Data set on the whole analytical result of WP4
D 4.2.3

Annex to the Progress Report VI
January 2022
Version n.1

PROJECT AdSWiM

Work Package:	**WP 4 - Innovative solutions in analytical, microbiological controls and to treat urban wastewaters (UWW)**
Activity:	**4.2 Innovative Analytical Methods/Devices (IAMD) Nutrients and trace elements** **4.6 IAMD_Results analysis**
Phase Leader:	**UNIVPM**
Deliverable:	**D 4.2.3**

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CONTENTS

PART 1: INTRODUCTION

One dataset, that collects all results provided by the PPs involved in the WP4 was designed by Univpm, OGS, CAFC, Uniud, PHI and published in open access mode from National Institute of Oceanography and Experimental Geophysics - OGS, Division of Oceanography (doi=10.13120/j23k-n088).

The data set is accessed by the link

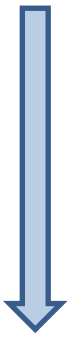
https://nodc.inogs.it/catalogs/doidetails;jsessionid=428B3F91CE5D3FA653A564671BEEC31A?0&doi=10.13120/j23k-n088

The file collects all the parameters investigated during the entire framework of the AdSWiM project, from all the partners involved in analytical determinations.

PART 2: DATASET ORGANIZATION AND PARAMETERS

The dataset is organized in an excel file, designed as following:

1. **Vertical bar** (from top to bottom):



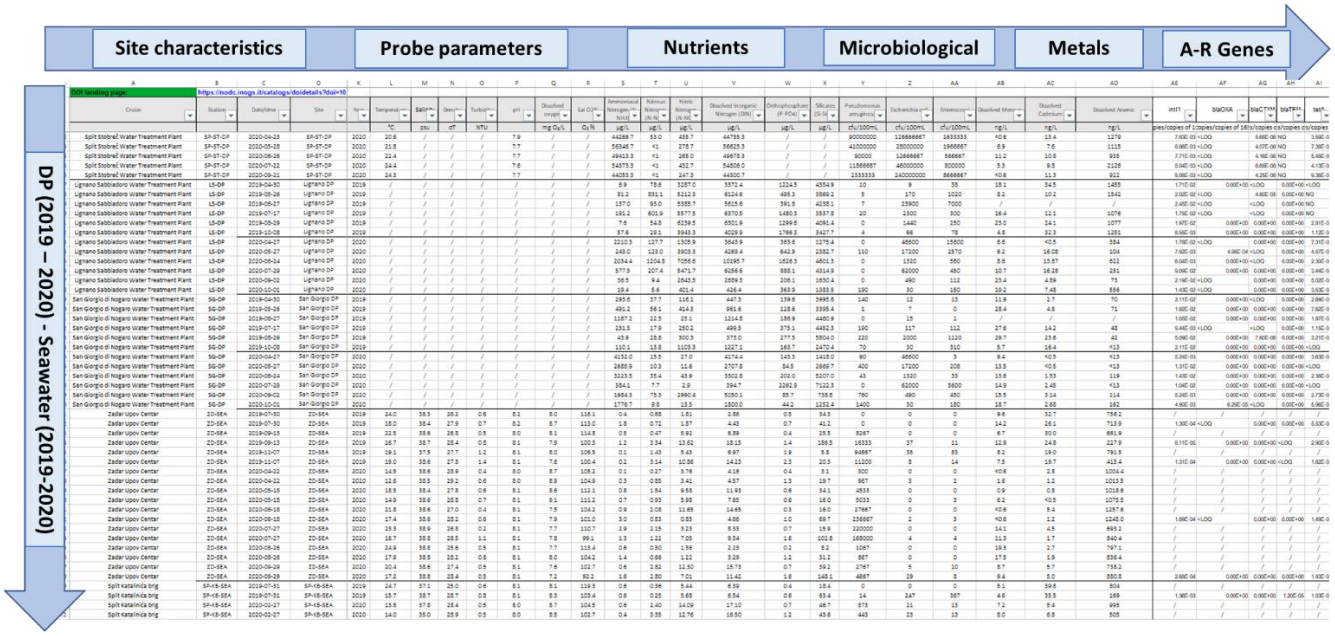
- Depuration Plant, in order: Zadar Upov Centar Water Treatment Plant, Split Katalinića brig Water Treatment Plant, Split Stobreć Water Treatment Plant, Lignano Sabbiadoro Water Treatment Plant, San Giorgio di Nogaro Water Treatment Plant.
- Sea Sites, in order: Zadar Upov Centar, Split Katalinića brig, Split Stobreč, Lignano Sabbiadoro, San Giorgio di Nogaro, Francavilla al mare
- Francavilla al Mare Water Treatment Plant

Vertical disposition followed the time series for each site (from 2019 to 2020)

2. **Horizontal bar** (from left to right):

- Time and Site characteristics: Station name, date/time, type, latitude, longitude, bottom depth, month, year;
- Probe parameters: Temperature (°C), Salinity (psu), Density (σT), Turbidity (NTU), pH, Dissolved Oxygen (mg/L), Oxygen saturation (O_2%).
- Nutrient concentrations (µg/L): Ammoniacal nitrogen N-NH_3, Nitrous nitrogen N-NO_2, Nitric Nitrogen N-NO_3, Dissolved Inorganic Nitrogen, Ortophosphate P-PO_4, Silicates Si-SiO_2.
- Microbiological parameters (cfu/100ml): Pseudomonas Aeruginosa, Escherichia Coli, Enterococci.

- Dissolved metals concentrations (ng/L): Dissolved Mercury, Dissolved Cadmium, Dissolved Arsenic.
- Antibiotic-Resistance (A. R) genes (gene copies/copies of 16S rRNA): intl1, blaOXA, blaCTXM, blaTEM, tetA, mcr1, qnrS, ermB, sul2.



PART 3: LEGEND

A legend was insert at the bottom of the table to help readers understand the charted data

Limits of Detection (LOD) for each parameter were calculated by every singular partner with his own method, available in the singular technical report of each PPs. The values determined in concentrations below to LOD are reported in the dataset as “<number”.

The same provisions applied for LOD are applied also at the Limits of Quantification (LOQ).

Concerning Antibiotic-Resistance genes parameters, whenever the gene is present but it is not quantifiable, the wording “NQ” (Not Quantifiable) is applied in the cell of belonging.

Whenever a value was not determined, the symbol “ / ” was applied in the cell of belonging.