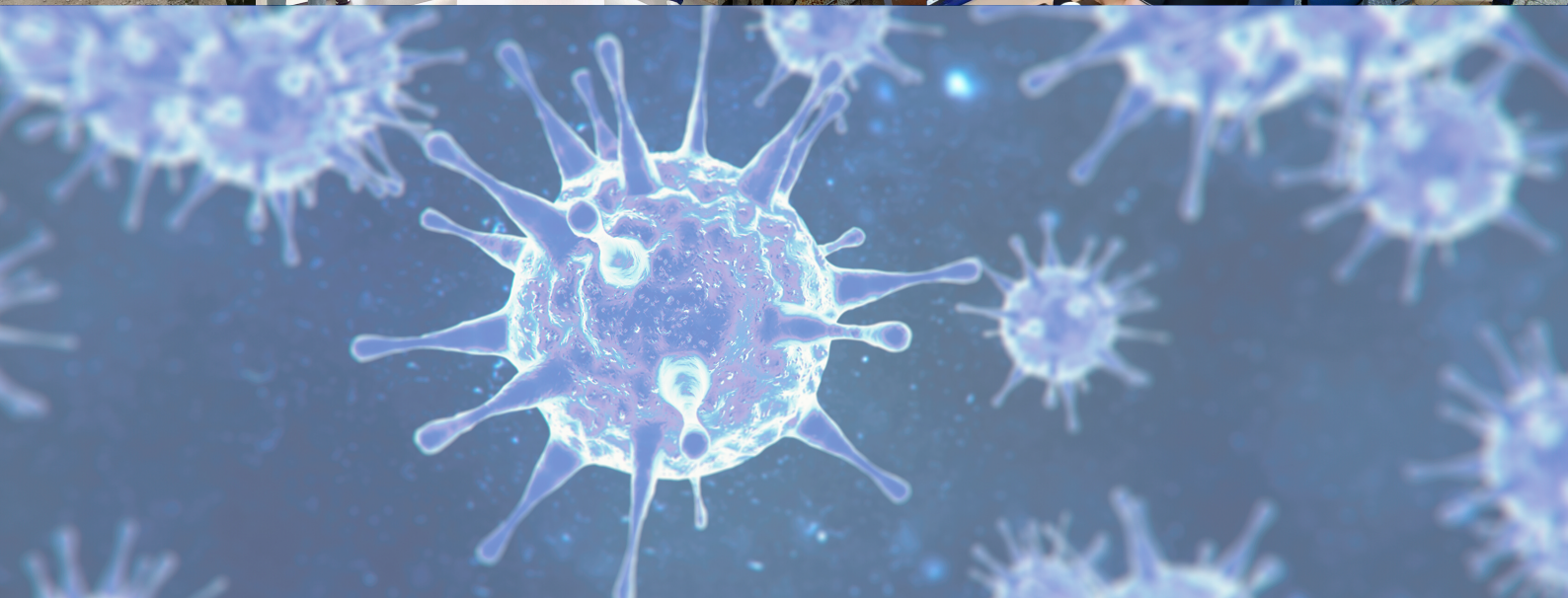


MANAGING THE UNEXPECTED - EUROPEAN PUBLIC WATER UTILITIES FACING THE CORONAVIRUS EMERGENCY

Lessons learnt and good practices



EUROPEAN ASSOCIATION
OF PUBLIC WATER OPERATORS

AQUA PUBLICA EUROPEA

THE EUROPEAN ASSOCIATION OF PUBLIC WATER OPERATORS
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OF PUBLIC WATER OPERATORS**

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In collaboration with



■ TABLE OF CONTENTS

Preface by UN-Habitat Executive Director Maimunah Mohd Sharif, Chair of the GWOPA International Steering Committee	4
Introduction: The importance of cooperation among public water operators to tackle the Covid-19 emergency	5
Phase I: Getting Prepared	8
◦ Reorganising the decision-making and information flow: the role of the Crisis Unit	8
◦ Identifying essential functions	10
◦ Facilitating working from home with the adapted instruments	12
◦ Securing essential supplies in adequate quantity	14
Phase II: Managing the emergency - first things first	15
◦ Staff management: shifts, segmentation, tracking	16
◦ Customer relations: business as usual, but from remote, and water access assured	18
◦ Commercial relations: only necessary interactions and safety first	20
◦ Drinking water and waste water treatment operations: ensuring uninterrupted service	21
Phase III: The recovery time	23
◦ Reorganising headquarters in order to maximise social distancing	24
◦ Customer and commercial relations	26
Conclusion: Which implications for the future?	27
About the authors	32
Table of examples	33

PREFACE

For cities and communities to thrive, we need citizens to come together to meet existential challenges. Covid-19 is one in a series of historic challenges that require the harnessing of talent and innovation to ensure our cities continue to be dynamic and inclusive places. Very often the unsung heroes are those who are at the front lines and utility companies help ensure cities function in the most difficult times.

Water and sanitation operators have a common mandate to serve the population with basic services around the world. Since the Covid-19 crisis began, utilities have been reaching out to one another for advice and support even more than usual. As a former mayor, I am sure their work is much appreciated by local governments and the communities we all serve.

The **Global Water Operators' Partnerships, GWOPA**, the UN-Habitat-led international network supporting solidarity-based exchange and learning, has been working with its partners to enable operators to help one another to address this unprecedented challenge.

In this publication, GWOPA is proud to collaborate with **Aqua Publica Europea** to share the experience and emerging body of practice from Europe with other regions. Water and sanitation utilities are on the frontline in terms of preventing the spread of Covid-19. The operators showcased have undertaken a range of work to help ensure that the utilities continue, despite the challenges. The utility-led responses to the crisis presented here have helped protect the public and workers and keep these life-saving services available to all.

As in all sectors during this crisis, water and sanitation operators are learning while working and constantly adapting to new information and changing circumstances. By sharing what has been tried and tested, we hope these cases can contribute to the ongoing learning and support operators to help them respond to their specific situations.

Covid-19 is not the only challenge. The growing impact of climate change on water resources, treatment and infrastructure, presents a significant threat to utilities' normal operations into the future. We need strong public services to protect everyone during such crises. Making use of peer learning between operators to strengthen their collective resilience to such threats is a powerful tool to which we hope this document can contribute.

