



# Safe and efficient management

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**World Health  
Organization**

REGIONAL OFFICE FOR  
**Europe**



**Organisation  
mondiale de la Santé**

BUREAU RÉGIONAL DE L'  
**Europe**



**Weltgesundheitsorganisation**

REGIONALBÜRO FÜR  
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**Всемирная организация  
здравоохранения**

**Европейское** региональное бюро

# Programme of work 2014-2016

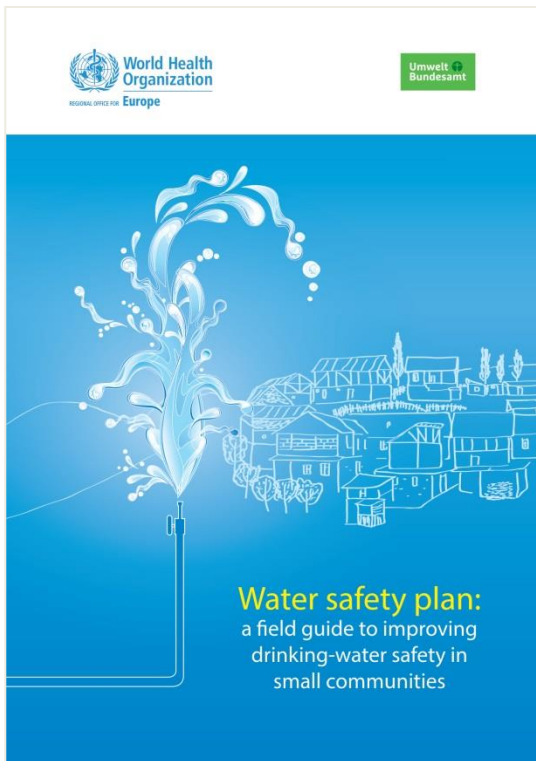
- **Programme area 4: safe and efficient management of water supply and sanitation systems**
  - Promotion and capacity building on water safety plans (WSPs) and sanitation safety plans (SSPs) through national, sub-regional and regional events
  - Development of field guidance
  - Exchange of experience on safe and efficient management
  - Special attention to water losses and wastewater management
- Lead Party and organization: **Portugal and IWA**

# WSPs are relevant for target setting

- Recommended by WHO Guidelines since 2004
- Public health benchmark for safe drinking water
- Risk management from catchment to consumer
- Benefits broadly confirmed
- Significant policy momentum in Europe

Country	WSP-related targets
Armenia <sup>a</sup>	<ul style="list-style-type: none"><li>• Develop methodology and legal basis for WSPs by 2016</li><li>• Develop and implement WSPs in five communities by 2020</li></ul>
Hungary	<ul style="list-style-type: none"><li>• Promote good practice in water-supply management (indicator: number of water supplies using WSPs)</li></ul>
Kyrgyzstan <sup>b</sup>	<ul style="list-style-type: none"><li>• Organize development and approval of WSPs for two cities (Bishkek and Osh) by 2015</li><li>• Organize development and approval of WSPs for other cities and regional centres by 2020</li></ul>
Republic of Moldova	<ul style="list-style-type: none"><li>• Set up WSPs for all cities and other settlements with populations of over 5000 people by 2020</li></ul>
Tajikistan <sup>a</sup>	<ul style="list-style-type: none"><li>• Develop WSPs in five major cities by 2015</li><li>• Develop WSPs in 30 rural communities by 2017</li></ul>

# WSP field guide (2014)



- Step-by-step WSP introduction for field staff:
  - Small community/town operators
  - Local agencies/NGOs which support WSP implementation
- Hands-on advice in plain language
- Ready-to-use templates
- Available in Russian and English

Source: <http://www.euro.who.int/en/health-topics/environment-and-health/water-and-sanitation/publications/2014/water-safety-plan-a-field-guide-to-improving-drinking-water-safety-in-small-communities>

# WSP field guide (2014)

Templates to support you in developing your WSP



- Template 1-A. WSP team list
- Template 1-B. Protocol of WSP team meeting
- Template 2-A. Map of water supply system
- Template 2-B. Description of water supply
- Template 3-A. Hazard analysis and risk assessment
- Template 3-B. Sanitary inspections
- Template 4. Improvement plan
- Template 5-A. Compliance monitoring plan
- Template 5-B. Operational monitoring and inspection
- Template 6-A. Instructions for operations and maintenance
- Template 6-B. Emergency response plan

WSP TASK 3. Identify and assess hazards, hazardous events, risks

## Template 3-B Sanitary inspections

The sanitary inspection forms provided in [Template 3-B](#) support documenting WSP task 3.

