



# DATA QUALITY REVIEW REPORT VOLUME II: FILLED DQR TOOLS

DOCUMENT SUBMITTED TO: MCA-JORDAN

By:

**IDEA INTERNATIONAL INSTITUTE** 

Final Draft Report (Version 2) April 11<sup>th</sup>, 20

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### 1.1. MCA-JORDAN (CENTRAL LEVEL)

|                      | Reporting and   | System As   | sessment Protocol - MCA-Jordan   |
|----------------------|---|---|--|
|                      | MCA-J M&E Unit/Organization:  |   | MCA M&E Unit   |
|                      | Date of Review:   |   | 10th December  |
|                      | Reporting Period Verified:  |   | Quarter 5 to Quarter 8   |
|                      | Component of the M&E System   | Answer Codes:<br>Yes - completely<br>Partly<br>No - not at all<br>N/A | REVIEWER COMMENTS<br>(Please provide detail for each response not coded "Yes - Completely". Detailed responses will help guide<br>strengthening measures.)   |
|                      |   |   |  |
| Rev<br>Inte<br>all A | rt 1: Reporting Performance<br>riewavailability, completeness, and timeliness of reports from all<br>rmediate Aggregation Sites. How many reports should there have been from<br>kggregation Sites? Howmany are there? Were they received on time? Are<br>complete? |   |  |
| 1                    | How many reports should there have been from PIUs? [A]  | 36  | M&E Unit expects quarlerly : 1 report from WAJ-Zarqa, 1 report from JVA, 3 monthly reports from As-Samra<br>PMU, 1 quarterly report from PMC (starting Q5), 1 report per quarter from WAJ-Amman (MWI Finance<br>directorate) but now agreed reporting will be annually (1 per year counted here).  |
| 2                    | How many reports are there? [B]   | 33  | All reports available except from WAJ-Amman for year 1, 4 reports were expected but only one received. This is<br>due to the frequency of reporting which was not adapted to the availibility of data. Now reporting yearly.   |
| 3                    | Calculate % Available Reports [B/A]   | 92%   | See explanations above   |
| 4                    | Check the dates on the reports received. How many reports were received on time? (i.e., received by the due date). [C]  | 31  | WAJ-Zarqa on time but at the beginning needed reminders. As-Samra reports all on time. PMC 11 out of the 12<br>reports on time (some difficulties on Q5 (first report), Fiscal agent (WAJ-Amman) report not on time. JVA Q1 to<br>Q4 needed to call but now reports on time without reminder. WAJ-Amman (Fiscal agent), report received with<br>many follow-up.  |
| 5                    | Calculate % On time Reports [C/A]   | 86%   |  |
| 6                    | How many reports were complete? (i.e., complete means that the report contained all the required indicator data*). [D]  | 32  | WAJ-Zarqa, one quarter with missing 1 or 2 indicators missing because of problems with the WAJ MIS (X7). As-<br>Samra reports complete. PMC reports always complete. Fiscal agent report complete.   |
| 7                    | Calculate % Complete Reports [D/A]  | 89%   |  |
|                      | rt 2. Systems Assessment<br>M&E Structure, Functions and Capabilities   |   |  |
| 1                    | There is a documented organizational structure/chart that clearly identifies<br>positions that have data management responsibilities at the M&E Unit.   | Partly  | There is an MCA organizational chart (provided) but it does not clearly identify . Roles and responsibilities of<br>M&E staff are identified in the M&E plan, however, they do not correspond to positions specified in the<br>organizational chart. Job descriptions were provided for M&E Director, Deputy Director and M&E Officer. The<br>mandate of the M&E Unit is described briefly in the Compact Agreement. |
| 2                    | All staff positions dedicated to M&E and data management systems are filled.  | Partly  | 2 out of 3 positions are filled. The position of M&E Director is vacant at the moment.   |
| 3                    | Current human resources at the M&E Unit are sufficient in quantity to<br>ensure good quality M&E  | Partly  | There is need for 3 staffs at the M&E Unit to ensure good quality M&E. For Director for overall supervision and<br>validation; 1 staff dedicated to monitoring (ITT) and 1 staff dedicated to Evaluation (e.g. impact evaluation).<br>Nothing has been decided yet (does not seem to be a priority of CEO)   |
|                      | List the additional human resources needed to ensure good quality M&E   |   | Need for a 1,5 person for monitoring (support, field visits, ITT, training and sensitization); Need for 1,5 person for<br>evaluation (supervision, review quality of data, analysis)   |
| 4                    | Current human resources at the M&E Unit have necessary skills<br>(knowledge, ability and attitude) to ensure good quality M&E   | Partly  | The M&E Deputy Director joined the Evaluator Institute for 2 courses (impact evaluation methodology) and a<br>training was organized by Social Impact on Impact evaluation for all MCA and IEs.  |
|                      | List the skills needed to ensure good quality M&E   |   | Need for skills in: Internal data quality review, data collection, data analysis and interpretation, report writing<br>skills, M&E reporting, building indicators, quality control, evaluation.  |
| 5                    | A senior staff member (e.g., the Program Manager) is responsible for<br>reviewing the aggregated numbers prior to the submission/release of<br>reports from the M&E Unit.   | Yes - completely  | ITT is approved by Dep. Director before submission to MCC. Deputy CEO and Project Directors are also<br>involved in validation.  |
| 6                    | There are designated staff responsible for reviewing the quality of data (i.e., accuracy, completeness, timeliness and confidentiality) received from PIUs.   | Yes - completely  | The M&E officer is in charge of reviewing the quality of data received. He checks for inconsistencies in numbers<br>and trends.  |
| 7                    | There is a training plan which includes staff involved in M&E and data-<br>collection and reporting at all levels in the reporting process.   | No - not at all   | There is no training plan. One of the objective of this DQR is to make recommendations in terms of capacity-<br>building at all levels.  |
| 8                    | The training plan is being implemented in a timely manner.  | N/A   |  |
| 9                    | All relevant staff have received training in M&E and on the data<br>management processes and tools.   | Partly  | Only one 3 days training on Impact Evaluation was organized and offered by Social Impact in June 2013.<br>Training included themes such as M&E, ITT and Impact Evaluation. All MCA-Jordan staff and key M&E focal<br>points participated.  |

| II- F | Reporting Guidelines  |                  |  |
|-------|---|------------------|--|
| 10    | The M&E Unit has documented the definition of the indicator(s).   | Yes - completely | The M&E plan and the Narrative indicator sheets available for MCA-Compact and each project. The M&E plan is<br>available. However, the Narrative indicator sheets were not disseminated to the implementing entities yet. M&E<br>unit is waiting to update the M&E plan first.                         |
| 11    | The M&E Unit has <b>shared</b> the definition of the indicator(s) with all relevant levels of the reporting system (e.g., regions, districts, service points).                            | Partly           | Unfortunately, the narrative indicator sheets were not shared with stakeholders. Definitions were discussed<br>during meetings with stakeholders.  |
| 12    | The M&E plan shows a description of the services (activities) that are related to each indicator measured by the Program.   | Yes - completely | In the logical model and also in the Indicator tracking tables presented in the M&E plan.  |
| 13    | There is a written policy that states for how long source documents and<br>reporting forms need to be retained.   | No - not at all  | No clear guidelines stating how long source documents should be stored by stakeholders.  |
| 14    | The M&E Unit has provided written guidelines to all PIUs on reporting<br>requirements and deadlines.  | Partly           | Some reference to reporting requirements in the IE agreement, but not clearly stated (reporting requirements<br>and deadlines are not specified). The M&E plan does not clarify this either.   |
| т     | he M&E Unit has provided written guidelines per indicator to PIUs on  |                  |  |
| 15    | ", what they are supposed to report on.   | Yes - completely | Indicated in the M&E plan (Indicators Tracking Tables: Indicator Names + Definitions, Baseline and Targets).<br>They have also been discussed and agreed with the implementing entities.   |
| 16    | how (e.g., in what specific format) reports are to be submitted.  | Partly           | Formats have been agreed with the implementing entities. Basically, the M&E unit is using the format orgininally<br>used by the IE. However, no specific written guidelines.   |
| 17    | to whom the reports should be submitted.  | Partly           | The M&E focul points know whom they need to submit the report to. However, there are no specific written<br>guidelines.  |
| 18    | when the reports are due.   | Partly           | This has been agreed with the various entitites. However, no written guidelines.   |
|       | - Data-collection and Reporting Forms / Tools   |                  |  |
| 19    | The M&E Unit has identified standard reporting forms/tools to be used by<br>all reporting levels.   | No - not at all  | No standard reporting format use at all levels. Reporting format varies across entities and was identified based<br>on discussions with IEs.   |
| 20    | If multiple organizations (PIUs) are implementing activities under the<br>Program/project, they all use the same reporting forms and report<br>according to the same reporting timelines. | Partly           | They are not using the same format. Reporting timelines are between the 25th and 30th of previous month,<br>however the period reported varies across entities. The specific reporting period is thus specified in the ITT<br>(reference date).  |
| 21    | The standard forms/tools are consistently used by PIUs.   | Yes - completely | The entities usually use the agreed format consistently.   |
| 22    | Clear instructions have been provided by the M&E Unit on how to<br>complete the data collection and reporting forms/tools.  | Partly           | M&E unit is regularly in contact with the entitites. Since the format is the one already used by the entity, it is not really needed.  |
| 23    | All source documents and reporting forms relevant for measuring the<br>indicators are available for auditing purposes (including dated print-outs in<br>case of computerized system).     | Yes - completely | Information used for M&E was available at M&E unit when requested.   |
| IV    | - Data Management Processes   |                  |  |
| 26    | The M&E Unit has clearly documented data aggregation, analysis and/or<br>manipulation steps performed at each level of the reporting system.  | Yes - completely | The Narrative indicator sheets present the calculation formulas for each indicator (when necessary). Important<br>information on changes to the ITT are indicated in the form of notes. Since Exell sheets (ITT) is protected, there<br>is a need to justify all changes.                              |
| 27    | Feedback is systematically provided to PIUs on the quality of their<br>reporting (i.e., accuracy, completeness and timeliness).   | Partly           | Feedback is usually provided by email or through phone calls. Sometimes visits are necessary to discuss<br>issues.   |
| 28    | (If applicable) There are quality controls in place for when data from paper-<br>based forms are entered into a computer (e.g., double entry, post-data<br>entry verification, etc).      | N/A              | No computorized system at M&E Unit. However, some control in the ITT excel sheets.   |
| 29    | There is a written back-up procedure for electronic data and information.   | Partly           | There is no back-up procedure. However, M&E Director uses his own system. He keeps files of all emails and<br>all documents for each quarter and per source. Back-up is don on laptop and flash disk. No regular back-up on<br>the server (may once).  |
| 30    | If yes, the latest date of back-up is appropriate (e.g., back-ups are weekly or monthly).   | Partly           | After completion of ITT report.  |
| 31    | There is a written procedure to address late, incomplete, inaccurate and<br>missing reports; including following-up with PIUs on data quality issues.                                     | No - not at all  | Procedure is not written. Follow-up done by email, visits or calls.  |
| 32    | If data discrepancies have been uncovered in reports from PIUs, the M&E<br>Unit has documented how these inconsistencies have been resolved.  | Yes - completely | Usually if changes needed in the ITT, this is documented.  |
| 33    | The M&E Unit can demonstrate that regular supervisory site visits have<br>taken place and that data quality has been reviewed.  | Partly           | Sites visits and supervisory work is being done regularly. However, internal data quality reviews have not been<br>possible given the various sources and lack of time). Data quality is discussed with the entities (i.e., how good<br>they feel about the data).                                     |
| V-    | Use of M&E results  |                  |  |
| 33    | Are M&E results used to inform planning of Compact activities? If yes,<br>please provide examples of use. If no, why?   | Partly           | M&E is perceived mostly as an MCC request. For the moment, ITT does not provide additional information to the<br>progress reports submitted by PMC and contractors.  |
| 34    | Are M&E results used to inform budgeting within the Compact? If yes, please provide examples of use. If no, why?  | Partly           | see above. However, disbursements by MCC are linked to achievement of targets for some of the indicators (mostly progress indicators).   |
| 35    | Are M&E results used at MCA-T level to asses performance during<br>implementation? If yes, please provide examples of use. If no, why?  | Partly           | See above. There used to be bi-weekly meetings in which each section's head would present challenges and<br>results. But this has stopped in May 2013 due to unavailability of people.   |
| 36    | Are M&E results used for supporting evidence-based decision-making? If<br>yes, please provide examples of use. If no, why?  | Partly           | See above  |
| 37    | Are M&E results used for informing advocacy efforts? If yes, please<br>provide examples of use. If no, why?   | Partly           | Some information on progress of projects is used by the communication specialist, but it mostly comes from the project directors, not from M&E unit.   |
| 38    | How could use of M&E results be improved at MCA-T level?  |                  | M&E is mainly seen as an MCC request. There is a need to raise awareness at management level on the<br>usefulness of M&E. There is a need to clarify communication channels within MCA. Some suggestions would be<br>the preparation of fact sheets, progress reports, annual summary of achievements. |

|  |  |   | - Intermediate Level (PIU/IE)  |
|--|--|---|--|
|  | IE/Organization:   | Water Au  | thority of Jordan (central level) Finance Department   |
|  | Date of Review:  |   | 19th December 2013   |
|  | Reporting Period Verified:   |   | Q5 to Q8   |
|  | Component of the M&E System  | Answer Codes: Yes<br>completely<br>Partly<br>No - not at all<br>N/A | REVIEWER COMMENTS<br>(Please provide detail for each response not coded "Yes - Completely".<br>Detailed responses will help guide strengthening measures.)   |
| Pa   | rt 1: Reporting performance  |   |  |
| deli<br>all S  | view availability, completeness, and timeliness of reports from all Service<br>very sites within the Region. How many reports should there have been from<br>Service Delivery Sites? How many are there? Were they received on time?<br>they complete?   |   |  |
| 1  | How many reports should there have been from all service delivery sites? [A]   | 4   |  |
| 2  | How many reports are there? [B]  | 1   |  |
| 3  | Calculate % <u>Available</u> Reports [B/A]   | 25%   | Only one report available, but contained information for Q6 and Q7 (Q2 and Q3 for<br>2013).  |
| 4  | Check the dates on the reports received. How many reports were received on time? (i.e., received by the due date). [C]   | 0   |  |
| 5  | Calculate % On time Reports [C/A]  | 0%  | None of the reports were on time   |
| 6  | How many reports were complete? (i.e., complete means that the report contained all the required indicator data*). [D]   | 0   |  |
| 7  | Calculate % Complete Reports [D/A]   | 0%  | The report did not contain the calculated indicator (outstanding debt). Only<br>Operating cost coverage.   |
| Pa   |  |   |  |
|  | rt 2. Systems Assessment   |   |  |
| 1  |  |   |  |
| 1<br>1   | rt 2. Systems Assessment - M&E Structure, Functions and Capabilities There are designated staff responsible for reviewing the quality of data (i.e., accuracy, completeness and timeliness) received from sub-reporting levels (e.g., service delivery sites).   | Partly  | It does not seem there is validation of data received by finance department or W/<br>Zarqa. Only calculations are made en sent to M&E Unit   |
| 1  | M&E Structure, Functions and Capabilities     There are designated staff responsible for reviewing the quality of data     (i.e., accuracy, completeness and timeliness) received from sub-reporting   | Partly  |  |
|  | M&E Structure, Functions and Capabilities     There are designated staff responsible for reviewing the quality of data     (i.e., accuracy, completeness and timeliness) received from sub-reporting     levels (e.g., service delivery sites).     There are designated staff responsible for reviewing aggregated numbers  |   | Zarqa. Only calculations are made en sent to M&E Unit  |
| 1<br>2   | M&E Structure, Functions and Capabilities     There are designated staff responsible for reviewing the quality of data     (i.e., accuracy, completeness and timeliness) received from sub-reporting     levels (e.g., service delivery sites).     There are designated staff responsible for reviewing aggregated numbers     prior to submission to the next level (e.g., to the central M&E Unit).     Current human resources at the M&E Unit are sufficient in quantity to   | N/A   | Zarqa. Only calculations are made en sent to M&E Unit<br>No aggregation necessary.   |
| 1 2 3  | M&E Structure, Functions and Capabilities     There are designated staff responsible for reviewing the quality of data     (i.e., accuracy, completeness and timeliness) received from sub-reporting     levels (e.g., service delivery sites).     There are designated staff responsible for reviewing aggregated numbers     prior to submission to the next level (e.g., to the central M&E Unit).     Current human resources at the M&E Unit are sufficient in quantity to     ensure good quality M&E   | N/A   | Zarqa. Only calculations are made en sent to M&E Unit<br>No aggregation necessary.   |
| 1<br>2<br>3<br>4                                       | M&E Structure, Functions and Capabilities     There are designated staff responsible for reviewing the quality of data     (i.e., accuracy, completeness and timeliness) received from sub-reporting     levels (e.g., service delivery sites).     There are designated staff responsible for reviewing aggregated numbers     prior to submission to the next level (e.g., to the central M&E Unit).     Current human resources at the M&E Unit are sufficient in quantity to     ensure good quality M&E     List the additional human resources needed to ensure good quality M&E     Current human resources at the M&E Unit have necessary skills   | N/A<br>Yes - completely   | Zarqa. Only calculations are made en sent to M&E Unit No aggregation necessary. Reporting is only annual. Does not require an important workload.  |
| 1<br>2   | M&E Structure, Functions and Capabilities     There are designated staff responsible for reviewing the quality of data     (i.e., accuracy, completeness and timeliness) received from sub-reporting     levels (e.g., service delivery sites).     There are designated staff responsible for reviewing aggregated numbers     prior to submission to the next level (e.g., to the central M&E Unit).     Current human resources at the M&E Unit are sufficient in quantity to     ensure good quality M&E     List the additional human resources needed to ensure good quality M&E     Current human resources at the M&E Unit have necessary skills     (knowledge, ability and attitude) to ensure good quality M&E  | N/A<br>Yes - completely   | Zarqa. Only calculations are made en sent to M&E Unit No aggregation necessary. Reporting is only annual. Does not require an important workload. There is need for additional skills.   |
| 1<br>2<br>3<br>4<br>5<br>6                             | M&E Structure, Functions and Capabilities     There are designated staff responsible for reviewing the quality of data     (i.e., accuracy, completeness and timeliness) received from sub-reporting     levels (e.g., service delivery sites).     There are designated staff responsible for reviewing aggregated numbers     prior to submission to the next level (e.g., to the central M&E Unit).     Current human resources at the M&E Unit are sufficient in quantity to     ensure good quality M&E     List the additional human resources needed to ensure good quality M&E     Current human resources at the M&E Unit have necessary skills     (knowledge, ability and attitude) to ensure good quality M&E     List the skills needed to ensure good quality M&E     All relevant staff have received training on the data management   | N/A<br>Yes - completely<br>Partly                                   | Zarqa. Only calculations are made en sent to M&E Unit No aggregation necessary. Reporting is only annual. Does not require an important workload. There is need for additional skills.   |
| 1<br>2<br>3<br>4<br>5<br>6<br><i>II</i><br>The         | M&E Structure, Functions and Capabilities     There are designated staff responsible for reviewing the quality of data     (i.e., accuracy, completeness and timeliness) received from sub-reporting     levels (e.g., service delivery sites).     There are designated staff responsible for reviewing aggregated numbers     prior to submission to the next level (e.g., to the central M&E Unit).     Current human resources at the M&E Unit are sufficient in quantity to     ensure good quality M&E     List the additional human resources needed to ensure good quality M&E     Current human resources at the M&E Unit have necessary skills     (knowledge, ability and attitude) to ensure good quality M&E     List the skills needed to ensure good quality M&E     All relevant staff have received training on the data management     processes and tools.  | N/A<br>Yes - completely<br>Partly                                   | No aggregation necessary.<br>Reporting is only annual. Does not require an important workload.<br>There is need for additional skills.   |
| 1<br>2<br>3<br>4<br>5<br>6<br><i>II</i><br>The<br>repo | M&E Structure, Functions and Capabilities     There are designated staff responsible for reviewing the quality of data     (i.e., accuracy, completeness and timeliness) received from sub-reporting     levels (e.g., service delivery sites).     There are designated staff responsible for reviewing aggregated numbers     prior to submission to the next level (e.g., to the central M&E Unit).     Current human resources at the M&E Unit are sufficient in quantity to     ensure good quality M&E     List the additional human resources needed to ensure good quality M&E     Current human resources at the M&E Unit have necessary skills     (knowledge, ability and attitude) to ensure good quality M&E     List the skills needed to ensure good quality M&E     All relevant staff have received training on the data management     processes and tools.     M&E Department at IE level has provided written guidelines to each sub-  | N/A<br>Yes - completely<br>Partly                                   | Zarqa. Only calculations are made en sent to M&E Unit No aggregation necessary. Reporting is only annual. Does not require an important workload. There is need for additional skills.   |
| 1<br>2<br>3<br>4<br>5<br>6<br><i>II</i><br>The         | M&E Structure, Functions and Capabilities     There are designated staff responsible for reviewing the quality of data     (i.e., accuracy, completeness and timeliness) received from sub-reporting     levels (e.g., service delivery sites).     There are designated staff responsible for reviewing aggregated numbers     prior to submission to the next level (e.g., to the central M&E Unit).     Current human resources at the M&E Unit are sufficient in quantity to     ensure good quality M&E     List the additional human resources needed to ensure good quality M&E     Current human resources at the M&E Unit have necessary skills     (knowledge, ability and attitude) to ensure good quality M&E     List the skills needed to ensure good quality M&E     List the staff have received training on the data management     processes and tools.     Indicator Definitions and Reporting Guidelines     M&E Department at IE level has provided written guidelines to each sub-     ring level on   | N/A Yes - completely Partly No - not at all                         | Zarqa. Only calculations are made en sent to M&E Unit No aggregation necessary. Reporting is only annual. Does not require an important workload. There is need for additional skills. Data management, data verification and reporting skills.  |
| 1<br>2<br>3<br>4<br>5<br>6<br><i>II</i><br>7           | M&E Structure, Functions and Capabilities     There are designated staff responsible for reviewing the quality of data     (i.e., accuracy, completeness and timeliness) received from sub-reporting     levels (e.g., service delivery sites).     There are designated staff responsible for reviewing aggregated numbers     prior to submission to the next level (e.g., to the central M&E Unit).     Current human resources at the M&E Unit are sufficient in quantity to     ensure good quality M&E     List the additional human resources needed to ensure good quality M&E     Current human resources at the M&E Unit have necessary skills     (knowledge, ability and attitude) to ensure good quality M&E     List the skills needed to ensure good quality M&E     All relevant staff have received training on the data management     processes and tools.     Indicator Definitions and Reporting Guidelines     M&E Department at IE level has provided written guidelines to each sub-     oring level on     ",, what they are supposed to report on. | N/A Yes - completely Partly No - not at all Partly                  | Zarqa. Only calculations are made en sent to M&E Unit No aggregation necessary. Reporting is only annual. Does not require an important workload. There is need for additional skills. Data management, data verification and reporting skills. Data management, data verification and reporting skills. Data management of the second seco |

| 11 | I- Data-collection and Reporting Forms / Tools   |                 |  |
|----|--|-----------------|--|
| 11 | Are you aware of the indicators in the Indicator Tracking Table (ITT)?   | No - not at all |  |
| 12 | Do you understand the indicators you need to report on in the Indicator<br>Tracking Table (ITT)?   | Partly          |  |
| 13 | The M&E Department at PIU level has identified standard reporting<br>forms/tools to be used by <u>all reporting levels</u>   | Partly          |  |
| 14 | Clear instructions have been provided by the M&E Department at PIU<br>level to sub-reporting levels (e.g., service delivery sites) on how to<br>complete the data collection and reporting forms/tools.        | N/A             |  |
| 15 | The standard forms/tools are <u>consistently</u> used by Service Delivery<br>Sites and other sub-reporting levels.   | N/A             |  |
| 16 | All source documents and reporting forms relevant for measuring the indicators are available for auditing purposes (including dated print-outs in case of computerized system).                                | No - not at all | Source documents were not provided, even after many requests.          |
| IV | /- Data Management Processes   |                 |  |
| 17 | Feedback is systematically provided to all service delivery sites on the<br>quality of their reporting (i.e., accuracy, completeness and timeliness).  | No - not at all |  |
| 18 | If applicable, there are quality controls in place for when data from paper-<br>based forms are entered into a computer (e.g., double entry, post-data<br>entry verification, etc).                            | No - not at all |  |
| 19 | There is a written back-up procedure for electronic data and information.  | Partly          | No written back-up procedure. However, back-up is done on 3 computers. |
| 20 | <u>If yes ,</u> the latest date of back-up is appropriate (e.g., back-ups are weekly or monthly).  | Partly          |  |
| 21 | There is a written procedure to address late, incomplete, inaccurate and<br>missing reports; including following-up with service delivery sites on data<br>quality issues.                                     | No - not at all |  |
| 22 | If data discrepancies have been uncovered in reports from service<br>delivery sites, the Intermediate Aggregation Levels (e.g., regions, PIU)<br>have documented how these inconsistencies have been resolved. | No - not at all |  |
| V. | - Use of M&E results   |                 |  |
| 33 | Are M&E results used to inform planning of Project activities? If yes,<br>please provide examples of use. If no, why?  | No - not at all |  |
| 34 | Are M&E results used to inform budgeting of the project? If yes, please provide examples of use. If no, why?   | No - not at all |  |
| 35 | Are M&E results used to asses performance during implementation of the<br>project? If yes, please provide examples of use. If no, why?   | No - not at all |  |
| 36 | Are M&E results used for supporting evidence-based decision-making? If<br>yes, please provide examples of use. If no, why?   | No - not at all |  |
| 37 | Are M&E results used for informing advocacy efforts? If yes, please<br>provide examples of use. If no, why?  | No - not at all |  |
| 38 | How could use of M&E results be improved at Project level?   |                 |  |

