless Intelligent Networked Systems (WINES).

Shortly after this time UK Computing Research Community (UKCRC) established their Grand Challenges in Computing Research[1], one of these was focussed on new challenges in Ubiquitous Computing. An EPSRC funded research network, UK Ubiquitous computing network (UK Ubinet[2]) had formed in response to this grand challenge and brought together academic researchers within the UK to build a multi-disciplinary community covering the broad aspects of ubiquitous computing.

Consequently, in July 2004, the EPSRC Information and Communication Technologies (ICT) Programme launched the first WINES call with the anticipation of forming large, multidisciplinary consortia to tackle the future challenges of autonomic, self-organising and self-managing systems. This call resulted in an investment of £7.8 million across seven projects.

Due to the success (formation of new multidisciplinary consortia) of the first round of projects, additional funding for WINES was secured for a second call (launched in July 2005) and a third call (launched in Dec 2008). The second call funded six cross disciplinary projects to the value of £8.3 million. The third call funded nine projects to the value of £5.7 million. The total portfolio of projects funded through this initiative totals £21.8 million

Details of WINES funded projects can be found in the full workshop report.

Having instigated this initiative, EPSRC held a first workshop in 2007 to bring together invited both grant holders and non grant holders from the first two calls, with the intention to focus ideas for a third call. In addition to identifying key research challenges, there were a number of issues identified arising from the first two calls that could be addressed in a third call.

Objectives for the workshop

This workshop is held four years after this workshop not only to bring together completed projects from the first call, those entering the final stages (from the second call) and those beginning under the third call; but also to assess whether these issues have been addressed and to scope future opportunities for WINES-related research, including maximising impact of the projects in the initiative.

The objectives of the workshop were stated as:

- To share experiences and best practise of the projects funded under the WINES Programme.
- To showcase the funded research and disseminate to the wider community.
- To forge new collaborations and partnerships.
- To enable networking between researchers working on the projects.
- To help to evaluate the WINES initiative and justify investment by EPSRC.
- Investigate future directions of WINES-related research and future opportunities.

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[1] http://www.ukcrc.org.uk/grand_challenges/index.cfm
[2] http://www-dse.doc.ic.ac.uk/Projects/UbiNet/

Conclusions & Recommendations for Action

Following the workshop and the processing of the outputs (detailed in the full report), there are a number of conclusions and recommendations for action to make.

- This WINES workshop aimed to bring together the academic and industrial WINES community to share experiences from the funded research projects, explore the merits of the initiative and identify future opportunities for WINES-related research.

- The objectives were achieved through an appraisal of the projects within the initiative, focussed discussion sessions around past experiences and future opportunities and networking.

- There was a general feeling that WINES was a success (testified by three calls), but the underlying network to support the community was not sustained. Although there are claims that the vision was lost it was suggested that the vision has pervaded into the research community and manifesting through other mechanisms (i.e. the Digital Economy programme and WINES-like projects have been supported through responsive mode - Wildsensing, Fresnel and CARDyAL).

- The timeliness of the workshop can be seen as an early engagement with the wireless community on EPSRC future plans on Shaping Capability and Delivering Impact and generated a level of mutual understanding of EPSRC future plans.

- The appraisal of the WINES initiative should form an example of the 'funder to sponsor' mentality of EPSRC.

- Industry groups represented at the workshop (Mobile VCE) have recognised the WINES initiative and understood there are opportunities for exploitation.

- The WINES community were made more aware of future opportunities for WINES related research (beyond that of just another call).

The following recommendations for action have been identified to take further with the help of the community:

Recommendations for Action 1
EPSRC will use the outputs and discussion points to feed into the *Shaping Capability* agenda (by also taking into account other perspectives from other sources).

Recommendation for Action 2:
A suite of case studies of WINES projects should be built. This could demonstrate the working together between academic and industry groups that otherwise would not have happened, the innovative advances in mobile computing that occurred and the skilled people (PhD outflow) that has resulted from the initiative. If disseminated effectively to industry and other researchers, these case studies could facilitate further working and encourage new industry and new opportunities to become more involved with the wireless community.

Recommendation for Action 3:
Present a showcase of WINES technology ('WINES-tasting') for an industry audience to promote the exploitation and commercialisation of WINES outputs.

Recommendation for action 4:
Track impacts of WINES projects to feed into future strategy for government and justify investment of EPSRC-led initiatives.

DELEGATE LIST: WINES WORKSHOP 16/17 MARCH 2011

Matthew	Ball	EPSRC
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Liam	Blackwell	EPSRC
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Jaafar	Elmirghani	University of Leeds
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Alan	Wilson	Royal Veterinary College
Trevor	York	The University of Manchester

Wired and Wireless intelligent

WINES

Networked Systems

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AGENDA

Day ONE: The Past and Present of WINES

10:30   Registration and Coffee
11:00   Session 1: Presentations
- Welcome and Introduction (Andy Lawrence)
- Background to the WINES initiative (Morris Sloman)
- Perspectives of WINES (Eamonn O'Neill, Dave Kerwin/Alan Wilson, Gerard Parr, Dan Chalmers)

13:00   Lunch and informal networking
14:15   Session 2: Parallel Poster/Breakout Sessions
- Public Engagement
- Barriers, Drivers and Opportunities
- Exploitation and Commercialisation

16:45   Tea break
17:00   Feedback from Session 2
17:30   Session 3: Panel Discussion (What has WINES achieved?)
18:15   Poster Session & Drinks Reception
19:30   Dinner (Radcliffe House Private Dining Room)

DAY TWO: The Future of WINES

09:15   Session 4: Presentations
- Summary of Day One (Andy Lawrence)
- An EPSRC View of the Landscape (Liam Blackwell)
- The Future of Networks: An Industry Perspective (Walter Tuttlebee)

10:45   *Coffee*
11:15   Session 5: Breakout sessions
- Future Directions and Impact

12:30   *Lunch and informal networking*
13:30   Feedback from Session 5
14:00   Session 6 : Panel Discussion (Where next for WINES?)
15:00   Wrap up and final thoughts
15:30   Finish