



Horizon 2020 Programme

WIDEST

Water Innovation through Dissemination Exploitation of Smart Technologies

GA number: 642423

WP 5: Dissemination and communication channels
D5.4: Final communication and dissemination action plan report

January 2017

http://www.widest.eu/





Document Information

| Project Number | 642423 | Acronym | WIDEST | | | |
|-----------------|---|---------|--------|--|--|--|
| Full title | Water Innovation through Dissemination Exploitation of Smart Technologies | | | | | |
| Project URL | http://www.widest.eu | | | | | |
| Project officer | Erik Pentimalli | | | | | |

| Deliverable | Number | 5.4 | Title | Final communication and dissemination Action plan report |
|--------------|--------|-----|-------|--|
| Work Package | Number | 5 | Title | Dissemination and Communication channels |

| Date of delivery | Contractual | M24 | Actual | M24 |
|---------------------|-------------------|------------------------|-----------|-----|
| Nature | Prototype | Report X Dissemination | □ Other □ | |
| Dissemination Level | Public X Con | sortium | | |

| Responsible Author | Lydia S. Vamvakeridou- Lyroudia | Email | L.S.Vamvakeridou-Lyroudia@ex.ac.uk | | | |
|------------------------------|--|-------|------------------------------------|--|--|--|
| Partner | UNEXE | Phone | 0044 1392 723634 | | | |
| Abstract (for dissemination) | Report on the communication and dissemination Action Plan at the end of the project. | | | | | |
| Key words | Dissemination; communication | | | | | |

| /ersion Log | | | | | | | |
|-------------|---------|-----------------------------|---------|---------------|--|--|--|
| Issue Date | Version | Author | Partner | Change | | | |
| 27-01-17 | 1.0 | Lydia Vamvakeridou-Lyroudia | UNEXE | Draft | | | |
| 30-01-17 | 1.1 | Xavier Domingo | EURECAT | Revision | | | |
| 30-01-17 | 1.2 | Francesc Guitart | EURECAT | Revision | | | |
| 30-01-17 | 1.3 | Lydia Vamvakeridou-Lyroudia | UNEXE | Final version | | | |





Executive Summary

This report is part of WIDEST (www.widest.eu), a H2020 funded project – Coordination and Support Action (Ref. Number 642423). It details the communication and dissemination Action Plan at the end of the project, i.e. at the end of M24. This report is closely linked to D5.2 (the dissemination and communication plan for the project as a whole), which was submitted in July 2015 and to D5.3 (the dissemination and communication report for the 1st year), which was submitted in January 2016.

All the activities during the project aimed at increasing visibility and awareness on Smart Water and Smart Water technologies, targeting different audiences. A cornerstone of the project's communication and dissemination strategy is to link, help and support the dissemination actions of the ICT4WATER cluster and the active participation to the steering committee of an EIP Water Action Group on Smart Water Technologies (Ctrl+SWAN), both detailed in this report. Regarding the projects form ICT4WATER cluster, it started with 15 projects and extended to a total of 20 projects at the end of WIDEST project, when more new projects have been added to the cluster. Currently, a total of 192 organizations from 34 different European countries are part of the ICT4WATER cluster. WIDEST target all different audiences across Europe, helps and supports the dissemination actions of the ICT4WATER cluster. It also assists and participates actively to the steering committee of an EIP Water Action Group on Smart Water Technologies (Ctrl+SWAN), which is now officially the 20th member of the cluster (since December 2016). Thanks to the actions carried out by WIDEST, the ICT4WATER cluster is growing, as an example the 4 CSA projects KINDRA, FREEWAT, WaterInnEU and BlueSCities have been included to the cluster proposed by WIDEST, while PROTEUS was prompted to join after attending the networking session organised at the Lisbon event by WIDEST. SAFEWATER joined soon after (February 2016), while SIM4NEXUS joined in June 2016.

WIDEST also exploits the classic communication and dissemination channels (website, social media, conferences, publications). The website has been redesigned in order to increase the impact on the audience in early 2016. In D6.1: Project Management Handbook, Key Performance Indicators (KPI) were defined regarding the impact of webpage and other digital media impact. According to these KPIs, all the indicators were achieved.

During the second year, the number of visits to the web has been 9.134 users, having a 35.9% of returning users, meaning that has increased with respect to the previous year. During the first year the 86.53% of the users were users that visited the web for the first time while during second year 64.10% of the user were new users. This decrease in the number of new sessions can be explained by the stabilization of the novelty among the Water community. It has to be taken into account that during 2nd year, the number of pages and time in the site has increased to 3.53 pages/session and 4:48 minutes (from 1.57 pages/session and 1:05 minutes during 1st year). This means that, despite the decrease of visits the users visiting WIDEST stay more time and browse more the web (reading news or new documents published). This can be explained by the constant update of the web and the dissemination through social





networks and the efforts in publishing news and contents (such as the Roadmaps or presentations in events). One of the KPI regarding the percentage of returning visitors was expected to be 75% of the expected number of visitors, which was a non-real percentage. Taking into account that the number of visits was 1500 (during first and second year), and that the final value of visits has been more than 16.000 (an order of magnitude higher), the raw number of returning users is higher than the expected with the unrealistic KPI (making this KPI virtually achieved).

Regarding the Twitter account (see Section 4.4), we strongly believe that it is a good media to disseminate WIDEST messages as the audience is focused on main WIDEST fields. The expected cumulative number of tweets in the KPIs was 100, and this number has been widely exceeded with 1010 tweets during first and second year alone.

During the project, WIDEST has had a strong presence in 42 major international events, including 2 scientific special sessions at major international conferences, resulting also in the publication of 3 papers (Section 6). These publications are included into the IWO (see Deliverable 1.3). A full list and evaluation of the events that took place during the whole project is included in this report.

To understand this document the following deliverables have to be read.

| Number | Title | Description |
|--------|--|--|
| D5.1 | Project Website | Details about the design and implementation of the project website |
| D5.2 | Communication and Dissemination Plan | The strategy for dissemination and communication throughout the project. |
| | First year dissemination and communication plan report | Communication and dissemination activities during the first year of the project. |





Table of contents

| 1. IN | TRODUCTION – PURPOSE OF THE REPORT | 6 |
|-------|---|-----|
| 2. W | IDEST PROJECT COMMUNICATION AND DISSEMINATION STRATEGY | 8 |
| 2.1 | STAGE 1: VISIBILITY AND AWARENESS | 8 |
| 2.2 | STAGE 2: REACHING WIDER AUDIENCES, ACHIEVEMENTS, RESULTS | g |
| 3. LI | NKS WITH OTHER INITIATIVES AND RELATED ACTIVITIES | 11 |
| 3.1 | THE ICT4WATER CLUSTER | 11 |
| 3.2 | EIP WATER ACTION GROUP CTRL+SWAN | 15 |
| 3.3 | WATER SUPPLY AND SANITATION TECHNOLOGY PLATFORM (WSSTP) | 17 |
| 3.4 | INTERNATIONAL WATER ASSOCIATION (IWA) | 17 |
| 3.5 | SWAN SMART WATER NETWORK FORUM | 18 |
| 4. C | OMMUNICATION TOOLS AND ACTIVITIES | 19 |
| 4.1 | Overview | 19 |
| 4.2 | VIDEO COMPETITION - STRATEGIC CHANGE AND SWITCH TO OTHER ACTIVITY | 20 |
| 4.3 | MOOCs (Massive Open Online Courses) | 22 |
| 4.4 | Newsletters and other means of communication | 22 |
| 4.5 | THE WEBSITE AND ITS USE | 23 |
| 5. C | ONFERENCES AND EVENTS | 26 |
| 5.1 | SPECIAL SESSIONS AT CONFERENCES OF HIGH SCIENTIFIC QUALITY | 26 |
| 5.2 | PARTICIPATION TO CONFERENCES AND EVENTS | 26 |
| 6. PI | JBLICATIONS AND OTHER CONTRIBUTIONS | 31 |
| 7. A | CTIVITIES PER WP TASK | 32 |
| 8. C | ONCLUSIONS | 37 |
| APPEN | IDIX 1: DETAILED REPORT FOR DISSEMINATION ACTIVITIES | 39 |
| APPEN | IDIX 2: ICT4WATER CLUSTER- PROJECTS AND MEMBERS | 83 |
| ADDEN | IDIY 3. EYCHANGE OF DEDSONNEL DDODOSAL (ILINE 2016) | 0.4 |





1. Introduction – Purpose of the report

WIDEST (www.widest.eu) is a H2020 funded project (Coordination and Support Action - CSA- Ref. Number 642423), entitled "Water Innovation through Dissemination Exploitation of Smart Technologies". This report is part of the project (WP5-Deliverable 5.4). Promoting public awareness, communicating and disseminating the results of a Horizon 2020 Coordination and Support Action, such as the WIDEST project, is one of its key objectives. Consequently, the communication and dissemination activities play a major role in the project.

The purpose of this document is to detail the communication and dissemination activities that took place during the whole project (2 years).

The most significant factor, related to communication of WIDEST, regarding dissemination activities is its links to the ICT4WATER cluster. Consequently, most of the activities related to communication and dissemination are organised, with the main goal of helping the visibility and dissemination of the cluster as a whole, not just the project's as an isolated entity.

In general the overall communication and dissemination objectives for WIDEST are to:

- Provide visibility to the Project and its scientific outcomes, within the research community working
 in related fields. Material from all the other Work Packages will be gradually added to the website,
 as the project matures and they become available, especially during the 2nd year.
- Raise awareness for WIDEST and for other websites and projects (especially the ICT4WATER cluster (http://ict4water.eu), of which WIDEST is a member), within different potential user groups.
- Promote Smart Technologies, related to ICT for Water Management, in accordance to the scope and aims of EIP for Water (EC).
- Establish common frameworks, such as logos, website, videos etc.
- Develop dissemination and training materials (e.g., The Massive Open Online Courses, the dedicated YouTube channel, etc.)
- Provide direct access to the ICT for Water Observatory though its website.
- Develop links with WssTP and IWA and its activities and audience.
- Establish and develop links with an EIP Water action group, in order to share knowledge of ICT for water to a connected community.
- Organise events and link with existing events, such as the SWAN (The Smart Water Networks Forum) conference, the WssTP annual conference etc.





 Encourage interaction with stakeholders and the public, by participating in panel discussions, organising lectures, organising a competition on a video clip and share this information with the public.

This document is addressed to the following:

- a. The Project Partners, in particular, those identified as work package leaders and dissemination contacts, so that they know what they are responsible for delivering, how and when, and as a reference document.
- b. The Project Coordinator (for monitoring purposes).
- c. The EC Project Advisor (to understand what dissemination activities we undertook, to help support and advise on communication and dissemination across the EC where appropriate and to monitor progress).

This WIDEST Communication and Dissemination activities are managed and monitored by UNEXE (as Work Package 5 Leader). However, the various activities detailed are being carried out or assisted also by different Project Partners, as the whole consortium is involved in WP5.





2. WIDEST project communication and dissemination strategy

With the related Deliverable D5.2- Communication and Dissemination plan, issued at the end of M6, WIDEST communicated to all the partners and to the EC the strategy and plan for dissemination and communication activities to be followed.

In order to ensure the project partners are communicating with the right audiences and disseminating the project results at the right time, WIDEST dissemination has been split into two categories/stages:

- Stage 1: VISIBILITY and AWARENESS
- Stage 2: REACHING WIDER AUDIENCES, ACHIEVEMENTS, RESULTS

Each stage roughly coincides with one project reporting period (12 months). Consequently, the first stage refers to the first year of the project and the second stage to the second year of the project, although they are not strictly separated and discrete, but designed in order to support the overall project progress. A more accurate description of the strategy would be to say that Stage 1 activities are more prevalent during the 1st year, while Stage 2 activities are more prevalent during the 2nd year. On the other hand, some preparations for Stage 2 have started during the first year.

Consequently the activities and actions detailed in this report are focusing more towards visibility and awareness.

2.1 Stage 1: Visibility and Awareness

The objectives of Stage 1 Communication and Dissemination activities are to:

- Raise awareness and communicate project vision across relevant audiences listed below.
- Communicate the project vision in supporting the relevant national and international targets.
- Raise awareness for all the EU funded projects under the ICT4WATER cluster.
- Communicate the expected benefits of Smart Water technologies to relevant audiences.
- Provide an opportunity for people to 'find out more' and 'get involved' through the open events and the lectures.
- Market the WIDEST project as an H2020 funded project with an underlying objective of supporting the use of ICT for Water Management and Smart Water technologies for reducing water consumption and hence reducing energy consumption across the EU.
- Direct people to relevant contact details, partner details and other sources of information regarding WIDEST and the ICT4WATER cluster.
- · Reach other EIP groups and get involved.

During Stage 1 the main target audiences are:

- Utility companies (water, energy)
- Policy makers





- Government/EU officers and Water EIP groups
- Academic / scientific groups, including students
- Local communities through the open events
- Potential investors in Smart Water meters and ICT for water technologies
- Potential commercial / business partners for further Smart Water technology development

2.2 Stage 2: Reaching wider audiences, Achievements, Results

The objectives of Stage 2 Communication and Dissemination activities are to:

- Keep relevant audiences up to date with WIDEST progress.
- Disseminate new knowledge gained through the project, e.g. the ICT for Water Observatory, the portfolio for Smart Water technologies etc.
- Promote the exchange of knowledge between the project partners through the exchange of personnel.
- Publicise results targeting the involvement of wider audiences.
- Publicise project achievements and knowledge to academic/student audiences (e.g. through the lectures and video clips).
- Help wider audiences understand about Smart Water technologies and water efficiency at home (e.g. through the MOOCs).
- Continue reaching local communities and environmental groups, informing them about water efficiency and the use of Smart Water technology.
- Re-iterate the future vision of WIDEST on Smart Water technologies, the expected benefits and links with national and international targets on energy / water / environment.
- Support the development of new partnerships between partners of the ICT4WATER cluster and the water industry.
- Set the basis for future partnerships between project partners, ICT4WATER partners, EIP action groups, Smart Water technology developers and the water industry.
- Gain support for future Smart Water technologies/activities from relevant audiences:
 - o EC / National Government / Regulators (e.g. EUREAU, DEFRA)
 - o Industry Water and ICT Companies
 - o Public / Domestic water users/Wider audiences

The main Stage 2 target audiences are:

- Trade and industry audiences specifically utility companies (water, energy) and ICT companies
- Government and policy makers
- Industry regulators
- · Academic/Scientific groups including students
- Policy makers, Environmental groups





- Domestic water users / households (e.g. through the MOOCs)-wider audience
- Commercial water users (e.g. businesses, schools)
- Smart Water technology developers

At present, there is no mandate for water companies to make use of smart water technologies in the EU in general—therefore, the only way to influence companies to take up smart technologies and adopt them in the future, is to put across a strong case to Water Ministers, to regulators (e.g., OFWAT in the UK), to government agencies (e.g., the Water Directorate at DEFRA, UK) and to the individual water companies, as well as increasing social awareness on the benefits of smart technologies (i.e., the grass root approach). This was part of the 2nd stage of the project dissemination.

Most importantly, all communication and dissemination activities about the WIDEST project, no matter which stage of the project, are aimed to demonstrate the ways in which the project is contributing to a 'European Innovation Union' and account for public spending by helping provide evidence that the collaborative WIDEST project is adding value by:

- a. Showing how the collaboration of all the European WIDEST partners has and will achieve more than any one partner on its own.
- b. Showing how the outputs of the WIDEST project and Smart Water technologies in general are relevant to people's everyday lives relating to water use.
- c. Ensuring that the results from the WIDEST project are taken up by decision makers to influence policy making, and by investors, industry and the scientific community to ensure the research related to Smart Water by all the projects in the ICT4WATER cluster is exploited to its full potential.





3. Links with other initiatives and related activities

One of the most important channels for disseminating WIDEST, the project progress, results and future options for Smart Water technologies is the project's involvement in relevant networking channels, forums and special interest groups/workshops. This chapter details the importance of each of these initiatives for WIDEST and the active involvement of the project partners.

3.1 The ICT4WATER cluster



The ICT4WATER cluster (http://ict4water.eu) is a cluster of 20 EC funded projects (FP7 and H2020), created initially out of 15 FP7/H2020 projects, all related to ICT and Water and/or Smart Water. The first five (2012-2015) - the first

generation (WATERP, iWIDGET, EFFINET, URBANWATER, ICEWATER) are now finished. The next five-(2014-2017) - the second generation (DAIAD, ISS-EWATUS, SMARTH20, WATERNOMICS, WISDOM) are still ongoing. The third generation, another five (WIDEST, WATERINNEU, BLUESCITIES, FREEWAT, KINDRA) are CSA projects that started in 2015. Recently (in 2016), four more projects joined the cluster (PROTEUS, SAFEWATER, SIM4NEXUS, POWER), while the action group Ctrl+SWAN, which is affiliated with WIDEST, became also officially a permanent member of the cluster (since December 2016). Together, the 20 projects include 192 partners from different backgrounds, all related to ICT/Smart Water and ICT for Water Management: Academia, Research organisations, Industrial partners, SMEs, water utilities, public bodies, platforms and networks (e.g. WssTP and the IWA) and an EIP Water Action Group.

At the time WIDEST was developed as a proposal, and afterwards as a project (i.e., when we were defining the dissemination tasks in detail), the ICT4WATER cluster was a recent initiative making its first steps, and its importance and potential role was not yet fully appreciated by anyone (including the initial members of the cluster). Therefore, it was not mentioned in the Description of the Tasks for WP5. The perception of the usefulness and significance of the cluster during 2015 became apparent after the project started.

By structure and definition, WIDEST is the project "closest" to the cluster, since most of its partners are either coordinators or main scientific partners in the cluster projects of the "first generation". So, at the start of WIDEST (kick-off meeting) it was decided and agreed that WIDEST will:

- take a leading role within the ICT4WATER cluster
- align/direct significant dissemination events and activities, so as to include the cluster, or to represent the cluster





- actively participate in, promote and assist all ICT4WATER cluster activities (if not already organized by WIDEST in the first place)
- promote the cluster through its website
- investigate the means to keep the ICT4WATER cluster "alive", for dissemination purposes after the end of WIDEST, as a "hub" for ICT and Water matters. The latter is of main concern and is detailed below.

As a consequence several activities initially designed in a generic form, shifted to more ICT4WATER-oriented context, since the 1st year of WIDEST. This approach continued for the second year as it offers the unique opportunity of disseminating results from 20 projects, bringing together several organisations (192 different partners from 34 countries). The details of the projects and the project partners are presented in Appendix 2. By the end of 2016 there are 192 different organisations involved with the ICT4WATER cluster, exchanging results, material, ideas, participating in common actions, sharing visibility and disseminating to wider audiences than each project alone. Moreover, it offers the opportunity to plan for the future of smart technologies, especially in the context of smart cities and the IoT. This initiative has the support of the EC, especially from, DG CONNECT, Unit H5 – Smart Cities & Sustainability. Recently (since October 2016) EASME has also expressed an interest and supports actively the cluster.

The details of the cluster and the projects are as follows:

Table 2.1: ICT4WATER cluster projects and contact details

| ICT4WATER Cluster | www | .ict4water.e | <u>u</u> | | | |
|---|--|---------------|--|------------------------|--|----------------------------------|
| Contact persons Lydia Vamvakeridou-Lyroudia Gabriel Anzaldi Sander Smit Aude Glennisson | Institution University of Exeter, UK EURECAT, Spain BM-CHANGE, Netherlands European Commission, DG CONNECT | | L.S.Vamvakeridou-Lyroudia@ex.ac.uk gabriel.anzaldi@eurecat.org sander@bm-change.nu | | ICT4WATER Projects involved IWIDGET, WIDEST, SIM4NEXUS WATERP, WIDEST, SIM4NEXUS WATERNOMICS N/A | Comments Website administration |
| Nr | CALL | | Projects | Coordinators'names | Coordinators'e-mails | Comments |
| ī | FP7-2011 | 317624 | ICEWATER | Parag Mogre | parag.mogre@siemens.com | Concluded |
| 2 | FP7-2011 | 318272 | IWIDGET | Dragan Savic | d.savic@exeter.ac.uk | Concluded |
| 3 | FP7-2011 | <u>318556</u> | EFFINET | Laura Maestre Martínez | Imaestre@aqualogy.net | Concluded |
| 4 | FP7-2011 | 318603 | WatERP | Gabriel Anzaldi | gabriel.anzaldi@eurecat.org | Concluded |
| 5 | FP7-2011 | 318602 | UrbanWater | Eva Martinez | emartinezd@fcc.es | Concluded |
| 6 | FP7-2013 | 619186 | DAIAD | Spiros Athanasiou | spathan@imis.athena-innovation.gr | Active -finishing 2017 |
| 7 | FP7-2013 | 619228 | ISS-EWATUS | Ewa Magiera | ewa.magiera@us.edu.pl | Concludes in January 2017 |
| 8 | FP7-2013 | 619172 | SmartH2O | Andrea-Emilio Rizzoli | andrea@idsia.ch | Active -finishing 2017 |
| 9 | FP7-2013 | 619660 | WATERNOMICS | Stefan Decker | stefan.decker@deri.org | Concludes in January 2017 |
| 10 | FP7-2013 | 619795 | WISDOM | Alain Zarli | alain.zarli@cstb.fr | Concludes in January 2017 |
| 11 | H2020-Water 4a | 642047 | KINDRA | Marco Petitta | marco.petitta@uniroma1.it | Active -finishing 2018 |
| 12 | H2020-Water 4a | 641821 | WATERINNEU | L. Pesquer | l.pesquer@creaf.uab.cat | Concludes in January 2017 |
| 13 | H2020-Water 4a | 642354 | BlueSCities | Richard Edelman | richard.elelman@ctm.com.es | Concludes in January 2017 |
| 14 | H2020-Water 4a | 642224 | FREEWAT | R. Rossetto | r.rossetto@sssup.it | Active -finishing 2018 |
| 15 | H2020-Water 4a | 642354 | WIDEST | Gabriel Anzaldi | gabriel.anzaldi@eurecat.org | Concludes in January 2017 |
| 16 | H2020-EU.2.1.1.1. | 644852 | PROTEUS | Nicolas Giunta | nicolas.giunta@eglobalmark.com | Active -finishing 2018 |
| 17 | FP7-SEC-2012-1 | 312764 | SAFEWATER | Linda Eller-Shein | safewater-arttic@eurtd.com | Concludes in December 2016 |
| 18 | H2020-Water2b | 689150 | SIM4NEXUS | Floor Brouwer | SIM4NEXUS@wur.nl | Active - finishing 2020 |
| 19 | H2020-ICT10c-2015 | 687809 | POWER | Paul Fleming | PFleming@dmu.ac.uk | Active - finishing 2019 |
| 20 | EIP WATER ACTION GROUP | AG126 | Ctrl+SWAN | Armando Di Nardo | agctrlswan@gmail.com | Active Permanently |





The website of the cluster was initially developed before WIDEST started, at the end of 2014, by the WATERNOMICS project, which is another member of the cluster. They are the website administrators. More specifically Sander Smit (BM Change, The Netherlands) is the website administrator. Gabriel Anzaldi (EURECAT) and Lydia Vamvakeridou-Lyroudia (UNEXE) have from the start of WIDEST been in close contact and cooperation with Sander Smit. The three have formed the cluster steering committee, with a view of coordinating, assisting and supporting cluster activities, visibility, communication and common events. Lydia Vamvakeridou-Lyroudia, Gabriel Anzaldi (WIDEST) and Sander Smit (WATERNOMICS), joined by Aude Glenisson (DG CONNECT). They are the four main contacts for the cluster (http://www.ict4water.eu/index.php/contact/).

