

# Multiplier Events E2 Report of ORKON

## Erasmus+ Project

Implementation of ECVET for Qualification  
Design in Drinking Water Treatment Plants  
and Sanitation for Pure Drinkable Water

“PURE-H2O”



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# MULTIPLIER EVENT E2

## PARTICIPANTS OF THE COURSE:

ORKON performed Multiplier Event E2 by 39 participants ;

This event took place in Ankara by ORKON on 09-10 February 2016 by 39 participants. It took place after the Transnational Meeting in Sofia. So, 2 days' course is organised for the introduction of the project and its products which are produced. The participants are chosen from the water sector and it is thought to give maximum benefits for the participants of the course. PURE-H2O Project is presented in technically detailed way and design aspects of a drinking water treatment plant are given. Good exchange of expertises and ideas took place at the event and it has been a good dissemination of the project. Participants were environmental, civil, electrical, mechanical, geological engineers, civil technicians, survey and mapping technicians, people from administration, tenders and managing departments.

## NAME & PROFESSIONS LIST

1	Altan Dizdar	Engineer
2	Ertuğrul Dizdar	Engineer
3	Hakan Damar	Engineer
4	Kenan Kaya	Engineer
5	Adnan Bilgin	Engineer
6	Ekin Akkaya	Engineer
7	Çağan Dizdar	Engineer
8	Cem Açikkol	Architect
9	Naci Derebaşınıoğlu	Engineer

10	Seçil Kocaer	Administration
11	Bariş Özcan	Engineer
12	Yaşar Yıldırım	Technician
13	Ömer Tekpınar	Engineer
14	Behzat Göllü	Engineer
15	Filiz Sarıaltun	Technician
16	Feray Yoloğlu	Engineer
17	Ayşe Betül Demir	Engineer
18	Aysun Bahadır	Technician
19	Can Karaşahin	Engineer
20	Enes Çetin	Technician
21	Kadir Bahadır	Engineer
22	Mehtap Ataşoğlu	Engineer
23	Sibel Doğankaya	Engineer
24	Nazmi Okur	Technician
25	Serkan Dizdar	Technician
26	Nazmi Okur	Technician
27	Hüseyin Atak	Technician
28	Hüseyin Ersoy	Technician
29	Mayis Kurt	Engineer
30	Emre Kaan Koca	Technician
31	Mustafa Kandemir	Technician
32	Burak Koçak	Engineer
33	Hacer Akarsu	Engineer
34	Filiz Güldürü	Technician



35	Yasin Özyılmaz	Engineer
36	Ferhat Kayıkçı	Technician
37	Muammer Sonkaya	Engineer
38	Hacı Gönültaş	Administration
39	Neslihan Koçyiğit	Administration

### *METHODOLOGY OF THE MULTIPLIER EVENT:*

The documents belonging to PURE-H2O Project are distributed before the course days, on the 5<sup>th</sup> of February 2016 and requested from the participants to study on the documents to be more useful understanding from the 2 days meeting. Then, the courses took place on the 9<sup>th</sup>-10<sup>th</sup> of February 2016. The methodology used in the course and the topics discussed were:

- ☐ European Union projects are introduced and some of the examples are given, completed projects and their products are discussed,
- ☐ Full introduction of the project PURE-H2O is explained, aims, objectives, products are described,
- ☐ Scientific and technologic explanation of a drinking water treatment plant is given and discussed,
- ☐ Web is introduced in detail and it is shown how to use the e-learning modules,
- ☐ A question and answer session is performed and the questions are answered.
- ☐ European Qualifications Framework, explanation of ECVET are given,
- ☐ The relation between the PURE-H2O water subject and the EQF, ECVET terms are explained,
- ☐ It is thought to the participants how to level themselves with the courses of our project,
- ☐ The advantages of using European Qualifications Principles and use of mobility is discussed and it is shown how to use our project to identify and level themselves in this sector,
- ☐ The easiness to find a work after these courses is discussed and meantime it is shown to the participants that to work on the project gives a competence to the beneficiary in this area,
- ☐ At the end of the 2 days course, an evaluation questionnaire is distributed and required from the participants to fill it in.

Generally, there was a good mood at the course and most of the participants were very much interested to have knowledge about the project and the products. We believe that we gave all detailed information about

the project and we added good details to the professions of the participants.

Some of the participants said that they could give support in the technical aspects in drinking water treatment plants subject if there will be a continuation project after PURE-H2O,

It is required from the participants to work on the products, e-learning, book and the distributed material to them,

The below questionnaire is distributed to the participants, and it is asked from them to answer the questions.

## *RESULTS OF THE COURSE:*

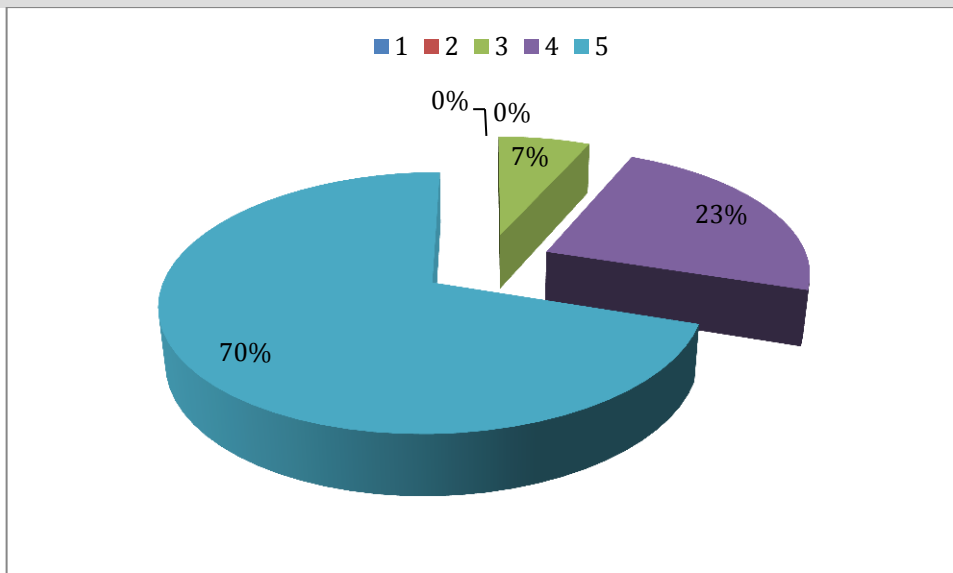
We delivered the evaluation questionnaire to the participants and we got the following results from the participants :

### *PURE-H2O MULTIPLIER EVENT 2 QUESTIONNAIRE*

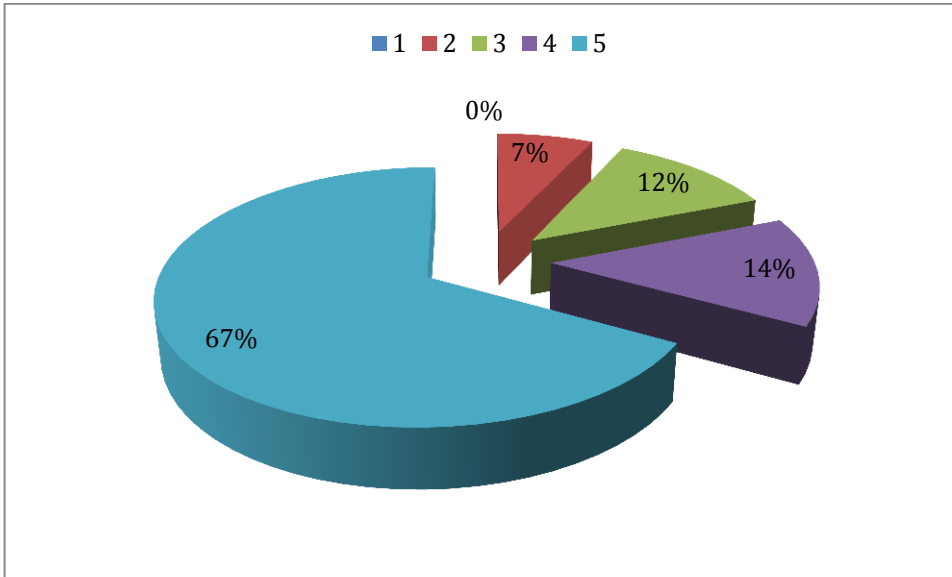
#### **Evaluation scale:**

1 – not at all satisfied/fully disagree; 2 – unsatisfied/disagree; 3 – partly satisfied/partly disagree; 4 – satisfied/agree; 5 – fully satisfied/fully agree

