Fiber From The Farm (FFTF)

(C4EU 5.4.1: Report on Pilots on Fiber Deployment)

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Abstract

This is the abstract

Index Terms

Bottom-up-Broadband (BuB), policy

CONTENTS

List of Figures

List of Tables

I. Introduction

Super TODO cite example [1]

II. About this document

This report has been produced using open source tools such as LaTeX [**?**] and *git* [**?**]. LaTeX is widely used in academia to prepare print-class documents. It automatically takes care of numbering, cross-referencing, tables of contents, bibliography, etc. *Git* is a high performance distributed revision control which is used in many open source projects, such as the linux kernel. Git makes it easy and safe to collaborate as each contributor works on his or her own personal copy. Good contributions can be easily shared with others, and it is always possible to revert to a previous version.

Our git repository is publicly available in *github*:

https://github.com/jbarcelo/C4EU-deliverables

Anyone who is familiar with LaTeX and *github* can contribute to this document. The firs step is to make a copy (a *fork* in *github* jargon). The contributor can work in this copy and make changes to improve the document. After that, it is necessary to request that these changes are merged into the original copy of the document (a *pull request* in github jargon).

If you see anything that can be improved, feel free to contribute. This document is alive in the sense that it will keep evolving as long as contributors make changes and improve it.

The system automatically keeps track of all the contributors and their contributions. It is possible to see who is contributing more actively and which are the exact changes made by each contributor. And everything is public on the web.

III. Deployments

TODO Bla (see Figure 1) bla

IV. Points-Of-Presence (POPs)

TODO bla

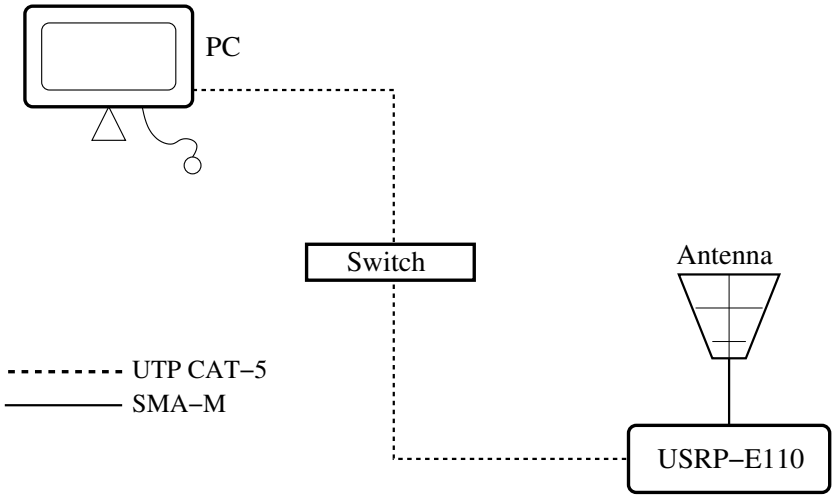

Fig. 1. TODO remove.

V. Results

TODO Bla

The proposed identification of TV White Spaces with USRP-E110 enables the execution of a spectrum sensing algorithm via SSH, allowing the USRP to be located at convenient locations.

It is possible to build a Radio Environment Maps (REM) [**?**] from samples gathered by geographically distributed USRPs controlled from a centralized location, increasing the efficiency and boosting the implementation of cognitive networks.

In order optimize the spectrum sensing algorithm, better signal processing techniques are expected to be implemented in the near future [**?**]. All of this in the attempt to differentiate noise from TV broadcast signals.

Currently, our research is oriented towards the effective communication of two USRP-E110 using TVWS at distances over three meters apart [**?**]. Also, we are working at combining the cognitive and transmission tasks inside a unified code running in the USRP-E110.

Acknowledgment

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do not represent the views of the European Commission.

REFERENCES

[1] J. Barcelo, B. Bellalta, R. Baig, R. Roca, A. Domingo, L. Sanabria, C. Cano, and M. Oliver, "Bottom-up Broadband Initiatives in the Commons for Europe Project," *arXiv preprint arXiv:1207.1031*, 2012.