Currently, there are ongoing discussions and planning about what will happen after the end of the two projects (WIDEST and WATERNOMICS) that currently manage the cluster. Both projects end in January 2017, and the challenge is to find a way to keep ICT4WATER sustainable and "alive" after the end of the projects. So far the following have been decided:

Sander Smit offered to maintain the website and continue issuing the Newsletter with his own funding. Lydia Vamvekeridou-Lyroudia and Gabriel Anzaldi will continue to actively organise and participate to events, funding their participation through other projects; both participate in SIM4NEXUS, a member of the cluster that started in June 2016 and will continue for four years.

During the project, the following activities have taken place, which WIDEST has organized, guided, assisted, supported and participated, with the aim of promoting and disseminating the ICT4WATER cluster, through WIDEST:

- ICT4WATER clustering event on March 18-19, 2015 in Brussels. This clustering event with the
 participation of the WIDEST partners: EURECAT, UNEXE and CETAQUA, resulting in a white
 paper by the EC, entitled: Emerging topics and technology roadmap for Information and
 Communication Technologies for Water Management.
- Extended Standards Session (post SWAN-Conference), London- 1st May 2015 (UNEXE-Lydia Vamvakeridou-Lyroudia from WIDEST). The one day standardisation workshop (held in Hammersmith, London) involved representatives from the ICT4Water projects (iWIDGET, WISDOM, WIDEST, ICeWater, WaterInnEU and ISS EWATUS). Full report in included in Appendix 1.
- 3. Participation at all the Water Innovation Conferences in 2015 and 2016, held in June 2015 and June 2016 (Brussels). The ICT4WATER cluster was represented there by WssTP (organisers) and UNEXE (presentation in two sessions) in 2015, exhibition booth in 2016.
- 4. A special scientific session organised during the IAHR World Congress (2 July 2015 The Hague Netherlands) with the assistance and participation of EURECAT (Gabriel Anzaldi).
- A special Session and Workshop on Standards and Standardisation Session, CCWI, Leicester –
 2 September 2015. The purpose of this session was to agree on the cluster's recommendations to the EC, as to how specific standards can be identified and the management, resources and





processes be put in place for their implementation. This session was attended by representatives from the ICT4Water projects (EFFINET, iWIDGET, ISS-EWATUS, URBANWATER, WIDEST) and academics outside of the cluster from the University of Staffordshire, Imperial College of London and the Indian Institute of Science (Bangalore) who share an interest in Standards and Standardisation. The main points discussed at the meeting are summarised in Appendix 1.

- 6. Open day ICT and Water Management in Barcelona (September 22, 2015), organised by EURECAT.
- 7. Exhibition Booth and special networking session on Smart Cities and the IoT (https://ec.europa.eu/digital-agenda/events/cf/ict2015/item-display.cfm?id=15433), during the ICT 2015 Exhibition and Conference in Lisbon (18-22 October 2015), organised by UNEXE and EURECAT. Detailed report is presented in Appendix 1.
- 8. Workshop 'Global Lessons Learned on Implementation of Information and Communication Technology', during the Water and Development Congress & Exhibition in Jordan (21st of October 2015), organised by the International Water Association.
- 9. Participation at the special session about Smart Water, during the European Utility Week. This Event took place in Vienna (3-5 November 2015) (http://www.european-utility-week.com/). It was an event attracting mostly industrial partners specializing in smart applications (energy and water). In 2015 they had a dedicated session on Smart Water for the first time, and ICT4WATER was represented there with a presentation by UNEXE.
- 10. Second participation at the EUW Conference in November 2016 (Barcelona, Spain), where they had an exhibition booth, a hub session with 8 projects participating, and also a presentation at the Summit Conference.
- 11. Cluster meeting and participation at the EIP Water Innovation Conference in Leeuwarden (9-11 February 2016).
- 12. Participation at the WaterWise Conference in London (8 March 2016).
- 13. Participation at the WSSTP Working Group Water & Energy, in all the meetings (April 2016, June 2016, November 2016), where WIDEST is leading the Smart Water thematic group.
- 14. Participation at the Summer School on Smart Water Management, held in August 2016 in Ascona, Switzerland, organised by SMARTH20, another cluster member. During this event all the lectures have been videoed and uploaded as part of T5.4.
- Organising a special session for Young Professionals at the WaterIdeas Conference in Bologna, Italy (October 19, 2016)
- 16. Participation at the WATERLINK Conference, organised by the Water Alliance, in Leeuwarden (Jan 2017)
- 17. Participation at the Stakeholders' consultation for the New Drinking Water Directive, where remarks about smart water have been included to the white paper (June 2015, December 2015, September 2016)
- 18. Participation at a ICT4WATER cluster meeting in Jerez (Spain) in June 2016





The above list is not comprehensive. Many other events, which WIDEST attended, were linked also to the cluster. The above list contains only the events where the ICT4WATER cluster reference was prominent.

Apart from events, conferences and workshops, WIDEST participated in the ICT4WATER newsletters, passed material to the cluster for the website, and assisted in any way possible.

3.2 EIP Water Action Group Ctrl+SWAN

The main goal of Task 5.6 is for WIDEST to work with other stakeholders to establish a Smart Water Action Group (EIP on Water or EIP on Smart Cities), identifying and approaching stakeholders and engaging in meetings, activities and events, related to Smart Water.

Many EIP Action Groups have been established since 2013-14. Our first step was to go through the existing action groups and find out whether a group related to Smart Water already existed. It was considered that linking WIDEST to an existing action group, where some stakeholders were already involved, would be preferable to starting one with new stakeholders. Besides, the EC would not accept the existence of two action groups with similar goals and/or thematic interests.

Consequently we decided to link with the existing EIP Water Action Group CTRL+SWAN - Cloud Technologies & ReaL time monitoring + Smart Water Network (AG126)

(http://www.eip-water.eu/CTRL_SWAN and http://www.swan.technology/

The Action Group is led by Prof Armando di Nardo (University of Naples, Italy).

One WIDEST partner (UNEXE) was already a



member of this action group since 2014. A second WIDEST partner (EURECAT) also joined the group in February 2015. After presenting the WIDEST scope to the Group, Gabriel Anzaldi (EURECAT), Lydia Vamvakeridou-Lyroudia (UNEXE) and Dragan Savic (UNEXE) became also members of the Action Group Steering Committee from March 2015.

Moreover, WIDEST introduced this Action Group to the ICT4WATER cluster, leading to the Action Group becoming an associated partner of the cluster (http://www.ict4water.eu/index.php/projects-partners/), and from December 2016, with the agreement of the EC (DG CONNECT and EASME) a full permanent member of the cluster (the 20th member).

As a consequence, WIDEST and Ctrl+SWAN have linked and coordinated dissemination activities, while there has also been continuous interaction between the Group and the Cluster, with people from the Cluster joining the Action Group (e.g., from iWIDGET, WATERP, ISS-EWATUS, WATERNOMICS,





SMARTH20, PROTEUS). In the two years that WIDEST was active, there have been the following coordinated dissemination activities:

- Participation of the cluster at the special session organised by WIDEST and iWIDGET during the IAHR International Conference on 02/07/2015- in the Hague, (Special session of EU funded research on ICT and Water), organised by Dragan Savic and Lydia Vamvakeridou-Lyroudia (UNEXE), with the participation also of Gabriel Anzaldi (EURECAT).
- Participation of Ctrl+SWAN at the Open Day organised by WIDEST (EURECAT) in Barcelona (September 22, 2015).
- Participation of Ctrl+SWAN at the ICT4WATER exhibition booth and special session during the ICT2015 Conference and Exhibition in Lisbon (20-22 October 2015), organised by UNEXE and EURECAT.
- 4. Participation of Ctrl+SWAN together with WIDEST at the session on Smart Water during the European Utilities Week, in Vienna (2-5 November 2015), organised by UNEXE.
- 5. Participation of Ctrl+SWAN (Anna di Mauro) with WIDEST (Lydia Vamvakeridou-Lyroudia/UNEXE) at two stakeholder consultation meetings (26 May 2015 and 8 December 2015) held in Brussels related to the new Drinking Water Directive to be released in 2018-19, invited by the organisers (KWR). During these events we were able to present to the EC and the other stakeholders, the importance of including the use of Smart Water technologies for monitoring and reporting drinking water quality.
- 6. Participation at the EIP Water Action Group Annual Conference in Leeuwarden (9-11 February 2016). Alongside this Conference, the EIP Water Action Group was also present at the ICT4WATER cluster meeting, while members of the ICT4WATER cluster participated also at the Action Group meeting.
- 7. Participation at the WATERLINK Symposium in Leeuwarden (26 January 2017). Here the Action Group organised a special session on sensors and WIDEST participated, by presenting material about the cluster.
- 8. WIDEST has also participated in all the teleconferences held by the action group steering committee after February 2015. Usually there is a steering group teleconference every two months (on average-sometimes more frequently, organised by Anna Di Mauro), unless the steering group meets in person during common events.

The positive result of this involvement with Ctrl+SWAN is that we expanded the base of stakeholders involved with Smart Water, by extending our dissemination activities to the members of the Action Group and we linked many projects and people from the ICT4WATER cluster with the Action Group. We believe that more benefits will come out of this synergy, even after the end of WIDEST, because members of the Group and the Cluster met, exchanged ideas, results and experiences. Discussions among individuals for future activities (e.g. submitting proposals for further H2020 calls, further actions) have already started.





3.3 Water supply and sanitation Technology Platform (WssTP)

http://www.wsstp.eu/site/online/home

WssTP are already partners of WIDEST with a special task on project branding and the collection of material for the video channel. They also provide increased contacts for dissemination through their newsletter contact lists. Apart from these, they organise a number of events (conferences, workshops), which offer an excellent opportunity for dissemination.

During the two years 2015-2017, WIDEST has participated at the following events:

- Water Innovation Europe Conference in 2015 and in 2016 (June 2015 and June 2016 respectively),
 where the ICT4WATER cluster has been presented, as well as the links of smart technologies to the
 Juncker directive (L.S.Vamvakeridou-Lyroudia-UNEXE) to a scientific/academic audience and water
 industry representatives in 2015. In 2016, WIDEST held an exhibition booth for the project and the
 cluster.
- 2. The H2020 brokerage and Working Groups event on November 22, 2015, June 2016, November 2016 and a special Working Group meeting in April 2016 in Karlsruhe. WIDEST was represented there by UNEXE (L.S.Vamvakeridou-Lyroudia), as a member of the Working Groups.

Further details about these activities are presented in Appendix 1. Contacts and networking with the EC, the water industry, SMEs have been made during the event. WIDEST was invited to join the Water & Energy WssTP Working Group, which was just starting. The first meeting of this working group was planned for November 23, 2015, but it was postponed due to unforeseen events (please see the related report in Appendix 1). The first working meeting took place during the 2nd year of the project (April 2016) and WIDEST attended it. In November 2016 a new working group was formed, targeting the Nexus (Water-Energy-Food) theme. WIDEST also participated in this second working group, which is led by one of the cluster projects (SIM4NEXUS)

3.4 International Water Association (IWA)

http://www.iwa-network.org/

IWA is another partner of WIDEST, responsible mainly for dissemination activities related to the Wiki and the international workshop on ICT Implementation Promotion in Low and Middle Income Countries (LAMIC). Apart from these activities, IWA is an excellent dissemination channel for reaching scientific and academic audiences and practitioners, and it is in this capacity that they are included in this list.

During the 1st year of the project, WIDEST participated in the Workshop on ICT Implementation Promotion in Low and Middle Income Countries (LAMIC) that took place in Jordan (16-20 October 2015). IWA organized this session and presented WIDEST.

During the 2nd year of the project, IWA organised an event for Young Water Professionals in the fall 2016 which aimed to share the knowledge as compiled in WIDEST project. Additionally IWA sought further





opportunities to contribute to events that will allow the dissemination of the key messages of WIDEST project throughout 2016. The 13th IWA Leading Edge Conference on Water and Wastewater Technologies, which will took place in Spain (June16-19, 2016) was such an event, which also hosted an ICT4WATER cluster event.

Further targeted outreach among water professionals of the material developed by WIDEST (such as the roadmaps) were realized by specific dissemination to ICT4Water experts that are participating in the IWA specialist groups and the broader IWA network.

3.5 SWAN Smart Water Network Forum

http://www.swan-forum.com/

WIDEST has already made contact with this forum and participated with a presentation on the ICT4WATER cluster and on WIDEST at the annual SWAN Conference (29-30 April, 2015-UNEXE). This forum has also been in contact with WIDEST and the ICT4WATER cluster for the common paper on standardisation about Smart Water.





4. Communication tools and activities

4.1 Overview

Throughout the project, WIDEST used the following communication tools:

Table 4.1: Communication and Dissemination Tools

| Tools | Comments | | | | |
|-------------------------------|--|--|--|--|--|
| Project website www.widest.eu | Set up from May 2015 and updated as needed. It contains all the links relevant to the project. Its design and implementation is detailed in D5.1. Recently the website underwent radical improvement in terms of visualisation by EURECAT. | | | | |
| Twitter account | The Twitter account is @widest_eu (https://twitter.com/widest_eu) and, again all the partners are invited to communicate project news. Set up and in use from June 2015. | | | | |
| LinkedIn group: | For LinkedIn a group address has been created: https://www.linkedin.com/grp/home?gid=8350127 by UNEXE (Dragan Savic) and all the partners were invited to join the group. Set up and in use from June 2015. | | | | |
| Project branding (logo) | Set up from April 2015, already in use. Files available to all partners to ensure consistent project branding (by WssTP). The logo appears on every page of this report. | | | | |
| Document templates | Available for project reports, presentations, meeting minutes etc., prepared by EURECAT and available to all partners, to allow the project outputs to be communicated using consistent project branding. As an example, this report is written in the standard template for all the projects reports. | | | | |
| Project Poster | It was prepared by UNEXE and is available from September 2015. The first time it was used was at the Open Day event in Barcelona. From then on, we have showed it in every event, e.g. at all the WssTP events and the EUW16 exhibition booth. It can be downloaded at http://www.widest.eu/images/downloads/ict4water_open_day/pdf/WIDEST.pdf | | | | |
| Project contacts list | Available as individual list, but also enhanced by the contacts list of WssTP for newsletter dissemination etc. Due to the close links with ICT4WATER and the Ctrl+SWAN action group, we now disseminate to wider lists, through the lists of these two initiatives, which have been added to the initial lists by WIDEST. | | | | |





| MOOC | The MOOC platform started in M9 as planned, with the two first e-learning |
|-----------------|---|
| | courses linked to it. They can be reached at: |
| | http://www.widest.eu/index.php/project/moocs |
| Blogspots | WIDEST contributed to the IWA blogspots. Details are given in Section 4.4 |
| Video channel/ | Material collection for the video channel (e.g., video clips on Smart Water are |
| YouTube channel | already being collected and a video Tube (YouTube) account has been set up |
| | since June 2015. The material increased as the Project progressed. A lot of |
| | material was collected during the summer school in Switzerland (August 2016). |
| Newsletters | WIDEST got actively involved in the ICT4WATER newsletter published |
| | quarterly (as opposed to an initial 6 monthly frequence), where WIDEST |
| | contributions and related activities appear in each issue. Details are presented |
| | in Section 4.4 WssTP publishes another monthly Newsletter, which goes to a |
| | further distribution list. WssTP, as a partner in the project, hosts all kind of news |
| | related to WIDEST and the ICT4WATER cluster.(WSSTP contribution) |

4.2 Video competition - Strategic change and switch to other activity

Out of all the communication and dissemination activities planned for Year 1, the Video competition is the only one that was postponed initially for strategic reasons and later cancelled and shifted to other activities due to legal issues. Initially, it was due to start in October-November 2015, with the results announced by the end of the 1st year.

However, as detailed in Chapter 3, the active and fruitful linking with the ICT4WATER cluster has given us new ideas about how to exploit better this connection, for the benefit of the video competition.

This video competition will address young artists and video animators, up to 35 years old. They will need to produce a short video clip (60-120 seconds in English), with the theme "ICT-Smart Water meters for water management". Most of the competitors (most likely all of them) are not expected to have any previous knowledge on the subject. So, providing background information to them is essential in order to succeed and produce something creative and original; we do not want to get videos that would replicate clichés. Most importantly we want to stress the idea of the EU dimension.

However a major challenge was that in the first few months of the project we did not have any structured educational background material (presentations, lectures) that would be useful for "beginners" and students. The material we already have is addressing professionals, water utilities and experts, not students. As for the e-learning MOOCs available, they are focused too much towards individual behaviour around the house and do not cover any broader view.





By contrast, through the ICT4WATER cluster we learned about the planned summer school for students (http://www2.idsia.ch/cms/smartwater/), which is due to take place in August 2016, organised by the SMARTH20 project. Several partners from WIDEST and other projects will participate, teaching and presenting various related matters out of the ICT4WATER cluster projects, including workshops. The material for this summer school will be educational, addressed to students without any previous knowledge on the subject. Moreover it will include sessions about customer behaviour towards Smart Water, which is of utmost importance for the video. The material, obviously, is not ready yet. Consequently, the results of the competition and the link to the video will be included in next year's report.

Therefore we decided to postpone the competition and start it once suitable background material will be ready, i.e., in early September 2016. We plan to announce the competition together with a link to the website, where the educational material will be uploaded. We could also include there interviews with the students attending the summer school, so as to include students' views too.

Finally, initially we thought that we would advertise the competition only to the countries where the main WIDEST partners are based (i.e. UK, Spain, and France). Now taking advantage of our links to ICT4WATER we can have a broader base, advertising through all the cluster projects, practically to all EU countries.

In conclusion, we expected to announce the competition in September, with the results announced at the end of 2016. However in September 2016, UNEXE who is the partner responsible for the Task, consulted with the legal and EU support officers at the University and faced new issues. The University was reluctant to fund and support the event because of IPR issues for the videos. They stated (EU support team- Dr Enda Clarke) that it would not be clear who would have the IP right of the videos, especially since it was to be an international event and the outcome would be hosted by another website and not the website of UNEXE. After two meetings, the issue was not solved and we decided to change the activity altogether.

Since there was a budget (around 5000 Euros) foreseen in the proposal and the GA for prizes and other expenses, we decided to switch to another, not initially foreseen activity:

We organised an extended event and presence for the ICT4WATER cluster at the European Utility Week in 2016 (http://www.clarion-cms.com/uploads/Pages/site229_45219_en_file1.pdf please see further details in Appendix 1), with an exhibition booth, a half day hub session open to all the visitors (over 7000) and a presentation and panel discussion at the Summit Conference about Smart Water (November 15-17, 2016) in Barcelona (http://www.european-utility-week.com/2016programme-highlights). It is difficult for the ICT4WATER cluster members to participate to such events, because of the high costs for booth and hub session (it was only possible to have a hub session if we had a booth). The ICT4WATER projects were invited to attend. It was attended by iWIDGET, WATERP, DAIAD, PROTEUS, WATERINNEU, WATERNOMICS, BLUESCITIES, WIDEST-8 projects), who all made presentations about different outcomes of their results. It offered unique opportunities for networking and contacts with the industry.





The major feature is that with this participation Smart Water started having a presence at a mostly Energy oriented major event, contributing to a wider impact for the Smart Water Community.

The exhibition booth alone cost 8263 Euros, and this amount was paid by WIDEST (UNEXE), without claiming from any other project or partner, instead of the budget predicted for the initial activity.

This is a deviation and a change to the timeline, regarding the GA (Task 5.2), but we believe it was necessary and it was replaced by another non-predicted and costly activity, which again promoted WIDEST and the ICT4WATER cluster visibility in networks where smart water had a small presence so far.