Sanitary inspections provide useful on-site information from the WSP team in identifying problems with the water supply and possible solutions. When performed regularly, sanitary inspections enhance the WSP team's knowledge of the water supply system. Sanitary inspection results provide an important basis for

This template offers a variety of relevant sanitary inspection (SI) forms. The SI forms will be relevant for your system, and the WSP team should select the SI forms applicable to the local water supply setting. On the next pages you can find the following abstraction technologies and supply steps:

- dug well with hand pump (SI form 1)
- dug well with windlass (SI form 2)
- borehole with mechanized pumping (SI form 3)
- spring source (SI form 4)
- storage reservoirs (SI form 5)
- public/yard taps and piped distribution (SI form 6)
- collection and household containers (SI form 7).

Page 1 of each inspection form presents a systematic checklist of significant typical risk factors associated with a respective abstraction technology (such as presence of animals, accumulation of faecal material, design flaws in infrastructure). The questions are structured so that a "Yes" answer indicates a high risk and a "No" answer indicates no or a very low risk. All answers should be recorded during observation and interviewing of community members and/or operators.

Page 2 of each inspection form provides space to document additional observations, as well as further details, remarks, observations, and recommendations.

Each sanitary inspection form is accompanied by explanatory notes. The notes and 4 of each inspection form provide additional guidance to the WSP team to assist your understanding of each question. Also remember that the WSP team should report the results of the inspection to your local health office or local water supply office can significantly improve the water supply system.

The WSP team should carry out sanitary inspections regularly (for example, once a month) and regular inspection not only supports WSP task 3 but is also useful as monitoring your control measures as a part of WSP task 5.

All completed sanitary inspection forms become part of your WSP documentation.

Template

### SANITARY INSPECTION FORM 1 DUG WELL WITH HAND PUMP

#### I. General information

- a. Name of village or town: .....
- b. Location and/or name of dug well: .....
- c. Date of inspection: .....
- d. Weather conditions during inspection: .....

*Note. If there is more than one dug well in your community, or if the community is (such as springs or boreholes), carry out sanitary inspections for these sources too. Note. If consumers store water in homes, also regularly inspect water storage and the sanitary inspection form "Collection and household containers".*

#### II. Specific questions for assessment

1. Is there a latrine uphill and/or within 10 metres of the well?
2. Is the fence absent, inadequate or faulty?
3. Can animals have access within 10 metres of the well?
4. Is there any other source of pollution within 10 metres of the well (animal breeding, cultivation, roads, garages, craft enterprises or other activities)?
5. Is stagnant water ponding within 3 metres of the well?
6. Is the drainage channel absent or cracked, broken or in need of repair?
7. Is the cement floor or slab less than 2 metres in diameter around the top of the well?
8. Are there cracks in the cement floor or slab?
9. Is the hand pump loose at the point of attachment or, for rope-pumps, is the pump cover missing or damaged?
10. Is the well cover absent, cracked or insanitary?

Total score of risk factors as total number of "YES" answers: .....

#### III. Results and comments

- a. Sanitary inspection risk score (tick appropriate box):  
 Very high risk     High risk     Medium risk     Low risk  
 Risk score: 9-10    Risk score: 6-8    Risk score: 3-5    Risk score: 1-2
- b. Important points of risk noted and reported on the reverse of this form:  
 • list according to question numbers 1-10  
 • additional comments

#### IV. Names and signatures of assessors: .....

Template 5-A | Page 2

Date: .....

Sampling frequency	
Parameter(s) tested and target value(s)	
Sampler	
Sampling locations	
Laboratory at which samples are tested	
WSP team member to whom the results are reported	

# WSP policy road map (2010)

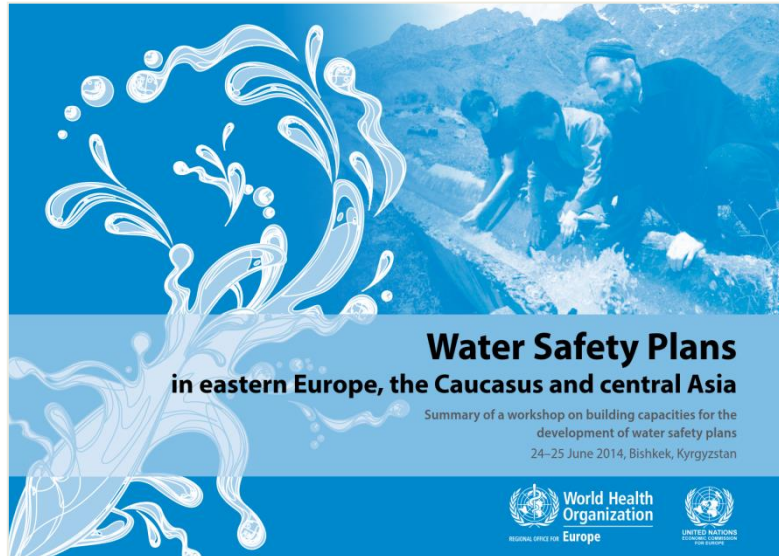


- Targeting regulators tasked with revising or developing drinking-water quality policies
- Conceptual framework and building blocks for introduction and scale-up of WSPs at country level
- Now available in Russian