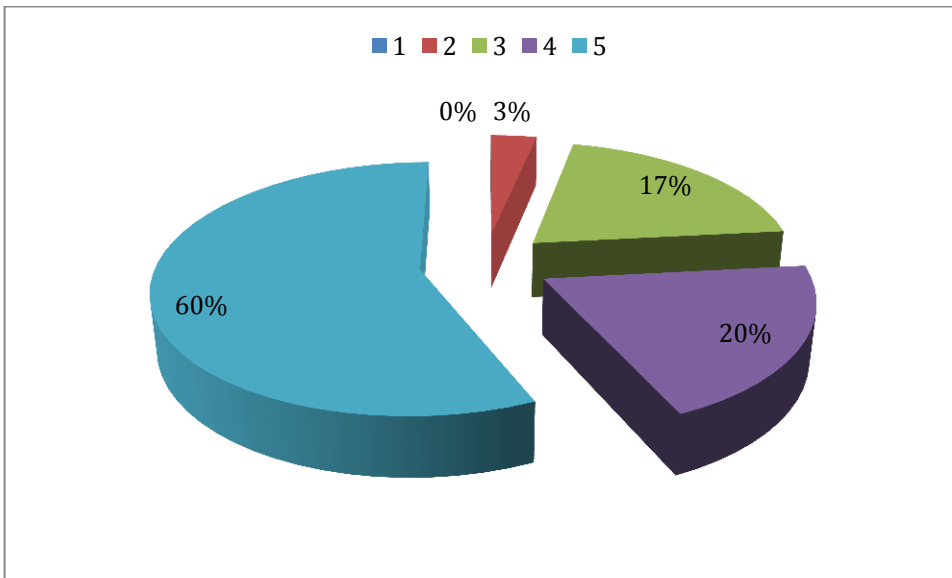
#### **1. Organisation of the event**



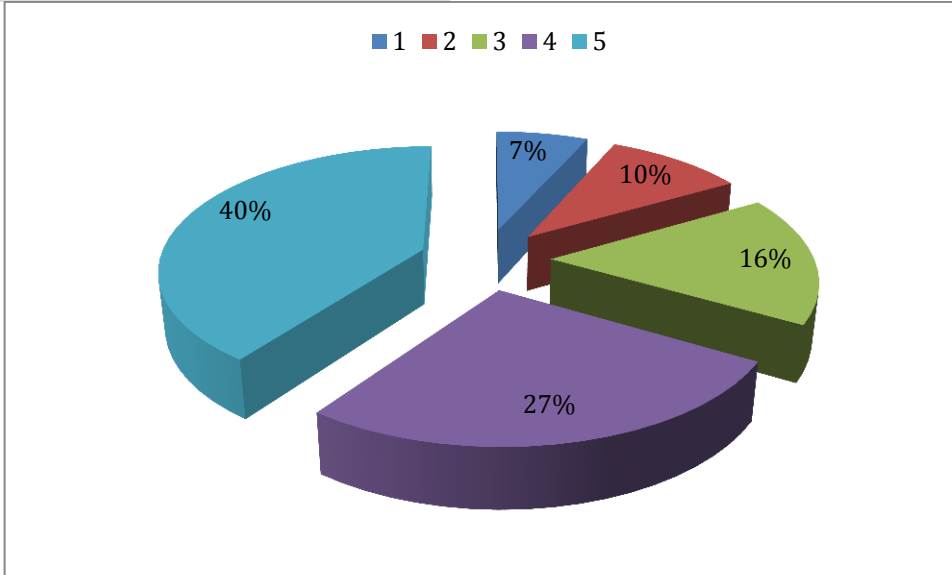
## 2. Venue



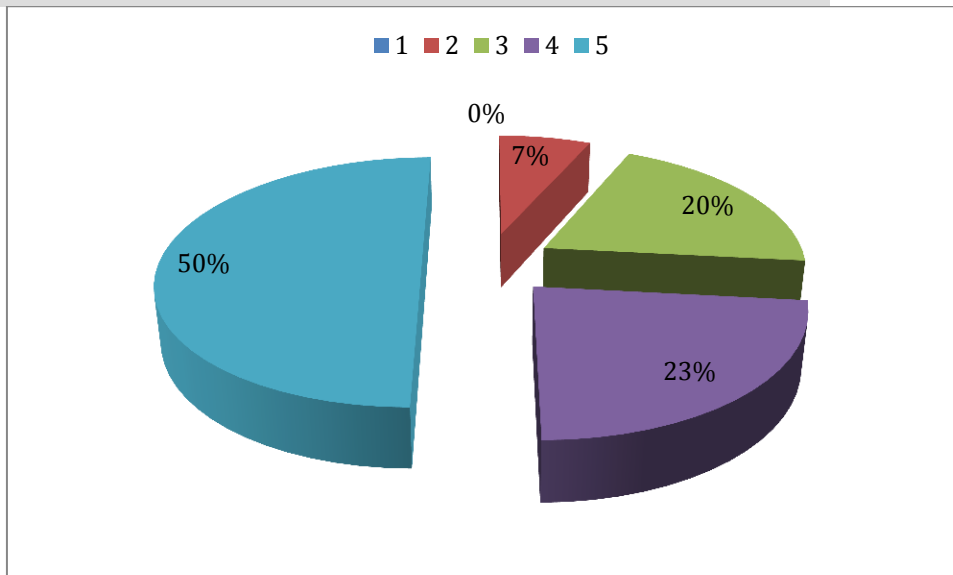
## 3. Quality of the material and products provided



#### 4. Quality of presentations and introductions

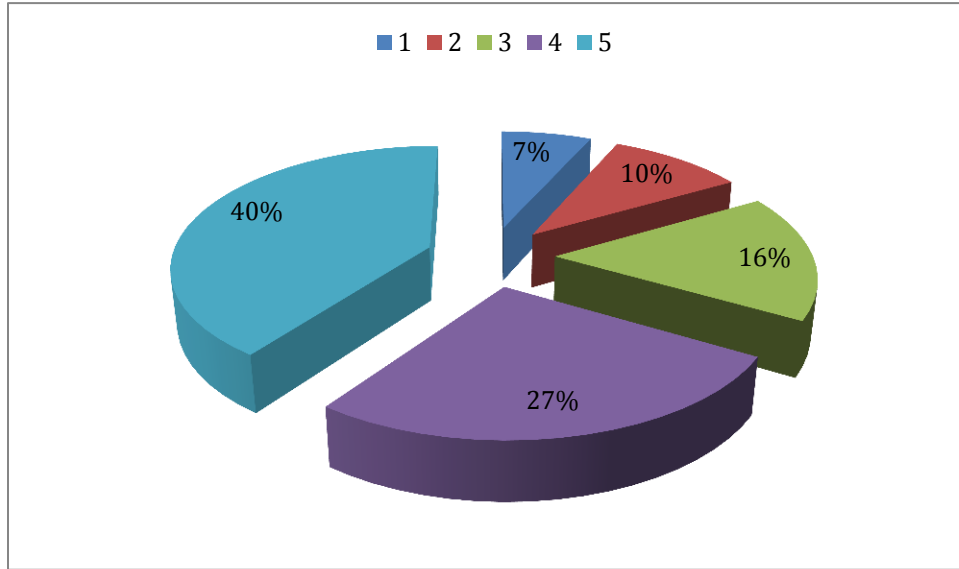


#### 5. Usefulness of presentations to you

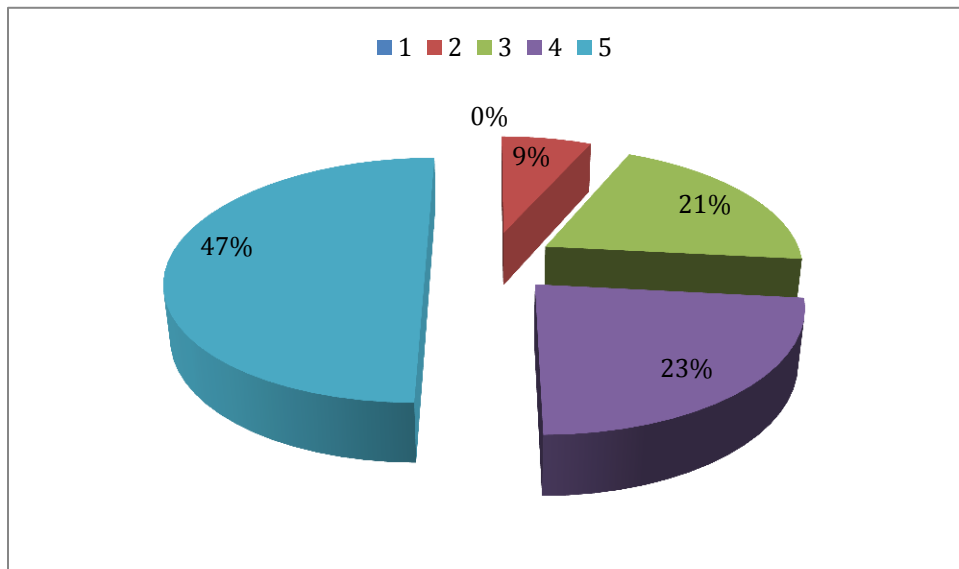




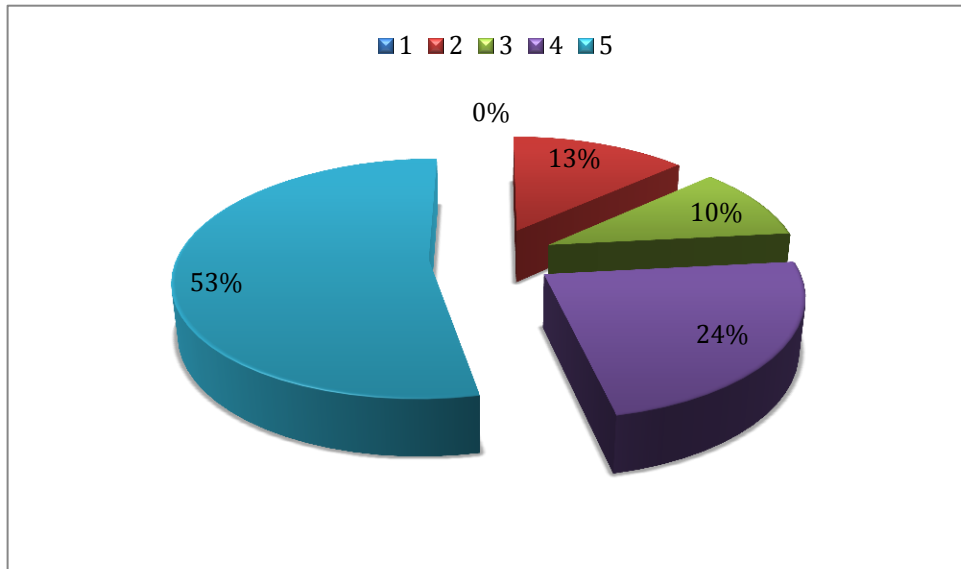
## 6. Clarity of answers and comprehensibility



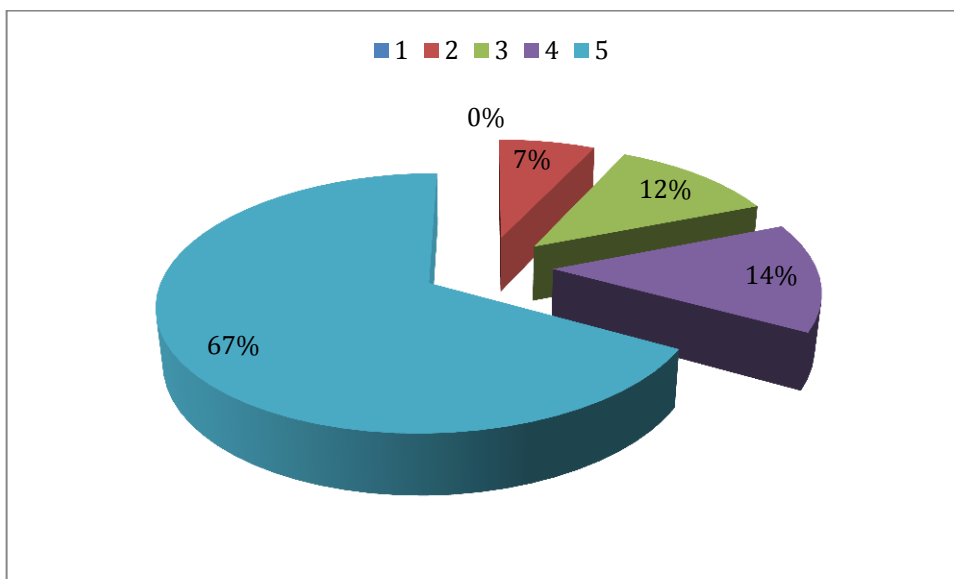
## 7. Quality of the discussions, questions and answers,