#### **1.2. WATER NETWORK PROJECT**

|                                    |   |  | ssment Protocol - MCA-Jordan  |  |
|------------------------------------|---|--|---|--|
|                                    | MCA-T M&E Unit/Organization:  |  | Water Network Project Directorate   |  |
|                                    | Date of Review:   |  | December, 2013  |  |
|                                    | Reporting Period Verified:  |  | NA-Contracts are recently awarded.  |  |
|                                    | Component of the M&E System   | Answer Codes:<br>Yes - completely<br>Partly<br>No - not at all<br>N/A                                      | REVIEWER COMMENTS<br>(Please provide detail for each response not coded "Yes - Completely". Detailed responses will help guide<br>strengthening measures.)  |  |
| Pa                                 | rt 1: Reporting Performance   |  |   |  |
|                                    | view availability, completeness, and timeliness of reports from all   |  |   |  |
| Inte<br>all A                      | armediate Aggregation Sites. How many reports should there have been from<br>Aggregation Sites? How many are there? Were they received on time? Are<br>y complete?  |  |   |  |
| 1                                  | How many reports should there have been from PIUs? [A]  | NA   | Water Project Directorate shall be receiving monthly progress reports from the PMC reflecting the progress o<br>each of the awarded contracts separately.   |  |
| 2                                  | How many reports are there? [B]   |  |   |  |
| 3                                  | Calculate % Available Reports [B/A]   | -  |   |  |
| 4                                  | Check the dates on the reports received. How many reports were received on time? (i.e., received by the due date). [C]  |  | No reports has yet been received as the contracts are recently awarded.   |  |
| 5                                  | Calculate % On time Reports [C/A]   | -  |   |  |
| 6                                  | How many reports were complete? (i.e., complete means that the report contained all the required indicator data*). [D]  |  | Reports templates are not available. However, the indicators defined are directly related to the project activities<br>and must be accurately reported for progress follow up and financial installments.   |  |
|                                    |   |  |   |  |
| 7                                  | Calculate % Complete Reports [D/A]  | -  |   |  |
| 7                                  | Calculate % Complete Reports [D/A]  | -  |   |  |
| ·                                  | Calculate % <u>Complete</u> Reports [D/A]<br>rt 2. Systems Assessment   | -  |   |  |
| Pa                                 |   | -  |   |  |
| Pa                                 | rt 2. Systems Assessment  | Yes - completely   |   |  |
| Pa                                 | Int 2. Systems Assessment - M&E Structure, Functions and Capabilities There is a documented organizational structure/chart that clearly identifies  |  | The Water Project Director are also considering the introduction of a Project Engineer/Supervisor position to t<br>in charge for the on-site supervision of contractors activities.   |  |
| <b>Pa</b><br><i>I</i> -            | Int 2. Systems Assessment -M&E Structure, Functions and Capabilities There is a documented organizational structure/chart that clearly identifies positions that have data management responsibilities at the M&E Unit. All staff positions dedicated to M&E and data management systems are  | Yes - completely   |   |  |
| <b>Pa</b><br><i>I</i><br>1         | rt 2. Systems Assessment -M&E Structure, Functions and Capabilities There is a documented organizational structure/chart that clearly identifies positions that have data management responsibilities at the M&E Unit. All stalf positions dedicated to M&E and data management systems are filled. Current human resources at the M&E Unit are sufficient in quantity to   | Yes - completely<br>Yes - completely   |   |  |
| <b>Pa</b><br><i>I</i><br>1         | Int 2. Systems Assessment Int 2. Systems Assessment Int 2. Systems Assessment Int 2. Systems Assessment Interest and Capabilities There is a documented organizational structure/chart that clearly identifies positions that have data management responsibilities at the M&E Unit. All staff positions dedicated to M&E and data management systems are filled. Current human resources at the M&E Unit are sufficient in quantity to ensure good quality M&E   | Yes - completely<br>Yes - completely   |   |  |
| <b>Pa</b><br>1<br>2<br>3           | Int 2. Systems Assessment IM&E Structure, Functions and Capabilities IThere is a documented organizational structure/chart that clearly identifies positions that have data management responsibilities at the M&E Unit. All staff positions dedicated to M&E and data management systems are filled. Current human resources at the M&E Unit are sufficient in quantity to ensure good quality M&E List the additional human resources needed to ensure good quality M&E Current human resources at the M&E Unit have necessary skills   | Yes - completely<br>Yes - completely<br>Yes - completely   | in charge for the on-site supervision of contractors activities. Directorate staff are highly qualified, still, once reporting scheme and templates are developed by the PMC an approved by the Directorate, training on the use of these templates and data verification and validation  |  |
| <b>Pa</b><br>1<br>2<br>3           | Int 2. Systems Assessment         •M&E Structure, Functions and Capabilities         •M&E Structure, Functions and Capabilities         There is a documented organizational structure/chart that clearly identifies positions that have data management responsibilities at the M&E Unit.         All staff positions dedicated to M&E and data management systems are filled.         Current human resources at the M&E Unit are sufficient in quantity to ensure good quality M&E         List the additional human resources needed to ensure good quality M&E         Current human resources at the M&E Unit have necessary skills (knowledge, ability and attitude) to ensure good quality M&E  | Yes - completely<br>Yes - completely<br>Yes - completely   | in charge for the on-site supervision of contractors activities. Directorate staff are highly qualified, still, once reporting scheme and templates are developed by the PMC an approved by the Directorate, training on the use of these templates and data verification and validation techniques should be provided.   |  |
| <b>Pa</b><br>1<br>1<br>2<br>3<br>4 | rt 2. Systems Assessment         -M&E Structure, Functions and Capabilities         There is a documented organizational structure/chart that clearly identifies positions that have data management responsibilities at the M&E Unit.         All staff positions dedicated to M&E and data management systems are filled.         Current human resources at the M&E Unit are sufficient in quantity to ensure good quality M&E         List the additional human resources needed to ensure good quality M&E         Current human resources at the M&E Unit have necessary skills (knowledge, ability and attitude) to ensure good quality M&E         List the skills needed to ensure good quality M&E         List the skills member (e.g., the Program Manager) is responsible for reviewing the aggregated numbers prior to the submission/release of  | Yes - completely<br>Yes - completely<br>Yes - completely<br>Partly   | in charge for the on-site supervision of contractors activities. Directorate staff are highly qualified, still, once reporting scheme and templates are developed by the PMC an approved by the Directorate, training on the use of these templates and data verification and validation techniques should be provided. Data verification and validation techniques.  |  |
| <b>Pa</b><br>1<br>2<br>3<br>4<br>5 | Int 2. Systems Assessment         •M&E Structure, Functions and Capabilities         •M&E Structure, Functions and Capabilities         There is a documented organizational structure/chart that clearly identifies positions that have data management responsibilities at the M&E Unit.         All staff positions dedicated to M&E and data management systems are filled.         Current human resources at the M&E Unit are sufficient in quantity to ensure good quality M&E         List the additional human resources needed to ensure good quality M&E         Current human resources at the M&E Unit have necessary skills (knowledge, ability and attitude) to ensure good quality M&E         List the skills needed to ensure good quality M&E         A senior staff member (e.g., the Program Manager) is responsible for reviewing the aggregated numbers prior to the submission/release of reports from the M&E Unit.         There are designated staff responsible for reviewing the quality of data (i.e., accuracy, completeness, timeliness and confidentiality) received   | Yes - completely<br>Yes - completely<br>Yes - completely<br>Partiy<br>Partiy<br>Yes - completely           | in charge for the on-site supervision of contractors activities. Directorate staff are highly qualified, still, once reporting scheme and templates are developed by the PMC an approved by the Directorate, training on the use of these templates and data verification and validation techniques should be provided. Data verification and validation techniques. Water Project Director   |  |
| <b>Pa</b><br>1<br>2<br>3<br>4<br>5 | Image: Structure, Functions and Capabilities         •M&E Structure, Functions and Capabilities         •M&E Structure, Functions and Capabilities         There is a documented organizational structure/chart that clearly identifies positions that have data management responsibilities at the M&E Unit.         All stalf positions dedicated to M&E and data management systems are filled.         Current human resources at the M&E Unit are sufficient in quantity to ensure good quality M&E         List the additional human resources needed to ensure good quality M&E         Current human resources at the M&E Unit have necessary skills (knowledge, ability and attitude) to ensure good quality M&E         List the skills needed to ensure good quality M&E         List the skills needed to ensure good quality M&E         A senior staff member (e.g., the Program Manager) is responsible for reviewing the aggregated numbers prior to the submission/release of reports from the M&E Unit.         There are designated staff responsible for reviewing the quality of data (i.e., accurrey, completeness, timeliness and confidentiality) received from Plus.         There is a training plan which includes staff involved in M&E and data- | Yes - completely<br>Yes - completely<br>Yes - completely<br>Partly<br>Yes - completely<br>Yes - completely | in charge for the on-site supervision of contractors activities.           Directorate staff are highly qualified, still, once reporting scheme and templates are developed by the PMC ar approved by the Directorate, training on the use of these templates and data verification and validation techniques should be provided.           Data verification and validation techniques.           Water Project Director           Deputy Water Project Director |  |

| II- F | Reporting Guidelines  |                  |  |
|-------|---|------------------|--|
|       |   |                  |  |
| 10    | The M&E Unit has documented the definition of the indicator(s).   | Yes - completely |  |
| 11    | The M&E Unit has <b>shared</b> the definition of the indicator(s) with all relevant levels of the reporting system (e.g., regions, districts, service points).                            | Yes - completely |  |
| 12    | The M&E plan shows a description of the services (activities) that are related to each indicator measured by the Program.   | Yes - completely |  |
| 13    | There is a written policy that states for how long source documents and reporting forms need to be retained.  | No - not at all  | No docuemnted records retention policy is available. However, the system adopted by the PMC allows for<br>records and reports retention throughout the project duration for contractual purposes.    |
| 14    | The M&E Unit has provided written guidelines to all PIUs on reporting<br>requirements and deadlines.  | Yes - completely | reporting requirements are defiend for all agreed indicators.  |
| т     | he M&E Unit has provided written guidelines per indicator to PIUs on  |                  |  |
| 15    | ", what they are supposed to report on.   | Yes - completely |  |
| 16    | how (e.g., in what specific format) reports are to be submitted.  | No - not at all  | Reporting templates/formats are not yet developed.   |
| 17    | to whom the reports should be submitted.  | Yes - completely |  |
| 18    | when the reports are due.   | Yes - completely |  |
|       | - Data-collection and Reporting Forms / Tools   |                  |  |
| 19    | The M&E Unit has identified standard reporting forms/tools to be used by<br>all reporting levels.   | No - not at all  | Reporting templates are not yet develoepd.   |
| 20    | If multiple organizations (PIUs) are implementing activities under the<br>Program/project, they all use the same reporting forms and report<br>according to the same reporting timelines. | No - not at all  | The PMC shall define reporting scheme for the contractors and shall take into consideration time required by<br>contractors to send their reports for verification by PMC prior to sending to MCA-J. |
| 21    | The standard forms/tools are consistently used by PIUs.   | No - not at all  | No reports are yet developed.  |
| 22    | Clear instructions have been provided by the M&E Unit on how to<br>complete the data collection and reporting forms/tools.  | Partly           | Indicators definitions are well-established. However, reporting templates are not yet developed.   |
| 23    | All source documents and reporting forms relevant for measuring the<br>indicators are available for auditing purposes (including dated print-outs in<br>case of computerized system).     | No - not at all  | No reports are yet developed.  |
| IV    | - Data Management Processes   |                  |  |
| 26    | The M&E Unit has clearly documented data aggregation, analysis and/or<br>manipulation steps performed at each level of the reporting system.  | Partly           | Data review and analysis responsibilitites are well defined, still, no docuemnted procedures for data<br>management are in place.  |
| 27    | Feedback is systematically provided to PIUs on the quality of their<br>reporting (i.e., accuracy, completeness and timeliness).   | N/A              | No reports are developed so far.   |
| 28    | (If applicable) There are quality controls in place for when data from paper-<br>based forms are entered into a computer (e.g., double entry, post-data<br>entry verification, etc).      | N/A              | No quality control measures are developed for data entry and/or post entry verification.   |
| 29    | There is a written back-up procedure for electronic data and information.   | Yes - completely | Data will be maintained and backed-up at several levels (contractors, PMC, and Water Project Directorate).   |
| 30    | If yes, the latest date of back-up is appropriate (e.g., back-ups are weekly or monthly).   | N/A              | Data and records are not yet generated.  |
| 31    | There is a written procedure to address late, incomplete, inaccurate and<br>missing reports; including following-up with PIUs on data quality issues.                                     | No - not at all  | No written procedure is developed.   |
| 32    | If data discrepancies have been uncovered in reports from PIUs, the M&E<br>Unit has documented how these inconsistencies have been resolved.  | N/A              | No data is available yet.  |
| 33    | The M&E Unit can demonstrate that regular supervisory site visits have taken place and that data quality has been reviewed.   | Partly           | MCA-J are planning to assign a site engineer/supervisor for the direct supervision of the project(s) progress<br>including on site data quality verification.  |
| v     | Use of M&E results  |                  |  |
| 33    | Are M&E results used to inform planning of Compact activities? If yes, please provide examples of use. If no, why?  | Partly           | No reports are yet developed. Progress in some contracts (e.g. Primary and Secondary network<br>rehabilitiation/restructuring) will affect other indicators (e.g. NRW level)                         |
| 34    | Are M&E results used to inform budgeting within the Compact? If yes, please provide examples of use. If no, why?  | Partly           | No progress is yet achieved. However, each of the contract has a budget that is being monitored against<br>progress.   |
| 35    | Are M&E results used at MCA-J level to asses performance during<br>implementation? If yes, please provide examples of use. If no, why?  | Partly           | Progress is controlled against financial installments of contract values.  |
| 36    | Are M&E results used for supporting evidence-based decision-making? If yes, please provide examples of use. If no, why?   | Yes - completely | Results will be used to monitor project progress and taking decisions on mitigation measures to be taken to re-<br>adjust progress.  |
| 37    | Are M&E results used for informing advocacy efforts? If yes, please provide examples of use. If no, why?  | N/A              |  |
| 38    | How could use of M&E results be improved at MCA-J level?  |                  |  |

|                | Reporting and System Assessm   | ent Sheet - Iı  | ntermediate Aggregation Site   |
|----------------|--|---|--|
|                | Organization:  |   | Jordan Water Authority – Zarqa   |
|                | Date of Review:  |   |  |
|                | Reporting Period Verified:   |   | Quarter 5 to Quarter 8   |
|                | Component of the M&E System  | Answer Codes: Yes<br>completely<br>Partly<br>No - not at all<br>N/A | REVIEWER COMMENTS<br>(Please provide detail for each response not coded "Yes - Completely".<br>Detailed responses will help guide strengthening measures.)   |
| Pa             | rt 1: Reporting performance  |   |  |
| deliv<br>all S | iew availability, completeness, and timeliness of reports from all Service<br>rery sites within the Region. How many reports should there have been from<br>ervice Delivery Sites? How many are there? Were they received on time?<br>they complete? |   |  |
| 5              | How many reports should there have been from all service delivery sites? [A]   | 4   | WAJ-Zarqa are issuing NRW reports on quarterly basis. Data used for NRW calculation are obtained from the Customer Services system (X7) for water billing quartities and from Operations for water production, imports, and exports quantities.<br>It is agreed that NRW calculations are time consuming and a One-Quarter lag in reporting is accepted (i.e. Q8 NRW percentage is actually for Q7). |
| 6              | How many reports are there? [B]  | 4   | All reports are available for the review period as agreed between WAJ-Zarqa and MCA-J.   |
| 7              | Calculate % Available Reports [B/A]  | 100%  | See explanation above.   |
| 8              | Check the dates on the reports received. How many reports were received on time? (i.e., received by the due date). [C]   | 4   | All reports are received as agreed with one quarter lag. Data is usually provided for<br>the Quarter after 4-6 weeks of quarter end and is reported for the next quarter.  |
| 9              | Calculate % On time Reports [C/A]  | 100%  | See explanation above.   |
| 10             | How many reports were complete? (i.e., complete means that the report contained all the required indicator data*). [D]   | 4   | Reports sent to MCA-J are all complete and sent formally and duly signed and<br>authorized by WAJ-Zarqa.   |
| 11             | Calculate % Complete Reports [D/A]   | 100%  | See explanation above.   |
|                |  |   |  |
| Pa             | rt 2. Systems Assessment   |   |  |
| 1-             | M&E Structure, Functions and Capabilities  |   |  |
| 1              | There are designated staff responsible for reviewing the quality of data<br>(i.e., accuracy, completeness and timeliness) received from sub-reporting<br>levels (e.g., service delivery sites).  | Partly  | The NRW Directorate and support staff are taking the initiative of reviewing the data collected from the system through checking some suspected customers consumption extracted from $X7$ . However, no official mandate is available.   |
| 2              | There are designated staff responsible for reviewing aggregated numbers<br>prior to submission to the next level (e.g., to the central M&E Unit).  | Partly  | The NRW Directorate and support staff are taking the initiative of reviewing the data collected from the system through checking some suspected customers consumption extracted from $X$ . However, no official mandate is available.  |
| 3              | Current human resources are sufficient to ensure good quality M&E at PIU level.  | Partly  | Data quality control is delivered upon availability of the staff but no staff is officially<br>designated for this control.  |
| 4              | All relevant staff have received training on the data management processes and tools.  | No - not at all   | No official data management training was provided.   |

| 11- | Indicator Definitions and Reporting Guidelines   |                  |   |
|-----|--|------------------|---|
|     | M&E Department at PIU level has provided written guidelines to each sub-<br>rting level on   |                  |   |
| 5   | ", what they are supposed to report on.  | Partly           | No written guidelines were provided on data collection, review, processing,<br>reviewing, authorizing, and reporting. However, reporting formats have<br>been discussed and agreed. However, no written guidelines. |
| 6   | how (e.g., in what specific format) reports are to be submitted.   | Partly           | See explanation above.  |
| 7   | to whom the reports should be submitted.   | Partly           | See explanation above.  |
| 8   | when the reports are due.  | Partly           | See explanation above.  |
|     | - Data-collection and Reporting Forms / Tools  |                  |   |
| 9   | The M&E Department at PIU level has identified standard reporting<br>forms/tools to be used by all reporting levels  | Yes - completely | WAJ-Zarqa adopted the outline developed by IWA for NRW calculation. The same<br>table is used for reporting NRW results.  |
| 10  | Clear instructions have been provided by the M&E Department at PIU level<br>to sub-reporting levels (e.g., service delivery sites) on how to complete the<br>data collection and reporting forms/tools.        | N/A              | only reports extracted from the system are provided by sub-reporting levels. No<br>specific data processing or special reporting formats are requested.   |
| 11  | The standard forms/tools are consistently used by Service Delivery<br>Sites and other sub-reporting levels.  | Yes - completely | Same forms of reports are always being used.  |
| 12  | All source documents and reporting forms relevant for measuring the<br>indicators are available for auditing purposes (including dated print-outs in<br>case of computerized system).                          | Yes - completely | All detailed results can be provided from the system upon request.  |
| IV  | - Data Management Processes  |                  |   |
| 13  | Feedback is systematically provided to all service delivery sites on the<br>quality of their reporting (i.e., accuracy, completeness and timeliness).  | Partly           | In case of serious data quality issues (like significant drop or increase in water<br>production) only.   |
| 14  | If applicable, there are quality controls in place for when data from paper-<br>based forms are entered into a computer (e.g., double entry, post-data<br>entry verification, etc).                            | No - not at all  | only in case of apparent mistakes, data is being re-checked.  |
| 15  | There is a written back-up procedure for electronic data and information.  | No - not at all  | Data is being instantly transferred to WAJ-Central servers. Only local back-up is<br>delivered as an initiative from IT staff. No emergency/contingency plans in case of<br>connection failure with WAJ-Central.    |
| 16  | If yes, the latest date of back-up is appropriate (e.g., back-ups are weekly or monthly).  |                  |   |
| 17  | There is a written procedure to address late, incomplete, inaccurate and<br>missing reports; including following-up with service delivery sites on data<br>quality issues.                                     | No - not at all  | No written procedures are available.  |
| 18  | If data discrepancies have been uncovered in reports from service<br>delivery sites, the Intermediate Aggregation Levels (e.g., regions, PIU)<br>have documented how these inconsistencies have been resolved. | No - not at all  | No official documentation for resolved discrepancies is available. They are dealt with<br>directly between the NRW-Directorate, IT Department, and the concerned<br>department(s)                                   |

#### **1.3. WASTE WATER NETWORK PROJECT**

|                | Reporting Sy   | stem Asse   | ssment Protocol - MCA-Jordan   |  |
|----------------|--|---|--|--|
|                | MCA-T M&E Unit/Organization:   |   | Waste Water Network Project Directorate  |  |
|                | Date of Review:  |   | 17 December, 2014  |  |
|                | Reporting Period Verified:   | Quarter 5 to Quarter 8  |  |  |
|                | Component of the M&E System  | Answer Codes:<br>Yes - completely<br>Partly<br>No - not at all<br>N/A | REVIEWER COMMENTS<br>(Please provide detail for each response not coded "Yes - Completely". Detailed responses will help guide<br>strengthening measures.)   |  |
|                |  |   |  |  |
|                | rt 1: Reporting Performance  | [   |  |  |
| Intei<br>all A | riew availability, completeness, and timeliness of reports from all<br>rmediate Aggregation Sites. How many reports should there have been from<br>(ggregation Sites? How many are there? Were they received on time? Are<br>complete? |   |  |  |
| 1              | How many reports should there have been from PIUs? [A]   | 4   | There are three contracts under this project: C1 (East Zarqa), C2 (West Zarqa) and C3 (Ruselfa). PMC reports<br>monthly, quarterly and annually through DCEO which then forwards reports to the Project Director. However,<br>only the quarterly report is included here. WAJ-Zarqa used to report to Project Director (by phone) and<br>information was then forwarded to M&E Unit. Since the last 3 months, WAJ-Zarqa directly sends information to<br>M&E Unit (more efficient). This is not included here, just PMC reports. |  |
| 2              | How many reports are there? [B]  | 4   | All reports are available  |  |
| 3              | Calculate % Available Reports [B/A]  | 100%  |  |  |
| 4              | Check the dates on the reports received. How many reports were received on time? (i.e., received by the due date). [C]   | 4   | All reports are submitted on time  |  |
| 5              | Calculate % On time Reports [C/A]  | 100%  |  |  |
| 6              | How many reports were complete? (i.e., complete means that the report contained all the required indicator data*). [D]   | 4   | All reports are complete   |  |
| 7              | Calculate % Complete Reports [D/A]   | 100%  |  |  |
|                |  |   |  |  |
| Ра             | rt 2. Systems Assessment   |   |  |  |
| 1-             | M&E Structure, Functions and Capabilities  |   |  |  |
| 1              | There is a documented organizational structure/chart that clearly identifies<br>positions that have data management responsibilities.  | Partly  | Some job descriptions are not available. Though when announcements are made for the position this job<br>description is clearly formulated   |  |
| 2              | All staff positions dedicated to M&E and data management systems are filled.   | Yes - completely  | M&E activities are not really time consuming as the information provided to the M&E Unit is readily available in<br>the PMC reports. WAJ-Zarqa now sends information directly to M&E Unit.   |  |
| 3              | Current human resources at the M&E Unit are sufficient in quantity to<br>ensure good quality M&E   | Yes - completely  | The Project Director used to be the only staff for the project. However, a junior Eng. Was recruited in November<br>There is still need for a Mid-Experienced Eng. To ensure proper supervision of the project.  |  |
|                | List the additional human resources needed to ensure good quality M&E  |   |  |  |
| 4              | Current human resources at the M&E Unit have necessary skills<br>(knowledge, ability and attitude) to ensure good quality M&E  | Yes - completely  | See above  |  |
|                | List the skills needed to ensure good quality M&E  |   | Training on project management tools, especially in the use of Primavera P6.   |  |
| 5              | A senior staff member (e.g., the Program Manager) is responsible for<br>reviewing the aggregated numbers prior to the submission/release of<br>reports from the M&E Unit.  | Yes - completely  | The Project Director reviews and provide feedback on all reports submitted by the PMC.   |  |
| 6              | There are designated staff responsible for reviewing the quality of data<br>(i.e., accuracy, completeness, timeliness and confidentiality) received<br>from PIUs.  | Yes - completely  | The Project Director reviews and provide feedback on all reports submitted by the PMC. Site visits are made<br>every week.   |  |
| 7              | There is a training plan which includes staff involved in M&E and data-<br>collection and reporting at all levels in the reporting process.  | N/A   |  |  |
| 8              | The training plan is being implemented in a timely manner.   | N/A   |  |  |
| 9              | All relevant staff have received training in M&E and on the data<br>management processes and tools.  | Yes - completely  | The Project Dir. Was in the Social Impact Training. However, the new Junior Engineer was not there since he's new.   |  |

| II- F | Reporting Guidelines  |                  |  |
|-------|---|------------------|--|
|       |   |                  |  |
| 10    | The M&E Unit has documented the definition of the indicator(s).   | Partly           | Sometimes the Project Director asks what the M&E wants. Not always clear.  |
| 11    | The M&E Unit has <b>shared</b> the definition of the indicator(s) with all relevant levels of the reporting system (e.g., regions, districts, service points).                            | Partly           | Not clear for contractors and PMC as reporting on M&E is not included in their contracts and there are no written guidelines.  |
| 12    | The M&E plan shows a description of the services (activities) that are related to each indicator measured by the Program.   | Yes - completely |  |
| 13    | There is a written policy that states for how long source documents and<br>reporting forms need to be retained.   | Yes - completely | As long as Project information goes, it is included in the PMC and Contractor's contracts.   |
| 14    | The M&E Unit has provided written guidelines to all PIUs on reporting<br>requirements and deadlines.  | Partly           | No written guidelines as to when reports are to be submitted. Project Director receives a reminder from M&E<br>Unit a week before the submission deadline.   |
| т     | he M&E Unit has provided written guidelines per indicator to PIUs on $\ldots$   |                  |  |
| 15    | ", what they are supposed to report on.   | Yes - completely | Progress report format was agreed with PIMC.   |
| 16    | how (e.g., in what specific format) reports are to be submitted.  | Yes - completely | Progress report format was agreed with PMC.  |
| 17    | to whom the reports should be submitted.  | Yes - completely | Yes, stated in PMC contract.   |
| 18    | when the reports are due.   | Partly           | Not stated clearly for submission to M&E Unit. However, submission dates for PMC reports are clear and stated<br>in their contract.  |
|       | - Data-collection and Reporting Forms / Tools   |                  |  |
| 19    | The M&E Unit has identified standard reporting forms/tools to be used by<br>all reporting levels.   | Yes - completely | Progress report format was agreed with PMC.  |
| 20    | If multiple organizations (PIUs) are implementing activities under the<br>Program/project, they all use the same reporting forms and report<br>according to the same reporting timelines. | N/A              |  |
| 21    | The standard forms/tools are consistently used by PIUs.   | Yes - completely |  |
| 22    | Clear instructions have been provided by the M&E Unit on how to<br>complete the data collection and reporting forms/tools.  | Yes - completely | Progress report format was agreed with PMC.  |
| 23    | All source documents and reporting forms relevant for measuring the<br>indicators are available for auditing purposes (including dated print-outs in<br>case of computerized system).     | Yes - completely | Yes, the PMC stores all information on their website (in addition to hard copies).   |
| IV    | - Data Management Processes   |                  |  |
| 26    | The M&E Unit has clearly documented data aggregation, analysis and/or<br>manipulation steps performed at each level of the reporting system.  | N/A              |  |
| 27    | Feedback is systematically provided to PIUs on the quality of their<br>reporting (i.e., accuracy, completeness and timeliness).   | Yes - completely |  |
| 28    | (If applicable) There are quality controls in place for when data from paper-<br>based forms are entered into a computer (e.g., double entry, post-data<br>entry verification, etc).      | N/A              |  |
| 29    | There is a written back-up procedure for electronic data and information.   | Partly           | No written procedures at MCA-Level   |
| 30    | If yes, the latest date of back-up is appropriate (e.g., back-ups are weekly or monthly).   | Yes - completely | The Project Director does a regular back-up of his files. Emails are stored on the MCA server, but this was to be<br>checked with the IT specialist. However, it was not possible to meet him during the mission.  |
| 31    | There is a written procedure to address late, incomplete, inaccurate and missing reports; including following-up with PIUs on data quality issues.  | Partly           | It is understood by all but not written.   |
| 32    | If data discrepancies have been uncovered in reports from PIUs, the M&E Unit has documented how these inconsistencies have been resolved.   | Yes - completely | Issues with data in the reports from PMC are discussed during meetings.  |
| 33    | The M&E Unit can demonstrate that regular supervisory site visits have taken place and that data quality has been reviewed.   | Yes - completely | The Director goes to site twice a week.  |
| v-    | Use of M&E results  |                  |  |
| 33    | Are M&E results used to inform planning of Compact activities? If yes,<br>please provide examples of use. If no, why?   | Partly           | Use of M&E results(ITT) is very limited, since the information is already available in the PMC reports. Main results<br>(outocome and impacts) will show up mostly at the end of the Compact or even only after. Only limited<br>involvement in the planning and budgeting of activities (determined by WAJ and MCC at the time). Some results<br>might be helpful in defining the solution for blockages (cleaning instead of replacement). In addition, in many<br>cases, he is the one providing the data to M&E Unit, so no new information. |
| 34    | Are M&E results used to inform budgeting within the Compact? If yes, please provide examples of use. If no, why?  | Partly           | Might be useful to budget for the connection of other sites (outscaling options. E.g., P2)   |
| 35    | Are M&E results used at MCA-T level to asses performance during implementation? If yes, please provide examples of use. If no, why?   | Yes - completely | progress of contractor work and preparing next tenders   |
| 36    | Are M&E results used for supporting evidence-based decision-making? If<br>yes, please provide examples of use. If no, why?  | Partly           | Data are too prematured to be useful for decision-making. Some stakeholders do not like long detailed reports.   |
| 37    | Are M&E results used for informing advocacy efforts? If yes, please<br>provide examples of use. If no, why?   | Partly           | We have been told that many pepole asked to be connected to the network after hearing about its activities   |
| 38    | How could use of M&E results be improved at MCA-T level?  |                  | Partial handing over might show an impact on some indicators. By better presentation of the huge data collected<br>and the work done   |

