
Title*: Study on Use Cases related to Improvement of Energy Efficiency in operating Heterogeneous Wireless Networks

from **Source*:** NKUA, IFX, HWDU, HWSE, IBBT

Submitted **To*:** RRS

Document for*:

Decision	
Discussion	
Information	X

Submission date*: 2010-11-24

Agenda Item:

Contact: Makis, Markus

Relevant WI(s), or deliverable(s):

New Work Item Form

Form to be used when proposing new Work Items for adoption onto the ETSI Work Programme.

Work Item details

Which Technical Body is responsible? RRS		Sub Group: WG1 Project:	
WI reference number (if known): DTR/RRS-00 <i>(number will be allocated by Secretariat if not shown)</i>		PWI reference: XXX	
Formal title of deliverable:		Use cases study for energy efficiency in heterogeneous wireless networks	
Working title: Control Channels for Cognitive Radio Systems		<p>Scope of work to be undertaken: The scope of this work item is to identify suitable Use Cases which address aspects related to <i>Improvement of Energy Efficiency in operating Heterogeneous Wireless Networks</i>.</p> <p>In particular, the work will examine a list of scenarios such as the decision of switching on and off specific parts of the wireless network based on the traffic demands the case that there is a need to deploy new heterogeneous network nodes to an already dense network environment. It is furthermore intended to study Use Cases related to suitable self-adaptation mechanisms, including for example the set-up of local network clusters, suitable routing and cooperation mechanisms, etc. with the objective to improve the overall Energy Efficiency from the heterogeneous system perspective.</p> <p>This Use Case will take into account available work within ETSI RRS, in particular work related to the usage of TVWS, the exploitation of a reconfigurable mobile device architecture, in order to identify requirements and architectural enhancements to support/enable energy optimisations etc.</p>	
Rapporteur (named individual person): name: organisation: e-mail:		Supporting ETSI Member organisations: (name at least four)	

Deliverable document details:

What type of document will be produced? EN[] EG[] ES[] TS[] TR[X] SR[] GS [] For EN deliverables only: – Is the draft EN to be approved by One-step Approval or Two-step Approval Procedure? – Candidate harmonized standard? – Directive:		Is it a new document or a revision of an existing one? New If a revision, state the deliverable (e.g. TS 102 987 v1.1.1) being revised: edition / version	
Hierarchy: if this Work Item fits in a hierarchical tree (see TWP clause 1.6.1), its position shall then be indicated here by giving the reference of its parent node (WI reference / deliverable number / topic name). _____			

Work schedule:

Milestone name	Target date
• TB adoption of WI	
• Early Draft	
• Stable Draft	
• Draft for approval	
• WG approval (delete if no WG)	
• TB approval	
To be published as version:	

Remarks:

<p><u>Environmental Aspects</u> No</p> <p>Key aspects (in an overall perspective):</p> <ul style="list-style-type: none"> • Power consumption and saving mechanisms No • Operational conditions No • Other matters No <p style="text-align: center;">Comment:</p>	<p><u>User /Consumer Aspects</u> No</p> <p>Key requirements:</p> <ul style="list-style-type: none"> • accessibility & Usability No • user security No • privacy No • safety No <p style="text-align: center;">Comment:</p>
<p><u>Security Aspects</u> No</p> <p>Comments:</p>	<p><u>Keywords</u> (at least 2 from those available at http://webapp.etsi.org/ContextHelp/WorkProgram_help.asp?type=CODES_KEYWORDS)</p> <p style="text-align: center;">RADIO</p>