4.3 MOOCs (Massive Open Online Courses)

Massive Open Online Courses (MOOCs) are one of the main audio-visual channels for engaging and increasing awareness for the general public (households, schools, businesses). They promote the learning and understanding of Smart Water management and the importance of water efficiency. The first MOOC, in the form of an e-learning platform was uploaded on Month 9 (i.e., in October 2015). It is the e-learning platform for water efficiency at home, which was developed by an iWIDGET partner (NTUA). The second MOOC is about flood risk management, developed by UNS.

Access to MOOCs takes place through the project website:

http://www.widest.eu/index.php/project/moocs

After the end of the project, the ICT4WATER cluster will "inherit" the links to the MOOCs and enhance them, if possible, around a series of "themes" related to ICT and Water, which will be defined in Work Package 1, during Stage 2, i.e., the second year of the project.

4.4 Newsletters and other means of communication

Initially, it was thought that WIDEST would publish a six-monthly Newsletter. However, our links with ICT4WATER changed our views on it. ICT4WATER published a quarterly Newsletter. Instead of publishing a second Newsletter, with the same or similar news, sent to the same distribution list, we decided to get more actively involved in the ICT4WATER cluster (please see Section 3.1 for details), contribute to the Newsletter, and publish the WIDEST news through the ICT4WATER cluster newsletter (e.g. http://us8.campaign-archive2.com/?u=46ad96ae8c306627be2d57709&id=24c4357017) (please see Appendix 1 for details)

WssTP publishes another monthly Newsletter, which goes to a further distribution list. WssTP, as a partner in the project, hosts all kind of news related to WIDEST and the ICT4WATER cluster. Obviously, the scope of this Newsletter is wider and WIDEST does not contribute to all the newsletter issues, only whenever there is something important to announce.





A key channel for broad dissemination of WIDEST project has been the newsletters and blogposts of the International Water Association:

In February 2016, IWA shared twice a blogpost on the impact of ICT in the water sector: http://www.iwa-network.org/blog2/the-impact-of-ict-in-the-water-sector:

This was shared twice with +50,000 subscribers as part of the World Water Congress in Brisbane's newsletter:

http://us8.campaign-archive2.com/?u=74edc4ba9b90d5e4db2355c52&id=16c3d59e3c&e=
http://us8.campaign-archive2.com/?u=74edc4ba9b90d5e4db2355c52&id=49547504f6&e=7fb37dd051

A second earlier (August 2015) blogpost was shared on the 'Wise use of water using smart technologies': http://www.iwa-network.org/blog2/wise-use-of-water-with-smart-technologies.

Finally, as mentioned already in the dissemination plan in M6, we decided not include a Wiki with terms and definitions until input from WP1 and WP2 is complete (towards the end of the second year), where we will be able to post also material from the roadmaps (WP3 and WP4).

4.5 The Website and its use

The total amount of sessions at the project website aggregated during 1st and 2nd year has been 7.272, meaning that 7.272 new and returning users had visited the WIDEST webpage (http://widest.eu). A total amount of 5.718 of these users were new users that visited the page for the first time. During the second year the total number of viewed pages from WIDEST web site accounted for 9.134, which means an average of 3.53 pages per session. The average time per session that the visitor stayed connected and reading the web page has been of 4:48 minutes.

| <u>Year</u> | <u>Sessions</u> | <u>Users</u> | Viewed Pages | Pages/Session | Average Time per Session (s) |
|-------------|-----------------|--------------|-----------------|---------------|------------------------------|
| First | 4.700 | 4.067 | 7.359 | 1.57 | 65 |
| Second | 2.585 | 1.678 | 9.134 | 353 | 288 |

Within the top five of a total amount of 117 different countries visiting WIDEST (during the 2 years) there are United States, Spain, China and United Kingdom. In the second place, one can see that there is a non-assigned value, meaning that the location has not been captured. The reason of the N/A values can be due the usage of some mobile devices, we included this value due to its representativeness. The project location full statistics are:

| <u>Position</u> | <u>Country</u> | <u>Sessions</u> | % Sessions |
|-----------------|----------------|-----------------|------------|
| 1 | United States | 1.673 | 23.01% |
| 2 | N/A | 1.239 | 17.04% |





| 3 | Spain | 980 | 13.48% |
|---|----------------|-----|--------|
| 4 | United Kingdom | 526 | 7.23% |
| 5 | Russia | 259 | 3.56% |

In Twitter, the activity accounted for 1.010 Tweets in the period ranging from 1st February 2015 to 30th January 2017. That Twitter activity caused that 234 Twitter users had engaged to WIDEST's Twitter account (@widest_eu) while WIDEST project is following 257 Twitter accounts.

| Start date | End date | <u>Tweets</u> | Following | <u>Followers</u> |
|------------|------------|---------------|-----------|------------------|
| 01/02/2015 | 14/03/2016 | 486 | 145 | 110 |
| 01/02/2015 | 30/01/2017 | 1010 | 257 | 234 |

The Twitter account helps to increase the visibility of WIDEST project, as any information is shared rapidly and can arrive to a wide range of people including researchers, industry, SMEs or citizens. This can be seen in WIDEST Twitter account audience classification, where the top five topics are Science news, Technology and Business and news.

Interests

| Interest name | % of audience |
|--------------------------------|---------------|
| Science news | 78% |
| Business and news | 77% |
| Politics and current events | 70% |
| Business news and general info | 68% |
| Tech news | 67% |
| Technology | 67% |
| Government | 64% |
| Green solutions | 64% |
| Business and finance | 54% |
| Entrepreneurship | 52% |

Regarding the audience statistics, the top five tweets in terms of Impressions (users that have seen that tweet) and Engagements (interactions – meaning retweets, favourites or replies- with that tweet) can be found in the Figures below.







| Tweets | Top Tweets Tweets and replies Promoted | Impressions | Engagements | Engagement rate |
|--------|---|-------------|-------------|-----------------|
| WIDEST | WIDEST @widest_eu · Nov 24 After analyzing more than 3500 ICT and water related documents, this is the frequency map of keywords. Wow! pic.twitter.com/KoBhOdbLfu View Tweet activity | 920 | 20 | 2.2% |
| WIDEST | WIDEST @widest_eu · Dec 19 Worth reading! #SmartCity #roadmap iwa-network.org/building-a-roa View Tweet activity | 900 | 12 | 1.3% |
| WIDEST | WIDEST @widest_eu · Nov 24 Upcoming deliverables 1.8 and 1.5 contain an analysis of ICT and water related literature, commercial developments and technology trends View Tweet activity | 388 | 3 | 0.8% |
| WIDEST | WIDEST @widest_eu · Nov 25 @CETAQUA @AguasDeHuelva @CanalUHU @AytoHuelva @iAgua Congratulations! View Tweet activity | 240 | 0 | 0.0% |
| WIDEST | WIDEST @widest_eu · Dec 24 Thanks so much for a great year! Happy Holidays! @Water_UofExeter @H2ODraganSavic @SIM4NEXUS @ict4water_eu View Tweet activity | 213 | 1 | 0.5% |





5. Conferences and Events

5.1 Special Sessions at Conferences of high scientific quality

Conferences (scientific, academic, or trade) are important dissemination channels for WIDEST both for networking and spreading the word about the WIDEST project and also for presenting project progress and results.

According to the GA (Task 5.5), the project needs to host two international workshops about WIDEST, as special sessions/side events at suitable international conferences of high esteem. They would follow the same format as a normal conference session, but they should also introduce WIDEST and present some issues and analysis for discussion.

The first of these special sessions took place early in the project. It was called "EU projects for ICT and Water", and was organized as a special session during the IAHR World Congress by EURECAT on July 2, 2015 in The Hague, Netherlands. It hosted papers from the ICT4WATER cluster (17 papers, 4 posters from 10 projects and the Ctrl+SWAN action group; the full list is included in Appendix 1). These Conferences take place every two years in different locations, attracting large numbers of participants, mainly from the academia and from research organisations.

The second took place during the **CCWI** (**Computing and Control for the Water Industry**) **International Conference**, which was held in Leicester, UK. (September 1-3, 2015). The special session took place on September 2, 2015. It was again organized with the ICT4WATER cluster by UNEXE (WIDEST/iWIDGET, with the help of ISS-EWATUS (Ewa Magiera) and BLUESCITIES), presenting 17 papers from 8 cluster projects. It was followed by a second session on standards and standardization organized by UNEXE. The full list of the papers and extended notes from the special session are again in Appendix 1.

Initially we thought that we should hold the second special session during the second Year of the Project. However, most suitable conferences in 2016 (e.g., WDSA-Water Distribution Systems Analysis, HIC-Hydroinformatics) were to be held outside Europe (in Colombia and South Korea, respectively). This fact alone makes it impossible to organize a well-attended special session, due to cost issues. In 2016, in Europe, there's no equivalent Conference taking place. The next appropriate conferences in Europe are all to be held in 2017, after the end of WIDEST. Besides, by September/October 2015 the five cluster projects of the first generation were finishing, and there was no way to have them participating in Conferences, presenting mature results. Hence we decided to bring forward the second Conference special session.

5.2 Participation to Conferences and Events

During the two years WIDEST participated at the following Conferences and events:





| Event | Date | Location | Targeted audience | Attended by: |
|---|--------------------|-------------|---|---|
| Water Eco-innovation meeting (EASME) | 26 February 2015 | Brussels | EC officers | EURECAT |
| OGC Interoperability Day | 13 March 2015 | Barcelona | Academia, Industry, SMEs, | EURECAT |
| ICT for water – Working Workshop meeting | 18 March 2015 | Brussels | EC officers | EURECAT, UNEXE, CETAQUA |
| ICT for water - Annual Cluster | 19 March 2015 | Brussels | Experts from the ICT4WATER cluster projects and EC officers | EURECAT, UNEXE, CETAQUA |
| Global Water Forum | 13 April 2015 | South Korea | Academia, Industry, SMEs, Students, NGOs, Policy/Governance representatives | UNEXE |
| SWAN Forum 2015 Conference | 29-30 April 2015 | London | Academia, Industry, SMEs, Water Utilities, Water experts | UNEXE |
| Special session on standards and standardisation (closed event with invited stakeholders) | 1 May 2015 | London | Invited session for drafting the conclusions from the open session in the previous day. Representatives from the ICT4WATER cluster and industrial partners | UNEXE ICT4WATER |
| Stakeholder Consultation on the Drinking Water Directive | 26 May 2015 | Brussels | Selected stakeholder group, EC | UNEXE Ctrl+SWAN |
| PTEA (Spanish Technologic Water Platform) – Work Group 4 meeting | 26 May 2015 | Madrid | Academa, industry | EURECAT |
| Water Innovation Europe 2015 | 24-26 June 2015 | Brussels | Academia, industry, SMEs, Students, EC | UNEXE, WssTP |
| IAHR World Congress 2015 Special Session | 2 July 2015 | Delft | Academia, industry, SMEs, Students | UNEXE, EURECAT ICT4WATER Ctrl+SWAN |
| PTEA (Spanish Technologic Water Platform) – 5 th General Assembly | 30 July 2015 | Madrid | Academia, industry | EURECAT |
| CCWI 2015 Special Session | 1-3 September 2015 | Leicester | Academia, industry, SMEs, Students | UNEXE ICT4WATER |
| 42nd IAH International Congress | 17 September 2015 | Rome | Academia, industry, SMEs | EURECAT |





| Hydro DWG Workshop | 20-21 September 2015 | Orleans | Academia, industry, SMEs | EURECAT |
|--|-------------------------|-----------------------|---|---|
| ICT for water management Open Day | 22 September 2015 | Barcelona | Academia, industry, SMEs, Students | EURECAT CETAQUA UNEXE ICT4WATER Ctrl+SWAN |
| Sant Miquel Fair | 24 September 2015 | Lleida | Industry, SMEs | EURECAT |
| ICT2015 Exhibition, Conference and networking session | 18-22 October 2015 | Lisbon | Academia, industry, SMEs, Students, EC | EURECAT UNEXE ICT4WATER Ctrl+SWAN |
| IWA Development Congress and Exhibition | 19-23 October 2015 | Jordan | Academia, Industry, - SMEs Students | IWA |
| European Utility Week | 3-5 November 2015 | Vienna | Industry, Utilities. Smart Water and energy | UNEXE Ctrl+SWAN |
| WssTP H2020 Brokerage Event and Working Groups | 22 November 2015 | Brussels | Academia, industry, SMEs, EC | UNEXE WssTP |
| Smart Water Grid International Conference 2016 | 27 November 2015 | Incheon | Academia, industry, SMEs, EC | UNS |
| lot 2015 - International Conference on the Internet of Things | 28 November 2015 | Seoul | Academia, industry, SMEs, EC | UNS |
| Final Stakeholder Consultation on the Drinking Water Directive | 8 December 2015 | Brussels | Selected stakeholder group, EC | UNEXE Ctrl+SWAN |
| Smart Energy UK & Europe 2016 | 28-29 January 2016 | London | Energy and Water Industry, SMEs | UNEXE |
| EIP Water Conference | 9-11 February 2016 | Leeuwarden | Academia, Industry, SMEs, Water Utilities, Water experts | EURECAT, UNEXE, WSSTP, ICT4WATER, Ctrl+SWAN |
| WaterWise Annual Conference | 3 March 2016 | London | Academia, Industry, SMEs, Water Utilities, Water experts | UNEXE |
| Aplec Joves del Camp | 18 March 2016 | Mollerussa | Academia, Industry, SMEs | EURECAT |
| Water and Energy Working Group meeting | 19-20 April 2016 | Karlsruhe, Germany | Closed meeting for invited experts, in preparation of the participation to the Water Innovation Conference in June (please see below) | UNEXE |





| Aquathon | 13 May 2016 | Granada | Academia, Students | CETAQUA |
|---|------------------------|-------------|--|--|
| 13 th IWA Leading Edge Conference on Water and Wastewater technologies | 16-19 June 2016 | Spain | Academia, Industry, SMEs, Water Utilities, Water experts ICT4WATER cluster projects and EC officers | EURECAT, UNEXE, CETAQUA ICT4WATER |
| Water Innovation Europe 2016 | 21-23 June 2016 | Brussels | Academia, industry, SMEs, Students, EC | UNEXE, WssTP |
| SmartH20 Summer School | 21-25 August 2016 | Switzerland | ICT4WATER cluster, students | UNEXE, EURECAT ICT4WATER |
| FREEWAT Open workshop | 30 September 2016 | Paris | Academia, Industry, SMEs, Water Utilities, Water experts, ICT4WATER cluster projects | EURECAT |
| Greencities event | 05-06 October 2016 | Malaga | Academia, Industry, SMEs, Water Utilities, Water experts | CETAQUA |
| Water Ideas 2016 | 20-21 October 2016 | Bologna | Academia, Industry, SMEs, Water Utilities, Water experts | EURECAT |
| European Utility Week | 15-17 November 2016 | Barcelona | Industry, Utilities, Smart Water and energy, ICT4WATER cluster | UNEXE, EURECAT ICT4WATER, |
| iWater | 15-17 November 2016 | Barcelona | Academia, Industry, SMEs, Water Utilities, Water experts | EURECAT |
| ICT for Water Open Day App Storming | 25 November 2016 | Huelva | Academia, Students | CETAQUA |
| Bluescities final conference | 13-14 December 2016 | Brussels | Academia, EC, representatives of cities, industry | UNEXE |
| WaterInnEU Final Event | 24 January 2017 | Barcelona | Industry, Utilities, ICT4WATER cluster | EURECAT |
| WATELINK Symposium | 26 January 2017 | Leeuwarden | Energy and Water Industry, SMEs | UNEXE Ctrl+SWAN |

Evaluation of these events is included in Appendix 1.

In terms of dissemination value and impact, there are five events that stand out: The two special sessions (IAHR and CCWI), the ICT Open Day Event in Barcelona, the participation at the ICT2015 Conference and Exhibition in Lisbon and the participation at the European Utility Week (2015 and especially 2016). We believe that they were the results that provided the highest scientific content (IAHR and CCWI) and





the greater visibility (Barcelona, Lisbon, Vienna) for the EC, the industry, the experts, the local authorities, and (in the case of Lisbon) also for the general public.

Regarding our established links with the EUW, we successfully established links between smart water and the energy sector, which did not exist, as follows: In 2015, the Event and Exhibition was held in Vienna (3-5 November 2015) (http://www.european-utility-week.com/). This event is attracting mostly industrial partners specializing in smart applications (energy and water). In 2015 the event had a dedicated session on Smart Water, for the first time in its history, where WIDEST was represented by UNEXE. The Exhibition and the Conference usually attract 4000-5000 attendees, mostly from the Energy Industry. In 2015 it was the first time they organized a water session, where WIDEST was invited. In 2016, at the invitation of the organisers, we organised an Exhibition booth, a hub session and a presentation and panel participation during the main Conference/Summit. We included the ICT4WATER cluster (8 projects) and the Action Group in the activities. WIDEST paid in full for the booth and the participation for the cluster, which was not predicted when we wrote the proposal.

After the end of the project, we have been invited to participate in a magazine with a short article, which will be published in February 2016 on European Energy.





6. Publications and other contributions

During the 1st year of the project there have been the following publications:

- The white paper, "ICT4Water Cluster report on Recommendations for Standards and Standardisation in the European Smart Water Market on standards and standardization", which was developed by the ICT4WATER and iWIDGET, with the participation of WIDEST http://www.i-widget.eu/images/pdf/CCWI_iWIDGET_ICT4Water_Standards_report_v2.pdf
- 2. "News from the EU cluster ICT for Water" publication in the Italian Journal of Groundwater. http://www.acquesotterranee.it/sites/default/files/ASr12076.pdf

The following publications are not direct WIDEST publications, but publications in which WIDEST has been highly involved:

 "The Roadmap for ICT and Water Management, Emerging topics and technology roadmap for Information and Communication Technologies" (Published, as final version in August 2016 by the EC). (https://ec.europa.eu/digital-single-market/en/news/emerging-topics-and-technology-roadmap-ict-water-management-august-2016)

This paper came out of the ICT4WATER cluster meeting, with the participation of WIDEST, in Brussels (March 2015), and was followed by revisions by the EC. Following the publication of this roadmap, WIDEST, with the approval of the EC, has started disseminating on it in presentations, discussions etc.





7. Activities per WP Task

Task 5.1 - Website and Social networks

This task was active for the whole project and the progress is detailed in Section 4.1, with further details in Sections 4.3 and 4.4.

Task 5.2 - Smart Water video Competition

Activities related to this task have switched to another activity, as detailed in Section 4.2.

Task 5.3 - Collection of Video Material

This task is led by WssTP, who is collecting different types of video materials. Major contribution to this material came from the lectures at the summer school in Switzerland, which were videoed and uploaded.

Task 5.4 - Video Channel

It is the WIDEST intention to create a YouTube video channel, where different types of video material produced during the project or collected from the other sister projects from the ICT4WATER cluster will be hosted. This video channel is the central location where viewers from all types of audiences and from different backgrounds will be able to access them. All the partners, but also stakeholders were encouraged to contribute to the material of this channel, which will also host all types of announcements and events (lead by WssTP). It was the intention of WIDEST to publicise this web channel mainly during the 2nd dissemination stage (i.e. during the 2nd year of the project), when enough material would have been collected. Some of the material were developed within WIDEST (T5.3) from the demonstration workshops and the special sessions of the open events, interviewing also stakeholders and providing web-lectures as introduction to Smart Water Management. WssTP is leading the collection of the material. The video series contain about ten or more videos lasting 5 to 15-minutes, although longer videos are also included, (e.g. from lectures at the summer school and related discussions). These came mainly from the open events organised by the partners, but also from other sources, e.g. videos prepared for special events/projects.

A significant number of videos from different projects have been collected from the ICT 2015 event in Lisbon, coming from various projects of the ICT4WATER cluster (e.g. the collective ICT4WATER cluster video http://ict4ater.eu), as well as a special video for the cluster itself.

Also material is being collected from partners (e.g. from UNEXE - videos on Smart Water management and Hydroinformatics- https://www.youtube.com/channel/UC1rinKXsJvzYjl3sgzYGJ3g with 13 videos) and also from the summer school in Switzerland (August 2016).





Task 5.5

Open house events and demonstration workshops

There were two types of events organised by WIDEST:

- a. Open house events
- b. Demonstration workshops.

The <u>Open House events</u> are friendly, local, informal events open to the public at large, which will last one day. They are addressed to and target as audience the local community, including students/schools, local groups of citizens and businesses. Each event will include a brief introductory lecture aimed at the general public, videos, and (when possible) a demonstration of Smart Water management concepts, followed by a question and answer session.

The <u>Demonstration workshops</u> are also open to the public, but addressed to the students. Consequently their agenda and content is more academically oriented.

Each partner hosted one Open House event and one demonstration workshop. The list of the events already organized suring the project per partner is as follows:

EURECAT:

Open event: It took place on September 22, 2015 in Barcelona, called ICT4WATER open day. This event was organized with the participation of the ICT4WATER cluster, the participation of the Ctrl+SWAN Action Group. It was also attended by the EC officer Dr Grażyna Wojcieszko, Policy/Project Officer, DG CONNECT, Unit H5 – Smart Cities & Sustainability.

<u>Demonstration workshop</u>: It took place during the 2nd year of the project, at a summer school held in Switzerland, for postgraduate students by the ICT4WATER project SMARTH20 (22-25 August 2016). This event hosted demonstration workshops from other partners (UNEXE), because lasted for a week.

