



CREW

Cognitive Radio Experimentation World

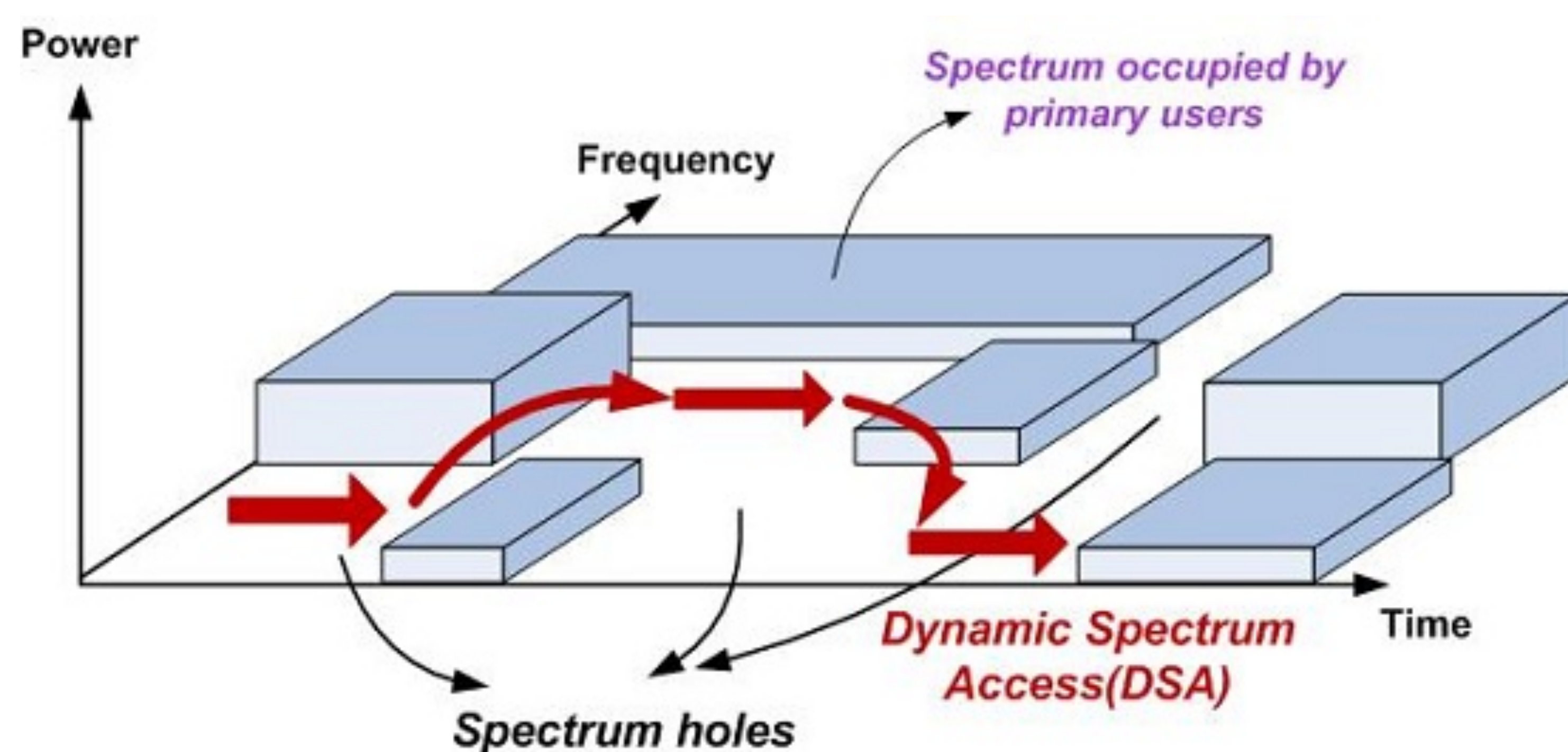
