

Introduction to the WUN Cognitive Communications Consortium

- The achievements *so far*

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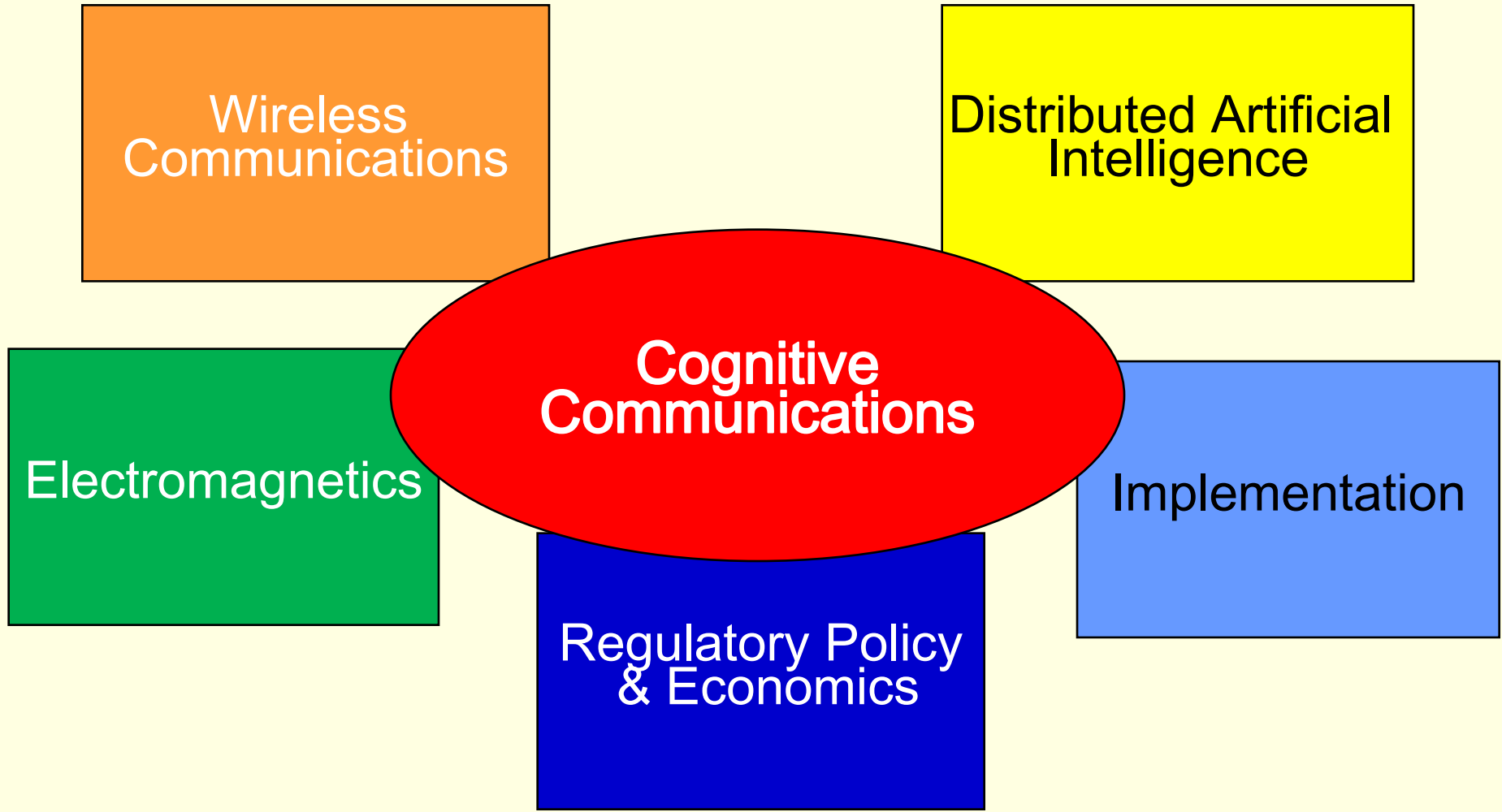
University of York, UK