UNEXE:

<u>Open event</u>: It was organized on October 20-22, 2015 in Lisbon, during the ICT2015 exhibition. UNEXE was the main organizer, but EURECAT assisted also. WIDEST participated there together with the ICT4WATER cluster. We had an Exhibition booth for the Cluster at the centre of Lisbon for five days, open to the public, manned all the time, where the general public was informed about Smart Water, with demonstrations, brochures and videos from members of all the ICT4WATER projects, as well as a special session about ICT and smart cities on October 22, open to the visitors of the Exhibition and the Conference.

<u>Demonstration workshops</u>: During the first year of the project, UNEXE organized two demonstration workshops: (1) a special session at the IAHR Conference (July 2015, The Hague) with 13 papers and presentations, (2) a special session during the CCWI Conference (Leicester, September 2015), with 12 papers and presentations. During both sessions members of the ICT4WATER cluster presented and





demonstrated the results of their work to the conference participants, mostly postgraduate students, academics and representatives of the Water industry.

During the second year, UNEXE organised a third demonstration workshop at the summer school held in Switzerland, for postgraduate students by the ICT4WATER project SMARTH20 (22-25 August 2016). The latter was beyond the expected activities according to the DoA.

CETAQUA:

Open event: It took place during the 2nd year of the project, organised together with DAIAD project in Alicante (Spain).

<u>Demonstration workshop</u>: It took place during the 2nd year of the project, at the University of Granada. It consisted of a speech and a hackathon with University students. Water related data set was delivered, and challenge about water urban cycle published.

IWA:

Due to the special status of IWA as an international dissemination organization, the events to be organized by IWA were different and special. Accordingly, IWA organized the following two events in 2016 and 2015 respectively:

<u>Open event</u>: cutting edge application of ICT and Young Water Professionals event on how to get "from Academia to Implementation", which took place during the 2nd year of the project (October 2016, during the WaterIdeas Conference in Bologna, Italy), attended also by UNEXE.

<u>Demonstration workshop</u>: Workshop on ICT Implementation Promotion in Low and Middle Income Countries (LAMIC) which took place in Jordan (18-22 October 2015). IWA organized this demonstration and presented WIDEST. Unfortunately no other members of WIDEST were able to attend, because it coincided with the event in Lisbon.

WssTP:

Due, again, to the special status of WssTP as an international dissemination organization, the events organized by WssTP were different and special. Accordingly, WssTP organized the following two events:

Open event: This open event took place in Brussels. A session and presentation on ICT and Water during Water Innovation Conference (24-26 June 2015). It was organized by WssTP. UNEXE participated also. There were two sessions for presenting WIDEST material on June 24 (open to the WssTP working groups) and on June 26 (open to all), attended also by UNEXE.

<u>Demonstration workshop</u>: It took place during the 2nd year of the project, during the Water Innovation Conference 2016 (June 2016). WSSTP supported an exhibition booth, providing information, and distributing material about WIDEST and the ICT4WATER cluster, attended also by UNEXE.





UNS:

<u>Open event</u>: The SMART Water Workshop was organized by University of Nice, Sophia Antipolis in conjunction with @QUA – Smart ICT for Water. It is held as a co-event during the Singapore International Water Week 2016. This workshop aimed to share the experiences of successful case studies and the implementation techniques applied in various environments. At the same time, the needs for standardization protocols were addressed and discussed around the various Smart Water devices.

<u>Demonstration workshop</u>: It took place during the Smart Water Challenges and IoT Workshop event (IoT Conference 2015). Another demonstration was conducted by UNS during the SWG Standardisation (SWGIC 2015).

It should be pointed out that so far, due to the open character of the events organized it was not possible to video the actual lectures/presentations in the demonstration workshops. However material presented in them (presentations), are available and uploaded to the video channel.

Exchange of personnel

The exchanges of personnel took place in a different manner than the one predicted in the proposal: Instead of exchanging between two organisations for 1-2 weeks, all the research partners (UNEXE, EURECAT, CETAQUA, UNS) sent personnel to the summer school in Switzerland (August 2016), where all the participants benefited from lectures, discussions and workshops related to smart water and management, delivered by prominent academics within the ICT4WATER cluster and by invited speakers from the US and beyond the cluster. The event was organised by SMARTH20, a project member of the ICT4WATER cluster. Details about the rationale for the switch are included in Appendix 3, as they were proposed to the EC officer in June 2016.

Task 5.6- Smart Water Action Group

Details about this activity are presented in Section 2.2.

Roles and Responsibilities

The following table lists the names of the persons responsible for dissemination in WIDEST.

Table 5.1: Project dissemination contacts

| Partner | Dissemination contacts (main contact in bold) | Main responsibilities related to communication/dissemination |
|---------|---|--|
| EURECAT | Xavier Domingo | WP1, WP2 |
| | Gabriel Anzaldi | WP6/Coordinator-Overall supervision |
| UNEXE | Lydia Vamvakeridou-Lyroudia | WP5 Overall/Events/ ICT4WATER/Ctrl+SWAN |
| | Dragan Savic | WP5/Events/Twitter |





| | David Walker | Website |
|---------|-----------------------|-----------------------------|
| CETAQUA | Javier Haro | WP4 |
| IWA | Eva Promes | IWA activities within WP5 |
| WssTP | Maria Mirachtsi | WssTP activities within WP5 |
| UNS | Philippe Gourbesville | WP3 |
| | Lian Guey | WP3 |





8. Conclusions

WIDEST is a Coordination and Support Action, for which Communication and Dissemination are a main priority. This report presented the communication and dissemination activities and actions that the project undertook during the whole project, in order to increase visibility and awareness on Smart Water and Smart Water technologies. The communication and dissemination actions are well oriented to the consecution of the objectives described in the DoA of the project. The total amount of activities and actions during the project accounted for 42 activities and actions in 26 different European and International venues. WIDEST devoted many efforts to reinforce the links with other initiatives and related activities, such as the ICT4Water cluster, the EIP Water Action Group Ctrl+SWAN, WssTP, IWA and the Smart Water Network Forum (SWAN). In that direction, WIDEST promotes the ICT4Water cluster by presenting and promoting the main outcomes and results of the projects in almost all of the activities where WIDEST is invited (see Appendix 1).

Regarding the projects form ICT4WATER cluster, it started with 15 projects and extended to a total of 17 projects at the end of the 1st year of the project, when PROTEUS and SAFEWATER have been added to the cluster, ending with 20 members at the end of the project, when SIM4NEXUS, POWER and the Ctrl+SWAN Action Group also joined the cluster. Currently, a total of 192 organizations from 33 different European countries are part of the ICT4WATER cluster. WIDEST targets all different audiences across Europe and internationally, helping and supporting the dissemination actions of the ICT4WATER cluster. It also assists and participates actively to the steering committee of an EIP Water Action Group on Smart Water Technologies (Ctrl+SWAN), which ultimately (December 2016), also joined officially the cluster, with the support of DG CONNECT. Thanks to the actions carried out by WIDEST, the ICT4WATER cluster is growing, as an example the 4 CSA projects KINDRA, FREEWAT, WaterInnEU and BlueSCities have been included to the cluster proposed by WIDEST, while PROTEUS was prompted to join after attending the networking session organised at the Lisbon event by WIDEST. SAFEWATER joined in Leeuwarden (February 2016), SIM4NEXUS in June 2016, POWER in December 2016, after the BlueScities Conference.

WIDEST also exploits the classic communication and dissemination channels (website, social media, conferences, publications). The website has been redesigned during the 1st year in order to increase the impact on the audience. In D6.1: Project Management Handbook, Key Performance Indicators (KPI) were defined regarding the impact of webpage and other digital media impact. According to these KPIs, All the indicators were achieved.

During the second year, the number of visits to the web has been 9.134 users, having a 35.9% of returning users, meaning that has increased with respect to the previous year. During the first year the 86.53% of the users were users that visited the web for the first time while during second year 64.10% of the user were new users. This decrease in the number of new sessions can be explained by the stabilization of the novelty among the Water community. It has to be taken into account that during 2nd year, the number





of pages and time in the site has increased to 3.53 pages/session and 4:48 minutes (from 1.57 pages/session and 1:05 minutes during 1st year). This means that, despite the decrease of visits the users visiting WIDEST stay more time and browse more the web (reading news or new documents published). This can be explained by the constant update of the web and the dissemination through social networks and the efforts in publishing news and contents (such as the Roadmaps or presentations in events). One of the KPI regarding the percentage of returning visitors was expected to be 75% of the expected number of visitors, which was a non-real percentage. Taking into account that the number of visits was 1500 (during first and second year), and that the final value of visits has been more than 16.000 (an order of magnitude higher), the raw number of returning users is higher than the expected with the unrealistic KPI (making this KPI virtually achieved).

Regarding the Twitter account (see Section 4.4), we strongly believe that it is a good media to disseminate WIDEST messages as the audience is focused on main WIDEST fields. The expected cumulative number of tweets in the KPIs was 100, and this number has been widely exceeded with 1.010 tweets during first and second year alone.

WIDEST has had a strong presence in 42 major international events, including 2 scientific special sessions at major international conferences), exhibition booths in 3 events, in one case (EUW2016) with over 5000 visitors and in the 2nd case (Lisbon 2015) open to the general public too. It also turned out in the publication of 3 papers (Section 6). These publications are included into the IWO (see Deliverable 1.3).

The major challenge after the end of the project is to keep the ICT4WATER cluster "live", maintain its website and continue its activities. We have been very keen on this, because gradually ICT4WATER has become a brand name in the field. It is widely recognised, it receives invitations to specific events as a cluster and even it has started being asked for letters of support to other proposals submitted to the EC. We have taken measures for it, by ensuring that the website will continue to be supported (by Sander Smit) and that the other two leading persons (Lydia Vamvakeridou-Lyroudia/UNEXE and Gabriel Anzaldi/EURECAT-both WIDEST partners) will still be able to participate to conferences, workshops, working groups and events through a new project (SIM4NEXUS), to which they are both WP leaders, until June 2020. Moreover the support of the EC ensures that more new projects are invited to join and most of them accept.





Appendix 1: DETAILED REPORT FOR DISSEMINATION ACTIVITIES





| General information | | | | | |
|---|------|----------------|-----------------|---------------------------------|--|
| Name: | Rub | rica | | | |
| Type of activity: Journal Paper | | | | | |
| Place: | Not | Relevant | | | |
| Start date: | 01/0 | 3/2015 | End date: | 01/03/2015 | |
| Participant data | | | | | |
| Name: Gabriel Anzaldi (EURECAT) | | | | | |
| Partner: EURECAT | | | | | |
| Objectives of the event/activity | | | | | |
| Describe the main objectives of WIDEST among different stakeholders including Water Authorities, Water Operators, System Integrators, ICT for Water technologies professionals, academia and research community, Policy Makers, and the relevant industry at large. | | | | | |
| Results of the dissemination activity | | | | | |
| The paper was published in the Italian Journal of Groundwater. The goal of this journal is to link the academic world with private and public companies and professionals by presenting up to date scientific and technical papers. | | | | | |
| Pending and follow-up actions | | | | | |
| Not relevant | | | | | |
| Final asses | smen | it of the ever | nt (achievement | of objectives, results, impact) | |
| Not relevant | _ | | | | |





| | | | General inf | orma | ition | | | |
|-------------------|-------|-------------------------|----------------|-------|---------------------|------------|---------|------------|
| Name: | | al SWAN er meeting) | | and | Extended | Standards | session | (ICT4WATER |
| Type of activity: | Conf | erence (1 st | day) Worksh | юр (2 | ^{2nd} day) | | | |
| Place: | Lond | on | | | | | | |
| Start date: | 30-04 | 4-2015 | End date | | 01-05-20 | 15 | | |
| Participant data | | | | | | | | |
| Name: Lydia Varr | | | nvakeridou-L | yrouc | lia (LVL)- D | ragan Savi | С | |
| Partner: UNEXE | | | | | | | | |
| | | Obje | ectives of the | eve | nt/activity | | | |

Annual conference of the SWAN (Smart Water Network) Forum. UNEXE is a member of the Forum. Objective 1: Present the EU Perspective regarding Smart Water at the Conference (presentation by Dragan Savic) Objective: 2 Participation at a panel about the EU perspective on Standards (LVL); Objective 3: Organise a workshop on May 1 with invited participants from the ICT4WATER cluster and SWAN about Standards and Standardisation for Smart Water Technologies.

Results of the dissemination activity

Over 400 participants at the Conference. Presentations and panel discussion were successful. The workshop the next day was also successful, organizing the outline of an ICT4WATER collective report on standards and standardization. The paper will be led by LVL (UNEXE/WIDEST and iWIDGET)

Pending and follow-up actions

The standards special session will be followed by another one, alongside the CCWI 2015 Conference (September 2015, Leicester, UK), where the first draft of the paper will be discussed by the ICT4WATER cluster.

Final assessment of the event (achievement of objectives, results, impact...)

• There was a view (from iWIDGET / WIDEST and WISDOM) that changing user behaviour could occur through social media and consumer driven approaches. As in previous meetings, it was again pointed out that not many people are interested in lowering water consumption as there is no real financial





incentive (in UK at least). Consumers need to see a strong link between water consumption and energy use – in particular the energy used with water heating.

- Integration within the SMART city and multi-utility context was also deemed to be attractive for promoting greater overall savings.
- Clear focus is needed: the "20-20-20" EC targets (Energy consumption, carbon emissions, renewables) were discussed (http://ec.europa.eu/clima/policies/package/index_en.htm) as well as what the cluster's objectives are regarding standards what is our standards focus, where and how do we define them?
- There is also, currently, an emphasis on the Utility side, focusing on technology in utilities, especially since pumping costs are proved to be the highest operating costs for the Water Utility. Although this is necessary, as reducing customer demand will ultimately reduce load and pumping, more effort is required on engaging consumers. Nonetheless, any utility-level Smart water management scheme will have to include SMART pumps, eventually optimising pump operation and matching pumping intensity to forecasted demand. There is a strong need for innovation: the use of SMART meters is important if we are to reduce water (and therefore energy) consumption.
- The Internet of Things (IoT) seems very relevant, and probably needs to be looked into. There should be one overarching requirement for all things "SMART" Smart water grids, SMART traffic systems etc. The problem is generic in that the overall framework is the same even though content and context may differ.
- There needs to be more interaction with Independent companies as there is currently incentive and, probably more worrying, no guidelines. We are still in the early stages of SMART meter development so this is the ideal time to get markets interested and involved to get interaction to a usable point. One incentive could be to make companies realise that Standards generate more economy than Intellectual Property.
- Standards must be open and available to all who are involved. We still need to determine what exactly needs to be controlled, and who (i.e. what regulatory authority) will control it. Industry is moving at a very fast pace, so these decisions need to be made soon. Relationships with existing established networks (e.g. SWAN) should be encouraged and exploited.
- It was agreed to prepare a white paper to be presented at the CCWI conference in Leicester and to invite feedback from there in order to complete this report.





| General information | | | | | | |
|---------------------|------------------|--------------|-----------------|--------------------------------------|--|--|
| Name: | PTE | A (Spanish T | echnologic Wa | ter Platform) – Work Group 4 meeting | | |
| Type of activity: | Worl | k Group sess | sion | | | |
| Place: | Mad | rid, | | | | |
| Start date: | 26-0 | 5.2015 | End date: | 26-05.2015 | | |
| | Participant data | | | | | |
| Name: Xavier D | | | ningo (EURECA | T) | | |
| Partner: | | EURECAT | | | | |
| | | Objec | tives of the ev | ent/activity | | |

Periodic event for the Spanish water industry and academia focused on the R&D for water sector, Work Group 4 is focused on contributing to the harmonization and fostering the innovation while increasing the potential of the supranational market relative to the water sector.

Results of the dissemination activity

Xavier Domingo (EURECAT) was invited as a speaker and he made two presentations: one describing WatERP project and its main outcomes; and another one presenting WIDEST and introducing the ICT4Water cluster to the assistants.

Pending and follow-up actions

Contacts with the national water industry and academia have been made. WIDEST was invited to collaborate on future updates and revisions of the Strategic Innovation Agenda in collaboration with other stakeholders. WIDEST was invited to assist and collaborate with other interesting PTEA Work Groups. WIDEST was invited to assist and collaborate to the "End Users Event" focused on dissemination to irrigation communities and water users.

Final assessment of the event (achievement of objectives, results, impact...)

The objectives of the participation of WIDEST at this summit were achieved. Dissemination and contacts with the water industry have been made and participation to further events has been planned.





| General information | | | | | | |
|---------------------|-----------------------------------|------------|------------------|--------------------------------|-----------|--|
| Name: | First | Stakeholde | r consultation e | vent on the new Drinking Water | Directive | |
| Type of activity: | Wor | kshop-Cons | ultation | | | |
| Place: | Brus | sels | | | | |
| Start date: | 26-0 | 5-2015 | End date | 26-05-2015 | | |
| | Participant data | | | | | |
| Name: | Lydia Vamvakeridou-Lyroudia (LVL) | | | | | |
| Partner: UNE. | | | UNEXE | | | |
| | | Obje | ctives of the ev | ent/activity | | |

Event organized by KWR on behalf of the EC. It was the final stakeholder consultation event on the new Drinking Water Directive to be released in 2018-19.

Results of the dissemination activity

WIDEST was invited to this event, as a member of the steering committee of the EIP Water Action Group Ctrl+SWAN, together with two other members of the Action Group Steering Committee. This Action Group is affiliated to WIDEST and the ICT4WATER cluster, under Task 5.6

Pending and follow-up actions

Contacts and networking with the water industry and other stakeholder groups have been made. In particular WIDEST managed to raise in the discussions and the minutes the importance of smart sensor technologies to drinking water quality and safety. Invitation to the final consultation followed.

Final assessment of the event (achievement of objectives, results, impact...)

The event attended by around 80 stakeholders split in three working sessions, with plenaries at the beginning and at the end. Minutes were kept by KWR, who organized the event. The point of this first stakeholder consultation was to raise significant issues about the changes to the New Drinking Water Directive. The matter of Smart Water technologies was raised, in relation to Drinking Water Quality Monitoring. It was followed by a telephone interview by LVL, carried out by KWR, in June 2015, to clarify some points and discuss Smart Water technology ahead of the final consultation and document.





| | General information | | | | | |
|-------------------|--|--------------|----------------|------|----------------|--|
| Name: | Wss | TP- Water In | novation Con | fere | ence 2015 | |
| Type of activity: | Con | ference-Worl | king group ses | ssic | ons-Networking | |
| Place: | Brus | sels | | | | |
| Start date: | 25-0 | 6-2015 | End date | | 27-06-2015 | |
| | Participant data | | | | | |
| Name: | Lydia Vamvakeridou-Lyroudia (LVL), Maria Mirachtsi (WssTP) | | | | | |
| Partner: | UNEXE, WssTP | | | | | |
| | | Objec | tives of the e | ve | nt/activity | |

Event organized annually by WssTP in Brussels to bring together the water industry, experts from the WssTP working groups, EC representatives, academics, researchers, SMEs and NGOs. (http://wsstp.eu/news/wsstp-water-innovation-smes-awards-winners-2015-announced/)

Results of the dissemination activity

WIDEST was invited to this event, by WssTP who organized it. On behalf of WIDEST, LVL made two presentations, about WIDEST and the ICT4WATER Cluster: (a) at the working groups meeting and (b) at the plenary session on the third day, where she presented the relevance of Smart Water and ICT4WATER for the Juncker agenda.

Pending and follow-up actions

Contacts and networking with the EC, the water industry, SMEs have been made. WIDEST was invited to join the Water & Energy WssTP working group, which was starting, and WIDEST accepted. The first meeting of this working group was planned for Nov 23, but it was postponed due to unforeseen events (please see the related report in this Appendix). The first meeting will take place during the 2nd year of the project (April 2016) and LVL will attend it.

Final assessment of the event (achievement of objectives, results, impact...)

The event attended by around 400 people, from all fields related to the water industry and the EC. It has a great visibility among the industry, the EC and the research community. The invitation to join the WssTP working group on Water and Industry is another good opportunity for linking with other initiatives and groups.





| | | • | General informa | ition | |
|--|---|---------------|-----------------|---|--|
| Name: | PTE | A (Spanish T | echnologic Wate | er Platform) – 5 th General Assembly | |
| Type of activity: General Assembly | | | | | |
| Place: | Mad | rid, | | | |
| Start date: | 30-0 | 6.2015 | End date: | 30-06.2015 | |
| Participant data | | | | | |
| Name: | | Xavier Don | ningo (EURECAT |) | |
| Partner: EURECAT | | | | | |
| Objectives of the event/activity | | | | | |
| Annual event for the Sp | Annual event for the Spanish water industry and academia focused on the R&D for water sector, | | | | |
| Results of the dissemination activity | | | | | |
| Xavier Domingo (EURECAT) was invited as a speaker and he made a presentation of WIDEST project and introduced the ICT4Water cluster to the assistants. | | | | | |
| Pending and follow-up actions | | | | | |
| Not relevant | | | | | |
| Final asses | smen | t of the ever | nt (achievement | of objectives, results, impact) | |
| Not relevant | | | | | |





| | | General inform | ation | | |
|-------------------|------------------|--|-----------------------------------|--|--|
| Name: | IAHR World Cor | ngress | | | |
| Type of activity: | Special session | (scientific) entitle | ed :EU projects for ICT and Water | | |
| Place: | The Hague, Net | herlands | | | |
| Start date: | 02-07-15 | End date | 02-07-2015 | | |
| | Participant data | | | | |
| Name: | | Dragan Savic and Lydia Vamvakeridou-Lyroudia (Organisers), Gabriel Anzaldi. Other projects from the cluster and the Action Group participating | | | |
| Partner: | UNEXE, E | URECAT | | | |
| | Ohie | ctives of the eve | nt/activity | | |

Objectives of the event/activity

These Conferences take place every two years in different locations, attracting large numbers of participants, mainly from the academia and from research organisations usually over 1000 participants). WIDEST participated in the latest IAHR congress (June 2015, The Hague, Netherlands), where it also organized a special session for the ICT4WATER cluster. The objective was to present the results of various projects, together with an introduction on Smart Water (Dragan Savic) and a presentation on standards and standardization (LVL) Please see the list of papers (17) and posters (4) on the next page

Results of the dissemination activity

Scientific papers with results from 10 projects in the cluster have been presented. The session was attended mainly by academics and researchers. WIDEST had the opportunity of introducing the "EU and ICT for Water" perspectives to the audience. It gave also the opportunity for face-to-face meetings between members of the cluster and the action group.

