WaveComBE

mmWave Communications in the Built Environments

WaveComBE_D4.3

Training school on millimeter wave communication

Version v1.1   Date: 2020/09/02

Document properties:

Grant Number:	766231
Document Number:	D4.3
Document Title:	Training school on millimeter wave communication
Partners involved:	All
Authors:	Frederik Naessens
Contractual Date of Delivery:	2020/09/02
Dissemination level:	CO[1]
Version:	1.1
File Name:	WaveComBE D4.3_v1.1

Table of contents

[1] CO = Confidential, only members of the consortium (including the Commission Services)

PU = Public

Executive Summary

Training is an important aspect of any H2020-MSCA-ITN project and in particular for WaveComBE as well. In order to get all ESRs at the same level and to promote knowledge sharing amoung the consortium two schools have already taken place. This documents describes the content of the schools.

1   Introduction

Within WaveComBE project there were a number of training events defined. Two of them included a 'school' which is mandatory for all ESRs and also provided the possibility to collect ECTS points.

Event No.	Main Training Events & Conferences	ECTS (*if any*)	Lead Beneficiary	Month (*estimated*)
1	Summer school: Scientific and technological training	Yes	CHALMERS	7
2	Complementary skills training workshops	Yes	USFD	10, 24
3	Summer school: New models for 5G characterization	Yes	UPV	18
4	Scientific and technological workshop	No	UDUR	28
5	Business showcase	No	RPN	42

The two (summer) schools are:

- [WATS-1] Scientific and technological training: The goal is to organize this school after all ESRs are recruited and will be held to provide all ESRs with initial scientific and technological training in fundamental themes covered by WAVECOMBE. This event will be hosted by CHALMERS and participated by all the partners.
- [WATS-2] New models for 5G characterization: The training school will deal with the new models applied for the 5G characterization, including channel, mobility and traffic modelling, but also addressing visualization of dynamic results. Some experts in the field from partners in the network will participate, with UPV being the leader

In the sections below you can find more detailed information about these two schools.

Note: WATS-1 was originally intended to be hosted by Chalmers but was organized by University of Twente.

2   Training school 1 - Enschede (WATS-1)

2.1   Brief overview

- Host: University of Twente
- Venue: U Park Hotel (De Veldmaat 8, 7522 NM Enschede, Netherlands)
- Time: 4-6 September 2019

2.2   Agenda

Day 1: Wednesday, 4/September

- 08:30-09:00 Start
- 09:00-10:15 Theme 1: Array Antennas by Assoc. Prof. Ashraf Uz Zaman, Gapwaves/Chalmers.
- 10:15-10:45 Coffee Break
- 10:45-12:00 Theme 1: Array Antennas by Assoc. Prof. Ashraf Uz Zaman, Gapwaves/Chalmers.
- 12:00-13:00 Lunch
- 13:00-14:15 Theme 2: OTA Characterization of Antennas and Devices by Assoc. Prof. Andrés Alayón Glazunov, UT/Chalmers.
- 14:15-14:45 Coffee Break
- 14:45-16:00 Theme 2: OTA Characterization of Antennas and Devices by Assoc. Prof. Andrés Alayón Glazunov, UT/Chalmers.
- 19:00-22:00 Joint Dinner

Day 2: Thursday, 5/September

- 09:00-10:15 Theme 3: 5G Introduction and NR features by Prof. Jose Francisco Monserrat, UPV.
- 10:15-10:45 Coffee Break
- 10:45-12:00 Theme 3: 5G Introduction and NR features by Prof. Jose Francisco Monserrat, UPV.
- 12:00-13:00 Lunch
- 13:00-16:00 Theme 4: 5G Wireless System Networks by Dr. Jiming Chen, Ranplan.
- 10:15-10:45 Coffee Break
- 13:00-16:00 Theme 4: 5G Wireless System Networks by Dr. Jiming Chen, Ranplan.
- 19:00-22:00 Joint Dinner

Day 3: Friday, 6/September

- 09:00-10:15 Theme 5: Channel Models and Propagation by Dr. Christian Schneider, TU Ilmenau.
- 10:15-10:45 Coffee Break
- 10:45-12:00 Theme 5: Channel Models and Propagation by Dr. Christian Schneider, TU Ilmenau.
- 12:00-13:00 Lunch
- 13:00-15:00 Exam: (multiple choice exam with contributions from all the instructors)
- 15:30-16:00 Completion of course evaluation form.
- 16:15 The course ends.

