

# PROLINE-CE WORKPACKAGE T1, ACTIVITY T1.3

# IDENTIFICATION OF STRATEGIES AND MEASURES TO BE INTEGRATED INTO EXISTING POLICY GUIDELINES

D.T1.3.2 START-UP STAKEHOLDER WORKSHOPS IMPLEMENTED PLUS RELATED DOCUMENTATION

### **NATIONAL REPORT - SLOVENIA**

June, 2017

Lead Institution	University of Ljubljana					
Contributor/s	PP 4					
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Date last release	25. 7. 2017					







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# 1. Date and Location of the Start-up stakeholder workshop in Slovenia

The first national stakeholder workshop for the PROLINE-CE project was held on May 18th 2017 in the hall of the JP Vodovod-Kanalizacija d.o.o. building in Ljubljana.

The goal of the workshop was to identify strategies and measures, which will be integrated to policy guidelines which will be done through intensive key stakeholder involvement by means of this kind of workshops. The input provided by the target groups is essential in developing best management practices in land use for drinking water protection and flood/drought mitigation.

# 2. Participants of the Start-up stakeholder workshop in Slovenia

Invitation for the workshop (see Annex 1) was sent to all Slovenian stakeholders. 36 participants took part in the workshop. Participants list is enclosed in Annex 2a. Participants were from different institutions and their departments (see also Annex 2b):

- 6 from governmental agencies: Slovenian Environment Agency, Water Agency, Nature protection agency;
- 1 from governmental inspectorate for the environment and spatial planning;
- 3 Municipalities: Ljubljana, Cerklje na Gorenjskem, Škofja Loka;
- 4 Public Water Utilities: Ljubljana, Domžale, Kranj, Krško;
- 2 NGO's: GWP CEE and GWP Slovenia;
- 1 University research institution;
- 4 SME's and research institutions dealing with water and spatial planning.

### 3. Workshop sessions

### 3.1. Workshop opening session (Session 1)

Workshop started with a welcome to all the stakeholders and participants from the Head of the Development department of Ljubljana Water Utility (JP Vodovod-Kanalizacija d.o.o.) - mag. Nataša Šušteršič (Figure 1).

Afterwards mag. Suzana Stražar (Figure 2), Head of Department of Water management of Slovenian Water Agency, held an invited speech regarding integration of the PROLINE-CE project topics to the Agency's mission.







Figure 1: Welcome words of mag. Nataša Šušteršič (Head of the Development department of Ljubljana Water Utility (JP Vodovod-Kanalizacija d.o.o.)



Figure 2: Invited speech of mag. Suzana Stražar (Head of Department of Water management of Slovenian Water Agency)

The first session of the workshop finished with the presentation mag. Alja Grošelj from the Institute of the Republic of Slovenia for Nature Conservation. She presented establishment, development and management of Tivoli, Rožnik and Šišenski hill Landscape Park, which is a part of Slovenian Pilot Action.



Figure 3: Invited speech of mag. Alja Grošelj from the Institute of the Republic of Slovenia for Nature Conservation



Figure 4: General PROLINE-CE project presentation by dr. Barbara Čenčur Curk

### 3.2. Workshop session: PROLINE-CE presentations (Session 2)

In the second session PROLINE-CE project presentations were held:

- PROLINE-CE project general presentation (dr. Barbara Čenčur Curk, UL NTF; Figure 4)
- The challenges of drinking water resources protection from the point of view of land use case of Ljubljana and Dravlje valley pilot action (mag. Branka Bračič Železnik, JP VO-KA; Figure 5)
- Flood hazard and measures in Slovenia (dr. Primož Banovec, UL FGG; Figure 6)

Within the discussion interaction between drinking water and flood hazard was discussed.







Figure 5: Challenges of drinking water resources protection from the point of view of land use presented by mag. Branka Bračič Železnik



Figure 6: Flood hazard and measures in Slovenia presented by dr. Primož Banovec

### 3.3. Workshop session: Interactive stakeholder dialogue (Session 3)

The second aim of the workshop was to acquire feedback from workshop participants on various aspects drinking water and its collision with flood protection and land-use management. The method used was carousel brainstorming which enabled exploring multiple perspectives of an issue in a dynamic session. The stakeholder workshop was addressing the aspects which are of importance for the stakeholders in Slovenia, also reflecting their professional background, working experiences and home institutions.

The stakeholder dialogue was organized as discussion of three topics in three groups, in a circular way with the stakeholders being divided into three groups according to their professional background, working experiences and home institutions in such way that each group consisted of various experts. Each topic had a moderator from the Slovenian PROLINE-CE project team:

- TOPIC 1: The challenges of drinking water protection regarding land use management, led by mag. Branka Bračič Železnik (JP VO-KA) and co-lead by dr. Anja Torkar (UL-NTF); see Figure 7;
- TOPIC 2: Flood management and protection of drinking water resources; Measures and practices, led by dr. Primož Banovec (UL-FGG) and co-led by Ajda Cilenšek (UL-FGG); see Figure 8;
- TOPIC 3: Past extreme weather events affecting drinking water supply specific experiences of interruption in drinking water supply and threats, led by dr. Barbara Čenčur Curk (UL-NTF) and co-led by Matej Cerk (UL-FGG); see Figure 9.