Maimunah Mohd Sharif
UN-Habitat Executive Director
Chair of the GWOPA International Steering Committee

INTRODUCTION

THE IMPORTANCE OF COOPERATION AMONG PUBLIC WATER OPERATORS TO TACKLE THE COVID-19 EMERGENCY

In Europe, the Covid-19 pandemic first broke out in Northern Italy on 20-21 February 2020. The initial reaction of the Italian government was to declare a lockdown in the affected towns ("red zones") and adopt milder restrictions in the surrounding areas. In the rest of the country, measures were limited to bans of large gatherings of people. Meanwhile, in other European countries, life (and business) continued relatively as usual, with important public events – from football matches to elections – still taking places in many countries at the beginning of March.

Over the following weeks, the situation evolved rapidly. Italy adopted strict nationwide lockdown measures on 8 March, followed by Spain on 14 March, by France on 16 March, and then progressively by the great majority of the other European countries. In parallel, external borders were closed and, within the Schengen area (a free circulation area for goods and people encompassing several European countries), strict national border controls were re-established allowing only for essential supplies to transit.

This brief chronology of the outbreak of Covid-19 in Europe shows how quickly European countries moved from a state of normality to an unprecedented situation in which mobility and social life were restrained, many business relations were suspended or disrupted, and a number of socio-economic activities considered as essential were hurriedly re-organised in order to ensure their continuity while minimising risk for people's health.

Water utilities are among those actors that experienced and managed a high level of pressure to ensure the continuity of an essential service in a context characterised by heightened uncertainty and heavy limitations to normal operability. In a matter of days (sometimes hours), water utilities had to completely rethink the way they operate to adapt to this exceptional situation.

Most operators effectively relied on their existing risk management protocols to develop contingency plans that allowed for a swift and orderly reorganisation of operations, thus avoiding any interruption of the service (including customer relations). Nonetheless, given the absolute novelty of this emergency, some complications were difficult to predict or simply out of utilities' control (for example the sourcing of some essential supplies).

In this context, very early on public water utilities expressed a strong need to exchange and share information with their European peers, and in particular with those located in the areas first affected by the outbreak, in order to better understand the risks and challenges to be faced, to compare contingency plans and to share solutions.

At a European level, **Aqua Publica Europea**, the European Association of Public Water Operators, immediately set up an exchange platform to respond to such a request from its members. As of mid-March, the association:

- ▶ organised a series of videoconferences on the management of the emergency;
- ▶ collected and circulated informative documents and other useful material;
- ▶ produced a series of reference documents summarising the measures adopted by public water utilities to ensure the continuity of the service;
- ▶ dialogued with European Institutions to help avoiding the risk of disruption in the delivery of essential supplies to utilities.

The present report is the result of these constant exchanges, operational discussions and joint reflection. **The report provides an overview of best practices developed by European public water utilities for the management of the coronavirus emergency. It also draws lessons from the responses to unforeseen issues** as well as from the practical knowledge acquired when translating a theoretical risk management plan into concrete action.

More concretely, the document outlines aspects that have emerged as essential for water operators to consider through the various phases of contingency planning, from its preparation until the partial restart of normal activity when lockdown measures are progressively relaxed. **The document has neither the ambition to provide strict guidelines, nor the intention to be exhaustive with regard to measures to be taken. Rather, it is an account of the concrete experiences and approaches** elaborated by the staff of European public utilities and, as such, it aims to provide some informative elements on crisis management that can be used as an initial reference for utilities – in Europe or elsewhere – that might face similar challenges, thus also creating a stepping stone for fruitful exchanges and mutual learning.

From the adoption of its Founding Charter, **Aqua Publica Europea** was created based on the values of solidarity and cooperation between its members, public water operators. This mind-set is fully aligned with the objectives of the UN-Habitat's Global Water Operators Partnerships Alliance (GWOPA). With this spirit, the members of **Aqua Publica Europea** have long been actively engaged in GWOPA's international platform to share their know-how and experience on a strictly not-for-profit basis with other public water utilities across the world. Today's great challenge – a global sanitary crisis – has strengthened this willingness to engage in peer learning initiatives.

The Greek word 'crisis' contains the notions of both challenge and opportunity. The Covid-19 crisis has proved once again the relevance and centrality of water services for our societies. Across the world, all water operators have the same great responsibility towards their communities and mission to serve to the best of their capacities. **Aqua Publica Europea** is proud to provide – together with GWOPA – a framework in which public water utilities can support each other with the objective to improve constantly the quality of the public service they ensure for the benefit of all.

PHASE I

GETTING PREPARED

In the context of the Covid-19 crisis, a key challenge has been the extreme rapidity with which the measures to ensure continuity of service had to be designed and implemented. Until mid-February the outbreak of the Covid-19 was not expected in Europe, at least not with the intensity it then showed, and lockdown measures were taken and enforced by governments with a timeframe of a few days.

Against this background, a lesson learnt is that preparation for crisis management, based in particular on consolidated and pre-existing risk-management approaches, is essential for ensuring the resilience of the utility that has to swiftly re-organise operations and workflows.

This section summarises some of the most frequent elements that characterise the contingency plans adopted by **Aqua Publica Europea's** members with regard to the phase that precedes the entry into force of lockdown measures.



The monitoring of the internal and external environment for new risks is an essential part of the Enterprise Risk Management plan.

This can help us to identify emerging risks. For instance, Irish Water began engaging with Risk and Business Continuity stakeholders on Covid-19 risk in late January.

TORRY SCHELLHORN
ENTERPRISE RISK MANAGER
IRISH WATER (IRELAND)

✓ **REORGANISING THE DECISION-MAKING AND INFORMATION FLOW: THE ROLE OF THE CRISIS UNIT**

As a first step to address the Covid-19 crisis and streamline decision-making, a high number of public water operators have set up a **'Crisis Unit', with an essential function: centralising the collection of information and the elaboration of responses during the emergency.**

The nature and the urgency of the challenges have required a reconfiguration of the normal decision-making procedures in order to rapidly and consistently address current needs and new sources of risks. As some operators have pointed out, the main challenge is not to retrieve information, but rather to make sense of an overload of information in a context that is uncharted and that can become chaotic.

In this context, the crisis unit is typically mandated with gathering up-to-date information on workers' health as well as on the status of operations affected by the emergency (including relations with suppliers), in order to keep a real-time panoramic view of the evolution of the situation. The crisis unit is also normally in charge of coordinating responses concerning information and instructions related to workers' health and safety, communication with staff and suppliers, relations with authorities.

The crisis units are normally composed by representatives of General Management, Human Resources, Unions, and a doctor.