2.3   ESR attendance

Name	Attendance
ESR1 – Wai Yan	Present
ESR2 – Mohammad Poordaraee	Present
ESR3 - Alireza Bagheri	Present
ESR4 - Amar Al Jzari	Present
ESR5 - Othman Zahid	Present
ESR6 - Samuel Romero	Present
ESR7 - Danaisy Prado Alvarez	Present
ESR8 - Chen Chen	Present
ESR9 - Yixin Zhang	Excused
ESR10 - Chunxia Qin	Present
ESR11 - Monika Drozdowska	Present

2.4   Photos

Below some photos of the training school
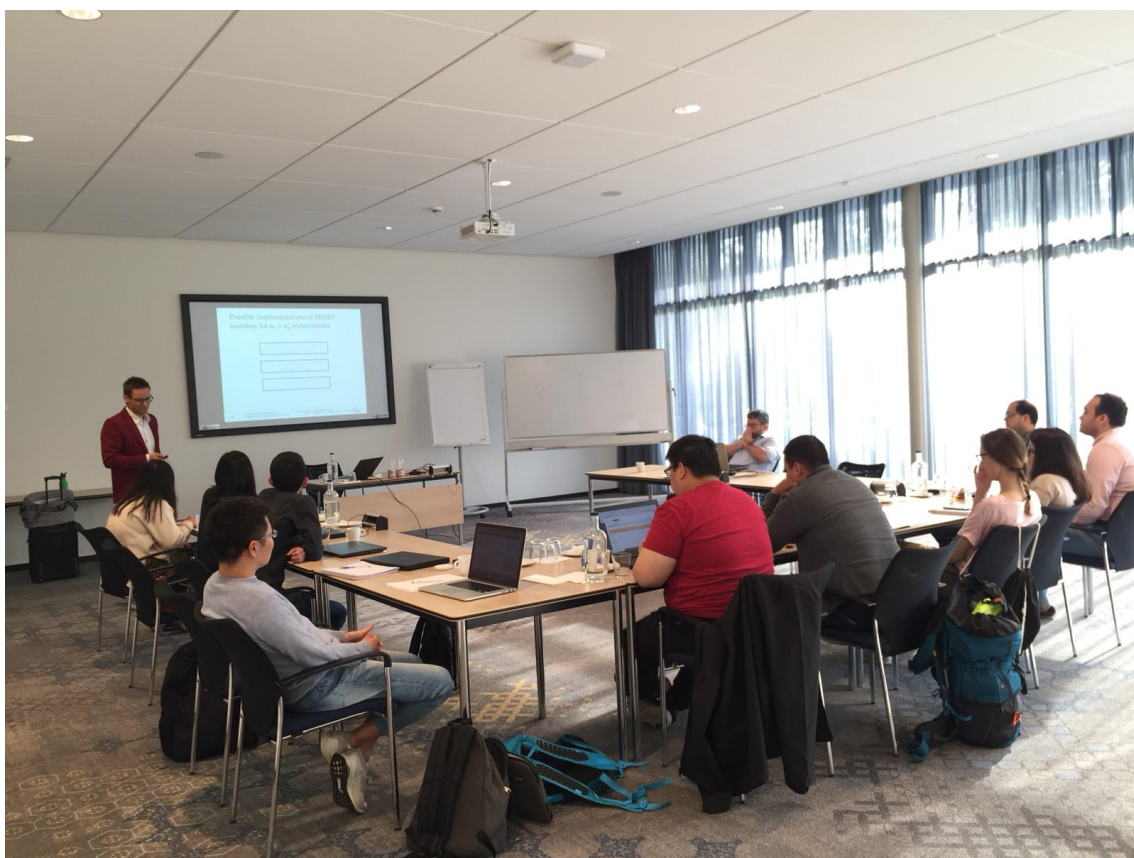
Note: After the training school, all ESR had a bonding trip to Rotterdam

3   Training school 2 - Valencia (WATS-2)

3.1   Brief overview

- Host: Universitat Politècnica de València
- Venue:

    8G Building. 4th Floor, D access

    Instituto de Telecomunicaciones y Aplicaciones Multimedia (iTEAM)

    Ciudad Politécnica de la Innovación (CPI)

    Universitat Politècnica de València (UPV)

    Camino de Vera, s/n

    46022 Valencia

    Spain

- Time: 3-6 February 2020

3.2   Agenda

Day 1: Monday 3rd Feb

- 14:30-16:00 Meeting ESR's Coordination with Prof. Narcis Cardona Marcet, Universitat Politècnica de València
- 16:00-16:30 BREAK
  Horizontal skills: CC5: Communication skills
- 16:30-18:30 Introduction to soft skills by Prof. Roberto Verdone, University of Bologna

Day 2: Tuesday 4th Feb

  Horizontal skills: CC5: Communication skills
- 08:30-11:00 Aptitudes and personality by Prof. Roberto Verdone, University of Bologna
- 11:00-11:30 BREAK
- 11:30-13:30 Inter-personal communication skills by Prof. Roberto Verdone, University of Bologna
- 13:30-14:30 LUNCH
- 14:30-16:15 Public speaking by Prof. Roberto Verdone, University of Bologna
- 16:15-16:30 BREAK
  Simulation tools for 5G
- 16:30-18:30 Channel modelling (practical session) by Prof. José F. Monserrat del Río, Universitat Politècnica de València