At the end of working in groups, a resume of all discussion was made by three group leaders (Figure 10, Figure 11 and Figure 12). Group leaders prepared a comprehensive report about outcomes of discussions with extraction of gaps and problems and measures.







Figure 7: Discussion of topics 1, led by mag. Branka Bračič Železnik (JP VO-KA) and co-lead by dr. Anja Torkar (UL-NTF)



Figure 8: Discussion of topics 2, led by dr. Primož Banovec (UL-FGG) and co-led by Ajda Cilenšek (UL-FGG)



Figure 9: Discussion of topics 3, led by dr. Barbara Čenčur Curk (UL-NTF) and co-led by Matej Cerk (UL-FGG)



Figure 10: Resume of topics 1 presented by topic 1 moderator mag. Branka Bračič Železnik (JP VO-KA)



Figure 11: Resume of topics 2, presented by topic 2 moderator dr. Primož Banovec (UL-FGG)



Figure 12: Resume of topics 3, presented by topic 3 moderator dr. Barbara Čenčur Curk (UL-NTF)

# 3.3.1. Topic 1 - The challenges of drinking water protection regarding land use management

Within the topic 1 the conflicts between different land use and protection of drinking water resources were discussed. Participants of the stakeholder workshop were asked to share their experiences, thoughts, and make proposals for measures according to following questions:





### 1. Land use:

How and which land use affect quality of drinking water resources; what are your experiences and measures? Land use and drinking water resources protection conflict:

- agriculture (supervision of use of pesticides, fertilizers and manure)
- forest management
- urban areas.

Which land use has priority and why? Can we harmonize land uses and how?

2. Drinking water protection zones (hereinafter DWPZ):

What are problems in implementation of DWPZ? Can we change and reduced the size of DWPZ according to the new knowledge and technologies? Where and when is conservative protection of DWPZ acceptable (e.g. with no intervention)? Would more effective surveillance and punitive policy contribute to more consistent compliance with the prohibition and implementation measures?

3. Which measures for drinking water supply and quality do you propose? How to motivate key decision makers to implement the necessary measures?

During discussion of three groups, the following gaps and problems were raised:

- Despite Decree on the water protection area for the Ljubljansko polje aquifer (Official gazette RS No.43/15) and Decree on the water protection area for the aquifers of Ljubljansko barje and outskirts of Ljubljana (Official Gazette RS No.115/07, 9/08, 65/12 in 93/13), which prescribes restrictions and prohibitions in DWPZ, there are irregularities in the DWPZ, particularly the violations of restrictions and prohibitions on the quality of groundwater in the narrowest DWPZ. The proposal that Water utilities buy land in the narrowest DWPZ was given to extend the narrowest area with the most rigorous protection regime. Since farmers do not want to sell land located in the narrowest area, nationalization might be possible solution? Often there is a problem that the manager has the agreement with the owner, but when he passes away, there are often problems with heirs and the performance of activities in the context of public drinking water supply cannot be carried out. A proposal was made to prepare a decree on the termination of inheritance for such areas, for example like in Sweden.
- If land has been present in the DWPZ for decades, it is necessary to conclude compromises and to coordinate these land uses in accordance with the decree, and those land uses cannot be prohibited. It is in the best interest to look for the best practices and technologies in the DWPZ.
- The problem of obtaining administrative permits was exposed. If there are no restrictions, prohibitions and prescribed measures in this document, inspection services have no basis for action.





- Communication between individual stakeholders is very poor or often in not even present. It is necessary to establish more dynamic cooperation and integration between stakeholders (more conversations, simpler administrative procedures).
- There is a major problem of controlling the environment and groundwater by irregular and harmful behaviour of individuals.
- A problem was exposed that an individual, when he has a certificate for buying pesticides, he can buy unlimited quantities of pesticides. There are no limits on quantities.
- Generally, we have good legislation, but the implementation in not so good. Inspection services are under-staffed and have very limited power.
- The culture of people in behaviour towards the environment is still low, they are still dumping waste in the DWPZ, digging gravel ... Stricter control and punishing policy will not change much (one or two offenders will be penalized, while the other 8 will not be).
- There is a problem of small wastewater treatment plants, which are prohibited in the DWPZ, but on the other hand there is no sewage system.