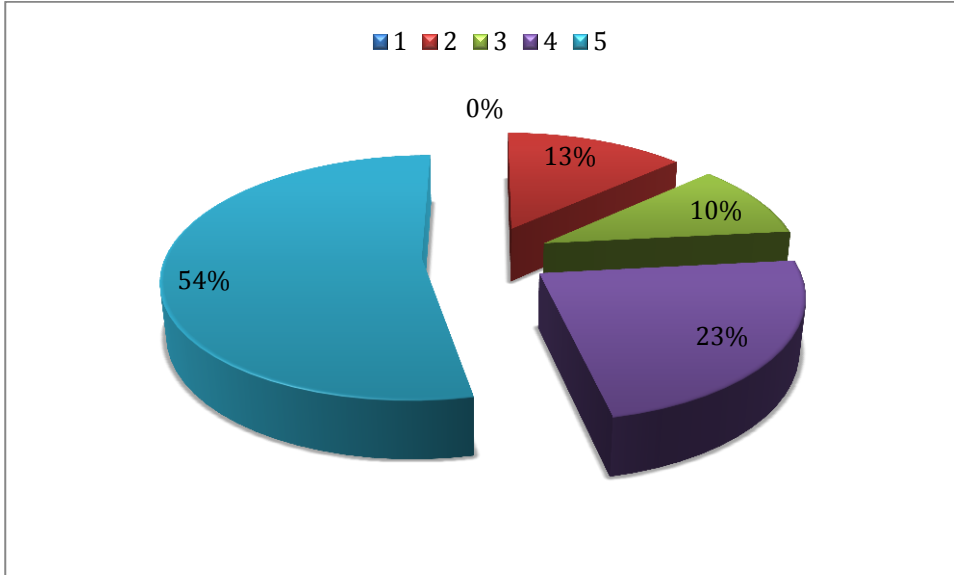
## 8. Dialogue between the participants



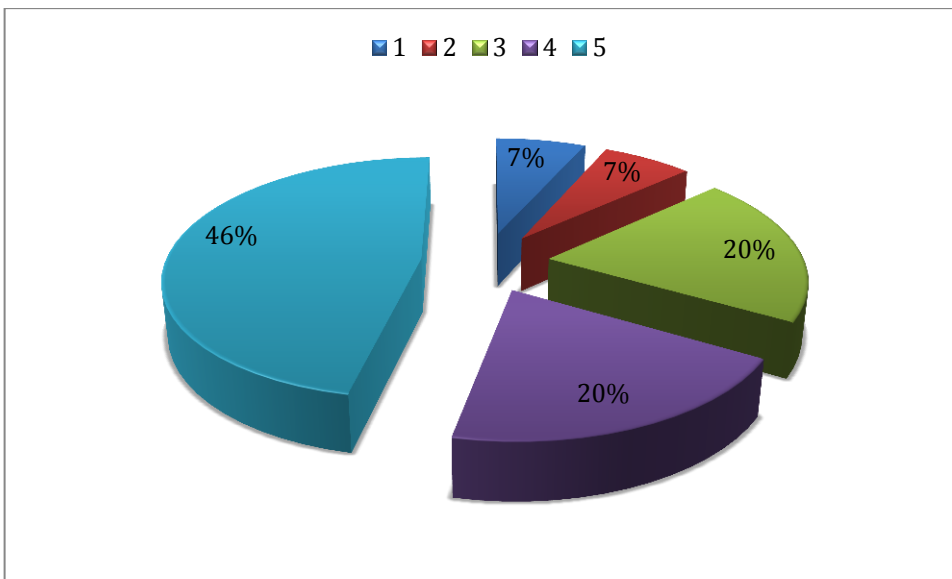
## 9. Competence areas are very well defined in PURE-H2O Project.



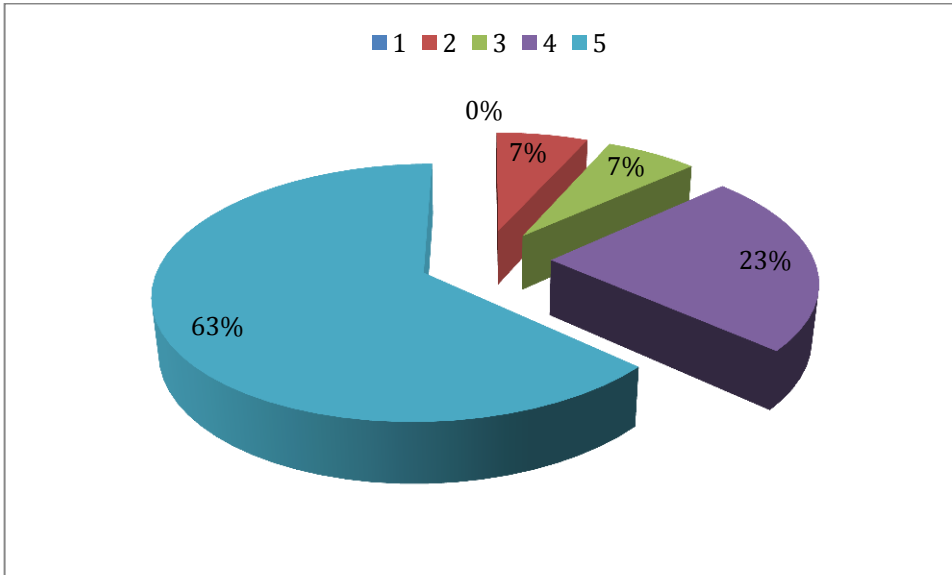
## 10. The steps of competence development are clearly described



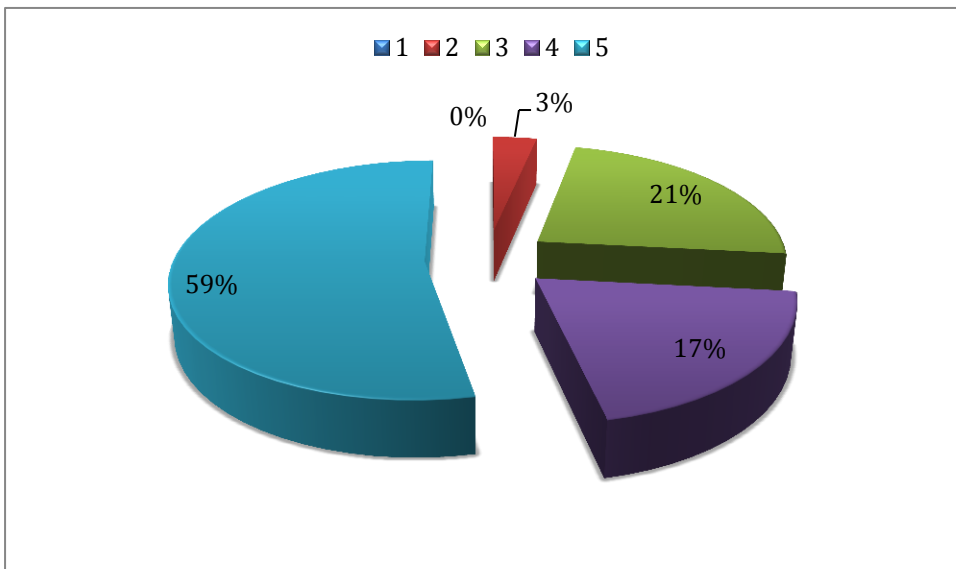
## 11. Competence areas are chosen suitable to PURE-H<sub>2</sub>O subject



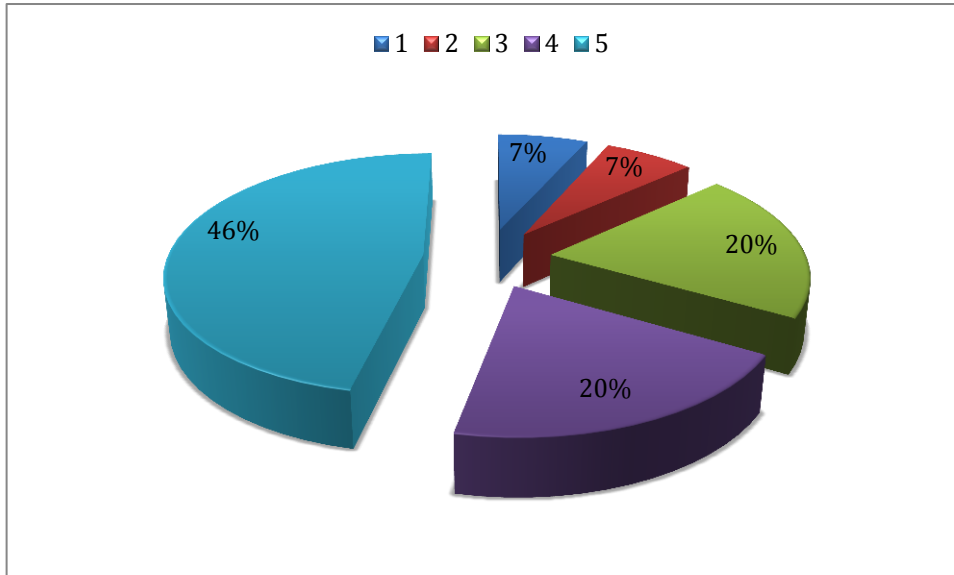
## 12. PURE-H2O Project shows necessary steps of competence development



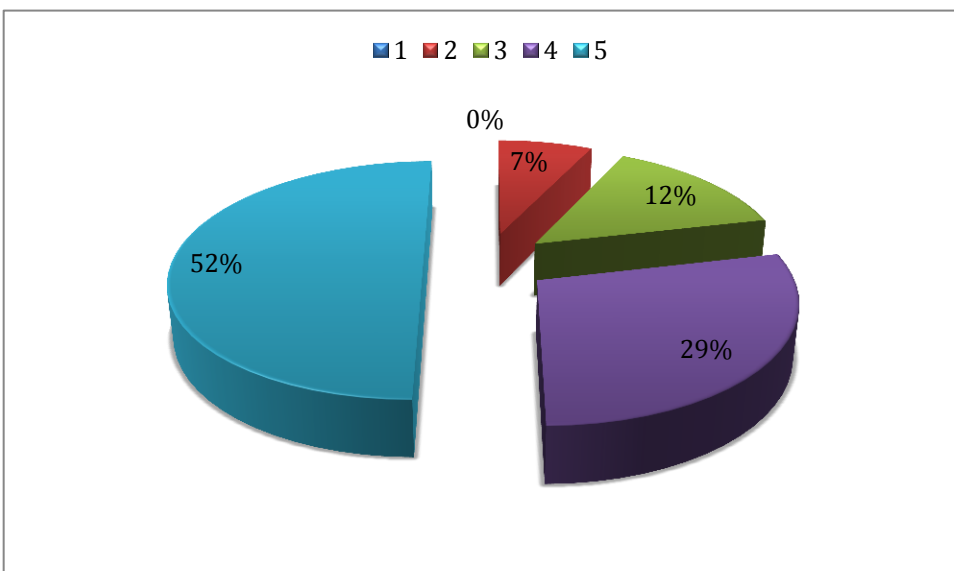
## 13. Overall, PURE-H2O project provides a satisfactory description of competences in water sector in my country



