

Template for summary reports in accordance with article 7 of the Protocol on Water and Health

Executive summary

Please provide an overall evaluation of the progress achieved in implementing the Protocol in your country during the reporting period. Please provide a short description of the main steps taken and highlight important achievements, key challenges, success factors and concrete good practice examples.

Suggested length: maximum 2 pages

Kindly please note the National report on SDGs for further information mainly pages 169 to 179 of the document. This document is referred to as NSO (2021) in his report) Link: <https://nso.gov.mt/en/nso/Media/Salient-Points-of-Publications/Pages/2021/Sustainable-Development-in-Malta--Statistical-Information-on-the-2030-Agenda-in-Malta---2021.aspx>

Part one

General aspects

1. Were targets and target dates established in your country in accordance with article 6 of the Protocol?

Please provide detailed information on the target areas in part two.

YES NO IN PROGRESS NA

If targets have been revised, please indicate the date of adoption and list the revised target areas. Please provide detailed information in part two.

2. Were targets and target dates published and, if so, how?

Please explain whether the targets and target dates were published, made available to the public (e.g., online, official publication, media) and communicated to the secretariat.

3. Has your country established national or local arrangements for coordination between competent authorities for setting targets? If so please describe, including information on which public authority(ies) took the leadership and coordinating role, which public authorities were involved and how coordination was ensured.

4. Was a programme of measures or action plan developed to support implementation of the targets? If so, please briefly describe that programme or plan, including how financial implications were taken into account.

5. What has been done in your country to ensure public participation in the process of target setting in accordance with article 6, paragraph 2, and how was the outcome of public participation taken into account in the final targets set?

6. Please provide information on the process by which this report has been prepared, including information on which public authorities had the main responsibilities and what other stakeholders were involved.

7. Please report any particular circumstances that are relevant for understanding the report, including whether there is a federal and/or decentralized decision-making structure.

Part two

Targets and target dates set and assessment of progress

For countries that have set or revised targets and target dates, please provide information specifically related to the progress towards achieving them. If you have not set targets in a certain area, please explain why.

For countries in the process of setting targets, please provide information on baseline conditions and/or targets considered under the relevant target areas.

Suggested length: one page (330 words) per target area.

I. Quality of the drinking water supplied (art. 6, para. 2 (a))

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

The target is to provide a reliable good quality drinking water for all the permanent and visiting population.

The sector is regulated by Maltese Legal Notice 17 of 2009 as amended by legal notice 242 of 2009, transposing the Drinking Water Directive (98/83/EC).

Alignment with the recast EU Drinking Water Directive 2020/2184. The process of transposing the Directive to local legislation is currently underway.

Link to Legal Notice 17 of 2009:

<http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=11134&l=1>

Link to new Drinking Water Directive: <https://eur-lex.europa.eu/eli/dir/2020/2184/oj>

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

The key target is to adhere to the Drinking Water mandatory quality parametric values and ensure reliability of supply and access to water.

In addition to the above the water supplier (Water Services Corporation) is further obliged by the Water Supply and Sewerage Services Regulations and licence issued by the Regulator for Energy and Water Services:

- to supply water intended for human consumption according to applicable regulations and standards;
- to report to the Regulator for Energy and Water Services on its performance according to reporting requirements established by this licence and including:
 - Percentage of tests complying with micro-biological standards (according to Water Intended for Human Consumption Regulations);

- Percentage of tests complying with chemical indicator parameters (mandatory and indicator parameters, and according to Water Intended for Human Consumption Regulations).
3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

The entire population has access to drinking water and the drinking water system. In general, progress is reported across a wide range of performance indicators.

Main achievements and indicators reported include Percentage of tests complying with micro-biological standards was at practically 100% between 2010 and 2020.

Percentage of tests complying with chemical indicator parameters increased from 89% in 2010 to 94% in 2020 and % of tests complying to mandatory chemical standards remained at 100% in 2020.

4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Contributing towards SDG 6 target 6.1 in that by 2030 achieving universal and equitable access to safe and affordable drinking water for all.

5. If you have not set a target in this area, please explain why.

II. Reduction of the scale of outbreaks and incidents of water-related disease (art. 6, para. 2 (b))

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

The Infectious Disease Prevention and Control Unit is responsible for the surveillance of infectious diseases in Malta, including water-borne diseases. Every notified case is investigated to identify the potential source and the necessary public health control measures implemented to prevent additional cases.

On the other hand, the water utility (Water Services Corporation) is obliged under the Water Supply and Sewerage Services Regulations and the licence issued to it by the Regulator for Energy and Water Services to notify to the Regulator any breaches or potential breaches to any regulations, directions or codes of practice.

Link: Water Supply and Sewerage Services Regulations: <http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=12362&l=1>

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

In reporting and investigating any such incidents, the water utility is also required to submit proposals to rectify operations and provide precautionary measures to ensure against repeat situations and/or continuation of such breaches.

3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Contributing towards SDG 6 target 6.3 in that by 2030 improving water quality and the reduction of pollution by minimising the release of hazardous chemicals and materials.

5. If you have not set a target in this area, please explain why.

III. Access to drinking water (art. 6, para. 2 (c))

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

The entire population is served with and has access to drinking water.

The Water Services Corporation has the duty under the Water Services Corporation Act (Chapter 355 of the Laws of Malta), inter alia:

- to develop, maintain and promote a safe and efficient production and distribution system in order to satisfy, as economically as possible, all reasonable demands for water;
 - to manage and operate all undertakings and other installations and all property, transferred to and vested in the Corporation by virtue of this Act or otherwise acquired by the Board for the purposes of any of its functions;
 - to hold and administer and, if and when it thinks fit, to realise any assets it may hold from time to time.
2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

The Water Services Corporation is further required to report on an annual basis to the Regulator for Energy and Water Services (REWS) on its performance in providing access to drinking water in its Licence Monitoring Reports, including details on operational outputs and performance indicators (e.g. Total number of active accounts total potable water supplied, sources of supply, properties affected by supply interruptions etc.)

3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

The Water Services Corporation consistently meets its obligations to provide access to drinking water to the population.

4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Contributing towards SDG 6 target 6.1 in that by 2030 achieving universal and equitable access to safe and affordable drinking water for all.

5. If you have not set a target in this area, please explain why.

IV. Access to sanitation (art. 6, para. 2 (d))

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.
 - to provide, improve and extend such a system of public sewers and to cleanse and maintain these sewers so as to ensure that the drainage system operates and continues to operate safely and effectively;
 - to make provisions for the operation of these sewers and such further provisions as are necessary from time to time for effectively dealing with the contents of these sewers by means of sewage treatment and disposal works or otherwise;
 - to have regard in performing its duty of the need to provide for the treatment and disposal or otherwise of trade effluent;
 - to promote the proper disposal of waste water and storm-water run-off;
 - to manage and operate all undertakings and other installations and all property, transferred to and vested in the Corporation by virtue of this Act or otherwise acquired by the Board for the purposes of any of its functions;
 - to hold and administer and, if and when it thinks fit, to realise any assets it may hold from time to time;

Link to Water Services Corporation Act:
<http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=8825&l=1>

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5 of the Protocol).

The Water Services Corporation is further required to report on an annual basis to the Regulator for Energy and Water Services on its performance in providing access to sanitation in its Licence Monitoring Reports, including details on operational outputs and performance indicators (e.g. Percentage of the population served with sewerage).

All the population (100%) is served with sewerage services. For the small number of customers (< 1%) who are not connected directly to a collection network due to the absence of a main sewer system in the vicinity, the water utility provides a free cesspit-emptying service to all domestic consumers.

In Malta, the BOD and COD measured in wastewater generation from households and businesses have increased in the period 2010–2019. Comparing 2019 with 2010, the proportion of pollution (BOD and COD) removed by treatment has increased, and by default the pollution discharged to sea has decreased (NSO, 2021). Generation, discharge, and treatment of wastewater— Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) from baseline to 2021 is illustrated in the figures 1 and 2 below as extracted from NSO (2021).

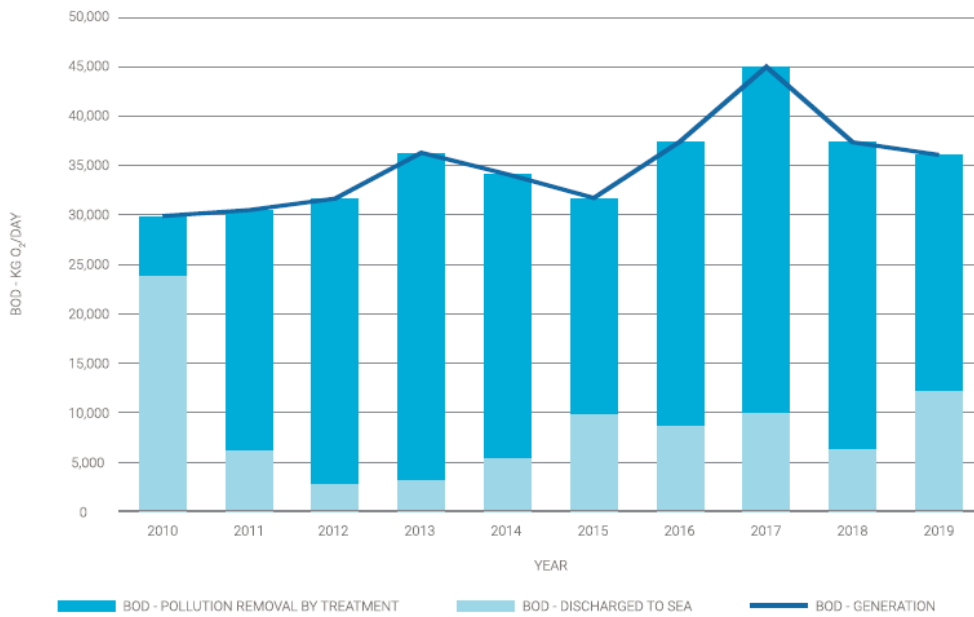


Figure 1 Biochemical Oxygen Demand (BOD) from baseline to 2021 is as extracted from NSO (2021).