### The following *measures* were proposed:

- Very important, if not the most important is to educate, aware and inform all involved stakeholders. This should be an ongoing process.
- Collaboration of all professions which are involved and are operating in all areas of the water circle.
- It is necessary to create vulnerability analysis of the areas where the pumping well is located, and on the basis of this, determine the land use and activities that may be possible in the area.
- For individual interventions in the DWPZ, the risk of pollution or quantity change from this intervention on the groundwater must be estimated. If the risk cannot be quantified, the precautionary principle is assumed.
- Fuel tanks with liquid fuels should be prohibited in the narrowest DWPZ and flood areas.
- Despite new knowledges and technologies, the participants at the workshop gave priority to conservative protection of water resources in a way that protects the area and does not involved new activities.
- Adapting measures in the DWPZ should be a more dynamic process.
- Depending on the amount of water pumping, if, for example, it is increased in time, it is necessary to adapt the DWPZ areas. The geometry of the water source varies according to the pumping quantities.
- At the municipal level, it is necessary to define the reserve water resources and make an appropriate land reservation. Also, activities on that land must be adapted.





- There was doubt if the record of the Water Right in the Constitution is written correctly. Groundwater as a natural source of clean and safe drinking water should be protected.
- In order to reduce the impact of the agricultural activity on the groundwater quality, it is necessary to have an ongoing education for farmers, how and what causes pollution of groundwater, which are main sources of drinking water and also a source for irrigation.

## 3.3.2. Topic 2 - Flood management and protection of drinking water resources; measures and practices

Working groups were addressing floods in the context of water resources protection with an emphasis on groundwater protection. Key question for discussion was:

1. What are your experiences in flood and its interaction with drinking water resources protection?

During discussion following issues were raised:

### Physical phenomena affected by the flood-groundwater interactions:

- Contaminated sites (old burdens) affected by the flood-groundwater interactions
- In some specific cases contaminated sites with buried pollutants exist on the flood sites above groundwater. While they could be recognized as stable under current conditions, floods could trigger migration of pollutants.
- Change of dominant groundwater flows because of the flood events (locally increased infiltration). This could cause different water quality in the abstraction wells.
- Flooding of pumping wells: this can occur in the case of floods affecting pumping stations. The wells heads could be constructed as sealed in a way to prevent the surface water intrusion in the well. During the flood events in 1990 (Celje, Slovenia) the wells were flooded, but their heads were constructed as sealed so their operation was not interrupted. Specific issue are switchboards and electronic equipment. They were flooded in the 2010 water well field Brest floods. The groundwater and wells were not polluted, but the pumping station was out of service for some weeks. Sealing of wells is important not only for pumping wells but also for piesometric wells.
- Gravel pits: gravel pits were developed due to the gravel abstraction on several alluvium aquifers. In some cases they were flooded by groundwater after the abstraction developing lakes. These lakes have direct interaction with groundwater posing a pollution threat.
- Specific flood-groundwater interaction concept is related to the change of river bed level. In several cases bedload transport was historically interrupted by the construction of hydropower plants (river damming). As a consequence rivers started to dig-in into their alluvium beds. Related groundwater level was dropping at the same time. Necessary measures are related to maintenance of the stable bedload transport or stabilization of river bed with constructive measures.





- Sewerage systems (drainage, mixed) could transfer floods to the zones which are generally not exposed to floods. From this point of view they are a pollution source as well as transport mechanism.

### Measures for the prevention of flood-groundwater interactions:

- Some flood protection measures might induce dramatically changes in groundwater level and flow including infiltration capacity. With the development of flood protection measures the groundwater interactions should be addressed thoroughly.
- In case of flood-drinking water use especially safety level of electrical installations is of critical importance.
- More space for water general outline, which is in practice difficult to implement. Quite regularly it could be observed that, especially small water courses are covered and narrowed on the benefits of other uses (traffic, houses etc.).

### Monitoring issues:

- With the EU project BOBER the water monitoring network in Slovenia was considerably improved. This is especially valid for the surface river network and related discharges. Online interaction with the ground water with potential groundwater induced flooding is not so well addressed. This is recognized potential for improvement in locations in Slovenia where high groundwater levels might cause flooding (i.e. shallow aquifers in Pomurje, Cerklje).
- Permanent monitoring and now casting (forecasting) of available groundwater resources for abstraction (use) might be necessary in line with observed climate change.

### Governance concepts:

- Balanced approach related to balanced protection and use of water resources should be applied. Overprotection might impede development, while under protection might affect sustainable development and deplete resources.
- Floods on agricultural land especially grassland should be clearly recognized as acceptable. Clear and balanced compensations should be made for farmers. Grassland with adequate farming practice should be fostered on flood zones.
- Water use permitting process on flood hazard zones should be defined better, also in the River Basin Management Plans. Current RBMPs do not address this issue adequately.
- Small water individual rights, which are eligible under the Slovene legislation, are poorly monitored and supervised. Nevertheless they might on one hand be a challenge for the protection of groundwater resources (over-abstraction), but in the case of flood-groundwater relationship they might be a source of risk, because their construction standards and maintenance procedures are usually not well defined and they might provide a pathway for pollution.
- Permitting process related to the permit for the underground constructions (cellars) is relatively inefficient. Subterranean constructions might on one hand affect the





groundwater quality and quantity, but they are also subject to flooding. Only some spatial acts on local level define systematically where underground levels are allowed and where they are not allowed.

