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Commission

Structured Implementation and Information Framework (SIIF) Towards a new EU/national urban waste water INSPIRE data organisation

European Commission

Directorate General for the Environment

unit C.2 - Marine Environment & Water Industry

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Existing data model: http://forum.eionet.europa.eu/x_wise-reporting/library/treatment_directive/uwwtd-data-request-2013/

**Reporter/ReportPeriod/Contact/Agglomerations/BigCity
_bidDischarger/UWWTPs/UwwtpAgglo/DischargePOints
/Industrie/MSLevel/UWWTPS_Add-
on/Agglomerations_Add-on/MSLevel_Add-on**

Will remain as they are for the next reporting exercise
2016 starting work on INSPIRE compliance for preparation of
the 10th reporting.

New ReceivingAreas table due to shortcomings which
generate mistakes in the assessment (different dates of
designation depending from the parameters or deadlines of
compliance which are not seven year after the date of
designation)

First draft established in May 2015

Will be used for the 9th reporting exercise prefilled by the
Commission

- **Article 17 tables FLAagglo/FLAUWWTP/InvestmentsJob.**

UWWTP and AGGLOMERATION forward looking aspect tables and SOCIOECONOMIC MS table.

First draft established in May 2015

Will be used for the 9th reporting exercise prefilled by the Commission

- **Eurostat Waste Water Table**

No proposal established yet. Has to be done for the 10th reporting

→ all MS will use the same XML file for the next reportings

FINALISATION OF INSPIRE HARMONISATION TO BE LAUNCHED IN 2016

Three tables targeted

INSPIRE parameters compulsory to be added under the INSPIRE directive

INSPIRE Agglomeration table
INSPIRE UWWTP table
INSPIRE discharge point table

Proposal of parameters to be added at the end of the tables or in new tables in order not to disturb the existing organisation of data at MS level.

Addition of new **optional parameters** for **national use** and **interconnection** of data

Creation of new specific tables

AGGLO/municipality table (link municipalities and agglomerations)
UWWTP/municipality table
AGGLO/water utility table
UWWTP/water utility table
AGGLO/Permit table
UWWTP/Permit table
Discharge points/Permit table
Collecting System/Permit table (for all the industrial discharges in the collecting systems)
AGGLO/storage tank
UWWTP/storage tank
UWWTP/water reuse table
UWWTP/water and sludge treatment technology table
UWWTP sludge table
UWWTP waste/grease/sand/reagent tables
UWWTP energy table
UWWTP greenhouse gaz emission table
UWWTP operation human ressources and cost table

...

Some of these tables will be tested under the new phase of the SIIF project depending from the interest of MS and SIIF partners.

QUESTIONS

IS EACH PROPOSAL

PERTINENT?

SUFFICIENT?

INSPIRE COMPLIANT?

Objective

Link agglomeration to the municipality to know the municipalities concerned by this waste water system but also to give opportunities from the waste water website to have access to municipality information

| Fieldname | Label/Explanation | Remarks |
|------------|--|---------------------------|
| aggCode | ID of the UWWTD agglomeration | According to coding rules |
| MSCodeCity | Member State where the LAU2 is located | |
| LAU2 | Use LAU2 Eurostat code | |
| DateCon | Date of connection | |
| DateDecon | Date of deconnection | |

There might be several municipalities per agglomeration and several agglomerations per municipality

Objective

Link the UWWTP to the municipality to know the municipality where the UWWTP is located but also to give opportunities from the waste water website to have access to municipality information

| Fieldname | Label/Explanation | Remarks |
|------------|--|---------|
| uwwCode | ID of UWWTP/ collecting system without treatment | |
| MSCodeCity | Member State where the LAU2 is located | |
| LAU2 | Use LAU2 Eurostat code | |
| DateCon | Date of connection | |
| DateDecon | Date of deconnection | |

There might be several municipalities per agglomeration and several agglomerations per municipality