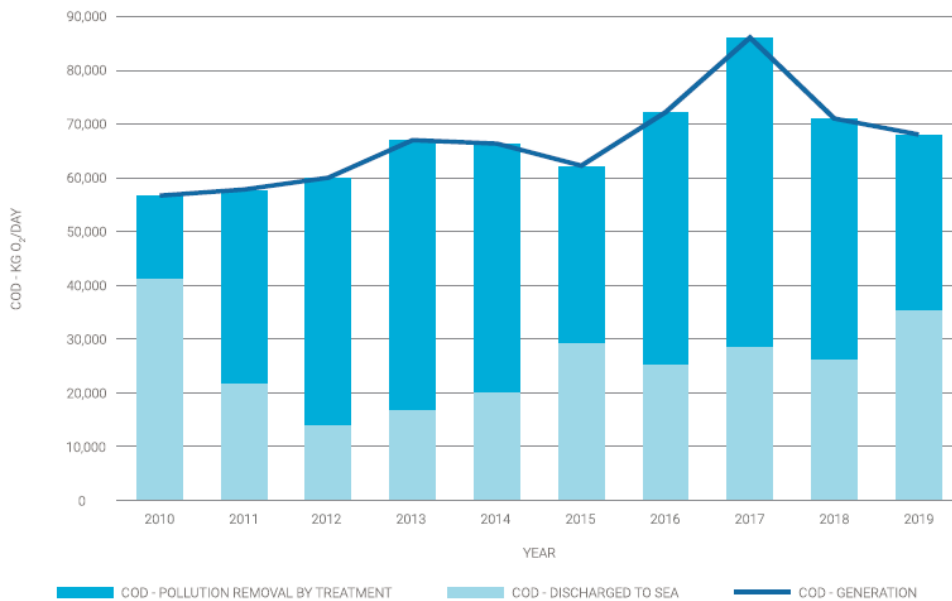


Figure 2 Chemical Oxygen Demand (COD) from baseline to 2021 is as extracted from NSO (2021)

3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

100% of the population already have access to sanitation.

The Water Services Corporation consistently meets its obligations to provide access to sanitation to the population.

4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Contributing towards SDG 6 target 6.2 in that by 2030 achieving access to adequate and equable sanitation and hygiene for all.

5. If you have not set a target in this area, please explain why.

V. Levels of performance of collective systems and other systems for water supply (art. 6, para. 2 (e))

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

Refer to Section ‘Access to Drinking Water’

Furthermore, the water utility (Water Services Corporation) is regulated by the Regulator for Energy and Water Services for the supply of water through the public distribution network, and through a licence issued under the Water Supply and Sewerage Services Regulations.

Link to Water Supply and Sewerage Services Regulations:
<http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=12362&l=1>

Licence Monitoring Reports are submitted on an annual basis by the Water Services Corporation to the Regulator for Energy and Water Services. These reports include inter alia detailed information on key outputs and performance indicators as well as outputs on water supply systems. The Licence Monitoring Reports include proposed performance targets and outputs for a five year rolling period and including information on:

- Reliability of supply and service quality outputs (e.g.: % of households receiving low water pressure, total number of supply interruptions greater than 12 hours, emergency supplies served by water tanker etc.)
- Asset maintenance and operational efficiency of water supply systems (estimated leakages, mains bursts /1000 km, length of mains replaced, percentage unaccounted for water etc.)
- the complaints received from customers on water quality, supply pressure and interruptions to supply
- the requests on compensation according to Customer contract. Proposed performance targets and outputs are reviewed and updated on an annual basis.

In addition the licence issued to the Water Services Corporation by the Regulator for Energy and Water Services requires inter alia the publication of a Customer Contract by the Water Services Corporation which includes:

- levels of service of water supply including
 - potable water quality standards;
 - potable water pressure (greater than 1 bar) and flow (9 litres / minute);
 - standards on continuity and reliability of supply;
 - alternative water supply arrangements to customers;

- arrangements and procedures regarding the provision of water supply services including period to connect to distribution network and response time for repairs to service and renewals;
- works standards
- levels of service in relation to:
 - billing and payment facilities and procedures;
 - communication response arrangements to complaints and queries by customers;
 - notification arrangements and appointments with customers;
 - arrangements and procedures for dealing with complaints and resolving disputes;
 - arrangements, guidance and procedures for giving appropriate service to vulnerable customers or customers with special needs;
 - period to correct billing errors and effectively address customer complaint
- a code of practice and procedures on disconnection / suspension of potable water supply;
- exceptional circumstances where the water utility may be exempted from fulfilling these service obligations.

The Customer Contract was brought into effect in July 2011. Prior to entry into force the Customer Contract was published in draft form for public consultation.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5 of the Protocol).

The Maltese national water operator (WSC) is responsible for water quality up to the Customers' first tap downstream of the revenue meter. This water is certified to be potable according to the EU Drinking Water Directive. Besides the continuous numerous tests conducted in the operator's accredited laboratories, the operator doses the water with Chlorine gas and uses residual chlorine as an indicator against micro-biological contamination.

Furthermore, the licence issued by the Regulator for Energy and Water Services to the water utility establishes reporting requirements on:

- manner in which Customer Contract was operated during the preceding year
- Regulatory Information including Outputs and Performance Indicators reported in Licence Monitoring Reports
- Emergency Response Plans outlining the various risks to WSC operations and established processes and procedures to address such emergency situations and to ensure continuity of service to consumers.
- Leakage Control Plans outlining estimated leakage levels and projections of leakage levels on a regional and national basis.
- The Water Supply and Sewerage Services Regulations and Licence issued by the Regulator for Energy and Water Services further provides powers to the Regulator to:
 - assess and audit the operations of water supplier and compliance with licence conditions;

- issue enforcement orders to ensure compliance to any condition or requirement of the licence.
3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

As stated in 2. above, the water quality in Malta is according to the Drinking Water Directive 98/83/EC and is continuously monitored.

In general progress has been reported across a wide range of performance indicators.

Main achievements and indicators reported include:

- Percentage of households receiving low water pressure decreased from 1.2% in 2010 to 0.28% in 2020;
 - Total number of supply interruptions greater than 12 hours decreased from 66 instances/annum in 2010 to 50 instances/annum in 2020;
 - Estimated leakage was reported to have fluctuated from 4.0 Mm³/annum in 2010 down to 3.4 Mm³/annum in 2020 set against an increase in water supplied from 24.7 Mm³/annum to 31.2 Mm³/annum, respectively.
4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Contributing towards SDG 6 target 6.1 in that by 2030 achieving universal and equitable access to safe and affordable drinking water for all; as well as target 6.4 in that by 2030 sustainably increase water-use efficiency across all sectors in this case by enhancing the efficiency of the public water distribution system.

5. If you have not set a target in this area, please explain why.

VI. Levels of performance of collective systems and other systems for sanitation (art. 6, para. 2 (e))

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

Included in the EU Urban Waste-Water Treatment (UWWT) Directive.

Target is to reduce overflows.

The water utility (Water Services Corporation) is regulated by the Regulator for Energy and Water Services for the provision of sewerage services, and through a licence issued under the Water Supply and Sewerage Services Regulations.

Licence Monitoring Reports are submitted on an annual basis by the Water Services Corporation to the Regulator for Energy and Water Services. These reports include inter alia detailed information on key outputs and performance indicators as well as outputs on sewerage services provided. The Licence Monitoring Reports include proposed performance targets and outputs for a five year rolling period and including information on:

- Volumes and percentage of wastewater collected and treated,
- Sewerage system failures (e.g.: sewer collapses, sewer blockages etc.
- Asset maintenance on sewerage network (length of mains replaced, etc.)
- The complaints received from customers on sewerage services, flooding of sewers etc.

- The requests on compensation according to Customer contract

Proposed performance targets and outputs are reviewed and updated on an annual basis.

In addition the licence issued to the Water Services Corporation by the Regulator for Energy and Water Services requires inter alia the publication of a Customer Contract by the Water Services Corporation which includes:

- levels of service for providing sewerage services including:
 - in the case of industrial or commercial consumers, the permissible quantity and quality standards of effluent that may be discharged;
 - minimum quality standards of treated effluent;
 - standards on continuity and reliability of the sewerage network;
 - alternative sewage collection and disposal arrangements to customers;
 - arrangements and procedures regarding the provision of a sewerage connection point including:
 - period to connect to Licensee's sewerage network,
 - response time for repairs to portions of the sewerage network that might affect the customer's connection and service;
 - works standards;
 - sanitary restoration in case of flooding of private premises and/or public areas of sewage.
 - levels of service in relation to:
 - billing and payment facilities and procedures;
 - communication response arrangements to complaints and queries by customers;
 - notification arrangements and appointments with customers;
 - arrangements and procedures for dealing with complaints and resolving disputes;
 - arrangements, guidance and procedures for giving appropriate service to vulnerable customers or customers with special needs;
 - period to correct billing errors and effectively address customer complaint
 - a code of practice and procedures on disconnections to the sewerage network;
 - exceptional circumstances where the water utility may be exempted from fulfilling these service obligations. The Customer Contract was brought into effect in July 2011. Prior to entry into force the Customer Contract was published in draft form for public consultation
2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

The licence issued by the Regulator for Energy and Water Services to the water utility establishes reporting requirements on:

- Regulatory Information including Outputs and Performance Indicators reported in Licence Monitoring Reports;
- the manner in which Customer Contract was operated during the preceding year;

- Emergency Response Plans outlining the various risks to WSC operations and established processes and procedures to address such emergency situations and to ensure continuity of service to consumers.