Source: [http://www.who.int/water\\_sanitation\\_health/dwq/thinkbig\\_small.pdf?ua=1](http://www.who.int/water_sanitation_health/dwq/thinkbig_small.pdf?ua=1)

# WSP capacity building (2014)

## Sub-regional workshop for EECCA countries

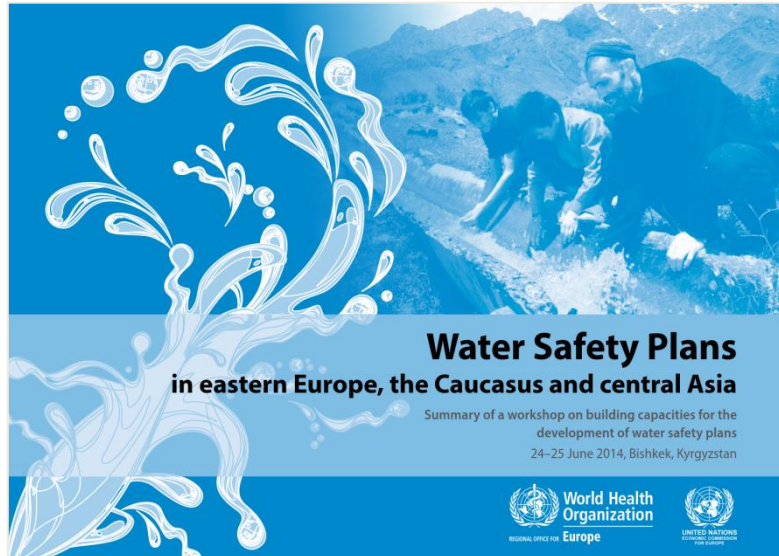


Source: <http://www.euro.who.int/en/health-topics/environment-and-health/water-and-sanitation/publications/2014/water-safety-plans-in-eastern-europe,-the-caucasus-and-central-asia>

- Increase knowledge and awareness among national stakeholders to appreciate the value of WSPs
- Review status of WSP-related policies and programmes
- Identify barriers hindering WSP uptake and support needs
- Sharing experiences in supporting WSP implementation

# WSP capacity building (2014)

## Sub-regional workshop for EECCA countries



Source: <http://www.euro.who.int/en/health-topics/environment-and-health/water-and-sanitation/publications/2014/water-safety-plans-in-eastern-europe,-the-caucasus-and-central-asia>

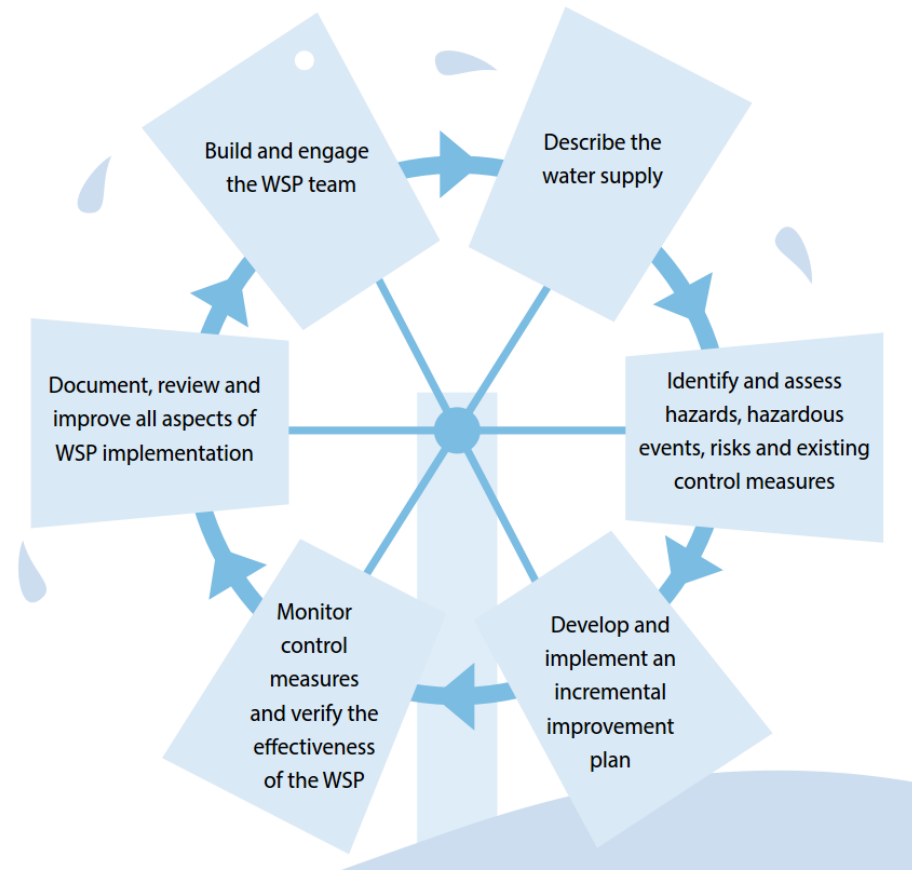
- 78 delegates from water and health domain:
  - 12 EECCA countries
  - International experts
  - IFIs, NGOs, UN organizations
- Summary in English and Russian
- Funded by Germany