Objective

Link the agglomeration to the water utility to know the water utility owner(s) of the urban waste water collecting system but also to give opportunities from the waste water website to have access to detailed information on them

| Fieldname | Label/Explanation | Remarks |
|---------------|---|---------------------------|
| aggCode | ID of the UWWTD agglomeration | According to coding rules |
| MSCodeUtility | Member State where the water utility is located | |
| WUCode | National ID code of the water utility | |
| DateCon | Date of connection | |
| DateDecon | Date of disconnection | |

There might be several water utilities per agglomeration and several agglomerations per water utility


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Objective

Link the UWWTP to the water utility to know the water utility owner of the UWWTP but also to give opportunities from the waste water website to have access to detailed information on them

| Fieldname | Label/Explanation | Remarks |
|---------------|--|---------|
| uwwCode | ID of UWWTP/ collecting system without treatment | |
| MSCodeUtility | Member State where the water utility is located | |
| WUCode | National ID code of the water utility | |
| DateCon | Date of connection | |
| DateDecon | Date of disconnection | |

Normally there is one water utility per treatment but the opportunity is given to have several water utility per UWWTP.



Objective

Link the UWWTP to the permit associated to give opportunities from the waste water website to have access to detailed information on the permit. A permit content lost of useful information.

| Fieldname | Label/Explanation | Remarks |
|------------|--|---|
| uwwCode | ID of UWWTP/ collecting system without treatment | |
| PermitCode | National ID code of the permit | |
| DateCon | Date of connection | Each time there is a new permit there is a connection to the new one and disconnection to the old one |
| DateDecon | Date of disconnection | |

Normally there is one permit per treatment but the opportunity is given to have several permits per UWWTP.



Objective

Link the discharge point to the permit associated to give opportunities from the waste water website to have access to detailed information on the permit. A permit content lost of useful information.

| Fieldname | Label/Explanation | Remarks |
|------------|--------------------------------|---|
| dcpCode | ID of the discharge point | |
| PermitCode | National ID code of the permit | |
| DateCon | Date of connection | Each time there is a new permit there is a connection to the new one and disconnection to the old one |
| DateDecon | Date of disconnection | Each time there is a new permit there is a connection to the new one and disconnection to the old one |

Normally there is one permit per treatment but the opportunity is given to have several permits per UWWTP.



Objective

Link the Agglomeration to the permit of discharges in collecting systems to give opportunities from the waste water website to have access to detailed information on the permit. A permit content lost of useful information.

| Fieldname | Label/Explanation | Remarks |
|------------|--------------------------------|--|
| aggCode | ID of the UWWTD agglomeration | According to coding rules |
| PermitCode | National ID code of the permit | |
| DateCon | Date of connection | Each time there is a new permit there is a connection to the new one and deconnection to the old one |
| DateDecon | Date of deconnection | Each time there is a new permit there is a connection to the new one and deconnection to the old one |

Normally there are several permits per collecting system



Objective

Link the Agglomeration to the storage tanks along collecting systems and provide basic information about them.

| Fieldname | Label/Explanation | Remarks |
|-------------|--------------------------------------|--|
| aggCode | ID of the UWWTD agglomeration | According to coding rules |
| STankCode | National ID code of the storage Tank | |
| Sname | National name of the storage Tank | |
| STLatitude | Latitude | |
| STLongitude | Longitude | |
| STVolume | Volume of storage | |
| DateCon | Date of connection | The date of connection has to be the date of building of the storage tank. |
| DateDecon | Date of disconnection | The date of disconnection is when the storage tank is no more used |

There might be several storage tanks per agglomeration



Objective

Link the agglomeration to the pumping stations of the collecting system and provide basic information about it.