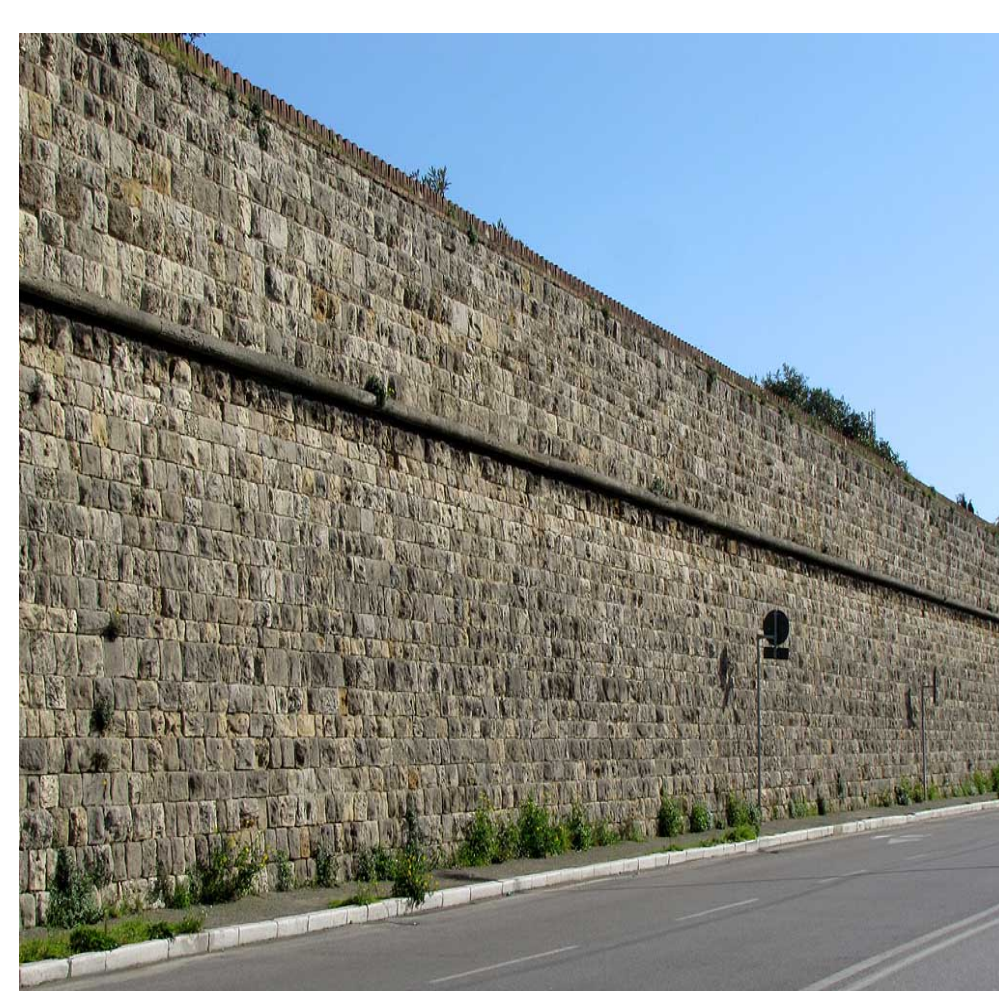
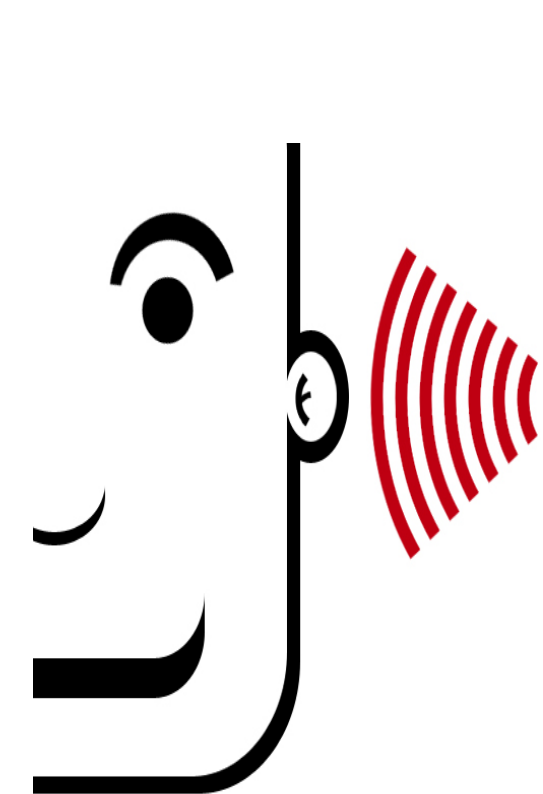


