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DELLA PREVENZIONE SANITARIA



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Foreword

Considering that Italy is not yet a Party to the treaty of the Protocol on Water and Health, the following report only comprises a description on the state of WASH in Italy and does not include data on targets and progress related to the abovementioned Protocol.

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Italian National Summary Report UNECE-WHO/Europe Protocol on Water and Health

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1. REGULATORY FRAMEWORK AND POLICIES

In Italy, at the moment, neither constitution or other law recognize water and sanitation as human rights. Nevertheless, measures related to WASH are generally applicable to the whole population. The current national policy on **drinking water** is represented by the regulations in force, which define aspects relating to water quality (Legislative Decree 31/2001, that will soon be replaced by the decree transposing Directive (EU) 2020/2184)) and its management (Legislative Decree 152/2006). Besides drinking-water quality, drinking-water service delivery requirements are regulated under the ARERA Resolution 917/2017/R/IDR, concerning the regulation of the technical quality of the water services (integrated or individual). The revision of the entire body of legislation is underway, which includes the management of the integrated water cycle.

The drinking-water national strategy, aimed to give effect to the national policy, includes the *National plan of interventions in the water sector*, approved in 2019 for 80000000 euros. In the same context, mention should also be made to the *Three-year national planning of school building interventions*, financing numerous interventions finalized to the compliance of school structures with hygiene and sanitary regulations.

Concerning **sanitation service chain**, there are national normative references for all the components and processes comprising the sanitation system; among others:

- the D.M. 5 luglio 1975 establishes the sanitary requirements of residential environments;
- referring to containment, emptying and conveyance, in Italy there are local guidelines for the application of national reference law (D.lgs. 3 aprile 2006 n. 152, concerning environmental regulations);
- referring to treatment and disposal/use, the national reference law is the D.lgs. 3 aprile 2006 n. 152. Adding to it, there are: a national guideline for the design of urban wastewater collection and treatment systems, a specific regulatory reference for the use of sludge in agriculture (D.lgs. 27 gennaio 1992, n. 99) and a regulation on technical standards for the reuse of wastewater (Decreto 12 giugno 2003, n. 185; national and related regional regulations are to be harmonized with the provisions of Regulation (EU) 2020/741 by 2023).

In order to deal with the environmental infraction procedures towards the EU, in 2017 Italy provided for the establishment of a Single Commissioner to deal with all the interventions necessary for the exit of the agglomerations identified by the infringement of the EU Wastewater Directive. The Commissioner and the two Sub-Commissioners have the task of accelerating the



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design and implementation of the collection, sewerage and purification works affected by the EU infringement procedures opened against Italy. Many of the planned interventions have already been initiated. In addition, the programming of further interventions for 600000000 euros is included in the National Recovery and Resilience Plan, approved in 2021.

The national sanitation strategy will be totally implemented through the ratification of the Water and Health Protocol.

The ratification of the Water and Health Protocol, under the coordination of the Ministry of Health (with technical support of ISS) and of the Ministry for Ecological Transition, will represent a systemic policy in the WASH issues. The Protocol will provide the strategic framework of national reference to strengthen the involvement of all sectors and actors in sustainable and safe management of water and sanitation.

The national WASH policies and plans address all the following areas:

- Affordability measures for drinking-water, sanitation, hand hygiene
- Access to safely managed drinking-water supply and sanitation services
- Household connections for drinking-water
- Drinking-water quality
- Faecal sludge management
- Safe use of treated municipal wastewater and municipal faecal sludge
- Hand hygiene facilities and behaviour change activities. Referring to that issues, The Antibiotic Resistance Plan (PNCAR) 2017-2020, extended for 2021, includes, among other activities, the establishment of a surveillance network of hydroalcoholic solution consumption as an indicator of healthcare workers' adherence to the hand hygiene procedure as a method of combating Care-Related Infections and Antimicrobial Resistance.
- Risks of climate variability and climate change to WASH services
- Climate resilience of WASH technologies and management systems
- Sustainability of WASH services
- Performance and efficiency of operators or service providers
- WASH in public places
- Protections for workers. In this context, the national law D.lgs. 9 aprile 2008, n. 81 applies



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to all workers - comprising sanitation workers, and ensure the health and safety in workplaces. In addition to that, in Italy there is a technical document, published by the National Institute for Insurance against Accidents at Work, concerning specifically the safety for operators of civil wastewater treatment plants.