✓ IDENTIFYING ESSENTIAL FUNCTIONS

The adoption of strict lockdown measures, and in particular the limitations to people's mobility, social distancing and the shutdown of economic activities may significantly hamper utilities' normal operations. In the time preceding lockdown or, in any case, before the move to an "emergency mode", it is therefore essential **to define those functions that are essential and that cannot be interrupted**. In parallel, the identification of activities that can be temporarily suspended or slowed down allows to take efficient decisions on the assignment of available staff members and on the minimisation of avoidable risks.



Especially when lockdown measures are adopted quickly, some initial confusion is natural: managing this initial phase is critical, as workers may have concerns or uncertainties about what they need to do with regard to procedures or safety measures such as masks or safety distances.

PAOLA MIOTTO
PERSONNEL MANAGER
VIACQUA (VICENZA, ITALY)

In some cases, operators have developed a sophisticated template, based on existing risk management methodologies, to prioritise functions as well as to assess the level of risk - with regards to both contagion spread but also of potential disruption due to employees becoming ill - attached to each of these.



EMASESA
metropolitana

EMASESA (Seville, Spain)

Example of a model for staff management during the pandemic: staff is re-organised in categories depending on the criticality of the function and the level of risk exposure of each function (P), and on the degree of severity of the outbreak (E).

	P1	P2	P3
E1	<ul style="list-style-type: none"> Information, awareness-raising and monitoring General considerations E1 	<ul style="list-style-type: none"> Information and awareness raising. General considerations E1 	<ul style="list-style-type: none"> Information and awareness raising. General considerations E1
E2	<ul style="list-style-type: none"> Information, awareness-raising and monitoring Isolation of work areas, avoiding contact. General considerations E2 	<ul style="list-style-type: none"> Information and awareness raising. Closing face-to-face attention to the user (P2.1) General considerations E2 	<ul style="list-style-type: none"> Information and awareness raising. General considerations E2
E3	<ul style="list-style-type: none"> Accesses and bathrooms will be independent (P1.1) Telework in the case of those responsible and positions as possible (P1.2) 	<ul style="list-style-type: none"> Telework in the case of those responsible (P2.2) Absence in case you cannot by command Higher Order (P2.2) 	<ul style="list-style-type: none"> Telework in the case of those responsible Absence in case it cannot be mandated Higher Order
E4	<ul style="list-style-type: none"> Extend the shift schedule from 8 to 12 hours (P1.1) Temporary allocation to affected posts to fill the gaps of identified persons with experience in these posts (P1.1) 	<ul style="list-style-type: none"> Telework in the case of those responsible (P2.2) Absence in case you cannot by command Higher Order (P2.2) 	<ul style="list-style-type: none"> Telework in the case of those responsible and absence in the event that it cannot be



Risk management is a learning process that has to involve all the staff. In order to achieve this, it is important to design approaches that give everyone the opportunity to build on their own experience, regardless of whether it was a success or a failure.

KATARINA KRCUNOVIC
BUDGET AND ANALYTICAL ACCOUNTING MANAGER
EAU DE PARIS (PARIS, FRANCE)

✓ FACILITATING WORKING FROM HOME WITH THE ADAPTED INSTRUMENTS

With restricted mobility, whether due to social distancing or disrupted public transport, many governments and operators have promoted home-working to the extent possible. It is therefore critical for the water operator that as many employees as possible be able to work from home effectively.

The capacity for an operator to swiftly implement remote-working will depend on several structural factors, notably whether or not – and to what extent - some of its activities have already been digitalised and can be performed online easily.

Beyond, the **operators should review their readiness to facilitate the implementation of generalised remote-working**, including (and especially) elementary material and infrastructural considerations related to telecommunications and technology.

Some water operators came to the realisation, on the occasion of the Covid-19 crisis, that they were not fully prepared for a company-wide move to working from home and, consequently, had to dedicate significant efforts to upgrade the IT infrastructure in a very short time.



The corona crisis forced us to act agile and adapt quickly. We learned that we could work and collaborate from home much more efficiently than we ever thought. Suddenly, we were fully digital.

CARL HEYRMAN
GENERAL MANAGER
AQUAFLANDERS (FLANDERS, BELGIUM)

Key factors to consider in preparation of extensive teleworking include::

- ▶ Availability of laptops and other IT equipment for employees.
- ▶ Capacity of the operator's central server (number of connected people or of MB/second the server can support as compared to the expected number of people connected during working hours.)
- ▶ Security of PCs and other remote equipment (are software and hardware secured from cyberattacks from remote?)
- ▶ Access to internet connection for employees working from home (do they all have a good enough internet connection?)
- ▶ Communication tools and processes for employees who do not normally use a computer for their work and relations with their hierarchy – on-site teams, for example, often rely on direct contact. For these employees, tailored tools that ensure communication can include chats, SMS or the creation of company email addresses.



We had to develop a new methodology for working remotely for 700 employees in just three days. It was tough, but we succeeded.

MARC RUELLE
MANAGING DIRECTOR
SWDE (WALLONIA, BELGIUM)



We have focused on improving strategic information and communication with employees, and in particular on-site workers, by adopting new company-wide methods and processes: from the creation of individual email addresses to text messaging. Always in agreement with workers and the union.

BERNARD MICHAUX
PRODUCTION MANAGER
CILE (LIÈGE, BELGIUM)

✓ SECURING ESSENTIAL SUPPLIES IN ADEQUATE QUANTITY

One of the main problems that have emerged from this crisis, across sectors and countries, has been the availability of Personal Protective Equipment (PPE); an issue that has also been experienced by water operators. **To foster resilience within utilities, it is therefore critical to highlight the importance of securing own stocks that are well planned with a long-term, precautionary approach.** Having sufficient pre-established stocks further allows to share them with other services that may be in need (in the present case, the health sector, for example).

Not only do water operators need to ensure the safety of their workers when on duty, but they also should provide the adequate information regarding risk and correct behaviour for each specific tasks, to prevent alarm within the workforce.



Equipping workers with the necessary personal protective equipment (PPE) adapted to their task requirements was a priority, including masks, gloves and safety glasses. In the context of a generalised difficulty to source facemasks, we worked with other public operators to issue joint purchase orders.