The water utility's performance as reported in the Licence Monitoring Reports and other documentation is reviewed by the Regulator for Energy and Water Services.

The Water Supply and Sewerage Services Regulations and Licence issued by the Regulator for Energy and Water Services further provides powers to the Regulator to:

- assess and audit the operations of water supplier and compliance with licence conditions;
 - issue enforcement orders to ensure compliance to any condition or requirement of the licence.
3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

Sewerage system failures – sewer collapses decreased from 107/1000 km in 2010 to 33/1000 km in 2020.

4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Contributing towards SDG 6 target 6.2 in that by 2030 achieving access to adequate and equiable sanitation and hygiene for all.

5. If you have not set a target in this area, please explain why.

VII. Application of recognized good practices to the management of water supply (art. 6, para. 2 (f))

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

The Maltese national water operator (WSC) uses a systematic approach to manage its potable water network. It uses a methodology recommended by the International Water Association (IWA) to manage leakage from its network.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

The WSC benchmarks its performance of the network using the internationally-recognised Infrastructure Leakage Index (ILI). Over the years, using the model described in 1. above, leakage has been brought down significantly. The target was to reach ILI = 2.

3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

ILI was > 20 in the mid-1990s; it is now <2 (2020), which puts Malta in band A of the World Bank Institute classification.

4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Contributing towards SDG 6 target 6.4 in that by 2030 sustainably increase water-use efficiency across all sectors in this case by enhancing the efficiency of the public water distribution system.

5. If you have not set a target in this area, please explain why.

VIII. Application of recognized good practice to the management of sanitation (art. 6, para. 2 (f))

Refer to Section IV ‘Access to Sanitation’

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.
2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).
3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.
4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.
5. If you have not set a target in this area, please explain why.

IX. Occurrence of discharges of untreated wastewater (art. 6, para. 2 (g) (i))

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

To minimize the occurrence of such events in line with the EU Urban Wastewater Treatment (UWWT) Directive.

The water utility (Water Services Corporation) is regulated by the Regulator for Energy and Water Services for the provision of sewerage services, and through a licence issued under the Water Supply and Sewerage Services Regulations.

Licence Monitoring Reports are submitted on an annual basis by the Water Services Corporation to the Regulator for Energy and Water Services. These reports include inter alia performance indicators and associated targets on:

- Volumes of untreated wastewater disposed to sea,
- Total number of intermittent discharges to the sea
- Total number of incidents of failures of wastewater treatment plants

Proposed performance targets and outputs are reviewed and updated on an annual basis.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

The EU UWWT Directive, regulates the discharge of treated wastewater to sea. The Maltese national water utility (WSC) is in the process of upgrading its wastewater collection and treatment infrastructure.

The licence issued by the Regulator for Energy and Water Services to the water utility establishes reporting requirements on:

- Outputs and Performance Indicators reported in Licence Monitoring Reports;
- Emergency Response Plans outlining the various risks to WSC operations and established processes and procedures to address such emergency situations and to ensure continuity of service to consumers.
- The water utility's performance as reported in the Licence Monitoring Reports and other documentation is reviewed by the Regulator for Energy and Water Services. The Licence issued by the Regulator for Energy and Water Services further provides power to the Regulator to:
 - assess and audit the operations of water supplier and compliance with licence conditions;
 - issue enforcement orders to ensure compliance to any condition or requirement of the licence.

The water utility (Water Services Corporation) is further obliged under the Water Supply and Sewerage Services Regulations and the licence issued to it by the Regulator for Energy and Water Services to notify to the Regulator any breaches or potential breaches to any regulations, directions or codes of practice.

In reporting and investigation any such incidents, the water utility is also required to submit proposals to rectify operations and precautionary measures to ensure against repetition and/or continuation of such breaches.

Link:<http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=12362&l=1>

3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

Sea water quality has dramatically improved over the past few years due to the commissioning of wastewater treatment plants.

4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Contributing towards SDG 6 target 6.3 in that by 2030 improving water quality and the reduction of pollution by minimising the release of hazardous chemicals and materials.

5. If you have not set a target in this area, please explain why.

X. Occurrence of discharges of untreated storm water overflows from wastewater collection systems (art. 6, para. 2 (g) (ii))

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

Baseline:

Collection systems (CSOs) are locally, chiefly designed as separate systems. Heavy urbanisation and cross connectivity of storm-water runoff with the wastewater collection network, is imposing hydraulic overloads on the wastewater collection and treatment systems, translating into occasional inland overflows and overflows to sea, particularly during high intensity rainfall events.

The following legislation covers CSOs:

Requirements of urban waste water collecting systems are set out by the Urban Waste Water Treatment Directive 91/271/EEC (UWWTD) in Article 3 and Annex 1(A) and a footnote (1) of Annex 1(A) stating that:

“The design, construction and maintenance of collecting systems shall be undertaken in accordance with the best technical knowledge not entailing excessive costs, notably regarding: ...

- limitation of pollution of receiving waters due to storm water overflows”

Annex 1(A) footnote (1): “Given that it is not possible in practice to construct collecting systems and treatment plants in a way such that all waste water can be treated during situations such as unusually heavy rainfall, Member States shall decide on measures to limit pollution from storm water overflows. Such measures could be based on dilution rates or capacity in relation to dry weather flow, or could specify a certain acceptable number of overflows per year.”

- Requirements to meet good ecological status of all waters by 2015 are set out by the Water Framework Directive 2000/60/EC (WFD). CSOs are considered in several river basin management plans (RBMPs) as a pressure causing a serious impact on the receiving waters.
- The Bathing Water Directive 2006/7/EC (BWD) addresses the CSO impacts by classifying the bathing waters affected by CSOs as “subject to short-term pollution”. Short-term pollution means microbiological contamination which has clearly identifiable causes, is not normally expected to affect bathing water quality for more than approximately 72 hours after the bathing water quality is first affected and for which the competent authority has established procedures to predict and deal with.

Target:

To minimize diluted wastewater overflows to land and sea during storm events.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

To maintain wastewater collection network detention galleries and basins as well as treatment plants, so as to minimize overflows to land and sea

A national investment plan (2022-2025) has been drafted to address key wastewater treatment plant and collection system upgrades, targeting increased demand requirements, renewal of ageing infrastructure and curbing of seawater infiltration in low lying sewer lines and wastewater pumping stations.

3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.
4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Contributing towards SDG 6 target 6.3 in that by 2030 improving water quality and the reduction of pollution by minimising the release of hazardous chemicals and materials.

5. If you have not set a target in this area, please explain why.

XI. Quality of discharges of wastewater from wastewater treatment installations (art. 6, para. 2 (h))

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

To establish and maintain stable operations and keep to the parameters set out under the EU Urban Wastewater Directive.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

Refer to Section IX (2) above.

3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Contributing towards SDG 6 target 6.3 in that by 2030 improving water quality and the reduction of pollution by minimising the release of hazardous chemicals and materials.

5. If you have not set a target in this area, please explain why.

XII. Disposal or reuse of sewage sludge from collective systems of sanitation or other sanitation installations (art. 6, para. 2 (i))

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

To divert sewage sludge disposal away from landfill with possible energy recovery. This is being undertaken in the context of the EU Circular Economy guidelines and EU Landfilling target reductions.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

A feasibility study is being carried out by the Water Service Corporation to identify the most suitable option/s for adoption.

3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

Currently carrying out the feasibility assessment.

4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Contributing towards SDG 6 target 6.3 in that by 2030 improving water quality and the reduction of pollution by minimising the release of hazardous chemicals and materials.

5. If you have not set a target in this area, please explain why.

XIII. Quality of wastewater used for irrigation purposes (art. 6, para. 2 (i))

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

Three reclaimed water polishing plants were commissioned between 2017 and 2018. The plants are designed around a multi-barrier process consisting of Ultra-Filtration, Reverse Osmosis and Advanced Oxidation, consistently rendering Class A quality treated effluent, as defined in the EU Water Reuse Regulation (2020/741).

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

The plants are providing Class A treated effluent for unrestricted irrigation, in line with the EU Water Reuse Regulation.

3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

NA

4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Contributing towards SDG 6 target 6.3 in that by 2030 improving water quality and the reduction of pollution by minimising the release of hazardous chemicals and materials, particularly through the collection, treatment and reuse of waste waterwater.

5. If you have not set a target in this area, please explain why.

XIV. Quality of waters which are used as sources for drinking water (art. 6, para. 2 (j))

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

Objective set under EU Water Framework Directive: Good status by 2027 or when natural conditions permit.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

Please refer to the Implementation of actions under the Second River Basin Management Plan (2015-2021).

3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

Currently in the process of achieving good quantitative status in all groundwater bodies whilst the achievement of good qualitative status depends on the natural response time of the aquifer systems.

4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Contributing towards SDG 6 target 6.1 in that by 2030 achieving universal and equitable access to safe and affordable drinking water for all.

5. If you have not set a target in this area, please explain why.

XV. Quality of waters used for bathing (art. 6, para. 2 (j))

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

Coastal bathing water in Malta is monitored by the Environmental Health Directorate (EHD) in accordance with the provisions of Legal Notice 125 of 2008 as amended by Legal Notice 237 of 2011. These national regulations transpose Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006, concerning the management of bathing water quality.

Link to Legal Notice 125 of 2008:
<http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=11866&l=1>

Link to EEA bathing water report: <https://www.eea.europa.eu/themes/water/europes-seas-and-coasts/assessments/state-of-bathing-water/country-reports-2020-bathing-season/maltese-bathing-water-quality-in-2020/view>

Malta has identified a total of 87 coastal bathing waters covering the 3 main islands of the Maltese archipelago i.e. Malta, Gozo and Comino. All 87 coastal bathing waters are monitored every week during the official bathing season which starts from the 3rd week of May to the 3rd week of October. The bathing water quality is then classified using the criteria as defined by the same directive for the 2 microbiological parameters based on 4 years data for each site. All 87 sites are monitored approximately four times as much the required minimum frequency stipulated in Annex IV of Directive 2006/7/EC, meaning samples are collected every week rather than every four weeks. During the bathing season, the EHD issues weekly reports with the classification of each bathing site based on the Escherichia coli and Intestinal enterococci counts.