Device sensitivity and environment measurements

- Final result of one out of three experiments of 'Open Call 1' -



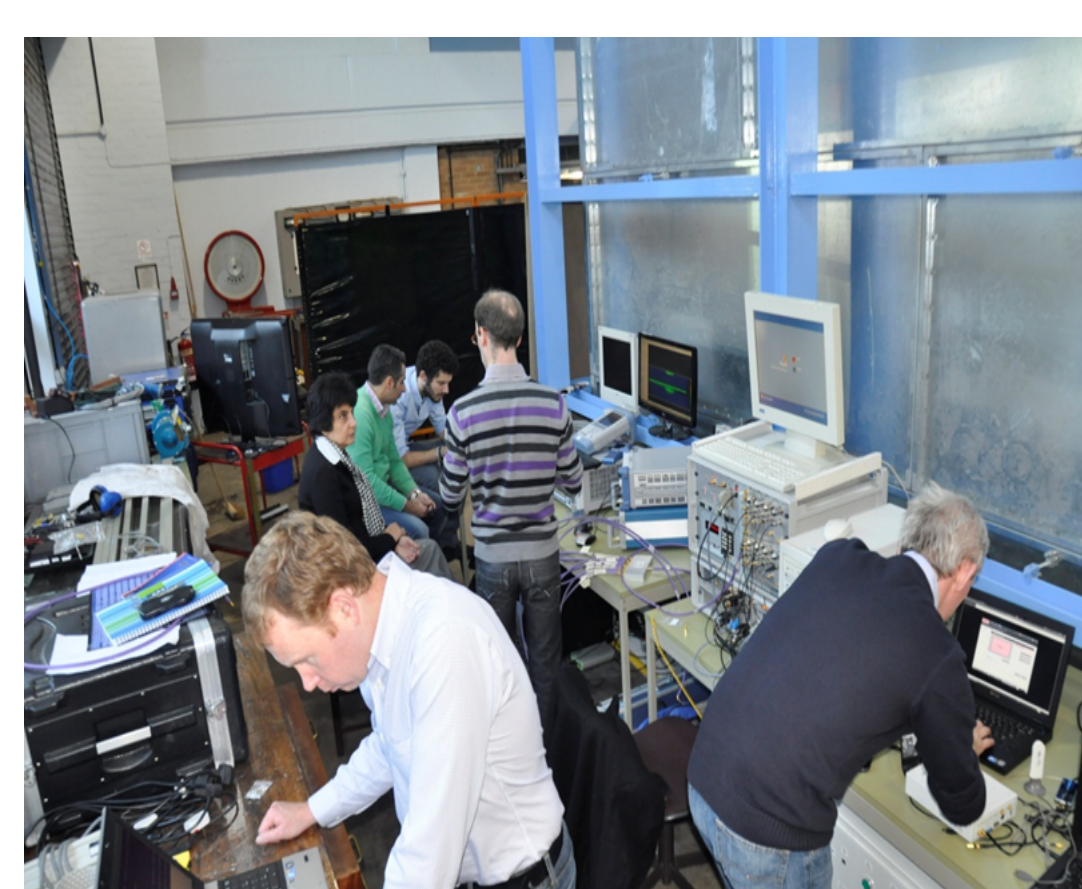
Cognitive radio (CR) devices 'listen' to identify spectrum holes.
This requires a **strong signal** and **sensitive CR** device.



Experiment

- Several CR devices with Wi-Fi and Bluetooth signals.
Main finding: only high end devices accurately detected primary user.
- Signal strength in three environments:
 - office in TUB
 - air cabin in EADS
 - semi-shielded environment at iMinds.**Main finding:** signal level drops when device height in room increases.