MARIA PIA SCAFFIDI
HEAD OF QUALITY, ENVIRONMENTAL SAFETY AND SECURITY
DEPARTMENT - RSPP
SAL (LODI, ITALY)

An additional lesson learnt from the coronavirus epidemic is related to widespread concerns regarding the sourcing of essential supplies for water operations (such as chemicals, reagents, etc.) due to the closing of borders. While, in this case, no shortage was experienced, **a prudential approach for essential supplies that considers potential disruptions of the supply chains** in the future can help build resilience. It also highlights the need to maintain transparent communication and coordinated planning with suppliers.

PHASE II

MANAGING THE EMERGENCY - FIRST THINGS FIRST

The shift to a proper 'emergency mode' for a water operator can follow the enforcement of lockdown measures by public authorities. A water operator can also decide to anticipate some of these measures, if it perceives a significant increase in the health risks for the employees. This was indeed the case for some European water utilities that, for example, decided to adopt remote working before the measure was imposed by national government's decision.

In any case, once the emergency starts, **the crucial challenge is to ensure continuity of essential water and sanitation service while also preventing health and safety risks for employees.** As a first step, it is paramount to assess these risks at company level to be able to adopt the most adequate measures. This is the role of the crisis unit, with the involvement of medical professionals and unions.

This section reports the most common measures adopted by European public water utilities during the peak of the outbreak. While external considerations such as local conditions and national guidelines influence the operator's decision-making, it nevertheless appears that measures are quite consistent across territories and pursue the same objectives.



The COVID-19 emergency taught us that, in order to face disrupting and unexpected situations, we need to be versatile and open-minded about the search for solutions. This means being ready to question any aspect of existing processes, and to explore options that, until that moment, we considered impossible.

MARCO BLAZINA
ENVIRONMENTAL PROTECTION AND WASTEWATER
TREATMENT MANAGER
MM (MILAN, ITALY)

✓ STAFF MANAGEMENT: SHIFTS, SEGMENTATION, TRACKING

Regarding staff management, **all the employees that could carry their tasks from home were asked to do so**. Generally, staff assigned to essential on-site functions has continued working but **the teams have been reorganised in groups (segmentation) to avoid contact with each other and to ensure containment in case of infection within one of the teams**. Back-up teams have been assigned at home to be able to replace their colleagues in case a team had to isolate.

Where this was not possible, due to limited staff availability, and for particular critical functions, contacts with external companies have been initiated to outsource the function in case of need (but no operator had to resort to this option, to our knowledge).

For employees not assigned to essential functions and for which remote working could not be organised, the use of vacation days has been encouraged (in some countries, government support schemes gave financial relief for this situation).

To prevent gatherings of people at operators' premises at peak hours, **shifts have been organised to spread employees' time of arrival and departure**. The use of common showers and locker rooms has been strictly limited to staff working on sewage and sanitation and as long as the minimum safety distance between each person can be respected.

As a preventive measure to protect all employees, workers are asked to stay home in case of symptoms. In addition, health monitoring has been implemented, including temperature checks at arrival in the office and obligation to inform the unit crisis in case of contact with people found positive. Staff with particular health problems, or in the 'at-risk' category, has been identified with special measures for their safety adopted. In some cases, operators have adopted mobile applications that allow tracing of the contacts – anonymously – of an infected worker, to prevent further contagion.

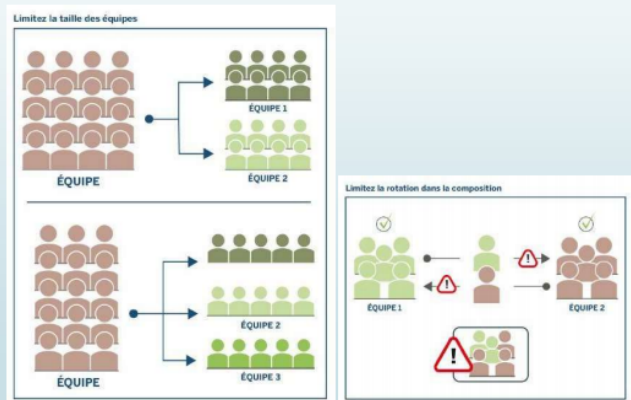
In summary:

- ▶ Staff segmented in teams (operational and back-up).
- ▶ Arrival and departure of employees organised in slots.
- ▶ Monitoring of employees' health and their contacts.
- ▶ Minimum distancing between employees ensured.



CILE (Liège, Belgium)

Example of 'segmentation' scheme for staff at CILE



SMAT Gruppo (Turin, Italy)

SMAT has developed a mobile application to trace, anonymously, employees' close contacts when at work; the application alerts colleagues if one person becomes ill.

✓ **CUSTOMER RELATIONS: BUSINESS AS USUAL, BUT FROM REMOTE, AND WATER ACCESS ASSURED**

Many operators have decided **to close their customer offices/counters to protect workers and customers. In this case, remote exchanges have been encouraged (email, internet or phone).** The adaptation and digitisation of customer services was operated smoothly. It is to be noted that the average number of interactions per day has decreased following the slowdown of economic activity.

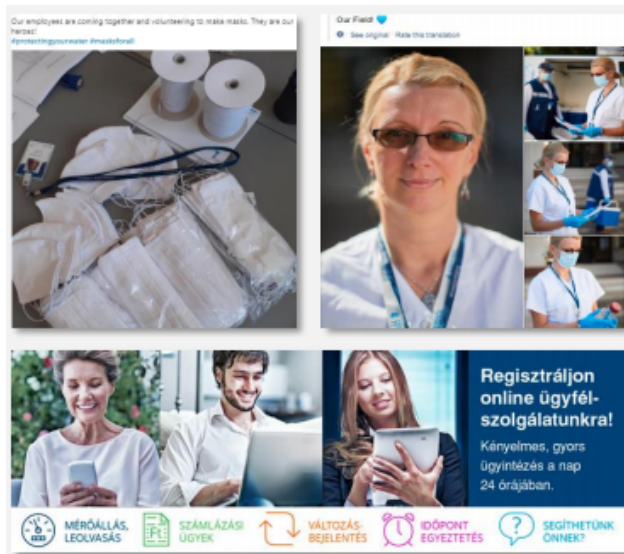
Communications and instruments have been tailored to specific categories of citizens: for example, one operator has developed a special phone application to allow hearing-impaired people to reach customer service; in general, a range of tools, also age-specific, have been deployed to reach more effectively different categories of users (texts outreach, increased social media activity, targeted emails or off-line information in invoices or letters).