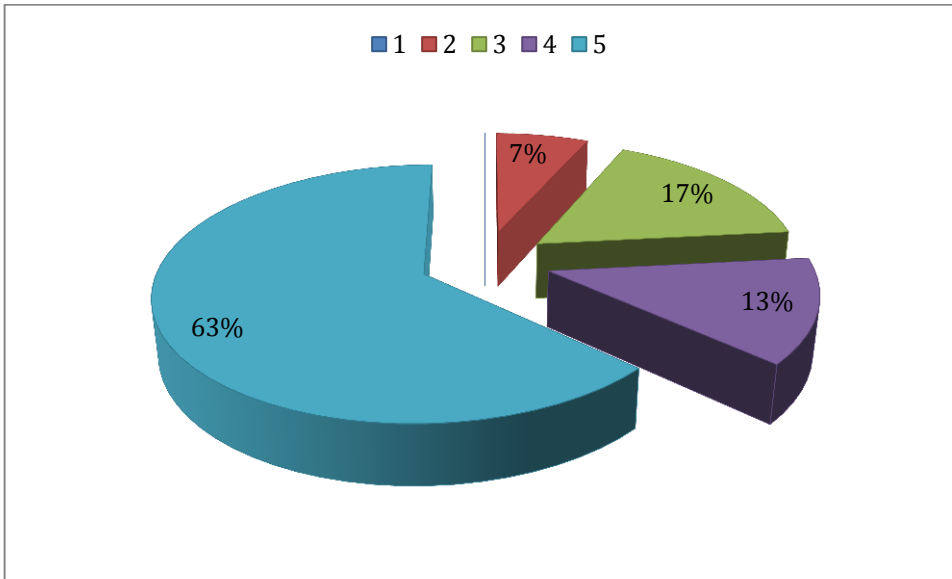
#### 14. The Competences are not too complicated to understand



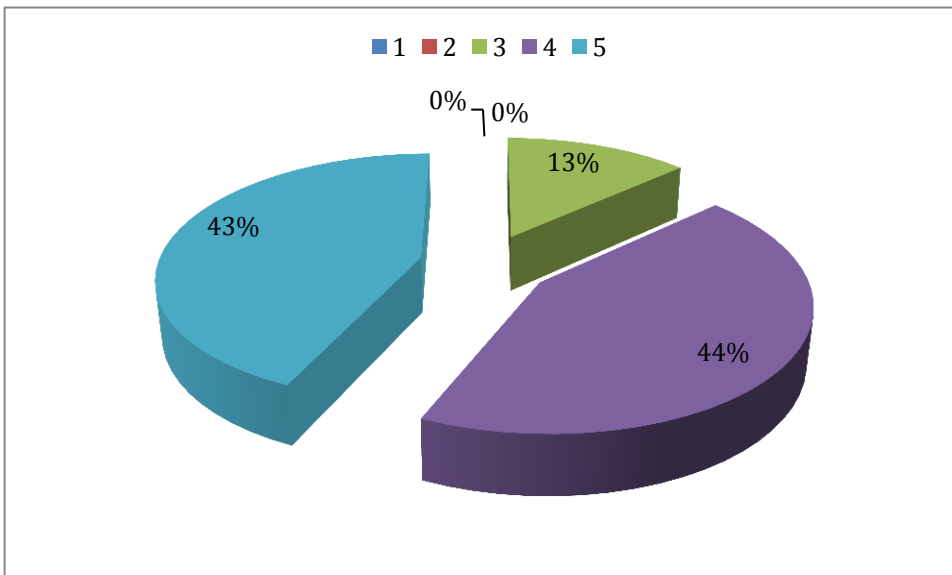
#### 15. PURE-H2O Project is understandable and useful to my profession



16. PURE-H2O Project helps me define which competences we already offer to our trainees and which ones we may decide to offer in the future.

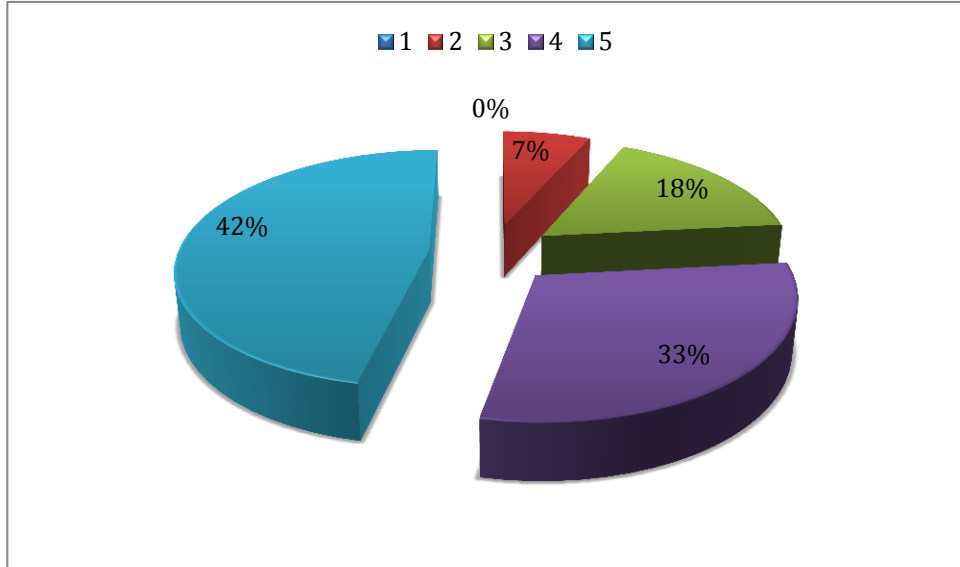


17. PURE-H2O Project is defining the information about the drinking water treatment plants perfectly.

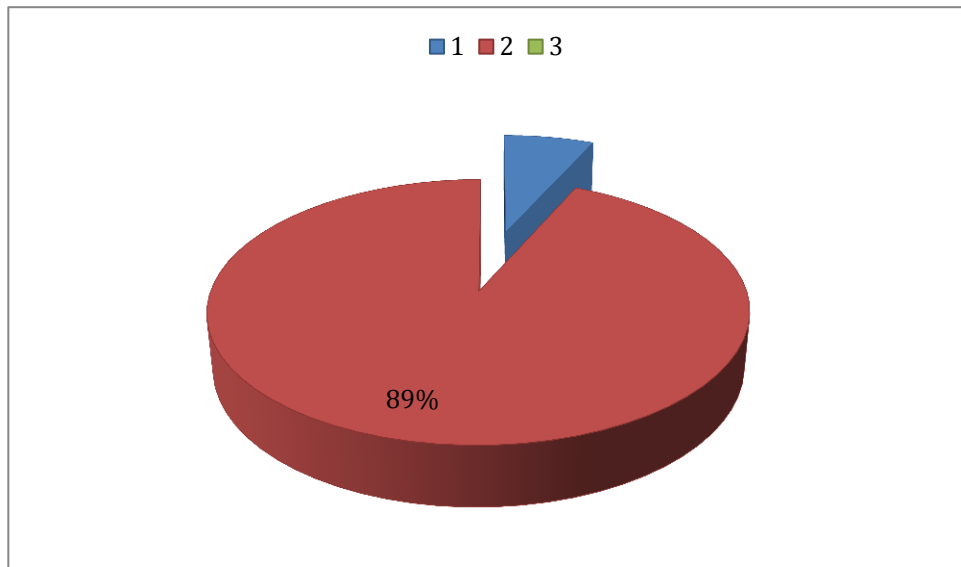




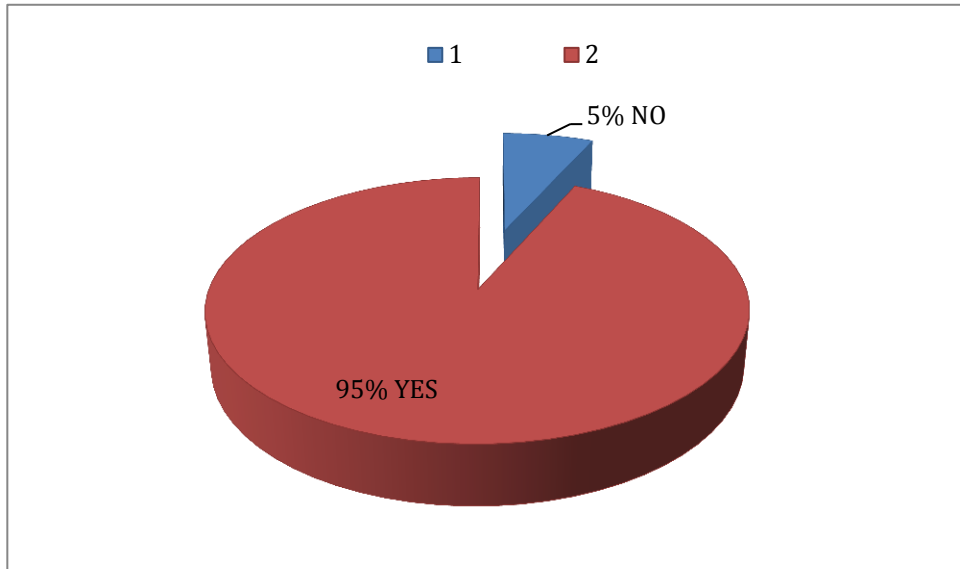
18. PURE-H2O Project is important and useful for my career development



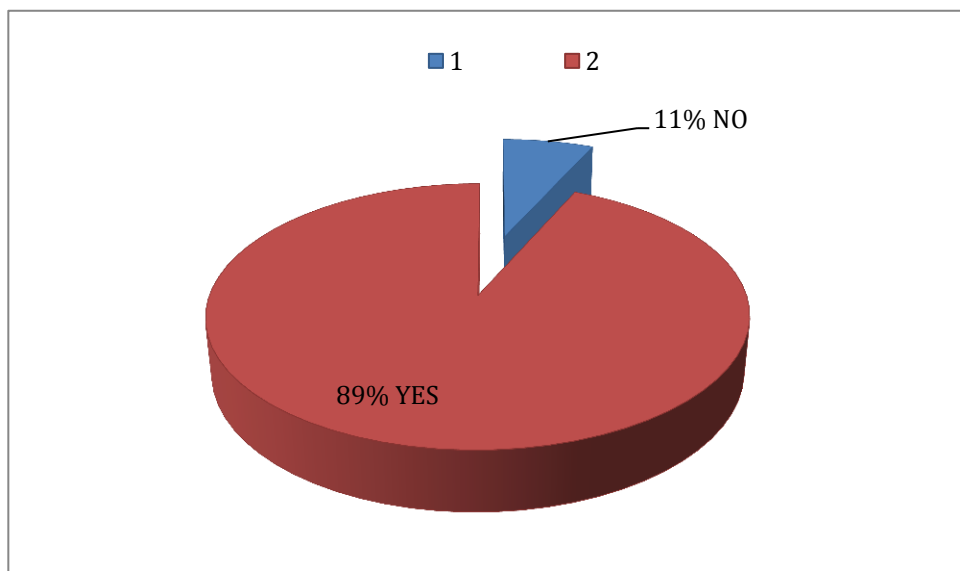
19. How do you estimate the training possibilities in the field of PURE-H2O project?



