



UWWTD National Summary Chapter 2020 Malta

1. Key messages

This document provides an overview of the data reported by Malta for 2020 under the Urban Waste Water Treatment Directive (“the Directive”).

The information presented in this document should be read as the assessment by the European Commission and main conclusions of the 2020 data submitted by Malta for the 12th reporting cycle. There is no link between this document and any infringement proceedings initiated before 2023. The reported information is without prejudice to any future infringements that the Commission may decide to launch.

In 2020, Malta had a population of 0.5 Mio and reported 3 agglomerations generating $\geq 2,000$ p.e. each for a total load of 643,039 p.e., of which:

- **1 agglomeration (33%)**, generating **37,537 p.e. (6%)** of wastewater, **compliant** with the requirements of the Directive; and
- **2 agglomerations**, generating **605,502 p.e.** of wastewater, **not compliant** with the requirements of the Directive (secondary and more stringent treatment).¹

As regards the compliant agglomerations:

- The load in full compliance with **Article 3** (collection and/or IAS) represents a percentage equal to **100%** of the total load;
- The load in full compliance with **Article 4** (secondary treatment) represents a percentage equal to **5.8%** of the total load subject to compliance²;
- The load in full compliance with **Article 5** (treatment more stringent than secondary) represents a percentage equal to **0%** of the total load subject to compliance (agglomerations generating more than 10,000 p.e. and discharging into sensitive areas).

In 2020, Malta had not yet reached the target for treating waste water to fully comply with the Directive (also known as “**distance to target**”).

¹ Agglomerations are only legally compliant with the Directive when their entire generated load is compliant (articles 3, 4 and/or 5). For non-compliant agglomerations, the distance to target is calculated for each article based on the non-compliant fraction. Distance to target represents the real implementation status more accurately than compliance does.

² Collected load from agglomerations below 10,000 p.e. and discharging into coastal waters may not need to be subject to secondary treatment.

- **94.2%** of the collected waste water load must still undergo **secondary treatment** in line with the requirements of the Directive (approximately **605,500 p.e.**); and
- **100%** of the collected waste water load from agglomerations generating >10,000 p.e. discharged into sensitive areas must still undergo **more stringent treatment** (nitrogen and/or phosphorus removal), in line with the requirements of the Directive (approximately **55,700 p.e.**).

No waste water load is addressed by means of individual or other appropriate systems (IAS)³ i.e. **non-centralised sanitation systems**.

For the reference year 2020⁴ Malta reported:

- **3 agglomerations**⁵ $\geq 2,000$ p.e.⁶ with a total waste water load of **643,039 p.e.**;⁷
- **3 urban waste water treatment plants** >2,000 p.e., with a total design capacity of **626,000 p.e.**, all equipped with technology for **more stringent** treatment than secondary treatment.

In conclusion, with 94.2% of the load not compliant in 2020 and a distance to target of **94.2% for secondary treatment and 100% for more stringent treatment**, Malta needs to make a very significant effort to reach full compliance with the Directive. Malta reported 2 treatment plants for which investments are planned to tackle farm waste pre-treatment issues, which shows that efforts are ongoing.

It should be noted that the total entering load decreased significantly from 2018 (928,251 p.e.) to 2020 (841,722 p.e.) due to a COVID-19-related decrease in economic activity.

More detailed information on the implementation of the Directive in Malta can be found on the website <https://water.europa.eu/freshwater/countries/uwwt/malta>.

³ IAS compliance is not assessed under the implementation report but considered to be "appropriate" and therefore all IASs reported are considered as compliant.

⁴ Annual data on the collection and treatment of waste water to 31 December 2020.

⁵ An agglomeration is an area where the population and/or economic activities are sufficiently concentrated for urban waste water to be collected and conducted to an urban waste water treatment plant or to a final discharge point (Article 2(4) of the Directive). Member States define the boundaries of their agglomerations and report data per agglomeration.

⁶ Member States do not have reporting obligations under the Directive for agglomerations <2,000 p.e.

⁷ p.e. stands for 'population equivalent': the organic biodegradable load having a 5-day biochemical oxygen demand (BOD5) of 60 g of oxygen per day (Article 2(6) of the Directive). This term reflects organic pollution generated at the agglomeration level by inhabitants and other sources, such as non-resident population and industries under Articles 11 or 13.