<https://deputyprimeminister.gov.mt/en/environmental/Health-Inspectorate/WRAU/Pages/Bathing-Water-Programme.aspx>

Samples are collected from each site and submitted to the Public Health Laboratory to be analysed for the two microbiological parameters i.e. E. coli and Intestinal enterococci. The analytical microbiological methods used to assess compliance with the Directive are, Intestinal enterococci - Microplate MPN technique (ISO 7899 -1:2000) and Escherichia coli - Microplate MPN technique (ISO 9308 - 3:2000). Analysis is performed at the Public Health Laboratory (PHL) by qualified personnel with years of experience in water analysis. The laboratory is accredited for Intestinal enterococci and Escherichia coli parameters

The classification of all 87 was assessed as per Annex II of the Directive 2006/7/EC and resulted as follows in table 1 below:

84 sites classified as Excellent	-	96.6%
3 sites classified as Good	-	3.4%
0 sites classified as Sufficient	-	0.0%
0 sites classified as Poor	-	0.0%

Table 1 Classification 2020

The target is to comply with the requirements of the Bathing Water Directive and achieve 100% excellent quality. A decline in quality was noticed over the past two years during the pandemic, due to increased use of recreational boats and camper vans, among other potential issues (see figure 3 below). The Environmental Health Directorate is planning to discuss this with all the relevant entities so as to come up with a plan and establish mitigation measures.

	Total number of bathing waters	Excellent		Good		Sufficient		Poor		Not classified		
		Count	%	Count	%	Count	%	Count	%	Count	%	
Total	2017	87	86	98.9%	1	1.1%	0	0.0%	0	0.0%	0	0.0%
	2018	87	86	98.9%	1	1.1%	0	0.0%	0	0.0%	0	0.0%
	2019	87	85	97.7%	2	2.3%	0	0.0%	0	0.0%	0	0.0%
	2020	87	84	96.6%	3	3.4%	0	0.0%	0	0.0%	0	0.0%

Figure 3 Number of bathing waters by quality class for the last assessment period 2017–2020. Source: (European Environment Agency, 2021)

- Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

Since Malta is not a signatory to the Protocol, bathing water is monitored vis a vis the Bathing Water Directive, which in principle advocates for the same objectives.

Malta has been monitoring its official bathing areas for decades and bathing sites were classified with the criteria stipulated under the Barcelona Convention. However, since 2004 when Malta became an EU Member State, bathing water quality started also being monitored and classified according to the EU Directives. Data for both classifications is being provided in Graph 1 and Table 1 below. The EHD has completed the compilation of 29 beach profiles covering all 87 bathing sites monitored as part of the annual bathing water monitoring programme in 2013. Every year a revised version of the beach profile is published and copies of these reports can be found at the following

<https://deputyprimeminister.gov.mt/en/environmental/Health-Inspectorate/WRAU/Pages/Bathing-Water-Profiles.aspx> . Moreover,

As part of the management programme, Environmental Health Officers carry out routine site-inspections so as to check for any possible sources of pollution. These officers also investigate any complaints made by the public and when in doubt, extra samples are collected and sent for analysis at the designated laboratory. In the case that visual evidence of pollution is noted or unsatisfactory results, the affected site is temporarily closed and bathing would not be recommended. If there will be the need to temporary close any of these areas, a temporary closure sign is affixed at the same site and the information is provided in five languages, Maltese, English, French, German, and Italian. As from bathing season 2018, a short-term pollution report is published following each temporary closure of a bathing site. These reports can be found at the following

<https://deputyprimeminister.gov.mt/en/environmental/Health-Inspectorate/WRAU/Pages/Short-Term-Pollution-Reports.aspx>

All bathing areas monitored as part of the bathing water monitoring programme are clearly identified by fixed information signs in five languages, indicating the site code and stating that the area is monitored by the EHD on a regular basis. In 2018, a QR code which provides the raw data for each Blue Flag beach was affixed to the information boards. The EHD has new information boards which provide further information on the classification of sites and beach profiles in the pipeline.

3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

As can be seen from the classification graph figure 4 below there has been a positive progress in the bathing water quality both as for the requirements of the EU Directive and the Barcelona Convention.

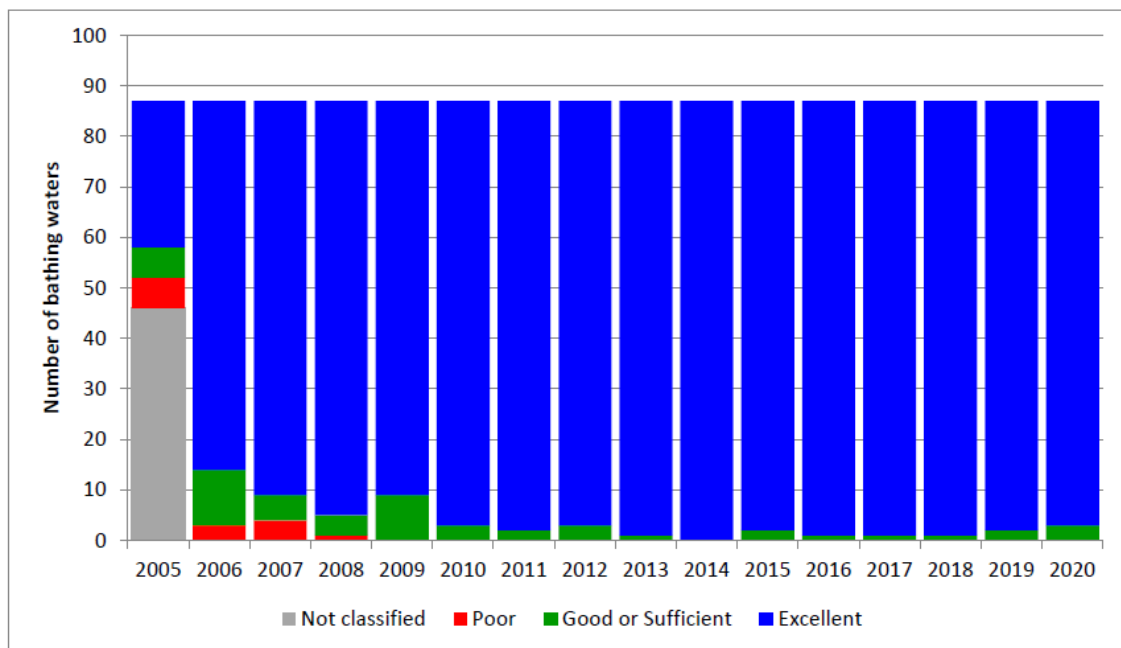


Figure 4 Bathing water quality by water category and season (EEA, 2021)

Bathing water quality by water category and season. Each column represents an absolute number of bathing waters in the season. Quality classes “good” and “sufficient” are merged for comparability with the classification of the preceding Bathing Water Directive 76/160/EEC. Source: (European Environment Agency, 2021)

4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.
5. If you have not set a target in this area, please explain why.

XVI. Quality of waters used for aquaculture or for the production or harvesting of shellfish (art. 6, para. 2 (j))

This is not applicable to MT as we have no land-based/freshwater aquaculture or similar industries for the harvesting of shellfish.

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.
2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).
3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.
4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.
5. If you have not set a target in this area, please explain why.

XVII. Application of recognized good practice in the management of enclosed waters generally available for bathing (art. 6, para. 2 (k))

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

Official bathing sites all form part of coastal water bodies open sea. Enclosed bathing waters are usually harbour areas, which are not designated as bathing sites. There are no lakes and other enclosed waters that are official bathing sites. Bathing sites are monitored as explained in the section XV.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).
3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.
4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.
5. If you have not set a target in this area, please explain why.

XVIII. Identification and remediation of particularly contaminated sites (art. 6, para. 2 (l))

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

For facilities falling under the EU Industrial Emission Directive (IED), requirements for land monitoring data and an Outline Decommissioning Plan arise from Regulation 7 of Industrial Emissions (Integrated Pollution Prevention and Control) Regulations (LN 10 of 2013), which transpose the EU Industrial Emissions (IPPC) Directive (2010/75/EU) into Maltese law (IED). Soil screening values and groundwater threshold values for Malta have been determined based on relevant EU regulations and international guidance documents. Later on such a document also provided a scientific basis for the drafting of general Terms of Reference for land and groundwater contamination investigations to be carried out for potentially contaminated sites, either before their redevelopment or after decommissioning. In cases which do not fall within the scope of the IED, the provisions of SL 549.97 (Prevention and Remedying of Environmental Damage Regulations) or SL 549.63 (Waste Regulations) may be applied.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

The compilation of the list of contaminated and potentially contaminated sites in Malta is an ongoing process, as is the assessment of the likelihood, extent and significance of contamination. The compilation of the list takes into consideration various potentially polluting installations (e.g. petrol stations, slurry pits, scrapyards and historical military fuel storage sites) where there is a risk of seepage of contaminants and groundwater contamination.

Malta is in the process of initiating a study aimed at determining local background levels of specific contaminants in land and groundwater with the aim of producing National screening levels for both industrial and residential uses.

3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

The requirement for remediation may depend on the projected after-use of the site. Soil screening values and groundwater threshold values established are different in cases of “industrial” and “residential” after uses. In different cases, the Authority may require specific techniques ranging from site sealing to full remediation activities.

