

Wireless Network

- Presentations

- Japan side:

Hiroshi Harada, NICT addressed current concerns in the future wireless network and introduced a solution, dynamic spectrum access and introduced the Japan research activities in the field.

Shin Nomoto, KDDI R&D presented current R&D status on cognitive radio and co-operative radio. In the presentation, R&D results on enabling technologies for cognitive radio network were introduced. Especially KDDI R&D devoted to realize a infrastructure-less cognitive radio system. Moreover, R&D results on enabling technologies related to co-operative radio network based on multi-site MIMO technology was introduced.

- EU side:

Rémy Bayou introduced the EU research activities in the field of radio technologies and radio networking in FP6 & FP7 and highlighted the Cognitive radio projects.

Mat Fort From BT Wireless presented the Trilogy project, which aims at redesigning the architecture of the future Internet, notably as regards the control plane and the routing issues.

- Questions from participants

- “Has cognitive dedicated channel for signaling been considered in the project? and which part is needed to be standardized? ” In the discussion, current status of R&D on signaling channel for cognitive radio is introduced and some thoughts regarding to standardized topics are introduced from results of past Japanese projects.
- “Which kind of cognitive radio is more appropriate for the future wireless network? Network-centric cognitive radio or self-organized cognitive radio” In the discussion, pros and cons for both radios are introduced. But to have common understanding, we need to collaborate between and EU and Japan and continue to discuss.



Conclusions

- In the future , integration between wired and wireless networks is mandatory for the future network by using intelligent approach such as cognitive radio and co-operative radio. But currently there are many opinions and definitions.
- By collaborating and discussing with EU and Japan , clear view for future integrated network must be designed. Further discussions on Cognitive radio approaches are felt as fruitful, especially as far as systems definition and future standards are concerned.