2. Situation of sensitive areas

Malta applies **Article 5(2,3)** of the UWWTD, identifying some water bodies on its territory as sensitive areas (SAs) and/or catchments of sensitive areas (CSAs) under Article 5(2,3). In 2020, Malta reported **one sensitive coastal area** (Qammieh Point till Ras ir-Raheb) where nitrogen removal is necessary to avoid eutrophication.

In addition, a large share of Malta territory is not identified as sensitive area, being this territory also known as “non-sensitive” area or “normal” area, to which Article 5 does not apply.

When **applying Article 5(2,3)**, all agglomerations above 10,000 p.e. discharging into a sensitive area subject to Article 5(2,3) must comply with Article 5 (apply more stringent treatment than secondary treatment i.e. nitrogen and/or phosphorus removal and/or microbiological treatment⁸) and report individual equipment and performance for each of their treatment plants.

⁸ The latter is not assessed in the current report as it is mainly implemented to ensure compliance with other EU Directives on drinking water and bathing water.

3. Legal compliance

Compliance with the main requirements of the Directive is assessed per agglomeration. Three requirements are needed for full compliance, namely:

- Collection of wastewater (condition required for compliance with Article 3 and also for compliance with Articles 4 and 5);
- Secondary treatment of the collected wastewater, i.e. adequate treatment level and treatment performance (condition required for compliance with Article 4 and also for Article 5); and
- More stringent treatment than secondary treatment, i.e. adequate treatment level and treatment performance; generally applicable to agglomerations >10,000 discharging into sensitive areas.

In Malta, in 2020, **33% of agglomerations (1) complied** with the Directive, which represents **6% of the waste water load** generated by the country (37,537 p.e.), as shown below.

Figure 1. Compliance rate for agglomerations in Malta in 2020

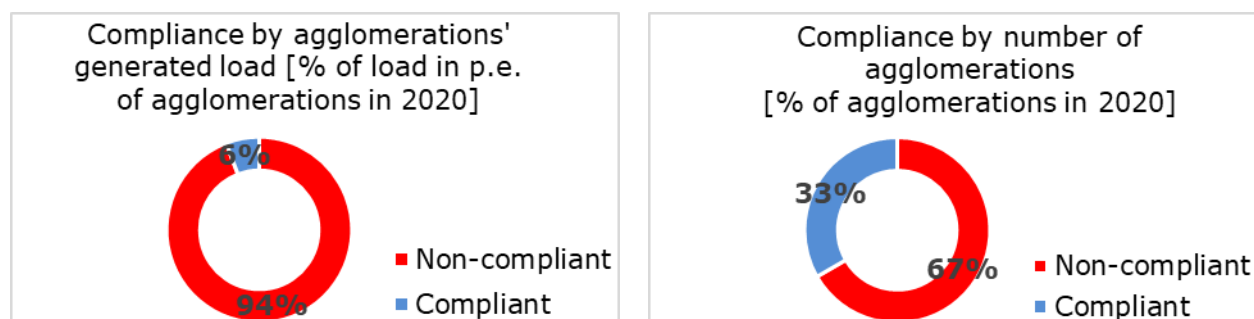


Table 1. Compliance rate by Article, agglomeration and load generated for Malta in 2020

Malta in 2020	Agglomeration			Waste water load		
	Total [No]	Compliance rate [No]	[%]	Total [p.e.]	Compliance rate [p.e.]	[%]
Article 3 (collection)	3	3	100 %	643,039	643,039	100 %
Article 4 (secondary treatment)	3*	0	0 %	643,039**	37,537	5.8 %
Article 5 (more stringent treatment)	1*	0	0 %	55,713**	0	0 %