Pending and follow-up actions

Not relevant

Final assessment of the event (achievement of objectives, results, impact...)

It was a successful event attended by most of the cluster projects, with 17 papers and 4 posters presented, including one collective scientific paper from the Ctrl+SWAN Action Group (the first since this group was established), which was presented by the Chairman, Armando Di Nardo.





| | | | | FP7 ICT and Water |
|------------------------|------------------------------------|----------------|--|--|
| Thematic | Submission ID First name Last name | Last name | Accepted as | Title |
| | | | | |
| Intro | n/a Dragan | Savic | Organiser | Introduction to the special session ICT and WATER |
| Sensors and detection | 81857 Jan | Mink | Accepted Oral Special Session | WATERNOMICS: Low cost sensors and systems for collecting water usage in three pilots. |
| | 83185 Wenyan | Wu | Accepted Oral Special Session | Real-time Leak and Burst Detection using Wireless Smart Sensors for Monitoring water distribution System. |
| | 81796 Solomon | Seyonm | Accepted Oral Special Session | Household leakage detection using audio signals. |
| | 86771 Armando | Di Nardo | Accepted Oral Special Session | New Perspectives for Smart Water Network monitoring, partitioning and protection with innovative Real Time sensors |
| Modelling demand | 88177 Rafal | Ulanczyk | Accepted Oral Special Session | A fuzzy-stochastic modelling approach for urban water supply systems – ISS EWATUS project's concepts. |
| | 85087 Chrysi | Laspidou | Accepted Oral Special Session | A multivariate analysis of the daily water demand of Skiathos Island, Greece, implementing the Artificial Neuro-Fuzzy Inference System (ANFIS) |
| | 81804 Enrico | Creaco | Accepted Oral Special Session | Considering the mutual dependence of the pulse intensity and duration in models for water demand generation. |
| | 83898 Xavier | Llort | Accepted Oral Special Session | A Water Availability Prediction System for water management. |
| Other modelling | 87857 Ernesto | Arandia | Accepted Oral Special Session | An iWIDGET Analytic for Optimal Equipment Replacement by Minimizing Life-Cycle Costs Under Demand Uncertainty. |
| User behaviour | 83100 Andrea | Cominola | Accepted Oral Special Session | Modelling residential water consumers' behaviors by feature selection and feature weighting. |
| | 82349 Babis | Magoutas | Accepted Oral Special Session | WaterCity: Triggering residential water conservation through social persuasive technology. |
| | 87849 Albert | Rodríguez | Accepted Oral Special Session | An integrated approach to empowering domestic water users. |
| System ICT | 87075 Wenyan | Wu | Accepted Oral Special Session | An IoTs enabled Framework for Urban water system. |
| | 84594 Christos | Kouroupetroglo | Kouroupetroglo Accepted Oral Special Session | WATERNOMICS: Serving diverge user needs under a single water information platform. |
| | 87848 Jose | Barateiro | Accepted Oral Special Session | λ n approach for full scale off-line testing to evaluate the IWIDGET system performance. |
| Business and standards | 81682 Sander | Smit | Accepted Oral Special Session | Business drivers for adopting smart water technology. |
| | 87068 Lydia | Vamvakeridou | Vamvakeridou- Accepted Oral Special Session | Standards and standardisation bodies in relation to the exploitation of advances in smart water technologies: current trends and future needs |
| Closure | n/a Dragan | Savic | Organiser | Conclusions and Closure |
| | | | | |
| | | | | POSTER |
| | 87002 George | Arampatzis | Accepted Poster Special Session | Balancing water supply and demand under different demand management options: a water system perspective |
| | 87554 Andreas | Abecker | Accepted Poster Special Session | Data and system interoperability in the drinking-water supply chain |
| | 87644 David | Sancho | Accepted Poster Special Session | A flexible Decision Support System for efficient and integrated water resources management |
| | 87649 Wenyan | nw | Accepted Poster Special Session | A GENETIC INTEGRATION FTAMEWORK TOT WATER SUPPLY LISTIDUTION SYSTEMS USING INTEROPERADIE STANDARDS. |





| | General information | | | | | |
|-------------------|---|--|--|--|--|--|
| Name: | Special session at a Conference and 2 nd session on Standards and Standardisation Session, CCWI, Leicester, 3rd September 2015 | | | | | |
| Type of activity: | Conference (1st session-open to all) Workshop (2nd session-restricted to ICT4WATER cluster members) | | | | | |
| Place: | Leicester, UK | | | | | |
| Start date: | 02-09-2015 End date 04-09-2015 | | | | | |
| | Participant data | | | | | |
| Name: | Lydia Vamvakeridou-Lyroudia (LVL)- Dragan Savic (Organisers) with the help of the ISS-EWATUS project for the special session | | | | | |
| Partner: | UNEXE | | | | | |
| | Objectives of the event/activity | | | | | |

Objectives of the event/activity

The CCWI (Computing and Control for the Water Industry) is an international biennial conference. WIDEST (UNEXE) organized two sessions with the following objectives: (1) a special session lasting a whole day, where participants from ICT4WATER projects would presented result and (2) a workshop on standards and standardization as a follow-up of the previous meeting in May 2015 to discuss and finalise the white paper on standards

Results of the dissemination activity

Over 250 participants at the Conference, the special session was attended by over 80 people. 12 papers have been presented. The workshop on standards finalized the white paper led by LVL (UNEXE/WIDEST and iWIDGET)

Pending and follow-up actions

The white paper will be finalized (in written form) to be submitted to the EC by iWIDGET. WIDEST will take over after the submission of this white paper exclusively, to follow-up within WIDEST, during the 2nd year of the project.

Final assessment of the event (achievement of objectives, results, impact...)

The individual efforts of the ICT4Water cluster projects were acknowledged, and it was discussed how best to collaborate:





- Most of the projects will be making individual recommendations regarding standards and are at different stages (some finishing, some only just starting). Earlier projects can educate the final projects and provide more direction as a result of "lessons learned".
- A number of the ICT4Water cluster projects are developing almost identical systems. We need to use these projects as an example and make the point that if there were a set of standards in place, these systems could be interchangeable. This would be in the EC's best interests and create huge market potential.
- It was agreed that semantics is the most important hurdle to overcome, even preceding the other priority sectors (interoperability, comparability, reliability, security, safety and communication). We also need to provide clear definitions for each of these sectors, providing examples of how and where they cause problems. With regards to standardisation and semantics have SMART Cities already tackled this issue and if so, how far ahead are they? Could we learn any lessons from them?
- Existing standards that have already been applied in other sectors (e.g. energy, waste water) and in other countries (i.e. adopted by individual countries, and not internationally recognised) need investigating. What recommendations could be made for the adoption/amendment of these existing standards?
- Smart Water Standards could follow the same path as Big Data and 5G communications projects in that a self-sustaining body, perhaps a PPP (private public partnership), could be set up to coordinate with and consult to the EC. Another possibility is setting up a CSA to investigate standards and standardisation issues and to make further recommendations to the EC.
- Previous experience suggests that the typical timeframe to produce/amend/develop a standard from start to finish, from scratch, was approximately 11 years. An amendment could take around 3 years. Suggesting a timeline of 10 years for the development of the standards that we recommend is not unreasonable and fits in with other EC directives already in place
- Organisations (especially utility companies) already recognise that standardisation is a very important topic; we do however need to stress the expected value in order to get buy-in from industry. Gaining approval takes a lot of time, effort and resources getting support from the OGC could help in this regard, as they could help finding sponsors. WIDEST pledged to help with this during the 2nd year of the project and take over, where iWIDGET and the combined efforts of iWIDGET and WIDEST stopped. The continuation of this white paper will be an exclusive WIDEST output (Gabriel Anzaldi/EURECAT to lead).





| | | | Thursday 3rd September | | |
|---------------|---|---|---|--|---|
| 08:30-06:30 | | | Registration and morning refreshments | | |
| 09:30-10:00 | | Jessica Curzon | Jessica Curzon, DEFRA, "A Defra view of the importance of Cyber Security" | Cyber Security" | |
| 10:00-10:30 | | Prof. Helge Janicke, "Cyb | Prof. Helge Janicke, "Cyber Security for Critical Infrastructures — Challenges and Opportunities" | enges and Opportunities" | |
| 10:30-11:00 | | | Morning break | | |
| 11:00-13:00 | T11 - HA3.02 | T12 - HA3.03 | T13 - HA3.04 | T14 - HA3.05 | T15 - HA0.10 |
| | Modelling algorithms and techniques | Real time management of WDS | Water quality | ICT4Water | Leakage management |
| Chair | Hwee See | Heinz Jacobs | Avi Ostfeld | Lydia Vamvakeridou-Lyroudia | Bruno Brunone |
| | ID 142 - Josep Roma, Ramon Pérez, Gerard Sanz, Sergi Grau "Model calibration and leakage assesment applied to a real Water Distribution Network" | ID 126 - Fatiha Nejjari, Ramon Sarrate, Joaquim Blesa "Optimal pressure sensor placement in water distribution networks minimizing leak location uncertainty" | ID 31 - E. J. M. Blokker, P. G. Schaap "Particle Accumulation Rate Of Drinking Water Distribution Systems Determined By Incoming Turbidity" | | ID 216 - L. Latchoomun, R.T.F. Ah King and K. Busawon, D. Mawooa, R.G. Kaully "Laboratory investigation of the leakage characteristics of unburied HDPE pipes" |
| | | | | ID 401 - Noura Al-Hoqani, Shuang-Hua Yang *Adaptive Sampling for Wireless Household Water Consumption Monitoring" | |
| | ID 187 - Edo Abraham, Ivan Stoianov "Efcient preconditioned iterative methods for hydraulic simulation of large scale water distribution networks" | ID 178 - Juan Saldarriaga, Camilo Andrés Salcedo "Determination of Optimal Location and Settings of Pressure Reducing Valves in Water Distribution Networks for Minimizing Water Losses" | ID 136 - Hyunjun Kim, Sanghyun Kim and Jayong Koo "Modelling chlorine decay in a pilot scale water distribution system subjected to transient" | ID 402 - Ambreen Hussain, Wenyan Wu, Gabriel Anzaldi, Andreas Abecker "Implementation of OGC Compliant Framework for Data Integration in Water Distribution System" ID 403 - Tomasz Jach, Ewa Magiera, Wojciech Froelich "Application of HADOOP to Store and Process Big Data Gathered from an Urban Water Distribution System" | ID 307 - Isaac Okeya, Christopher Hutton, Zoran Kapelan "Locating pipe bursts in a district metered area via online hydraulic modelling" |
| | ID 189 - Luigi Berardi, Daniele Laucelli, Rita Ugarelli, Orazio Giustolisi "Hydraulic system modelling: background leakage model calibration in Oppegård municipality" | ID 186 - Giovanna Darvini, Luciano Soldini "Pressure control for WDS management. A case study" | ID 153 - C. Di Cristo, A. Leopardi, C. Quintiliani, G. de Marinis "Drinking water vulnerability assessment after disinfection through chlorine" | ID 404 - Mario Vašak, Goran Banjac, Hrvoje Novak "Water use disaggregation based on classification of feature vectors extracted from smart meter data" | ID 313 - Nicholas D. Bailey, Jakobus E. Van Zyl " Experimental investigation of internal fluidisation due to a vertical water leak jet in a uniform medium " |
| | ID 192 - R. Wright, P. Parpas, I. Stoianov "Experimental Investigation of Resilience and Pressure Management in Water Distribution Networks" | ID 188 - Daniel Marton, Pavel Menšik, Miloš Starý "Using predictive model for strategic control of multi-reservoir system storage capacity" | ID 158 - S. Husband, M. Jackson and J. Boxall "Identifying Material Accumulation Processes in Drinking Water Distribution Systems with Extended Period Epanet MSX Turbidity Simulations." | ID 405 - Xiaomin Chen, Shuang-Hua Yang, Lili Yang, Xi Chen "A Benchmarking Model for Household Water Consumption Based on Adaptive Logic Networks" | ID 420 - Euijeong Lim, Dragan Savic, Zoran Kapelan "Development of a Leakage Target Setting Approach for South Korea based on Economic Level of Leakage" |
| | ID 190 - R. Wright, E. Abraham, P. Parpas, I. Stoianov "Optimized Control of Pressure Reducing Valves in Water Distribution Networks With Dynamic Topology" | ID 170 - Congcong Sun, Mark Morley, Dragan Savic, Vicenc Puig, Gabriela Cembrano, Zheng Zhang "Combining model predictive control with constraint-satisfaction formulation for the operative pumping control in water networks" | | ID 406 - Jordi Meseguer, Josep M. Mirats- Tur, Gabriela Cembrano, Vicenç Puig "Model-Based Monitoring Techniques for Leakage Localization in Distribution Water Networks" | ID 101 - Shanshan Li, Ronghe Wang, Wenyan Wub and Jilong Sun "Non- hydraulic factors analysis of pipe burst in water distribution systems" |
| No. of papers | 5 | 5 | 4 | 7 | 5 |
| 13:00-14:00 | | | Lunch, networking and Exhibition | | |





| Up 538 - Jinliang Gao, Chengthi Zheng, upon Stoianov variable System Demand: "Pipe failure analysis and impact of methods for Centrifugal Pumps Operating whame Mydraulic conditions in water consumption: Insight from a Survey in supply networks" and the doctored system Demand: "Dependent of Centrifugal Pumps Operating water of Variable System Demand: "Despession of Variable System Demand: "Despession of Variable System Demand: "National Mydraulic Confidence and Poland" "Demand: Profession of Variable System Located in Romania; "Andrew Camen Georgescu, Andrei Demand: "Meazure and analysis analysi | 14:00-15:00 15:00-16:30 Chair | Modelling algorithms and techniques Elad Salomons Elad Salomons | Prof. Avi Ostfeld "Water distribut 1722 - H33.03 Real time management of WDS Juan Saldarriaga ID 201 -Andrei-Mugur Georgescu, Sanda-Carmen Georgescu, Cardin loan Cosoiu. | Prof. Avi Ostfeld "Water distribution systems security enhancements through modeling: review and challenges" T22 - HA3.03 Itime management of WDS Transient flow Transient flow Didia Covas Dragan Savic ID 161 - Hossein Rezaei, Bernadette Ryan, ID 407 - Vixine Shan Lili Vane Kim | modeling: review and challenges" T24 - H43.05 ICT4Water Dragan Savic | Assest management Mohan Kumar 10 9 - Daniel Wilson, Yves R. Filion, Ian D. Mone "Identifying factors that influence |
|--|-------------------------------------|--|--|---|---|---|
| 10 103 - Mario Castro Gama, Emilio Attilio 10 95 - Olivier Piller, Jochen Deuerlein, Denis 10 256 - Bogumii Ulanicki, Lorenzo Picinali, Claranchi, Quan Pan "Water Distribution Gibert and Jean-Marc Weber "Installing Network Model Building, Case Study: In the consumption by using Automatic Metering Readers data" 10 205 - Automatic Metering Readers data" 10 205 - Automatic Metering Readers data 10 205 - Automatic Metering Readers data 10 205 - Bogumii Ulanicki, Lorenzo Picinali, Clarances of Automatic Metering Readers data 10 205 - Bogumii Ulanicki, Lorenzo Picinali, Clarances of Cavitation in a pressure reducing valve and analysis paragents and analysis parageration purposes" 10 205 - Antonio Candelleri, Davide Soldi, Mugur Georgescu, Andrei Prasmoru of hourly water consumption by using Automatic Metering Readers data 10 205 - Bogumii Ulanic Metering Readers data 10 205 - Bogumii Ulanicki, Lorenzo Picinali, Clarances of Automo Candelleri, Davide Soldi, Mugur Georgescu, Andrei Personania 10 205 - Automo Candelleri, Davide Soldi, Mugur Georgescu, Andrei Personania 10 205 - Bogumii Ulanic Metering Readers data 10 206 - Bogumii Ulanic Metering Readers data 10 200 - Sanda-Carmen Georgescu, Andrei Personania 10 202 - Sanda-Carmen Georgescu, Andrei Personania 10 242 - S. Meniconi, B. Brunone, M. 10 240 - Chrysi Laspidou, Elpiniki Papageorgiou, Konstantinos Kokinos, Antono Georgescu, Andrei Personania 10 242 - S. Meniconi, B. Brunone, M. 10 241 - Kim Perren and Lili Yang Personania 10 241 - Kim Perren and Lili Yang Personania 10 241 - Kim Perren and Lili Yang Personania 10 241 - Kim Perren and Lili Yang Personania 10 241 - Kim | | Orazio Giustonisi "WDNew, vice di Orazio Giustonisi "WDNew, vice di Orazio Giustonisi "WDNew, vice di Peatures" 1D 215 - L.Latchoomun, R.T.F. Ah King and K. Busawon "A new approach to model development of water distribution networks with high leakage and burst rates" | Livin Hasegan, Anton Anton, Diana Maria Bucur "EPANET Simulation of Control Methods for Centrifugal Pumps Operating Under Variable System Demand" 10 238 - Jinliang Gao, Chengzhi Zheng, Wenyan Wu, Shihua Qia, Xiaoming Xu "Does pressure reduction test have significant effect on evaluating pressure management to reduce physical leakage amount?" | Ivan Stoianov "Pipe failure analysis and impact of dynamic hydraulic conditions in water supply networks" ID 247 - M. Ferrante, C. Capponi, B. Brunone, S. Menicon "Hydraulic characterization of PVC-O pipes by means of transient tests" | Yamin Zhang "Household Water Consumption: Insight from a Survey in Greece and Poland" ID 408 - David Walker, Enrico Creaco, Lydia Vamvakeridou-Lyroudia, Raziyeh Farmani, Zoran Kapelan, Dragan Savic "Forecasting Domestic Water Consumption from Smart Meter Readings using Statistical Methods and Artificial Neural Networks" | the factor of safety and probability of failure of large-diameter, cast iron water mains with a mechanistic, stochastic model: A case study in the City of Hamilton" 10 98 - Saeed Hashemi, Yves R. Filion and Vanessa L. Speight "Pipe-level energy metrics for energy assessment in water distribution networks." |
| 1D 200 - Sanda-Carmen Georgescu, Andrein 1D 202 - Antonio Candelieri, Davide Soldi, Mugur Georgescu, Remus Alexandru Francesco Archetti "Short-term forecasting Madularea, Vlad-Florin Piraianu, Anton of hourly water consumption by using Anton, Georgiana Dunc "Numerical Model "Transient efects of self-adjustment of Automatic Metering Readers data" Anton, Georgiana Dunc "Numerical Model "Transient efects of self-adjustment of a Medium-Sized Municipal Water pressure reducing valves" S 4 4 4 4 4 | | ID 103 - Mario Castro Gama, Emilio Attilio Lanfranchi, Quan Pan "Water Distribution Network Model Building, Case Study: Milano, Italy" | ID 95 -Olivier Piller, Jochen Deuerlein, Denis Gilbert and Jean-Marc Weber "Installing fixed sensors for double calibration and early-warning detection purposes" | ID 256 - Bogumil Ulanicki, Lorenzo Picinali, Tomasz Janus "Measurements and analysis of cavitation in a pressure reducing valve during operation – a case study" | | 10 113 - Juanjuan Zhu, Richard P. Collins, Joby B. Boxall, Robin S. Mills, Rob Dwyer- Joyce "Non-Destructive In-Situ Condition Assessment of Plastic Pipe Using Ultrasound" |
| N 4 4 4 | | ID 205 - Antonio Candelieri, Davide Soldi, Francesco Archetti "Short-term forecasting of hourly water consumption by using Automatic Metering Readers data" | | ID 242 - S. Meniconi, B. Brunone, M. Ferrante, E. Mazzetti, D.B. Laucelli, G. Bort "Transient efects of self-adjustment of pressure reducing valves" | ID 410 - Chrysi Laspidou, Elpiniki Papageorgiou, Konstantinos Kokkinos, Sambit Sahu, Arpti Gupta, Leandros Tassiulas "Exploring patterns in water consumption by clustering" | |
| . of papers 4 4 5 5 4 | | | | | ID 411 - Kim Perren and Lili Yang "Psychosocial and behavioural factors associated with intention to save water around the home: A Greek case study" | |
| | of papers | 4 | 4 | 4 | 5 | 4 |