- One of the potential non-constructive measures for flood risk reduction might be relocation of the houses and households at risk. This should be performed with due attention (potential notable effect on social networks).
- Special issue is related to the depositions of material on flood zones (and especially combined flood zones and drinking water protection zones). According to Slovene legislation one can deposit up to 500 m3 of material with limited permitting procedures. In some cases up to 30.000 m3. The inspectorate is quite limited with the empowerments and available technical means to supervise it. The deposited material can negatively affect flood risk, but can be also a source of pollution to groundwater. Significant improvement in this field is necessary. Different inspectorates are responsible in this domain (water management, construction, agriculture), they should coordinate their activities better.
- Low penetration of standards and related decrees are in place for the construction of urban drainage related to its flooding, efficient pre-treatment, retention, infiltration, and reuse and similar.
- Flood and pollution disaster forensics is on low level. They should provide leverage for improved responsibility of all stakeholders as well as learning set in order to prevent re-occurrence of similar mistakes.
- Historical knowledge on the flood management, and protection of water resources should be upgraded with actual developments and disseminated to general public, which is a challenge. Awareness rising and continuous education should provide a general framework.
- Flood induced groundwater pollution is also one of direct flood damages. It is difficult to identify and model. Improvements in this domain are necessary. This is also related to improved flood insurance which is insuring also damage to drinking water abstraction and delivery system.
- Usually active groundwater resources are addressed. Groundwater resources which are identified as potential (long-term) reserve and might not be activated yet should be treated with similar (or same) attention in order to provide secure and quality drinking water for future generations. This is related also to their monitoring (usually performed with lower attention) and other (permitting, planning RBMPs, etc.).
- Improved RBMPs should integrate flood groundwater interaction better, addressing both (1) strategical framework, but also direct implementation of the anticipated measures in practice (decrees, enforcement ...).

Flood risk maps based upon modelling as well as drinking water protection zones based upon the modelling are practice in Slovenia. Unclear issue is their maintenance which should follow all the changes that occur in the dynamic environment.





# 3.3.3. Topic 3 - Past extreme weather events affecting drinking water supply - specific experiences of interruption in drinking water supply and threats

Within the topic 3 past extreme weather events affecting drinking water supply were discussed. Since most of the groups already discussed about floods in group 2, in this group focus was more on drought problems. Participants of the stakeholder workshop were asked to share their experiences, thoughts, and make proposals for measures according to following topic and questions:

Climate change and drinking water supply (drought and flood)

### 1. Planning:

Does water utility have water safety plan with consideration of climate change?

Does Municipality have a program / strategy of adaptation to climate change?

### 2. Experiences:

Have you already faced drought / flood problems? What measures have been taken?

During discussion following issues were raised:

### Climate change adaptation

Municipalities, which were present at the workshop (Ljubljana, Cerklje na Gorenjskem, Škofja Loka) do not have climate change adaptation program.

Water utility of Ljubljana has safety plan with measures for drought and flood for each water well field. Smaller water utilities do not have water safety plan considering climate change.

In water supply pipelines water has higher temperatures in summer, which are also rising (CC). Water suppliers have to assess impacts (water temperature, water levels, water quality) of climate change to the water supply system.

Vulnerability of drinking water sources to drought, flood and other factors have to be estimated on local level. Vulnerability is defined only on state level in the frame of Integrated River Basin Management Plan (IRBM).

Most water supplies rely on one larger well field; therefore it is a must to determine reserve drinking water resource and elaborate operational plan for cases of pollution or other events.

Drinking water protection zones (DWPZ), above all the zone nearest to the well, have to be delineated with regard to extreme events (drought, flood). In drought depression cone radius is larger and the nearest DWPZ is larger.

In case of drought, the demand is higher and available water is limited. Drinking water abstraction has priority according to Slovenian Water Law. Nevertheless, succession of disconnections for other water uses (irrigation, industry...) has to be determined for each water resource. There is a lack of control of private water permit owners if they really stopped pumping.





### Drought

Agriculture and drought: Municipality of Ljubljana would like to make a joint irrigation plan for agricultural areas, but there is a problem of small private land owners, not willing to cooperate. For joint irrigation system, commassation of land parcels (merger of individual properties in a given area) is necessary, for which procedures take long time. Some areas (Zadobrova and Bizovik) already have individual irrigation systems. On the other hand pumped and sold drinking water quantities are declining, which is not good for the pipeline system dimensioned for higher discharges, therefore water from the water supply could be offered to farmers upon special price for irrigation. Irrigation from water supply is in this case more rational than establishing new pumping station for irrigation

**Drought and drinking water supply**: local water supplies could get water from closest central (bigger) water supply system. This is often not the case, because there is a lack of connection of water suppliers.