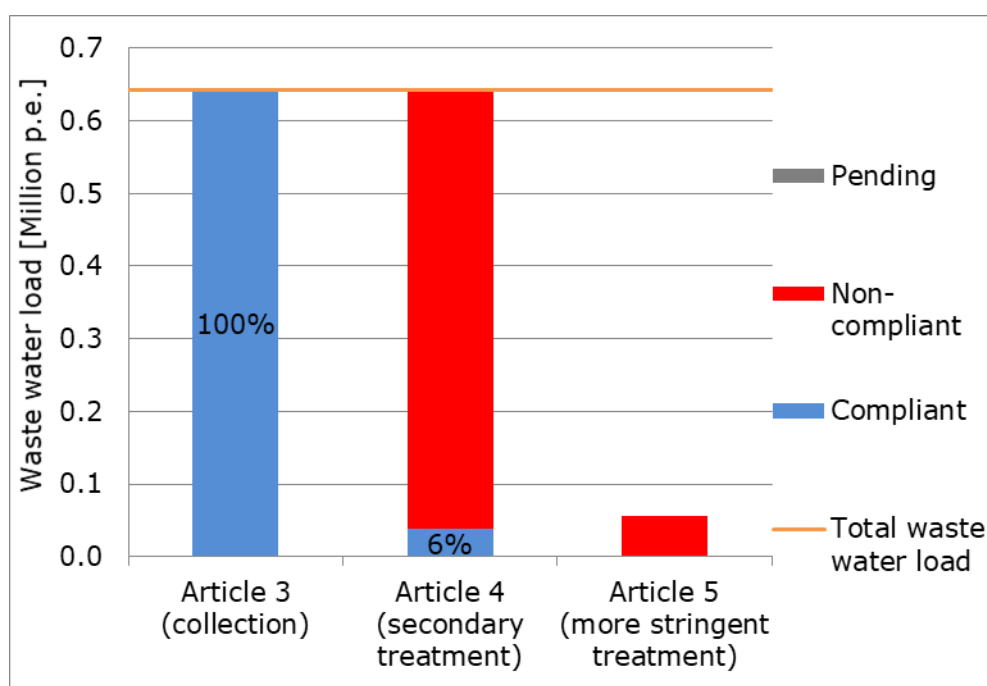
* The total [No of agglomerations] includes only those agglomerations that must provide secondary treatment / or more stringent treatment than secondary treatment before discharging wastewater from their treatment plants.

** The total [p.e. wastewater load] is the sum of the load of all of the agglomerations that must provide secondary treatment or more stringent treatment than secondary treatment before discharging wastewater from their treatment plants.

Table 2. Compliance rate and distance to target (DTT) by article and changes of these rates between 2018 and 2020 for Malta [change if >1%], arrows and dots colours: green=improvement, yellow=no change, red=deterioration. Note: decrease in value for compliance means deterioration, for DTT means improvement.

	Compliance			DTT		
	2018	2020	variation	2018	2020	variation
Article 3 (collection)	100%	100%	→ 0%	0%	0%	● 0%
Article 4 (secondary treatment)	0%	6%	↑ 6%	98%	94%	● -4%
Article 5 (more stringent treatment)	0%	0%	→ 0%	100%	100%	● 0%

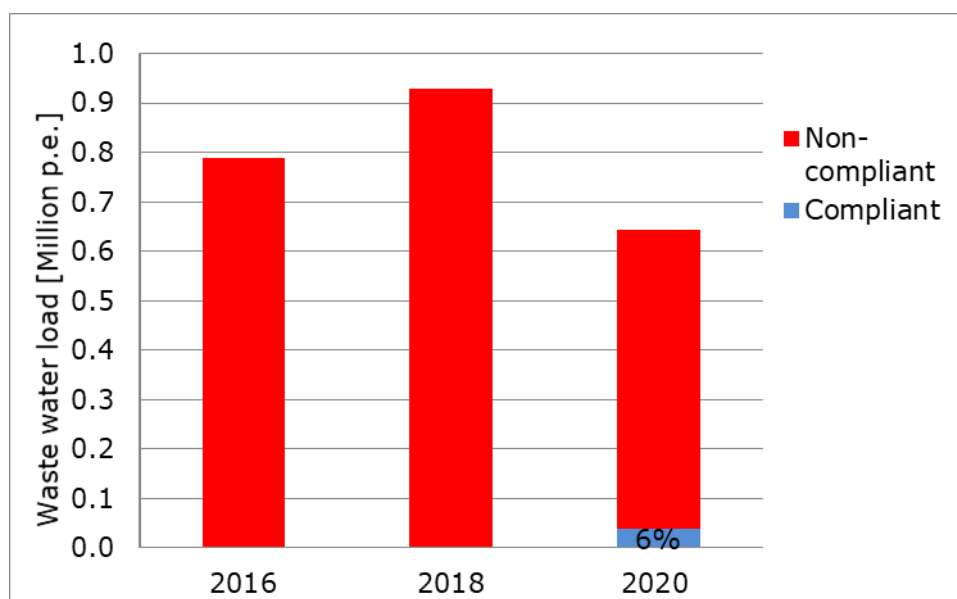
Figure 2. Compliance rate in Malta in 2020 per requirement⁹ [% of waste water load from agglomerations that complied with the given requirement of the Directive]