Interventions in private buildings have been minimised as much as possible. To be able to prioritise on-site interventions only to when strictly needed, several operators have adopted a new approach in cooperation between customer and technical services to provide remote guidance to users in identifying potential problems (and fix them if possible).

Meter reading has been most often suspended (except for smart metering). In many cases, billing and invoicing processes have been delayed (households can ask for a payment postponement) or suspended, in line also with national emergency regulations. Water cuts – where the option exists – have been suspended.

In summary:

- ▶ Most customer offices closed – remote interactions favoured (phone, email, internet), including for some technical operations in private homes.
- ▶ Attention to specific categories of users, also through targeted communication and adapted tools.
- ▶ Metering suspended, no water cuts, possibility for postponement of invoice payment.



BUDAPEST
WATERWORKS

Budapest Waterworks
(Budapest, Hungary)

Interactions with customers are carried out through a plurality of tools, adapted to the users and responding to their specific needs and preferences.



**acquedotto
pugliese**
l'acqua, bene comune

Acquedotto Pugliese
(Puglia, Italy)

Two new tools were developed during the emergency to reach out to specific categories of customers: an SMS system to keep contacts with senior customers and a mobile application for hearing-impaired people that transforms the voice of customer care's staff into text.



✓ **COMMERCIAL RELATIONS: ONLY NECESSARY INTERACTIONS AND SAFETY FIRST**

Most operators have adopted **specific procedures to manage the delivery of supplies, in order to ensure social distancing and minimise contacts**. Protocols were provided to suppliers to ensure compliance with operators' safety measures and contingency plan.

Most commonly, to avoid congestion, the delivery person is required to obtain clearance from the operator before entering the operator's area; truck drivers are to remain in the truck; minimum distance and other safety measures have to be respected during all delivery operations.

Many routine monitoring procedures on material and infrastructures have been suspended (except for drinking water and sanitation operations).

Training programmes (unless online) and commercial relations/meetings have been also suspended.

In summary:

- ▶ Suppliers must comply with contingency plans and safety procedures required by the water operator, in order to minimise contacts and ensuring social distancing.
- ▶ Physical commercial relations, training, routine monitoring of non-essential infrastructures suspended.

✓ DRINKING WATER AND WASTEWATER TREATMENT OPERATIONS: ENSURING UNINTERRUPTED SERVICE

Among the utilities members of **Aqua Publica Europea**, there are **no records of disruptions of drinking water supply or wastewater treatment operations due to the pandemic**.

High quality of drinking water has been insured, in compliance with requirements and standards. In some cases, chlorination has been slightly increased, but only following public authorities' or government's order and with the objective to reassure users rather than as a reaction to health concerns.

In different contexts, monitoring frequencies for drinking water have been reduced (notably when sampling is carried out at private homes' tap) but minimum legal requirements have always been respected. Regarding wastewater, in some limited cases and in particular for smaller plants, monitoring frequency for inlet waste waters has been temporary reduced in agreement with authorities as a result of lockdown measures (lower workforce availability, difficulty to maintain distances on-site) and to ensure staff protection, as technicians need to travel to different plants.

Activity on construction sites has been also reduced, with some continuity maintained, especially for network replacement, as outdoor activity has been considered to entail less risk of contagion. Disruptions have been mainly due to interruptions from external companies.



Eau de Paris (Paris, France)

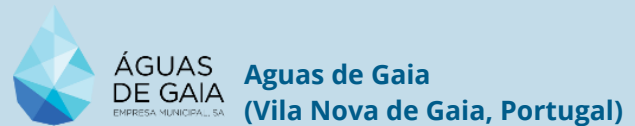
Technical operators monitoring the water cycle in city of Paris

In summary:

- ▶ No interruption of drinking water and wastewater operations during lockdown; no problem with assuring drinking water quality according to normal standard.
- ▶ Monitoring adapted but never below minimum law requirements (except for limited cases in wastewater treatment).
- ▶ Activity on construction sites reduced but not stopped.



Member of SMAT's staff performing operations during the lockdown at a wastewater treatment plant



Monitoring operations for drinking water during the lock-down

PHASE III

THE RECOVERY TIME

As this report is being drafted, many countries are progressively relaxing their lockdown measures. Yet, the perspective is not a return to normality, but rather, while the virus is still circulating, a reorganisation of societies to balance the objectives of, on the one hand, resuming economic activity and social life and, on the other hand, minimising the risk of a new wave of contagion.

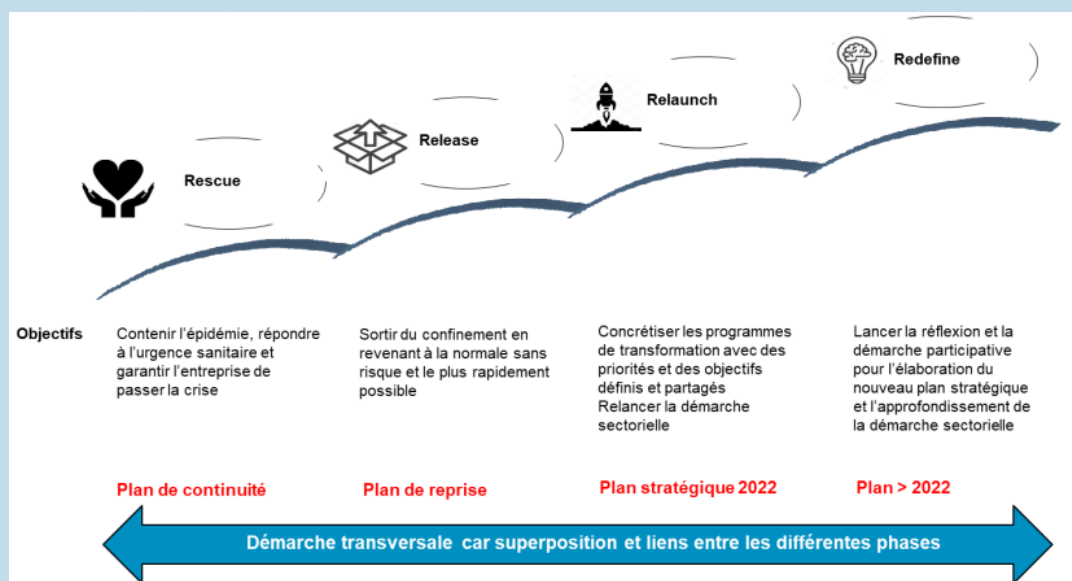
In this framework, **utilities in Europe are preparing their own recovery plans** (or have just finalised them). Since the transitional period between the lockdown and an eventual return to normality is expected to last several months, operators also need to adjust: the challenge is to gradually resume suspended activities while continuing to ensure employee safety with a greater number of people coming back to the offices, laboratories, plants and construction sites.