Thursday 3rd September



Panel discussion on Standards on T36 - HA1.51 ICT4Water Gill "Exploring the Sensitivity of Fatigue Analysis with Regard to Design Parameters in PVC Pipes Subjected to Cyclic Transient ID 246 - Dewi Rogers, Benedetto Calvo "Defining the Rehabilitation Needs of Wate Richard St. Aubin, Philip Martino and Larry ID 219 - Ahmad Malekpour, Bryan Karney, Cabral, Conceição Amado, Dídia Covas ID 139 - Valentina Marchionni, Marta "Water supply infrastructure cost Asset management T35 - HA0.10 etworks" luchberger, Zoran Kapelan, Dragan A. Savić "Correlation or not correlation? This is the question in modelling residential water Mona Arnold - "Integrative aspects in smar .yroudia, Marco Franchini, Zoran Kapelan, .ydia Vamvakeridou-Lyroudia, Steven G. "Application of the Improved City Bluepri ID 412 - Enrico Creaco, Raziyeh Farmani, water, waste, transport and ICT* ID 413 - Enrico Creaco, Stefano Alvisi, Raziyeh Farmani, Lydia Vamvakeridou-Dragan A. Savic "Preserving durationntensity correlation on synthetically ramework in 45 municipalities and unna Strzelecka - "Idicators for City Mona Amold, Kees van Leeuwen -ICT4Water/BlueSCities T34 - HA3.05 Gala Dinner, Mercure Leicester, The Grand Hotel, Granby Street mand pulses" eyprint* ID 415 - Tomasz Janus and Bogumil Ulanicki
"A behavioural membrane fouling model
for integrated simulation of membrane ID 414 - Tomasz Janus and Bogumil Ulanicki ID 416 - Tomasz Janus and Bogumil Ulanicki "ASM1-based activated sludge model with "Interface model between the bioreactor simulation of membrane bioreactors for preactors for wastewater treatment ioreactor for wastewater treatment and the membrane in a membrane Drainage and wastewater Katherine Huddersman "Advanced biopolymer kinetics for integrated Oxidation Processes using novel T33 - HA3.04 vastewater treatment" Miguel Balaguer and Javier Soriano "Direct and indirect water supply: an energy Ana Marques, Dália Loureiro, Helena Alegre, Didia Covas "Energy auditing as a tool for outlining major inefficiencies: and Goffredo La Loggia "A decision suppor ID 181 - Francesca Scarpa, Andrea Lobba, Chiara Maria Fontanazza, Gabriele Freni ID 197 - Elena Gómez, Enrique Cabrera, ID 214 - Aisha Mamade, Catarina Sousa ID 240 -Vincenza Notaro, Valeria Puleo, tool for water and energy saving in the esults from a real water supply system Gianfranco Becciu "Expeditious Pump Rescheduling in Multisource Water Distribution Networks" Enery Management T32 - HA3.03 ntegrated water system ID 308 - Markus I. Sunela, Raido Puust "Real ID 211 - Daniele Laucelli and Silvia Meniconi Modelling algorithms and techniques me water supply system hydraulic and Modeling water supply system control oaquim Sousa, Abel Gomes, Alfeu Sá Marques "Convergence issues in the "Water Distribution Network Analysis Accounting for Different Background 303 - Markus I. Sunela, Raido Puust ID 220 - João Muranho, Ana Ferreira, lity modeling – a case study" T31-HA3.02 stem algorithms" eakage Models" PANET solver No. of papers 18:30 19:30-22:30 17:00-18:30





| General information | | | | | |
|--|------|----------------|------------------|---|--|
| Name: ICT4Water Newsletters | | | | | |
| Type of activity: Newsletter writing and distribution (quarterly) | | | | | |
| Place: | Not | Relevant | | | |
| Start date: | Aug | /Sept 2015 | End date: | N/A. Ongoing activity, quarterly newsletter, several issues | |
| | | | Participant da | ta | |
| Name: | | Xavier Dom | ningo (XD) (EURI | ECAT) | |
| Partner: | | EURECAT | | | |
| Objectives of the event/activity | | | | | |
| The ICT4Water quarterly Newsletter is a communication channel devoted to deliver the latest news and keep up to date all representatives linked to ICT4Water cluster. The main objectives of the actions carried out using this medium is to spread the activities coordinated by WIDEST and/or linked to the cluster. Results of the dissemination activity | | | | | |
| | | | | | |
| WIDEST participated in the writing of several issues of this quarterly Newsletter (issues 11/09/2015, 6/11/2015, 13/01/2016). Starting at the end of August 2015 XD is reporting regularly in this newsletter activities related to WIDEST or to the cluster. The events reported include: a general presentation of WIDEST, the kick-off of the project, activities carried out (e.g. the Interoperability Day, Hydro DWG, IAHR world conference, Barcelona Open day, Lisbon event etc.). In the latest issue (Feb 2016) the end of the first year of WIDEST was announced. The text summed the activity carried out during this first year and emphasized its main milestones achievement during this first period. Pending and follow-up actions | | | | | |
| Pending and follow-up actions | | | | | |
| Not relevant | | | | | |
| Final asses | smen | nt of the ever | nt (achievement | of objectives, results, impact) | |
| Not relevant | | | | | |





| General information | | | | | | |
|----------------------------------|------------|--------------------------------|-----------|------------|--|--|
| Name: | "AQI | "AQUA2015" - 42ND IAH CONGRESS | | | | |
| Type of activity: | Con | ngress | | | | |
| Place: | Rom | Rome (Italy) | | | | |
| Start date: | 13/09/2015 | | End date: | 18/09/2015 | | |
| Participant data | | | | | | |
| Name: | | Gabriel Anzaldi (EURECAT) | | | | |
| Partner: | | EURECAT | | | | |
| Objectives of the event/activity | | | | | | |

During the workshop, the "water" projects granted by the European Commission during 2014 under the European Horizon 2020 Research Programme will be illustrated, by their coordinators and partners. These five on-going projects are related to water use and consequently they concern groundwater too. In some cases, groundwater is the main topic developed by projects. Knowing more about these projects represents an opportunity for the IAH community to create synergy inside EU, but also with other international and global projects related to the groundwater topic. Future and further possibilities for upcoming H2020 calls would be preliminary discussed.

Results of the dissemination activity

The WIDEST project was presented.

Pending and follow-up actions

WatERP/WIDEST partners have exchanged lived experiences with the rest of the OGC members in order to establish future standard development lines at short-midterm.





| General information | | | | | |
|---------------------|------------------|----------------------------|------------------|--------------|--|
| Name: | Hydi | Hydro DWG workshop | | | |
| Type of activity: | Wor | Workshop | | | |
| Place: | Orleans (France) | | | | |
| Start date: | 20/0 | 9/2015 | End date: | 21/09/2015 | |
| Participant data | | | | | |
| Name: | | Francesc Guitart (EURECAT) | | | |
| Partner: EURECA | | | EURECAT | | |
| | | Objec | tives of the eve | ent/activity | |

This workshop was aimed at establishing next steps in the development of the Open geospatial Consortium with the focus on the hydrologic standards.

Results of the dissemination activity

The WatERP/WIDEST projects have presented the lessons learned and recommendations to the HY_Features. These aspects were derived from the mappings between HY_Features and the water management ontology and their interaction with the Open Management Platform (OMP).

Pending and follow-up actions

WatERP/WIDEST partners have exchanged lived experiences with the rest of the OGC members in order to establish future standard development lines at short-midterm.

Final assessment of the event (achievement of objectives, results, impact...)

The workshop discussed current stage and needs of the hydrologic architecture (REST SOS and WPS), Markup languages (WaterML2.0, GroundwaterML, TimeseriesML, etc.) and semantic models (HY_Features) with special emphasis on real-demonstration.





| | | | General inform | nation | | |
|----------------------------------|-------------------------|--|----------------|------------|--|--|
| Name: | ICT 1 | for Water Op | en Day | | | |
| Type of activity: | | Event open to the public, with invited speakers from the EC and the ICT4WATER cluster | | | | |
| Place: | Barc | Barcelona | | | | |
| Start date: | 22(| 09-15 | End date | 22-09-2015 | | |
| | Participant data | | | | | |
| Name: | | Organisers: Gabriel, Anzaldi, Xavier Domingo (EURECAT). Dragan Savic and Lydia Vamvakeridou-Lyroudia (UNEXE) (Organisers) Other projects from the cluster and the Action Group participating | | | | |
| Partner: | UNEXE, EURECAT, CETAQUA | | | | | |
| Objectives of the event/activity | | | | | | |

The event was a technology transfer and networking session where water innovation results by the five finishing projects of the cluster were presented (WATERP, iWIDGET, EFFINET, URBANWATER, ICEWATER).

Results of the dissemination activity

Apart from the ICT4WATER cluster members, who were present, the event was also attended by the Ctrl+SWAN action group and by two EC officers: EC (Grazyna Wojcziecko DG CONNECT and Tom Bauer EIP Water Secretariat). After the presentation of the projects and their results, there were presentations by the EC where the future of Smart Water projects was discussed at length with the EC representatives

Pending and follow-up actions

Not relevant

Final assessment of the event (achievement of objectives, results, impact...)

The event was very successful, attended by members of the ICT4WATER cluster, EC officers, project partners, representatives of local water related industries and SMEs. In all there were around 100 participants. Details appeared in the local media (http://www.iagua.es/noticias/grupo-inclam/15/10/07/hemos-traducido-concepto-smart-ahorros-reales-gestores-agua) and the official newsletters by the Commission:

(http://us6.campaign-archive2.com/?u=55b2cc2102daad86f327941d4&id=62141a395a&e=a256d59e98)





| General information | | | | | |
|----------------------------------|----------------------------|----------------|-----------|------------|--|
| Name: | Sant Miquel Fair | | | | |
| Type of activity: | Pres | resentation | | | |
| Place: | Lleic | Lleida (Spain) | | | |
| Start date: | 24/09/2015 | | End date: | 24/09/2015 | |
| Participant data | | | | | |
| Name: | Francesc Guitart (EURECAT) | | | | |
| Partner: | | EURECAT | | | |
| Objectives of the event/activity | | | | | |

Sant Miquel Fair is the Lleida's Industrial Equipment National Venue and its main objective is to be a national meeting point for the main agricultural industries and SMEs. 2015 edition had more than 150.000 visitors, 325 expositors and 64 conferences, workshops and other parallel activities with more than 6.000 professional inscriptions and institutional visitors.

Results of the dissemination activity

A presentation was done describing WatERP project and its objectives and main outcomes. During the presentation there was the opportunity of introducing the WIDEST project and the ICT4Water cluster.

Pending and follow-up actions

After the presentation some informal meetings were done with the assistants, which was a great opportunity for networking with SMEs and industries representatives and also WatERP details were discussed as well as WIDEST and ICT4Water missions.

Final assessment of the event (achievement of objectives, results, impact...)

The presentation described WatERP main outcomes and WIDEST and ICT4Water cluster were presented.





| General information | | | | | |
|----------------------------------|----------------------------------|--|------------------|--|--|
| Name: | Exhi | bition booth | (ICT4WATER), o | demonstration and special networking session | |
| | durir | ng the ICT 20 | 15 Conference i | n Lisbon | |
| Type of activity: | Exhi | bition- Open | to the general | public and Networking session open to the | |
| | Con | Conference participants- ICT4WATER clustering activity | | | |
| Place: | Lisbo | Lisbon, Portugal | | | |
| Start date: | 18-1 | 0-2015 | End date | 22-10-2015 | |
| | Participant data | | | | |
| Name: | | Lydia Vam | nvakeridou-Lyrou | dia (LVL)- Dragan Savic- Gabriel Anzaldi | |
| (Organisers) | | | | | |
| Partner: | Partner: UNEXE, EURECAT, CETAQUA | | | | |
| Objectives of the event/activity | | | | | |

ICT4Water was selected as one of the five projects to show their results at the exhibition at the ICT2015 event in Lisbon to the general public. The interactive exhibition was a showcase of the best-in-class results of the existing European ICT Research & Innovation. This event was organized mainly by UNEXE as their Open to the Public Event, with the help of Gabriel Anzaldi (EURECAT) and Sander Smit (WATERNOMICS)

The special networking session, attended also by the EC officer Grazyna Wojcziecko. It was a networking session on Smart Water, Smart Cities and the IoT, co-organised by UNEXE (LVL) and EURECAT.

https://ec.europa.eu/digital-agenda/events/cf/ict2015/item-display.cfm?id=15433

Results of the dissemination activity

Over 6000 people visited the exhibition at the Conference venue (i.e. the part that was not open to the general public). We cannot keep exact records of the visitors at the ICT4WATER booth, because it was open to the general public, but we estimate that there were more, because it was also open for two additional days. Around 100 people attended the networking session, and this number was limited by the fact that the room allocated for the event by the Conference had a limited capacity. The ICT4WATER booth and interviews by ICT4WATER people from LNEC (iWIDGET partner) appeared also in local media (in Portuguese). Dragan Savic gave an interview to an Austrian channel.

Pending and follow-up actions





For WIDEST, the events in Lisbon were the most important dissemination action during the 1st year of the project. We intend to follow with an event of similar scale during the second year of the project, which will take place during the European Utility Week in Barcelona (November 2016)

Final assessment of the event (achievement of objectives, results, impact...)

The event was a remarkable success for the ICT4WATER cluster and WIDEST. The exhibition booth was a good opportunity for networking, disseminating to the general public and the media, increasing the visibility of ICT4WATER (and of WIDEST, which is part of it). It was also attended by several EC officers.

The networking session was very well attended, full, with people standing, beyond our expectations. Also the introduction to the session by the EC advisor, as to the perspective of the EC was very helpful:

The EC wants to see the products and services created to achieve these policy goals delivered through the global market place and in the process contribute to the health and wealth of Europe. ICT4Water's work has produced a range of innovative new ideas, products and services. At present, each is the result of a separate initiative. As is known from the field trials, assembling them into connected systems is difficult. The EC therefore asked ICT4WATER to advise them whether or not the introduction of standards could facilitate and accelerate the formation of a Smart Water market. WIDEST and iWIDGET were asked to coordinate the work as it had recent experience of successfully leading the creation of the Open Geospatial Consortium (OGC) and Open Modelling Interface (OpenMI) standard. Respectively.

Detailed minutes of the discussion were kept, which can be provided to the EC if needed. We don't put them here, because this document will be public.





| General information | | | | | |
|---|-----------------|--|------------|--|--|
| Name: | EU Utility Week | | | | |
| Type of activity: | Exhibition and | Exhibition and Conference mainly attended by the Energy Industry | | | |
| Place: | Vienna | Vienna | | | |
| Start date: | 03-11-2015 | End date: | 05-11-2015 | | |
| Participant data | | | | | |
| Name: Lydia Vamvakeridou-Lyroudia (LVL) | | | | | |
| Partner: UNEXE | | | | | |
| Objectives of the event/activity | | | | | |

Annual event for the European Utilities, with Exhibition and Conference. It is well attended (over 4000 visitors) by representatives of the Energy (mostly) utilities focusing on Smart Energy. In 2015 they included a water session with the objective to see whether the audience would be interested,

Results of the dissemination activity

LVL was invited as speaker at the Conference and made a presentation about WIDEST and the ICT4Water cluster. Also she introduced the EIP Water Action Group to the organisers, who participated too, chairing the water session. There was a significant interest from the audience and the organisers.

Pending and follow-up actions

Due to the success of the 2015 participation, WIDEST and ICT4WATER have been invited to be more widely involved at the 2016 Conference and Exhibition, which will take place in Barcelona (November 2016)

Final assessment of the event (achievement of objectives, results, impact...)

The objectives of the participation of WIDEST at this summit were achieved. Dissemination and contacts with the water industry have been made and participation to further events has been planned. It was so successful that this year, 2016, at the invitation of the organisers, we are planning for an Exhibition booth, two hub sessions and one panel session at the Conference. We are planning to include the ICT4WATER cluster and Action Group in the activities, and make this event the equivalent of ICT2015 (Lisbon) participation for Year 2, because of the high attendance and visibility.





| | | General infor | mation | | | |
|-------------------|---|--|---------------|--|--|--|
| Name: | WssTP Working | WssTP Working Groups and Brokerage Event | | | | |
| Type of activity: | Workshop | | | | | |
| Place: | Brussels | | | | | |
| Start date: | 23-11-2015 | End date: | 23-11-2015 | | | |
| | | Participant | data | | | |
| Name: | Name: Lydia Vamvakeridou-Lyroudia (LVL) | | | | | |
| Partner: UNEXE | | | | | | |
| | Obje | ectives of the e | vent/activity | | | |

Event organized bi-annually by WssTP for active members of the WssTP Working Groups. UNEXE represents WIDEST by participating at the Water and Energy Working Group.

Results of the dissemination activity

Due to special circumstances (please see below at the final assessment paragraph) the water and energy group was cancelled at the last moment, i.e. on the same day of the event. The participants that were present were distributed to other working groups that were to take place on the same day. LVL attended the workshop for the Water-Energy-Food working group and the group for Eco-innovation (the ICT group was cancelled too)

Pending and follow-up actions

Contacts and networking with the water industry and other research/working groups representatives have been made. WIDEST was invited to participate to the next annual WssTP innovation conference in June 2016, to present ongoing activities and results related to Smart Water and the ICT4WATER cluster.

Final assessment of the event (achievement of objectives, results, impact...)

Although WIDEST has been represented, the goals have been only partially achieved, due to the cancellation of the water and energy working group meeting Thus happened because the event was held during the period where Brussels was under special security measures (lock-down) after the events of the terrorist attack in Paris on November 15. Consequently less than half of the expected participants showed up; the rest cancelled at the last moment. Obviously, these circumstances were beyond the organisers' control.





| General information | | | | | | | |
|----------------------------------|--------------------------------------|---------------|--------------------|----------------|--|--|--|
| | | | | | | | |
| Name: | Sma | rt Water Grid | I International Co | onference 2015 | | | |
| Type of activity: | Worl | kshop-Confe | shop-Conference | | | | |
| Place: | Inche | on | | | | | |
| Start date: | 27-11-2015 | | End date: | 27-11-205 | | | |
| Participant data | | | | | | | |
| Name: | Philippe Gourbesville, Lian Guey Ler | | | | | | |
| Partner: | UNS | | | | | | |
| Objectives of the event/activity | | | | | | | |

The international event is organized by the Korean Ministry of Land, Infrastructure and Transport (MOLIT) and Smart Water Grid Research Group. It is a yearly international conference which was first held in 2013 at Incheon that focus on the Smart Water Grid for water management.

Results of the dissemination activity

UNS was invited to organize a workshop on Standardization to discuss the issues of standardization for Smart ICT in the water domain. Speakers include organizations like ETRI, IBM as well as governmental body like the National Telecommunication Regulatory Authority of Egypt. In addition Smart Water Journal and @QUA Association was publicised during the workshop.

Pending and follow-up actions

Contacts with the water industry have been made and WIDEST was invited to participate to other annual water industry events in 2016.

Final assessment of the event (achievement of objectives, results, impact...)

The objectives of the participation of WIDEST at this conference were achieved. Dissemination and contacts with the water industry have been made and participation to further events has been planned.





| General information | | | | | |
|----------------------------------|--|---------------------|------------------|--|--|
| Name: | loT 2 | 2015 - Interna | ational Conferen | ce on the Internet of Things - Smart Water | |
| Type of activity: | Wor | Workshop-Conference | | | |
| Place: | Inch | Incheon | | | |
| Start date: | 28-1 | 1-2015 | End date: | 28-11-2015 | |
| | Participant data | | | | |
| Name: | Name: Philippe Gourbesville, Lian Guey Ler | | | Guey Ler | |
| Partner: | UNS | | | | |
| Objectives of the event/activity | | | | | |

It is an international event which started in 2008 in Switzerland that focus on all topics related to the internet of things. *UNS was invited to organize a workshop on 'Smart Water Challenges and IoT Workshop'* to discuss the issues on SMART ICT and IoT for the water domain. Speakers include organizations like ETRI, IBM, K-Water and IBM.

Results of the dissemination activity

Standardizations and specifications on Smart Water Technology are discussed. Also, the importance of smart sensor technologies and the essential roles of Web of Things and IOT to water management are explored. In addition Smart Water Journal and @QUA Association was publicised during the workshop.

Pending and follow-up actions

Contacts and networking with the water industry and other stakeholder groups have been made.

Final assessment of the event (achievement of objectives, results, impact...)

The objectives of the participation of WIDEST at this conference were achieved. Dissemination and contacts with the water industry have been made and participation to further events has been planned.





| General information | | | | | |
|----------------------------------|---|-----------------------|-----------------|-------------------------------------|--|
| Name: | Stak | eholder cons | sultation event | on the new Drinking Water Directive | |
| Type of activity: | Wor | Workshop-Consultation | | | |
| Place: | Brus | Brussels | | | |
| Start date: | 08-12-2015 | | End date: | 08-12-205 | |
| Participant data | | | | | |
| Name: | Name: Lydia Vamvakeridou-Lyroudia (LVL) | | | | |
| Partner: | UNEXE | | | | |
| Objectives of the event/activity | | | | | |

Event organized by KWR on behalf of the EC. It was the final stakeholder consultation event on the new Drinking Water Directive to be released in 2018-19.

Results of the dissemination activity

WIDEST was invited to this event, as a member of the steering committee of the EIP Water Action Group Ctrl+SWAN, together with two other members of the Action Group Steering Committee. This Action Group is affiliated to WIDEST and the ICT4WATER cluster, under Task 5.6

Pending and follow-up actions

Contacts and networking with the water industry and other stakeholder groups have been made. In particular WIDEST managed to include in the discussions and the minutes the importance of smart sensor technologies to drinking water quality and safety.

Final assessment of the event (achievement of objectives, results, impact...)

