

Wat€rnomics

Public Summary of Project

Project Acronym: **Waternomics**
Project Title: **ICT for Water Resource Management**
Project Number: **619660**
Instrument: **Collaborative project**
Thematic Priority: **FP7-ICT-2013.11**

D8.1

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| Work Package: | WP8 | |
| Due Date: | 28/2/2014 | |
| Submission Date: | 28/2/2014 | |
| Start Date of Project: | 1/2/2014 | |
| Duration of Project: | 36 Months | |
| Organisation Responsible of Deliverable: | NUIG | |
| Version: | 1.0 | |
| Status: | Draft | |
| Author name(s): | Edward Curry | NUIG |
| Reviewer(s): | Eoghan Clifford | NUIG |
| Nature: | <input checked="" type="checkbox"/> R – Report <input type="checkbox"/> P – Prototype <input type="checkbox"/> D – Demonstrator <input type="checkbox"/> O - Other | |
| Dissemination level: | <input checked="" type="checkbox"/> PU - Public <input type="checkbox"/> CO - Confidential, only for members of the consortium (including the Commission) <input type="checkbox"/> RE - Restricted to a group specified by the consortium (including the Commission Services) | |
| Project co-funded by the European Commission within the Seventh Framework Programme (2007-2013) | | |

Revision history

| Version | Date | Modified by | Comments |
|---------|------------|--------------|-----------------|
| 1.0 | 28/02/2014 | Edward Curry | Initial Version |
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Table of Contents

1. Introduction 6

1. Introduction

In order to facilitate Wateronomics project dissemination the project has produced a public description of the project in the form of a fact sheet leaflet. The Wateronomics fact sheet was designed and written by NUIG and supported by each partner with feedback.

The fact sheet covers the following topics:

- Project Overview
 - Project Facts
 - Contact Details
- The Water Challenge
- Project Approach
- Project Objectives
- Project Partners

The leaflet will be updated with results for the project as needed. The leaflet can be printed by each partner as needed and distributed at the relevant events. In this way, the leaflet serves distinctly the project's dissemination objectives. The fact sheet version will also be available for download from the project's website.

APPROACH



Linked Water Data

- Systems linked incrementally when needed and cost-effective
- Water data published as Open Data on the Web

IoT **Internet of Things**

- Sensors connected directly to the Internet
- Real-time water awareness
- Semantic Event Processing



Water Analysis Services

- Water Usage Prediction Models
- Hydro-meteorological Drought Forecast
- Leak Detection / Fault Detection and Diagnosis (FDD)



Interactive Water Information Services

- Visual Dashboards
- Decision support systems
- Games & interactive learning apps

The Pilots

WATERNOMICS will be demonstrated in three high impact pilots that target three different end users/stakeholders:

- Domestic users in Greece implemented by a water utility
- Corporate operator in Italy provided by a major EU airport
- Municipal water based demonstration in Poland

OVERVIEW

Project Facts

- ▶ Type of project: **Collaborative project**
- ▶ Project start date: **February 2014**
- ▶ Duration: **36 months**
- ▶ Call: **FP7-ICT-2013-11**
- ▶ Effort: **416 PM**
- ▶ Budget: **C4.287M**
- ▶ Max EC contribution: **C2.905M**
- ▶ Grant No.: **619660**
- ▶ Consortium: **10 partners**
- ▶ Countries: **5**
- ▶ SMEs: **4**
- ▶ Pilots: **3**

General Contact

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ICT for Water Resource Management

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THE WATER CHALLENGE

Climate change, increased urbanization and increased world population are several of the factors driving global challenges for water management. In fact, the World Economic Forum has cited "The Water Supply Crises" as a major risk to global economic growth and environmental policies in the next 10 years. In parallel, the United Nations has called for intensified international collaboration.

- Global energy and water demand is expected to rise 40% over the next 20 years
- By 2025, 1.8 billion people will live in water scarce regions and two thirds subjected to water stress
- 20-40% of Europe's water is being wasted
- Water supply and sanitation is a large energy consumer. In California it represents 19% of electricity and 30% of natural gas consumption
- Europe has the opportunity to pursue a global leadership position in water-related ICT technologies



Project co-funded by the European Commission within the 7th Framework Program (Grant Agreement No. 619660)

PARTNERS

| | |
|---|------------------------------------|
|  | NUI Galway Ireland |
|  | ULTRA4 Greece |
|  | UNESCO-IHE Netherlands |
|  | TU Delft Netherlands |
|  | BM-Change Netherlands |
|  | R2M SOLUTION SRL Italy |
|  | SEA Italy |
|  | Municipality of Thermi Greece |
|  | VTEC Engineering BV Netherlands |
|  | ZWIK Poland |

OBJECTIVES

WATERNOMICS will provide personalised and actionable information on water consumption and water availability to individual households, companies and cities in an intuitive & effective manner at relevant time-scales for decision making:

- To introduce **demand response and accountability principles (water footprint)** in the water sector
- To engage consumers in new **interactive and personalized** ways that bring water efficiency to the forefront and leads to changes in water behaviours
- To empower corporate decision makers and municipal area managers with a **water information platform** together with relevant tools and methodologies to enact ICT-enabled water management programs
- To promote **ICT enabled water awareness** using airports and water utilities as pilot examples
- To make possible **new water pricing options** and policy actions by combining water availability and consumption data

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