As indicated in the figure above, **all waste water is collected in an adequate way. Article 4** is only reached for **6%** of the load, corresponding to **1 compliant agglomeration**. Compliance with **Article 5** is not achieved at all.

⁹ The pending category comprises pending deadlines under the Accession Treaty of a Member State and/or the 7-year transition period applied to new designations of sensitive areas by a Member State.

Figure 3: Compliance rate with the Directive in Malta in the period 2016-2020 [% of wastewater load of agglomerations that complied with the Directive for the given year]



As indicated in the figure above, overall compliance progressed to a small extent from 0% in 2018 to 6% in 2020. One waste water treatment plant (Ras il-Hobz) became compliant in 2020.

Figure 4: Compliance rate by region (NUTS2) in Malta in 2020 [% of wastewater load of agglomerations that complied with the Directive]

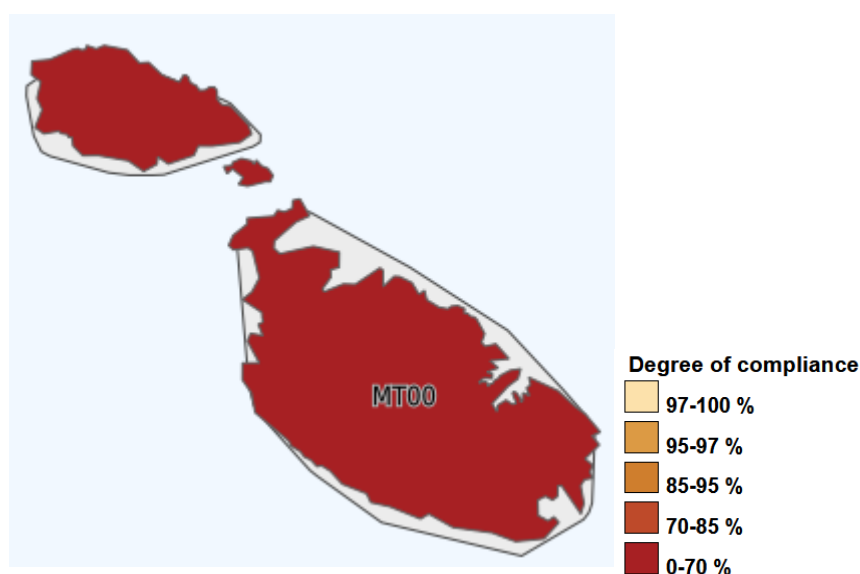


Table 3. Generated and compliant load and rate at regional level (Nuts2) for Malta in 2020

NUTS 2 ID	NUTS 2 NAME	Total generated load (p.e.)	Rate for Art. 3 (%)	Rate for Art. 4 (%)	Rate for Art. 5 (%)	Compliant load (p.e.)	Rate (%)
MT00	Malta	643,039	100.0	5.8	0.0	37,537	6%

In 2020, the compliance rate for Malta was 6% on average. One station (Ras il-Hobz) became compliant in 2020. The two biggest treatment plants in the country are still not compliant, representing a very significant non-compliant load. Based on their incoming and discharge loads, it appears that the abatements are correct.

4. Distance to target

NOTA: The term "distance to target" represents the effort still needed to reach compliance with the Directive for each requirement (per article). The term applies to non-compliant agglomerations, and their compliant fractions are not part of this concept, which only covers "non-compliant fractions of non-compliant agglomerations".