State has to focus on awareness of drought consequences and measures for avoiding/adapting to drought and has to be done on all levels: state, local...

### Flood protection

Flood protection measures, which affect private land, are not accepted by land owners.

Flood protection measures have to be separately determined for agricultural and urban areas; e.g. private land owner with building on flood area has to pay for this building.

Municipalities would like to change land from building land to open space for flooding, but owners dispute because land has then lower value.

Municipalities have determined flood hazard areas and measures in their spatial plans. But there is a problem; because designer still thinks on 'old' way, therefore there is a need for education of elder designers. Slovenian Environment Agency has to issue guidelines for management of water courses.

Participants also stressed a problem of illegal waste disposals, which can be flooded.

### 4. Feed-Back Questionnaire Analysis

In order to improve the PROLINE-CE stakeholder workshop and to get feed-back from participants about the event, participants were asked to answer several questions about the workshop. The number of completed surveys is 22. The Feed-Back Questionnaire Analysis in enclosed in Annex 3.





### **ANNEX 1**

Invitation

National Start-up stakeholder workshop in SLOVENIA

Date: 18.5.2017

Location: JP Vodovod-Kanalizacija d.o.o., Ljubljana





## **VABILO**

1. nacionalna delavnica za deležnike

"Izzivi upravljanja s prostorom in z viri pitne vode na območjih poplavne nevarnosti"

četrtek, 18. maj 2017, ob 9.00 uri v veliki sejni dvorani JP Vodovod-Kanalizacija d.o.o. Vodovodna cesta 90, 1000 Ljubljana

JP Vodovod-Kanalizacija d.o.o. in Univerza v Ljubljani (Naravoslovnotehniška fakulteta in Fakulteta za gradbeništvo in geodezijo) vas vabita na 1. nacionalno delavnico transnacionalnega projekta PROLINE-CE. Cilj projekta je priprava smernic v zvezi z učinkovito zaščito virov pitne vode. Ta namen bo dosežen skozi razvoj ukrepov za učinkovito upravljanje rabe prostora, katerih cilj je varovanje vodnih virov pitne vode, kot tudi zmanjšanje vplivov poplav in suš v skladu z izzivi podnebnih sprememb.

### Cilji delavnice so:

- ✓ Določiti vaše trenutne izzive v vsakodnevnem poslovanju v zvezi z navedenimi tematikami
- ✓ Vključiti vas kot deležnike v razvoj transnacionalnega akcijskega načrta za celovito trajnostno zaščito virov pitne vode in varstvo pred poplavami
- ✓ Predstaviti nabor priporočil, ukrepov ter dobrih praks upravljanja s prostorom in zaščite virov pitne vode

Vljudno vabljeni,

plaulo PGW mag. Branka Bračič Železnik

JP VO-KA

dr. Barbara Cencur Curk

**UL NTF** 

dr. Primož Banovec

UL FGG

Udeležbo na delavnici potrdite na: proline\_ce@geo.ntf.uni-lj.si do 16.5.2017

http://www.interreg-central.eu/PROLINE-CE





### Program:

Program prve delavnice projekta PROLINE-CE naslavlja odnos med **zaščito virov pitne vode** in **upravljanjem s poplavami**. Nedavni poplavni dogodki 2010, 2014 so izkazali potrebo po boljšem razumevanju tega odnosa s strani številnih deležnikov.

- 9:00 Registracija
- 9:30 Otvoritev delavnice in uvodni nagovori:
  - Predstavnik JP Vodovod-Kanalizacija d.o.o.
  - Predstavnik Direkcije RS za vode
  - Predstavnik Zavoda RS za varstvo narave
- 10:00 Predavanja:
  - Predstavitev projekta PROLINE-CE (dr. B. Čenčur Curk, UL NTF)
  - Izzivi varovanja virov pitne vode z vidika rabe prostora (mag. B. Bračič Železnik, JP VO-KA)
  - Poplavna nevarnost in ukrepi v RS (*dr. P. Banovec, UL FGG*)
  - Interakcija med pitno vodo in poplavno nevarnostjo (dr. B. Čenčur Curk, UL NTF in dr. P. Banovec, UL FGG)

Avtorji bodo v prispevkih predstavili ključno obstoječo zakonodajo ter učinke in izzive njenega izvajanja (varnostni načrti, program ukrepov - priprava programa in pristojnost izvajanja ukrepov, NZPO, poplavna škoda na VVO).