| Fieldname | Label/Explanation | Remarks |
|-------------|--|--|
| uwwCode | ID of UWWTP/ collecting system without treatment | |
| StCode | National ID code of the pumping station | |
| Sname | National name of the pumping station | |
| StLatitude | Latitude | |
| StLongitude | Longitude | |
| DateCon | Date of connection | The date of connection has to be the date of building of the storage tank. |
| DateDecon | Date of disconnection | The date of disconnection is when the storage tank is no more used |

There might be several pumping stations per agglomeration



Objective

Link the UWWTP to the storage tank associated and provide basic information about it.

| Fieldname | Label/Explanation | Remarks |
|-------------|--|--|
| uwwCode | ID of UWWTP/ collecting system without treatment | |
| StCode | National ID code of the storage Tank | |
| Stname | National name of the storage Tank | |
| StLatitude | Latitude | |
| StLongitude | Longitude | |
| StVolume | Volume of storage | |
| StRoof | Information about the building of the storage system equipped with a roof or not | O: Open C: Close |
| DateCon | Date of connection | The date of connection has to be the date of building of the storage tank. |
| DateDecon | Date of disconnection | The date of disconnection is when the storage tank is no more used |

Normally there is one storage tank per UWWTP but the opportunity is given to have several permits per UWWTP.



Objective

To have more information about water reused from a specific treatment plant

| Fieldname | Label/Explanation | Remarks |
|---------------------|---|--|
| uwwCode | ID of UWWTP | |
| UWWTPReuseYear | Reference Year | To specify the resference year of this information |
| UWWTPReusePerc | Rate of treated waste water re-used (% of total volume treated) | Has to be calculated as regards the yearly volume of waste water produces |
| UWWTPReuseAgri | Re-use of treated waste water in: Agriculture | Y/N |
| UWWTPReuseInd | Re-use of treated wastewater in: Industry | Y/N |
| UWWTPReuseOther | Re-use of treated waste water in: Others | Y/N |
| UWWTPReuseTreatment | Level of treatment of the treated waste water used for reuse | 1: primary, 2: secondary, 3N: more stringent nitrogen removal, 3P: more stringent phosphorus removal, 3m: more stringent disinfection, 3NP: more stringent nitrogen and phosphorus removal, 3Nm: more stringent nitrogen removal and disinfection, 3Pm: more stringent phosphorus removal and disinfection, 3NPm: more stringent nitrogen and phosphorus removal and disinfection, 3other: any other more stringent treatment (please provide an explanation in the Comments case) |
| UWWTPReusestorage | Volume of treated waste water that could be store in a storage tank before being used | |
| UWWTPReuseExplain | Re-use of treated waste water: Please explain others | |
| DateCon | Date of connection | When the activity has started |
| DateDecon | Date of disconnection | When the activity has ended |

Objective

To have more information about the main water and sludge technologies used in the UWWTP.

| Fieldname | Label/Explanation | Remarks |
|--------------------------|---|--|
| uwwCode | ID of UWWTP | |
| UWWTPmainwatertreatment | Main water treatment technology type implemented | Existing EU or international list has to be used |
| UWWTPmainsludgetreatment | Main sludge treatment technology type implemented | Existing EU or international list has to be used |

There is one main water treatment type and one main sludge treatment type per treatment plant

Objective

To have more information about the other water technologies used in the UWWTP.

| Fieldname | Label/Explanation | Remarks |
|--------------------------|---|--|
| uwwCode | ID of UWWTP | |
| UWWTPotherwatertreatment | other water treatment technology type implemented | Same list than for the main treatment type table |

There might be several water treatment types per treatment plant.



Objective

To have more information about the other sludge technologies used in the UWWTP.

| Fieldname | Label/Explanation | Remarks |
|---------------------------|--|--|
| uwwCode | ID of UWWTP | |
| UWWTPothersludgetreatment | other sludge treatment technology type implemented | Same list than for the main treatment type table |

There might be several sludge treatment types per treatment plant.