Introduction

- Technical rationale for WUN CogCom
- Key aims
- Key research priorities
- Consortium make-up
- Organisational structure
- Achievements

A Mix of Disciplines



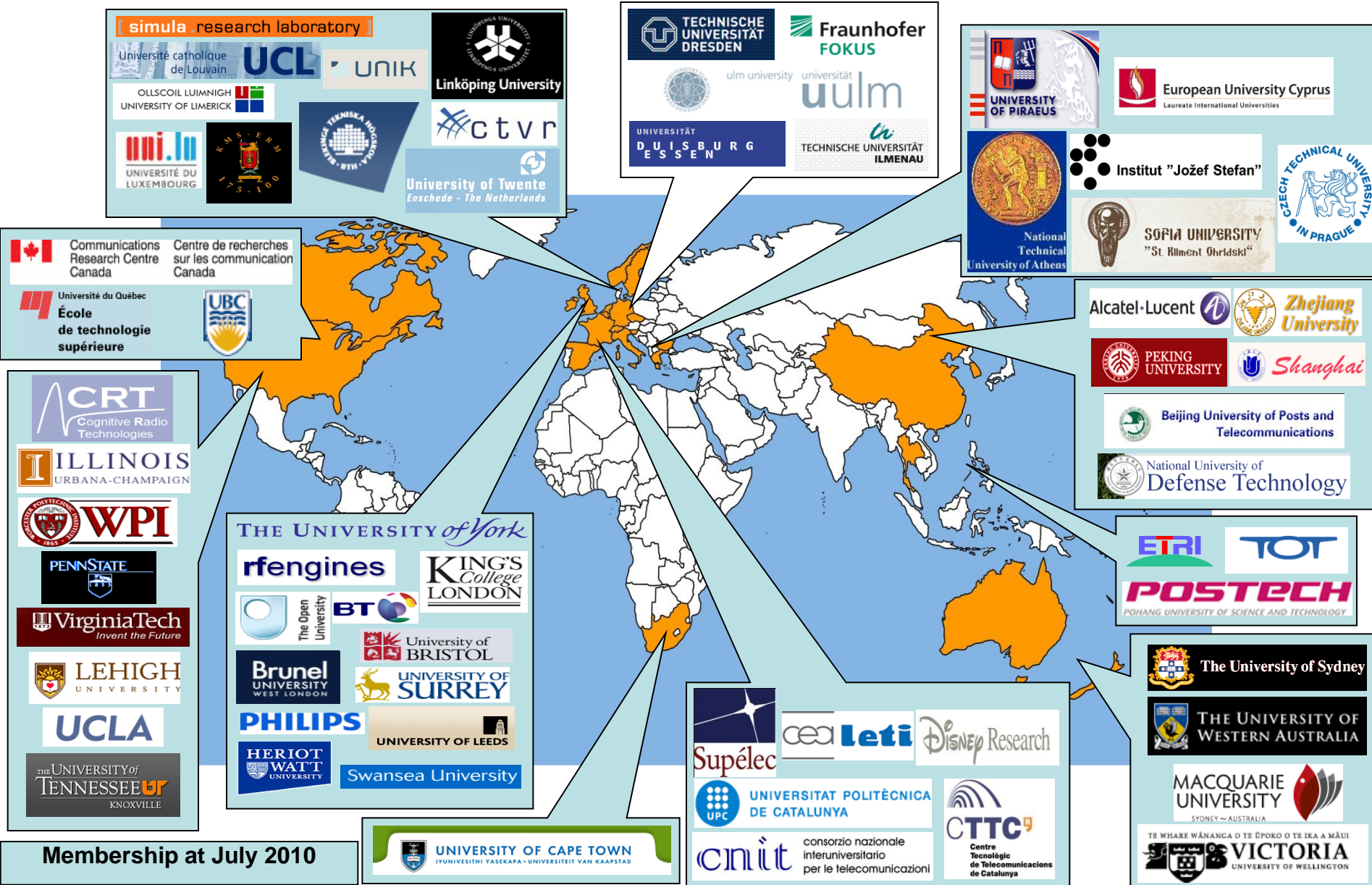
Key Aims

- The overarching aim of the group is:
 - To play a leading role in Cognitive Communications research through global collaboration
- In order to achieve this, key aims are:
 - To influence the research and regulatory agendas worldwide in the field of cognitive communications
 - To organise regular seminars, meetings and workshops on cognitive communications at member locations, and other suitable venues.
 - To secure research funding as a consortium (or smaller member groupings) to support the WUN CogCom activities in cognitive communications
 - To support exchange of personnel between WUN CogCom members, to facilitate research collaboration and learning in the field

Key Research Priorities

- The key research priority for the Consortium is:
 - The application of cognitive principles to communications through the enabling research areas of:
 - Cognitive communications for ‘smart’ environments
 - Cognitive networking for hierarchical ad hoc and sensor networks
 - Low complexity cognitive radio
 - Cognitive radio for next generation spectrum access
 - ‘Green’ cognitive radio
 - Robust cognitive radio
 - Cognitive communications for body sensor networks
 - Sensing and measurement for cognitive radio
 - Cognitive Acoustics

WUN Cognitive Communications Consortium



Membership at July 2010

Organisational Structure 1

- Steering Group
 - Responsible for setting the direction of the RP, decisions reach via consensus where possible, if not, majority voting
 - Membership represents all constituencies

Dr David Grace	Chair	University of York, UK
Dr Kareem Baddour	USA Region	CRC, Canada