In Malta, the distance to target for 2020 is still substantial for waste water treatment both for secondary and more stringent treatment. The figures concerning the waste water load of all agglomerations are the following:

Table 4: Detailed distance to target figures and rates by Article, by agglomeration and by load generated for Malta in 2020

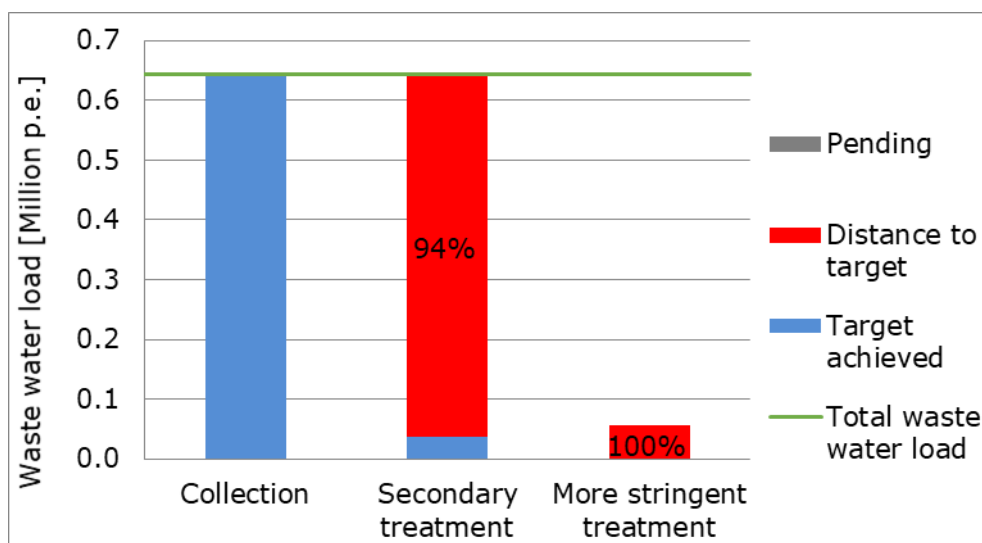
Malta in 2020	Waste water load		
	Target [p.e.]	Distance to target [p.e.]	Distance to target [%]
Article 3 (collection)	643,039	0	0 %
Article 4 (secondary treatment) *	643,039	605,502	94.2 %
Article 5 (more stringent treatment) **	55,713	55,713	100 %

*The target [p.e.] for secondary treatment represents the waste water load that should be adequately collected + the load that is collected from all agglomerations and should receive compliant secondary treatment (i.e. not exempted from meeting Article 4), regardless of whether the agglomeration complies with Article 3 or not.

** The target for more stringent treatment represents the waste water load that should be adequately collected + the load that is collected from all agglomerations generating >10,000 p.e., and discharging into sensitive areas that should receive compliant more stringent treatment, regardless of whether the agglomeration complies with Article 3 or not.

As mentioned above, Malta collects waste water in an adequate way. However, the distance to target for secondary treatment and more stringent treatment is still significant, with 94.2% of the load still needing secondary treatment, corresponding to 0.6 million p.e., and 100% of the load discharged to the identified sensitive area still needing more stringent treatment, corresponding to 0.05 million p.e.

Figure 5. Distance to target for collection, secondary treatment and more stringent treatment in Malta in 2020 [% of waste water load of all agglomerations. This load did not meet criteria for compliance with the given requirement of the Directive]



5. Additional information

Malta has implemented actions to reach compliance i.e. disconnection and/or pre-treatment of farm waste before entering urban waste water treatment plants. Malta expects to reach full compliance by 2027. This will be achieved through the following measures:

- Commissioning of the Sant Antnin retrofit in 2023;
- Upgrading of MTGSTP and MTNSTP by 2026;
- Farm waste disconnection by 2026.

Furthermore, the total load of waste water entering for treatment is higher than the design capacity of treatment plants. This high level of total entering load is due to waste discharges from farmyards, which constitutes the main issue of non-compliance for Malta.

6. National Implementation Programme (Article 17)

a) Non-compliant individual agglomerations

In the report submitted by Malta under Article 17, **2 projects** are listed concerning works on **treatment plants** planned for the period after 2020 to tackle non-compliant situations identified in 2020. The works are scheduled for completion **by 2025**. With these two projects, Malta aims to reach compliance on farm waste pre-treatment. The Ras il-Hobz treatment plant reached compliance in 2020; however, Malta has planned a capacity upgrade by 2025 to meet future demand.