|   |  |  | - Intermediate Level (PIU/IE)  |
|---|--|--|--|
|   | IE/Organization:   |  | WAJ – Zarqa Directorate  |
|   | Date of Review:  |  |  |
|   | Reporting Period Verified:   |  |  |
|   | Component of the M&E System  | Answer Codes: Yes<br>completely<br>Partly<br>No - not at all<br>N/A  | REVIEWER COMMENTS<br>(Please provide detail for each response not coded "Yes - Completely".<br>Detailed responses will help guide strengthening measures.)   |
| Pa  | rt 1: Reporting performance  |  |  |
| deli<br>all S                                     | view availability, completeness, and timeliness of reports from all Service<br>very sites within the Region. How many reports should there have been from<br>Service Delivery Sites? How many are there? Were they received on time?<br>they complete?   |  |  |
| 1   | How many reports should there have been from all service delivery sites? [A]   | 4  | delays at the beginning. In the last three qyarters on time  |
| 2   | How many reports are there? [B]  | 4  |  |
| 3   | Calculate % <u>Available</u> Reports [B/A]   | 100%   |  |
| 4   | Check the dates on the reports received. How many reports were received on time? (i.e., received by the due date). [C]   | 4  |  |
| 5   | Calculate % On time Reports [C/A]  | 100%   | with need to reminder  |
| 6   | How many reports were complete? (i.e., complete means that the report contained all the required indicator data*). [D]   | 4  | as per the form  |
| 7   | Calculate % Complete Reports [D/A]   | 100%   |  |
| Ŀ   | rt 2. Systems Assessment<br>- M&E Structure, Functions and Capabilities  |  |  |
| 1   | There are designated staff responsible for reviewing the quality of data   |  | Wastewater division at WA-l-Zama lacks many nersonal. Mannement system is  |
|   | (i.e., accuracy, completeness and timeliness) received from sub-reporting levels (e.g., service delivery sites).   | No - not at all  | Wastewater division at WAJ-Zarqa lacks many personal. Mangement system is<br>also deficit<br>due to lack of technical professionals and software problems. They do themselve   |
| 2   | (i.e., accuracy, completeness and timeliness) received from sub-reporting  | No - not at all<br>Partly  | also deficit<br>due to lack of technical professionals and software problems. They do themselve  |
|   | (i.e., accuracy, completeness and timeliness) received from sub-reporting<br>levels (e.g., service delivery sites).<br>There are designated staff responsible for reviewing aggregated numbers   | Partly<br>Partly   | also deficit<br>due to lack of technical professionals and software problems. They do themselve<br>the double check where they detect the confusing billing numbers. They are fully<br>aware of the problem and need technical support with x7   |
| 2   | <ul> <li>(i.e., accuracy, completeness and timeliness) received from sub-reporting levels (e.g., service delivery sites).</li> <li>There are designated staff responsible for reviewing aggregated numbers prior to submission to the next level (e.g., to the central M&amp;E Unit).</li> <li>Current human resources at the M&amp;E Unit are sufficient in quantity to</li> </ul>  | Partly   | also deficit<br>due to lack of technical professionals and software problems. They do themselve<br>the double check where they detect the confusing billing numbers. They are fully<br>aware of the problem and need technical support with x7<br>For some indicators like sewer outflow incidents, the staff are not enough to repo   |
| 2   | (i.e., accuracy, completeness and timeliness) received from sub-reporting<br>levels (e.g., service delivery sites).<br>There are designated staff responsible for reviewing aggregated numbers<br>prior to submission to the next level (e.g., to the central M&E Unit).<br>Current human resources at the M&E Unit are sufficient in quantity to<br>ensure good quality M&E   | Partly<br>Partly<br>Data review<br>specialist<br>Yes - completely  | also deficit<br>due to lack of technical professionals and software problems. They do themselve<br>the double check where they detect the confusing billing numbers. They are fully<br>aware of the problem and need technical support with x7<br>For some indicators like sewer outflow incidents, the staff are not enough to repor-<br>No further information is also included excpet the number<br>labour, data mangement specialist   |
| 2   | <ul> <li>(i.e., accuracy, completeness and timeliness) received from sub-reporting levels (e.g., service delivery sites).</li> <li>There are designated staff responsible for reviewing aggregated numbers prior to submission to the next level (e.g., to the central M&amp;E Unit).</li> <li>Current human resources at the M&amp;E Unit are sufficient in quantity to ensure good quality M&amp;E</li> <li>List the additional human resources needed to ensure good quality M&amp;E</li> <li>Current human resources at the M&amp;E Unit have necessary skills</li> </ul>  | Partly<br>Partly<br>Data review<br>specialist  | also deficit<br>due to lack of technical professionals and software problems. They do themselve<br>the double check where they detect the confusing billing numbers. They are fully<br>aware of the problem and need technical support with x7<br>For some indicators like sewer outflow incidents, the staff are not enough to report<br>No further information is also included excpet the number<br>labour, data mangement specialist<br>They have the knowledge and could identify the gaps of the data collection syste   |
| 2<br>3<br>4                                       | <ul> <li>(i.e., accuracy, completeness and timeliness) received from sub-reporting levels (e.g., service delivery sites).</li> <li>There are designated staff responsible for reviewing aggregated numbers prior to submission to the next level (e.g., to the central M&amp;E Unit).</li> <li>Current human resources at the M&amp;E Unit are sufficient in quantity to ensure good quality M&amp;E</li> <li>List the additional human resources needed to ensure good quality M&amp;E</li> <li>Current human resources at the M&amp;E Unit have necessary skills (knowledge, ability and attitude) to ensure good quality M&amp;E</li> </ul>   | Partly Partly Data review specialist Yes - completely Compact anlysis. Reporting and   | also deficit<br>due to lack of technical professionals and software problems. They do themselve<br>the double check where they detect the confusing billing numbers. They are fully<br>aware of the problem and need technical support with x7<br>For some indicators like sewer outflow incidents, the staff are not enough to repor<br>No further information is also included except the number<br>labour, data mangement specialist<br>They have the knowledge and could identify the gaps of the data collection syste<br>the technical problems. WAJ zaraqa needs personal and technical support   |
| 2<br>3<br>4<br>5<br>6                             | <ul> <li>(i.e., accuracy, completeness and timeliness) received from sub-reporting levels (e.g., service delivery sites).</li> <li>There are designated staff responsible for reviewing aggregated numbers prior to submission to the next level (e.g., to the central M&amp;E Unit).</li> <li>Current human resources at the M&amp;E Unit are sufficient in quantity to ensure good quality M&amp;E</li> <li>List the additional human resources needed to ensure good quality M&amp;E</li> <li>Current human resources at the M&amp;E Unit have necessary skills (knowledge, ability and attitude) to ensure good quality M&amp;E</li> <li>List the skills needed to ensure good quality M&amp;E</li> <li>All relevant staff have received training on the data management</li> </ul>  | Partly Partly Data review specialist Yes - completely Compact anlysis. Reporting and presentation                                  | also deficit due to lack of technical professionals and software problems. They do themselve the double check where they detect the confusing billing numbers. They are fully aware of the problem and need technical support with x7 For some indicators like sewer outflow incidents, the staff are not enough to repor No further information is also included excpet the number labour, data mangement specialist They have the knowledge and could identify the gaps of the data collection syste the technical problems. WAJ zaraqa needs personal and technical support data review, reporting monitoring   |
| 2<br>3<br>4<br>5<br>6<br><i>II</i><br>The         | <ul> <li>(i.e., accuracy, completeness and timeliness) received from sub-reporting levels (e.g., service delivery sites).</li> <li>There are designated staff responsible for reviewing aggregated numbers prior to submission to the next level (e.g., to the central M&amp;E Unit).</li> <li>Current human resources at the M&amp;E Unit are sufficient in quantity to ensure good quality M&amp;E</li> <li>List the additional human resources needed to ensure good quality M&amp;E</li> <li>Current human resources at the M&amp;E Unit have necessary skills (knowledge, ability and attitude) to ensure good quality M&amp;E</li> <li>List the skills needed to ensure good quality M&amp;E</li> <li>All relevant staff have received training on the data management processes and tools.</li> </ul>   | Partly Partly Data review specialist Yes - completely Compact anlysis. Reporting and presentation                                  | also deficit due to lack of technical professionals and software problems. They do themselve the double check where they detect the confusing billing numbers. They are fully aware of the problem and need technical support with x7 For some indicators like sewer outflow incidents, the staff are not enough to repor No further information is also included excpet the number labour, data mangement specialist They have the knowledge and could identify the gaps of the data collection syste the technical problems. WAJ zaraqa needs personal and technical support data review, reporting monitoring   |
| 2<br>3<br>4<br>5<br>6<br><i>II</i><br>The         | <ul> <li>(i.e., accuracy, completeness and timeliness) received from sub-reporting levels (e.g., service delivery sites).</li> <li>There are designated staff responsible for reviewing aggregated numbers prior to submission to the next level (e.g., to the central M&amp;E Unit).</li> <li>Current human resources at the M&amp;E Unit are sufficient in quantity to ensure good quality M&amp;E</li> <li>List the additional human resources needed to ensure good quality M&amp;E</li> <li>Current human resources at the M&amp;E Unit have necessary skills (knowledge, ability and attitude) to ensure good quality M&amp;E</li> <li>List the skills needed to ensure good quality M&amp;E</li> <li>List the skills needed to ensure good quality M&amp;E</li> <li>All relevant staff have received training on the data management processes and tools.</li> <li>Indicator Definitions and Reporting Guidelines</li> <li>M&amp;E Department at IE level has provided written guidelines to each sub-</li> </ul>   | Partly Partly Data review specialist Yes - completely Compact anlysis. Reporting and presentation                                  | also deficit due to lack of technical professionals and software problems. They do themselve the double check where they detect the confusing billing numbers. They are fully aware of the problem and need technical support with x7 For some indicators like sewer outflow incidents, the staff are not enough to repor No further information is also included excpet the number labour, data mangement specialist They have the knowledge and could identify the gaps of the data collection syste the technical problems. WAJ zaraqa needs personal and technical support data review, reporting monitoring   |
| 2<br>3<br>4<br>5<br>6<br><i>II</i><br>The         | <ul> <li>(i.e., accuracy, completeness and timeliness) received from sub-reporting levels (e.g., service delivery sites).</li> <li>There are designated staff responsible for reviewing aggregated numbers prior to submission to the next level (e.g., to the central M&amp;E Unit).</li> <li>Current human resources at the M&amp;E Unit are sufficient in quantity to ensure good quality M&amp;E</li> <li>List the additional human resources needed to ensure good quality M&amp;E</li> <li>Current human resources at the M&amp;E Unit have necessary skills (knowledge, ability and attitude) to ensure good quality M&amp;E</li> <li>List the skills needed to ensure good quality M&amp;E</li> <li>All relevant staff have received training on the data management processes and tools.</li> <li>Indicator Definitions and Reporting Guidelines</li> <li>M&amp;E Department at IE level has provided written guidelines to each sub-orting level on</li> </ul>   | Partly Partly Data review specialist Yes - completely Compact anlysis. Reporting and presentation No - not at all                  | also deficit due to lack of technical professionals and software problems. They do themselve the double check where they detect the confusing billing numbers. They are fully aware of the problem and need technical support with x7 For some indicators like sewer outflow incidents, the staff are not enough to repor No further information is also included excpet the number labour, data mangement specialist They have the knowledge and could identify the gaps of the data collection syste the technical problems. WAJ zaraqa needs personal and technical support data review, reporting monitoring   |
| 2<br>3<br>4<br>5<br>6<br><i>II</i><br>The<br>repo | <ul> <li>(i.e., accuracy, completeness and timeliness) received from sub-reporting levels (e.g., service delivery sites).</li> <li>There are designated staff responsible for reviewing aggregated numbers prior to submission to the next level (e.g., to the central M&amp;E Unit).</li> <li>Current human resources at the M&amp;E Unit are sufficient in quantity to ensure good quality M&amp;E</li> <li>List the additional human resources needed to ensure good quality M&amp;E</li> <li>Current human resources at the M&amp;E Unit have necessary skills (knowledge, ability and attitude) to ensure good quality M&amp;E</li> <li>List the skills needed to ensure good quality M&amp;E</li> <li>All relevant staff have received training on the data management processes and tools.</li> <li>Indicator Definitions and Reporting Guidelines</li> <li>M&amp;E Department at IE level has provided written guidelines to each sub-orting level on</li> <li>,,, what they are supposed to report on.</li> </ul> | Partly Partly Data review specialist Yes - completely Compact anlysis. Reporting and presentation No - not at all Yes - completely | also deficit due to lack of technical professionals and software problems. They do themselve the double check where they detect the confusing billing numbers. They are fully aware of the problem and need technical support with x7 For some indicators like sewer outflow incidents, the staff are not enough to repor No further information is also included except the number labour, data mangement specialist They have the knowledge and could identify the gaps of the data collection syste the technical problems. WAJ zaraqa needs personal and technical support data review, reporting monitoring They need training in evaluation of the data, reporting and |

|    | III- Data-collection and Reporting Forms / Tools   |                  |   |  |
|----|--|------------------|---|--|
| 11 | Are you aware of the indicators in the Indicator Tracking Table (ITT)?   | No - not at all  | Waj Zarqa send the requested information and do not have with ITT and direct connection   |  |
| 12 | Do you understand the indicators you need to report on in the Indicator<br>Tracking Table (ITT)?   | N/A              | WAJ z are not informed about the ITT  |  |
| 13 | The M&E Department at PIU level has identified standard reporting<br>forms/tools to be used by <u>all reporting levels</u>   | Yes - completely | No written guidelines   |  |
| 14 | Clear instructions have been provided by the M&E Department at PIU<br>level to sub-reporting levels (e.g., service delivery sites) on how to<br>complete the data collection and reporting forms/tools.        | Yes - completely | no written procedures   |  |
| 15 | The standard forms/tools are <u>consistently</u> used by Service Delivery Sites and other sub-reporting levels.  | Yes - completely | agreed on the format  |  |
| 16 | All source documents and reporting forms relevant for measuring the<br>indicators are available for auditing purposes (including dated print-outs in<br>case of computerized system).                          | Yes - completely | not within waj-z  |  |
| IV | - Data Management Processes  |                  |   |  |
| 17 | Feedback is systematically provided to all service delivery sites on the<br>quality of their reporting (i.e., accuracy, completeness and timeliness).  | Yes - completely | no feedback from m&e unit to waj-z only in case of late reports or missing data   |  |
| 18 | If applicable, there are quality controls in place for when data from paper-<br>based forms are entered into a computer (e.g., double entry, post-data<br>entry verification, etc).                            | Yes - completely | Quality control is done WAJ amman   |  |
| 19 | There is a written back-up procedure for electronic data and information.  | Yes - completely | yes   |  |
| 20 | <u>If yes</u> , the latest date of back-up is appropriate (e.g., back-ups are weekly or monthly).  | Yes - completely | weekly  |  |
| 21 | There is a written procedure to address late, incomplete, inaccurate and<br>missing reports; including following-up with service delivery sites on data<br>quality issues.                                     | Yes - completely | no written guidelines. But according to their experience they communicate to clear<br>things up. However, no written minutes or protocols is done |  |
| 22 | If data discrepancies have been uncovered in reports from service<br>delivery sites, the Intermediate Aggregation Levels (e.g., regions, PIU)<br>have documented how these inconsistencies have been resolved. | Yes - completely | again no written guidelines   |  |
| V- | Use of M&E results   |                  |   |  |
| 33 | Are M&E results used to inform planning of Project activities? If yes, please provide examples of use. If no, why?   | Yes - completely | Progress in work and capacity needs   |  |
| 34 | Are M&E results used to inform budgeting of the project? If yes, please provide examples of use. If no, why?   | Yes - completely | They are informed of the contengancy component with the budgeting to<br>recommend new activities or new personals                                 |  |
| 35 | Are M&E results used to asses performance during implementation of the project? If yes, please provide examples of use. If no, why?  | Partly           | They got the reports from PMC or WAJ do no assessment   |  |
| 36 | Are M&E results used for supporting evidence-based decision-making? If<br>yes, please provide examples of use. If no, why?   | Partly           | the form of their presentation like $\Pi T$ is not very attractive to stakeholders. Long and lacks attraction                                     |  |
| 37 | Are M&E results used for informing advocacy efforts? If yes, please<br>provide examples of use. If no, why?  | Yes - completely | it shows the project progress and acheivements  |  |
| 38 | How could use of M&E results be improved at Project level?   |                  |   |  |

|  | Reporting and System Assessment Sheet - Intermediate Aggregation Site  |   |  |  |  |
|--|--|---|--|--|--|
| Organization:  |  | PMC   |  |  |  |
|  | Date of Review:  | 17 December 2013  |  |  |  |
|  | Reporting Period Verified:   | Q5 to Q8  |  |  |  |
|  | Component of the M&E System  | Answer Codes: Yes<br>completely<br>Partly<br>No - not at all<br>N/A | REVIEWER COMMENTS<br>(Please provide detail for each response not coded "Yes - Completely".<br>Detailed responses will help guide strengthening measures.)   |  |  |
| Pa   | Part 1: Reporting performance  |   |  |  |  |
| deliv<br>all S   | iew availability, completeness, and timeliness of reports from all Service<br>rery sites within the Region. How many reports should there have been from<br>ervice Delivery Sites? How many are there? Were they received on time?<br>they complete? |   |  |  |  |
| 5  | How many reports should there have been from all service delivery sites? [A]   | 4   | considered for this excersis as q5-q8  |  |  |
| 6  | How many reports are there? [B]  | 4   |  |  |  |
| 7  | Calculate % Available Reports [B/A]  | 100%  |  |  |  |
| 8  | Check the dates on the reports received. How many reports were received on time? (i.e., received by the due date). [C]   | 4   | told by M&E unit at MCA J  |  |  |
| 9  | Calculate % On time Reports [C/A]  | 100%  |  |  |  |
| 10   | How many reports were complete? (i.e., complete means that the report contained all the required indicator data*). [D]   | 4   | assured by M&E unit  |  |  |
| 11   | Calculate % Complete Reports [D/A]   | 100%  |  |  |  |
|  | rt 2. Systems Assessment<br>M&E Structure, Functions and Capabilities  |   |  |  |  |
| 1  | There are designated staff responsible for reviewing the quality of data<br>(i.e., accuracy, completeness and timeliness) received from sub-reporting<br>levels (e.g., service delivery sites).  | Yes - completely  | project directorate and PMC do revision for the data. Health and gender specialist<br>are also involved in the revision process  |  |  |
| 2  | There are designated staff responsible for reviewing aggregated numbers<br>prior to submission to the next level (e.g., to the central M&E Unit).  | Yes - completely  | Reports go through different channels before approval. Project directorate, MCA<br>mangement level through discussion and then MCA when uploaded. In the field<br>green test procedure is done where 3 sign the daily report (residence eng, inspector<br>and) |  |  |
| 3  | Current human resources are sufficient to ensure good quality M&E at PIU level.  | Partly  | In the field further skills would be<br>needed like reporting. More personal are<br>also needed to follow up the increasing<br>number of contracts.  |  |  |
| 4  | All relevant staff have received training on the data management processes and tools.  | Partly  | Some would need more mangement and DQR training . Eng. Ababneh expressed the need for a mid experienced assitance  |  |  |
| 11-  | Indicator Definitions and Reporting Guidelines   |   |  |  |  |
| The M&E Department at PIU level has provided written guidelines to each sub-<br>reporting level on |  |   |  |  |  |
| 5  | ", what they are supposed to report on.  | Yes - completely  | most indicators are defiened. However, some need more clarification like<br>number of sewere out flow. Or need to be improved in terms of reporting.   |  |  |
| 6  | how (e.g., in what specific format) reports are to be submitted.   | Yes - completely  | M&E unit send a home made format for WAJ and JVA   |  |  |
| 7  | to whom the reports should be submitted.   | Yes - completely  | not written guideline  |  |  |
| 8  | when the reports are due.  | Partly  | They do remind sometimes WAJ Zarqa of the reports timeline   |  |  |

| 11 | III- Data-collection and Reporting Forms / Tools   |                  |   |  |
|----|--|------------------|---|--|
| 9  | The M&E Department at PIU level has identified standard reporting<br>forms/tools to be used by all reporting levels  | Yes - completely | daily reports from contractors. Complains, payments, PMC reporting and daily<br>reports   |  |
| 10 | Clear instructions have been provided by the M&E Department at PIU level<br>to sub-reporting levels (e.g., service delivery sites) on how to complete the<br>data collection and reporting forms/tools.        | Yes - completely | no written guidelines for the reporting at WAJ-Z who do what and when   |  |
| 11 | The standard forms/tools are consistently used by Service Delivery<br>Sites and other sub-reporting levels.  | Yes - completely | as agreed upon  |  |
| 12 | All source documents and reporting forms relevant for measuring the<br>indicators are available for auditing purposes (including dated print-outs in<br>case of computerized system).                          | Yes - completely |   |  |
| N  | /- Data Management Processes   |                  |   |  |
| 13 | Feedback is systematically provided to all service delivery sites on the<br>quality of their reporting (i.e., accuracy, completeness and timeliness).  | Yes - completely | mainly on completeness.   |  |
| 14 | If applicable, there are quality controls in place for when data from paper-<br>based forms are entered into a computer (e.g., double entry, post-data<br>entry verification, etc).                            | Yes - completely | by project directors and before by program adminstrator   |  |
| 15 | There is a written back-up procedure for electronic data and information.  | Yes - completely |   |  |
| 16 | If ves, the latest date of back-up is appropriate (e.g., back-ups are weekly or monthly).  | Yes - completely | weekly  |  |
| 17 | There is a written procedure to address late, incomplete, inaccurate and<br>missing reports; including following-up with service delivery sites on data<br>quality issues.                                     | Yes - completely | no written procedures. However, when incomplete data or missing data apears they make a note or communicate through emails or meet in person. As clarified by M&E and project directors |  |
| 18 | If data discrepancies have been uncovered in reports from service<br>delivery sites, the Intermediate Aggregation Levels (e.g., regions, PIU)<br>have documented how these inconsistencies have been resolved. | Partly           | They do meetings in discrepency cases, use telphone call or personal talks  |  |

#### **1.4. AS-SAMRA EXPANSION PROJECT**

|                             | Reporting System Assessment Protocol - MCA-Jordan  |   |  |  |
|-----------------------------|--|---|--|--|
|                             | MCA-T M&E Unit/Organization:   | As-Samra Project Directorate  |  |  |
| Date of Review:             |  | December 17 2013  |  |  |
| Reporting Period Verified:  |  |   | Q5 to Q8   |  |
| Component of the M&E System |  | Answer Codes:<br>Yes - completely<br>Partly<br>No - not at all<br>N/A   | REVIEWER COMMENTS<br>(Please provide detail for each response rot coded "Yes - Completely". Detailed responses will help guide<br>strengthening measures.) |  |
|                             |  |   |  |  |
|                             | rt 1: Reporting Performance<br>riewavailability, completeness, and timeliness of reports from all  | 1   |  |  |
| Inte<br>all A               | revolvationally, completeness, and unreliness or epotts informating<br>mediate Aggregation Sites. How many reports should there have been from<br>Aggregation Sites? How many are there? Were they received on time? Are<br>r complete?  |   |  |  |
| 1                           | How many reports should there have been from PIUs? [A]   | 4   |  |  |
| 2                           | How many reports are there? [B]  | 4   |  |  |
| 3                           | Calculate % Available Reports [B/A]  | 100%  |  |  |
| 4                           | Check the dates on the reports received. How many reports were received on time? (i.e., received by the due date). [C]   | 4   |  |  |
| 5                           | Calculate % On time Reports [C/A]  | 100%  |  |  |
| 6                           | How many reports were complete? (i.e., complete means that the report contained all the required indicator data*). [D]   | 4   |  |  |
| 7                           | Calculate % Complete Reports [D/A]   | 100%  |  |  |
|                             |  |   |  |  |
|                             |  |   |  |  |
| Ра                          | rt 2. Systems Assessment   |   |  |  |
|                             | rt 2. Systems Assessment M&E Structure, Functions and Capabilities   |   |  |  |
|                             | •  | Yes - completely  | yes the organizational chart identifies positions  |  |
| 1<br>1                      | M&E Structure, Functions and Capabilities  | Yes - completely<br>Partly  | yes the organizational chart identifies positions not all. An assistant to the director is still under preparation for announcement                        |  |
| 1<br>1<br>2                 | M&E Structure, Functions and Capabilities There is a documented organizational structure/chart that clearly identifies positions that have data management responsibilities at the M&E Unit. All staff positions dedicated to M&E and data management systems are  |   |  |  |
| 1<br>1<br>2                 | M&E Structure, Functions and Capabilities There is a documented organizational structure/chart that clearly identifies positions that have data management responsibilities at the M&E Unit. All staff positions dedicated to M&E and data management systems are filled. Current human resources at the M&E Unit are sufficient in quantity to  | Partly  |  |  |
| 1<br>1<br>2                 | M&E Structure, Functions and Capabilities There is a documented organizational structure/chart that clearly identifies positions that have data management responsibilities at the M&E Unit. All staff positions dedicated to M&E and data management systems are filled. Current human resources at the M&E Unit are sufficient in quantity to ensure good quality M&E  | Partly  |  |  |
| 1<br>1<br>2<br>3            | M&E Structure, Functions and Capabilities There is a documented organizational structure/chart that clearly identifies positions that have data management responsibilities at the M&E Unit. All staff positions dedicated to M&E and data management systems are filled. Current human resources at the M&E Unit are sufficient in quantity to ensure good quality M&E List the additional human resources needed to ensure good quality M&E Current human resources at the M&E Unit have necessary skills  | Partly<br>Partly  |  |  |
| 1<br>1<br>2<br>3            | M&E Structure, Functions and Capabilities There is a documented organizational structure/chart that clearly identifies positions that have data management responsibilities at the M&E Unit. All staff positions dedicated to M&E and data management systems are filled. Current human resources at the M&E Unit are sufficient in quantity to ensure good quality M&E List the additional human resources needed to ensure good quality M&E Current human resources at the M&E Unit have necessary skills (knowledge, ability and attitude) to ensure good quality M&E   | Partly<br>Partly  |  |  |
| 1<br>2<br>3                 | M&E Structure, Functions and Capabilities There is a documented organizational structure/chart that clearly identifies positions that have data management responsibilities at the M&E Unit. All staff positions dedicated to M&E and data management systems are filled. Current human resources at the M&E Unit are sufficient in quantity to ensure good quality M&E List the additional human resources needed to ensure good quality M&E Current human resources at the M&E Unit have necessary skills (knowledge, ability and attitude) to ensure good quality M&E List the skills needed to ensure good quality M&E List the skills needed to ensure good quality M&E List the skills needed to ensure good quality M&E A senior staff member (e.g., the Program Manager) is responsible for reviewing the aggregated numbers prior to the submission/release of  | Partly<br>Partly<br>Yes - completely                                    |  |  |
| 1<br>2<br>3<br>4<br>5       | M&E Structure, Functions and Capabilities There is a documented organizational structure/chart that clearly identifies positions that have data management responsibilities at the M&E Unit. All staff positions dedicated to M&E and data management systems are filled. Current human resources at the M&E Unit are sufficient in quantity to ensure good quality M&E List the additional human resources needed to ensure good quality M&E Current human resources at the M&E Unit have necessary skills (knowledge, ability and attitude) to ensure good quality M&E List the skills needed to ensure good quality M&E List the skills needed to ensure good quality M&E A senior staff member (e.g., the Program Manager) is responsible for reviewing the aggregated numbers prior to the submission/release of reports from the M&E Unit. There are designated staff responsible for reviewing the quality of data (i.e., accuracy, completeness, timeliness and confidentiality) received  | Partly Partly Ves - completely Yes - completely                         |  |  |
| 1<br>2<br>3<br>4<br>5<br>6  | M&E Structure, Functions and Capabilities There is a documented organizational structure/chart that clearly identifies positions that have data management responsibilities at the M&E Unit. All staff positions dedicated to M&E and data management systems are filled. Current human resources at the M&E Unit are sufficient in quantity to ensure good quality M&E List the additional human resources needed to ensure good quality M&E Current human resources at the M&E Unit have necessary skills (knowledge, ability and attitude) to ensure good quality M&E List the skills needed to ensure good quality the guality of data (i.e., accuracy, completeness, timeliness and confidentiality) received from PUs. There is a training plan which includes staff involved in M&E and data- | Partly Partly Partly Yes - completely Yes - completely Yes - completely |  |  |