The event was attended by around 80 selected and invited stakeholders representing different organisations. It split in three working groups, working in separate sessions, with plenaries at the beginning and at the end. Minutes were kept by KWR, who organized the event. The point of this second stakeholder consultation (the first one was in May 2015) was to finalise the proposal to the EC about the New Drinking Water Directive. The points that had already been discussed in the previous consultation were brought forward, and commented upon. At the closing plenary session there was voting about several points. The recommendations about Smart Water technologies have been included to the final recommendations.





| | | | General inform | nat | ion |
|----------------------|-----------|---------------------------------------|-----------------------------------|------|--|
| Name: | Sma | Smart Energy UK & Europe 2016 | | | |
| Type of activity: | Sma | art Energy S | Summit -Confere | nce |) |
| Place: | Lond | don, | | | |
| Start date: | 28-0 | 28-01-2016 End date : 29-01-16 | | | |
| | | | Participant (| dat | a |
| Name: Lydia | | | Lydia Vamvakeridou-Lyroudia (LVL) | | |
| Partner: | | UNEXE | | | |
| | | Obje | ectives of the ev | ven | t/activity |
| Annual event for the | water in | dustry repre | esentatives and t | for | water utilities focusing on smart energy. They |
| | | | | | om) in order to update the audience on issues |
| related to Smart Wat | | | | | |
| | | Results | s of the dissemi | inat | tion activity |
| LVL was invited as s | speaker a | and made a | a presentation al | bou | at WIDEST and the ict4water cluster, entitled: |

Pending and follow-up actions

Contacts with the water industry have been made and WIDEST was invited to participate to other annual water industry events in 2016, in order to update all their members on the EC perspectives relate to Smart Water.

Final assessment of the event (achievement of objectives, results, impact...)

The objectives of the participation of WIDEST at this summit were achieved. Dissemination and contacts with the water industry have been made and participation to further events has been planned.

Smart Water Meters: The European Commission Perspective.





| General information | | | | | | |
|--|-----|---------------------|------------------------|----------------|--|--|
| Name: | IWA | IWA Blog Post Entry | | | | |
| Type of activity: | Pos | t Entry | | | | |
| Place: | Not | Relevant | | | | |
| Start date: | Feb | 2016 | End date: | N/A | | |
| | • | | Participant da | ta | | |
| Name: | | Gabriel Anz | zaldi <i>(EURECAT)</i> | | | |
| Partner: | | EURECAT | | | | |
| | | Objec | tives of the ever | nt/activity | | |
| The IWA blog is one of several communication channels managed by the Communications and Engagement Team but owned by all. It aims to offer a broad perspective of the work of the IWA, and thought-leadership on water-related issues as they connect with larger global debates e.g. sustainability, urbanization, health and human rights. | | | | | | |
| | | Results | of the dissemina | ation activity | | |
| The blog post entry arrived to all subscribers and helped to inform and spread the results of WIDEST project among all the relevant actors regarding the IWA community. | | | | | | |
| Pending and follow-up actions | | | | | | |
| Not relevant | | | | | | |
| Final assessment of the event (achievement of objectives, results, impact) | | | | | | |
| Not relevant | | | | | | |





| General information | | | | | | | |
|--|--|--|--|--|--|--|--|
| Name: | 3 rd EIP Water Annual Conference and ICT4WATER clustering meeting | | | | | | |
| Type of activity: | Workshops/Conference/Meeting: Multiple type event | | | | | | |
| Place: | Leeuwarden, the Netherlands | | | | | | |
| Start date: | 09/02/2016 | | | | | | |
| Participant data | | | | | | | |
| Name: | Gabriel Anzaldi and Xavier Domingo (EURECAT-organisers), Lydia Vamvakeridou-Lyroudia (UNEXE), Durk Krol (WSSTP) | | | | | | |
| Partner: EURECAT, UNEXE, WSSTP, ICT4WATER cluster, EIP Water Group Ctrl+SWAN | | | | | | | |
| Objectives of the event/activity | | | | | | | |
| | | | | | | | |

Annual event organised by EIP Water (EC). It's a three day event for the water industry, water operators/utilities, academics, researchers, EC representatives, water regulators, city stakeholders and authorities and NGOs related to the water sector, focusing overall on water innovation, with around 550 participants from 50 countries.

Results of the dissemination activity

Part of the Annual Conference is dedicated to group meetings. WIDEST (EURECAT-Gabriel Anzaldi and Xavier Domingo) organised an ICT4WATER cluster event, attended by representatives of the initial 15 projects and one of the new projects (PROTEUS) (http://www.ict4water.eu/index.php/ict4water-at-eip-water-conference/). WIDEST (EURECAT and UNEXE) also participated at the Ctrl+SWAN Action Group meeting (http://www.swan.technology/ctrlswan-side-meeting-on-best-available-technology-for-smart-water-network/), presenting (UNEXE) the activities of WIDEST related to the Action Group. On the last day there was a special conference "Cities and Water", where WIDEST participated and voted (UNEXE, WSSTP) as stakeholders for the Leeuwarden Declaration, which was the final outcome of the Conference and the accompanying side events (http://www.eip-water.eu/leeuwarden-declaration-why-and-how-drive-water-innovation-europe)

Pending and follow-up actions N/A





Final assessment of the event (achievement of objectives, results, impact...)

The objectives of the participation of WIDEST at this conference have been achieved. By participating in a single event, WIDEST managed to organise a ICT4WATER cluster meeting, participate to an Action Group meeting and vote as stakeholders for a Water Declaration, apart from networking and contacting water related experts and professionals from 50 countries and from different fields. A detailed report on these activities can be found at the ICT4WATER website (http://www.ict4water.eu/index.php/ict4water-at-eip-water-conference/), at the WIDEST website (http://www.widest.eu/index.php/news) and will be included at the next Newsletter (due in May 2016).





| General information | | | | | | | | |
|----------------------------------|------------|--|-----------|------------|--|--|--|--|
| Name: | Wate | Water Efficiency Annual Conference | | | | | | |
| | (http | ttp://www.waterwise.org.uk/pages/conference-2016.html) | | | | | | |
| Type of activity: | Con | onference, organised by Waterwise (<u>www.waterwise.org</u>) | | | | | | |
| Place: | Lond | London, | | | | | | |
| Start date: | 02/03/2016 | | End date: | 02/03/2016 | | | | |
| Participant data | | | | | | | | |
| Name: | | Lydia Vamvakeridou-Lyroudia (LVL) | | | | | | |
| Partner: | | UNEXE | | | | | | |
| Objectives of the event/activity | | | | | | | | |

Annual event for the water industry representatives, for water utilities and for water regulators (e.g. OFWAT), focusing on water efficiency (water saving, smart water, behavioural changes etc). This year's theme focused on customers' behavioural changes through smart water technology and customer interaction.

Results of the dissemination activity

LVL was invited as expert to be a member of the panel, discussing the technical aspects related to the Conference theme (technology opportunities and barriers for engaging people through smart water technologies), representing WIDEST and the ICT4WATER cluster.

(http://www.waterwise.org.uk/data/2016_Conference/Conference_agenda_2016_-_Final_29_02.pdf)

Pending and follow-up actions

Contacts with the water industry and water regulators have been made. WIDEST was invited to participate also to the next annual conference.

Final assessment of the event (achievement of objectives, results, impact...)

The objectives of the participation of WIDEST at this summit were achieved. Dissemination and contacts with the water industry and water regulators have been made and participation to further events has been planned.





| General information | | | | | | | |
|---|---|---------|-----------------------------------|-----------------|--|--|--|
| Name: | Water and Energy Working Group (WSSTP) | | | | | | |
| Type of activity: | Workshop, organised by DVGW (Karlsruhe-Germany) | | | | | | |
| Place: | Karlsruhe-Germany | | | | | | |
| Start date: | 20/0 | 4/2016 | End date: | 21/04/2016 | | | |
| Participant data | | | | | | | |
| Name: | Name: | | Lydia Vamvakeridou-Lyroudia (LVL) | | | | |
| Partner: | | UNEXE | | | | | |
| Objectives of the event/activity | | | | | | | |
| Workshop of the Water and Energy Working Group by WSSTP. | | | | | | | |
| | | Results | of the dissemi | nation activity | | | |
| LVL was invited as to participate because of the links to the cluster and smart water. It was the first workshop of this working group, where the thematic areas were determined, as well as the priorities for research linked to the industry. LVL was put in charge of Thematic Area 1 (Smart water and Energy). | | | | | | | |
| Pending and follow-up actions | | | | | | | |
| A white paper was written, submitted to WSSTP to be included in the Roadmap by WSSTP in June 2016 (LVL contributed for smart water) | | | | | | | |
| Final assessment of the event (achievement of objectives, results, impact) | | | | | | | |
| The objectives of the participation of WIDEST at this workshop were achieved. Dissemination and contacts water and energy major industrial partners and active participation to the activities and the Roadmap of WSSTP. | | | | | | | |





| General information | | | | | | | |
|----------------------------------|------------------------------|--|-----------|------------|--|--|--|
| Name: | | VA Water & Wastewater Technology Conference LET2016 and ICT4WATER uster meeting | | | | | |
| Type of activity: | Con | Conference/Cluster Meeting: Multiple type event | | | | | |
| Place: | Jerez de la Frontera (Spain) | | | | | | |
| Start date: | 17/06/2016 | | End date: | 17/06/2016 | | | |
| Participant data | | | | | | | |
| Name: | | Eva Promes (IWA- Organisers) Gabriel Anzaldi (EURECAT), Lydia Vamvakeridou-Lyroudia (UNEXE), | | | | | |
| Partner: | | EURECAT, UNEXE, IWA, ICT4WATER cluster, | | | | | |
| Objectives of the event/activity | | | | | | | |

Annual conference organised by IWA. It's a three day event for the water industry, water operators/utilities, academics, researchers, focusing overall on water technology, with around 300 participants. The ICT4WATER cluster meeting was organised as a special session on 17/06/2016

Results of the dissemination activity

The cluster meeting was called by DG CONNECT and was attended by Aude Glenisson (DG CONNECT) and Evdokia Achilleos (EASME). It was attended by 10 projects (all the active projects at the time) as well as some representatives from new projects as incentive for them to join the cluster. Presentations of the main outcomes of all the projects were made. During the event Aude Glenisson presented the later version of the ICT for Water Management Roadmap on behalf of the EC.

Pending and follow-up actions

N/A

Final assessment of the event (achievement of objectives, results, impact...)

The objectives of the participation of WIDEST at this conference have been achieved. The results of the projects were presented to attendees of the Conference and the ICT4WATER cluster was promoted to new projects. These activities can be found at the ICT4WATER website and newsletter (http://us8.campaign-archive1.com/?u=46ad96ae8c306627be2d57709&id=8a7911240f), at the WIDEST website (http://www.widest.eu/index.php/news)





| General information | | | | | | |
|----------------------------------|------------------|--|------------------|------------------------------------|--|--|
| Name: | Wss | TP- Water In | novation Confere | ence 2015 | | |
| Type of activity: | Con | Conference-Working group sessions-Networking | | | | |
| Place: | Brus | Brussels | | | | |
| Start date: 21-0 | | 6-2016 | End date | 23-06-2016 | | |
| | Participant data | | | | | |
| Name: | | Lydia Vamv | /akeridou-Lyroud | lia (LVL), Maria Mirachtsi (WssTP) | | |
| Partner: UNEXE, WssTP | | | | | | |
| Objectives of the event/activity | | | | | | |

Event organized annually by WssTP in Brussels to bring together the water industry, experts from the WssTP working groups, EC representatives, academics, researchers, SMEs and NGOs. (http://wsstp.eu/news/wsstp-water-innovation-smes-awards-winners-2015-announced/)

Results of the dissemination activity

WIDEST was invited to this event, by WssTP who organized it. On behalf of WIDEST, LVL made a presentation at the working group Water & Energy (about smart water and the cluster) and held an exhibition booth for two days, displaying and distributing material about the cluster and WIDEST. This was the main dissemination event organised by WSSTP for the project..

Pending and follow-up actions

Contacts and networking with the EC, the water industry, SMEs have been made. WIDEST participated at the Water & Energy working Group, leading the Smart Water thematic session.

Final assessment of the event (achievement of objectives, results, impact...)

The event attended by around 400 people, from all fields related to the water industry and the EC. It has a great visibility among the industry, the EC and the research community. The WssTP working group on Water and Industry is another good opportunity for linking with other initiatives and groups.





| General information | | | | | | | |
|----------------------------------|--|---|----------------|------------|------------|--|--|
| Name: | Participation/ Teaching at the Summer School on Smart Water Management | | | | | | |
| Type of activity: | Summer school - Educational Activity | | | | | | |
| Place: | Monte Verita, Ascona, Switzerland | | | | | | |
| Start date: 22-08-2016 | | | End date | 25-08-2016 | | | |
| | | | Participant da | ta | | | |
| Name: | | Lydia Vamvakeridou-Lyroudia (LVL), Gabriel Anzaldi (EURECAT Francesc Guitart (EURECAT), | | | (EURECAT), | | |
| Partner: UNEXE, EURECAT | | | | | | | |
| Objectives of the event/activity | | | | | | | |

Summer school organised by the project SMARTH20 (a member of the ICT4WATER cluster, to provide young professionals and PhD students a week of lectures, workshops and teaching on smart water.

(http://www2.idsia.ch/cms/smartwater/)

Results of the dissemination activity

WIDEST was invited to this event, by SMARTH20 who organized it. On behalf of WIDEST, LVL and Gabriel Anzaldi delivered lectures. All the lectures can be found online. They have also been recorded on video and are part of the communication tools uploaded by WSSTP. Many cluster projects also participated by delivering lectures, while there were also invited speakers beyond the cluster.

Pending and follow-up actions

N/A

Final assessment of the event (achievement of objectives, results, impact...)

The event was attended by around 40 participants from Europe and the US. It provided a living forum for lecturing, exchanging ideas, stimulating discussions and accumulated material with wider significance that will remain online as a permanent communications tool.





| General information | | | | | | | |
|----------------------------------|-------------------|-----------------------------------|------------------|---|--|--|--|
| Name: | 3 rd S | takeholder | consultation eve | ent on the new Drinking Water Directive | | | |
| Type of activity: | Wor | kshop-Consultation | | | | | |
| Place: | Brus | ssels | | | | | |
| Start date: | 23-09-2016 | | End date: | 23-09-2016 | | | |
| | Participant data | | | | | | |
| Name: | | Lydia Vamvakeridou-Lyroudia (LVL) | | | | | |
| Partner: | | UNEXE | | | | | |
| Objectives of the event/activity | | | | | | | |

Event organized by DG ENV. It was the 3rd stakeholder consultation event on the new Drinking Water Directive to be released in 2018-19.

Results of the dissemination activity

WIDEST was invited to this event, initially as a member of the steering committee of the EIP Water Action Group Ctrl+SWAN, together with two other members of the Action Group Steering Committee. This Action Group is affiliated to WIDEST and the ICT4WATER cluster, under Task 5.6

Pending and follow-up actions

Contacts and networking with the water industry and other stakeholder groups have been made. In particular WIDEST managed to include in the discussions and the minutes the importance of smart sensor technologies to drinking water quality and safety.

Final assessment of the event (achievement of objectives, results, impact...)

The event was attended by around 60 selected and invited stakeholders representing different organisations. The 3rd consultation targeted the final points for the recommendations on the Drinking Water Directive, to be submitted to the EC. The point of this special 3rd stakeholder consultation (the first one was in May 2015, the second in December 2015) was to comment on the proposal to the EC about the New Drinking Water Directive. The points that had already been discussed in the previous consultations and the draft document were brought forward, and commented upon. The recommendations about Smart Water technologies have been included to the final recommendations.





| | | | General inform | nat | tion | |
|-------------------------------------|--|---|------------------|-----------------|--|--|
| Name: | EC-DoE Workshop - Understanding the water-energy nexus: integrated water | | | | | |
| | and | and power system modelling, in Ispra, Italy, 28 and 29 September 2016 | | | | |
| Type of activity: | Wor | kshop | | | | |
| Place: | JRC | , Ispra, Italy | | | | |
| Start date: | 28-0 | 9-2016 | End date | | 29-09-2016 | |
| | 1 | | Participant o | lat | ta | |
| Name: | | Lydia Vam | vakeridou-Lyroι | ıdi | ia (LVL), | |
| Partner: | | UNEXE, | | | | |
| | | Objec | ctives of the ev | en | nt/activity | |
| Workshop EU-US to e | | | energy links, r | es | earch gaps, state-of-the-art technology and | |
| | | Results | of the dissemi | na | tion activity | |
| WIDEST was invited to | this e | event, by SIN | M4NEXUS, a m | en | nber of the ICT4WATER cluster and the JRC | |
| who organized it. On b | ehalf d | of WIDEST, | LVL participate | d a | at the procedures with prominent members of | |
| the JRC, the US and se | elected | l projects fro | m the EU. | | | |
| | | Pend | ing and follow | -u _l | o actions | |
| A White paper is to follow in 2017. | | | | | | |
| Final asses | smen | t of the eve | nt (achievemer | nt | of objectives, results, impact) | |
| | • | • | • | | ope and the US. It provided the opportunity to ves the opportunity to participate in following | |





| General information | | | | | | |
|----------------------------------|------------------|---|-----------------|------------------------------------|--|--|
| Name: | Worl | kshop for You | ung Water Profe | ssionals at Water Ideas Conference | | |
| Type of activity: | Wor | rkshop/Conference | | | | |
| Place: | Bolo | ogna, Italy | | | | |
| Start date: | Start date: 19-1 | | End date | 21-10-2016 | | |
| | Participant data | | | | | |
| Name: | | Eva Promes (EP), Lydia Vamvakeridou-Lyroudia (LVL), | | | | |
| Partner: IWA,UNEXE | | | | | | |
| Objectives of the event/activity | | | | | | |

Workshop for Young Professionals with the theme: Developing a Roadmap: ICT solutions for Water in Smart Cities. This workshop for and by Young Water Professionals (YWPs), is developed by the International Water Association on behalf of the partners of aiming to establish an interconnected ICT for

Water community. It was the main dissemination event for IWA.

A roadmap on Smart City Connection is currently under development by WIDEST partners, which provides policy and decision makers from municipalities and utilities an overview of the main aspects that need to be considered to effectively design and integrate ICT for Water solutions and strategies. This workshop aims to spark fresh ideas from Young Water Professionals via interactive exercises, group discussions, and dialogue with 'senior' water professionals to design a YWP version of this roadmap. Key challenges and recommendations will be identified to drive the development of ICT solutions for Water in Smart Cities, which may be integrated in the WIDEST roadmap to be shared with the European Commission.

Results of the dissemination activity

IWA organised the special session for Young Professionals, as part of the Water Ideas Conference (http://water-ideas.com/2016/en/). Apart from the workshop (EP and LVL), LVL also participated in the panel for the Roadmap during the main Conference event.

Pending and follow-up actions

N/A

Final assessment of the event (achievement of objectives, results, impact...)





The event was attended by around 15 young professionals, while the Conference had more than 200 participants from across Europe. The event was a success, because it gave the opportunity to young professionals to get information about smart water and also the opportunity to disseminate the Roadmap to the conference attendees.





| General information | | | | | | | |
|----------------------------------|---|---|------------|--|--|--|--|
| Name: | European | European Water Utility Week 2016 | | | | | |
| Type of activity: | Hub sessi | Hub session/ Conference(Summit)and Exhibition | | | | | |
| Place: | Barcelona, Spain | | | | | | |
| Start date: | 15-11-201 | 6 End date | 17-11-2016 | | | | |
| | Participant data | | | | | | |
| Name: | Name: Lydia Vamvakeridou-Lyroudia (LVL), Gabriel Anzaldi (GA) | | | | | | |
| Partner: UNEXE, EURECAT | | | | | | | |
| Objectives of the event/activity | | | | | | | |

Annual event for the European Utilities, with Exhibition, Hub Sessions (open to all) and Conference (Summit). It is well attended (over 5000 visitors) by representatives of the Energy (mostly) utilities focusing on Smart Energy (http://www.clarion-cms.com/uploads/Pages/site229_45219_en_file1.pdf) . In 2015 they included a water session with the objective to see whether the audience would be interested for the first time. WIDEST participated and in 2016 the ICT4WATER cluster, represented by WIDEST decided to have there their main annual dissemination event.

Results of the dissemination activity

A hub session (hub session 35) was organised (chaired by LVL- GA speaker, together with another 8 cluster projects), WIDEST paid and manned an exhibition booth and LVL was invited to make a presentation on Smart Water and Energy at the Summit (the main Conference).,

Pending and follow-up actions

N/A

Final assessment of the event (achievement of objectives, results, impact...)

The objectives of the participation of WIDEST at this summit and exhibition were achieved. Dissemination and contacts with the water industry have been made and participation to further events has been planned.





| General information | | | | | | |
|----------------------------------|------------------|------------------|---------------|--|--|--|
| Name: | WssTP Working | g Groups and Bro | okerage Event | | | |
| Type of activity: | Workshop | Workshop | | | | |
| Place: | Brussels | | | | | |
| Start date: | 23-11-2016 | End date: | 24-11-2016 | | | |
| | Participant data | | | | | |
| Name: | Lydia Var | mvakeridou-Lyro | ıdia (LVL) | | | |
| Partner: | UNEXE | UNEXE | | | | |
| Objectives of the event/activity | | | | | | |

Event organized bi-annually by WssTP for active members of the WssTP Working Groups. UNEXE represents WIDEST by participating at the Water and Energy Working Group, and, from now on, to the newly created Nexus working Group.

Results of the dissemination activity

WIDEST participated successfully in the deliberations of both working groups, representing WIDEST and the cluster. At the meeting of the Water & Energy Working group she made a presentation on the thematic theme of smart water.

Pending and follow-up actions

Contacts and networking with the water industry and other research/working groups' representatives have been made.

Final assessment of the event (achievement of objectives, results, impact...)