Regulatory authority

In Italy exists an independent regulatory authority, set by law, the Italian Regulatory Authority for Energy, Networks and Environment (ARERA). Among its tasks, ARERA is responsible for:

- setting tariffs
- overseeing drinking-water quality and/or treated effluent
- overseeing service coverage or other aspects related to the quality of service delivery
- ARERA doesn't impose planning priorities - which have to be chosen at local level but have a role in addressing investments.
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More in general, ARERA regulatory powers refers to drinking water and waste water services, but doesn't set construction standards, nor defines health standards.

WASH in specific context

1. Health care facilities. In addition to the national drinking water and sanitation regulations, which are also applicable in healthcare facilities, there is a specific guideline on standards of safety and hygiene at work in the surgical unit. The discipline of medical waste management is reported in the D.P.R. 15 luglio 2003, n. 254. Concerning national coverage targets for WASH in health care facilities, it can be reported the establishment of a regional system to monitor the consumption of hydroalcoholic hand hygiene products, in the National Plan for Prevention 2020-2025.
2. School. In addition to the national drinking water and sanitation regulations, which are also applicable in schools, the decree of the president of the council of ministers 07/06/1995, defines the general reference school service charter. In it, the environmental requirements of schools are made explicit, including clear references to hygiene and sanitation.

2. RISK MANAGEMENT APPROACHES

On June 14, 2017, a decree was issued to implement Directive (EU) 2015/1787, which introduced



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in Italy, with a mandatory regime, an integrated system of prevention and control based on site-specific risk analysis extended to the entire water supply chain, according to the principles of Water Safety Plans (WSP), for all drinking water suppliers. To date, more than 200 WSPs were implemented in Italy.

Adaptation to climate changes

The basis for the definition of actions and policies for adaptation to climate change have been set with the National Strategy for Adaptation to Climate Change. A National Plan for Adaptation to Climate Change has been drafted. The Plan identifies: reference climate scenarios at the district/regional scale; risk propensity; sectoral impacts and vulnerabilities (including water resources and health); sectoral adaptation actions (including water resources and health); roles for the implementation of actions and adaptation measures as well as coordination tools between the different levels of government of the territory; estimation of human and financial resources needed; Indicators of effectiveness of adaptation actions; Methods for monitoring and evaluating the effects of adaptation actions.

3. COVID-19 PREPAREDNESS AND RESPONSE PLANS

A series of activities have been undertaken to acquire and share knowledge and evidence with respect to the impact of COVID-19 on water systems and surveillance. In the context of Water Safety Plan, hazardous events and hazards were identified that could arise, indirectly related to the ongoing pandemic emergency - primarily due to reduced human resources on the ground and lockdown restrictions. Particularly critical, events associated with increases in consumption that, combined with the deficient recharge of many aquifers, may result in restrictions water supply restrictions and service shifts with health impacts as well. In addition to the preparedness and response plan for pandemic events, Italy has prepared many documents related to the WASH field. Below is a summary table of the main topics, the description of how and where the topic is addressed:

TOPICS	HOW → WHERE
HAND HYGIENE BEHAVIOUR CHANGE	Implementing decrees and/or resolutions of communication campaigns aimed at educating on hygiene behaviors/prevention measures. → Piano strategico-operativo nazionale di preparazione e risposta a una pandemia influenzale (PanFlu) 2021-2023