| II- F | II- Reporting Guidelines  |                  |  |  |
|-------|---|------------------|--|--|
|       |   |                  |  |  |
| 10    | The M&E Unit has documented the definition of the indicator(s).   | Partly           | The expansion indicator is still to be defined. Modification for the name of the indicator or design of a new one is<br>recommended              |  |
| 11    | The M&E Unit has <b>shared</b> the definition of the indicator(s) with all relevant levels of the reporting system (e.g., regions, districts, service points).                            | Partly           | Still there is an agreement that expansion indicator shall be defiened   |  |
| 12    | The M&E plan shows a description of the services (activities) that are related to each indicator measured by the Program.   | Yes - completely |  |  |
| 13    | There is a written policy that states for how long source documents and<br>reporting forms need to be retained.   | Yes - completely |  |  |
| 14    | The M&E Unit has provided written guidelines to all PIUs on reporting<br>requirements and deadlines.  | Yes - completely | For progress data yes. Not for data informed by IEs directly to M&E Unit.  |  |
| т     | he M&E Unit has provided written guidelines per indicator to PIUs on  |                  |  |  |
| 15    | ,,, what they are supposed to report on.  | Yes - completely | Yes for progress of the constructions. No for indicators informed by IEs   |  |
| 16    | how (e.g., in what specific format) reports are to be submitted.  | Partly           | format is available and in use, but no written guidelines  |  |
| 17    | to whom the reports should be submitted.  | Partly           | No written guidelines although known   |  |
| 18    | when the reports are due.   | Partly           | No written guidelines although known   |  |
|       | - Data-collection and Reporting Forms / Tools   |                  |  |  |
| 19    | The M&E Unit has identified standard reporting forms/tools to be used by<br>all reporting levels.   | Yes - completely | all forms are available  |  |
| 20    | If multiple organizations (PIUs) are implementing activities under the<br>Program/project, they all use the same reporting forms and report<br>according to the same reporting timelines. | Yes - completely | yes. Contractor is using the format as the authority engineer. IEs use format discussed with M&E Unit.   |  |
| 21    | The standard forms/tools are consistently used by PIUs.   | Yes - completely |  |  |
| 22    | Clear instructions have been provided by the M&E Unit on how to<br>complete the data collection and reporting forms/tools.  | Yes - completely |  |  |
| 23    | All source documents and reporting forms relevant for measuring the<br>indicators are available for auditing purposes (including dated print-outs in<br>case of computerized system).     | Yes - completely |  |  |
| IV    | - Data Management Processes   |                  |  |  |
| 26    | The M&E Unit has clearly documented data aggregation, analysis and/or<br>manipulation steps performed at each level of the reporting system.  | Yes - completely | As regards progress reports from contractor only.  |  |
| 27    | Feedback is systematically provided to PIUs on the quality of their<br>reporting (i.e., accuracy, completeness and timeliness).   | Yes - completely | only on completeness   |  |
| 28    | (If applicable) There are quality controls in place for when data from paper-<br>based forms are entered into a computer (e.g., double entry, post-data<br>entry verification, etc).      | Yes - completely | an external German firm is reviewing the data form   |  |
| 29    | There is a written back-up procedure for electronic data and information.   | Yes - completely | backups are done hard and electronic   |  |
| 30    | If yes, the latest date of back-up is appropriate (e.g., back-ups are weekly or monthly).   | Yes - completely | weekly   |  |
| 31    | There is a written procedure to address late, incomplete, inaccurate and missing reports; including following-up with PIUs on data quality issues.  | Yes - completely |  |  |
| 32    | If data discrepancies have been uncovered in reports from PIUs, the M&E Unit has documented how these inconsistencies have been resolved.   | Yes - completely |  |  |
| 33    | The M&E Unit can demonstrate that regular supervisory site visits have taken place and that data quality has been reviewed.   | Yes - completely |  |  |
| v-    | Use of M&E results  |                  |  |  |
| 33    | Are M&E results used to inform planning of Compact activities? If yes, please provide examples of use. If no, why?  | Yes - completely | technical progress, employment, gender.  |  |
| 34    | Are M&E results used to inform budgeting within the Compact? If yes, please provide examples of use. If no, why?  | Yes - completely |  |  |
| 35    | Are M&E results used at MCA-T level to asses performance during<br>implementation? If yes, please provide examples of use. If no, why?  | No - not at all  | reporting is done only on the engineering part. Though some procurement, and gender issues are included.   |  |
| 36    | Are M&E results used for supporting evidence-based decision-making? If<br>yes, please provide examples of use. If no, why?  | No - not at all  | reports are discussed on technical basis. If needed recommendations or modifications shall be done before the<br>report is approved and uploaded |  |
| 37    | Are M&E results used for informing advocacy efforts? If yes, please provide examples of use. If no, why?  | No - not at all  | more focus shall be done for the project novality especially for the sludge line   |  |
| 38    | How could use of M&E results be improved at MCA-T level?  |                  |  |  |

| Reporting and System Assessment Protocol - Intermediate Level (PIU/IE) |   |   |  |
|--|---|---|--|
|  | IE/Organization:  | Ministry of Water and Irrigation - Project Magement Unit              |  |
| Date of Review:  |   | December 29 2013  |  |
|  | Reporting Period Verified:  | Q5 to Q8  |  |
|  | Component of the M&E System   | Answer Codes: Yes -<br>completely<br>Partly<br>No - not at all<br>N/A | REVIEWER COMMENTS<br>(Please provide detail for each response not coded "Yes - Completely".<br>Detailed responses will help guide strengthening measures. )                                      |
| Part   | 1: Reporting performance  |   |  |
| deliver<br>all Ser   | wavailability, completeness, and timeliness of reports from all Service<br>ry sites within the Region. How many reports should there have been from<br>vice Delivery Sites? How many are there? Were they received on time?<br>ey complete? |   |  |
|  | How many reports should there have been from all service delivery sites? [A]  | 4   | Quarterly report on progress sent by SPC on influent, effluent and quality of water.   |
| 2  | How many reports are there? [B]   | 4   |  |
| 3  | Calculate % Available Reports [B/A]   | 100%  |  |
|  | Check the dates on the reports received. How many reports were received on time? (i.e., received by the due date). [C]  | 4   |  |
| 5  | Calculate % On time Reports [C/A]   | 100%  |  |
|  | How many reports were complete? (i.e., complete means that the report contained all the required indicator data*). [D]  | 4   |  |
| 7  | Calculate % Complete Reports [D/A]  | 100%  |  |
|  | 2. Systems Assessment<br>1&E Structure, Functions and Capabilities  |   |  |
| 1  | There are designated staff responsible for reviewing the quality of data<br>(i.e., accuracy, completeness and timeliness) received from sub-reporting<br>levels (e.g., service delivery sites).   | Yes - completely  | The M&E focal point at PMU is responsible for reviewing the quality of the data  |
|  | There are designated staff responsible for reviewing aggregated numbers<br>prior to submission to the next level (e.g., to the central M&E Unit).   | Yes - completely  | The M&E focal point at PMU is responsible for reviewing the quality of the data  |
|  | Current human resources at the M&E Unit are sufficient in quantity to<br>ensure good quality M&E  | Partly  | The MWI PMU is managing various projects and would therefore need proper staff<br>to ensure better supervision.  |
|  | List the additional human resources needed to ensure good quality M&E   |   | Financial, legal, technical staff and engineers.   |
|  | Current human resources at the M&E Unit have necessary skills<br>(knowledge, ability and attitude) to ensure good quality M&E   | Partly  | There is need for further training apart from the one already organized by M&E Unit  |
| 5  | List the skills needed to ensure good quality M&E   |   | Analysis, interpretation, presentation and reporting of M&E data. Mostly, how to<br>adpat the format to stakeholders. How to share their experience with wider public.<br>How to publish papers. |
|  | All relevant staff have received training on the data management<br>processes and tools.  | Partly  | Yes, but further needs. Trainings should be organized outside Amman and Zarqa to<br>ensure attendance.   |
| II- II   | ndicator Definitions and Reporting Guidelines   |   |  |
|  | &E Department at IE level has provided written guidelines to each sub-<br>ing level on  |   |  |
| 7  | ,,, what they are supposed to report on.  | Yes - completely  | Yes  |
| 8  | how (e.g., in what specific format) reports are to be submitted.  | Yes - completely  | A specific reporting format is used by SPC   |
| 9  | to whom the reports should be submitted.  | Yes - completely  | Yes, see Document control procedures   |
| 10   | when the reports are due.   | Yes - completely  | Yes in contract with SPC   |

|    | III- Data-collection and Reporting Forms / Tools   |                  |   |  |
|----|--|------------------|---|--|
| 11 | Are you aware of the indicators in the Indicator Tracking Table (ITT)?   | Yes - completely |   |  |
| 12 | Do you understand the indicators you need to report on in the Indicator<br>Tracking Table (ITT)?   | Yes - completely | Though some indicators need to be rephrased like using reclaimed water instead of<br>treated wastewater. The Effluent shall exclude runoff in the indicator reporting. This<br>was discussed with Eng Owies |  |
| 13 | The M&E Department at PIU level has identified standard reporting<br>forms/tools to be used by <u>all reporting levels</u>   | Yes - completely | Yes in contract with SPC  |  |
| 14 | Clear instructions have been provided by the M&E Department at PIU<br>level to sub-reporting levels (e.g., service delivery sites) on how to<br>complete the data collection and reporting forms/tools.        | Yes - completely |   |  |
| 15 | The standard forms/tools are <u>consistently</u> used by Service Delivery<br>Sites and other sub-reporting levels.   | Yes - completely |   |  |
| 16 | All source documents and reporting forms relevant for measuring the<br>indicators are available for auditing purposes (including dated print-outs in<br>case of computerized system).                          | Yes - completely | Yes, see document control procedures for As-Samra Waste Water Treatment Plan<br>Explansion BOT project  |  |
| IV | - Data Management Processes  |                  |   |  |
| 17 | Feedback is systematically provided to all service delivery sites on the<br>quality of their reporting (i.e., accuracy, completeness and timeliness).  | Yes - completely | Timeliness and completeness   |  |
| 18 | If applicable, there are quality controls in place for when data from paper-<br>based forms are entered into a computer (e.g., double entry, post-data<br>entry verification, etc).                            | N/A              |   |  |
| 19 | There is a written back-up procedure for electronic data and information.  | Yes - completely | Yes, in the agreement.  |  |
| 20 | <u>If ves</u> , the latest date of back-up is appropriate (e.g., back-ups are weekly or monthly).  | Yes - completely | Hard and electronic backup are done at WAJ Amman MWI monthly  |  |
| 21 | There is a written procedure to address late, incomplete, inaccurate and<br>missing reports; including following-up with service delivery sites on data<br>quality issues.                                     | Yes - completely | See document control procedures.  |  |
| 22 | If data discrepancies have been uncovered in reports from service<br>delivery sites, the Intermediate Aggregation Levels (e.g., regions, PIU)<br>have documented how these inconsistencies have been resolved. | Yes - completely | See document control procedures.  |  |
| v- | Use of M&E results   |                  |   |  |
| 33 | Are M&E results used to inform planning of Project activities? If yes, please provide examples of use. If no, why?   | Partly           | The need to specify the indicators to be used to monitor progress of the<br>project. It would be more useful then for decision-making.  |  |
| 34 | Are M&E results used to inform budgeting of the project? If yes, please provide examples of use. If no, why?   | No - not at all  | its only a small item in the iTT  |  |
| 35 | Are M&E results used to asses performance during implementation of the<br>project? If yes, please provide examples of use. If no, why?   | No - not at all  | M&E unit get those reports as available data. Did not notice any input from the M&E unit on those report as evaluation  |  |
| 36 | Are M&E results used for supporting evidence-based decision-making? If<br>yes, please provide examples of use. If no, why?   | No - not at all  | M&E unit still need to identify the indicators for the expansion of AS Samra treatment plant  |  |
| 37 | Are M&E results used for informing advocacy efforts? If yes, please<br>provide examples of use. If no, why?  | Partly           | The project itself is of great importance though the sludge line is of special<br>dimension for this project that shall be highlighted  |  |
| 38 | How could use of M&E results be improved at Project level?   |                  |   |  |

|                             | Reporting and System Assessment Sheet - Intermediate Aggregation Site   |   |  |  |
|-----------------------------|---|---|--|--|
|                             | Organization:   | Jordan Valley Authority   |  |  |
| Date of Review:             |   |   |  |  |
| Reporting Period Verified:  |   |   | Q5 to Q8   |  |
| Component of the M&E System |   | Answer Codes: Yes -<br>completely<br>Partly<br>No - not at all<br>N/A | REVIEWER COMMENTS<br>(Please provide detail for each response not coded "Yes - Completely".<br>Detailed responses will help guide strengthening measures.) |  |
| Ра                          | rt 1: Reporting performance   |   |  |  |
| deli<br>all S               | iew availability, completeness, and timeliness of reports from all Service<br>very sites within the Region. How many reports should there have been from<br>Service Delivery Sites? How many are there? Were they received on time?<br>they complete? |   |  |  |
| 5                           | How many reports should there have been from all service delivery sites? $\ensuremath{\left[ A \right]}$  |   |  |  |
| 6                           | How many reports are there? [B]   |   |  |  |
| 7                           | Calculate % Available Reports [B/A]   | -   |  |  |
| 8                           | Check the dates on the reports received. How many reports were received on time? (i.e., received by the due date). [C]  |   |  |  |
| 9                           | Calculate % On time Reports [C/A]   | -   |  |  |
| 10                          | How many reports were complete? (i.e., complete means that the report contained all the required indicator data*). [D]  |   |  |  |
| 11                          | Calculate % Complete Reports [D/A]  | -   |  |  |
|                             |   |   |  |  |
| Ра                          | rt 2. Systems Assessment  |   |  |  |
| Ŀ                           | M&E Structure, Functions and Capabilities   |   |  |  |
| 1                           | There are designated staff responsible for reviewing the quality of data<br>(i.e., accuracy, completeness and timeliness) received from sub-reporting<br>levels (e.g., service delivery sites).   | Yes - completely  | WAJ amman is revising the data. However, number and capacities were not identified.  |  |
| 2                           | There are designated staff responsible for reviewing aggregated numbers<br>prior to submission to the next level (e.g., to the central M&E Unit).   | Yes - completely  | yes the reports from sites are reviewed WAJ amman before approved and delivery   |  |
| 3                           | Current human resources are sufficient to ensure good quality M&E at PIU level.   | Yes - completely  | JVA has sufficient staff and skills. Their expertise is also identified.   |  |
| 4                           | All relevant staff have received training on the data management processes and tools.   | Yes - completely  | Meeting with JVA ensure that the staff got training on data collection, mangement<br>and processing.   |  |

| II- | II- Indicator Definitions and Reporting Guidelines   |                  |   |  |
|-----|--|------------------|---|--|
|     | M&E Department at PIU level has provided written guidelines to each sub-<br>rting level on   |                  |   |  |
| 5   | ", what they are supposed to report on.  | Yes - completely |   |  |
| 6   | how (e.g., in what specific format) reports are to be submitted.   | Yes - completely |   |  |
| 7   | to whom the reports should be submitted.   | Yes - completely | MCA Jordan  |  |
| 8   | when the reports are due.  | Yes - completely | Quarterly   |  |
| 11  | - Data-collection and Reporting Forms / Tools  |                  |   |  |
| 9   | The M&E Department at PIU level has identified standard reporting<br>forms/tools to be used by all reporting levels  | Yes - completely | However, there are some differences in the format sometimes. Mainly, its scanned copies.                            |  |
| 10  | Clear instructions have been provided by the M&E Department at PIU level<br>to sub-reporting levels (e.g., service delivery sites) on how to complete the<br>data collection and reporting forms/tools.        | Yes - completely | Clear instructions are provided.  |  |
| 11  | The standard forms/tools are consistently used by Service Delivery<br>Sites and other sub-reporting levels.  | Yes - completely | Reports mostly have a standard form   |  |
| 12  | All source documents and reporting forms relevant for measuring the<br>indicators are available for auditing purposes (including dated print-outs in<br>case of computerized system).                          | Yes - completely | All reports submitted to MCA M&E Unit for the period were provided. However, source<br>documents were not provided. |  |
| IV  | IV- Data Management Processes  |                  |   |  |
| 13  | Feedback is systematically provided to all service delivery sites on the<br>quality of their reporting (i.e., accuracy, completeness and timeliness).  | Partly           | only on completeness but accuracy and timeliness are followed up.   |  |
| 14  | If applicable, there are quality controls in place for when data from paper-<br>based forms are entered into a computer (e.g., double entry, post-data<br>entry verification, etc).                            | N/A              | on data form not data content   |  |
| 15  | There is a written back-up procedure for electronic data and information.  | N/A              |   |  |
| 16  | If yes, the latest date of back-up is appropriate (e.g., back-ups are weekly or monthly).  | N/A              |   |  |
| 17  | There is a written procedure to address late, incomplete, inaccurate and<br>missing reports; including following-up with service delivery sites on data<br>quality issues.                                     | Partly           | There is no systematic written procedure, however, JVA uses written letters or<br>mails to discuss certain cases    |  |
| 18  | If data discrepancies have been uncovered in reports from service<br>delivery sites, the Intermediate Aggregation Levels (e.g., regions, PIU)<br>have documented how these inconsistencies have been resolved. | Partly           | Mostly but not all the time and there is no guideline sfor this.  |  |

#### 2.1. COMPACT-LEVEL INDICATORS

| Indicat     | tor Name                                 | Network water consumption per capita (residential and non-residential)   |
|-------------|--|--|
| 1. Metadata |  |  |
| 1.1         | Indicator Code                           | Outcome 01   |
|             |  |  |
| 1.2         | Responsible Entity                       | WAJ-Zarqa  |
| 1.3         | Indicator Type (input, activity, output, | Outcome  |
|             | outcome, impact (Goal/Objective))        |  |
| 1.4         | Measurement Unit                         | Liters per capita per day (I./c./d.)   |
| 1.5         | Data Source                              | WAJ (billed water consumption )and DOS (population data). ITT department in charge of  |
| 1.6         | Definition                               | providing information.<br>For Zarga Governorate: [Annual billed residential and non-residential (in m3)] / [population of  |
| 1.0         | Definition                               | governorate] * 1000 / 365  |
| 1.7         | Calculation Method (formula)             | [Annual billed residential and non-residential] / [population of governorate] * 1000 / 365. Chec<br>calculation formula since in reality this is calculated quarterly: [billed residential and non-<br>residential consumption for the quarter in cubic meters] / [population of governorate] * 1000 / |
| 1.8         | Sampling Method (if applicable)          | Not applicable   |
| 1.9         | Data Collection Method                   | Consumption data is collected both by water collectors using electronic meters and reports from  |
|             |  | the field for which data is entered manually. Data from electronic meter readers is directly   |
|             |  | transfered to the X7 system. Batches are run on a daily basis to check data consistency.<br>Sometimes lack of commitment from meter readers more than lack of qualification. They decide   |
| 1.10        | Reporting Method                         | Data is sent to MCA quarterly using WAJ-Zarqa's template.  |
| 1.11        | Frequency                                | Quarterly  |
|             | ,  |  |
| 1.12        | Level of Disaggregation                  | None but data could be available for Zarqa and Ruseifa separately. Also, each subarea has a<br>code and information could be disaggregated by sub-area.  |
| 1.13        | Data Storage Method                      | X7 system. Backups are done daily.   |
| 1.15        |  |  |
| 1.14        | Database Format (if applicable)          | SQL database.  |
| 1.15        | Observations on Metadata                 | Data for Q4 corresponds to data for Q3 since data often needs to be amended when errors are  |
|             |  | found. Corrected data is sent to MCA. Also, might not be correct to divide by total population,  |
|             |  | should be divided by total number of residential and non-residential customers? In that case<br>however would be consumption per customer  |
|             | Baseline Values                          |  |
| 2.1         | Value                                    | 65 liters per capita per day (l./c./d.)  |
| 2.2         | Period of Reference                      | 2009   |
| 2.3         | Baseline Value Estimation Method         | 1. Numbers used for Baseline calculation were for year 2009. Annual billed residential and non-  |
|             |  | residential: 21272723 cubic meters (WAJ-Z); Estimated Population of Zarqa Governorate: 89100   |
|             |  | (DOS).   |
| 2.4         | Observations on Baseline                 | 2. Source of this indicator: WAJ Zarga (Subscribers Directorate)<br>For population data, the last census is 2004 using an estimated growth rate.   |
|             |  |  |
|             | Targets                                  | 96 litres per capita by the end of Compact (disaggregated by year - see Narrative)   |
| 3.1         | Target Settting Method                   | The numbers were taken for year 2009 (source PMU/MWI director).  |
| 3.2         | Observations on Targets                  | Formula: [Target for water consumption per capita in rural areas]*[Percentage of rural areas in  |
|             |  | Zarqa]+[Target for water consumption per capita in urban areas]*[1-Percentage of rural areas in  |
|             |  | Zarqa]. % increase applied yearly to reach 15% increase by 2015. Check target setting method.  |
|             |  | Why are we using rural and urban consumption targets if we don't have baseline data  |

| 4.  | Indicator Monitoring                                  |  |
|-----|---|--|
| 4.1 |   |  |
|     | Value   |  |
|     | Q5  | 60,4   |
|     | Q6  | 56,4   |
|     | Q7  | 63,4   |
|     | Q8  | 78,7 The value of this indicator for this quarter is quite high compared to the previous quarters.<br>Is this the right figure? There is an important jump in total residential consumption from<br>4998073in the previous quarter to 6322985 in Q8. This does not seem possible given data from   |
| 4.2 | Reporting Date  |  |
|     | Q5  | March 2013   |
|     | Q6  | June 2013  |
|     | Q7  | September 2013   |
|     | Q8  | December 2013  |
| 5.  | Recounting of Reported Results                        |  |
|     | Re-aggregate the numbers from the reports             |  |
|     | received from all Service Delivery Sites.             |  |
|     | What is the re-aggregated number? [A]                 |  |
| 52  | What aggregated result was contained in the           |  |
| 5.2 | progress report prepared by the grantee (and          |  |
|     |   |  |
| 5.2 | submitted to M&E Unit)? [B]                           |  |
| 5.3 | Calculate the ratio of recounted to reported          |  |
|     | numbers. [A/B]  |  |
| 5.4 | What are the reasons for the discrepancy (if          | All the data submitted by Waj-Zarqa correspond to the data in the ITT input table.   |
|     | any) observed (i.e., data entry errors,               |  |
|     | arithmetic errors, missing source documents,          |  |
|     | other)?   |  |
| 6.  | Comments  |  |
| 6.1 | Quality of Indicator                                  | Fair   |
| 6.2 | Proposition for Revising Current Indicator            | Contemplate usign indicator: Network water consumption per customer, since population data might be misleading. In fact, the population variable used to calculate this indicator is beyond the influence of the project and can be affected by external conditions (such as the influx of important number of refugees from Syria). In this case, the performance of the project will |
| 6.3 | Proposition to ensure timely availability of the data | None, information is available on a timely basis.  |
| 6.4 | Aspects to update in the M&E Plan                     | The M&E plan states that this indicator is cumulative, but it cannot be summed up as it is consumption per day. Check population data. Why in Q7, population skips from 931000 to 951  |
|     | I   |  |

| Indica                     | itor Reference Sheet                             |   |
|----------------------------|--|---|
| Indicator Name 1. Metadata |  | Billed residential water consumption  |
|                            |  |   |
| 1.1                        | Indicator Code                                   | Outcome 03  |
| 1.2                        | Responsible Entity                               | WAJ-Zarqa   |
| 1.3                        | Indicator Type (input, activity, outcome, impact | Outcome   |
| 1.4                        | Measurement Unit                                 | liters per capita per day (l./c./d.)  |
| 1.5                        | Data Source                                      | WAJ-Zarqa   |
| 1.6                        | Definition                                       | Billed residential network water consumption.   |
| 1.7                        | Calculation Method (formula)                     | [average percentage of residential customers]*[consumption per capita]  |
| 1.8                        | Sampling Method (if applicable)                  |   |
| 1.9                        | Data Collection Method                           | Consumption data is collected both by water collectors using electronic meters and reports from the field for which data is entered manually. Data from electronic meter readers is directly transfered to the X7 system. Batches are run on a daily basis to check data consistency. Sometimes lack of commitment from meter readers more than lack of qualification. They decided to implement new guidelines where collectors need to do 20 readings per day and report. |
| 1.10                       | Reporting Method                                 | Data is sent to MCA quarterly using WAJ-Zarqa's template.   |
| 1.11                       | Frequency  | Quarterly   |
| 1.12                       | Level of Disaggregation                          | None but data could be available for Zarqa and Ruseifa separately. Also, each subarea has a code and information could be disaggregated by sub-area.  |
| 1.13                       | Data Storage Method                              | X7 system. Backups are done daily.  |
| 1.14                       | Database Format (if applicable)                  | SQL database.   |
| 1.15                       | Observations on Metadata                         | Review definition of the indicator and indicator name as it is misleading. If the information is per capita, the indicator name should state it. The calculation formula stated in the narrative indicator sheet does not seem right. Data for Q4 corresponds to data for Q3 since data often needs to be amended when errors are found. Corrected data is sent to MCA.   |
| 2.                         | Baseline Values                                  |   |
| 2.1                        | Value  | 57 liters per capita per day  |
| 2.2                        | Period of Reference                              | 2009  |
| 2.3                        | Baseline Value Estimation Method                 | [average percentage of residential customers (WAJ-Z)]*[consumption per capita (WAJ and DOS)]  |
| 2.4                        | Observations on Baseline                         | Baseline formla should be revised as data for 2009 is available at WAI-Zarqa. Consumption has actually decreased looking at ITT data. This is probably due to a wrong baseline. There is need to revise the baseline.   |
| 3.                         | Targets  | 88 liters per capita per day by end of target   |
| 3.1                        | Target Settting Method                           | % increase applied yearly to reach 20.5% increase by 2016   |
| 3.2                        | Observations on Targets                          |   |

| 4.  | Indicator Monitoring                                  |  |
|-----|---|--|
| 4.1 | Value   |  |
|     | Q5  | 55,1 in input table but 50,1 in ITT Compact sheet. (why is it multiplied by 0,91? The same for all quarters  |
|     | Q6  |  |
|     | Q7  |  |
|     | Q8  |  |
| 4.2 | Reporting Date  |  |
|     | Q5  |  |
|     | Q6  |  |
|     | Q7  |  |
|     | Q8  |  |
| 5.  | Recounting of Reported Results                        |  |
| 5.1 | Re-aggregate the numbers from the                     |  |
|     | reports received from all Service                     |  |
|     | Delivery Sites. What is the re-                       |  |
|     | aggregated number? [A]                                |  |
| 5.2 | What aggregated result was                            |  |
|     | contained in the progress report                      |  |
|     | prepared by the grantee (and                          |  |
|     | submitted to M&E Unit)? [B]                           |  |
| 5.3 | Calculate the ratio of recounted to                   |  |
|     | reported numbers. [A/B]                               |  |
| 5.4 | What are the reasons for the                          | All the data submitted by Waj-Zarqa correspond to the data in the ITT input table. However, some inconsistencies within the ITT itself (see discussion below). |
|     | discrepancy (if any) observed (i.e.,                  |  |
|     | data entry errors, arithmetic errors,                 |  |
|     | missing source documents, other)?                     |  |
|     | Comments  |  |
| 6.1 | Quality of Indicator                                  | Fair   |
| 6.2 | 1 0   | Contemplate usign indicator: Billed residential consumption per customer, since population data might be<br>misleading.  |
|     | Indicator   |  |
| 6.3 | Proposition to ensure timely availability of the data | None, information is available on a timely basis, except for population data which is an estimate.   |
| 6.4 | Aspects to update in the M&E Plan                     | The M&E plan states that this indicator is cumulative, but it cannot be summed up as it is consumption per day.<br>Check why it is multiplied by 0,91.         |

| Indicator Reference Sheet |                                  |  |
|---------------------------|----------------------------------|--|
| Indicator Name            |                                  | Operating cost coverage  |
| 1.                        | Metadata                         |  |
| 1.1                       | Indicator Code                   | Outcome 04   |
| 1.2                       | Responsible Entity               | WAJ-Amman  |
| 1.3                       | Indicator Type (input, activity, | Outcome  |
|                           | output, outcome, impact          |  |
| 1.4                       | Measurement Unit                 | Percentage   |
| 1.5                       | Data Source                      | WAJ-Amman - Fiscal Agent   |
| 1.6                       | Definition                       | Total quarterly operational revenues divided by total quarterly operating costs.   |
| 1.7                       | Calculation Method (formula)     | [Total Quarterly Operational Revenue] / [Total Quarterly Operational Cost (including maintenance) ]  |
| 1.8                       | Sampling Method (if applicable)  |  |
| 1.9                       | Data Collection Method           |  |
| 1.10                      | Reporting Method                 |  |
| 1.11                      | Frequency                        | Used to be quarterly, now Annually (starting Q9)   |
| 1.12                      | Level of Disaggregation          | Not applicable   |
| 1.13                      | Data Storage Method              |  |
| 1.14                      | Database Format (if applicable)  |  |
| 1.15                      | Observations on Metadata         | This is a common indicator.  |
| 2.                        | Baseline Values                  |  |
| 2.1                       | Value                            | TBD or 81% in 2012?  |
| 2.2                       | Period of Reference              | 2012?  |
| 2.3                       | Baseline Value Estimation Method | The source for Baseline calculation is WAJ Amman Financial reports and WAJ Zarqa administrative reports. Based<br>on consolidated audited statements (yearly). |
| 2.4                       | Observations on Baseline         | Baseline data should have been available if from administrative data of WAJ  |
| 3.                        | Targets                          | 100% by end of Compact   |
| 3.1                       | Target Settting Method           |  |
| 3.2                       | Observations on Targets          |  |