The WSSTP events, to which has been a regular attendee and presenter are the best opportunity to link with the EC, the industry, the academia and the water companies in all themes related to ICT and Water. It provides also a forum for developing Roadmap, assessments, research themes, of which WIDEST has taken advantage.





| General information | | | | |
|---|--------|---------------|-------------------|---|
| Name: | BLU | ESCITIES Fi | nal Conference | |
| Type of activity: | Con | ference | | |
| Place: | Brus | ssels | | |
| Start date: | 13-1 | 2-2016 | End date: | 14-12-2016 |
| | | | Participant da | ta |
| Name: | | Lydia Vam | /akeridou-Lyroud | lia (LVL) |
| Partner: | | UNEXE | | |
| | | Objec | tives of the ever | nt/activity |
| This event was the fina | l Cont | erence of the | project BLUESC | CITIES, a member of the ICT4WATER cluster |
| | | Results | of the dissemina | ation activity |
| WIDEST participated at the Conference. LVL chaired one of the working groups on the future of BLUESCITIES after the end of the project. | | | | |
| | | Pendi | ng and follow-u | p actions |
| It was (decided that the ICT4WATER website will host some outputs of the project (the Amberprint tool) after their website expires. | | | | |
| Final assessment of the event (achievement of objectives, results, impact) | | | | |
| Contacts and networking with representatives of the academia and the EC. | | | | |





| General information | | | | | |
|--|--|-------------------------------------|------------------|----------------|--|
| Name: | WA | WATERLINK- Water Alliance Symposium | | | |
| Type of activity: | Con | ference | | | |
| Place: | Lee | uwarden, the | Netherlands | | |
| Start date: | 26-0 | 1-2017 | End date: | 26-01-2017 | |
| | | | Participant da | ta | |
| Name: | | Lydia Vam | vakeridou-Lyroud | lia (LVL) | |
| Partner: | | UNEXE | | | |
| | | Objec | tives of the eve | nt/activity | |
| This event was the ann | ual Sy | rmposium org | ganised by the W | ater Alliance | |
| | | Results | of the dissemina | ation activity | |
| WIDEST participated at the Conference. LVL made a presentation at the special session on smart sensors, which was organised by the Ctrl+SWAN Action Group. | | | | | |
| Pending and follow-up actions | | | | | |
| N/A | | | | | |
| Final assessment of the event (achievement of objectives, results, impact) | | | | | |
| | Contacts and networking with representatives of the water industry, mainly from the Netherlands, but also from 13 other countries. | | | | |





Appendix 2: ICT4WATER cluster- Projects and members

(In 2015 the cluster consisted of the first 15 projects in this list. The last two projects joined the cluster officially on February 2016. Consequently during the first year of the project, ICT4WATER had 15 projects. During the 2nd year ICT4WATER starts with 17 projects, but more projects are expected to join, newly funded. This list has been updated in December 2016.)

More projects are currently and after the end of the project being invited by EASME and DG CONNECT to join, as their Grant Agreement is signed, provided they are related to ICT and Water

| ICT4WATER Cluster | www | .ict4water.e | <u>u</u> | | | |
|---|--|---------------|---|------------------------|--|----------------------------------|
| Contact persons Lydia Vamvakeridou-Lyroudia Gabriel Anzaldi Sander Smit Aude Glennisson | Institution University of Exeter, UK EURECAT, Spain BM-CHANGE, Netherlands European Commission, DG CONNECT | | Email address L.S.Vamvakeridou-Ly gabriel.anzaldi@eur sander@bm-change Aude.GLENISSON@e | ecat.org .nu | ICT4WATER Projects involved IWIDGET, WIDEST, SIM4NEXUS WATERP, WIDEST, SIM4NEXUS WATERNOMICS N/A | Comments Website administration |
| Nr | CALL | | Projects | Coordinators'names | Coordinators'e-mails | Comments |
| 1 | FP7-2011 | 317624 | ICEWATER | Parag Mogre | parag.mogre@siemens.com | Concluded |
| 2 | FP7-2011 | 318272 | IWIDGET | Dragan Savic | d.savic@exeter.ac.uk | Concluded |
| 3 | FP7-2011 | <u>318556</u> | EFFINET | Laura Maestre Martínez | lmaestre@aqualogy.net | Concluded |
| 4 | FP7-2011 | 318603 | WatERP | Gabriel Anzaldi | gabriel.anzaldi@eurecat.org | Concluded |
| 5 | FP7-2011 | 318602 | UrbanWater | Eva Martinez | emartinezd@fcc.es | Concluded |
| 6 | FP7-2013 | 619186 | DAIAD | Spiros Athanasiou | spathan@imis.athena-innovation.gr | Active -finishing 2017 |
| 7 | FP7-2013 | 619228 | ISS-EWATUS | Ewa Magiera | ewa.magiera@us.edu.pl | Concludes in January 2017 |
| 8 | FP7-2013 | 619172 | SmartH2O | Andrea-Emilio Rizzoli | andrea@idsia.ch | Active -finishing 2017 |
| 9 | FP7-2013 | 619660 | WATERNOMICS | Stefan Decker | stefan.decker@deri.org | Concludes in January 2017 |
| 10 | FP7-2013 | 619795 | WISDOM | Alain Zarli | alain.zarli@cstb.fr | Concludes in January 2017 |
| 11 | H2020-Water 4a | 642047 | KINDRA | Marco Petitta | marco.petitta@uniroma1.it | Active -finishing 2018 |
| 12 | H2020-Water 4a | 641821 | WATERINNEU | L. Pesquer | I.pesquer@creaf.uab.cat | Concludes in January 2017 |
| 13 | H2020-Water 4a | 642354 | BlueSCities | Richard Edelman | richard.elelman@ctm.com.es | Concludes in January 2017 |
| 14 | H2020-Water 4a | 642224 | FREEWAT | R. Rossetto | r.rossetto@sssup.it | Active -finishing 2018 |
| 15 | H2020-Water 4a | 642354 | WIDEST | Gabriel Anzaldi | gabriel.anzaldi@eurecat.org | Concludes in January 2017 |
| 16 | H2020-EU.2.1.1.1. | 644852 | PROTEUS | Nicolas Giunta | nicolas.giunta@eglobalmark.com | Active -finishing 2018 |
| 17 | FP7-SEC-2012-1 | 312764 | SAFEWATER | Linda Eller-Shein | safewater-arttic@eurtd.com | Concludes in December 2016 |
| 18 | H2020-Water2b | 689150 | SIM4NEXUS | Floor Brouwer | SIM4NEXUS@wur.nl | Active - finishing 2020 |
| 19 | H2020-ICT10c-2015 | 687809 | POWER | Paul Fleming | PFleming@dmu.ac.uk | Active - finishing 2019 |
| 20 | EIP WATER ACTION GROUP | AG126 | Ctrl+SWAN | Armando Di Nardo | agctrlswan@gmail.com | Active Permanently |

PROJECTS AT THE END OF THE PROJECT

| Project | Organisation | Country | | | | | | |
|-------------------|--|---------|--|--|--|--|--|--|
| iWIDGET (http://w | iWIDGET (http://www.i-widget.eu/) | | | | | | | |
| | The University of Exeter (coordinator) | UK | | | | | | |
| | HR Wallingford Ltd | UK | | | | | | |
| | IBM Ireland | Ireland | | | | | | |





| Project | Organisation | Country |
|-----------------------|--|-----------------|
| | Laboratorio Nacional de Engenharia Civil | Portugal |
| | National Technical University of Athens | Greece |
| | SAP AG | Germany |
| | Utility Partnership Limited | UK |
| | Administracao e gestao de sistemas de salubridade as | Portugal |
| | Waterwise Project Ltd | UK |
| BlueSCities (http://w | /ww.bluescities.eu/) | |
| | Fundació Ctm Centre Tecnològic (Coordinator) | Spain |
| | KWR | The Netherlands |
| | JRC, European Commission | Belgium |
| | Easton Consultancy | Belgium |
| | Strane Innovation | France |
| | Redinn | Italy |
| | NTUA | Greece |
| | De Monfort University | UK |
| | University Of Istanbul | Turkey |
| | VTT | Finland |
| | Irenaquagas | Italy |
| | Ticass | Italy |
| DAIAD (http://daiad. | eu/) | |
| | Athena Research Centre | Greece |
| | Bamberg University | Germany |
| | Amphiro AG | Switzerland |
| | Fraunhofer ISI | Germany |
| | Waterwise Project Ltd | UK |
| | Aguas de Alicante | Spain |





| Project | Organisation | Country | |
|-------------------------|---|---------|--|
| Effinet (http://effinet | Effinet (http://effinet.eu/) | | |
| | AQUALOGY (coordinator) | Spain | |
| | Spanish National Research Council (CSIC) | Spain | |
| | Technical University of Catalonia. Barcelona Tech (UPC) · Institut de Robòtica i Informàtica Industrial (IRI) | Spain | |
| | Cetaqua, Water Technology Centre | Spain | |
| | Aigües de Barcelona, Empresa Metropolitana de Gestió del Cicle Integral de l'Aigua, S.A (AB) | Spain | |
| | IMT Institute for Advanced Studies (IMT) | Italy | |
| | Gemalto | Germany | |
| | Signal GeneriX Ltd (SG) | Cyprus | |
| | University of Cyprus - Research Centre for Intelligent Systems & Networks (UCY - KIOS) | Cyprus | |
| | Water Board of Limassol (WBL) | Cyprus | |
| Freewat (http://www | .freewat.eu/) | | |
| | Scuola Superiore di Studi Universitari di Perfezionamento Sant'Anna | Italy | |
| | TEA-Sistemi s.p.a. | Italy | |
| | Technischen Universität Darmstadt | Germany | |
| | Agencia Estatal Consejo Superior de Investigaciones Cientificas | Spain | |
| | Oslandia | France | |
| | United Nations Educational, Scientific and Cultural Organization - UNESCO | France | |
| | Regione Toscana | Italy | |
| | Metcenas OPS - Methodology Centre for Environment Assessment | CR | |
| | Zeta Amaltea s.l. | Spain | |





| Project | Organisation | Country |
|-----------------------|---|-------------|
| | Institut za Ekološki Inženiring | Slovenia |
| | Erciyes Universitesi | Turkey |
| | National Technical University of Athens Asset Management and Development Corporation, Greece (NTUA-AMDC) - Lavrion Technological and Cultural Park (LTCP) | Greece |
| | NIHWM - National Institute of Hydrology and water management Bucharest | Romania |
| | Tartu Ulikool | Estonia |
| | Taras Shevchenko National University of Kyiv | Ukraine |
| | Paragon Limited | Malta |
| | Bremen University - Geological Survey | GER |
| | International Groundwater Resources Assessment Centre | Netherlands |
| | University of Applied Sciences and Arts of Southern Switzerland | Switzerland |
| ICEWater (http://icev | Nater-project.eu/) | |
| | Siemens Aktiengesellschaft | Germany |
| | Toshiba Research Europe Ltd | UK |
| | Consorzio Milano Ricerche CMR | Italy |
| | Italdata S.p.A | Italy |
| | Metropolitana Milanese S.p.A | Italy |
| | UNESCO-IHE Institute for Water Education | Netherlands |
| | SC Aquatim | Romania |
| | Institute of Communication and Computer Systems (ICCS) | Greece |
| | K&S GmbH Projektmanagement | Germany |
| ISS-Ewatus (http://is | ssewatus.eu/) | <u> </u> |
| | University of Silesia | Poland |
| | Institute for Ecologu of Industrial Areas | Poland |





| Project | Organisation | Country |
|---------------------|--|----------------|
| | Minicipal Water Company of Sosnowiec | Poland |
| | Loughborough University | United Kingdom |
| | Brunel University | United Kingdom |
| | University Pablo de Olavide Seville | Spain |
| | Center for Research and Technology Hellas | Greece |
| | Municipal Water Company of Skiathos | Greece |
| | DOTSOFT S.A. | Greece |
| | VU University Amsterdam | Netherlands |
| KINDRA (http://www | z.kindraproject.eu/) | |
| | Sapienza University of Rome, Earth Sciences Department (coordinator) | Italy |
| | European Federation of Geologists | Brussels |
| | Environment and Water Agency of Andalusia | Spain |
| | La Palma Research Centre for Future Studies S.L. | Spain |
| | University of Miskolc, Faculty of Earth Science and Engineering | Hungary |
| | Geological Survey of Denmark and Greenland | Denmark |
| SmartH2O (http://ww | vw.smarth2o-fp7.eu/) | |
| | SUPSI (coordinator) | Switzerland |
| | Politecnico di Milano | Italy |
| | University of Manchester | UK |
| | Universitat Politecnica de Valencia | Spain |
| | SETMOBILE | Romania |
| | European Institute for Particaptory Media | Germany |
| | Thames Water | UK |
| | SES | Switzerland |
| | EMIVASA | Spain |





| Project | Organisation | Country | |
|----------------------|--|-----------------|--|
| | Moonsubmarine | UK | |
| UrbanWater (http://u | UrbanWater (http://urbanwater-ict.eu/) | | |
| | Aqualia Gestion Integral Del Agua Sa (Coordinator) | Spain | |
| | Sagemcom Energy & Telecom Sas | France | |
| | Hydrometeorological Innovative Solutions | Spain | |
| | Sveuciliste U Zagrebu Fakultet Elektrotehnike I Racunarstva | Croatia | |
| | Red Skies Limited (Red) | UK | |
| | Orga Systems Gmbh | Germany | |
| | Serious Games Interactive | Denmark | |
| | Aqualogus - Engenharia E Ambiente Lda | Portugal | |
| | Taviraverde - Empresa Municipal Deambiente | Portugal | |
| | Ateknea Solutions Catalonia, Sa | Spain | |
| | Ovod Spol Sro (Ovod) | Czech Republic | |
| WaterInnEU (http://w | vaterinneu.org/) | L | |
| | Centre for Ecological Research and Forestry Applications | Spain | |
| | Technische Universiteit Delft | The Netherlands | |
| | Randbee SRL | Italy | |
| | adelphi Research GGMBH | Germany | |
| | 52°North Initiative for Geospatial Open Source Software GmbH | Germany | |
| | Orion Innovations | UK | |
| | Antea Belgium NV | Belgium | |
| | Global Water Partnership Central and Eastern Europe | Slovakia | |
| Waternomics (http:// | Waternomics (http://waternomics.eu/) | | |
| | National University of Ireland Galway | Ireland | |
| | Ultra4 | Greece | |





| Project | Organisation | Country |
|--------------------|---|-----------------|
| | UNESCO (IHE) | The Netherlands |
| | Delft University of Technology | The Netherlands |
| | BM-Change | The Netherlands |
| | R2M Solution | Italy |
| | Società Esercizi Aeroportuali Spa | Italy |
| | Thermi | Greece |
| | VTEC Engineering | The Netherlands |
| WatERP (http://www | .waterp-fp7.eu/) | |
| | Fundació Eurecat | Spain |
| | INCLAM, S.A. | Spain |
| | DISY Informationssysteme GMBH | Germany |
| | Agència Catalana de l'Aigua | Spain |
| | Staffordshire University | UK |
| | Institute of Communication and Computer Systems | Greece |
| | Hydrometeorological Innovative Solutions | Spain |
| | DVGW Deutscher verein des Gas- und Wasserfaches - | Germany |
| | Technisch-Wissenschaftlicher verein ev | , |
| | Stadtwerke Karlsruhe GMBH | Germany |
| | SWKN | Germany |
| WIDEST (http://www | v.widest.eu/) | |
| | Fundació Eurecat | Spain |
| | The University of Exeter | UK |
| | Centro Andaluz de Investigaciones del Agua | Spain |
| | International Water Association | UK |
| | European Water Supply and Sanitation | Belgium |
| | Université de Nice Sophia Antipolis | France |





| Project | Organisation | Country |
|--------------|--|---------|
| WISDOM (http | ://www.wisdom-project.eu/) | |
| | Centre Scientifique et Technique du Batiment | France |
| | D'Appolonia S. p. A. | Italy |
| | Cardiff University | UK |
| | City of Cardiff Council | UK |
| | Dwr Cymru Welsh Water | UK |
| | Provincia della Spezia | Italy |
| | Società Acquedotti Tirreni S. p. A. | Italy |
| | Intel Corporation (UK) Limited | UK |
| | Imperial College of Science, Technology and Medicine | UK |
| | Advantic Sistemas y Servicios sl | Spain |
| | IDRAN Ingegneria e Tecnologia srl | Italy |





PROJECTS THAT JOINED IN 2016-2017 – 2nd reporting period

| Project | Organisation | Country |
|---|---|----------------|
| PROTEUS (http://www.proteus-sensor.eu/) | | |
| | IFSTTAR | France |
| | ESIEE - Paris School of Electrical Engineering | France |
| | CTS-UNINOVA | Portugal |
| | SMAS Almada | Portugal |
| | WINGS ICT Solutions | Greece |
| | Unparallel Innovation, Ida | Portugal |
| | Noise in Physical Systems Laboratory (NiPS) | Italy |
| SAFEWATER (http:// | //www.safewater-project.eu/) | |
| | Hagihon Company Ltd | Israel |
| | Fraunhofer Institute of Optronics, System Technologies and Image Exploitation | Germany |
| | Acreo AB | Sweden |
| | Commissariat à l'Energie Atomique et aux Energies Alternatives | France |
| | Decision Makers Ltd | United Kingdom |
| | BioMonitech, Ltd | Israel |
| | Águas do Algarve | Portugal |
| | 3S Consult GmbH | Germany |
| | ARTTIC | France |
| SIM4NEXUS (www.sim4nexus.eu) | | |
| | Wageningen Research | Netherlands |
| | University of Thessaly | Greece |
| | University of Exeter | United Kingdom |





| Project | Organisation | Country |
|--------------------|---|----------------|
| | UNESCO-IHE | Netherlands |
| | Potsdam Institute for Climate impact Research | Germany |
| | Technical University of Madrid | Spain |
| | Bocconi University | Italy |
| | United Nations University | Japan/Germany |
| | Radboud University | Netherlands |
| | Royal Institute of Technology (KTH) | Sweden |
| | Uppsala University | Sweden |
| | EURECAT | Spain |
| | University of Sassari | Italy |
| | ENKI | Czech Republic |
| | PBL Netherlands Environmental Assessment Agency | Netherlands |
| | DHI | Denmark |
| | South West Water | United Kingdom |
| | ACTEON Action Environment | France |
| | Cambridge Econometrics | United Kingdom |
| | Strane Innovation | France |
| | Fresh Thoughts | Austria |
| | Baltic Environmental Forum | Latvia |
| | People & Water | Slovakia |
| | WSSTP | Belgium |
| POWER (http://www. | .power-h2020.eu/) | |
| | De Montfort University | United Kingdom |
| | CUBIT-Consortium Ubiquitous Technologies | Italy |
| | Fundacio CTM Centre Tecnologic | Spain |
| | KWR Watercycle Research Institute | Netherlands |





| Project | Organisation | Country | |
|-------------------|---|-----------------|--|
| | EIPCM European Institute for Participatory Media | Germany | |
| | Climate Alliance of European Cities | Germany/Belgium | |
| | Utrecht University | Netherlands | |
| | BASEFORM – Aggregate Formula | Portugal | |
| | Leicester City Council | United Kingdom | |
| | Hagihon University | Israel | |
| | City of Milton Keynes | United Kingdom | |
| | CASSA- City Company of Sabadell | Spain | |
| Ctrl+SWAN EIP Wat | Ctrl+SWAN EIP Water Action Group (http://www.swan.technology) | | |
| | Armando Di Nardo, Coordinator of the AG | | |
| | Anna Di Mauro, Responsible of AG Secretariat | Italy | |
| | email: agctrlswan@gmail.com | Italy | |
| | + All the members of the Action Group | | |





Appendix 3: Exchange of personnel-Proposal (June 2016)

WIDEST-WP5

Proposal about exchange of personnel.

WP5 (Communication and dissemination activities) in WIDEST contains a task (Task 5.5) that includes an activity called "Exchange of personnel", described in the GA as follows:

"This task will also include exchange of personnel. We will feature two exchanges of personnel with technical goals like discussing common standards, best practices, and guidelines, methods and stakeholders' needs and other supporting tasks. Each exchange will last 1-2 weeks and will entail exchanging knowledge and methods, web-lectures at the host institution, and developing the roadmaps and other materials. Whenever possible, the exchanges will be scheduled to coincide with open house events and demonstration workshops in the host institution, so as to maximize the exchange potential for dissemination. The exchange guests will give lectures/presentations (as appropriate per event) also to the people attending the events in the host institution"

This task involves exchange of personnel between the four "technical" R&D partners of WIDEST (EURECAT, UNEXE, CET, UNS), with the scope of exchanging knowledge and practices.

Initially, when we were writing the proposal we thought we would fulfil the requirements of this task by exchanging personnel between the WIDEST project partners, but given the increasing role and importance of the ICT4WATER cluster and related events, we rethought the whole issue.

The ICT4WATER cluster is organising a summer school for one week in August 2016 in Switzerland. It is organised by the SMARTH20 project (http://www2.idsia.ch/cms/smartwater/) , addressed to postgraduate students and young researchers . There are several invited speakers, from the cluster and external ones. Some of the speakers come from WIDEST (EURECAT and UNEXE), some from other ICT4WATER projects and some are external, e.g. from the US.

We thought that by sending personnel from the four WIDEST main research partners to this summer school we fulfil the real scientific purpose of this task in the best possible way. One person at least (in some cases two persons) from each main partner will attend the summer school, remain there for a week, exchange ideas, listen to others, listen to lectures and seminars by well-known speakers in the domain of smart water in the morning and participate to workshops in the afternoon. Moreover it will enable the participants to meet people working in complementary fields to their own, thus extending their knowledge on the subject of smart water.

The lectures, seminars and workshops will also be the background of the material to be uploaded to the project Video Channel towards the end of the project.

In conclusion, we believe that the main scope of exchanging personnel, i.e. the exchange of experience and the enhancement of knowledge regarding ICT and Water Management, will be better served by sending people to the summer school in August 2016, instead of isolated bilateral exchanges.