# WSP capacity building (2014)

## Sub-regional workshop for EECCA countries

- Basic training on WSP steps
- Experience sharing from international experts



# WSP capacity building (2014)

## Sub-regional workshop for EECCA countries

- Review of reported benefits:
  - Health
  - Water quality
  - Regulatory
  - Operational
  - Institutional
  - Investment

### Regulatory benefits include:

- better information from WSPs, to inform surveillance activities;
- increased knowledge-sharing and cooperation between water suppliers and local or national governments;
- improved legislation to support or strengthen associated regulation (e.g. resource protection, water allocation, consumer health, wastewater discharge, land use, and so on).

### Institutional benefits include:

- increased awareness, knowledge and understanding among staff of water suppliers of the supply system and prevailing risks;
- improved cooperation and communication among water supply staff;
- increased consumer confidence in the drinking-water supplied.

### Investment benefits include:

- support for decision-making about upgrade and improvement needs, thereby enabling better targeting of investments;
- increased access to and allocation of funds from national, state or local government budgets.

### Water quality benefits include:

- improved drinking-water quality (e.g. through compliance with water quality regulations);
- a reduction in the number and severity of drinking-water related incidents;
- improved source water protection.

### Operational benefits include:

- improved managerial and standard operating procedures;
- improved operational monitoring;
- improved record-keeping and data collection.

# WSP capacity building (2014)

## Sub-regional workshop for EECCA countries

- Countries experiences with WSP (e.g. TJK, KGZ)
- Enabling environment:
  - Role of pilot projects
  - Regulatory frameworks and auditing
- WSP-related targets set (drafted) under the Protocol
- WSPs for small systems:
  - Need for external advice
  - External sources of funding for improvements
  - Local sanitation practices

# WSP capacity building (2014)





## Support needs for WSP uptake /1

- **Advocacy at national level:**
  - Focus on high-level decision makers
  - Health and institutional benefits
  - Financial implications
- **Learning across countries:**
  - Sharing of regulations, norms and standards on WSPs
  - Sharing of experiences related to implementation

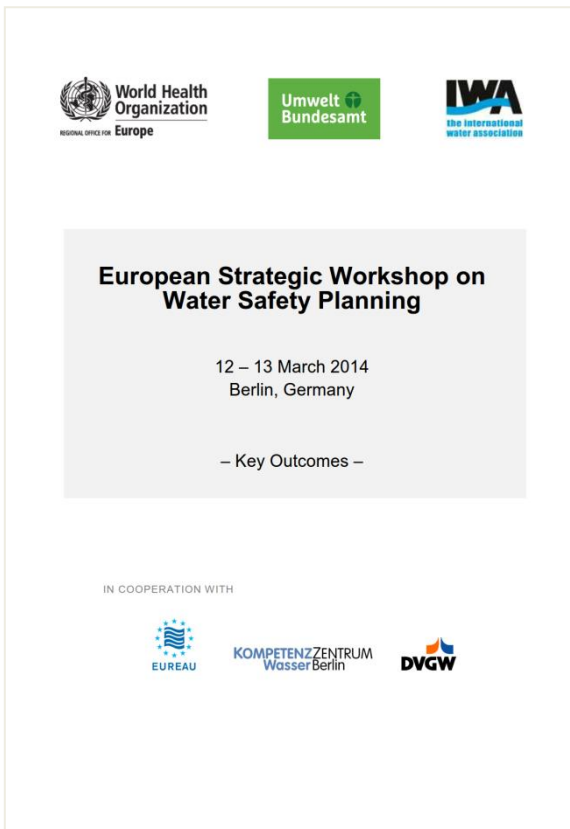
# WSP capacity building (2014)