Objective

To have more information about the sludge production

| Fieldname | Label/Explanation | Remarks |
|---------------------------|--|--|
| uwwCode | ID of UWWTP | |
| UWWTPSludgeYear | Reference Year | To specify the resference year of this information |
| UWWTPSludgeProduction | Yearly production of sludge (t DM/y) | |
| UWWTPSludgeDM | Dry matter (% of volume) | Parameters of sludge directive |
| UWWTPSludgeOM | Organic matter (% of DM) | Parameters of sludge directive |
| UWWTPSludgepH | pH | Parameters of sludge directive |
| UWWTPReuseSoilAgriculture | re-used: Soil and agriculture (t DM/y) | |
| UWWTPReuseOthers | re-used: Others (t DM/y) | |
| UWWTPDisposalLandfill | disposed: Landfill (t DM/y) | |
| UWWTPDisposalIncineration | disposed: Incineration (t DM/y) | |
| UWWTPDisposalOthers | disposed: Others (t DM/y) | |
| UWWTPSludgeZn | Zinc average concentration (mg/kg DM) | |
| UWWTPSludgeCu | Copper average concentration (mg/kg DM) | |
| UWWTPSludgePb | Lead average concentration (mg/kg DM) | Parameters of sludge directive |
| UWWTPSludgeNi | Nickel average concentration (mg/kg DM) | Parameters of sludge directive |
| UWWTPSludgeCr | Chromium average concentration (mg/kg DM) | Parameters of sludge directive |
| UWWTPSludgeHg | Mercury average concentration (mg/kg DM) | Parameters of sludge directive |
| UWWTPSludgeCd | Cadmium average concentration (mg/kg DM) | Parameters of sludge directive |
| UWWTPSludgeN | Total Nitrogen average concentration (mg/kg DM) | Parameters of sludge directive |
| UWWTPSludgeP | Total Phosphorus average concentration (mg/kg DM) | Parameters of sludge directive |
| UWWTPSludgeStor | Volume of sludge storage inside the UWWTP area (t M/y) | |
| UWWTPSludgeResidual | Residual | |



Objective

To have more information about the waste production (Grease and sand production not included in the waste) and its destination

| Fieldname | Label/Explanation | Remarks |
|--------------------------|---|---|
| uwwCode | ID of UWWTP | |
| UWWTPWasteYear | Reference Year | To specify the resference year of this information |
| UWWTPWasteproduction | Yearly production of Waste (t DM/y) | |
| UWWTPWasteLandfill | disposed: Landfill (t DM/y) | |
| UWWTPWasteIDlandfill | National ID code of the landfill | To be able to have access to the information of the lanfill |
| UWWTPWasteIncineration | disposed: Incineration (t DM/y) | Parameters of sludge directive |
| UWWTPWasteIDIncineration | National ID code of the incineration facility | To be able to have access to the information of the Incineration facility |
| UWWTPDWasteOthers | disposed: Others (t DM/y) | Parameters of sludge directive |
| UWWTPDWasteIDOthers | National ID code of the "Other" facility | To be able to have access to the information of the "Other" facility |
| UWWTPWasteRemarks | Remarks | |



Objective

To have more information about the grease production and its destination

| Fieldname | Label/Explanation | Remarks |
|---------------------------|--|---|
| uwwCode | ID of UWWTP | |
| UWWTPgreaseYear | Reference Year | To specify the resference year of this information |
| UWWTPGreaseproduction | Yearly production of grease (m3/y) | |
| UWWTPGreaseLandfill | disposed: Landfill (m3/y) | |
| UWWTPGreaseIDlandfill | National ID code of the grease destination landfill | To be able to have access to the information of the lanfill |
| UWWTPGreaseIncineration | disposed: Incineration (m3/y) | Parameters of sludge directive |
| UWWTPGreaseIDIncineration | National ID code of the grease destination incineration facility | To be able to have access to the information of the Incineration facility |
| UWWTPDGreaseOthers | disposed: Others (m3/y) | Parameters of sludge directive |
| UWWTPDGreaseIDOthers | National ID code of the "Other" grease destination facility | To be able to have access to the information of the "Other" facility |
| UWWTPGreaseRemarks | Remarks | |