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<p>HAND HYGIENE FACILITIES IN HEALTH CARE FACILITIES</p> <p>WASH IN HEALTH CARE FACILITIES</p>	<p>- National and regional program for Infection Prevention and Control in both hospital and community care settings (must include adoption of standard operating procedures for hand hygiene)</p> <p>- Setting up a Working Group specifically dedicated to infection prevention and control (IPC), which is also responsible for the publication of a series of technical reports aimed at providing guidance on IPC.</p> <p>→ Piano strategico-operativo nazionale di preparazione e risposta a una pandemia influenzale (PanFlu) 2021-2023</p>
<p>HAND HYGIENE FACILITIES IN PUBLIC PLACES</p>	<p>In public administrations, in access areas to health service facilities and in all premises open to the public, disinfectant solutions for hand hygiene shall be made available to employees, users and visitors.</p> <p>→ Decree of the President of the Council of Ministers March 1, 2020</p>
<p>DRINKING- WATER</p> <p>SANITATION</p>	<p>Providing specific technical guidance on water and sanitation in the light of the current emergency. The document is addressed to managers of the integrated water service and to the environmental and health authorities responsible for health and environmental protection. Limited to the circumstances of the emergency, recommendations are provided for risk prevention and control activities indirectly related to the pandemic emergency, which may affect the performance of integrated water cycle.</p> <p>→ Interim provisions on water and sanitation to prevent the SARS-CoV-2 virus diffusion.</p>
<p>HEALTH CARE WASTE MANAGEMENT</p>	<p>- Providing operating procedures to manage non-hospital urban waste, throughout the country (accordingly with the Italian DPCM April 26, 2020 and DPCM May 17, 2020) distinguishing between waste produced by subjects positive to the swab in solitary confinement or in mandatory quarantine at home and waste produced by people living in house with subjects not positive to the swab in solitary confinement or in mandatory quarantine. Recommendations are also given for operators and companies in the collection, disposal and treatment of such waste.</p> <p>- The SNPA Council has approved a document that contains general guidelines for the management of waste in the Covid-19 emergency.</p> <p>→ Interim guidance to manage urban waste related to the transmission of the SARS-CoV-2 virus infection. Version of May 31, 2020.</p> <p>→ First general indications for waste management - Emergency CoViD-19</p>
<p>WASH FOR VULNERABLE POPULATIONS</p>	<p>Publication of operational indications aimed at: support a correct risk assessment based on the conditions of the places where people with high fragility are concentrated; support the correct application of prescriptions regarding</p>



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the use of medical devices and personal protective equipment and of simple precautionary measures by the operators who come into contact with the frail person; Encourage the adoption, by the frail person, of appropriate behaviours to protect their own health and that of the community; Support the early detection of suspected cases of infection, facilitating the intervention of health authorities; Promote cooperation among the various subjects involved in the management of groups of fragile persons.

→ Indicazioni operative ad interim per la gestione di strutture con persone ad elevata fragilità e marginalità socio-sanitaria nel quadro dell'epidemia di Covid-19

4. TARGETS AND INDICATORS

For national sanitation and drinking water, Italy has different coverage targets in place. With respect of sanitation, it exists three main targets with differentiated level of improvement requested according to the operator initial position. Objectives include: Sewerage system adequacy, Sludge disposal in landfill and Treated wastewater quality.

For drinking water, target includes domestic and non-domestic users.

The existing measure defines minimum levels and objectives of technical quality in the integrated water service, through the introduction of specific standards and general standards, and the introduction of prerequisites, which are the necessary conditions for admission to the incentive mechanism associated with the general standards.

There is also a national strategic target belonging to the National Strategy for the Sustainable Development. The target for sanitation, “Minimize pollutant loads to soils, water bodies, and groundwater, taking into consideration good ecological status levels of natural systems”, is related to the national statistical indicator “Percentage of civil and industrial wastewater safely treated”.

