

**Matrix of Comments and Team Responses
for comments on Output 3 of the RO UWWTD RAS**

ANAR's Comments	Team Response
<p>Page (7), Chapter 1</p> <p>Paragraph 5 - With reference to the <i>OPTIMIZATION OF UWWTD COMPLIANCE COSTS</i>, the paragraph speaks of the "Creation of incentives for local authorities and operators to invest, comply and report in line with UWWTD requirements". We consider that these incentives granted to local authorities and local operators should be redistributed to individual users too, thereby attracting them to get connected to the sewer system.</p>	<p>We agree with the comment. However, Output 3 is not intended to provide solutions for the required incentives. This topic will be addressed during the preparation of the WSS Strategy outline (Output 7).</p>
<p>Page 18, Chapter 3.</p> <p>Figure 6 - General concept for the agglomeration load - the part about "LOAD ADDRESSED BY IAS" does not consider the status of the IASs, but only the status of the treatment plants (LaggC2)" (load collected via IASs). For that matter, we propose you to also illustrate the connection between the collection IAS and the treatment plant in your figure.</p>	<p>Figure 6 does not discuss the status of either the collecting system, or UWWTP or IAS. It represents the 3 main approaches of managing the generated load within an agglomeration, following the requirements for reporting compliance with Art.15 of the UWWTD, i.e.: load collected by collecting system; load addressed by IAS and load neither collected through collecting system, nor addressed by IAS.</p> <p>Comment concerning the discharge of the load of the decentralised systems into collecting systems or UWWTP will be added to #25 in the revised report.</p>
<p>Page 19 – Subchapter 3.3 Determination of permanent population in the agglomeration</p> <p>The assumption according to which the input of the resident urban and rural population was the same throughout 2011 and 2018 is incorrect, especially for the rural communities that are located near large urban centres, and the application of the calculation formula for the resident inhabitants (Equation 1) starting from this assumption generates significant errors. We propose to use the data concerning the <i>population by domicile</i> which is available with the National Statistics Institute per administrative unit (http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table).</p>	<p>As explained in detail in Output 2, the contribution of physically living people (not administratively registered) has meaning when calculating the generated agglomeration load, since the person's permanent residence often does not reflect the actual residence, where the person contributes to the agglomeration load. As defined by the NSI in Romania:</p> <ul style="list-style-type: none"> • <i>“The person's permanent residence is the address where he/she declares to have the main dwelling, printed as such on its identity card and registered by the administrative bodies of the State.”</i> • <i>“Usual residence is the place where a person normally spends the daily period of rest, regardless of temporary absences for purposes</i>

	<p><i>of recreation, holidays, visits to friends and relatives, business, medical treatment or religious pilgrimage. The usual residence may be the same as the domicile or may differ from it, for the persons who choose to establish their usual residence in a locality other than the locality of domicile in the country or abroad. It is considered having their usual residence in a specific geographic area just people who have lived in that usual residence for a continuous period of at least 12 months prior to reference moment.”</i></p> <p>For instance, based on data by NSI:</p> <ul style="list-style-type: none"> • For ALBA county the permanent residents are 377 844, but the usual residents are 328 311 in 2018; • For Caras Severin county the permanent residents are 322 243, but the usual residents are 275 063 in 2018; <p>The assumption made in Equation 1 is that the % share of the usual residents in a given settlement to the total usual residents in the urban (or rural area, depending on the settlement belonging) in 2011 is the same as in 2018. This approach is necessary, since the NSI doesn't maintain detailed data base at ATU/locality level for usual resident population in year 2018.</p> <p>In Annex 1 is presented comparison for two counties (Alba, Caras Severin) between the % contribution of permanent residents in a given municipality/ commune to the total permanent residents at county level AND the % contribution of usual residents in a given municipality/commune to the total usual residents at county level (as calculated according to equation 1). The difference in % contribution according to both approaches is below +/- 0.5% in over 97% of the municipalities/communes. The biggest difference is in Alba Iulia Municipality – 1% and Resita Municipality – 2.4%. This example shows that the selected approach gives almost the same results, concerning the population distribution. The differences, especially in the rural municipalities/communes are negligible.</p>
<p>Page 20 - Figure 7 “<i>Summary algorithm for determination the generated load of the agglomeration</i>”, your “0 p.e.” approach for the load which is not addressed through IAS or centralised systems is wrong. According to the Reporting Guide, this value is the difference between the total agglomeration load and the amount which is taken over</p>	<p>The assumption of the team that “all the population not connected to collecting system is connected to IAS” is based on the following:</p>

by the sewer systems and IAS. LOAD NOT ADDRESSED BY IAS or CS \neq 0 p.e. We consider that "LOAD NOT ADDRESSED BY IAS OR CS" is equal to zero only if the organic load of the agglomeration is fully collected (centralised and/or through IAS).