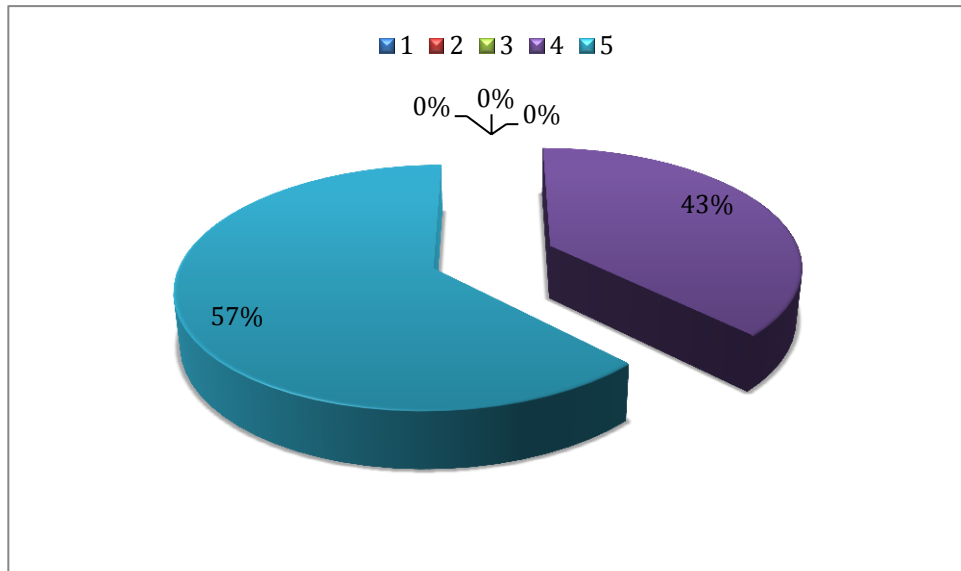
20. Are you satisfied with the provided Project documents (on-line and/or off-line)?



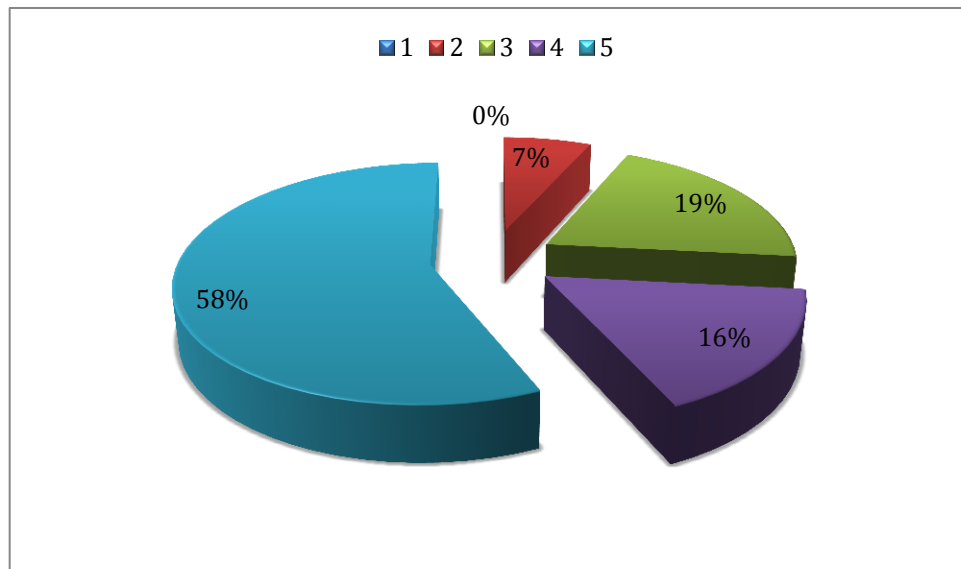
21. Do you think the PURE-H2O competence model could contribute to your job performance making it easier and more productive?



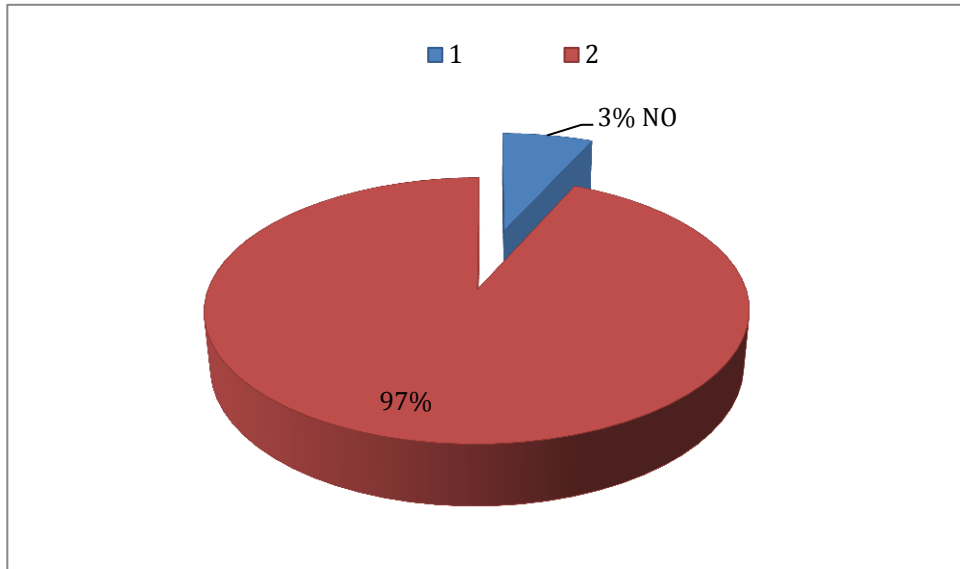
22. PURE-H2O Project helps me define which competences we already offer to our trainees and which ones we may decide to offer in the future.



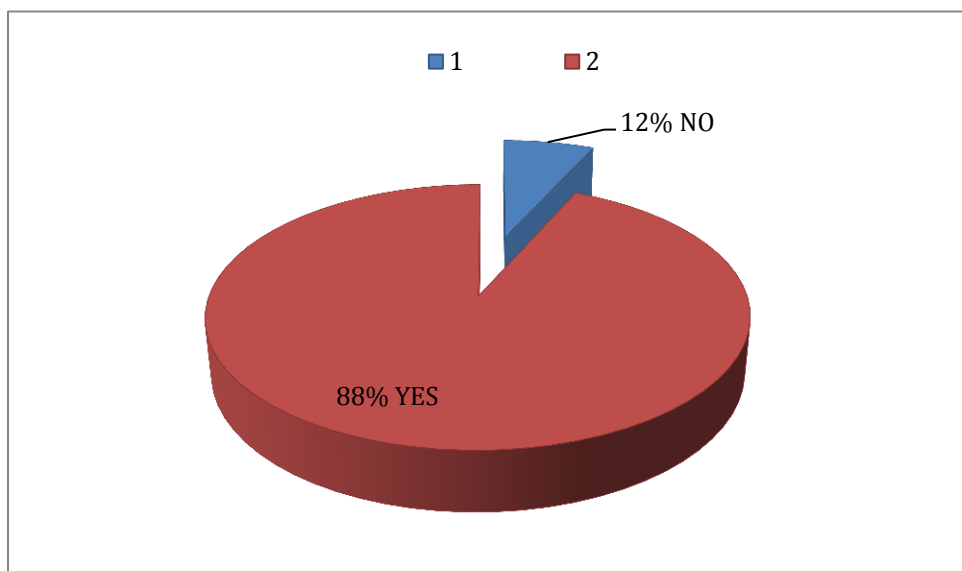
23. Web-site [www.pure-h2o.org](http://www.pure-h2o.org) is designed very effectively and easy to find everything on it.



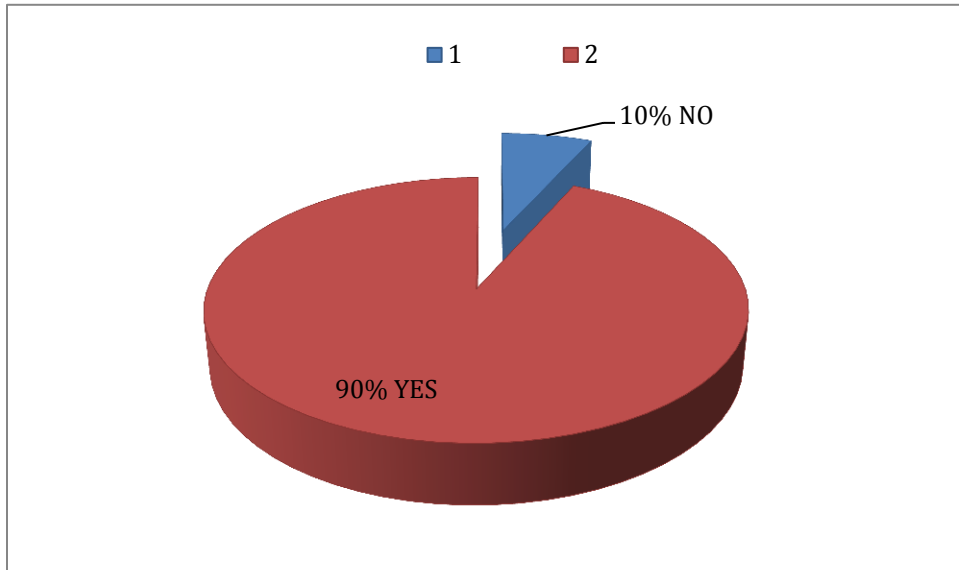
24. Do you need any pre-requisites (e.g. specific education, practical experience, etc.) to be able to use this training product?



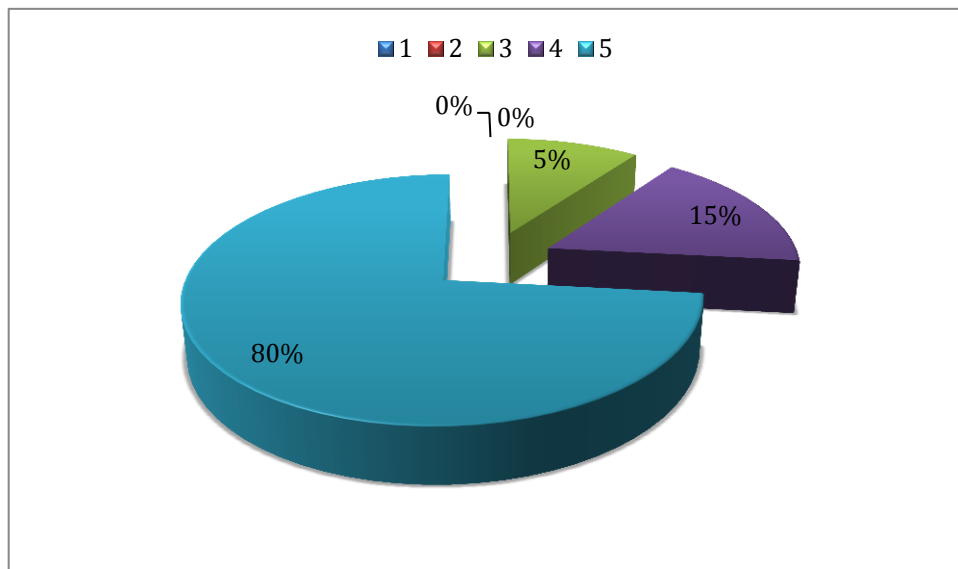
25. Are you satisfied with the provided training materials (on-line and/or off-line)?