The recovery plans thus address wide-ranging aspects: from the organisation of spaces in the headquarters, to procedures for the use of the company's car fleet or to restart operating in private homes.



SWDE (Wallonia, Belgium)

Components of SWDE's planning strategy the impact of the pandemic. Rescue: stopping the spread and guaranteeing the business continuity. Release: measures to recover business activities. Relaunch: re-defining the priorities for each sector of operations. Redefine: revising the operator's long-term strategic plan.



✓ REORGANISING HEADQUARTERS IN ORDER TO MAXIMISE SOCIAL DISTANCING

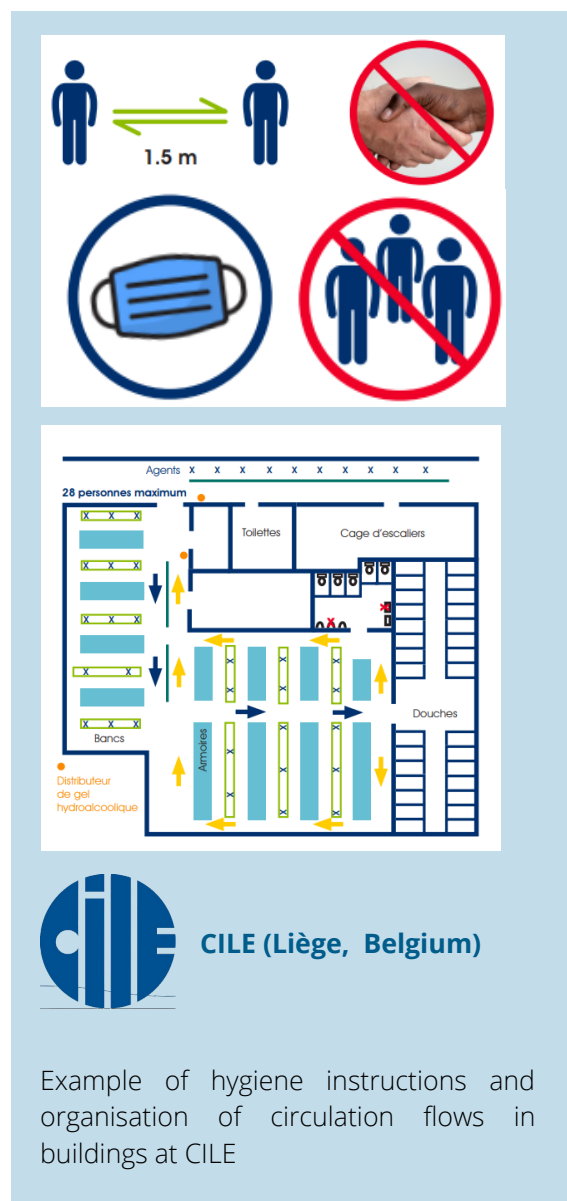
The established recovery plans generally focus on the reorganisation of internal spaces in order to ensure separations and safety distances as well as minimise contacts between people. Although remote working continues to be encouraged in most cases and to the extent possible, some operations require physical presence, such as invoicing or operations related to infrastructure monitoring.

The most common measures adopted in public water operators' recovery plans include:

▶ Minimum distancing ensured through:

- Rearrangement of office settings to minimise contacts (back-to-back seats, reorganisation of furniture); in some cases, separation windows between desks are installed.
- Circulation direction in hallways and ground markings.
- Recommended use of stairs over lifts; when lifts are used: limited number of people, standing back-to-back.
- Locker room capacity reduced and controlled.
- Dining room closed or spacing between seats.

- ▶ Extensive information to employees on sanitising practices.
- ▶ Temperature checks at entrance.
- ▶ Sanitisation of spaces and surfaces and availability of hand sanitiser.
- ▶ Wearing masks (surgical/cloth) on and around premises.
- ▶ Control of air conditioning.
- ▶ Doors left open.



Example of hygiene instructions and organisation of circulation flows in buildings at CILE

Specific provisions and procedures are also developed for **employees working outdoor or on-site**:

- ▶ Segregation (no mixing) of teams maintained.
- ▶ Sanitisation and availability of hand sanitisers.
- ▶ Personal Protective Equipment mandatory, according to activity.
- ▶ For company's vehicles, reduced number of maximum people per vehicle, in some cases only one person; in some cases, separating curtain or transparent device; authorisation to use own car (with cost reimbursement by the operator).



CILE (Liège, Belgium)

Guide for the use of company vehicles



SDEA (Alsace-Moselle, France)

Safety measures for vehicles :
internal panel to isolate seats and
sanitation toolkit



The adoption of hygiene measures, social distancing rules and individual protection equipment is essential. Our premises are cleaned every day and periodically sanitized with particular attention to the changing rooms.

PAOLO ROMANO
PRESIDENT
SMAT GROUP (TURIN, ITALY)

✓ CUSTOMER AND COMMERCIAL RELATIONS

When the customer offices have been closed to the public, water operators are assessing the possibility to re-open. Approaches vary: while some continue to privilege online and phone interactions, which have proven efficient contact methods, others are preparing to welcome visitors – mainly by-appointment and after the installation of a window separating customers from employees and with distancing rules always respected.

Activities involving access to private buildings are also resuming but subject to strict procedures: for instance, owners or tenants are invited to stay in another room while technicians operate in the building, and extensive informative material is provided in advance to customers to reassure on the safety precautions taken and to explain the behaviour to adopt.

Activity on construction sites and, more generally, realisation of the investment plans are also resuming.

In summary:

- ▶ Some operators are partially reopening customer offices: only by-appointment, and with minimum distance respected.
- ▶ Extensive information to citizens when access to private buildings is needed.
- ▶ Construction site activity resuming on normal basis.



ENSEMBLE, RÉINVENTONS DEMAIN

La crise actuelle démontre que nous sommes toujours plus forts unis, responsables et solidaires.

Genevois-es et acteurs économiques, vous êtes moteurs pour mettre en œuvre les meilleures actions pour Genève.

Ensemble nous pouvons mobiliser nos volontés et nos forces pour relever les défis environnementaux face à l'urgence climatique.

Nous sommes votre partenaire privilégié pour vous accompagner avec des solutions locales et durables.