## Support needs for WSP uptake /2

- **Building capacity at country level:**
  - Pilot projects
  - Education of trainers
  - Training of operators and local government who facilitate WSP implementation
  - Guidance in local language
  
- **International guidance**

WSP resource	Details	
	WHO (2012). Water safety planning for small community water supplies: step-by-step risk management guidance for drinking-water supplies in small communities. Geneva: World Health Organization <a href="http://www.who.int/water_sanitation_health/publications/2012/water_supplies/en/index.html">http://www.who.int/water_sanitation_health/publications/2012/water_supplies/en/index.html</a>	This step-by-step manual helps the reader to understand the WSP approach in the context of small community water supplies. It is intended to complement the 2009 step-by-step manual, which places more emphasis on large supplies. It is primarily targeted at local government officials and NGOs supporting drinking-water supply activities. The manual is available in English and Russian.
	WHO (2014). Water safety plan: a field guide to improving drinking-water safety in small communities. Copenhagen: WHO Regional Office for Europe <a href="http://www.euro.who.int/en/health-topics/environment-and-health/water-and-sanitation/publications/2014/water-safety-plan-a-field-guide-to-improving-drinking-water-safety-in-small-communities">http://www.euro.who.int/en/health-topics/environment-and-health/water-and-sanitation/publications/2014/water-safety-plan-a-field-guide-to-improving-drinking-water-safety-in-small-communities</a>	This field guide provides a step-by-step introduction to the WSP approach. It offers hands-on advice and a range of ready-to-use templates to assist communities and local institutions working on rural water supply to develop and implement their own WSPs. The field guide is available in English and Russian.
	WHO and IWA (2012). Water safety plan training package. Geneva: World Health Organization <a href="http://www.wspportal.org/ibis/water-safety-portal/eng/home">http://www.wspportal.org/ibis/water-safety-portal/eng/home</a>	This is an online platform that supplements WSP publications and the activities of WHO and its partners by providing an extensive range of practical tools, case studies and peer-to-peer support networks. The portal is operated in English and Spanish.
	WHO and IWA (2012). Water safety plan training package [website]. Geneva: World Health Organization <a href="http://www.who.int/water_sanitation_health/publications/wsp_training_package/en">http://www.who.int/water_sanitation_health/publications/wsp_training_package/en</a>	This package is designed to be used by trainers facilitating training based on the WSP manual; prior knowledge and understanding of WSPs are required. It consists of a facilitator handbook, a participant workbook and accompanying PowerPoint presentations. The training package is only available in English.

# Berlin strategic workshop (2014)



- Workshop focusing on **EU members**:  
60 participants from 20 countries
- Thematic coverage:
  - Status of WSP implementation & regulation
  - Policy drivers
  - Enabling environment for WSP uptake
  - Particularities of WSP in small supplies
  - WSP auditing and certification
  - Interfaces to risk assessment and management in adjacent fields

# National capacity building (2014)

- **Tajikistan** through Biannual Collaboration Agreement (BCA) between WHO/Europe and Ministry of Health:
  - Joint implementation with *Oxfam GB* (partner to PA 4)
  - Advocacy of decision makers and other stakeholders
  - Review of lessons learned from previous pilot project
  - Protocol context
  - Kick-off for further joint work of Oxfam and WHO/Europe
- **Republic of Moldova** as part of SDC-supported project on implementation of targets (*Ion, Nataliya*)

# Proposed activities in 2015

- **National capacity building** through WHO/Europe BCA-arrangements:
  - Kyrgyzstan
  - Republic of Moldova
  - Ukraine
  - Uzbekistan
- **IWA Regional Utility Management Conference** (13-15 May 2015, Tirana):
  - National associations in south-east Europe
  - Utility managers and senior utility staff



# Further considerations

- Note **linkages** with all programme areas
- **Opportunities** - interest by several partners in supporting and aligning with the WSP approach:
  - EBRD / World Bank / ADB
  - Donors and technical support agencies
  - NGOs
  - UN Habitat
- “Going beyond workshops”: more structured approaches in supporting **long-term policy uptake**

# Implementation challenges

- Little work on **sanitation** (safety) (planning)
- Sanitation **scoping/landscape study**
  
- **Regional workshop** on safe and efficient management
  
- **Funding** from one source

**Thank you**  
Спасибо  
**Merci**  
Danke



Source: Rod Shaw