- 11:30 Odmor za kavo
- 12:00 Delavnica na temo:
  - Konflikt rabe prostora in zaščite virov pitne vode; ukrepi in izkušnje
  - Upravljanje s poplavami in zaščita virov pitne vode; ukrepi in prakse
  - Pretekli ekstremni vremenski dogodki, ki so vplivali na oskrbo s pitno vodo - specifične izkušnje prekinitve dobave pitne vode in grožnje

V okviru delavnice želimo izmenjati izkušnje prisotnih deležnikov, saj jih želimo smiselno vključiti v rezultate projekta.

- 13:30 Zaključek delavnice
- 14:00 Pogostitev







**ANNEX 2a** 

Participants list

National Start-up stakeholder workshop in SLOVENIA

Date: 18.5.2017

Location: JP Vodovod-Kanalizacija d.o.o., Ljubljana

# PROLINE-CE 1. nacionalna delavnica za deležnike - Lista prisotnosti

JP Vodovod-Kanalizacija d.o.o. Ljubljana, 18. maj 2017



Zap.št.	Zap.št. Priimek	lme	Podjetje	Podpis
	Arh Marinčič	špela	Kostak d.d.	
2	Auersperger	Primož	JP Vodovod-Kanalizacija d.o.o.	
ω	Banovec	Primož	Univerza v Ljubljani, FGG	Barre
4	Bokal	Sabina	GWP Stowaska CEE	Erral Barne
5	Bračič Železnik	Branka	JP Vodovod-Kanalizacija d.o.o.	100 g of mark
6	Cerk	Matej	Univerza v Ljubljani, FGG	Max el
7	Cesar	Andrea	Kostak d.d.	Wood
00	Cilenšek	Ajda	Univerza v Ljubljani, FGG	which
9	Čenčur Curk	Barbara	Univerza v Ljubljani, NTF	7
10	Čermelj	Svetlana	Mestna uprava, Oddelek za varstvo okolja	
11	Frantar	Peter	Agencija RS za okolje	H
12	Gacin	Marina	Agencija RS za okolje	gady Martho
13	Globevnik	Lidija	TC vode d.o.o.	
14	Grošelj	Alja	Zavod RS za naravo	Allie Grand
15	Gspan	Marko	JP Vodovod-Kanalizacija d.o.o.	
16	Kogovšek	Bernard	JP Vodovod-Kanalizacija d.o.o.	March 1
17	Kranjc	Uroš	Institut za ekološki inženiring d.o.o.	Myxing
18	Kranjc	Stojan	Direkcija RS za vode, Oddelek za vodne pravice	7 R
19	Krmarič	Vlasta	JP Vodovod-Kanalizacija d.o.o.	O thankan

# PROLINE-CE 1. nacionalna delavnica za deležnike - Lista prisotnosti

JP Vodovod-Kanalizacija d.o.o. Ljubljana, 18. maj 2017



38	37	36	35	34	33	32	<u>ω</u>	30	29	28	27	26	25	24	23	22	21	20	Zap.št
Torkar	Šušteršič	Šorli	Stražar	Stražar	Stele Jeglič	Souvent	Roblek	Prestor	Pregl	Pergar	Pavlič	Onufrija	Mihorko	Meljo	Matjačič	Maslo	Malovrh	Lombar Arnež	Zap.št Priimek
Anja	Nataša	Maja	Suzana	Aleš	Мојса	Petra	Vesna	Joerg	Melhior	Petra	Urška	Kristina	Polonca	Janja	Pavel	Gorazd	Tanja	Tina	lme
Univerza v Ljubljani, NTF	JP Vodovod-Kanalizacija d.o.o.	JP Vodovod-Kanalizacija d.o.o.	Direkcija RS za vode	JKP Prodnik d.o.o.	Direkcija RS za vode	Agencija RS za okolje	Občina Škofja Loka, Oddelek za okolje in prostor	Geološki zavod Slovenije	IRG0	LUZ, d.d.	Agencija RS za okolje	Občina Škofja Loka, Oddelek za okolje in prostor	Agencija RS za okolje	Direkcija RS za vode	Inšpektorat RS za okolje in prostor	MOL, Oddelek za varstvo okolja	Občina Cerklje na Gorenjskem	Komunala Kranj, javno podjetje, d.o.o.	Podjetje
XXXX		Yol,	A Munica		The Jair	P. Johnson	nobbel	Sirving	200	A.S.	MARS!		Musho 0		CT &		3	Time tout Ad	Podpis

# PROLINE-CE 1. nacionalna delavnica za deležnike - Lista prisotnosti

JP Vodovod-Kanalizacija d.o.o. Ljubljana, 18. maj 2017



Zap.št.	Zap.št. Priimek	lme	Podjetje	Podpis
39	Zupan	Martina	GWP Slovenija	Mu Cunui.
40	Žvab Rožič	Petra	Univerza v Ljubljani, NTF	Lotate Part
41			Inštitut za vode RS	
42			Zdravstvena fakulteta	
43			Biotehniška fakulteta	
44	tenin	Aculie	rotord in sage rest tournain	
45				
46				
47				
48				
49				
50				
51				