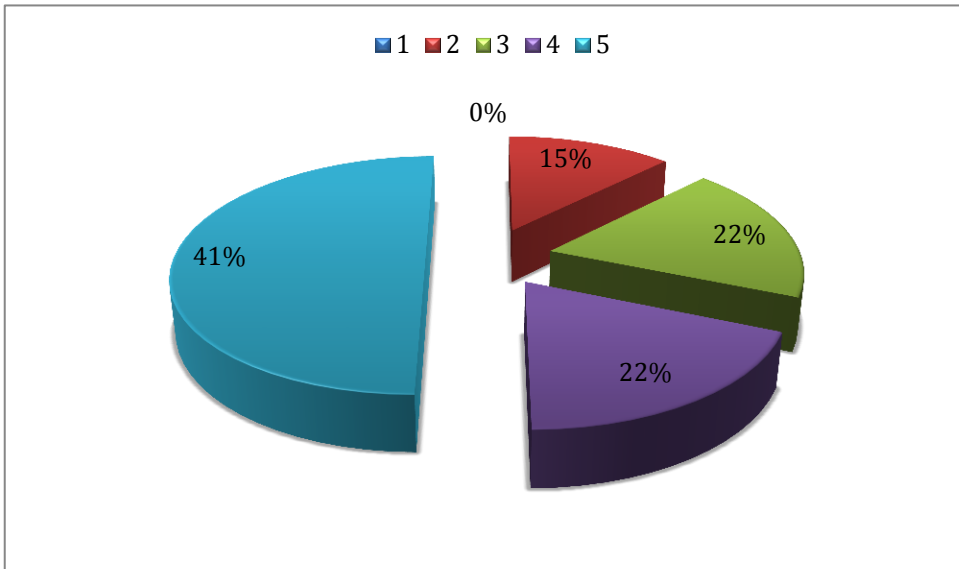
26. Do you think the PURE-H2O competence model could contribute to your job performance making it easier and more productive?



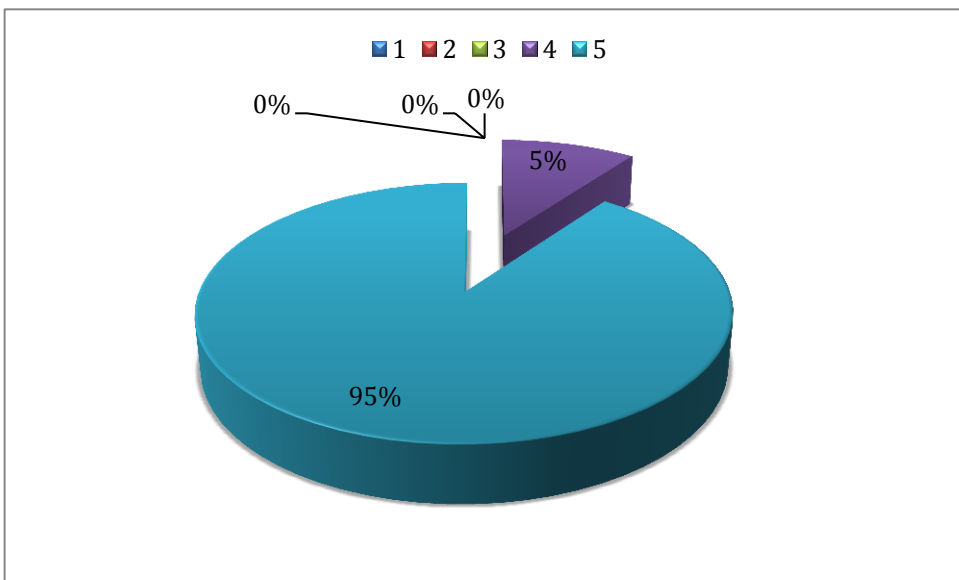
27. I will advise PURE-H2O Project and its products to my colleagues to read and study on them !



28. PURE-H2O Project helps me pinpoint which competences I already possess and which ones I need to develop



29. On a scale of 1 (lowest) to 5 (highest), what is your overall rating of today's event?





### 30. What did you like the most about today's event?

I met different people from water sector and have chance to discuss on the projects technically,

It was a social gathering, that was good,

EU projects always attracted my attention and it was good to be at the meeting,

The meeting was successful and organised professionally,

This subject, clean drinking water, is very important but we can't find good literature about this subject so to study a project on this project is quite logical,

The colleagues at the meeting, we had a good conversation all together on the pure water subject,

To know other country's habits was good, like Bulgaria, the Netherlands.

### 31. What did you like the least about today's event?

It was crowded, I couldn't have more chance to ask questions,

Next time, we must have more longer meeting,

The discussions were very quick,

People did not talk by taking permission.

## *PURE-H2O MULTIPLIER EVENT CONTENT :*

AN INTRODUCTION OF EU PROJECTS ARE PERFORMED FIRSTLY, THEN THE INTRODUCTION OF THE PROJECT PURE-H2O IS DONE WITH ITS TECHNICAL AND SCIENTIFIC DETAILS:



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## EUROPEAN UNION PROJECTS PURE-H2O

- ☐ Erasmus + Project
- ☐ Subject: "Implementation of ECVET for Qualification Design in Drinking Water Treatment Plants and Sanitation for Pure Drinkable Water"
- ☐ Partnership: Turkey, Bulgaria, Germany
- ☐ [www.pure-h2o.org](http://www.pure-h2o.org)



## ECO-MATRIX

- LLP-LdV Transfer of Innovation Project
- Subject: "Vocational Qualification Transfer System in Ecology"
- Partnership: Turkey, Bulgaria, Austria, Greece





## EC-AQUA

- LLP-LdV Transfer of Innovation Project
- Subject: “Implementation of ECVET for qualification design in sanitation and water loss management
- Transfer of PROWAT Project coordinated by ERBIL
- [www.pro-wat.com](http://www.pro-wat.com)
- Partnership: Bulgaria, Turkey, France



## SHANIME

- LLP-LdV Transfer of Innovation Project
- Subject: “Preventing Accidents in Construction – Health and Safety Multimedia Animated Learning”
- Partnership: Turkey, Poland, United Kingdom, Portugal



## EARTHQUAKE

- LLP-LdV Transfer of Innovation Project
- Subject: “VET in Rapid Earthquake Damage Assessments of Buildings to Avoid the Demolishing”
- Partnership: Turkey, Italy, Austria, Greece



## CARE-WASTE

- LLP-LdV Transfer of Innovation Project
- Subject: “Competence based e-learning in general and health care waste management for new skills development
- Transfer of WASTE-TRAIN Project coordinated by ERBIL
- [www.waste-train.com](http://www.waste-train.com)
- Partnership: Greece, Bulgaria, Turkey, Norway





- **The aim of Erasmus+ programme is to promote:**

- The innovation,
- European dimension,
- Transferability,
- Quality with analysing and solving problems for the vocational training systems.
- The adaptation of professional innovations in life-long learning training.



## Advantages of a EUROPEAN UNION Project

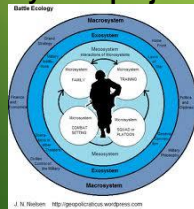
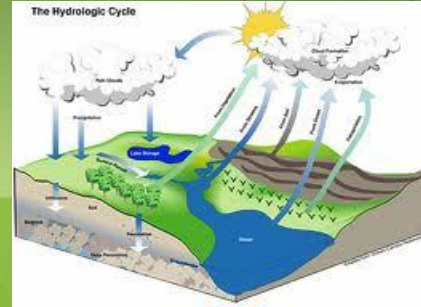
- You are working with different countries and cultures..
- This means that you and your organisation are aware about different cultures and also the European countries are getting knowledge about our culture..
- English language is becoming a more common language in your organisation.



- You are getting more practical with technical engineering glossary and design criterias in a project.

## Advantages of a EUROPEAN UNION Project

- You see the existing systems and management in other European countries and in this way you have the chance to make a comparison of yourself with them..
- You become more aware of what is right and what is wrong...
- You, your partners, your country, your partners' countries, your project are getting very well-known in Europe and suddenly you might be called from a European organisation to introduce your project in their country..



- You are used to be innovative in all your other works and this brings development & technique to your works..

## INTRODUCTION OF PURE-H<sub>2</sub>O PROJECT

### PROJECT PURE-H<sub>2</sub>O

Implementation of ECVET for Qualification Design in Drinking Water Treatment Plants and Sanitation for Pure Drinkable Water







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## PURE-H<sub>2</sub>O ERASMUS+ KA2 STRATEGIC PARTNERSHIPS PROJECT

- ☐ Name: "Implementation of ECVET for Qualification Design in Drinking Water Treatment Plants and Sanitation for Pure Drinkable Water"
- ☐ Partnership: Turkey, Bulgaria, Germany
- ☐ [www.pure-h2o.org](http://www.pure-h2o.org)

PURE-H <sub>2</sub> O		
Project Partners and Contacts		
P#	Partners	Contact Persons
P1	Orkon International Engineering Training Consulting Co. Inc.	Eng.Altan Dizdar
P2	Nigde University	Prof.Fehiman Çiner
P3	Gazi University	Prof.Seniha Alev Söylemez
P4	Planart	Ass.Prof.Gamze Yücel İşildar
P5	R & D Center "Biointech"	Prof.Anna Kujumdzieva
P6	Open University of Netherlands	Dr. Christian M. Stracke

## Project Activities : Intellectual Outputs

IO#	Output Title	Leading Organization
#1	Survey and analysis report on Drinking Water Supply Sector VET Requirements	ORKON
#2	PureH2O e-learning portal	BIOINTECH
#3	Learning outcomes based blended learning curriculum	BIOINTECH
#4	PureH2O Skills Passport	GAZI UNIVERSITY
#5	Analysis report of testing & evaluation	OPEN UNIVERSITY OF NETHERLANDS
#6	Analysis report on dissemination and use	ORKON
#7	Booklet "Pure H2O project: challenges & limitations"	PLANART



## PURE-H2O

PURE-H2O was developed to provide a tool that will promote:

- transparent environmental planning & education
  - in the development of sustainable & sound practices
  - in the area of potable water & related treatment plants





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**PURE**  
H<sub>2</sub>O

## PURE-H2O

This project will contribute to:

- the recognition & transparency of qualifications at the EU level
- provide an innovative model for competencies for the potable water sector





Erasmus+ ORKON

**PURE**  
H<sub>2</sub>O

## PURE-H2O

Thereby, the VET institutions will have the means necessary to:

- enhance the skill set as required in the various disciplines
- workplaces to workers within the potable water supply field



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## PURE-H2O

***The main target groups are teachers, trainers, learning facilitators, guidance professionals, school/institution managers and political decision makers.***



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## INTRODUCTION OF PURE-H2O INTELLECTUAL OUTPUTS

### PROJECT PURE-H2O

Implementation of ECVET for Qualification Design in Drinking Water Treatment Plants and Sanitation for Pure Drinkable Water



ORKON



Planart

Bio



Open  
University  
of Turkey



Erasmus+



ORKON



## PURE-H2O OUTCOMES

### INTELLECTUAL OUTPUT 1

#### Survey and Analysis Report On:

#### Drinking Water Supply Sector VET Requirements

COORDINATOR : ORKON

□ This document will include the description of drinking water supply sector VET requirements and the inquired information collected through questionnaires and group work with representative from the key project target groups and stakeholders.