SIG (Geneva, Switzerland)

Communication campaign for the recovery phase, stressing the pivotal role that public services will play in all fields of social life.

CONCLUSION

WHICH IMPLICATIONS FOR THE FUTURE?

While several countries across the world are slowly moving away from the most acute phase of the pandemic, people and organisations alike are assessing the impact of this unprecedented crisis both on their individual situation and on society.

This reflection is also taking place within **Aqua Publica Europea** and, although drawing conclusions for the long term is still premature, exchanges with members point **to three main domains where the pandemic is expected to have long-lasting effects: the role of water operators in society, the internal work organisation of operators, and the financing of water services.**

Public water operators: key actors for the society's wellbeing and safety

During the pandemic, many operators have registered **a rise in the level of satisfaction and trust among their users.** Most likely, the pandemic has renewed or strengthened citizens' awareness about the importance of universal access to safe water for collective health. Thanks to the extraordinary commitment of operators' employees, the continuity of water provision has been ensured and people could appreciate the reliability of this public service.

There are additional, more specific elements that can help explain the increased confidence in water services. Due to social-distancing rules, many users were asked to perform small tasks in their home (like reading the meter or fixing little issues) while being guided from remote by operators' staff. Not only did this helped to create new direct ties, but it also contributed to increasing users' awareness about the complexity of the service that exists 'behind the tap'.

On a different level, many water operators are currently involved in national and internal projects aimed at developing methodologies to detect the presence of Sars-CoV-2 in wastewater for surveillance purposes: **the wealth of scientific knowledge and technological capacities that public water operators can make available in different societal domains** is appreciated by a growing number of people (including policy-makers.) Furthermore, throughout the crisis, **many members of Aqua Publica Europea supported other essential services** (for examples by donating some PPE or by producing disinfectant for hospitals), thus showcasing the involvement of public water operators in their communities and their commitment for the common good.

Overall, the role played by water operators during the pandemic and their reliability have showed once again their role as critical actors in ensuring collective health and wellbeing.

Three drivers for the future of water operators' organisation: digitalisation, risk management and workers' participation

Most members of Aqua Publica Europea have reported that the transition to remote working occurred seamlessly with no loss in productivity, although in some cases this shift required to upgrade quickly the IT infrastructure and adapt work organisation. **The swift and overall successful move to remote working will provide an incentive to rethink conventional organisational models:** productivity assessment, role of social interactions and peer-learning, organisation of internal spaces, mobility, and many other elements of work organisation will have to be re-assessed through a new lens, now that large scale remote working proved to be possible and effective. Of course, this reflection concerns many other sectors beyond water and the debate on the pros and cons of remote working versus presence at the office is open.

More specific to the water sector, the disruptive effects caused by the pandemic have attested once more the importance for water operators to have solid risk management approaches in place. While within the European Union the elaboration of risk management plans is becoming a legal obligation, recent experiences highlight that, when a hazardous event occurs, having a well-designed risk management is just a starting point to effectively address the implications of adverse events. Methodologies to assess the likelihood and impact of risks are clearly essential, as are the decision-making procedures to adopt consequent actions that prevent or mitigate the risk in a proportionate way. However, as several operators' risk managers have emphasised, **risk management is also, to a large extent, a matter of involving staff in continuous and reiterative learning processes,** of enabling the personnel to improve from experience. Furthermore, the information needed to carry out the risk-assessment involves horizontal communication processes that cut across operators' departments and functions: (new) collaborative dynamics have to be established to facilitate this circulation of information. **The full integration of risk management in water operators is therefore a process that will deeply influence and transform the way of operating and interacting within water utilities.**

Finally, all operators have stressed (also through dedicated communication campaigns) that ensuring business continuity through these difficult times was only possible through the extraordinary commitment of the operators' staff. **The participation of employees in decision-making** (including on safety rules and work organisation) and their involvement around shared objectives have proved essential to tackle challenges successfully.

To sum up, **the pandemic has the potential to accelerate some transformation trends related to the internal organisation of water utilities:** the organisational stress caused by the pandemic is helping operators to better identify the key factors that can ensure greater resilience. In this framework, the adoption of approaches enabling staff and the operator as a whole to learn from experience will be essential to manage this transformation effectively.

The financing challenge: an opportunity to rethink traditional models?

Financing is another domain where water utilities are currently assessing the consequences of the pandemic. Although the severity of the economic impact varies across European territories, several members of **Aqua Publica Europea** highlight two phenomena: a short-term decrease of revenues due to the freeze of industrial and touristic activities (in particularly affected areas, this may reach a 20% decrease on an annual basis); an expected medium-term rise in the number of people facing difficulty to pay the water bills due to protracted economic downturn and rising unemployment. **The worsening of the economic situation occurs at a time when financing needs for the water sector are already significant throughout the EU:** a very recent (but pre-pandemic) study by the *Organisation for Economic Development and Cooperation* [1] estimates at around 289 billion euros the additional investment needs (compared to current expenditure) for the water sector in the EU for the next decade - with some countries already reaching the affordability threshold for significant parts of the population.

National governments and international institutions will continue to have a key responsibility in the prioritisation and financing of the protection and management of water resources. However, despite local differences, it is likely that the pandemic will accelerate a general development of new models of financing. **First, the traditional tariff/tax component will need to evolve towards 'smarter' approaches, that better reflect the differentiated pressure on water resources caused by different categories of users.** These new approaches to raise additional revenue can include, for example, a tax on property developers for soil-sealing (which would also capture the economic value this actor gains from the access to high quality water and sanitation services), or more accurate mechanisms to charge the cost of water pollution across users, like the approach based on the so-called 'Extended Producer Responsibility'. Both these approaches are currently under discussion at EU level and/or tested in some countries.

New opportunities for the financing of water services can also arise from the shift towards a more circular economy. Regardless of the approach for economic recovery chosen, it will be impossible to disregard the sustainability challenge. From nutrients recovery to energy neutrality, water operators hold a strategic position in the fight to tackle climate emergency. In this framework, conducive regulation and incentives can foster the creation of new value-chains in connection with other sectors (agriculture, constructions, etc.) that can

[1] OECD (2020), *Financing Water Supply, Sanitation and Flood Protection: Challenges in EU Member States and Policy Options*, OECD Studies on Water, OECD Publishing, Paris, <https://doi.org/10.1787/6893cdac-en>

open new economic opportunities, trigger investments and, in general, support the shift towards a more sustainable economy.