**ANNEX 2b** 

Participant's institutions - stakeholder list

National Start-up stakeholder workshop in SLOVENIA

Date: 18.5.2017

Location: JP Vodovod-Kanalizacija d.o.o., Ljubljana

			Participant name
Institution	Department	Type of institution	1st National
			stakeholder workshop
Kostak d.d.		Water Utility	Andrea Cesar
GWP CEE		NGO	Sabina Bokal
GWP Slovenija		NGO	Martina Zupan
Agencija RS za okolje	Sektor za analize podnebja in vodnega kroga	Governmental - Agency	Peter Frantar
	Sektor za arialize podriebja ili vodriega kroga	Governmental - Agency	Petra Souvent
Agencija RS za okolje	Sektor za kakovost voda	Governmental - Agency	Marina Gacin
	Sektor za kakovost voda	Governmental - Agency	Polonca Mihorko
Direkcija RS za vode	Urad za upravljanje z vodami	Governmental - Agency	Suzana Stražar
Direkcija RS za vode	Sektor za razvoj in plan, Oddelek za varstvo in rabo voda	Governmental - Agency	Jana Meljo
Direkcija KS za vode	Sektor za razvoj ili piari, Oddelek za varstvo ili rabo voda	Governmental - Agency	Mojca Stele Jeglič
Direkcija RS za vode	Oddelek za vodne pravice	Governmental - Agency	Kranjc Stojan
Zavod RS za naravo	OE Ljubljana	Governmental - Agency	Alja Grošelj
Institut za ekološki inženiring d.o.o.		SME	Kranjc Uroš
			Marko Gspan
JP Vodovod-Kanalizacija d.o.o.	Razvojna služba	Water Utility	Kogovšek Bernard
	Nazvojila služba	water offilty	Maja Šorli
			Šušteršič Nataša
JP Vodovod-Kanalizacija d.o.o.	Služba za nadzor kakovosti pitne in odpadne vode	Water Utility	Kramarič Vlasta
Komunala Kranj, javno podjetje, d.o.o.		Water Utility	Tina Lombar Arnež
Občina Cerklje na Gorenjskem		Municipality	Malovrh Tanja
Mestna občina Ljubljana	Oddelek za varstvo okolja	Municipality	Svetlana Čermelj
	Oddelek za varstvo okolja	Municipality	Gorazd Maslo
Inšpektorat RS za okolje in prostor	OE Ljubljana	Governmental -	Pavel Matjačič
inspektorat N3 za okolje ili prostor	OE Ejubijana	Inspectorate	Alenka Lepin
LUZ, d.d.		SME / spatial planning	Petra Pergar
IRGO	Hidrogeologija in okoljske študije	SME / research	Melhior Pregl
Geološki zavod Slovenije	Podzemne vode-hidrogeologija	SME / research	Joerg Prestor
Občina Škofja Loka	Oddelek za okolje in prostor	Municipality	Vesna Roblek
UL, Naravoslovnotehniška fakulteta	Katedra za stratigrafijo, paleontologijo in regionalno geologijo	University / Research	Petra Žvab Rožič
JKP Prodnik d.o.o.		Water Utility	Aleš Stražar





### **ANNEX 3**

Feed-Back Questionnaire Analysis

National Start-up stakeholder workshop in SLOVENIA

Date: 18.5.2017

Location: JP Vodovod-Kanalizacija d.o.o., Ljubljana





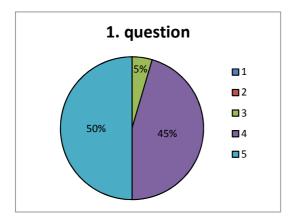
In order to improve the PROLINE-CE stakeholder workshop and to get feed-back from participants about the event, participants were asked to answer several questions about the workshop.

The value 1 is worst value and the number 5 is the best value.

### The number of completed surveys is 22.

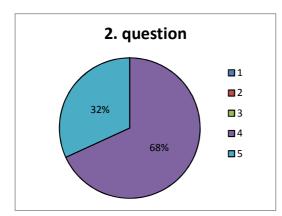
### Analysis of questions:

1. Was the event tailored enough to you (understandable, feel concerned, relevant topic)?



1. question	Num. of answers
1	0
2	0
3	1
4	10
5	11

2. Was the event approach (presentations/workshop/dialogue/brainstorming) suitable, attractive and well-balanced to raise awareness and increase your knowledge?