No projects are listed concerning works on **collecting systems**. Malta reported that compliance with Article 3 (collection) has been met. However, investments for maintaining collecting systems seem necessary.

The **investment** needed to ensure adequate urban wastewater collection and treatment, i.e. compliance with the Directive, as estimated by the national authorities and included in their Article 17 reporting, amounts in total to **EUR 23 million** for the period 2020-2026. This covers works on collecting systems and treatment plants for **non-compliant situations**.

b) National investments to reach and maintain compliance and comparison with OECD study

At national level, as indicated in an **OECD study**¹⁰, Malta would need to increase its investments further **to reach and maintain compliance**. The OECD estimated the financing needs **for the period 2020-2030** (total cumulative additional expenditures for sanitation) **at EUR 308 million**.

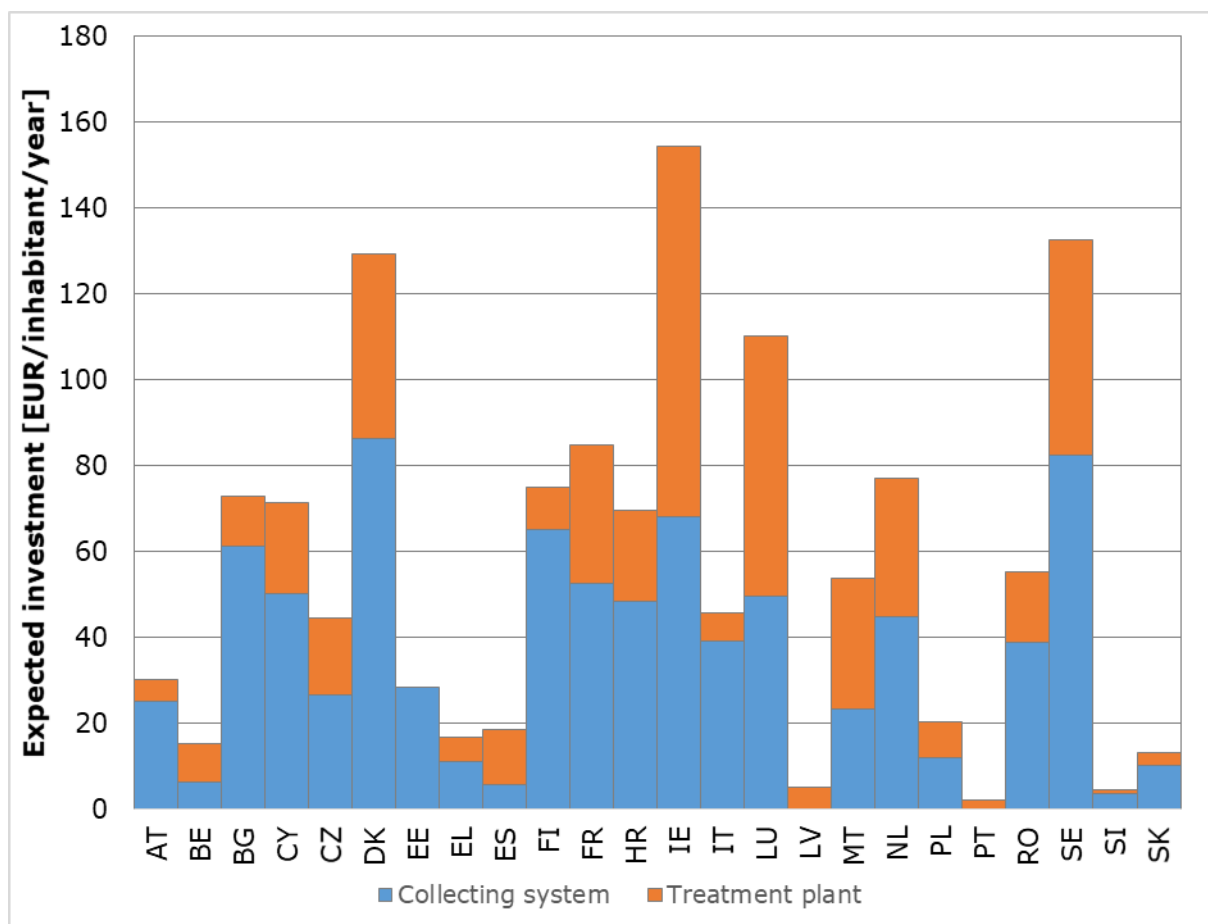
Nevertheless, Malta reports (Art. 17) aggregated figures at national level covering both investments in non-compliant agglomerations and investments in maintenance and renewal **for the period 2023-2027** amounting to an anticipated **EUR 138 million**. This figure is below the OECD forecast (about 45% of the OECD value). However, the periods covered are 10 years (OECD) vs 5 years (Art 17), which may explain the difference between expected investments.