□ The expected milestone of the deliverable will be the identification and analysis of the specific VET requirements in the project area.



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## PURE-H2O OUTCOMES

### INTELLECTUAL OUTPUT 1

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## PURE-H2O OUTCOMES

### Survey and Analysis Report On: Drinking Water Supply Sector VET Requirements

It will be used to:

- ☐ further develop the other PureH2O Intellectual outputs;
- ☐ improve the development, exchange and maintenance of foreseen VET certificate;
- ☐ enhance the accessibility and transparency of acquired e-competences by harmonizing the Europass, ESCO and other European instruments (EQF, ECVET).



## PURE-H2O OUTCOMES

An introduction of learning outcomes approach based on EQF principles and ECVET application will be made.

Concerning the every day operation of project activities, the tasks time table: what has to be done during the project, when and by whom will be spread among the partners and their relevant budget issues will be discussed.

The organization of project products/outcomes elaboration will be discussed.





## PURE-H2O OUTCOMES

National Reports will be prepared for Bulgaria (BIOINTECH), Germany (OUON) & Turkey (PLANART),

### TOC of the National Reports can be designed as:

Introduction of water systems,  
Background and needs analysis,  
Ways of purification of water in the country,  
Water treatment plants,  
EU and National Legislations,  
Professions and technicians working in the sector,  
Specification of target groups; end and potential users of the project ,n  
partner countries,  
VET Requirements in the sector,  
Analysis of Learning Outcomes,  
EQF Levels.



## PURE-H2O OUTCOMES

### INTELLECTUAL OUTPUT 2

### PURE-H2O e-Learning Portal

### COORDINATOR : BIOINTECH





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## PURE-H2O OUTCOMES

### PURE-H2O e-Learning Portal

- ☐ This result includes design, set up and functioning of PureH2O e-based system for project implementation.
- ☐ The e-portal will operate as flexible e-medium providing competence based carrier development.
- ☐ It will also act as knowledge data base, providing relevant information in the project subject area, as well as experience exchange platform within and outside the project consortium.
- ☐ The PureH2Oe-portal will also operate as a powerful dissemination and exploitation tool.



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BIOINTECH



## PURE-H2O OUTCOMES

### PURE-H2O e-Learning Portal

- ☐ PureH2O qualifications e-platform providing a frame for establishment of an algorithm for competence development in Drinking water supply sector;
- ☐ Set up of descriptive table for certification units comprising the following parts: knowledge, skills, wider competence.
- ☐ The new type of b-learning structure will be based on ECVET crediting plan as well as arranged in learning pathways corresponding to different qualification levels (5, 6, 7) of EQF system.



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## PURE-H2O OUTCOMES

### INTELLECTUAL OUTPUT 3

Learning Outcomes-Based Blended Learning Curriculum

COORDINATOR : BIOINTECH



## PURE-H2O OUTCOMES

### INTELLECTUAL OUTPUT 3

Learning Outcomes-Based Blended Learning Curriculum

COORDINATOR : BIOINTECH

- ☐ The result comprises creation of blended learning program in water supply sector, comprising 12 courses concerning characteristic, operation, management and economics of Drinking Water Treatment Plants.
- ☐ The project blend foresees development of on/of line training friendly opportunities designed for target groups in all partners' languages.
- ☐ The training model will be elaborated on the basis of the specific requirements of targeted qualifications of professionals working in the water supply sector needed upgrading/ updating of their knowledge and skills.



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## PURE-H2O OUTCOMES

### INTELLECTUAL OUTPUT 3

Learning Outcomes-Based Blended Learning Curriculum

COORDINATOR : BIOINTECH

- ☐ The built comprehensive learning outcome based units are designed to give detailed view of knowledge, skills and wider competence required for the target groups. A certification process based on ECVET allocation will be set up.
- ☐ The knowledge will be available as Learning Pathways (LPs) and Short Intensive Courses (SICs) designed to match EQF levels 5, 6 and 7, and weighed through ECVET.
- ☐ The qualification description will be made in accordance to ISCO/ESCO system.



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**BIOINTEC**



## PURE-H2O OUTCOMES

### INTELLECTUAL OUTPUT 4

PURE-H2O Skills Passport

COORDINATOR GAZI UNIVERSITY



**GAZI UNIVERSITY**



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ORKON



## PURE-H2O OUTCOMES

### PURE-H2O Skills Passport

This result represents a general frame for gathering of documents certifying completed training and acquired competence/qualification in water supply sector. It will facilitate the mobility process and comprises the following:

- ☐ Currently existing Europass documents (e.g. CV, Certificate supplements, Diploma supplements, Europass mobility certificate, EU language certificate);
- ☐ Work experiences or traineeships certificates;
- ☐ Non-formal education and training certificates (such as in-company training);



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## PURE-H2O OUTCOMES

### PURE-H2O Skills Passport

- ☐ Informal learning certificates (e.g. from job experiences, leisure activities or volunteer work);
- ☐ All other relevant internationally recognized certificates.

The system frame will be set up following the established common for the project criteria and procedures, and standard quality indicators.



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## PURE-H2O OUTCOMES

### INTELLECTUAL OUTPUT 4

#### Analysis Report of Testing & Evaluation

COORDINATOR : OPEN UNIVERSITY OF NETHERLANDS



**OPEN UNIVERSITY OF  
NETHERLANDS**



## PURE-H2O OUTCOMES

### Analysis Report of Testing & Evaluation

The evaluation of project results/outcomes will be conducted through testing/evaluation and tuning process. Evaluation & testing reports will be delivered which will include:

- ☐ a set of documents regarding the evaluation/certification procedure
- ☐ information regarding the format and specific content for each event and summary for the type and specificity of target groups and stakeholders involved;



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## PURE-H2O OUTCOMES

### Analysis Report of Testing & Evaluation

- ☐ measures foreseen for the final tuning of the planned outcomes.
- ☐ Evaluation Reports of meetings and activities-intellectual outputs,
- ☐ Testing reports of the multiplier events and intellectual outputs.



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## PURE-H2O OUTCOMES

### INTELLECTUAL OUTPUT 6

### Analysis Report on Dissemination and Use

COORDINATOR : ORKON + GAZI UNIVERSITY



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## PURE-H2O OUTCOMES

### Analysis Report on Dissemination and Use

- ☐ This output describes the project's dissemination objectives and measures achieving throughout the course of the project.
- ☐ It defines and prioritize the key objectives of the project's dissemination;
- ☐ Identifies main stakeholder types/categories and why to reach them; elaborates means for reaching out to stakeholders,
- ☐ Defines time-lines for the planned dissemination activities and stakeholder contact and, finally, identifies and prioritizes dissemination tools.



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## PURE-H2O OUTCOMES

### Analysis Report on Dissemination and Use

- ☐ An overview of the dissemination process will be made,
- ☐ Conclusions will be drawn how to identify and reach stakeholders, including end users and the public,
- ☐ Raise their awareness regarding the findings of the consortium and to encourage them to support and adoption of the consortium's recommendations regarding the access to the obtained research data.
- ☐ Promotional materials will be produced, 2 leaflets, 2 posters, Newsletter, etc.



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## PURE-H2O OUTCOMES

### INTELLECTUAL OUTPUT 7

#### Booklet "PURE-H2O Project: Challenges & Limitations"

COORDINATOR : PLANART



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## PURE-H2O OUTCOMES

#### Booklet "PURE-H2O Project: Challenges & Limitations"

The aim of this output is to evaluate the achievements compared to the project objectives and seek for successes and lessons learned of the PureH2O project.

The below objectives will be pursued in order to achieve this goal:

- ☐ Assess the structure and level of VET education in the Drinking water supply sector;
- ☐ Conduct document analysis on project activities and its quarterly reports and policy and legal documents related with strengthening the VET in the area;



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## PURE-H2O OUTCOMES

### Booklet "PURE-H2O Project: Challenges & Limitations"

- ☐ Define the level of participation of the different project target audience; stakeholders; policy makers and public;
- ☐ State the relations between project outputs, outcomes and effectiveness;
- ☐ Develop recommendations for further actions based on evaluation results and conclusions.



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## CHAPTER 1 SUMMARY INTRODUCTION OF DRINKING WATER TREATMENT



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## Technical, Research Aspects and Management of PURE-H2O Project



Technical



Management

Research



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## What is a Drinking Water Treatment?

Drinking water treatment plants are used to remove particles and organisms that lead to diseases and protect the public's welfare and supply pure drinkable water to the environment, people and living organisms.

- ☐ Provides drinking water to the public
- ☐ Follow the rules of engineering sciences
- ☐ Water depending on the quality of the water which enters the plant
  - Groundwater
  - Lakes
  - Rivers
  - Streams



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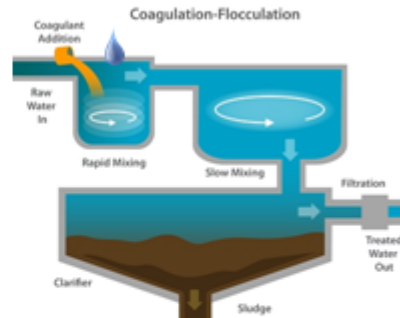
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## What is a Drinking Water Treatment?

### Coagulation

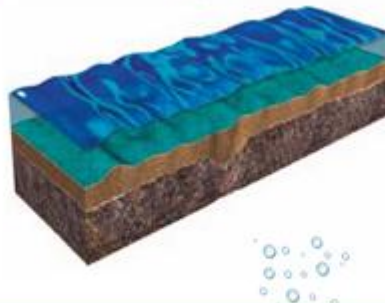
- Removes dirt and other particles
- Alum and other chemicals are added to form “floc” which attracts dirt particles
- The floc is heavy enough to sink to the bottom during sedimentation



## What is a Drinking Water Treatment?

### Sedimentation

- The heavy particles (floc) settle to the bottom and the clear water moves to filtration.