Objective

To have more information about the sand production and its destination

| Fieldname | Label/Explanation | Remarks |
|------------------------|--|---|
| uwwCode | ID of UWWTP | |
| UWWTPSandYear | Reference Year | To specify the resference year of this information |
| UWWTPSandproduction | Yearly production of sand (t DM/y) | |
| UWWTPSandLandfill | disposed: Landfill (t DM/y) | |
| UWWTPSandIDlandfill | National ID code of the sand destination landfill | To be able to have access to the information of the lanfill |
| UWWTPSandReuse | disposed:Reuse (t DM/y) | Parameters of sludge directive |
| UWWTPSandDIncineration | National ID code of the sand destination incineration facility | To be able to have access to the information of the Incineration facility |
| UWWTPDSandOthers | disposed: Others (t DM/y) | Parameters of sludge directive |
| UWWTPDSandIDOthers | National ID code of the "Other" sand destination facility | To be able to have access to the information of the "Other" facility |
| UWWTPSandRemarks | Remarks | |

Objective

To have more information about the reagent consumption

| Fieldname | Label/Explanation | Remarks |
|---------------------|--|--|
| uwwCode | ID of UWWTP | |
| UWWTPSandYear | Reference Year | To specify the resference year of this information |
| UWWTPIronSaltCons | Yearly Iron salts consumption of the UWWTP (kg) | |
| UWWTPAlSaltCons | Yearly Aluminium salts consumption of the UWWTP (kg) | |
| UWWTPLimeCons | Yearly Lime consumption of the UWWTP (kg) | |
| UWWTPReagentRemarks | Remarks | |

Objective

To have more information about the energy consumption and production

| Fieldname | Label/Explanation | Remarks |
|--------------------|---|--|
| uwwCode | ID of UWWTP | |
| UWWTPEnergYear | Reference Year | To specify the resference year of this information |
| UWWTPEnergyCons | Yearly energy consumption of the UWWTP (kw.h) | All consumption has to converted in kw.h |
| UWWTPSEnergyProd | Yearly energy production of the UWWTP (kw.h) | All production has to converted in kw.h |
| UWWTPEnergyRemarks | Explanation about source of energy used in this UWWTP | |

Objective

To have more information about the green house gaz emission of the UWWTP

| Fieldname | Label/Explanation | Remarks |
|---------------------------|--------------------------------|--|
| uwwCode | ID of UWWTP | |
| UWWTPGreenHouseGazYear | Reference Year | To specify the resference year of this information |
| UWWTPCO2Em | Carbone dioxide emission (t/y) | |
| UWWTPCH4Em | Methane emission (t/y) | |
| UWWTPN2OEm | Nitrous Oxide emission (t/y) | |
| UWWTPGreenHouseGazRemarks | Remarks | |



Objective

To have more information about the operation of the UWWTP

| Fieldname | Label/Explanation | Remarks |
|------------------------|--|---|
| uwwCode | ID of UWWTP | |
| UWWTPGreenHouseGazYear | Reference Year | To specify the reference year of this information |
| UWWTPHuman | Number of operators of the UWWTP | |
| UWWTPoperation Cost | Total operation cost (Euros/y) | |
| UWWTPrateHumanCost | Rate of human resource cost/total operation cost (Euros/y) | |
| UWWTPrateReagentCost | Rate of reagent cost/total operation cost (Euros/y) | |
| UWWTPrateEnergyCost | Rate of energy cost/total operation cost (Euros/y) | |
| UWWTPrateOtherCost | Rate of Other cost | |
| UWWTPOperationRemarks | Remarks especially for others | |



Thank you for your attention



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