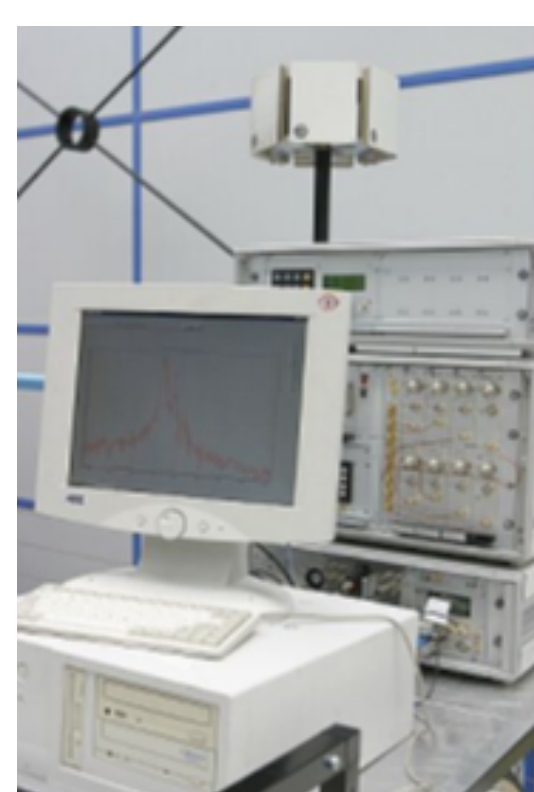
Test set up and some tested devices



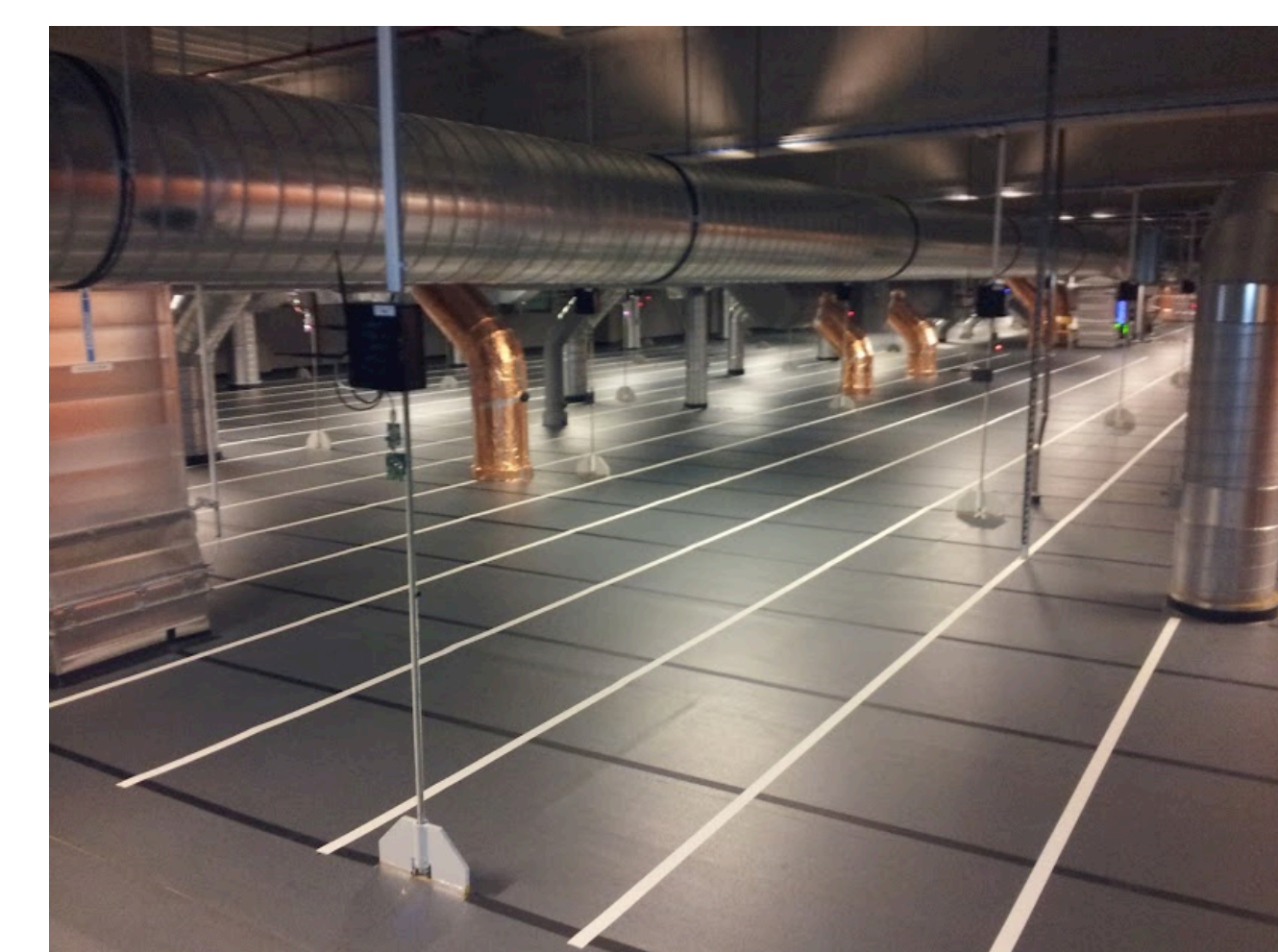
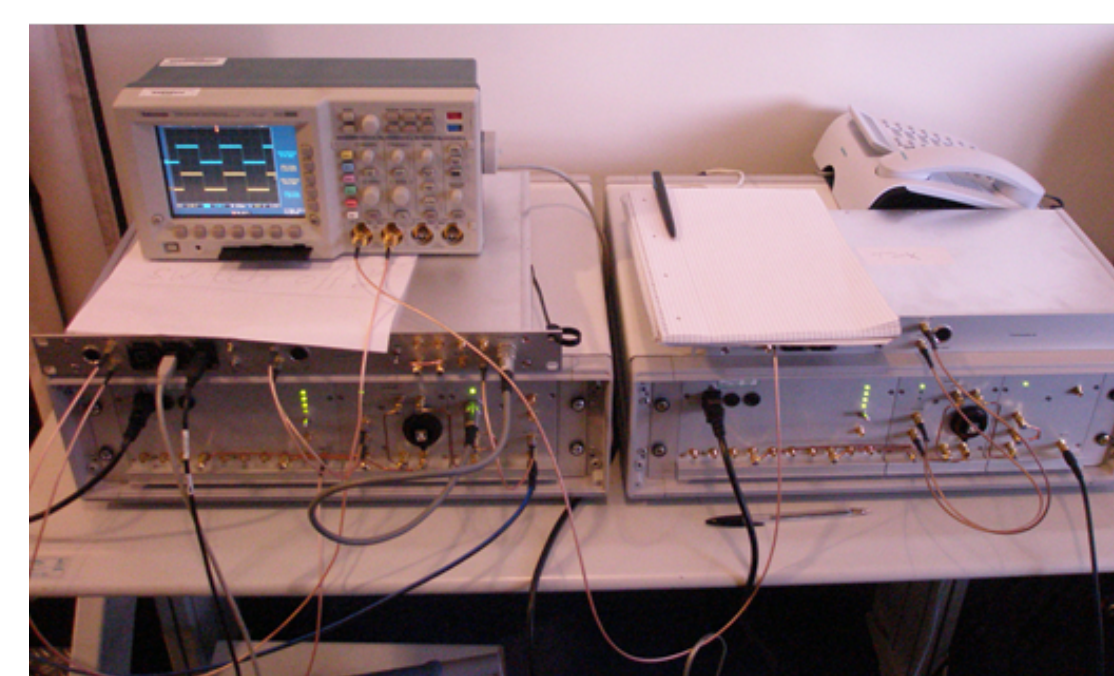
receiving end



transmitting end



Measurement equipment and tested environments



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Future Internet Research and Experimentation – FIRE

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