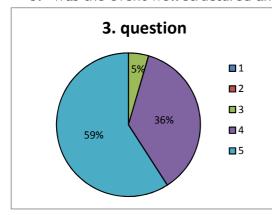


2. question	Num. of answers
1	0
2	0
3	0
4	15
5	7



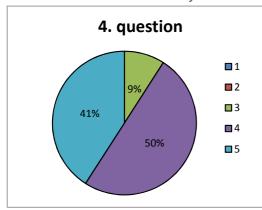


3. Was the event well structured and focused?



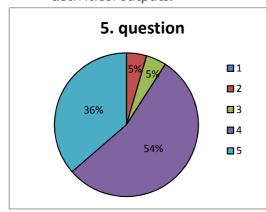
3. question	Num. of answers
1	0
2	0
3	1
4	8
5	13

4. Has the event raised your awareness and increased your actual knowledge?



4. question	Num. of answers
1	0
2	0
3	2
4	11
5	9

5. Have you gained a deeper knowledge about PROLINE-CE objectives and activities/outputs?



5. question	Num. of answers
1	0
2	1
3	1
4	12
5	8

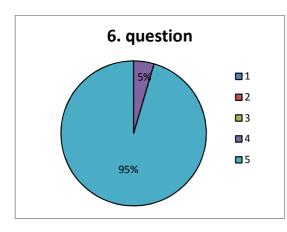




6. Was the event well prepared: invitation in time, organisation in general, enough information beforehand and in time?

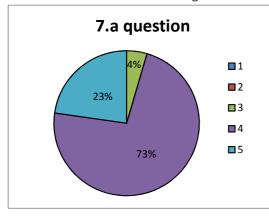
Additional comments:

/



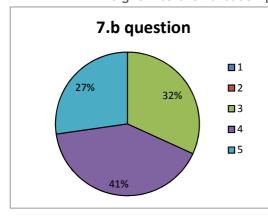
6. question	Num. of answers
1	0
2	0
3	0
4	1
5	21

- 7. Have you gained deeper insight into the "key messages" of the event
  - information about the current challenges of integrated water resources protection and flood mitigation



Num. of answers
0
0
1
16
5

insight into the foreseen practical application tests in the pilot areas and

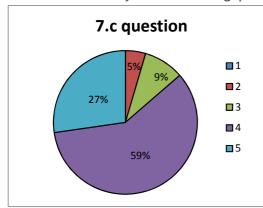


7.b question	Num. of answers
1	0
2	0
3	7
4	9
5	6



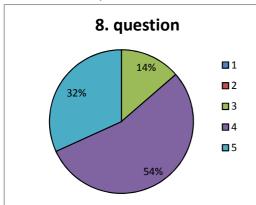


analysis of current gaps and reflection on SWOT analysis?



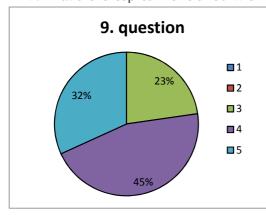
7.c question	Num. of answers
1	0
2	1
3	2
4	13
5	6

8. Are the points raised within the event relevant to your needs?



8. question	Num. of answers
1	0
2	0
3	3
4	12
5	7

9. Have the topics mentioned within the event an impact on your needs?

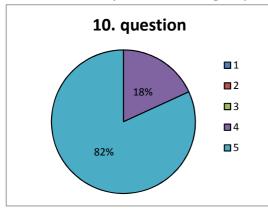


9. question	Num. of answers
1	0
2	0
3	5
4	10
5	7





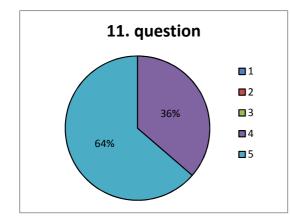
10. Were the possibilities to give your opinion sufficient enough?



10. question	Num. of answers
1	0
2	0
3	0
4	4
5	18

- 11. Were your expectations met? How satisfied are you with the event?

  Additional comments:
- high participation, a diverse composition of the participants
- several concrete examples of good practices in land management



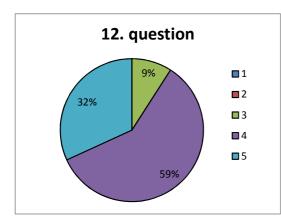
11. question	Num. of answers
1	0
2	0
3	0
4	8
5	14

- 12. Was the composition of participants adequate? Were all relevant stakeholders invited?

  Additional comments:
  - they were probably invited, but certain sectors were missing
  - not enough topic form the land use planning
  - missing the presence of the stakeholder who contaminant
  - builders, urbanists should also be present at the workshop
  - farmers are missing





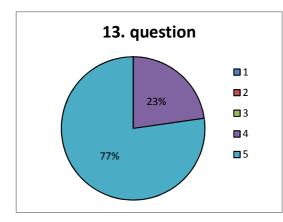


12. question	Num. of answers
1	0
2	0
3	2
4	13
5	7

13. Was the discussion atmosphere comfortable and constructive?

Additional comments:

/



13. question	Num. of answers
1	0
2	0
3	0
4	5
5	17

14. Are there additional topics you would like to have addressed?

- more in the direction of concrete solutions