Malta provided information on the **expected annual investment costs** per capita for installing and renewing waste water collecting systems and treatment plants, amounting to **EUR 54/inhabitant/year**, which is significantly above the EU27 average of **EUR 35/inhabitant/year**.

Malta reported that upgrading urban waste water treatment plants will be financed through a mix of revenues raised from water tariffs, central government funding/subsidies, EU structural funds and bridging loans.

¹⁰ <https://www.oecd-ilibrary.org/sites/6893cdac-en/1/3/3/index.html?itemId=/content/publication/6893cdac-en&csp=6d99cab0ab4541869c1dfa4bc5a155f4&itemIGO=oecd&itemContentType=book#section-d1e3528>

Figure 6. Current annual investments (new and renewed) reported by each Member State in 2020 (only MS with values are included) [EUR per inhabitant¹¹ per year]¹²



¹¹ Eurostat data: inhabitants at 1 January 2020.

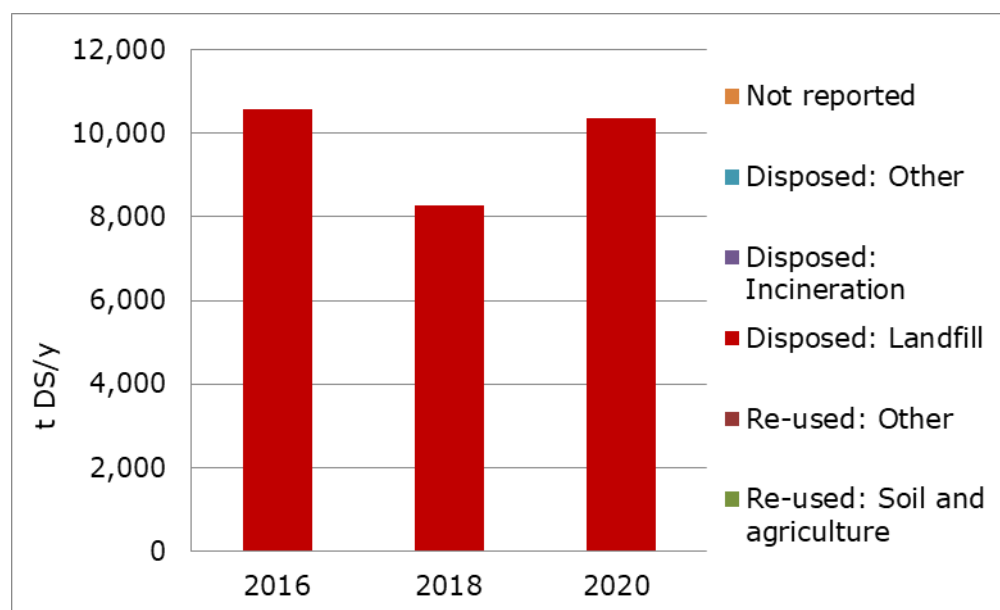
¹² Portugal, Spain and Sweden reported only investments on new infrastructures, consequently, the investments for these Member States are underestimated.

7. Sewage sludge

For the reference year 2020, Malta reported the reuse and disposal of **10,360 tonnes** of sewage sludge. In the previous reporting period (2018) this figure was lower (8,279 tonnes or 20% less).

All sludge (**100%**) is disposed of in **landfill**.

Figure 7 Sewage sludge disposal and reuse in Malta [% of sewage sludge reused in category "soil and agriculture"]
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At four discharge points, treated waste water is reused for irrigation. In 2020, **6.6%** of treated waste water was reported to be reused

No information was reported on stormwater overflows by Malta.

¹³ NB: not reported = destination unknown