| 4.  | Indicator Monitoring                  |   |
|-----|---------------------------------------|---|
| 4.1 | Value                                 |   |
|     | Year 1                                | For Q2 value is 75%   |
|     | Year 2                                | For Q6 85,4%  |
| 4.2 | Reporting Date                        |   |
|     | Year 1                                | Q2  |
|     | Year 2                                | Q6  |
| 5.  | Recounting of Reported Results        |   |
| 5.1 | Re-aggregate the numbers from the     | 74,9%   |
|     | reports received from all Service     |   |
|     | Delivery Sites. What is the re-       |   |
|     | aggregated number? [A]                |   |
| 5.2 | What aggregated result was            | 85,5%   |
|     | contained in the progress report      |   |
|     | prepared by the grantee (and          |   |
|     | submitted to M&E Unit)? [B]           |   |
| 5.3 | Calculate the ratio of recounted to   | 1   |
|     | reported numbers. [A/B]               |   |
| 5.4 | What are the reasons for the          | No discrepency  |
|     | discrepancy (if any) observed (i.e.,  |   |
|     | data entry errors, arithmetic errors, |   |
|     | missing source documents, other)?     |   |
| 6.  | Comments                              |   |
| 6.1 | Quality of Indicator                  | Fair  |
| 6.2 | Proposition for Revising Current      |   |
|     | Indicator                             |   |
| 6.3 | Proposition to ensure timely          | Clarify reporting requirements to WAZ-Amman. Discuss detailed defiinition of the indicator and clarify in the M&E |
|     | availability of the data              | plan.   |
| 6.4 | Aspects to update in the M&E Plan     | Baseline data   |
|     |                                       |   |

| Indica         | Indicator Reference Sheet                                |  |  |
|----------------|--|--|--|
| Indicator Name |  | Outstanding debt   |  |
| 1.             | Metadata   |  |  |
| 1.1            | Indicator Code   | Outcome 05   |  |
| 1.2            | Responsible Entity                                       | WAJ-Amman  |  |
| 1.3            | Indicator Type (input, activity, output, outcome, impact | Outcome  |  |
| 1.4            | Measurement Unit   | Percentage   |  |
| 1.5            | Data Source  | WAJ-Amman  |  |
| 1.6            | Definition   | Account receivable compared with annual sales.   |  |
| 1.7            | Calculation Method (formula)                             | [Accout receivable] / [annual sale]  |  |
| 1.8            | Sampling Method (if applicable)                          |  |  |
| 1.9            | Data Collection Method                                   |  |  |
| 1.10           | Reporting Method   |  |  |
| 1.11           | Frequency  | Quarterly (should be annual)   |  |
| 1.12           | Level of Disaggregation                                  |  |  |
| 1.13           | Data Storage Method                                      |  |  |
| 1.14           | Database Format (if applicable)                          |  |  |
| 1.15           | Observations on Metadata                                 | Given the characteristics of this indicator, frequency should be annual.   |  |
| 2.             | Baseline Values  |  |  |
| 2.1            | Value  | TBD  |  |
| 2.2            | Period of Reference                                      |  |  |
| 2.3            | Baseline Value Estimation Method                         |  |  |
| 2.4            | Observations on Baseline                                 | Need to calculate the baseline. The information is available in the information system at WAJ-Zarqa (financial indicators) |  |
| 3.             | Targets  | TBD  |  |
| 3.1            | Target Settting Method                                   |  |  |
| 3.2            | Observations on Targets                                  |  |  |

| 4.  | Indicator Monitoring                  |  |
|-----|---------------------------------------|--|
| 4.1 | Value                                 |  |
|     | Year 1                                |  |
|     | Year 2                                |  |
|     |                                       | Q6 is 2,5%. Information for Q2 should be available also.   |
| 4.2 | Reporting Date                        |  |
|     | Year 1                                |  |
|     | Year 2                                | Q6 is 2,5%. Information for Q2 should be available also.   |
| 5.  | Recounting of Reported Results        |  |
| 5.1 | Re-aggregate the numbers from the     |  |
|     | reports received from all Service     |  |
|     | Delivery Sites. What is the re-       |  |
|     | aggregated number? [A]                |  |
| 5.2 | What aggregated result was            |  |
|     | contained in the progress report      |  |
|     | prepared by the grantee (and          |  |
|     | submitted to M&E Unit)? [B]           |  |
| 5.3 | Calculate the ratio of recounted to   |  |
|     | reported numbers. [A/B]               |  |
| 5.4 | What are the reasons for the          |  |
|     | discrepancy (if any) observed (i.e.,  |  |
|     | data entry errors, arithmetic errors, |  |
|     | missing source documents, other)?     |  |
| 6.  | Comments                              |  |
| 6.1 | Quality of Indicator                  |  |
|     |                                       | Fair. This is a common indicator.  |
| 6.2 | Proposition for Revising Current      |  |
|     | Indicator                             | Need to clarify the definition: Account receivable (Account receivable in the previous year + Sales in the current<br>year - Bills collected during the year) / sales in the current year. |
| 6.3 | Proposition to ensure timely          |  |
|     | availability of the data              | This indicator has been informed only in Q6. There is need to clarify reporting requirements to WAJ-Amman and check why the information is not available.                                  |
| 6.4 | Aspects to update in the M&E Plan     |  |
|     | • • •                                 | Make sure all information is available and that WAJ-Amman can provide the information. Update the baseline.  |

#### 2.2. WATER NETWORK PROJECT

| Indicator Reference Sheet |  |  |
|---------------------------|--|--|
| Indicator Name            |  | Restructure and rehabilitate primary and secondary pipelines (km)  |
| 1.                        | Metadata   |  |
| 1.1                       | Indicator Code                                   | Output 01  |
| 1.2                       | Responsible Entity                               | Project Management Consultant, PMC   |
| 1.3                       | Indicator Type (input, activity, outcome, impact | Output   |
| 1.4                       | Measurement Unit                                 | Kilometer, km  |
| 1.5                       | Data Source                                      | Contractors sending their reports to PMC for verificaiton and approval. PMC send progress reports to MCA-J.  |
| 1.6                       | Definition                                       | Restructuring of the water distribution network involves the overall sub-division of the network into Water Supply<br>Areas, Distribution Areas and District Meter Areas. Rehabilitation of primary and secondary pipelines involves<br>renovation or replacement of an existing pipeline  |
| 1.7                       | Calculation Method (formula)                     | Summation of lengths of secondary and primary pipelines that were resutructured or rehabilitated.  |
| 1.8                       | Sampling Method (if applicable)                  | NA   |
| 1.9                       | Data Collection Method                           | Project(s) progress reports by contractors.  |
| 1.10                      | Reporting Method                                 | Progress reports by PMC.   |
| 1.11                      | Frequency  | Quarterly Reports  |
| 1.12                      | Level of Disaggregation                          | Data will be provided based on the contract released for Primary and Secondary pipelines replacement.  |
| 1.13                      | Data Storage Method                              | PMC Database.  |
| 1.14                      | Database Format (if applicable)                  | GIS data.  |
| 1.15                      | Observations on Metadata                         |  |
| 2.                        | Baseline Values                                  |  |
| 2.1                       | Value  | NA   |
| 2.2                       | Period of Reference                              | NA   |
| 2.3                       | Baseline Value Estimation Method                 | NA   |
| 2.4                       | Observations on Baseline                         | NA   |
| 3.                        | Targets  |  |
| 3.1                       | Target Settting Method                           | Based on the estimated length of pipes to be replaced or rehabilitated   |
| 3.2                       | Observations on Targets                          | The set target in the Narrative Description does not define the length of Primary and Secondary pipelines to be replaced or rehabilitated in each of the targetted areas. The Summation of Primary and Secondary Pipelines replacement target in the ITT for each of the areas does not match the figure in the Narrative Description. |

| 4.  | Indicator Monitoring                  |   |
|-----|---------------------------------------|---|
| 4.1 | Value                                 |   |
|     | Year 1                                | Contract has been recently awarded. No data is available yet.                                       |
|     | Year 2                                |   |
|     | fear 2                                |   |
| 4.2 | Reporting Date                        |   |
|     | Year 1                                |   |
|     | Year 2                                |   |
| 5.  | Recounting of Reported Results        |   |
| 5.1 | Re-aggregate the numbers from the     |   |
|     | reports received from all Service     |   |
|     | Delivery Sites. What is the re-       |   |
|     | aggregated number? [A]                | NA (data should be provided for each of the targetted areas separately)                             |
| 5.2 | What aggregated result was            |   |
|     | contained in the progress report      |   |
|     | prepared by the grantee (and          |   |
|     | submitted to AGRA M&E Unit)? [B]      | NA  |
| 5.3 | Calculate the ratio of recounted to   |   |
|     | reported numbers. [A/B]               | NA  |
| 5.4 | What are the reasons for the          |   |
|     | discrepancy (if any) observed (i.e.,  |   |
|     | data entry errors, arithmetic errors, |   |
|     | missing source documents, other)?     |   |
| 6.  | Comments                              |   |
| 6.1 | Quality of Indicator                  |   |
|     |                                       | Indicator is directly related to project perforamnce and reflects its progress.                     |
| 6.2 | Proposition for Revising Current      |   |
|     | Indicator                             |   |
| 6.3 | Proposition to onsure timely          | Redefine the length of pipelines to be replaced or rehabilitated in each of the three target areas. |
| 0.3 | Proposition to ensure timely          |   |
|     | availability of the data              | None  |
| 6.4 | Aspects to update in the M&E Plan     |   |
|     |                                       | None  |

| Indicator Name |                                  | Restructure and rehabilitate tertiary pipelines (km)   |
|----------------|----------------------------------|--|
| 1.             | Metadata                         |  |
| 1.1            | Indicator Code                   | Output 02  |
| 1.2            | Responsible Entity               | Project Management Consultant, PMC   |
| 1.3            | Indicator Type (input, activity, | Output   |
|                | output, outcome, impact          |  |
| 1.4            | Measurement Unit                 | Kilometer, km  |
| 1.5            | Data Source                      | Contractors sending their reports to PMC for verificaiton and approval. PMC send progress reports to MCA-J.  |
| 1.6            | Definition                       | Restructuring and rehabilitation of tertiary pipelines by replacement, reinforcement or renovation of existing pipelines.  |
| 1.7            | Calculation Method (formula)     | Summation of lengths of secondary and primary pipelines that were resutructured or rehabilitated.  |
| 1.8            | Sampling Method (if applicable)  | NA   |
| 1.9            | Data Collection Method           | Project(s) progress reports by contractors.  |
| 1.10           | Reporting Method                 | Progress reports by PMC.   |
| 1.11           | Frequency                        | Quarterly Reports  |
| 1.12           | Level of Disaggregation          | Four contracts are being released for the rehabilitation and restructuring of the tertiary networks.   |
| 1.13           | Data Storage Method              | PMC Database.  |
| 1.14           | Database Format (if applicable)  | GIS data.  |
| 1.15           | Observations on Metadata         |  |
| 2.             | Baseline Values                  |  |
| 2.1            | Value                            |  |
| 2.2            | Period of Reference              | NA   |
| 2.2            |                                  | NA   |
| 2.3            | Baseline Value Estimation Method | NA   |
| 2.4            | Observations on Baseline         |  |
| 3.             | Targets                          | NA   |
| 3.1            | Target Settting Method           |  |
| 3.2            | Observations on Targets          | Estimation of the total length of tertiary pipelines to be replaced and rehabilitated in the targetted areas.<br>The set target does not define the length of the tertiary pipelines to be replaced or rehabilitated in each of the targetted areas. Four contracts are awarded. |

| 4.  | Indicator Monitoring                  |   |
|-----|---------------------------------------|---|
| 4.1 | Value                                 | Four contracts has been recently awarded and no progress has been yet achieved.                                     |
|     | Year 1                                |   |
|     | Year 2                                |   |
| 4.2 | Reporting Date                        |   |
|     | Year 1                                |   |
|     | Year 2                                |   |
| 5.  | Recounting of Reported Results        |   |
| 5.1 | Re-aggregate the numbers from the     |   |
|     | reports received from all Service     |   |
|     | Delivery Sites. What is the re-       |   |
|     | aggregated number? [A]                | Mismatching figures of the length of Tertiary pipelines between the Narrative Description and the ITT Figures summa |
| 5.2 | What aggregated result was            |   |
|     | contained in the progress report      |   |
|     | prepared by the grantee (and          |   |
|     | submitted to AGRA M&E Unit)? [B]      |   |
| 5.3 | Calculate the ratio of recounted to   |   |
|     | reported numbers. [A/B]               |   |
| 5.4 | What are the reasons for the          |   |
|     | discrepancy (if any) observed (i.e.,  |   |
|     | data entry errors, arithmetic errors, |   |
|     | missing source documents, other)?     |   |
| 6.  | Comments                              |   |
| 6.1 | Quality of Indicator                  |   |
| 6.2 | Proposition for Revising Current      |   |
|     | Indicator                             |   |
| 6.3 | Proposition to ensure timely          |   |
|     | availability of the data              |   |
| 6.4 | Aspects to update in the M&E Plan     |   |

| Indicator Name |  | Replace customer meters (#)   |
|----------------|--|---|
| 1.             | Metadata   |   |
| 1.1            | Indicator Code                                   | Output 03   |
| 1.2            | Responsible Entity                               | РМС   |
| 1.3            | Indicator Type (input, activity, outcome, impact | Output  |
| 1.4            | Measurement Unit                                 | Number  |
| 1.5            | Data Source                                      | Contractors sending their reports to PMC for verificaiton and approval. PMC send progress reports to MCA-J.   |
| 1.6            | Definition                                       | Replacement of defective domestic customer water meter.   |
| 1.7            | Calculation Method (formula)                     | Number of replaced customer meters  |
| 1.8            | Sampling Method (if applicable)                  | NA  |
| 1.9            | Data Collection Method                           | Progress reports by contractors   |
| 1.10           | Reporting Method                                 | Progress Reports by PMC to MCA-J  |
| 1.11           | Frequency  | Quarterly   |
| 1.12           | Level of Disaggregation                          | The ITT demonstrates the number of meters to be replaced in each of the taretted areas.                       |
| 1.13           | Data Storage Method                              | PMC Database  |
| 1.14           | Database Format (if applicable)                  | GIS Database  |
| 1.15           | Observations on Metadata                         |   |
| 2.             | Baseline Values                                  |   |
| 2.1            | Value  | NA  |
| 2.2            | Period of Reference                              | NA  |
| 2.3            | Baseline Value Estimation Method                 | NA  |
| 2.4            | Observations on Baseline                         | NA  |
| 3.             | Targets  |   |
| 3.1            | Target Settting Method                           | Estimation of the number of defective meters in the targetted areas using consumption reports from WAJ-Zarqa. |
| 3.2            | Observations on Targets                          | more than 53,000 meters to be replaced in the ITT but around 7,500 in the narrative description               |

| 4.  | Indicator Monitoring                  |   |
|-----|---------------------------------------|---|
| 4.1 | Value                                 |   |
|     | Veer 1                                | NA  |
|     | Year 1                                | NA  |
|     | Year 2                                |   |
| 4.2 | Reporting Date                        | NA  |
| 7.2 |                                       |   |
|     | Year 1                                | NA  |
|     | Year 2                                |   |
|     |                                       | NA  |
|     | Recounting of Reported Results        |   |
| 5.1 | Re-aggregate the numbers from the     |   |
|     | reports received from all Service     |   |
|     | Delivery Sites. What is the re-       |   |
|     | aggregated number? [A]                | NA  |
| 5.2 | What aggregated result was            |   |
|     | contained in the progress report      |   |
|     | prepared by the grantee (and          |   |
|     | submitted to AGRA M&E Unit)? [B]      | NA  |
| 5.3 | Calculate the ratio of recounted to   |   |
|     | reported numbers. [A/B]               | NA  |
| 5.4 | What are the reasons for the          |   |
|     | discrepancy (if any) observed (i.e.,  |   |
|     | data entry errors, arithmetic errors, |   |
|     | missing source documents, other)?     | NA  |
| 6.  | Comments                              |   |
| 6.1 | Quality of Indicator                  |   |
|     |                                       | Need to exactly define guide for Defective Meters replacement activitiy.On what basis are meters to judged as<br>defecctive and will be replaced. |
| 6.2 | Proposition for Revising Current      |   |
|     | Indicator                             |   |
| 6.5 | December 1                            | None  |
| 6.3 | · · · · · · · · · · · · · · · · · · · |   |
|     | availability of the data              | NA  |
| 6.4 | Aspects to update in the M&E Plan     | NA  |
| 0.4 |                                       | NA  |
|     |                                       | NA  |

| Indic          | ator Reference Sheet                        |  |
|----------------|---|--|
| Indicator Name |   | Restructure and construct District Meter Areas (#)   |
| 1.             | Metadata                                    |  |
| 1.1            | Indicator Code                              | Output 04  |
| 1.2            | Responsible Entity                          | РМС  |
| 1.3            | Indicator Type (input, activity,            | Output   |
| 1.4            | output, outcome, impact<br>Measurement Unit | Number   |
| 1.5            | Data Source                                 | Contractors sending their reports to PMC for verificaiton and approval. PMC send administrative reports to MCA-J.  |
| 1.6            | Definition                                  | Restructuring and construction of District Meter Areas, isolating DMA's and constructing DMA's connection<br>points.   |
| 1.7            | Calculation Method (formula)                | Number of established District meter Areas.  |
| 1.8            | Sampling Method (if applicable)             | NA   |
| 1.9            | Data Collection Method                      | Progress reports by contractors  |
| 1.10           | Reporting Method                            | Progress Reports by PMC to MCA-J   |
| 1.11           | Frequency                                   | Quarterly  |
| 1.12           | Level of Disaggregation                     | The ITT demonstrates the number of meters to be replaced in each of the targetted areas.   |
| 1.13           | Data Storage Method                         | PMC Database   |
| 1.14           | Database Format (if applicable)             | GIS Database   |
| 1.15           | Observations on Metadata                    |  |
| 2.             | Baseline Values                             |  |
| 2.1            | Value                                       | NA   |
| 2.2            | Period of Reference                         | NA   |
| 2.3            | Baseline Value Estimation Method            | NA   |
| 2.4            | Observations on Baseline                    | NA   |
| 3.             | Targets                                     |  |
| 3.1            | Target Settting Method                      | design of the new isolated districts and location of district meters at isolated districts boundaries and connection points.   |
| 3.2            | Observations on Targets                     | Depending on the design of the isolated districts, DMAs are to measure the quanitties of water flowing into the area and out of it (if applicable). Still, the target defined in the Narrative sheets is different than that in the ITT. |

| 4.       | Indicator Monitoring                  |  |
|----------|---------------------------------------|--|
| 4.1      | Value                                 |  |
|          | Veer 1                                | NA   |
|          | Year 1                                | NA   |
|          | Year 2                                |  |
| 4.2      | Reporting Date                        | NA   |
| 7.2      |                                       |  |
|          | Year 1                                | NA   |
|          | Year 2                                |  |
|          |                                       | NA   |
|          | Recounting of Reported Results        |  |
| 5.1      | Re-aggregate the numbers from the     |  |
|          | reports received from all Service     |  |
|          | Delivery Sites. What is the re-       |  |
|          | aggregated number? [A]                | NA   |
| 5.2      | What aggregated result was            |  |
|          | contained in the progress report      |  |
|          | prepared by the grantee (and          |  |
|          | submitted to AGRA M&E Unit)? [B]      | NA   |
| 5.3      | Calculate the ratio of recounted to   |  |
|          | reported numbers. [A/B]               | NA   |
| 5.4      | What are the reasons for the          |  |
|          | discrepancy (if any) observed (i.e.,  |  |
|          | data entry errors, arithmetic errors, |  |
|          | missing source documents, other)?     | NA   |
| 6.       | Comments                              |  |
| 6.1      |                                       |  |
| 0.1      |                                       | Direct operational indicator that depends on the design of the new districts water system. |
| 6.2      | Proposition for Revising Current      | Since operational manager and appendo on the design of the new appress water of stemm      |
|          | Indicator                             |  |
|          |                                       | None   |
| 6.3      |                                       |  |
|          | availability of the data              |  |
| <u> </u> |                                       | NA   |
| 6.4      | Aspects to update in the M&E Plan     |  |
| L        |                                       | NA   |

| Indic          | ator Reference Sheet                                     |  |
|----------------|--|--|
| Indicator Name |  | Install strategic meters on key water transfer pipes   |
| 1.             | Metadata   |  |
| 1.1            | Indicator Code   | Output 05  |
| 1.2            | Responsible Entity                                       | РМС  |
| 1.3            | Indicator Type (input, activity, output, outcome, impact | Output   |
| 1.4            | Measurement Unit   | Number   |
| 1.5            | Data Source  | Contractors sending their reports to PMC for verificaiton and approval. PMC send administrative reports to MCA-J.  |
| 1.6            | Definition   | Install strategic bulk water meters on key water transfer pipes at 32 locations in Zarqa Governorate.  |
| 1.7            | Calculation Method (formula)                             |  |
| 1.8            | Sampling Method (if applicable)                          | NA   |
| 1.9            | Data Collection Method                                   | Progress reports by contractors  |
| 1.10           | Reporting Method   | Progress Reports by PMC to MCA-J   |
| 1.11           | Frequency  | Quarterly  |
| 1.12           | Level of Disaggregation                                  | The ITT demonstrates the number of strategic water meters to be installed during the different phases of the<br>project. They are all referred to in the Zarqa High DA cpomponent. |
| 1.13           | Data Storage Method                                      | PMC Database   |
| 1.14           | Database Format (if applicable)                          | GIS Database   |
| 1.15           | Observations on Metadata                                 |  |
| 2.             | Baseline Values  |  |
| 2.1            | Value  | NA   |
| 2.2            | Period of Reference                                      | NA   |
| 2.3            | Baseline Value Estimation Method                         | NA   |
| 2.4            | Observations on Baseline                                 | NA   |
| 3.             | Targets  |  |
| 3.1            | , , , , , , , , , , , , , , , , , , ,                    | Depending on the new design of the water system, strategic water meters are to be intalled at key locations to monitor water flow.   |
| 3.2            | Observations on Targets                                  | Although the definition states that 32 water meters are to be installed, the detailed targets are showing 65 files strategic water meters are to be in place.                      |

| 4.  | Indicator Monitoring                  |  |
|-----|---------------------------------------|--|
| 4.1 | Value                                 |  |
|     | Veer 1                                | NA   |
|     | Year 1                                | NA   |
|     | Year 2                                |  |
| 4.2 | Reporting Date                        | NA   |
| 7.2 |                                       |  |
|     | Year 1                                | NA   |
|     | Year 2                                |  |
|     |                                       | NA   |
|     | Recounting of Reported Results        |  |
| 5.1 | Re-aggregate the numbers from the     |  |
|     | reports received from all Service     |  |
|     | Delivery Sites. What is the re-       |  |
|     | aggregated number? [A]                | NA   |
| 5.2 | What aggregated result was            |  |
|     | contained in the progress report      |  |
|     | prepared by the grantee (and          |  |
|     | submitted to AGRA M&E Unit)? [B]      | NA   |
| 5.3 | Calculate the ratio of recounted to   |  |
|     | reported numbers. [A/B]               | NA   |
| 5.4 | What are the reasons for the          |  |
|     | discrepancy (if any) observed (i.e.,  |  |
|     | data entry errors, arithmetic errors, |  |
|     | missing source documents, other)?     | NA   |
| 6.  | Comments                              |  |
| 6.1 |                                       |  |
| 0.1 |                                       | Direct operational indicator that depends on the new design of the water system in the area. |
| 6.2 | Proposition for Revising Current      | aneccoperational interaction and acpends on the new design of the water system in the area.  |
|     | Indicator                             |  |
|     |                                       | None   |
| 6.3 |                                       |  |
|     | availability of the data              |  |
|     |                                       | NA   |
| 6.4 | Aspects to update in the M&E Plan     |  |
|     |                                       | NA   |

| Indica         | ator Reference Sheet                                     |  |
|----------------|--|--|
| Indicator Name |  | Install SCADA Telemetry monitoring system  |
| 1.             | Metadata   |  |
| 1.1            | Indicator Code   | Output 06  |
| 1.2            | Responsible Entity                                       | Project Management Consultant, PMC   |
| 1.3            | Indicator Type (input, activity, output, outcome, impact | Output   |
| 1.4            | Measurement Unit   | Kilometer, km  |
| 1.5            | Data Source  | Contractors sending their reports to PMC for verificaiton and approval. PMC send progress reports to MCA-J.  |
| 1.6            | Definition   | Install outstations for SCADA/Telemetry monitoring system at Zarqa Governorate strategic water infrastructure<br>and District Meter Area connection points.  |
| 1.7            | Calculation Method (formula)                             | number of points connected to the SCADA system (DMAs and strategic meteres at the main system).  |
| 1.8            | Sampling Method (if applicable)                          | NA   |
| 1.9            | Data Collection Method                                   | Project(s) progress reports by contractors.  |
| 1.10           | Reporting Method   | Progress reports by PMC.   |
| 1.11           | Frequency  | Quarterly Reports  |
| 1.12           | Level of Disaggregation                                  | Connections points are dependent on the new districts to be designed and main water supply system.   |
| 1.13           | Data Storage Method                                      | PMC Database.  |
| 1.14           | Database Format (if applicable)                          | SCADA System   |
| 1.15           | Observations on Metadata                                 |  |
| 2.             | Baseline Values  |  |
| 2.1            |  | NA   |
| 2.2            | Period of Reference                                      | NA   |
| 2.3            | Baseline Value Estimation Method                         | NA   |
| 2.4            | Observations on Baseline                                 | NA   |
| 3.             | Targets  |  |
| 3.1            | Target Settting Method                                   | One SCADA System to monitor water flows into the different areas through the main system. All dependent on the new design of the supply system.  |
| 3.2            | Observations on Targets                                  | Number of points (meters) to be connected to the system depends on the progress in contracts completion then integrated with the SCADA. Therefore, the SCADA system should be installed prior to completion of the first contract. |

| 4.  | Indicator Monitoring                  |  |
|-----|---------------------------------------|--|
| 4.1 | Value                                 | NA   |
|     | Year 1                                |  |
|     | Year 2                                |  |
| 4.2 | Reporting Date                        |  |
|     | Year 1                                |  |
|     | Year 2                                |  |
| 5.  | Recounting of Reported Results        |  |
| 5.1 | Re-aggregate the numbers from the     |  |
|     | reports received from all Service     |  |
|     | Delivery Sites. What is the re-       |  |
|     | aggregated number? [A]                | SCADA monitoring points are are dependent on the new design of the sypply system. Each point shall provide data<br>on the water quantities flowing into the system to the different areas. |
| 5.2 | What aggregated result was            |  |
|     | contained in the progress report      |  |
|     | prepared by the grantee (and          |  |
|     | submitted to AGRA M&E Unit)? [B]      | NA   |
| 5.3 | Calculate the ratio of recounted to   |  |
|     | reported numbers. [A/B]               | NA   |
| 5.4 | What are the reasons for the          |  |
|     | discrepancy (if any) observed (i.e.,  |  |
|     | data entry errors, arithmetic errors, |  |
|     | missing source documents, other)?     |  |
| 6.  | Comments                              |  |
| 6.1 | Quality of Indicator                  |  |
|     |                                       | Indicator is directly related to project perforamnce and reflects its progress.  |
| 6.2 | Proposition for Revising Current      |  |
|     | Indicator                             | NA   |
| 6.3 | Proposition to ensure timely          | NA   |
| 0.5 | availability of the data              |  |
|     | availability of the data              | None   |
| 6.4 | Aspects to update in the M&E Plan     |  |
|     |                                       | None   |