Prof Honggang Zhang	Asia Region	Zhejiang University, China
Dr Defeng (David) Huang	Australasian Region	University of Western Australia
Dr Mihael Mohorcic	Europe Region	Jozef Stefan Institute, Slovenia
Dr Maziar Nekovee	Industry	BT, UK
Tim Clarke	Distributed AI	University of York, UK
Prof Pavel Pechac	Electromagnetics	Czech Tech Uni, Prague, Czech Rep
Prof Linda Doyle	Implementation	CTVR, Ireland
Harriet Cross	WUN Coordinator	University of York, UK
Louise Heery	WUN General Manager	WUN

Organisational Structure 2

- Member's Group
 - Responsible for approving decisions made by the Steering Group, realised through majority voting
 - Includes one person from each partner

Communications with Members 1

- Website (www.wun-cogcom.org)
 - Username: wuncogcom
 - Password: br2009ain
- Email lists (xx@wun-cogcom.org)
 - all, asia, australasia, europe, usa
 - uk, australia, nz
 - See private website for the complete list

Communications with Members 2

- Skype (wun-cogcom)
- Linked In Page
- RSS Feeds
- Meltwater Drive Shared Area
- Wiki Area www.wun-cogcom.org/wiki
- Twitter @wuncogcom

Key Achievements 1

- Public WUN CogCom Workshop - September 2010
- WUN CogCom Best Paper Award 2011
- Edited Book approved by Wiley
 - Cognitive Communications: Distributed Artificial Intelligence (DAI), Regulatory Policy & Economics, Implementation
 - To be published in early 2012
 - Editors: David Grace and Honggang Zhang
 - Authors: From WUN CogCom

Key Achievements 2

- Staff and Student Exchange
 - Support from WUN RDF, Erasmus etc
- Emerging linkage with other bodies
 - IEEE TCCN
 - COST IC0902
- Endorsement of courses (IET Propagation Course)
- Several bilateral/multilateral linkages emerging

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- For more info
 - WUN Cognitive Communications Consortium
 - www.wun-cogcom.org