Next to exploring new financing models, **minimising financial needs and liabilities must remain the key objective**, and water operators have crucial responsibilities in this domain. First, water operators must keep their efforts for efficiency and performance improvement, so as to make the best use of existing assets and resources: the carefully assessed adoption of innovative solutions and well-designed investment plans that look at the long term will be key. Water operators can also help design **“Natural-Based Solutions” (NBS) that, next to more traditional grey engineering options, can prove extremely cost-effective – especially in the long term – to tackle the impact of climate change.** While the drive (and decision-making) for the long-term integrated planning NBS depend on lie in the hand of elected bodies, public water operators can and have to put forward ideas and solutions based on their technical expertise and on their legitimacy as public entities. From the “Rainwater plain” in Paris to maximise collection and re-use of rain water, to the strategy for biodiversity in the Guadalquivir river led by Seville’s operator (EMASESA), there are plenty of examples of the pivotal role water utilities can play in this domain.

In summary, the pandemic is going to affect severely the economy worldwide, and in particularly affected areas (including in Europe) water operators’ investment capacity is expected to be curbed. However, this unprecedented crisis represents an opportunity, on the one hand, to accelerate the design of financing models that are socially fairer and environmentally smarter, and on the other hand, to push towards the adoption of more cost-effective and greener solutions for water resources management.

Before and after the Covid-19 crisis, cooperation among water utilities remains key

To conclude, as in all historic moments characterised by deep transformation of social organisation, opportunities and challenges can be identified. While things will not be the same as they were before Covid-19 on many aspects, the continued supply of safe drinking water to all and well performing sanitation services will remain critical for the wellbeing and security of our society. Also, the water sector will continue to play a key role in the collective efforts towards a more sustainable model of development.

In this framework, **strengthening the capacities of public water operators – like of all other public services - must remain a strategic political objective for national and international institutions.** While specific companies programmes for staff training remain essential and resources have to be provided for this purpose, the public nature of these services make international cooperation an effective and viable complement for capacity development. The high attendance to the virtual meetings that both **Aqua Publica Europea** and **GWOPA** organised during the pandemic (some of these in partnership) proves once more the importance that international peer-to-peer learning has for public water operators.

Together with other international institutions like **GWOPA, Aqua Publica Europea** will continue to facilitate cooperation, knowledge sharing, and partnerships among public water utilities. Capacity-development is important for the water sector per se, but it also represents an essential element of a broader societal effort to ensure safety and well-being for all, and to strengthen our collective resilience to current and new threats.

ABOUT AQUA PUBLICA EUROPEA



EUROPEAN ASSOCIATION
OF PUBLIC WATER OPERATORS

Aqua Publica Europea (APE) is the European Association of Public Water Operators. It unites publicly owned water and sanitation services and other stakeholders working to promote public water management at both European and international level. APE is an operator-led association that looks for efficient solutions that serve public interests rather than corporate ones.

ABOUT THE COLLABORATING PARTNER



The **Global Water Operators' Partnerships Alliance (GWOPA)** is a UN-Habitat-led programme focused on strengthening public water utilities around the world and enhancing collaboration between them. In small towns and big cities, water and sanitation operators lead the delivery on these basic human requirements, providing services that are fundamental to inclusive, safe, resilient and sustainable cities (SDG 11). GWOPA uses its convening power to mobilize strategic sector actors—governments (local and national), civil society groups, labor unions, financial institutions, private sector—to promote water operators' partnerships (WOPs).

TABLE OF EXAMPLES

PHASE I: GETTING PREPARED

Reorganising the decision-making and information flow: the role of the Crisis Unit

- Budapest Waterworks (Budapest, HU) - Example taken from the presentation given at the web-meeting of APE's Working Group Performance, 26/05/2020
- SDEA (Alsace-Moselle, FR) - Example taken from the presentation given at the third video-conference on the response to Covid-19 emergency organised by Aqua Publica Europea, 06/05/2020
- EMASESA (Seville, ES) - Example taken from the presentation given at the first video-conference on the response to Covid-19 emergency organised by Aqua Publica Europea, 23/03/2020

PHASE II: MANAGING THE EMERGENCY - FIRST THINGS FIRST

Staff management: shifts, segmentation, tracking

- CILE (Liège, BE) - Example taken from the presentation given at the third video-conference on the response to Covid-19 emergency organised by Aqua Publica Europea, 06/05/2020
- SMAT Gruppo (Turin, IT) - Example taken from the presentation given at the third video-conference on the response to Covid-19 emergency organised by Aqua Publica Europea, 06/05/2020

Customer relations: business as usual, but from remote, and water access assured

- Budapest Waterworks (Budapest, HU) - Example taken from the presentation given at the web-meeting of APE's Working Group Performance, 26/05/2020
- Acquedotto Pugliese (Puglia, IT) - Example taken from the presentation given at the web-meeting of APE's Working Group Customer Relations, 12/05/2020

Drinking water and wastewater treatment operations: ensuring uninterrupted service

- Eau de Paris (Paris, FR) - Pictures shared by Eau de Paris for Aqua Publica's [video](#) on the commitment water operators' employees during the pandemic, 24/04/2020
- SMAT Gruppo (Turin, IT) - Example taken from the presentation given at the third video-conference on the response to Covid-19 emergency organised by Aqua Publica Europea, 06/05/2020
- Aguas de Gaia (Vila Nova de Gaia, PT) - Pictures shared by Aguas de Gaia for Aqua Publica's [video](#) on the commitment water operators' employees during the pandemic, 24/04/2020

PHASE III: THE RECOVERY TIME

- SWDE (Wallonia, BE) - Example taken from the strategic plan of SWDE, shared with APE members for the third video-conference on the response to Covid-19 emergency organised by Aqua Publica Europea, 06/05/2020

Reorganising headquarters in order to maximise social distancing

- CILE (Liège, BE) - Example taken from the presentation given at the third video-conference on the response to Covid-19 emergency organised by Aqua Publica Europea, 06/05/2020
- SDEA (Alsace-Moselle, FR) - Example taken from the presentation given at the third video-conference on the response to Covid-19 emergency organised by Aqua Publica Europea, 06/05/2020

Customer and commercial relations

- SIG (Geneva, CH) - Example taken from the presentation given at the web-meeting of APE's Working Group Communication, 10/06/2020

OUR MEMBERS



info@aquapublica.eu
+32 2.518.86.55
www.aquapublica.eu
@APE_EU