4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Contributing towards SDG 6 target 6.3 in that by 2030 improving water quality and the reduction of pollution by minimising the release of hazardous chemicals and materials.

5. If you have not set a target in this area, please explain why.

XIX. Effectiveness of systems for the management, development, protection and use of water resources (art. 6, para. 2 (m))

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

The River Basin Management Plan sets out the objectives in each water body in order to maintain good ecological and chemical status or to achieve it. The target of good ecological status, good chemical status and no deterioration are expected to be achieved at a water body level and cover the waters of the Maltese Water Catchment District (i.e. the whole of the Maltese Islands). The plan providing details on each target and related actions to achieve those targets is accessible from the following link:

https://era.org.mt/en/Documents/2nd_Water_Catchment_Management_Plan-Malta_Water_in_Maltese_Islands.pdf

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

Actions are described in the Second River Basin Management Plan (2015-2021).

3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

Please refer to the programme of measures under the Second River Basin Management Plan which highlighted all the measures and actions taken by Malta.

4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Contributing towards SDG 6 target 6.4 in that by 2030 sustainably increase water-use efficiency across all sectors and 6.6 by protecting and restoring water-related ecosystems.

5. If you have not set a target in this area, please explain why.

~~XX. Additional national or local specific targets~~

In cases where additional targets have been set, for each target:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.
2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).
3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.
4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.
5. If you have not set a target in this area, please explain why.

Part three

Common indicators¹

I. Quality of the drinking water supplied

1. Context of the data

1. What is the population coverage (in millions or per cent of total national population) of the water supplies reported under sections 2 and 3 below?

¹ In order to allow an analysis of trends for all Parties under the Protocol, please use wherever possible 2005 — the year of entry into force of the Protocol — as the baseline year.

The percentage of Maltese population with access to drinking water is 100%, as quoted in Malta’s SDGs publication (page 168):

“Indeed, the 2011 Census of Population and Housing showed that from 152,770 occupied dwellings, 152,732 had a potable water supply system, which translates into a national rate of 100% for the provision of safely managed drinking water services.” Source: National Statistics Office (2014), Census of Population and Housing 2011, Final Report, Valletta.

The EU Survey on Income and Living Conditions (EU-SILC) (2019) shows that in Malta the percentage of population having at least a bath, a shower or a toilet in their household is 99.8%. This percentage was stable throughout the 2010–2019 period being reviewed (see figure 5 below)

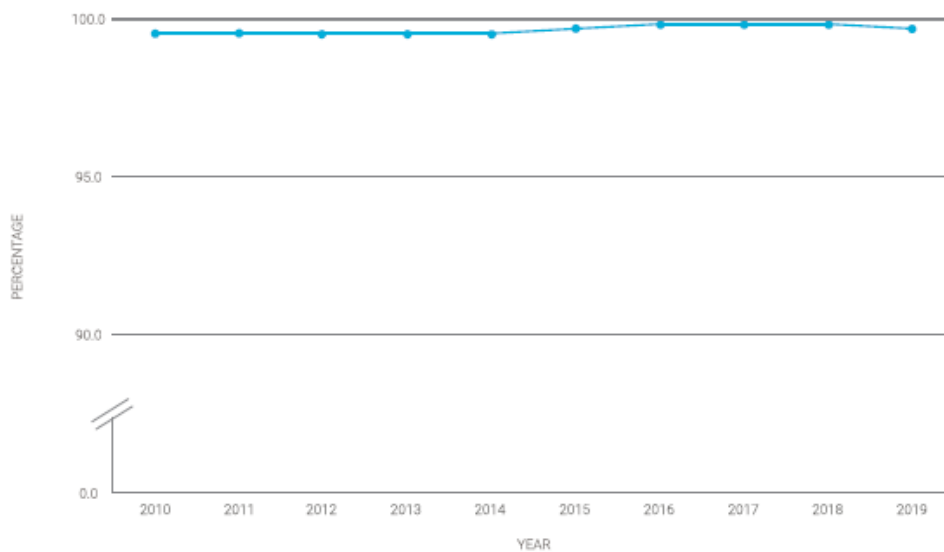


Chart 6.f: Population having at least a bath, a shower or a toilet in their household; EU-SILC, NSO

Figure 5 Population having at least a bath, a shower or a toilet 2010–2019 (NSO, 2021)

The rationale of this question is to understand the population coverage of the water quality data reported under sections 2 and 3 below.

Please describe the type of water supplies for which data is included in the following tables, and the population share covered by these supplies.

Please also clarify the source of the water quality data provided (e.g., data from regulatory authorities).

“It is estimated that in 2010, 44.9 million m³ of freshwater were withdrawn—2.6 million m³ from rainwater harvesting and 42.3 million m³ from groundwater. Other water resources included 16.8 million m³ from desalinated water production and 1.27 million m³ from treated wastewater. By 2019, total water abstraction and production remained similar to 2010—63 million m³. However, freshwater withdrawal decreased slightly to 40.9 million m³—3.0 million m³ from rainwater harvesting and 37.9 million m³ from groundwater. On the other hand, desalinated water production increased to 21.2 million m³ whilst reused treated wastewater decreased slightly to 1.0 million m³ (NSO, 2021)”. Water resources by source of abstraction and production are illustrated in the figure 6 below as abstracted from NSO (2021).

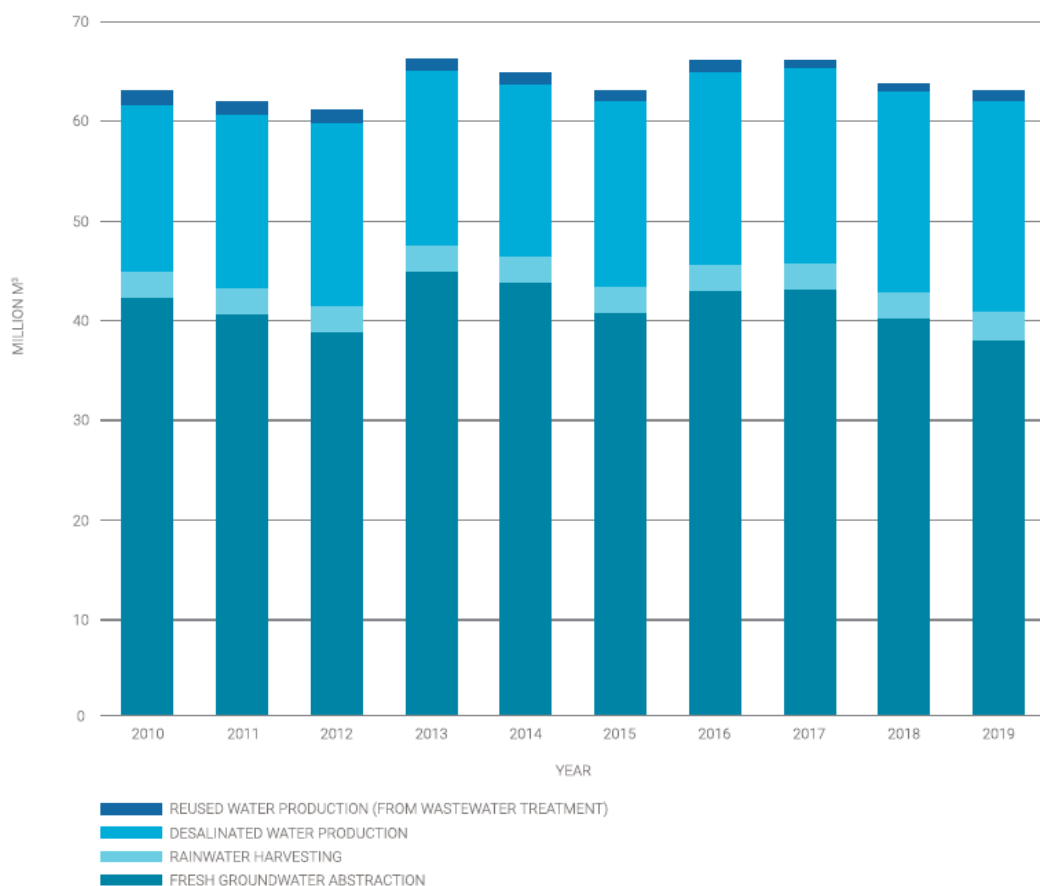


Figure 6 Water resources by source of abstraction and production (NSO, 2021)

Link: <https://nso.gov.mt/en/nso/Media/Salient-Points-of-Publications/Pages/2021/Sustainable-Development-in-Malta--Statistical-Information-on-the-2030-Agenda-in-Malta---2021.aspx>

Link to further qualitative and quantitative information: http://ec.europa.eu/environment/water/participation/map_mc/countries/malta_en.htm

- Please specify from where the water quality samples reported in sections 2 and 3 below are primarily taken (e.g., treatment plant outlet, distribution system or point of consumption).

Samples are elevated from treatment plant outlet, distribution system and point of consumption.

The rationale of this question is to understand where the samples were primarily taken from for the water quality data reported in sections 2 and 3 below.

- In sections 2 and 3 below, the standards for compliance assessment signify the national standards. If national standards for reported parameters deviate from the World Health Organization (WHO) guideline values, please provide information on the standard values.

Malta adopts the requirements under the European Union Drinking Water Directive EU 2184/2020.

The rationale of this question is to understand any possible differences between the national standards for microbiological and chemical water quality parameters and the respective WHO guideline values.²

2. Bacteriological quality

4. Please indicate the percentage of samples that fail to meet the national standard for *Escherichia coli* (*E. coli*). Parties may also report on up to three other priority microbial indicators and/or pathogens that are subject to routine water quality monitoring.

If possible, please provide segregated data for urban and rural areas in the table below. If this is not possible, please consider reporting by alternative categories available in your country, for example by “non-centralized versus centralized” water supplies or by population number-based categories. If you do so, please indicate the reported categories by renaming the rows in the column “area/category” in the table below accordingly.

