

# University Defence Research Collaboration (UDRC) for Signal Processing



Themed Meeting

Underwater Sensing, Signal

Processing and Comms

16<sup>th</sup> May 2017



11 May 2017

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# University Defence Research Collaboration (UDRC)

## Collaborative Centre for excellence for Signal Processing

### Aims:

- World-class research
- Long-term sustainable skills
- Community of Practice

### Approach:

- Joint funding with EPSRC
- Dstl technical leadership
- Close, early engagement with industry

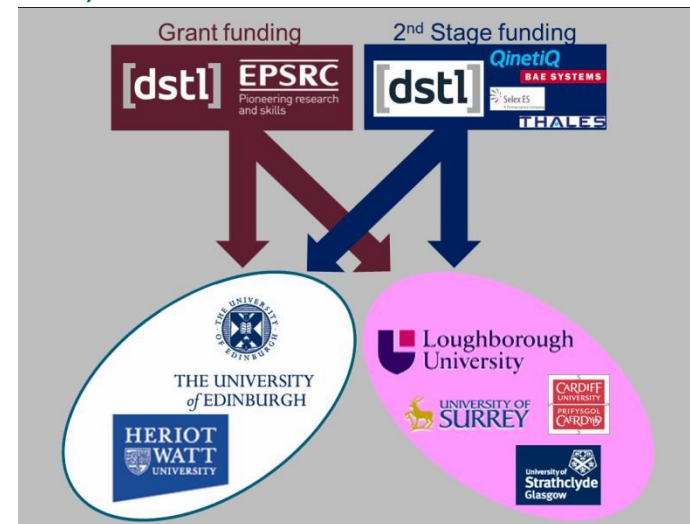


## Phase 2

- EPSRC / MOD Joint funding £8M over 5 years (2013 – 2018)
- 2 Consortia, totalling 8 Universities.
- Consortium Coordinator – University of Edinburgh
- Started in April 2013

## Approach

- Joint programme with EPSRC
  - Requires strategic technical alignment between MOD and Research Council
  - Requires work at UNCLASSIFIED
- Technical Challenge led research
- Provision for follow-on funding
  - Parallel contract with consortium leads



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# UDRC Portfolio – Phase 2

## Edinburgh research partnership

- **WP1: Sparse Representation and Compressed Sensing**
- **WP2: Distributed multi-sensor processing**
- **WP3: Unified detection, localisation and classification in complex environments**
- **WP4: Context-driven behaviour monitoring and anomaly detection**
- **WP5: Network enabled sensor management**
- **WP6: Efficient computation of complex signal processing algorithms**

## Lboro, Surrey, Strathclyde, & NCL Cardiff

- **WP1: Automated statistical anomaly detection and classification in high dimensions for the networked battlespace**
- **WP2: Handling Uncertainty and incorporating domain knowledge**
- **WP3: Signal Separation and broadband distributed Beamforming**
- **WP4: MIMO and Distributed sensing**
- **WP5: Low complexity algorithms and efficient implementation**

# Other ways of engaging

## Annual Conference



**SSPD 2017**

# Sensor Signal Processing for Defence Conference

**6 - 7 December, 2017**  
**Savoy Place, London**  
**WC2R 0BL**

**Important Dates:**  
Submission of Papers: 22nd June 2017  
Notification of Paper Acceptance: 22nd August 2017  
Final version of Paper Due: 30th September 2017

The Sensor Signal Processing for Defence Conference is organised by the University Defence Research Collaboration (UDRC) in Signal Processing. SSPD 2017 aims to bring together researchers from academia, industry and government organisations interested in Signal Processing for Defence.



Sensor Signal Processing for Defence Conference 2014

Signal Processing for Defence Conference (SSPD 2015)

Physicians Green Street Edinburgh EH2 1JQ

10, 2015

SSPD 2016

Research the UK Ministry of Research the IEEE Signal D and aims to bring present organisations

to Ristic on Signal ns will be included

the University Defence Research other researchers from academia, for Defence.



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# Other ways of engaging

## UDRC Website

## Educating the next generation



## Books

## Articles



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# End of Project Showcase

21<sup>st</sup> February 2018