Day 3: Wednesday 5th Feb

  Simulation tools for 5G
- 08:30-11:00 Link level simulation/OFDM performance (practical session) by Dr. Eduardo Garro Crevillén, Universitat Politècnica de València
- 11:00-11:30 BREAK
- 11:30-12:30 5G NR simulation (practical session) by Dr. Eduardo Garro Crevillén, Universitat Politècnica de València
- 12:30-13:30 Introduction to system simulation by Dr. David Martín Sacristán Gandía, Universitat Politècnica de València
- 13:30-14:30 LUNCH

- 14:30-16:15 Introduction to Unity 3D (practical session) by Dr. Saúl Adrián Inca Sánchez, Universitat Politècnica de València
- 16:15-16:30 BREAK
- 16:30-18:30 Field test measurements with lab equipment (practical session) by researcher Sergio Pastor Tur, Universitat Politècnica de València
- 20:00 JOINT CONSORTIUM DINNER

Day 4: Thursday 6th Feb

   Project Management Committee Meeting
- 09:00-11:00 WaveComBE PMC meeting - WPs status and results (WP1, WP2, WP3)
- 11:00-11:30 BREAK
- 11:30-12:30 WaveComBE PMC meeting - ESRs' pitches
- 12:30-13:30 WaveComBE PMC meeting - Exploitation (Gapwaves, LTV, RPN) (WP4)
- 13:30-14:30 LUNCH
- 14:30-15:30 WaveComBE PMC meeting - Coordination
- 15:30-16:30 WaveComBE PMC meeting - Financial and administrative issues
- 16:30-16:45 BREAK
- 16:45-17:15 WaveComBE PMC meeting - Training
- 17:15-17:45 WaveComBE PMC meeting - Dissemination

3.3   ESR attendance

Name	Attendance
ESR1 – Wai Yan	Present
ESR2 – Mohammad Poordaraee	Present
ESR3 - Alireza Bagheri	Present
ESR4 - Amar Al Jzari	Present
ESR5 - Othman Zahid	Present
ESR6 - Samuel Romero	Present
ESR7 - Danaisy Prado Alvarez	Present
ESR8 - Chen Chen	Present
ESR9 - Yixin Zhang	Present
ESR10 - Chunxia Qin	Present
ESR11 - Monika Drozdowska	Present

3.4   Photos
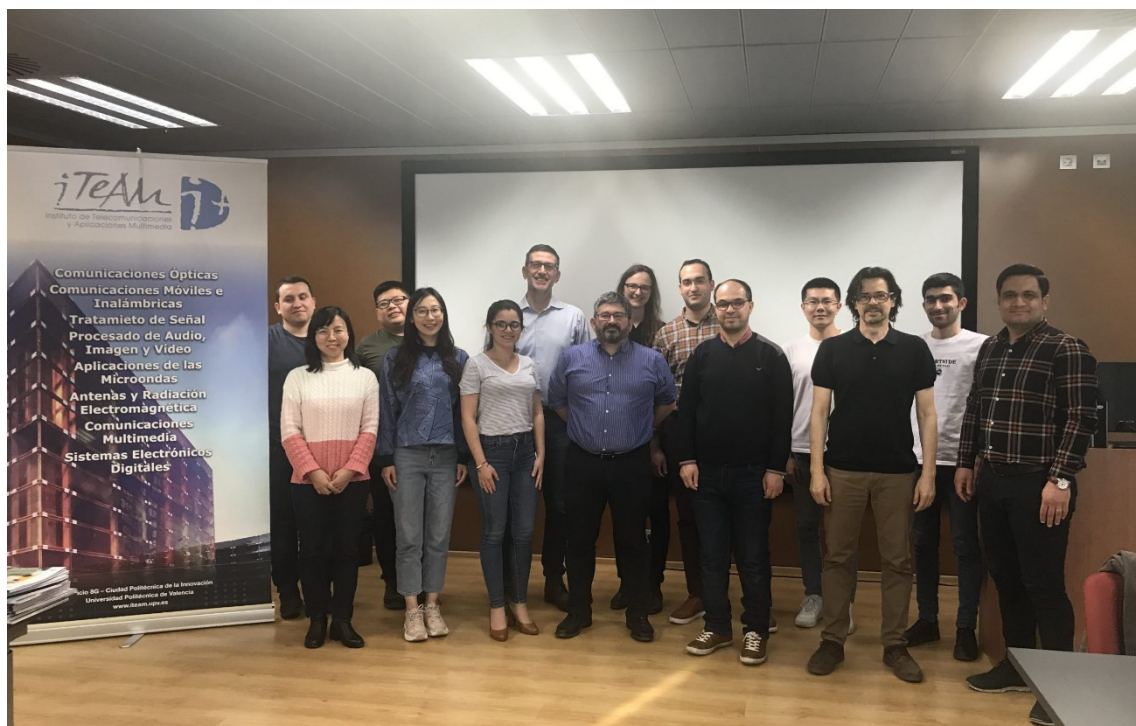
References

https://wavecombe.eu/ - Wavecombe portal website containing course material and exams