If data can be reported neither for urban and rural areas nor for alternative categories, please report total (national) values only.

Please comment on the trends or provide any other important information supporting interpretation of the data.

The supply of drinking water conforms with the microbiological parameters stipulated under the EU Drinking Water Directive (figure 7). When an exceedance takes place, generally a rare finding of 1 or 2 coliforms in the system, the water supplier notifies the authorities and provides the corrective action and the result of the repeat sample indicating that the system is back under control within a day or two.

ANNEX I

MINIMUM REQUIREMENTS FOR PARAMETRIC VALUES USED TO ASSESS THE QUALITY OF WATER INTENDED FOR HUMAN CONSUMPTION

Part A

Microbiological parameters

Parameter	Parametric value	Unit	Notes
Intestinal enterococci	0	number/100 ml	For water put into bottles or containers, the unit is number/250 ml.
<i>Escherichia coli</i> (<i>E. coli</i>)	0	number/100 ml	For water put into bottles or containers, the unit is number/250 ml.

Figure 7 Annex 1 DWD 2020

3. Chemical quality OUTDATED DATA

5. Please report on the percentage of samples that fail to meet the national standard for chemical water quality with regard to the following parameters:

- (a) Arsenic;

² The latest edition of the WHO *Guidelines for Drinking-water Quality* is available at: http://www.who.int/water_sanitation_health/publications/dwq-guidelines-4/en/.

- (b) Fluoride;
- (c) Lead
- (d) Nitrate.

6. Please also identify up to three additional chemical parameters that are of priority in the national or local context.

If possible, please provide segregated data for urban and rural areas in the table below. If this is not possible, please consider reporting by alternative categories available in your country, for example by “non-centralized versus centralized” sanitation systems or by population number-based categories. If you do so, please indicate the reported categories by renaming the rows in the column “area/category” in the table below accordingly.

If data can be reported neither for urban and rural areas nor for alternative categories, please report total (national) values only.

Please comment on the trends or provide any other important information supporting interpretation of the data.

0% noncompliance = 100% compliance

Substance	Baseline value (please specify the year)	Value reported in the previous reporting cycle (specify year)	Current value (specify year)
Fluoride	<i>0% (2006)</i>	<i>0% (2017)</i>	<i>0% (2020)</i>
Nitrate and nitrite	<i>0% (2004)</i>	<i>0% (2017)</i>	<i>0% (2020)</i>
Arsenic¹	<i>0% (2004)</i>	<i>0% (2017)</i>	<i>0% (2020)</i>
Lead	<i>0% (2004)</i>	<i>0% (2017)</i>	<i>0% (2020)</i>
Iron	<i>10% (2011)</i>	<i>8% (2017)</i>	<i>0% (2020)</i>
Additional chemical parameter 1: <i>Boron</i>	<i>0% (2004)</i>	<i>4% (2017)</i>	<i>5% (2020)</i>
Additional chemical parameter 2: <i>THMs (Total)</i>	<i>0% (2004)</i>	<i>0% (2017)</i>	<i>0% (2020)</i>
Additional chemical parameter 3: <i>pH</i>	<i>0% (2004)</i>	<i>0% (2017)</i>	<i>0% (2020)</i>
Additional chemical parameter 5: <i>Benzo(a)pyrene</i>	<i>0% (2004)</i>	<i>0% (2017)</i>	<i>0% (2020)</i>

Substance	Baseline value (please specify the year)	Value reported in the previous reporting cycle (specify year)	Current value (specify year)
No issue with results for Arsenic, Fluoride, Lead and Nitrate.			
The presence of Boron in Malta's drinking water was attributed to dependence on seawater desalination for 60% of the potable water demand; Boron is a naturally occurring element in seawater. With the introduction of high rejection RO membranes a drastic improvement was registered.			
The parametric value for Boron has been increased under the Drinking Water Recast, hence nonconformances are expected to decrease drastically.			

II. Outbreaks and incidence of infectious diseases related to water

In filling out the below table, please consider the following points:

(a) For reporting outbreaks, please report confirmed water-related outbreaks only (i.e., for which there is epidemiological or microbiological evidence for water to have facilitated infection);

(b) For reporting incidents, please report the numbers related to all exposure routes. In your response:

(i) Please report cases per 100,000 population;

(ii) Please differentiate between zero incidents (0) and no data available (-).

Please extend the list of water-related diseases, to the extent possible, to cover other relevant pathogens (e.g., enteric viruses, *Giardia intestinalis*, *Vibrio cholerae*).

Please indicate how the information is collected (e.g., event-based or incidence-based surveillance).

Please comment on the trends or provide any other important information supporting interpretation of the data.

Disease	Actual Number of Cases	Incidence rate per 100,000 population (all exposure routes)			Number of Cases 2019-2021	Number of outbreaks (confirmed water-borne outbreaks)		
	Number of Cases 2019-2021	Baseline (Average 2014-2018)	Value reported in the previous reporting cycle (2015)	Current value (2018)		Baseline (Average 2014-2018)	Value reported in the previous reporting cycle (2015)	Current value (2018)
Shigellosis	0	0.67	0.2	2.5 (12 cases of which 7 were imported)	0	0	0	0
Enterohaemorrhagic <i>E. coli</i> infection	0	0.33	0.4	0.2 (1 non-toxicogenic case reported)	0	0	0	0
Typhoid fever	0	0	0	0	0	0	0	0

Viral hepatitis A	4 (2 Imported)	1.4	0.9	0.84 (4 cases of which 3 were imported)	0	0	0	0
Legionellosis	29	1.8	Not reported	2.5	0	0.4	Not reported	0
Cryptosporiosis	6 (1 Imported)	0.2	Not reported	0.2	0	0	Not reported	0
Cholera	0	0	Not reported	0	0	0	0	0
Amoebiasis	0	0.04 (1 imported case in 2016)	Not reported	0	0	0	0	0

III. Access to drinking water

If possible, please provide segregated data for urban and rural areas in the table below. If this is not possible, please consider reporting by alternative categories available in your country, for example by “non-centralized versus centralized” water supply systems or by population number-based categories. If you do so, please indicate the reported categories by renaming the rows in the table below accordingly.

If data can be reported neither for urban and rural areas nor for alternative categories, please report total (national) values only.

Please comment on the trends or provide any other important information supporting interpretation of the data with regard to access to drinking water.

Percentage of population with access to drinking water	Baseline value (specify year)	Value reported in the previous reporting cycle (specify year)	Current value (specify year)
Total	100% (2004)	100% (2019)	100% (2021)
Urban	100% (2004)	100% (2019)	100% (2021)
Rural	100% (2004)	100% (2019)	100% (2021)

- Estimates provided by the WHO/United Nations Children’s Fund (UNICEF) Joint Monitoring Programme (JMP) for Water Supply and Sanitation. *JMP definitions are available at <http://www.wssinfo.org/definitions-methods/watsan-categories>.*

- National estimates. Please specify how “access” is defined and what types of drinking-water supplies are considered in the estimates in your country.

In particular, please specify if the above percentage on “access to drinking water” refers to access to (tick all applicable):

- Improved drinking water sources (as per JMP definition)

- Supplies located on premises
- Supplies available when needed
- Supplies that provide drinking water free from faecal contamination

As per JMP definition: *Improved water sources are those which, by nature of their design and construction, have the potential to deliver safe water. Improved sources include: piped water, boreholes or tubewells, protected dug wells, protected springs, rainwater, and packaged or delivered water.*

IV. Access to sanitation

If possible, please provide segregated data for urban and rural areas in the table below. If this is not possible, please consider reporting by alternative categories available in your country, for example by “non-centralized versus centralized” sanitation systems or by population number-based categories. If you do so, please indicate the reported categories by renaming the rows in the table below accordingly.

If data can be reported neither for urban and rural areas nor for alternative categories, please report total (national) values only.

Please comment on the trends or provide any other important information supporting interpretation of the data with regard to access to sanitation.

<i>Percentage of population with access to sanitation</i>	<i>Baseline value (specify year)</i>	<i>Value reported in the previous reporting cycle (specify year)</i>	<i>Current value (specify year)</i>
Total			
Urban		100% (2019)	100% (2021)
Rural		100% (2019)	100% (2021)

- Estimates provided by JMP. *JMP definitions are available at <http://www.wssinfo.org/definitions-methods/watsan-categories>.*
- National estimates. *Please specify how “access” is defined and what types of sanitation facilities are considered in the estimates in your country.*

In particular, please specify if the above percentage on “access to sanitation” refers to access to (tick all applicable):

- Improved sanitation facilities (as per JMP definition)
- Facilities not shared with other households
- Facilities from which excreta is safely disposed in situ or treated off site

The definition on the Global WASH in Health Care Facility Indicators states that “*Improved sanitation facilities are those designed to hygienically separate excreta from human contact. Improved facilities include: flush/pour flush to piped sewer system, septic tanks or pit latrines; ventilated improved pit latrines, composting toilets or pit latrines with slabs.*” Quoting the EU-SILC data, available on the Eurostat website, the total Maltese population not having indoor flushing toilet for the sole use of their household shows at 0.1% for most years between 2011 and 2020. Hence, unless there are discrepancies in the definitions, the percentage of Maltese population with access to sanitation translates to 99.9%, or 100%. Source: **Eurostat, Online Data Code ILC_MDHO03.**

V. Effectiveness of management, protection and use of freshwater resources

1. Water quality

1. On the basis of national systems of water classification, please indicate the percentage of water bodies or the percentage of the volume (preferably) of water³ falling under each defined class (e.g., for European Union countries and other countries following the European Union Water Framework Directive⁴ classification, the percentage of surface waters of high, good, moderate, poor and bad ecological status, and the percentage of groundwaters/surface waters of good or poor chemical status; for other countries, in classes I, II, III, etc.).