Page 23-24 - GENERATED LOAD OF AGGLOMERATION ADDRESSED BY IAS
(Lagg C2)

Paragraph 25 – your idea that “...it is considered that the load addressed by IAS is generated predominantly by residents living in zones without collecting system” has no grounds, since there are many cases in the Romanian villages where there is no sewer and no proper IAS either. Therefore, we consider that your assumption according to which “the domestic load addressed by IAS is the difference between the total number of resident population and the number of people connected to CS in an agglomeration” is not applicable to just about all agglomerations, and it cannot be supposed that in those localities/areas where there is no centralised WW collection system the entire population is connected to a proper individual collection system, since some individual systems are improper.

Paragraph 26 „The discussions with the local experts in the team, as well as the information collected through numerous site visits allow us to make the conclusion that in Romania, the wastewater is either collected through centralized sewer system or and trough **IAS individual systems**. So, the generated load not collected by collecting system and not addressed by **IAS individual systems** is actually “0”.”

According to the national legislation, more specifically Government Decision No. 188/2002, as amended, collection IASs are those tanks that can be vacuum-drained without any loss (*Rom. etanș vidanjabile*), e.g. proper tanks, concrete wall basins, apartment building systems, etc. This category does not cover the improvised latrines used in the rural environment. In their reports to COM about the requirements of Article 15 (European document “Data Dictionary Dataset specification for Urban Waste Water Treatment Directive reporting under Article 15–review, Version July 2017”), Romanian authorities applied the following parameter reporting concept:

- aggC1 = the biodegradable load of the agglomeration collected by means of centralised systems (the sewer network)

- the team hasn't received answer by the Romanian authorities how the IAS have been identified and reported so far (or alternatively how the “improvised systems” have been identified in the country);
- UWWTD legal compliance assessment methodology document assumes that “...for the moment the Commission considers that IAS is by definition appropriate unless there is a clear evidence of the opposite.”
- there is no Register of IAS in the country, thus there is no sound information on the number of IAS and the population connected to them.
- the information provided by the ROCs/LOCs is also very scarce as for most of the settlements NO DATA have been provided;
- During counties' visits and discussions with operators the main solution in case there is no sewerage system was identified as IAS.

Apparently, this approach seems to be too optimistic to ANAR. In case of lack of reliable information concerning the IAS in Romania, the team cannot provide further classification of the load not collected through sewer collecting systems, (i.e. distributed between LaggC2 and Lagg PercWithoutTreatment). For each agglomeration will be reported:

- % load collected through collecting system (Lagg C1) and
- % “load not collected through CS” (i.e. Lump Sum of aggC2 and agg Perc Without Treatment), it will be the difference between agg Generated and LaggC1.

This correction will be reflected in the revised report. As you know this is not helping improving compliance since it means that all the load should be addressed by CS. Hence, we are proposing allowance of additional (to the water-tight tank) IAS and a process for IAS to be introduced so that IASes can be used as solution to address some of the load.