# 2.3. WASTE WATER NETWORK PROJECT

| Indica | ator Reference Sheet                                     |   |
|--------|--|---|
| Indica | ator Name  | Incidents of sewage overflow reduced  |
| 1.     | Metadata   |   |
| 1.1    | Indicator Code   | Outcome 01  |
| 1.2    | Responsible Entity                                       | WAJ-Zarqa   |
| 1.3    | Indicator Type (input, activity, output, outcome, impact | Outcome 01  |
| 1.4    | Measurement Unit   | Number  |
| 1.5    | Data Source  | WAJ-Zarqa   |
| 1.6    | Definition   | Annual number of blockages that occurred in sewers network per year (pumping station blockages shall not be<br>included)  |
| 1.7    | Calculation Method (formula)                             | -   |
| 1.8    | Sampling Method (if applicable)                          | -   |
| 1.9    | Data Collection Method                                   | Complain Book, Calls  |
| 1.10   | Reporting Method   | Email, Phone  |
| 1.11   | Frequency  | Quarterly   |
| 1.12   | Level of Disaggregation                                  | Not disaggregated but recommended to be measured by type and location   |
| 1.13   | Data Storage Method                                      | M&E store both electronic and hard copy   |
| 1.14   | Database Format (if applicable)                          | -   |
| 1.15   | Observations on Metadata                                 | Need to know how they detect the blockages, how data is collected, stored and reported.   |
| 2.     | Baseline Values  |   |
| 2.1    | Value  | 8500  |
| 2.2    | Period of Reference                                      | Not indicated   |
| 2.3    | Baseline Value Estimation Method                         | Number of Sewage Blockages (Zarqa and Ruseifa)during months 1,2, 11 and 12+Number of Sewage Blockages<br>(Zarqa and Ruseifa)during months 3,4,, 10  |
| 2.4    | Observations on Baseline                                 | How it was calculated? For one year? Which year? Or average last years? Not indicated. Also defention has to be specified for the blockage duration, is it one hour, one day  |
| 3.     | Targets  |   |
| 3.1    | Target Settting Method                                   | Number of Sewage Blockages (Zarqa and Ruseifa)during months 1,2, 11 and 12 * (30%)+Number of Sewage<br>Blockages (Zarqa and Ruseifa)during months 3,4,, 10 * (20%<br>A reduction in the number of Sewage Blockages by 20% during months: 3,4,5,6,7,8,9,10 is expedted as a result of<br>the project.<br>A target was also provided from WAJ-Zarqa, but this only accounted for the benefits from cleaning, not<br>rehabilitation. |
| 3.2    | Observations on Targets                                  | A reduction in the number of Sewage Blockages by 30% during months: 1,2,11,12 is expected as a result of the<br>project.<br>A reduction in the number of Sewage Blockages by 20% during months: 3,4,5,6,7,8,9,10 is expedted as a result of<br>the project.<br>A target was also provided from WAI-Zarqa, but this only accounted for the benefits from cleaning, not<br>rehabilitation.  |

| 4.  | Indicator Monitoring                  |   |
|-----|---------------------------------------|---|
| 4.1 | Value                                 |   |
|     | Year 1                                | 8500  |
|     | Year 2                                | 8500  |
| 4.2 | Reporting Date                        |   |
|     | Year 1                                | Not indicated   |
|     | Year 2                                | Not indicated   |
| 5.  | Recounting of Reported Results        |   |
| 5.1 | Re-aggregate the numbers from the     | 8500  |
|     | reports received from all Service     |   |
|     | Delivery Sites. What is the re-       |   |
|     | aggregated number? [A]                |   |
| 5.2 | What aggregated result was            | 8500  |
|     | contained in the progress report      |   |
|     | prepared by the grantee (and          |   |
|     | submitted to AGRA M&E Unit)? [B]      |   |
| 5.3 | Calculate the ratio of recounted to   | 100%  |
|     | reported numbers. [A/B]               |   |
| 5.4 | What are the reasons for the          | No clear system for blockages complains (note book or dispeared calls) No call system. Lack of storage sytem for<br>type and location |
|     | discrepancy (if any) observed (i.e.,  | type and location   |
|     | data entry errors, arithmetic errors, |   |
|     | missing source documents, other)?     |   |
| 6.  | Comments                              |   |
| 6.1 | Quality of Indicator                  | Good  |
| 6.2 | Proposition for Revising Current      | Shall include type of Blockages with spatial distribution and reason. Name of indicator should be revised as:                         |
|     | Indicator                             | Number of incidents of sewage overflow reported.  |
| 6.3 | Proposition to ensure timely          | call center where complains shall be saved electronic with updates  |
|     | availability of the data              |   |
| 6.4 | Aspects to update in the M&E Plan     | Identify locations within the project area with blockages repition for analysis   |
|     |                                       |   |

| Indic          | ator Reference Sheet             |   |
|----------------|----------------------------------|---|
| Indicator Name |                                  | Quantity of wastewater collected from Zarqa Governorate increased   |
| 1.             | Metadata                         |   |
| 1.1            | Indicator Code                   | Outcome 02  |
| 1.2            | Responsible Entity               | WAJ-Zarqa   |
| 1.3            | Indicator Type (input, activity, | Outcome 02  |
|                | output, outcome, impact          |   |
| 1.4            | Measurement Unit                 |   |
| 1.5            | Data Source                      | Million Cubic Meters MWH,policy note  |
| 1.6            | Definition                       | Total volume of wastewater collected through the sewer system and pumped via West Zarqa, East Zarqa and West Russaifa pumping stations.   |
| 1.7            | Calculation Method (formula)     | Average Flow from ZPS (West Zarqa) + Average Flow from Hashemiyah PS (Easty Zarqa)  |
| 1.8            | Sampling Method (if applicable)  | none  |
| 1.9            | Data Collection Method           | flowmeters from pumping stations  |
| 1.10           | Reporting Method                 |   |
| 1.11           | Frequency                        | quarterly   |
| 1.12           | Level of Disaggregation          | none  |
| 1.13           | Data Storage Method              | electronic and hard copy by M&E   |
| 1.14           | Database Format (if applicable)  |   |
| 1.15           | Observations on Metadata         | its including assumptions and constrains  |
| 2.             | Baseline Values                  |   |
| 2.1            | Value                            |   |
| 2.2            | Period of Reference              | 24  |
| 2.3            | Baseline Value Estimation Method | Average Flow from ZPS (West Zarqa) + Average Flow from Hashemiyah PS (Easty Zarqa)  |
| 2.4            | Observations on Baseline         | Calculated based on 2009. Population growth in the project area was not expecting the sudden increase of population   |
| 3.             | Targets                          |   |
| 3.1            | Target Settting Method           | [(Served Pop 2015 * Water provided to HH per capita * WW generation * Portion of people/houses that will be served for WW /1000 L)/ 365] * 0.9  |
| 3.2            | Observations on Targets          | Kumar stated that they are using assumption of 85% connection rate within areas served, 4-Aug-2010.<br>A factor of 90% is applied to account for uncertainty about the population served from Amman- provided by<br>Mohammad Ababneh., where part of Amman (Marka) is being collected through zarqa network |

| 4.  | Indicator Monitoring                  |   |
|-----|---------------------------------------|---|
| 4.1 | Value                                 |   |
|     | Year 1                                |   |
|     | Year 2                                |   |
| 4.2 | Reporting Date                        |   |
|     | Year 1                                | 24  |
|     | Year 2                                | 24  |
| 5.  | Recounting of Reported Results        |   |
| 5.1 | Re-aggregate the numbers from the     |   |
|     | reports received from all Service     |   |
|     | Delivery Sites. What is the re-       |   |
|     | aggregated number? [A]                |   |
| 5.2 | What aggregated result was            |   |
|     | contained in the progress report      |   |
|     | prepared by the grantee (and          |   |
|     | submitted to AGRA M&E Unit)? [B]      | 24  |
| 5.3 | Calculate the ratio of recounted to   |   |
|     | reported numbers. [A/B]               | 1   |
| 5.4 | What are the reasons for the          |   |
|     | discrepancy (if any) observed (i.e.,  |   |
|     | data entry errors, arithmetic errors, |   |
|     | missing source documents, other)?     | wastewater collected from amman part shall be identified                        |
| 6.  | Comments                              |   |
| 6.1 | Quality of Indicator                  |   |
|     |                                       | good  |
| 6.2 | Proposition for Revising Current      |   |
|     | Indicator                             | Revise indicator name to: Volume of wastewater collected from Zarga Governorate |
| 6.3 | Proposition to ensure timely          |   |
| 0.0 | availability of the data              |   |
|     |                                       |   |
| 6.4 | Aspects to update in the M&E Plan     |   |

| Indic          | ator Reference Sheet                    |   |
|----------------|---|---|
| Indicator Name |   | Access to wastewater network increased  |
| 1.             | Metadata                                |   |
| 1.1            | Indicator Code                          | Outcome 03  |
| 1.2            | Responsible Entity                      | WAJ-Zarqa   |
| 1.3            | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Outcome 03  |
|                | output, outcome, impact                 |   |
| 1.4            | Measurement Unit                        | Percentage  |
| 1.5            | Data Source                             | WAJ-Zarqa   |
| 1.6            | Definition                              | Zarqa Governorate wastewater subscribers as a percent of water subscribers; each connection serves three<br>subscribers and all subscribers will connect to the new network.  |
| 1.7            | Calculation Method (formula)            | (Wastewater bills in Zarqa + Wastewater bills in Rusifah) / (Water bills in Zarqa + Water bills in Rusifah)   |
| 1.8            | Sampling Method (if applicable)         |   |
| 1.9            | Data Collection Method                  |   |
| 1.10           | Reporting Method                        | Mail  |
| 1.11           | Frequency                               | quarterly   |
| 1.12           | Level of Disaggregation                 | 3   |
| 1.13           | Data Storage Method                     | electronic and hard copy  |
| 1.14           | Database Format (if applicable)         |   |
| 1.15           | Observations on Metadata                | Name of indicator should be revised. The indicator is stated as the expected outcome rather than the indicator that will be used to measure the achievement of the outcome. Recommended is to use number of pepole connected to   |
| 2.             | Baseline Values                         |   |
| 2.1            | Value                                   | 72,1  |
| 2.2            | Period of Reference                     | 2009  |
| 2.3            | Baseline Value Estimation Method        | (Wastewater bills in Zarqa + Wastewater bills in Rusifah) / (Water bills in Zarqa + Water bills in Rusifah)   |
| 2.4            | Observations on Baseline                | <ol> <li>Calculation for the Baseline refers to water bill if it includes wastewater discharge rates or not.</li> <li>Numbers of issued bills were in year 2009 at two cities: Zarqa and Rusifah.</li> </ol>  |
| 3.             | Targets                                 |   |
| 3.1            |   | (Wastewater bills in Zarqa + Wastewater bills in Rusifah) / (Water bills in Zarqa + Water bills in Rusifah)   |
| 3.2            | Observations on Targets                 | <ol> <li>Sukneh area is excluded from calculations as it is assumed out of scope.</li> <li>There are two assumptions: one for percentage of connected population to wastewater network and the another<br/>for who decide not to connect to wastewater network with 95% factor</li> </ol> |

| 4.  | Indicator Monitoring                  |   |
|-----|---------------------------------------|---|
| 4.1 | Value                                 |   |
|     | Year 1                                | 72  |
|     | Year 2                                |   |
|     |                                       | 72  |
| 4.2 | Reporting Date                        |   |
|     | Year 1                                |   |
|     | Year 2                                |   |
| 5.  | Recounting of Reported Results        |   |
| 5.1 | Re-aggregate the numbers from the     | 72  |
|     | reports received from all Service     |   |
|     | Delivery Sites. What is the re-       |   |
|     | aggregated number? [A]                |   |
| 5.2 | What aggregated result was            | 72  |
|     | contained in the progress report      |   |
|     | prepared by the grantee (and          |   |
|     | submitted to AGRA M&E Unit)? [B]      |   |
| 5.3 | Calculate the ratio of recounted to   | 1   |
| 0.0 | reported numbers. [A/B]               |   |
| 54  | What are the reasons for the          | Serious problems with X7 software for billing at WAJ-Zarqa which can lead to misleading billing data  |
| 0   | discrepancy (if any) observed (i.e.,  |   |
|     | data entry errors, arithmetic errors, |   |
|     | missing source documents, other)?     |   |
| 6   | Comments                              |   |
| 6.1 |                                       | Good  |
| 0.1 | Quality of multator                   |   |
| 6.2 | Proposition for Revising Current      | Shall contain some degree of disaggregation to distinguish between was not connected and does not want to be  |
|     | Indicator                             | connected. Revise the name of the indicator as: Percentage of water subscribers with acces to waster water<br>network. Add number of people connected |
|     |                                       |   |
| 6.3 |                                       |   |
|     | availability of the data              |   |
| 6.4 | Aspects to update in the M&E Plan     | Connections number which is according to number of subscribers might be less than Families connected.   |
|     | · ·                                   | Subscribers are also not zoned. Shall be added to the ITT as number not percentage  |

| Indica         | ator Reference Sheet             |   |
|----------------|----------------------------------|---|
| Indicator Name |                                  | Expand network - West Zarqa   |
| 1.             | Metadata                         |   |
| 1.1            | Indicator Code                   | Output 01   |
| 1.2            | Responsible Entity               | РМС   |
| 1.3            | Indicator Type (input, activity, | Output 01   |
|                | output, outcome, impact          | KM  |
| 1.4            | Measurement Unit                 |   |
| 1.5            | Data Source                      | РМС   |
| 1.6            | Definition                       | Expansion of the network entails the installation of new pipes for the connection of new households to the wastewater network(households were not previously connected to waste water network). |
| 1.7            | Calculation Method (formula)     |   |
| 1.8            | Sampling Method (if applicable)  |   |
| 1.9            | Data Collection Method           |   |
| 1.10           | Reporting Method                 | Mail  |
| 1.11           | Frequency                        | Monthly/Quarterly/Yearly  |
| 1.12           | Level of Disaggregation          |   |
| 1.13           | Data Storage Method              | Electronic mail and on the website  |
| 1.14           | Database Format (if applicable)  |   |
| 1.15           | Observations on Metadata         | Administrative reports of PMC will be the source for this indicator. Indicator name needs to be revised as it is<br>stated as an action and not an output.                                      |
| 2.             | Baseline Values                  |   |
| 2.1            | Value                            | 0   |
| 2.2            | Period of Reference              | 2009  |
| 2.3            | Baseline Value Estimation Method | Set to 0 before work starts.  |
| 2.4            | Observations on Baseline         |   |
| 3.             | Targets                          | See ITT for targets   |
| 3.1            | Target Settting Method           | Based on work planned   |
| 3.2            | Observations on Targets          |   |

| 4.  | Indicator Monitoring                          | Not applicable only if work has not started yet.  |
|-----|---|---|
| 4.1 | Value   |   |
|     | Year 1  |   |
|     |   |   |
|     | Year 2  |   |
| 4.2 | Reporting Date                                |   |
|     | Year 1  |   |
|     | Year 2  |   |
| 5.  | Recounting of Reported Results                | Not applicable only if work has not started yet.  |
| 5.1 | Re-aggregate the numbers from the             |   |
|     | reports received from all Service             |   |
|     | Delivery Sites. What is the re-               |   |
|     | aggregated number? [A]                        |   |
| 5.2 | What aggregated result was                    |   |
|     | contained in the progress report              |   |
|     | prepared by the grantee (and                  |   |
|     | submitted to AGRA M&E Unit)? [B]              |   |
| 5.3 | Calculate the ratio of recounted to           |   |
|     | reported numbers. [A/B]                       |   |
| 5.4 | What are the reasons for the                  |   |
|     | discrepancy (if any) observed (i.e.,          |   |
|     | data entry errors, arithmetic errors,         |   |
|     | missing source documents, other)?             |   |
| 6.  | Comments                                      |   |
| 6.1 | Quality of Indicator                          | Good  |
| 6.2 | Duran a siti a a far Davisia a Company        | Review indicator name: KM of new pipes installed for the connection of new households to the wastewater |
| 6.2 | Proposition for Revising Current<br>Indicator | network - West Zarga  |
|     |   |   |
| 6.3 | , , ,   |   |
|     | availability of the data                      |   |
| 6.4 | Aspects to update in the M&E Plan             | Zoning of the KM shall be added   |

| Indic | ator Reference Sheet                                     |  |
|-------|--|--|
| Indic | ator Name  | Expand network - East Zarqa  |
| 1.    | Metadata   |  |
| 1.1   | Indicator Code   | Output 02  |
| 1.2   | Responsible Entity                                       | РМС  |
| 1.3   | Indicator Type (input, activity, output, outcome, impact | Output 02  |
| 1.4   | Measurement Unit   | KM   |
| 1.5   | Data Source  | РМС  |
| 1.6   | Definition   | Expansion of the network entails the installation of new pipes for the connection of new households to the<br>wastewater network(households were not previously connected to waste water network). |
| 1.7   | Calculation Method (formula)                             |  |
| 1.8   | Sampling Method (if applicable)                          |  |
| 1.9   | Data Collection Method                                   |  |
| 1.10  | Reporting Method   | Mail and website   |
| 1.11  | Frequency  | Monthly/Qarterly and Yearly  |
| 1.12  | Level of Disaggregation                                  |  |
| 1.13  | Data Storage Method                                      |  |
| 1.14  | Database Format (if applicable)                          |  |
| 1.15  | Observations on Metadata                                 | Administrative reports of PMC will be the source for this indicator. Indicator name needs to be revised as it is<br>stated as an action and not an output.   |
| 2.    | Baseline Values  |  |
| 2.1   | Value  | 0  |
| 2.2   | Period of Reference                                      | 2009   |
| 2.3   | Baseline Value Estimation Method                         | Set to 0 before work starts.   |
| 2.4   | Observations on Baseline                                 |  |
| 3.    | Targets  | See ITT for targets  |
| 3.1   | Target Settting Method                                   | Based on work planned  |
| 3.2   | Observations on Targets                                  |  |

| 4.  | Indicator Monitoring                          | Not applicable only if work has not started yet.  |
|-----|---|---|
| 4.1 | Value   |   |
|     | Year 1  |   |
|     |   |   |
|     | Year 2  |   |
| 4.2 | Reporting Date                                |   |
|     | Year 1  |   |
|     | Year 2  |   |
| 5.  | Recounting of Reported Results                | Not applicable only if work has not started yet.  |
| 5.1 | Re-aggregate the numbers from the             |   |
|     | reports received from all Service             |   |
|     | Delivery Sites. What is the re-               |   |
|     | aggregated number? [A]                        |   |
| 5.2 | What aggregated result was                    |   |
|     | contained in the progress report              |   |
|     | prepared by the grantee (and                  |   |
|     | submitted to AGRA M&E Unit)? [B]              |   |
| 5.3 | Calculate the ratio of recounted to           |   |
|     | reported numbers. [A/B]                       |   |
| 5.4 | What are the reasons for the                  |   |
|     | discrepancy (if any) observed (i.e.,          |   |
|     | data entry errors, arithmetic errors,         |   |
|     | missing source documents, other)?             |   |
| 6.  | Comments                                      |   |
| 6.1 | Quality of Indicator                          | Good  |
|     |   |   |
| 6.2 | Proposition for Revising Current<br>Indicator | Review indicator name: KM of new pipes installed for the connection of new households to the wastewater<br>network - East Zarqa |
|     |   |   |
| 6.3 | Proposition to ensure timely                  |   |
|     | availability of the data                      |   |
| 6.4 | Aspects to update in the M&E Plan             |   |
|     |   |   |

| Indic          | ator Reference Sheet                                     |  |
|----------------|--|--|
| Indicator Name |  | Expand network - Ruseifa   |
| 1.             | Metadata   |  |
| 1.1            | Indicator Code   | Output 03  |
| 1.2            | Responsible Entity                                       | РМС  |
| 1.3            | Indicator Type (input, activity, output, outcome, impact | Output 03  |
| 1.4            | Measurement Unit   | KM   |
| 1.5            | Data Source  | РМС  |
| 1.6            | Definition   | Expansion of the network entails the installation of new pipes for the connection of new households to the wastewater network(households were not previously connected to waste water network). Indicator name needs to be revised as it is stated as an action and not an output. |
| 1.7            | Calculation Method (formula)                             |  |
| 1.8            | Sampling Method (if applicable)                          |  |
| 1.9            | Data Collection Method                                   |  |
| 1.10           | Reporting Method   |  |
| 1.11           | Frequency  | Quarterly  |
| 1.12           | Level of Disaggregation                                  |  |
| 1.13           | Data Storage Method                                      | mail and website   |
| 1.14           | Database Format (if applicable)                          |  |
| 1.15           | Observations on Metadata                                 | Administrative reports of PMC will be the source for this indicator  |
| 2.             | Baseline Values  |  |
| 2.1            | Value  | 0  |
| 2.2            | Period of Reference                                      | 2009   |
| 2.3            | Baseline Value Estimation Method                         | Set to 0 before work starts.   |
| 2.4            | Observations on Baseline                                 |  |
| 3.             | Targets  | See ITT for targets  |
| 3.1            |  | Based on work planned  |
| 3.2            | Observations on Targets                                  |  |

| 4.  | Indicator Monitoring                          | Not applicable only if work has not started yet.   |
|-----|---|--|
| 4.1 | Value   |  |
|     | Year 1  |  |
|     |   |  |
|     | Year 2  |  |
| 4.2 | Reporting Date                                |  |
|     | Year 1  |  |
|     | Year 2  |  |
| 5.  | Recounting of Reported Results                | Not applicable only if work has not started yet.   |
| 5.1 | Re-aggregate the numbers from the             |  |
|     | reports received from all Service             |  |
|     | Delivery Sites. What is the re-               |  |
|     | aggregated number? [A]                        |  |
| 5.2 | What aggregated result was                    |  |
|     | contained in the progress report              |  |
|     | prepared by the grantee (and                  |  |
|     | submitted to AGRA M&E Unit)? [B]              |  |
| 5.3 | Calculate the ratio of recounted to           |  |
|     | reported numbers. [A/B]                       |  |
| 5.4 | What are the reasons for the                  |  |
|     | discrepancy (if any) observed (i.e.,          |  |
|     | data entry errors, arithmetic errors,         |  |
|     | missing source documents, other)?             |  |
| 6.  | Comments                                      |  |
| 6.1 | Quality of Indicator                          | Good   |
|     |   |  |
| 6.2 | Proposition for Revising Current<br>Indicator | Review indicator name: KM of new pipes installed for the connection of new households to the wastewater<br>network - Ruseifa |
|     |   |  |
| 6.3 | , , ,   |  |
|     | availability of the data                      |  |
| 6.4 | Aspects to update in the M&E Plan             |  |
|     |   |  |

| Indic          | ator Reference Sheet             |   |
|----------------|----------------------------------|---|
| Indicator Name |                                  | Reinforce and rehabilitate network - West Zarga   |
| 1.             | Metadata                         |   |
| 1.1            | Indicator Code                   | Output 04   |
| 1.2            | Responsible Entity               | РМС   |
| 1.3            | Indicator Type (input, activity, | Output 04   |
|                | output, outcome, impact          |   |
| 1.4            | Measurement Unit                 | KM  |
| 1.5            | Data Source                      | РМС   |
| 1.6            | Definition                       | Reinforcement entails upgrades to existing pipelines. Rehabilitation entails replacement of existing pipelines.<br>Indicator name needs to be revised as it is stated as an action and not an output. |
| 1.7            | Calculation Method (formula)     |   |
| 1.8            | Sampling Method (if applicable)  |   |
| 1.9            | Data Collection Method           |   |
| 1.10           | Reporting Method                 | Mail and website  |
| 1.11           | Frequency                        | quarterly   |
| 1.12           | Level of Disaggregation          |   |
| 1.13           | Data Storage Method              |   |
| 1.14           | Database Format (if applicable)  |   |
| 1.15           | Observations on Metadata         | Indicator name needs to be revised as it is stated as an action and not an output.  |
| 2.             | Baseline Values                  |   |
| 2.1            | Value                            | 0   |
| 2.2            | Period of Reference              | 2009  |
| 2.3            | Baseline Value Estimation Method | Set to 0 before work starts.  |
| 2.4            | Observations on Baseline         |   |
| 3.             | Targets                          | See ITT for targets   |
| 3.1            | Target Settting Method           | Based on work planned   |
| 3.2            | Observations on Targets          |   |

| 4.  | Indicator Monitoring                  | Not applicable only if work has not started yet.   |
|-----|---------------------------------------|--|
| 4.1 | Value                                 |  |
|     | Year 1                                |  |
|     |                                       |  |
|     | Year 2                                |  |
| 4.2 | Reporting Date                        |  |
|     | Year 1                                |  |
|     | Year 2                                |  |
| 5.  | Recounting of Reported Results        | Not applicable only if work has not started yet.   |
| 5.1 | Re-aggregate the numbers from the     |  |
|     | reports received from all Service     |  |
|     | Delivery Sites. What is the re-       |  |
|     | aggregated number? [A]                |  |
| 5.2 | What aggregated result was            |  |
|     | contained in the progress report      |  |
|     | prepared by the grantee (and          |  |
|     | submitted to AGRA M&E Unit)? [B]      |  |
| 5.3 | Calculate the ratio of recounted to   |  |
|     | reported numbers. [A/B]               |  |
| 5.4 | What are the reasons for the          |  |
|     | discrepancy (if any) observed (i.e.,  |  |
|     | data entry errors, arithmetic errors, |  |
|     | missing source documents, other)?     |  |
| 6.  | Comments                              |  |
| 6.1 | Quality of Indicator                  | Good   |
|     |                                       |  |
| 6.2 | 1 0                                   | Review indicator name: KM ofexisting pipelines reinforced and rehabilitated - West Zarqa |
|     | Indicator                             |  |
| 6.3 | Proposition to ensure timely          |  |
|     | availability of the data              |  |
|     |                                       |  |
| 6.4 | Aspects to update in the M&E Plan     |  |
|     |                                       |  |

| Indic          | ator Reference Sheet             |   |
|----------------|----------------------------------|---|
| Indicator Name |                                  | Reinforce and rehabilitate network - East Zarqa   |
| 1.             | Metadata                         |   |
| 1.1            | Indicator Code                   | Output 05   |
| 1.2            | Responsible Entity               | РМС   |
| 1.3            | Indicator Type (input, activity, | Output 05   |
|                | output, outcome, impact          |   |
| 1.4            | Measurement Unit                 | KM  |
| 1.5            | Data Source                      | PMC Administrative Reports.   |
| 1.6            | Definition                       | Reinforcement entails upgrades to existing pipelines. Rehabilitation entails replacement of existing pipelines. |
| 1.7            | Calculation Method (formula)     |   |
| 1.8            | Sampling Method (if applicable)  |   |
| 1.9            | Data Collection Method           |   |
| 1.10           | Reporting Method                 | mail website  |
| 1.11           | Frequency                        | Quarterly   |
| 1.12           | Level of Disaggregation          |   |
| 1.13           | Data Storage Method              | Mail and website  |
| 1.14           | Database Format (if applicable)  |   |
| 1.15           | Observations on Metadata         | Indicator name needs to be revised as it is stated as an action and not an output.                              |
| 2.             | Baseline Values                  |   |
| 2.1            | Value                            | 0   |
| 2.2            | Period of Reference              | 2009  |
| 2.3            | Baseline Value Estimation Method | Set to 0 before work starts.  |
| 2.4            | Observations on Baseline         |   |
| 3.             | Targets                          | See ITT for targets   |
| 3.1            | Target Settting Method           | Based on work planned   |
| 3.2            | Observations on Targets          |   |

| 4.  | Indicator Monitoring                  | Not applicable only if work has not started yet.   |
|-----|---------------------------------------|--|
| 4.1 | Value                                 |  |
|     | Year 1                                |  |
|     |                                       |  |
|     | Year 2                                |  |
| 4.2 | Reporting Date                        |  |
|     | Year 1                                |  |
|     | Year 2                                |  |
| 5.  | Recounting of Reported Results        | Not applicable only if work has not started yet.   |
| 5.1 | Re-aggregate the numbers from the     |  |
|     | reports received from all Service     |  |
|     | Delivery Sites. What is the re-       |  |
|     | aggregated number? [A]                |  |
| 5.2 | What aggregated result was            |  |
|     | contained in the progress report      |  |
|     | prepared by the grantee (and          |  |
|     | submitted to AGRA M&E Unit)? [B]      |  |
| 5.3 | Calculate the ratio of recounted to   |  |
|     | reported numbers. [A/B]               |  |
| 5.4 | What are the reasons for the          |  |
|     | discrepancy (if any) observed (i.e.,  |  |
|     | data entry errors, arithmetic errors, |  |
|     | missing source documents, other)?     |  |
| 6.  | Comments                              |  |
| 6.1 | Quality of Indicator                  | Good   |
|     | -                                     |  |
| 6.2 | 1 0                                   | Review indicator name: KM ofexisting pipelines reinforced and rehabilitated - East Zarqa |
|     | Indicator                             |  |
| 6.3 | Proposition to ensure timely          |  |
|     | availability of the data              |  |
|     |                                       |  |
| 6.4 | Aspects to update in the M&E Plan     |  |
| 1   |                                       |  |

| Indic          | ator Reference Sheet             |   |
|----------------|----------------------------------|---|
| Indicator Name |                                  | Reinforce and rehabilitate network - Ruseifa  |
| 1.             | Metadata                         |   |
| 1.1            | Indicator Code                   | Output 06   |
| 1.2            | Responsible Entity               | PMC   |
| 1.3            | Indicator Type (input, activity, | Output 06   |
|                | output, outcome, impact          |   |
| 1.4            | Measurement Unit                 | KM  |
| 1.5            | Data Source                      | РМС   |
| 1.6            | Definition                       | Reinforcement entails upgrades to existing pipelines. Rehabilitation entails replacement of existing pipelines.   |
| 1.7            | Calculation Method (formula)     |   |
| 1.8            | Sampling Method (if applicable)  |   |
| 1.9            | Data Collection Method           |   |
| 1.10           | Reporting Method                 | mail and website  |
| 1.11           | Frequency                        | Qarterly  |
| 1.12           | Level of Disaggregation          |   |
| 1.13           | Data Storage Method              |   |
| 1.14           | Database Format (if applicable)  |   |
| 1.15           | Observations on Metadata         | Administrative reports of PMC will be the source for this indicator. Indicator name needs to be revised as it is stated as an action and not an output. |
| 2.             | Baseline Values                  |   |
| 2.1            | Value                            | 0   |
| 2.2            | Period of Reference              | 2009  |
| 2.3            | Baseline Value Estimation Method | Set to 0 before work starts.  |
| 2.4            | Observations on Baseline         |   |
| 3.             | Targets                          | See ITT for targets   |
| 3.1            | Target Settting Method           | Based on work planned   |
| 3.2            | Observations on Targets          |   |

| 4.  | Indicator Monitoring                  | Not applicable only if work has not started yet.                                      |
|-----|---------------------------------------|---|
| 4.1 | Value                                 |   |
|     | Year 1                                |   |
|     |                                       |   |
|     | Year 2                                |   |
| 4.2 | Reporting Date                        |   |
|     | Year 1                                |   |
|     | Year 2                                |   |
| 5.  | Recounting of Reported Results        | Not applicable only if work has not started yet.                                      |
| 5.1 | Re-aggregate the numbers from the     |   |
|     | reports received from all Service     |   |
|     | Delivery Sites. What is the re-       |   |
|     | aggregated number? [A]                |   |
| 5.2 | What aggregated result was            |   |
|     | contained in the progress report      |   |
|     | prepared by the grantee (and          |   |
|     | submitted to AGRA M&E Unit)? [B]      |   |
| 5.3 | Calculate the ratio of recounted to   |   |
|     | reported numbers. [A/B]               |   |
| 5.4 | What are the reasons for the          |   |
|     | discrepancy (if any) observed (i.e.,  |   |
|     | data entry errors, arithmetic errors, |   |
|     | missing source documents, other)?     |   |
| 6.  | Comments                              |   |
| 6.1 | Quality of Indicator                  | Good  |
|     | -                                     |   |
| 6.2 | 1 0                                   | Review indicator name: KM ofexisting pipelines reinforced and rehabilitated - Ruseifa |
|     | Indicator                             |   |
| 6.3 | Proposition to ensure timely          |   |
|     | availability of the data              |   |
|     |                                       |   |
| 6.4 | Aspects to update in the M&E Plan     |   |
| 1   |                                       |   |