Information on the status of surface and groundwater bodies can be found in the 2nd River Basin Management Plan, however, most of the relevant information for this section dates back to 2015-2017 making it obsolete for this reporting cycle. The 3rd River Basin Management Plan will be published this year and will be forwarded to UNECE upon request.

Link: Environment and Resources Authority, *The 2nd Water Catchment Management Plan for the Malta Water Catchment District 2015 – 2021*, available online at <https://era.org.mt/wp-content/uploads/2019/05/2nd-Water-Catchment-Management-Plan-Malta-Water-in-Maltese-Islands-3.pdf>

(a) For European Union countries and other countries following the European Union Water Framework Directive classification

(i) Ecological status of surface water bodies

<i>Percentage of surface water classified as:</i>	<i>Baseline value (specify year)</i>	<i>Value reported in the previous reporting cycle (specify year)</i>	<i>Current value (specify year)</i>
High status			
Good status			
Moderate status			
Poor status			
Bad status			
Total number/volume of water bodies classified			
Total number/volume of water bodies in the country			

(ii) Chemical status of surface water bodies

<i>Percentage of surface water bodies classified as</i>	<i>Baseline value (specify year)</i>	<i>Value reported in the previous reporting cycle (specify year)</i>	<i>Current value (specify year)</i>
Good status			
Poor status			

³ Please specify.

⁴ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy.

	<i>Baseline value (specify year)</i>	<i>Value reported in the previous reporting cycle (specify year)</i>	<i>Current value (specify year)</i>
<i>Percentage of surface water bodies classified as</i>			

Total number/volume of water bodies classified

Total number/volume of water bodies in the country

(iii) *Status of groundwaters*

	<i>Baseline value (specify year)</i>	<i>Value reported in the previous reporting cycle (specify year)</i>	<i>Current value (specify year)</i>
<i>Percentage of groundwaters classified as</i>			

Good quantitative status

Good chemical status

Poor quantitative status

Poor chemical status

Total number/volume of groundwater bodies classified

Total number/volume of groundwater bodies in the country

2. Please provide any other information that will help put into context and aid understanding of the information provided above (e.g., coverage of information provided if not related to all water resources, how the quality of waters affects human health).

2. Water use

3. Please provide information on the water exploitation index at the national and river basin levels for each sector (agriculture, industry, domestic), i.e., the mean annual abstraction of freshwater by sector divided by the mean annual total renewable freshwater resource at the country level, expressed in percentage terms.

See below figures

	<i>Baseline value (specify year)</i>	<i>Value reported in the previous reporting cycle (specify year)</i>	<i>Current value (specify year)</i>
<i>Water exploitation index</i>			
Agriculture			
Industry ^a			
Domestic use ^b			

^a Please specify whether the figure includes both water abstraction for manufacturing industry and for energy cooling.

^b Please specify whether the figure only refers to public water supply systems or also to individual supply systems (e.g., wells).

When computed over the period 2007 to 2014, the WEI+ index for Malta ranges between 46% and 103%. WEI+ calculations on a ‘long term annual average’ basis for the Malta Water Catchment District yield levels of 78%, thereby confirming the water stressed nature of the country.

“Data for Malta shows that available renewable freshwater resources (annual) during the period under review amounted to 84.6 million m³. These freshwater resources are totally dependent on local precipitation since Malta, being an archipelago of islands, does not have any external inflow (such as through rivers) from other countries. In 2010, the percentage of freshwater withdrawal from available freshwater resources was 53.1%. In 2019, the proportion of freshwater withdrawal decreased to 48.4%. However, the decreasing trend was not constant and in the intervening years fluctuations can be noted” (NSO, 2021). Figures 8 and 10 below illustrate the available freshwater resources, freshwater withdrawal (left axis), and level of water stress (right axis) as extracted from NSO (2021).

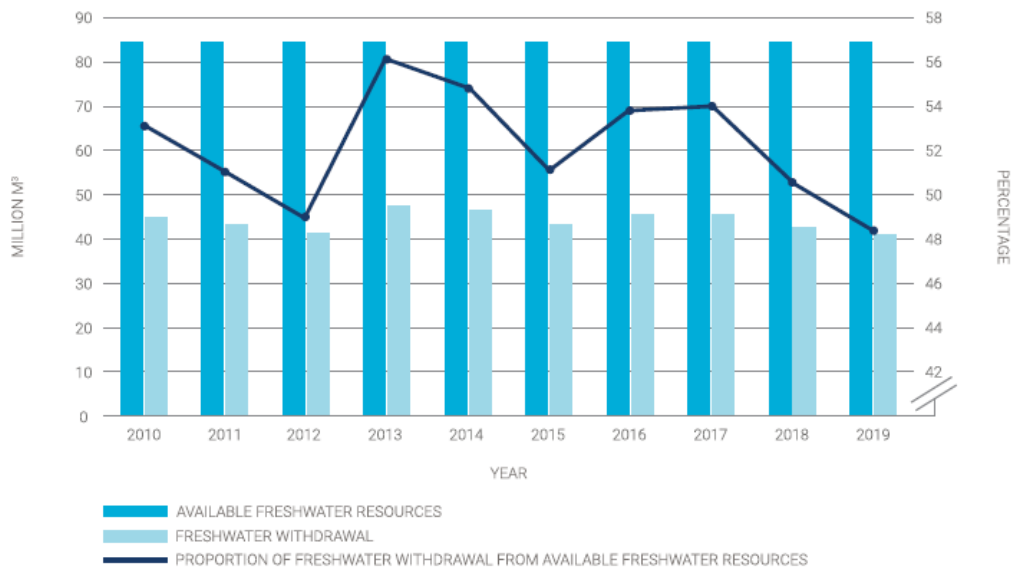


Figure 8 available freshwater resources, freshwater withdrawal and level of water stress (NSO, 2021).

“Since 2010, total water-use in Malta increased by only 0.3% from 58.86 million m³ in 2010 to 59.03 million m³ in 2019. In 2010, 29.9 million m³ of total water used was by the ‘agriculture, forestry, and fishing’ sector, while 19.5 million m³ was used by private households, 6.2 million m³ by the ‘services’ sector, and 3.2 million m³ by the ‘industrial’ sector. In 2019, water usage by private households, the ‘services’ sector, and the ‘industrial’ sector increased by 18.7%, 40.9%, and 19.6% respectively when compared to 2010. Conversely, water usage by the ‘agriculture, forestry, and fishing’ sector decreased by 22.1%, mainly driven by lower agricultural production levels” (NSO, 2021). Water used by sector illustrated in figure 9 below as extracted from NSO (2021).

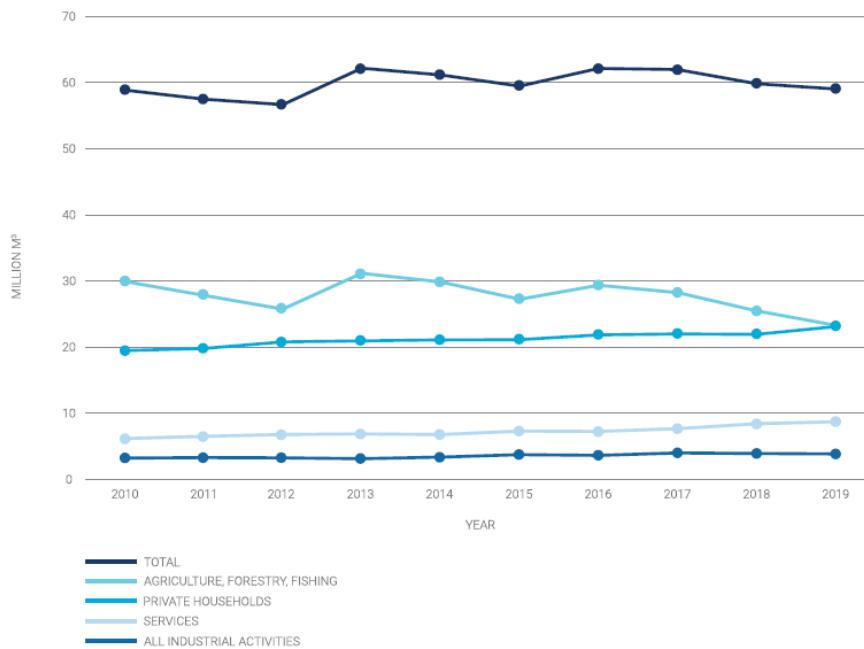


Figure 9 Water used by sector (NSO, 2021).