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## What is a Drinking Water Treatment?

### Filtration

- The water passes through filters, some made of layers of sand, gravel and charcoal that help remove even smaller particles



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## What is a Drinking Water Treatment?

### Disinfection

- A small amount of chlorine is added or some other disinfection method is used to kill any bacteria or microorganisms that may be in the water



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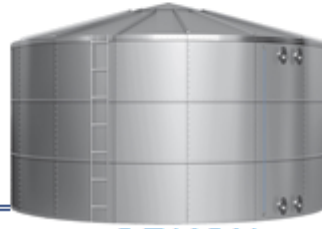


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## What is a Drinking Water Treatment?

### Storage

- Water is placed in a closed tank or reservoir for disinfection to take place. The water then flows through pipes to homes and businesses in the community



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## The Need for Drinking Water Treatment Plants



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## The Need for Drinking Water Treatment Plants

### Removal of Harmful Substances

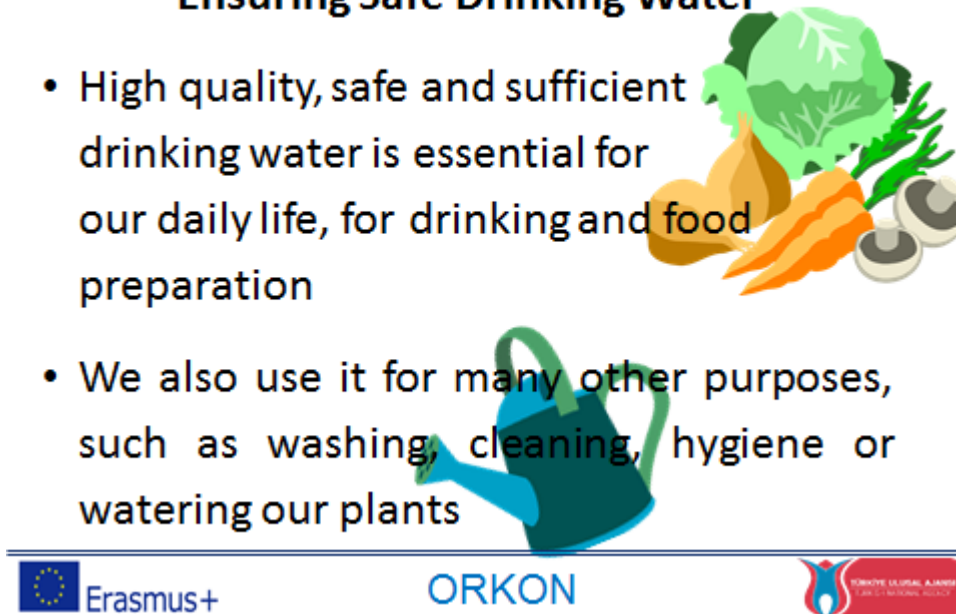
- Substances removed include suspended solids, bacteria, algae, viruses, fungi, minerals such as iron, manganese and sulfur, and other chemical pollutants such as fertilizers



## The Need for Drinking Water Treatment Plants

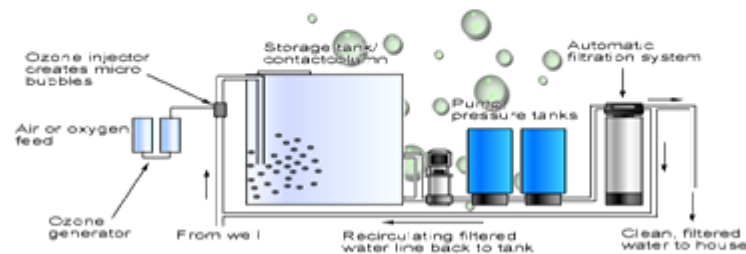
### Ensuring Safe Drinking Water

- High quality, safe and sufficient drinking water is essential for our daily life, for drinking and food preparation
- We also use it for many other purposes, such as washing, cleaning, hygiene or watering our plants





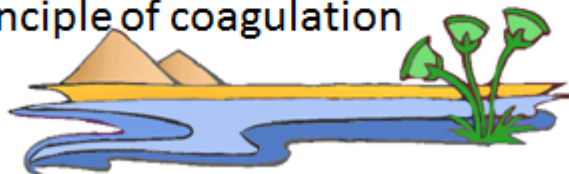
## The Evaluation of Water Treatment Technology



## Evolution of Water Treatment Technology

### History of Drinking Water Treatment

- Greek and India writings recommended water treatment methods dating back to 2000 B.C.
- 1500 B.C., the Egyptians first discovered the principle of coagulation





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## EUROPEAN DIRECTIVES & LEGISLATIONS



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## European Directives and Legislations

### The Directive Overview

- The Drinking Water Directive  
(Council Directive 98/83/EC)  
focuses on the  
quality of water  
intended for human consumption
  - Its objective is to protect human health  
from any water contamination



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## European Directives and Legislations

### The Drinking Water Directive Applies to:

- Drinking water from tankers
- Drinking water in bottles or containers
- Water used in the food-processing industry, unless national authorities are satisfied regarding the quality of the water



## European Directives and Legislations

### Water Supply

- Drinking water supply in the EU is organised by supply zones
- The Directive makes a distinction between large and small supplies
- Water sources vary considerably between Member States (MS)



## European Directives and Legislations

### Drinking Water Quality

- The Drinking Water Directive sets out minimum water quality requirements
- For each of the parameters, the Directive sets maximum concentration values
- The Directive requires to do regular monitoring of the quality of water

## PURE-H2O PRODUCTS







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## Analysis Report on Dissemination and Use

1st Page of the Leaflet: EN, TR, BG, NL

### PURE-H2O — Connections

- Target groups:** The PURE-H2O qualification recognition model is targeted at teachers, trainers, learning facilitators, guidance professionals, school/institution managers and political decision makers.
- Economic sectors:** Chemical and engineering, environmental protection, biotechnology, healthcare, food industry need professionals with relevant and updated qualifications approved following the PURE-H2O path.
- Institutional cooperation:** The PURE-H2O partnership between various institutions and national authorities contributes to the process of regulation, transparency & recognition of qualifications at the national & European level.

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### ERASMUS PLUS EU PROJECT — PURE-H2O

Implementation of EC/VET for Qualification Design in Drinking Water Treatment Plants & Sanitation for Pure Drinkable Water

PROJECT NUMBER: 2014-1-PT01-AL201-013117

**Objectives:**

- Develop a qualification design for drinking water treatment plants and sanitation for pure drinkable water.
- Implement the qualification design in drinking water treatment plants and sanitation for pure drinkable water.
- Develop a qualification design for drinking water treatment plants and sanitation for pure drinkable water.

This project is implemented with the financial support of the European Commission through Erasmus+ funding mechanism. Content of this report has been created as the project outputs, and does not necessarily reflect the official position of the European Commission.



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## Analysis Report on Dissemination and Use

2nd page of the Leaflet: EN, TR,

### PURE-H2O Predicted...

**Outcomes:**

- Analysis of the training needs
- Learning in PURE-H2O
- PURE-H2O learning outcomes-based blended learning curriculum
- PURE-H2O Skills Passport
- PURE-H2O analysis report of testing & evaluation
- Supporting sharing events
- PURE-H2O analysis report on dissemination and use
- Dissemination & use workshops

**Workshop Plan**

- 1. To
- 2. To
- 3. To
- 4. To
- 5. To
- 6. To
- 7. To
- 8. To
- 9. To
- 10. To

**Impacts:**

- Economic Sector: Drinking water supply
  - EU policy
  - Financial loss
  - Environmental damage
  - Problem solving
  - The drinking water supply sector
  - The bottle necks to be addressed
- Educational transfer for knowledge-based economy
- PURE-H2O project uses the tools for qualifications recognition in the national and EU scale
  - European & National Qualifications Frameworks (ENQF)
  - European Credit System for Vocational Education and Training (ECTS)
  - EUROPASS

### PURE-H2O Benefits

**Target groups benefit from:**

- Intensive motivation to learn
- Implementation of national good practices for qualification assessment
- EC/VET credit points
- a Scheme for PURE-H2O Skill Passports
- PURE-H2O training online and offline
- A set of learning outcomes
- Learning pathways and short intensive courses
- Exemplary documents

**Regional development benefits from:**

- Standardized user-centered VET learning paths
- Qualifications descriptions in the field of PURE-H2O to be introduced into the educational and industrial sectors in Bulgaria, the Netherlands and Turkey
- Globally accessible PURE-H2O e-portal
- Tests and certificates offered to trainees from Bulgaria, the Netherlands and Turkey
- PURE-H2O national workshops for presentation of project outcomes
- International workshops
- Cluster activity with similar initiative for further application of the PureH2O model



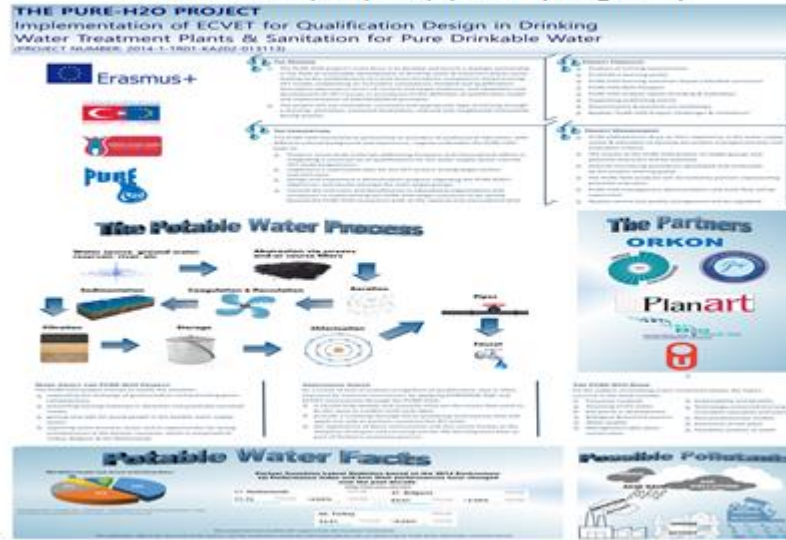
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## Analysis Report on Dissemination and Use

### 1 Poster: EN, TR, BG, (NL in progress)



## Analysis Report on Dissemination and Use

### 1 Newsletter: EN (1st Page)



## Analysis Report on Dissemination and Use

### Newsletter (2nd Page)



## Analysis Report on Dissemination and Use

### FACEBOOK OF THE PROJECT

### ERASMUS PLUS TR





*SOME PHOTOS BELONGING TO THE PARTICIPANTS OF  
THE MULTIPLIER EVENT:*