## 2.4. AS-SAMRA EXPANSION PROJECT

| Indic | ator Reference Sheet                                     |   |  |  |  |
|-------|--|---|--|--|--|
| Indic | ator Name  | Treated wastewater used in agriculture  |  |  |  |
| 1.    | Metadata   |   |  |  |  |
| 1.1   | Indicator Code   | Outcome 01  |  |  |  |
| 1.2   | Responsible Entity                                       | JVA   |  |  |  |
| 1.3   | Indicator Type (input, activity, output, outcome, impact | Outcome 01  |  |  |  |
| 1.4   | Measurement Unit   | Percentage  |  |  |  |
| 1.5   | Data Source  | JVA   |  |  |  |
| 1.6   | Definition   | Treated wastewater used for irrigation in Northern and Middle Jordan Valley as a percent of all water used for<br>irrigation in Northern and Middle Jordan Valley.  |  |  |  |
| 1.7   | Calculation Method (formula)                             | ([Quantities of mixed water sources released for irrigation in North Ghor]+[Quantities of mixed water sources released for irrigation (in Middle/South Ghor])/(Total water quantities used in Ghor agriculture)   |  |  |  |
| 1.8   | Sampling Method (if applicable)                          |   |  |  |  |
| 1.9   | Data Collection Method                                   |   |  |  |  |
| 1.10  | Reporting Method   | Mail  |  |  |  |
| 1.11  | Frequency  | Annual  |  |  |  |
| 1.12  | Level of Disaggregation                                  | Fresh water , traeted wastewater used for irrigation in North and Middle Jordan Valley  |  |  |  |
| 1.13  | Data Storage Method                                      | Mail and hard copy  |  |  |  |
| 1.14  | Database Format (if applicable)                          |   |  |  |  |
| 1.15  | Observations on Metadata                                 | Numbers were taken in year 2009.JVA is the source. No fresh water is used for agriculture in Middle /South Ghor   |  |  |  |
| 2.    | Baseline Values  |   |  |  |  |
| 2.1   | Value  |   |  |  |  |
| 2.2   | Period of Reference                                      | 61  |  |  |  |
| 2.3   | Baseline Value Estimation Method                         | 2009<br>([Quantities of mixed water sources released for irrigation in North Ghor]+[Quantities of mixed water sources<br>released for irrigation (in Middle/South Ghor])/(Total water quantities used in Ghor agriculture)  |  |  |  |
| 2.4   | Observations on Baseline                                 | Numbers were taken in year 2009.JVA is the source. No fresh water is used for agriculture in Middle /South Ghor   |  |  |  |
| 3.    | Targets  |   |  |  |  |
| 3.1   | Target Settting Method                                   | ([Quantities of mixed water sources released for irrigation in North Ghor]+[Quantities of mixed water sources released for irrigation (in Middle/South Ghor])/(Total water quantities used in Ghor agriculture)   |  |  |  |
| 3.2   | Observations on Targets                                  | <ol> <li>Numbers is based on year 2015 forecast.2. POC is various (Eng. Husam Hassan from JVA, and unknown from As-<br/>Samra WWTP. 3. All numbers used in target calculation are unverifiable.4. Treated wastewater includes rainwater<br/>runoff mixed with traeted wastewater in kking Talal dam.</li> </ol> |  |  |  |

| 4.  | Indicator Monitoring                  |  |
|-----|---------------------------------------|--|
| 4.1 | Value                                 |  |
|     | Year 1                                | 62.5   |
|     | Year 2                                | 64   |
| 4.2 | Reporting Date                        | 04   |
|     | Year 1                                |  |
|     | Year 2                                |  |
| 5.  | Recounting of Reported Results        |  |
|     | Re-aggregate the numbers from the     |  |
|     | reports received from all Service     |  |
|     | Delivery Sites. What is the re-       |  |
|     | aggregated number? [A]                |  |
| 5.2 | What aggregated result was            |  |
|     | contained in the progress report      |  |
|     | prepared by the grantee (and          |  |
|     | submitted to AGRA M&E Unit)? [B]      |  |
| 5.3 | Calculate the ratio of recounted to   |  |
|     | reported numbers. [A/B]               |  |
| 5.4 | What are the reasons for the          |  |
|     | discrepancy (if any) observed (i.e.,  |  |
|     | data entry errors, arithmetic errors, |  |
|     | missing source documents, other)?     |  |
| 6.  | Comments                              |  |
| 6.1 |                                       |  |
|     | - ,                                   |  |
| 6.2 | Proposition for Revising Current      |  |
|     | Indicator                             |  |
| 6.3 | Droposition to oncure time!           | To include rainwater runoff. Data reference? |
| 6.3 | ,                                     |  |
|     | availability of the data              |  |
| 6.4 | Aspects to update in the M&E Plan     |  |
|     |                                       |  |

| Indica         | ator Reference Sheet                                     |   |  |  |  |
|----------------|--|---|--|--|--|
| Indicator Name |  | Quality of As-Samra effluent meets standard   |  |  |  |
| 1. Metadata    |  |   |  |  |  |
| 1.1            | Indicator Code   | Outcome 02  |  |  |  |
| 1.2            | Responsible Entity                                       | MWI/JVA   |  |  |  |
| 1.3            | Indicator Type (input, activity, output, outcome, impact | Outcome 02  |  |  |  |
| 1.4            | Measurement Unit   | In Narrative P3 is 'level" while in the defention its number of days  |  |  |  |
| 1.5            | Data Source  | AVV/JVA   |  |  |  |
| 1.6            | Definition   | Number of days during the past quarter when effluent does not meet the applicable standard set out in the As-<br>Samra Project Agreement. |  |  |  |
| 1.7            | Calculation Method (formula)                             |   |  |  |  |
| 1.8            | Sampling Method (if applicable)                          |   |  |  |  |
| 1.9            | Data Collection Method                                   |   |  |  |  |
| 1.10           | Reporting Method   |   |  |  |  |
| 1.11           | Frequency  | Qarterly  |  |  |  |
| 1.12           | Level of Disaggregation                                  | Disaggregated -BOD< CODetc. Eng Mashagbeh JVA   |  |  |  |
| 1.13           | Data Storage Method                                      | Storage System at MWI   |  |  |  |
| 1.14           | Database Format (if applicable)                          |   |  |  |  |
| 1.15           | Observations on Metadata                                 | including assumptions and constrains  |  |  |  |
| 2.             | Baseline Values  |   |  |  |  |
| 2.1            | Value  |   |  |  |  |
| 2.2            | Period of Reference                                      |   |  |  |  |
| 2.3            | Baseline Value Estimation Method                         |   |  |  |  |
| 2.4            | Observations on Baseline                                 |   |  |  |  |
| 3.             | Targets  |   |  |  |  |
| 3.1            | Target Settting Method                                   |   |  |  |  |
| 3.2            | Observations on Targets                                  |   |  |  |  |

| 4.       | Indicator Monitoring                  |  |
|----------|---------------------------------------|--|
| 4.1      | Value                                 |  |
|          | Year 1                                |  |
|          | Year 2                                |  |
| 4.2      | Reporting Date                        |  |
|          | Year 1                                |  |
|          | Year 2                                |  |
| 5.       | Recounting of Reported Results        |  |
| 5.1      | Re-aggregate the numbers from the     |  |
|          | reports received from all Service     |  |
|          | Delivery Sites. What is the re-       |  |
|          | aggregated number? [A]                |  |
| 5.2      | What aggregated result was            |  |
|          | contained in the progress report      |  |
|          | prepared by the grantee (and          |  |
|          | submitted to AGRA M&E Unit)? [B]      |  |
| 5.3      | Calculate the ratio of recounted to   |  |
|          | reported numbers. [A/B]               |  |
| 5.4      | What are the reasons for the          |  |
|          | discrepancy (if any) observed (i.e.,  |  |
|          | data entry errors, arithmetic errors, |  |
|          | missing source documents, other)?     |  |
| 6.       | Comments                              |  |
| 6.1      | Quality of Indicator                  |  |
| 6.2      | Proposition for Revising Current      |  |
|          | Indicator                             |  |
| 6.3      | Proposition to ensure timely          |  |
|          | availability of the data              |  |
| <u> </u> |                                       |  |
| 6.4      | Aspects to update in the M&E Plan     |  |

| Indic          | ator Reference Sheet             |  |  |  |  |
|----------------|----------------------------------|--|--|--|--|
| Indicator Name |                                  | Volume of waste water effluent discharged from the As-Samra plant per year   |  |  |  |
| 1.             | Metadata                         |  |  |  |  |
| 1.1            | Indicator Code                   | Outcome 03   |  |  |  |
| 1.2            | Responsible Entity               | MWI/JVA  |  |  |  |
| 1.3            | Indicator Type (input, activity, | Outcome 03   |  |  |  |
|                | output, outcome, impact          | Cubic Meter  |  |  |  |
| 1.4            | Measurement Unit                 | Cubic Meter  |  |  |  |
| 1.5            | Data Source                      | AVI/IWM  |  |  |  |
| 1.6            | Definition                       | Annual volume of wastewater treated to at least secondary level (measured as annual volume of wastewater<br>effluent discharged from the As-Samra plant, million cubic meters per year). |  |  |  |
| 1.7            | Calculation Method (formula)     |  |  |  |  |
| 1.8            | Sampling Method (if applicable)  |  |  |  |  |
| 1.9            | Data Collection Method           |  |  |  |  |
| 1.10           | Reporting Method                 | Mail and hard copy   |  |  |  |
| 1.11           | Frequency                        | Quarterly  |  |  |  |
| 1.12           | Level of Disaggregation          |  |  |  |  |
| 1.13           | Data Storage Method              | Storage system at MWI  |  |  |  |
| 1.14           | Database Format (if applicable)  |  |  |  |  |
| 1.15           | Observations on Metadata         |  |  |  |  |
| 2.             | Baseline Values                  |  |  |  |  |
| 2.1            | Value                            | 6500000  |  |  |  |
| 2.2            | Period of Reference              |  |  |  |  |
|                |                                  | 2009   |  |  |  |
| 2.3            | Baseline Value Estimation Method | Not indicated  |  |  |  |
| 2.4            | Observations on Baseline         | 1. POC is Eng. Sultan Mashaqbah<br>2. Actual volume for year 2009 was 65,360,176 cubic meters.   |  |  |  |
| 3.             | Targets                          |  |  |  |  |
| 3.1            | Target Settting Method           |  |  |  |  |
|                |                                  | [Estimated As-Samra effluence in year 2015]*[Factor for "water not lost"]  |  |  |  |
| 3.2            | Observations on Targets          | [Estimated As-Samra effluence in year 2015]*[Factor for "water not lost"]  |  |  |  |

| 4.  | Indicator Monitoring                  |            |
|-----|---------------------------------------|------------|
| 4.1 | Value                                 |            |
|     | Year 1                                | 65 000 000 |
|     | Year 2                                | 65 000 000 |
| 4.2 | Reporting Date                        |            |
|     | Year 1                                |            |
|     | Year 2                                |            |
| 5.  | Recounting of Reported Results        |            |
| 5.1 | Re-aggregate the numbers from the     |            |
|     | reports received from all Service     |            |
|     | Delivery Sites. What is the re-       |            |
|     | aggregated number? [A]                |            |
| 5.2 | What aggregated result was            |            |
|     | contained in the progress report      |            |
|     | prepared by the grantee (and          |            |
|     | submitted to AGRA M&E Unit)? [B]      |            |
| 5.3 | Calculate the ratio of recounted to   |            |
|     | reported numbers. [A/B]               |            |
| 5.4 | What are the reasons for the          |            |
|     | discrepancy (if any) observed (i.e.,  |            |
|     | data entry errors, arithmetic errors, |            |
|     | missing source documents, other)?     |            |
| 6.  | Comments                              |            |
| 6.1 | Quality of Indicator                  |            |
| 6.2 | Proposition for Revising Current      |            |
|     | Indicator                             |            |
| 6.3 | Proposition to ensure timely          |            |
|     | availability of the data              |            |
| 6.4 | Aspects to update in the M&E Plan     |            |

| Indic          | ator Reference Sheet                    |   |
|----------------|---|---|
| Indicator Name |   | Agriculture use of treated wastewater   |
| 1.             | Metadata                                |   |
| 1.1            | Indicator Code                          | Outcome 03  |
| 1.2            | Responsible Entity                      | JVA   |
| 1.3            | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Outcome 03  |
|                | output, outcome, impact                 |   |
| 1.4            | Measurement Unit                        | Hectar  |
| 1.5            | Data Source                             | JVA   |
| 1.6            | Definition                              | Agriculture land in the Middle and Northern Jordan Valley using treated wastewater for at least part of their<br>irrigation water.  |
| 1.7            | Calculation Method (formula)            | ([Potential treated wastewater irrigation area in North Ghor]*[Actual percentage of wastewater irrigation area in North Ghor]+([Potential treated wastewater irrigation area in Middle Ghor]*[Actual percentage of wastewater irrigation area in Middle Ghor]*[Actual percentage of wastewater irrigation area in Middle Ghor]) |
| 1.8            | Sampling Method (if applicable)         |   |
| 1.9            | Data Collection Method                  |   |
| 1.10           | Reporting Method                        | Mail  |
| 1.11           | Frequency                               | Quarterly   |
| 1.12           | Level of Disaggregation                 | Potential and actual irrigated area in North and Middle Jordan Valley   |
| 1.13           | Data Storage Method                     | Storage system at MWI   |
| 1.14           | Database Format (if applicable)         |   |
| 1.15           | Observations on Metadata                |   |
| 2.             | Baseline Values                         |   |
| 2.1            | Value                                   | 13700   |
| 2.2            | Period of Reference                     | Not indicated   |
| 2.3            | Baseline Value Estimation Method        | ([Potential treated wastewater irrigation area in North Ghor]*[Actual percentage of wastewater irrigation area in<br>North Ghor]+([Potential treated wastewater irrigation area in Middle Ghor]*[Actual percentage of wastewater<br>irrigation area in Middle Ghor])  |
| 2.4            | Observations on Baseline                | POC is Mr. Yousef Hassan  |
| 3.             | Targets                                 |   |
| 3.1            | Target Settting Method                  | ([Potential treated wastewater irrigation area in North Ghor]*[Expected percentage of wastewater irrigation area<br>in North Ghor])+([Potential treated wastewater irrigation area in Middle Ghor]*[Expected percentage of wastewater<br>irrigation area in Middle Ghor])   |
| 3.2            | Observations on Targets                 | Including assumptions and constrains  |

| 4.  | Indicator Monitoring                  |       |
|-----|---------------------------------------|-------|
| 4.1 | Value                                 |       |
|     | Year 1                                | 14000 |
|     | Year 2                                | 14400 |
| 4.2 | Reporting Date                        |       |
|     | Year 1                                |       |
|     | Year 2                                |       |
| 5.  | Recounting of Reported Results        |       |
| 5.1 | Re-aggregate the numbers from the     |       |
|     | reports received from all Service     |       |
|     | Delivery Sites. What is the re-       |       |
|     | aggregated number? [A]                |       |
| 5.2 | What aggregated result was            |       |
|     | contained in the progress report      |       |
|     | prepared by the grantee (and          |       |
|     | submitted to AGRA M&E Unit)? [B]      |       |
| 5.3 | Calculate the ratio of recounted to   |       |
|     | reported numbers. [A/B]               |       |
| 5.4 | What are the reasons for the          |       |
|     | discrepancy (if any) observed (i.e.,  |       |
|     | data entry errors, arithmetic errors, |       |
|     | missing source documents, other)?     |       |
| 6.  | Comments                              |       |
| 6.1 | Quality of Indicator                  |       |
| 6.2 | Proposition for Revising Current      |       |
|     | Indicator                             |       |
| 6.3 | Proposition to ensure timely          |       |
|     | availability of the data              |       |
| 6.4 | Aspects to update in the M&E Plan     |       |
|     |                                       |       |

# 3. DATA QUALITY ASSESSMENT GRIDS

### 3.1. COMPACT-LEVEL INDICATORS

1. Validity - Do the data adequately represent the desired performance?

|   |  | Out              | come                       |                  |
|---|--|------------------|----------------------------|------------------|
| Dimension / Question  | Network water<br>consumption<br>per capita<br>(residential and<br>non-residential) |                  | Operating cost<br>coverage | Outstanding debt |
| 1.1. Relevance  |  |                  |                            |                  |
| Is there a solid, logical relation between the activity or program and what is being measured, or are there significant uncontrollable factors? | Partly   | Partly           | Yes - completely           | Partly           |
| 1.2. Adequacy   |  |                  |                            |                  |
| Do the indicators for particular expected results fully measure them? (completeness)  | Partly   | Yes - completely | Yes - completely           | Yes - completely |
| Are definitions clear enough for all users to have the same understanding?  | Partly   | Partly           | Partly                     | No - not at all  |
| If applicable, were national definitions used to define impact and outcome indicators?  | N/A  | N/A              | N/A                        | N/A              |
| Are the indicators sufficient to characterize and/or measure the results?   | Partly   | Yes - completely | Yes - completely           | Yes - completely |
| Does data include sufficient detail for disaggregated analysis if necessary?  | Yes - completely   | Yes - completely | Yes - completely           | Yes - completely |
| 1.3. Data collection tools (non-survey data only)   |  |                  |                            |                  |
| Is the data collection instrument well designed (e.g., reporting formats)?  | Partly   | Partly           | Partly                     | Partly           |
| Are data collectors well trained? How were they trained?  | Yes - completely   | Yes - completely | Yes - completely           | Yes - completely |
| If the instrument was self-reporting were adequate instructions provided?   | N/A  | N/A              | N/A                        | N/A              |
| 1.4. Non Sampling or Measurement Error (survey data only)   |  |                  |                            |                  |
| Is the data collection instrument well designed? I.e., does it enable to inform the indicator?  | <br>N/A  | N/A              | N/A                        | N/A              |
| Were the questions in the survey/questionnaire clear, direct, easy to understand?   | N/A  | N/A              | N/A                        | N/A              |
| Are definitions for data to be collected operationally precise?   | N/A  | N/A              | N/A                        | N/A              |
| Was there any quality control in the selection process of the enumerators?  | N/A  | N/A              | N/A                        | N/A              |
| Were trainers insiders of the program/project?  | N/A  | N/A              | N/A                        | N/A              |
| Were enumerators well trained?  | N/A  | N/A              | N/A                        | N/A              |
| If the instrument was self-reporting were adequate instructions provided?   | N/A  | N/A              | N/A                        | N/A              |
| Were response rates sufficiently large?   | N/A  | N/A              | N/A                        | N/A              |
| Has non-response rate been followed up?   | N/A  | N/A              | N/A                        | N/A              |
| Were there reasons for respondents to give incomplete or untruthful information?  | N/A  | N/A              | N/A                        | N/A              |
| Were there efforts to reduce the potential for personal bias by enumerators?  | N/A  | N/A              | N/A                        | N/A              |
|   |  |                  |                            |                  |

| 1.5. Representativeness of Data (survey data only)  |   |  |  |   |
|---|---|--|--|---|
| Is the sample from which the data are drawn representative of the population served by the activity?  | N/A   | N/A  | N/A  | N/A   |
| Did all units of the population have an equal chance of being selected for the sample?  | N/A   | N/A  | N/A  | N/A   |
| Is the sampling frame adequate? (i.e., the list of units in the target population up to date, comprehensive, mutually exclusive (for geographic frames))  | N/A   | N/A  | N/A  | N/A   |
| Is the sample of adequate size?   | N/A   | N/A  | N/A  | N/A   |
| Are the data complete? (i.e., have all data points been recorded?)  | N/A   | N/A  | N/A  | N/A   |
| 1.6. Transcription error  |   |  |  |   |
| Are steps being taken to limit transcription errors? (e.g., double keying of data for large surveys, electronic edit checking program to clean data, random checks of partner data entered by supervisors)                        | Yes - completely  | Yes - completely   | N/A  | N/A   |
| Have data errors been tracked to their original source and mistakes corrected?  | Yes - completely  | Partly   | Yes - completely   | N/A   |
| 1.7. Data processing  |   |  |  |   |
| Are the correct formulae being applied?   | Yes - completely  | Partly   | Yes - completely   | Partly  |
| Are the same formulae applied consistently from year to year, site to site, data source to data source (if data from multiple sources need to be aggregated)?   | Yes - completely  | Yes - completely   | Yes - completely   | Yes - completely  |
| Are procedures for dealing with missing data/outsiders traceable?   | Yes - completely  | Yes - completely   | N/A  | N/A   |
| Have procedures for dealing with missing data/outsiders been correctly applied?   | Yes - completely  | Yes - completely   | N/A  | N/A   |
| 1.8. Does the data set reflect data entered at the source? (non-survey data only)   |   |  |  |   |
| Are final numbers reported accurate? (E.g., does a number reported as a "total" actually add up?)   | Yes - completely  | Partly   | Yes - completely   | No - not at all   |
| Would an increase in the degree of accuracy be more costly than the increased value of the information? (Yes-completely, if no more marginal value remaining to conquer?)   | Partly  | Partly   | Yes - completely   | No - not at all   |
| Does the recording and reporting system avoids double counting people (e.g., a person receiving the same service twice in a reporting period, a person registered as receiving the same service in two different locations, etc)? | Yes - completely  | Yes - completely   | N/A  | Yes - completely  |
| Does the reporting system enable the identification and recording of a "drop out", a person "lost to follow-up" and a person who died?  | Yes - completely  | Yes - completely   | N/A  | Yes - completely  |
| Average score   | 2,65  | 2,59   | 2,83   | 2,31  |
| Recommendations on Validity   | Its definition needs<br>to be reviewed.<br>This analysis does<br>not include<br>method for<br>estimating<br>population. | Clarify indicator<br>definition as it is per<br>capita consumption.<br>Contemplate<br>possibility of<br>dividing by number<br>of domestic<br>customers instead<br>of by population. See<br>comments for<br>previous indicators<br>that also apply. | Clarify reporting<br>requirements to<br>WAZ-Amman.<br>Discuss detailed<br>definition of the<br>indicator and clarify<br>in the M&E plan. | Need to clarify the<br>definition: Account<br>receivable (Account<br>receivable in the<br>previous year + Sales<br>in the current year -<br>Bills collected during<br>the year)/sales in<br>the current year. |

#### 2. Reliability - Are data collection processes stable and consistent over time?

|  |  | Outo   | come   |  |
|--|--|--|--|--|
| Dimension / Question   | Network water<br>consumption per<br>capita<br>(residential and<br>non-residential)   | Billed residential<br>water<br>consumption   | Operating cost<br>coverage                                 | Outstanding debt   |
| 2.1. Consistency   |  |  |  |  |
| Is a consistent data collection process used from year to year, location to<br>location, data source to data source (if data come from different sources)? | Partly   | Partly   | Yes - completely   | Yes - completely   |
| Is the same instrument used to collect data from year to year, location to location?   | Yes - completely   | Yes - completely   | Yes - completely   | Yes - completely   |
| If data come from different sources are the instruments similar enough that the reliability of the data are not compromised?                               | N/A  | N/A  | N/A  | N/A  |
| Is the same sampling method used from year to year, location to location, data source to data source?  | N/A  | N/A  | N/A  | N/A  |
| 2.2. Internal quality control  |  |  |  |  |
| Are there procedures to ensure that data are free of significant error and that bias is not introduced?  | Yes - completely   | Yes - completely   | Yes - completely   | Yes - completely   |
| Are there procedures in place for periodic review of data collection,<br>maintenance, and processing?  | Partly   | Partly   | Yes - completely   | Yes - completely   |
| Do these procedures provide for periodic sampling (random checks) and quality<br>assessment of data?   | Partly   | Partly   | Yes - completely   | Yes - completely   |
| 2.3. Transparency  |  |  |  |  |
| Are data collection, cleaning, analysis, reporting, and quality assessment<br>procedures documented in writing?  | Partly   | Partly   | Partly   | Partly   |
| Are data problems at each level reported to the next level?  | Partly   | Partly   | Partly   | Partly   |
| Are data quality problems clearly described in final reports?  | Yes - completely   | Yes - completely   | Yes - completely   | Yes - completely   |
| 2.4 Technology and Software  |  |  |  |  |
| Does the technology and/or statistical software used to collect, analyse and manage data ensure reliability of data?                                       | Partly   | Partly   | Partly   | Partly   |
| Does the technology and/or statistical software used to report data adapted to the needs of internal users?  | Partly   | Partly   | Partly   | Partly   |
| Is the technology used to report data adequate and accessible for external<br>users.   | No - not at all  | No - not at all  | No - not at all  | No - not at all  |
| Average score  | 2,18   | 2,18   | 2,45   | 2,45   |
| Recommendations on Reliability   | Population data<br>used to calculate<br>this indicator based<br>on growth rate<br>estimates. Do not<br>factor for recent<br>immigration from<br>Syria. | Population data<br>used to calculate<br>this indicator based<br>on growth rate<br>estimates. Do not<br>factor for recent<br>immigration from<br>Syria. | Audit statements<br>allow to check<br>reliability of data. | Audit statements<br>allow to check<br>reliability of data. |

|  |   | Outo  | come   |  |
|--|---|---|--|--|
| Dimension / Question   | Network water<br>consumption per<br>capita<br>(residential and<br>non-residential)    | Billed residential<br>water<br>consumption  | Operating cost<br>coverage   | Outstanding debt   |
| 3.1. Frequency   |   |   |  |  |
| Are data available on a frequent enough basis to inform program management decisions?                                | Yes - completely  | Yes - completely  | Partly   | Partly   |
| Is a regularized schedule of data collection in place to meet program management needs?                              | Yes - completely  | Yes - completely  | Partly   | Partly   |
| 3.2. Availibility  |   |   |  |  |
| Is data reported in a given period the most current (up-to-date) practically available?                              | Partly  | Partly  | Yes - completely   | No - not at all  |
| Is data from within the period of interest for management purposes?  | Yes - completely  | Yes - completely  | Partly   | Partly   |
| Is data reported as soon as possible after collection?   | Yes - completely  | Yes - completely  | No - not at all  | No - not at all  |
| Is the date of collection clearly identified in the report?  | No - not at all   | No - not at all   | No - not at all  | Partly   |
| 3.3. Practicality  |   |   |  |  |
| Is the collection of data for the indicator a reasonably viable matter (human and financial resources are adequate)? | Partly  | Partly  | Yes - completely   | Yes - completely   |
| Is the data collection cost effective (are costs acceptable and justifiable)?  | Yes - completely  | Yes - completely  | Yes - completely   | Yes - completely   |
| Are conditions favourable for timely data collection?  | Yes - completely  | Yes - completely  | Partly   | Partly   |
| Average score  | 2,56  | 2,56  | 2,11   | 2,00   |
| Recommendations on Timeliness  | The only problem<br>here is the<br>availability of up-to-<br>date population<br>data. | The only problem<br>here is the<br>availability of up-to-<br>date population<br>data. | There is a need to<br>clarify reporting<br>requirements and<br>make sure data is<br>available on time. | There is a need to<br>clarify reporting<br>requirements and<br>make sure data is<br>available on time.<br>This indicator was<br>not informed in the<br>ITT for Q2 although<br>the data could be<br>easily available. |

|  |  | Outo   | ome                        |   |
|--|--|--|----------------------------|---|
| Dimension / Question   | Network water<br>consumption per<br>capita<br>(residential and<br>non-residential)                                   | Billed residential<br>water<br>consumption   | Operating cost<br>coverage | Outstanding debt  |
| 4.1. Reproducibility   |  |  |                            |   |
| Would repeated measurement yield the same results under similar conditions?  | Partly   | Partly   | Yes - completely           | Partly  |
| 4.2. Precision (survey data only)  |  |  |                            |   |
| Is the margin of error less than the expected change being measured?   | N/A  | N/A  | N/A                        | N/A   |
| Is the margin of error acceptable given the likely management decisions to be affected? (consider the consequences of the program or policy decisions based on the data) | N/A  | N/A  | N/A                        | N/A   |
| Have targets been set for the acceptable margin of error?  | N/A  | N/A  | N/A                        | N/A   |
| Has the margin of error been reported along with the data?   | N/A  | N/A  | N/A                        | N/A   |
| Average score  | 2,00   | 2,00   | 3,00                       | 2,00  |
| Recommendations on Precision   | Need to<br>contemplate using<br>number of<br>customers as<br>denominator or<br>total consumption<br>(not per capita) | Need to<br>contemplate using<br>number of<br>customers as<br>denominator or<br>total consumption<br>(not per capita) |                            | Need to clarify<br>reporting period and<br>formula to make<br>sure repeated<br>measurements give<br>the same results. |

|  |   | Outo  | come   |                  |
|--|---|---|--|------------------|
| Dimension / Question   | Network water<br>consumption per<br>capita<br>(residential and<br>non-residential)                    | Billed residential<br>water<br>consumption  | Operating cost<br>coverage   | Outstanding debt |
| 5.1. Integrity   |   |   |  |                  |
| Are mechanisms in place to reduce the possibility that data are manipulated for political or personal reasons? | Yes - completely  | Yes - completely  | Yes - completely   | Yes - completely |
| Is there objectivity and independence in key data collection, management, and assessment procedures?           | Yes - completely  | Yes - completely  | Yes - completely   | Yes - completely |
| Have data collection, management and analysis processes been reviewed by an independant body?                  | Partly  | Partly  | Partly   | Partly           |
| If data is from a secondary source, is the credibility of the data verified?                                   | Partly  | Partly  | N/A  | N/A              |
| If relevant, is personal data maintained according to national or international confidentiality guidelines?    | Yes - completely  | Yes - completely  | N/A  | Yes - completely |
| Average score  | 2,60  | 2,60  | 2,67   | 2,75             |
| Recommendations on Accuracy  | Can only base<br>evaluation on<br>consumption<br>information.<br>Population data was<br>not reviewed. | Can only base<br>evaluation on<br>consumption<br>information.<br>Population data was<br>not reviewed. | Financial data used<br>to inform this<br>indicator come from<br>annual consolidatd<br>audited financial<br>statements. |                  |