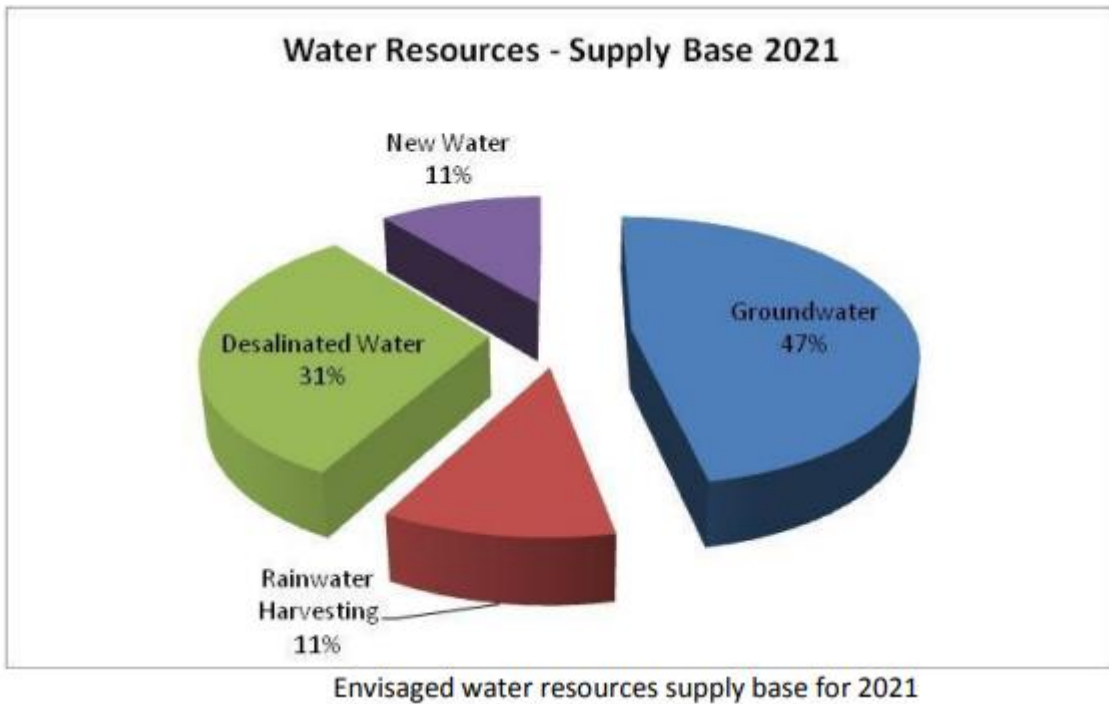


Figure 10 Water resources (2nd RBMP)

Part four

Water-related disease surveillance and response systems

1. In accordance with the provisions of article 8 of the Protocol:

Has your country established comprehensive water-related disease surveillance and early warning systems according to paragraph 1 (a)?

YES NO IN PROGRESS

Has your country prepared comprehensive national or local contingency plans for responses to outbreaks and incidents of water-related disease according to paragraph 1 (b)?

YES NO IN PROGRESS

Do relevant public authorities have the necessary capacity to respond to such outbreaks, incidents or risks in accordance with the relevant contingency plan according to paragraph 1 (c)?

YES NO IN PROGRESS

2. If yes or in progress, please provide summary information about key elements of the water-related disease surveillance and outbreak response systems (e.g., identification of water-related disease outbreaks and incidents, notification, communication to the public, data management and reporting). Please also provide reference to existing national legislation and/or regulations addressing water-related disease surveillance and outbreak response.

The Infectious Disease Prevention and Control Unit (IDCU) within the Health Promotion and Disease Prevention Directorate of the Maltese Ministry for Health is the national surveillance centre for communicable diseases in Malta. The main objectives of IDCU are:

- To undertake surveillance of communicable diseases in Malta.

- To improve reporting of notifiable diseases by creating methods that would encourage early notification.
- To disseminate relevant, accurate and timely information.
- To control infections through timely investigation and management of incidents of communicable diseases.
- To undertake epidemiological research in the area of infectious diseases
- To provide advice on communicable diseases to health professionals and the general public.
- To contribute to training in communicable disease control.

The Public Health Act allows the Superintendent of Public Health or delegates to enter any place where there is suspicion of an outbreak and take all the necessary measures required to stop an outbreak including ordering tests, closing down the place where the outbreak is happening, isolating and quarantine cases etc

The Infectious Disease Prevention and Control Unit (IDCU) collates data on 72 notifiable diseases, including food and water borne infections. General practitioners, hospitals and medical diagnostic laboratories (public and private) have to report to IDCU either by mail, fax, e-mail, or telephone. IDCU also actively collate data from the main general hospital laboratory on cases of infectious diseases. Case-definitions are based on EU case definitions. All cases are investigated by IDCU staff using dedicated questionnaires in order to identify the source of the infection and prevent additional cases.

IDCU also liaises with the relevant authorities in order to implement the necessary public health control measures. The unit collaborates closely with other directorates and ministries in outbreak investigations and surveillance, namely, the Environmental Health Directorate and the Veterinary Department. IDCU also promotes awareness amongst the public on infectious diseases. IDCU also provides the necessary communications on mitigation measures to the cases, general practitioners, general public and media depending on the situation.

SOPs exist for the investigation of cases and they are regularly updated. A 24/7 on call service of the IDCU for urgent notifications or public health emergencies is also in place. A helpline for the public operates when there is a Public Health Emergency of International Concern. Data is analysed regularly and monthly, quarterly and annual reports are issued. IDCU also regularly reports data to ECDC, WHO and other relevant authorities and communicates internationally and with stakeholders and via EWRS whenever this is required.

Public Health Act:
<http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=8931>

Food Safety Act
<http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=8915&l=1>

Additional legal notices:

<https://deputyprimeminister.gov.mt/en/environmental/Legislation/Pages/Food-Legislation/National/Food-Safety-Act-and-Legal-Notices.aspx>

3. Please describe what actions have been taken in your country in the past three years to improve and/or sustain water-related disease surveillance, early warning systems and contingency plans, as well as to strengthen the capacity of public authorities to respond to

water-related disease outbreaks and incidents, in accordance with the provisions of article 8 of the Protocol.

Part five

Progress achieved in implementing other articles of the Protocol

Please provide a short description of the status of implementation of articles 9 to 14 of the Protocol, as relevant.

Suggested length: up to two pages

Part six

Thematic part linked to priority areas of work under the Protocol

1. Water, sanitation and hygiene in institutional settings

1. In the table below, please provide information on the proportion of schools (primary and secondary) and health-care facilities that provide basic water, sanitation and hygiene (WASH) services.

All schools (primary and secondary) and health-care facilities provide basic water, sanitation and hygiene (WASH) services, including first class hot and cold water running through all taps, and soap and hand drying facilities. Bathrooms are sex separated.

Link to JMP report: <https://nso.gov.mt/en/nso/Media/Salient-Points-of-Publications/Pages/2021/Sustainable-Development-in-Malta--Statistical-Information-on-the-2030-Agenda-in-Malta--2021.aspx>

Basic services refer to the following:

(a) *Basic sanitation service: Improved facilities (according to JMP definition), which are sex-separated and usable at the school or health-care facility;*

Available at all schools and health-care facilities.

(b) *Basic drinking water service: Water from an improved source (according to JMP definition) is available at the school or health-care facility;*

Available at all schools and health-care facilities.

(c) *Basic hygiene service: Handwashing facility with water and soap available to students (schools) or patients and health-care providers (health-care facilities).*

Available at all schools and health-care facilities.

If the above definitions/categories do not apply in your country, please report for alternative categories for which data are available. In this case, please indicate the reported categories by renaming the rows in the table below accordingly.

Please indicate the source of data. If data is not available, please put (-).

Provision of safe drinking water, basic sanitation service and basic hygiene service are the standard of the country and available in all schools and health-care facilities. This is a requirement for Member States of the European Union.

Institutional setting

Current value (specify year)

Schools

<i>Institutional setting</i>	<i>Current value (specify year)</i>
Basic sanitation service	
Basic drinking-water service	
Basic hygiene service	
<i>Health-care facilities</i>	
Basic sanitation service	
Basic drinking-water service	
Basic hygiene service	

2. Has the situation of WASH in schools been assessed in your country?
 YES NO IN PROGRESS
3. Has the situation of WASH in health-care facilities been assessed in your country?
 YES NO IN PROGRESS
4. Do approved policies or programmes include actions (please tick all that apply):
 To improve WASH in schools
 To improve WASH in health-care facilities
5. If yes, please provide reference to main relevant national policy(ies) or programme(s).

These are basic requirements in Malta, available in all such facilities.

2. Safe management of drinking-water supply

6. Is there a national policy or regulation in your country, which requires implementation of risk-based management, such as WHO water safety plans (WSPs), in drinking water supply?
 YES NO IN PROGRESS
7. If yes, please provide reference to relevant national policy(ies) or regulatory documentation.

As per Drinking Water Directive EC 2020/2184

Link: <https://eur-lex.europa.eu/eli/dir/2020/2184/oj>

8. In the table below, please provide information on the percentage of the population serviced with drinking-water under a WSP.

Please indicate the source of data. If data is not available, please put (-).

<i>Percentage of population</i>	<i>Current value (specify year)</i>
Total	100% 2021

3. Equitable access to water and sanitation

9. Has the equity of access to safe drinking-water and sanitation been assessed?
 YES NO IN PROGRESS

10. Do national policies or programmes include actions to improve equitable access to water and sanitation (please tick all that apply):

- To reduce geographical disparities
- To ensure access for vulnerable and marginalized groups
- To keep water and sanitation affordable for all

11. If yes, please provide reference to main relevant national policy(ies) and programme(s).

As per Drinking Water Directive EC 2020/2184

Link: <https://eur-lex.europa.eu/eli/dir/2020/2184/oj>

Part seven

Information on the person submitting the report

The following report is submitted on behalf of Ministry for Health [name of the Party, Signatory or other State] in accordance with article 7 of the Protocol on Water and Health.

Name of officer responsible for submitting the national report: Claire Pace Senior Environmental Health Officer- WHO-UNECE National Focal Point Water & Health

E-mail:

claire.a.pace@gov.mt

clive.j.tonna@gov.mt (Director Environmental Health Directorate)

Telephone number: +356 21337333

Name and address of national authority: Environmental Health Directorate- Head Office – Superintendence of Public Health.

Signature: Clive Tonna- Diretor Environmental Health

Date: 6th April 2022

Submission

1. Parties are required to submit their summary reports to the joint secretariat, using the present template and in accordance with the adopted guidelines on reporting, 210 days before the next session of the Meeting of the Parties. Submission of the reports ahead of this deadline is encouraged, as this will facilitate the preparation of analyses and syntheses to be made available to the Meeting of the Parties.

2. Parties are requested to submit, to the two addresses below, an original signed copy by post and an electronic copy by e-mail. Electronic copies should be available in word-processing software.

Joint Secretariat to the Protocol on Water and Health

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Cluicchi

Endorsed by

Dr Karen Vincenti

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Ministry for Health – Malta