<p>- aggC2 = the biodegradable load of the agglomeration collected by means of centralised systems (without the improvised systems)</p> <p>- aggwhitouttreatment = 100 – aggC1 - aggC2, which in most cases is different from zero.</p> <p>The assumption that the uncollected load is zero is only applicable in circumstances where the agglomeration is compliant, <i>i.e.</i> at least 98% of the load is collected by means of a centralised system and IAS. Under these circumstances, we propose to reword the phrase considering the information specified in the justification.</p> <p>The modification of this approach is also reflected in the data inserted in the tables of Annex 8 for the columns titled <i>aggC2</i> and <i>aggPerc Without Treatment</i>, which are not filled out correctly. World Bank experts considered that the entire load which is not taken over through the sewer system is taken over through the IAS, which is incorrect!</p>	
<p>Paragraph 27 – Please delete the following statement: „Parameter <i>aggPercWithoutTreatment</i> is “0”, considering the explanations specified in Paragraph 26.</p>	
<p>Paragraph 40 – we consider that it would be interesting to present the status of the changes in the delineation of the agglomeration that have appeared after applying the new methodologies for the agglomerations that are larger than 2,000 PE that remain in the list, similarly to the information in Table 3 „<i>Summary of the number of the agglomerations that no longer need to be reported for the purposes of UWWTD implementation</i>”.</p>	<p>Summary information at county level considering the number of agglomerations/generated loads is presented in Table 4, paragraph 31 (page 32). Detailed information for each agglomeration is provided in Annex 8.</p>
<p>Page 36 – Chapter 5.1 Implications on the compliance costs</p> <p><i>“It is unknown yet what would be the overall optimization (reduction) of compliance cost since the work on the strategic financing plan is ongoing, however the expectations are that, due to the significant reduction of number of agglomerations the investment needs will also reduce significantly”.</i></p> <p>The reduction of the number of agglomerations does not necessarily and automatically involve a significant reduction of the investment costs. The investment costs for the</p>	<p>We agree with the comment, but we’ve only indicated some expectations in the report. You can see the analysis and new estimations in Output 4, which was just submitted to the MEWF.</p>

collection infrastructure (the sewer networks) are estimated to remain practically the same. A reduction may be obtained for building the treatment plants. (Reduction of the number of agglomerations does not entail automatically a significant reduction of investment costs. The investment costs for collection infrastructure (sewage systems) are estimated to hover at a high level. A reduction could be achieved at the level of construction of UWWTP itself.)	
List of abbreviations – we propose to have MAP (MoWF) replaced by MMAP (MoEWF)	Thank you for the comment. We'll correct this in the final version of the Report.
Page 22 - Equation 7 belongs in Annex 4 and not Annex 3; the same with Equation 12	Thank you for the comment. We'll correct this in the final version of the Report.
GENERATED LOAD OF INDUSTRIAL EMITTERS (Laggc1, IND) - The reference made to the information concerning the collection of the data for the industrial facilities specified in Annex 5 is not correct, the information is actually specified in Annex 7.	Thank you for the comment. We'll correct this in the final version of the Report.
The correct reference to the description of Equation 13 is to be found in Annex 4 and not in Annex 3.	Thank you for the comment. We'll correct this in the final version of the Report.
The remarks proposed by the Water Basin Administrations (WBA) over the maps of the newly delineated agglomerations, which World Bank consultants prepared for each county are to be found in the excel file which contains a centralised report covering all 41 counties, except for Bucharest and Ilfov County (with reference to the agglomerations associated to Arges-Vedea WBA which are included in Bucharest's newly delineated bounds).	Thank you for the comments. We have reviewed and addressed all these comments in the final report. We've also prepared a separate excel file (due to significant number of comments from operators), which is attached to this matrix of comments.
Comments from ROCs received in May 2020	Team Response
The "Report with the updated list of agglomerations of more than 2,000 people equivalent" does not consider the FS approved under POIM 2014-2020 in March 2020;	The delineation of the agglomeration boundaries is based on the requirement of the UWWTD, that "agglomeration" means an area where the population and/or economic activities are sufficiently concentrated for the urban wastewater to be collected and conducted to an urban

<p>Moreover, the above-mentioned report does not consider the projects already approved or in-process of approval in the county, related to expanding the sewage network and building treatment plants;</p> <p>We would like to mention that the agglomerations under POIM 2014-2020 were certified by the EIB experts during field visits (June 2019) and were confirmed by MA POIM through the approval of the FS corresponding to the "Regional development program of water and wastewater infrastructure for 2014-2020"</p>	<p>wastewater treatment plant or to a final discharge point. The methodology considers that when the distance between concentrated areas is significant, construction of a collecting system will result in "excessive costs". We considered carefully the information provided by you and confirm that the application of the methodology was properly done. i.e. the agglomeration boundaries will remain as initially suggested.</p> <p>At the same time comparing agglomerations delineated based on a national methodology to agglomerations indicated in a FS or investments approved for financing by POIM 2014-2020 is completely wrong. However, we support you in having a clear guidance by Romanian authorities on the adoption of the methodologies and a decision on when they will be applied.</p>
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A separate electronic file in MS Excel with answers to ROC comments is attached to this matrix of comments for easy reference and tracing of all comments and responses. Some of the comments are repetitive, but the team addressed them all.