The target for drinking water, “Maximize water efficiency and adjust withdrawals to water scarcity”, is related to the national statistical indicator “Percentage of population with safely managed drinking water services”

Since 2018 a specific regulation on the technical quality of the integrated water service (RQTI) has been in force, which pursues the achievement of minimum service levels. The aspects covered by the technical quality objectives, with respect to sewerage and treatment are as follows:

- Adequacy of the sewer system
- Frequency of flooding and/or sewer overflows



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- Regulatory adequacy of flood drains
- Control of flood drains
- Sludge disposal in landfills
- Quality of effluent water

The aspects relative to drinking water (general aqueduct standards) are as follows:

- Water Losses
- Service interruptions
- Drinking water quality

In general, measure(s) related to WASH are generally applicable to the whole population and sanitation and drinking-water are guarantee to disadvantage populations by social services. Moreover, it exists measures to improve and extend services to the following settings or situations:

- Remote or hard to reach areas. There is national legislation that allows the withdrawal of groundwater for drinking purposes. Permitting is regulated at the local level. Information are produced to the population for issues related to the use of private wells.
- Emergencies and disasters. Reductions on electricity, gas and integrated water service bills in support of populations affected by extreme events.
- People living in poverty and elderly people. Establishment of a social tariff for the integrated water service
- People living with disabilities. Tax deduction for the costs of interventions aimed at overcoming and eliminating architectural barriers

In the Deliberation 917/2017/R/idr, ARERA, the six macro indicators concerning the different aspects of integrated water services are:

- M1 - Containment of water losses in aqueduct networks and systems
- M2 - Maintenance of the continuity of the drinking water service, based on the measurement of the frequency of service interruptions
- M3 - Adequacy of the quality of the water supplied
- M4 - Minimisation of the environmental impact of the conveyance of waste water, measured on the basis of the degree of adequacy of the sewage system
- M5 - Minimisation of the environmental impact associated with the disposal of sludge



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deriving from the purification of waste water

- M6 - Minimisation of the environmental impact associated with the disposal of waste water from purification treatments

With the application of those indicators, and others foreseen in the regulation of contractual quality and in the tariff methodology, some of the issues tracked for sanitation and drinking water are listed in the following table:

Sanitation
Treated effluent and faecal sludge quality (M6)
Quality of service (“Response time to complaints”, regulation of contractual quality)
Cost efficiency (foreseen in the tariff methodology)
Functionality of systems (foreseen in the tariff methodology)
Drinking water
Drinking Water quality (M3)
Quality of service delivery (M2)
Cost efficiency (foreseen in the tariff methodology)
Functionality of systems (foreseen in the tariff methodology)

5. PARTICIPATION PROCEDURES

In Italy, the Legislative decree 6 september 2005, n. 206 states that the users are guaranteed, through representative forms, the participation to the procedures of definition and evaluation of the quality standards provided by law.

Moreover, Legislative Decree 152/2006 provides that Basin Authorities promote the active participation of all stakeholders in the elaboration, review and updating of Basin Plans. There are specific thematic sections in the websites of the different Basin Authorities. The various Basin Authorities have created events for the dissemination of the Plans (webinars, working tables, participation in online events, participation and promotion of projects, both scientific and popular, at territorial and national level, organized both by the Basin Authorities themselves and by other bodies and institutions).



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6. USE OF MONITORING DATA

WASH data are used for decisions on sanitation, drinking water and health. In particular, data evaluation has contributed to decision-making as it follows:

- Defining of investment priorities for the integrated water services and river basin management plans
- Orientating integrated water service investment plans
- Establishing legal limits for new priority substances
- Targeting surveillance activities, according to watch list (Directive 2013/39/EU)
- Supporting the introduction of a RA/RM approach (WSP)
- Supporting the definition of parametric values to be adopted in specific circumstances (evaluation of data from local contamination emergency)

The main obstacles encountered are the difficulty in digitizing much of the data available and the lack of coordination among environmental and health agencies in some areas.

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