### 3.2. WATER NETWORK PROJECT

1. Validity - Do the data adequately represent the desired performance?

|  | Outcome              |   |   | Out                            | put  |   |  |
|--|----------------------|---|---|--------------------------------|--|---|--|
| Dimension / Question   | Non-revenue<br>water | Restructure and<br>rehabilitate<br>primary and<br>secondary<br>pipelines (km) | Restructure and<br>rehabilitate<br>tertiary pipelines<br>(km) | Replace customer<br>meters (#) | Restructure and<br>construct District<br>Meter Areas (#) | Install strategic<br>meters on key<br>water transfer<br>pipes | Install SCADA<br>Telemetry<br>monitoring<br>system |
| 1.1. Relevance   |                      |   |   |                                |  |   |  |
| Is there a solid, logical relation between the activity or program and what is<br>being measured, or are there significant uncontrollable factors? | Yes - completely     | Yes - completely  | Yes - completely  | Yes - completely               | Yes - completely   | Yes - completely  | Yes - completely                                   |
| 1.2. Adequacy  |                      |   |   |                                |  |   |  |
| Do the indicators for particular expected results fully measure them?<br>(completeness)  | Yes - completely     | Yes - completely  | Yes - completely  | Yes - completely               | Yes - completely   | Yes - completely  | Yes - completely                                   |
| Are definitions clear enough for all users to have the same understanding?   | Yes - completely     | Yes - completely  | Yes - completely  | Yes - completely               | Yes - completely   | Yes - completely  | Yes - completely                                   |
| If applicable, were national definitions used to define impact and outcome indicators?   | Yes - completely     | Yes - completely  | Yes - completely  | Yes - completely               | Yes - completely   | Yes - completely  | Yes - completely                                   |
| Are the indicators sufficient to characterize and/or measure the results?  | Yes - completely     | Partly  | Partly  | Partly                         | Partly   | Yes - completely  | Yes - completely                                   |
| Does data include sufficient detail for disaggregated analysis if necessary?   | Partly               | Partly  | Partly  | Yes - completely               | Partly   | Yes - completely  | Yes - completely                                   |
| 1.3. Data collection tools (non-survey data only)  |                      |   |   |                                |  |   |  |
| Is the data collection instrument well designed (e.g., reporting formats)?   | Yes - completely     | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Are data collectors well trained? How were they trained?   | Yes - completely     | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| If the instrument was self-reporting were adequate instructions provided?  | Partly               | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| 1.4. Non Sampling or Measurement Error (survey data only)  |                      |   |   |                                |  |   |  |
| Is the data collection instrument well designed? I.e., does it enable to inform the indicator?   | N/A                  | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Were the questions in the survey/questionnaire clear, direct, easy to<br>understand?   | N/A                  | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Are definitions for data to be collected operationally precise?  | N/A                  | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Was there any quality control in the selection process of the enumerators?   | N/A                  | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Were trainers insiders of the program/project?   | N/A                  | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Were enumerators well trained?   | N/A                  | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| If the instrument was self-reporting were adequate instructions provided?  | N/A                  | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Were response rates sufficiently large?  | N/A                  | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Has non-response rate been followed up?  | N/A                  | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Were there reasons for respondents to give incomplete or untruthful information?   | N/A                  | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Were there efforts to reduce the potential for personal bias by enumerators?   | N/A                  | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |

| 1.5. Representativeness of Data (survey data only)  |   |  |      |      |      |      |      |
|---|---|--|------|------|------|------|------|
| Is the sample from which the data are drawn representative of the population served by the activity?  | N/A   | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |
| Did all units of the population have an equal chance of being selected for the sample?  | N/A   | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |
| Is the sampling frame adequate? (i.e., the list of units in the target population<br>up to date, comprehensive, mutually exclusive (for geographic frames))   | N/A   | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |
| Is the sample of adequate size?   | N/A   | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |
| Are the data complete? (i.e., have all data points been recorded?)  | N/A   | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |
| 1.6. Transcription error  |   |  |      |      |      |      |      |
| Are steps being taken to limit transcription errors? (e.g., double keying of data<br>for large surveys, electronic edit checking program to clean data, random<br>checks of partner data entered by supervisors)                  | Partly  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |
| Have data errors been tracked to their original source and mistakes corrected?  | Partly  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |
| 1.7. Data processing  |   |  |      |      |      |      |      |
| Are the correct formulae being applied?   | Yes - completely  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |
| Are the same formulae applied consistently from year to year, site to site, data source to data source (if data from multiple sources need to be aggregated)?   | Yes - completely  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |
| Are procedures for dealing with missing data/outsiders traceable?   | Partly  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |
| Have procedures for dealing with missing data/outsiders been correctly applied?   | Partly  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |
| 1.8. Does the data set reflect data entered at the source? (non-survey  |   |  |      |      |      |      |      |
| data only)  |   |  |      |      |      |      |      |
| Are final numbers reported accurate? (E.g., does a number reported as a "total" actually add up?)   | Yes - completely  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |
| Would an increase in the degree of accuracy be more costly than the increased value of the information? (Yes-completely, if no more marginal value remaining to conquer?)   | Partly  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |
| Does the recording and reporting system avoids double counting people (e.g., a person receiving the same service twice in a reporting period, a person registered as receiving the same service in two different locations, etc)? | Yes - completely  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |
| Does the reporting system enable the identification and recording of a "drop<br>out", a person "lost to follow-up" and a person who died?   | No - not at all   | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |
| Average score   | 2,53  | 2,67   | 2,67 | 2,83 | 2,67 | 3,00 | 3,00 |
| Recommendations on Validity   | MCA-J can utilize the<br>detailed NRW data<br>that is available for<br>the targetted areas<br>rather than relying<br>on the overall NRW<br>percentage in the<br>governorate | Informaton related<br>to data processing<br>are based on the<br>simplicity of<br>expected<br>techniques as no<br>data is currently<br>available. |      |      |      |      |      |

2. Reliability - Are data collection processes stable and consistent over time?

|  | Outcome              |   |   | Out                            | put  |   |  |
|--|----------------------|---|---|--------------------------------|--|---|--|
| Dimension / Question   | Non-revenue<br>water | Restructure and<br>rehabilitate<br>primary and<br>secondary<br>pipelines (km) | Restructure and<br>rehabilitate<br>tertiary pipelines<br>(km) | Replace customer<br>meters (#) | Restructure and<br>construct District<br>Meter Areas (#) | Install strategic<br>meters on key<br>water transfer<br>pipes | Install SCADA<br>Telemetry<br>monitoring<br>system |
| 2.1. Consistency   |                      |   |   |                                |  |   |  |
| Is a consistent data collection process used from year to year, location to<br>location, data source to data source (if data come from different sources)? | Yes - completely     | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Is the same instrument used to collect data from year to year, location to location?   | Yes - completely     | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| If data come from different sources are the instruments similar enough that the reliability of the data are not compromised?                               | Partly               | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Is the same sampling method used from year to year, location to location, data source to data source?  | Yes - completely     | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| 2.2. Internal quality control  |                      |   |   |                                |  |   |  |
| Are there procedures to ensure that data are free of significant error and that bias is not introduced?  | Partly               | Partly  | Partly  | Partly                         | Partly   | Partly  | Yes - completely                                   |
| Are there procedures in place for periodic review of data collection, maintenance, and processing?   | Partly               | Partly  | Partly  | Partly                         | Partly   | Partly  | Yes - completely                                   |
| Do these procedures provide for periodic sampling (random checks) and quality<br>assessment of data?   | No - not at all      | Partly  | Partly  | Partly                         | Partly   | Partly  | Yes - completely                                   |
| 2.3. Transparency  |                      |   |   |                                |  |   |  |
| Are data collection, cleaning, analysis, reporting, and quality assessment<br>procedures documented in writing?  | No - not at all      | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Are data problems at each level reported to the next level?  | Partly               | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Are data quality problems clearly described in final reports?  | No - not at all      | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| 2.4 Technology and Software  |                      |   |   |                                |  |   |  |
| Does the technology and/or statistical software used to collect, analyse and<br>manage data ensure reliability of data?                                    | No - not at all      | Yes - completely  | Yes - completely  | Yes - completely               | Yes - completely   | Yes - completely  | Yes - completely                                   |
| Does the technology and/or statistical software used t oreport data adapted to the needs of internal users?  | Partly               | N/A   | N/A   | N/A                            | N/A  | N/A   | Yes - completely                                   |
| Does the technology and/or statistical software used t oreport data adapted to the needs of internal users?  | Partly               | N/A   | N/A   | N/A                            | N/A  | N/A   | Yes - completely                                   |
| Is the technology used to report data adequate and accessible for external<br>users.   | No - not at all      | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Average score  | 1,86                 | 2,25  | 2,25  | 2,25                           | 2,25   | 2,25  | 3,00   |
| Recommendations on Reliability   |                      |   |   |                                |  |   |  |

|  | Outcome              |   |   | Out                            | put  |   |  |
|--|----------------------|---|---|--------------------------------|--|---|--|
| Dimension / Question   | Non-revenue<br>water | Restructure and<br>rehabilitate<br>primary and<br>secondary<br>pipelines (km) | Restructure and<br>rehabilitate<br>tertiary pipelines<br>(km) | Replace customer<br>meters (#) | Restructure and<br>construct District<br>Meter Areas (#) | Install strategic<br>meters on key<br>water transfer<br>pipes | Install SCADA<br>Telemetry<br>monitoring<br>system |
| 3.1. Frequency   |                      |   |   |                                |  |   |  |
| Are data available on a frequent enough basis to inform program management decisions?                                | Yes - completely     | Yes - completely  | Yes - completely  | Yes - completely               | Yes - completely   | Yes - completely  | Yes - completely                                   |
| Is a regularized schedule of data collection in place to meet program management needs?                              | Yes - completely     | Yes - completely  | Yes - completely  | Yes - completely               | Yes - completely   | Yes - completely  | Yes - completely                                   |
| 3.2. Availibility  |                      |   |   |                                |  |   |  |
| Is data reported in a given period the most current (up-to-date) practically available?                              | Yes - completely     | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Is data from within the period of interest for management purposes?  | Yes - completely     | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Is data reported as soon as possible after collection?   | Yes - completely     | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Is the date of collection clearly identified in the report?  | Yes - completely     | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| 3.3. Practicality  |                      |   |   |                                |  |   |  |
| Is the collection of data for the indicator a reasonably viable matter (human and financial resources are adequate)? | Partly               | Yes - completely  | Yes - completely  | Yes - completely               | Yes - completely   | Yes - completely  | Yes - completely                                   |
| Is the data collection cost effective (are costs acceptable and justifiable)?  | Yes - completely     | Yes - completely  | Yes - completely  | Yes - completely               | Yes - completely   | Yes - completely  | Yes - completely                                   |
| Are conditions favourable for timely data collection?  | Partly               | Yes - completely  | Yes - completely  | Yes - completely               | Yes - completely   | Yes - completely  | Yes - completely                                   |
| Average score  | 2,78                 | 3,00  | 3,00  | 3,00                           | 3,00   | 3,00  | 3,00   |
| Recommendations on Timeliness  |                      |   |   |                                |  |   |  |

|  | Outcome              |   |   | Out                            | put  |   |  |
|--|----------------------|---|---|--------------------------------|--|---|--|
| Dimension / Question   | Non-revenue<br>water | Restructure and<br>rehabilitate<br>primary and<br>secondary<br>pipelines (km) | Restructure and<br>rehabilitate<br>tertiary pipelines<br>(km) | Replace customer<br>meters (#) | Restructure and<br>construct District<br>Meter Areas (#) | Install strategic<br>meters on key<br>water transfer<br>pipes | Install SCADA<br>Telemetry<br>monitoring<br>system |
| 4.1. Reproducibility   |                      |   |   |                                |  |   |  |
| Would repeated measurement yield the same results under similar conditions?  | Partly               | Yes - completely  | Yes - completely  | Yes - completely               | Yes - completely   | Yes - completely  | Yes - completely                                   |
| 4.2. Precision (survey data only)  |                      |   |   |                                |  |   |  |
| Is the margin of error less than the expected change being measured?   | Partly               | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Is the margin of error acceptable given the likely management decisions to be affected? (consider the consequences of the program or policy decisions based on the data) | Yes - completely     | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Have targets been set for the acceptable margin of error?  | No - not at all      | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Has the margin of error been reported along with the data?   | No - not at all      | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Average score  | 1,80                 | 3,00  | 3,00  | 3,00                           | 3,00   | 3,00  | 3,00   |

|  | Outcome              |   |   | Out                            | :put   |   |  |
|--|----------------------|---|---|--------------------------------|--|---|--|
| Dimension / Question   | Non-revenue<br>water | Restructure and<br>rehabilitate<br>primary and<br>secondary<br>pipelines (km) | Restructure and<br>rehabilitate<br>tertiary pipelines<br>(km) | Replace customer<br>meters (#) | Restructure and<br>construct District<br>Meter Areas (#) | Install strategic<br>meters on key<br>water transfer<br>pipes | Install SCADA<br>Telemetry<br>monitoring<br>system |
| 6.1. Integrity   |                      |   |   |                                |  |   |  |
| Are mechanisms in place to reduce the possibility that data are manipulated for political or personal reasons? | No - not at all      | Partly  | Partly  | Partly                         | Partly   | Partly  | Yes - completely                                   |
| Is there objectivity and independence in key data collection, management, and assessment procedures?           | Yes - completely     | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Have data collection, management and analysis processes been reviewed by an independant body?                  | No - not at all      | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| If data is from a secondary source, is the credibility of the data verified?                                   | Partly               | Partly  | Partly  | Partly                         | Partly   | Partly  | Yes - completely                                   |
| If relevant, is personal data maintained according to national or international confidentiality guidelines?    | N/A                  | N/A   | N/A   | N/A                            | N/A  | N/A   | N/A  |
| Average score  | 1,75                 | 2,00  | 2,00  | 2,00                           | 2,00   | 2,00  | 3,00   |
| Recommendations on Accuracy  |                      |   |   |                                |  |   |  |

### 3.3. WASTE WATER NETWORK

#### 1. Validity - Do the data adequately represent the desired performance?

|   |  | Outcome  |   | Out  | put   |
|---|--|--|---|--|---|
| Dimension / Question  | Incidents of<br>sewage overflow<br>reduced | Quantity of<br>wastewater<br>collected from<br>Zarqa<br>Governorate<br>increased | Access to<br>wastewater<br>network<br>increased | Expand network<br>(West Zarqa, East<br>Zarqa and<br>Ruseifa) | Reinforce and<br>rehabilitate<br>network (West<br>Zarqa, East Zarqa<br>and Ruseifa) |
| 1.1. Relevance  |  |  |   |  |   |
| Is there a solid, logical relation between the activity or program and what is being measured, or are there significant uncontrollable factors? | Yes - completely                           | Yes - completely   | Yes - completely                                | Yes - completely   | Yes - completely  |
| 1.2. Adequacy   |  |  |   |  |   |
| Do the indicators for particular expected results fully measure them?<br>(completeness)   | Partly                                     | Partly   | Partly  | Yes - completely   | Partly  |
| Are definitions clear enough for all users to have the same understanding?  | Yes - completely                           | Yes - completely   | Yes - completely                                | Yes - completely   | Partly  |
| If applicable, were national definitions used to define impact and outcome indicators?  | N/A  | N/A  | N/A   | N/A  | N/A   |
| Are the indicators sufficient to characterize and/or measure the results?   | Partly                                     | Partly   | Partly  | Yes - completely   | Partly  |
| Does data include sufficient detail for disaggregated analysis if necessary?  | Partly                                     | Partly   | Partly  | Yes - completely   | Yes - completely  |
| 1.3. Data collection tools (non-survey data only)   |  |  |   |  |   |
| Is the data collection instrument well designed (e.g., reporting formats)?  | Partly                                     | Partly   | Partly  | Yes - completely   | Yes - completely  |
| Are data collectors well trained? How were they trained?  | Yes - completely                           | Partly   | Yes - completely                                | Yes - completely   | Yes - completely  |
| If the instrument was self-reporting were adequate instructions provided?   | N/A  | N/A  | N/A   | N/A  | N/A   |
| 1.4. Non Sampling or Measurement Error (survey data only)   |  |  |   |  |   |
| Is the data collection instrument well designed? I.e., does it enable to inform the indicator?  | N/A  | N/A  | N/A   | N/A  | N/A   |
| Were the questions in the survey/questionnaire clear, direct, easy to understand?   | N/A  | N/A  | N/A   | N/A  | N/A   |
| Are definitions for data to be collected operationally precise?   | N/A  | N/A  | N/A   | N/A  | N/A   |
| Was there any quality control in the selection process of the enumerators?  | N/A  | N/A  | N/A   | N/A  | N/A   |
| Were trainers insiders of the program/project?  | N/A  | N/A  | N/A   | N/A  | N/A   |
| Were enumerators well trained?  | N/A  | N/A  | N/A   | N/A  | N/A   |
| If the instrument was self-reporting were adequate instructions provided?   | N/A  | N/A  | N/A   | N/A  | N/A   |
| Were response rates sufficiently large?   | N/A  | N/A  | N/A   | N/A  | N/A   |
| Has non-response rate been followed up?   | N/A  | N/A  | N/A   | N/A  | N/A   |
| Were there reasons for respondents to give incomplete or untruthful information?  | N/A  | N/A  | N/A   | N/A  | N/A   |
| Were there efforts to reduce the potential for personal bias by enumerators?  | N/A  | N/A  | N/A   | N/A  | N/A   |

| 1.5. Representativeness of Data (survey data only)  |                  |                  |                   |                   |                                |
|---|------------------|------------------|-------------------|-------------------|--------------------------------|
| Is the sample from which the data are drawn representative of the population served by the activity?  | N/A              | N/A              | N/A               | N/A               | N/A                            |
| Did all units of the population have an equal chance of being selected for the<br>sample?   | N/A              | N/A              | N/A               | N/A               | N/A                            |
| Is the sampling frame adequate? (i.e., the list of units in the target population up to date, comprehensive, mutually exclusive (for geographic frames))  | N/A              | N/A              | N/A               | N/A               | N/A                            |
| Is the sample of adequate size?   | N/A              | N/A              | N/A               | N/A               | N/A                            |
| Are the data complete? (i.e., have all data points been recorded?)  | N/A              | N/A              | N/A               | N/A               | N/A                            |
| 1.6. Transcription error  |                  |                  |                   |                   |                                |
| Are steps being taken to limit transcription errors? (e.g., double keying of data<br>for large surveys, electronic edit checking program to clean data, random<br>checks of partner data entered by supervisors)                  | No - not at all  | Yes - completely | Partly            | Yes - completely  | Yes - completely               |
| Have data errors been tracked to their original source and mistakes corrected?  | No - not at all  | Yes - completely | Yes - completely  | Yes - completely  | Yes - completely               |
| 1.7. Data processing  |                  |                  |                   |                   |                                |
| Are the correct formulae being applied?   | Yes - completely | Yes - completely | Yes - completely  | Yes - completely  | Yes - completely               |
| Are the same formulae applied consistently from year to year, site to site, data source to data source (if data from multiple sources need to be aggregated)?   | Yes - completely | Yes - completely | Yes - completely  | Yes - completely  | Yes - completely               |
| Are procedures for dealing with missing data/outsiders traceable?   | No - not at all  | N/A              | Yes - completely  | N/A               | N/A                            |
| Have procedures for dealing with missing data/outsiders been correctly applied?   | N/A              | N/A              | Yes - completely  | N/A               | N/A                            |
| 1.8. Does the data set reflect data entered at the source? (non-survey  |                  |                  |                   |                   |                                |
| data only)  |                  |                  |                   |                   |                                |
| Are final numbers reported accurate? (E.g., does a number reported as a "total" actually add up?)   | Partly           | Yes - completely | Partly            | Yes - completely  | Yes - completely               |
| Would an increase in the degree of accuracy be more costly than the increased value of the information? (Yes-completely, if no more marginal value remaining to conquer?)   | Partly           | Yes - completely | Yes - completely  | Yes - completely  | Yes - completely               |
| Does the recording and reporting system avoids double counting people (e.g., a person receiving the same service twice in a reporting period, a person registered as receiving the same service in two different locations, etc)? | No - not at all  | N/A              | Yes - completely  | N/A               | N/A                            |
| Does the reporting system enable the identification and recording of a "drop<br>out", a person "lost to follow-up" and a person who died?   | N/A              | N/A              | Yes - completely  | N/A               | N/A                            |
| Average score   | 2,07             | 2,62             | 2,65              | 3,00              | 2,77                           |
|   | Poor data        | recommended to   | use of percentage | action not output | action not output<br>indicator |

#### 2. Reliability - Are data collection processes stable and consistent over time?

|  |  | Outcome  |  | Out  | tput  |
|--|--|--|--|--|---|
| Dimension / Question   | Incidents of<br>sewage overflow<br>reduced   | Quantity of<br>wastewater<br>collected from<br>Zarqa<br>Governorate<br>increased | Access to<br>wastewater<br>network<br>increased                  | Expand network<br>(West Zarqa, East<br>Zarqa and<br>Ruseifa) | Reinforce and<br>rehabilitate<br>network (West<br>Zarqa, East Zarqa<br>and Ruseifa) |
| 2.1. Consistency   |  |  |  |  |   |
| Is a consistent data collection process used from year to year, location to<br>location, data source to data source (if data come from different sources)? | No - not at all  | Yes - completely   | Yes - completely   | Yes - completely   | Yes - completely  |
| Is the same instrument used to collect data from year to year, location to location?   | Yes - completely   | Yes - completely   | Yes - completely   | Yes - completely   | Yes - completely  |
| If data come from different sources are the instruments similar enough that the reliability of the data are not compromised?                               | Partly   | Yes - completely   | Yes - completely   | Yes - completely   | Yes - completely  |
| Is the same sampling method used from year to year, location to location, data source to data source?  | Partly   | Yes - completely   | Yes - completely   | Yes - completely   | Yes - completely  |
| 2.2. Internal quality control  |  |  |  |  |   |
| Are there procedures to ensure that data are free of significant error and that<br>bias is not introduced?   | Partly   | Yes - completely   | Yes - completely   | Yes - completely   | Yes - completely  |
| Are there procedures in place for periodic review of data collection,<br>maintenance, and processing?  | Partly   | Yes - completely   | Yes - completely   | Yes - completely   | Yes - completely  |
| Do these procedures provide for periodic sampling (random checks) and quality assessment of data?  | No - not at all  | Yes - completely   | Yes - completely   | Yes - completely   | Yes - completely  |
| 2.3. Transparency  |  |  |  |  |   |
| Are data collection, cleaning, analysis, reporting, and quality assessment<br>procedures documented in writing?  | Partly   | Yes - completely   | Yes - completely   | Yes - completely   | Yes - completely  |
| Are data problems at each level reported to the next level?  | Partly   | Yes - completely   | Yes - completely   | Yes - completely   | Yes - completely  |
| Are data quality problems clearly described in final reports?  | No - not at all  | Yes - completely   | Yes - completely   | Yes - completely   | Yes - completely  |
| 2.4 Technology and Software  |  |  |  |  |   |
| Does the technology and/or statistical software used to collect, analyse and<br>manage data ensure reliability of data?                                    | No - not at all  | Yes - completely   | Partly   | Yes - completely   | Yes - completely  |
| Does the technology and/or statistical software used t oreport data adapted to the needs of internal users?  | No - not at all  | Yes - completely   | Partly   | Yes - completely   | Yes - completely  |
| Is the technology used to report data adequate and accessible for external<br>users.   | Partly   | Partly   | Partly   | Partly   | Partly  |
| Average score  | 1,69   | 2,92   | 2,77   | 2,92   | 2,92  |
| Recommendations on Reliability   | data is collected<br>from different<br>sources that are not<br>connected or<br>validated |  | using the exsisting<br>x7 billing gives<br>controversial results | action not output<br>indicator                               | action not output<br>indicator  |

|  |  | Outcome  |   | Out   | put   |
|--|--|--|---|---|---|
| Dimension / Question   | Incidents of<br>sewage overflow<br>reduced | Quantity of<br>wastewater<br>collected from<br>Zarqa<br>Governorate<br>increased | Access to<br>wastewater<br>network<br>increased | Expand network<br>(West Zarqa, East<br>Zarqa and Ruseifa)                                       | Reinforce and<br>rehabilitate<br>network (West<br>Zarqa, East Zarqa<br>and Ruseifa)             |
| 3.1. Frequency   |  |  |   |   |   |
| Are data available on a frequent enough basis to inform program management decisions?                                | Yes - completely                           | Yes - completely   | Yes - completely                                | Yes - completely  | Yes - completely  |
| Is a regularized schedule of data collection in place to meet program management needs?                              | Yes - completely                           | Yes - completely   | Yes - completely                                | Yes - completely  | Yes - completely  |
| 3.2. Availibility  |  |  |   |   |   |
| Is data reported in a given period the most current (up-to-date) practically available?                              | Yes - completely                           | Yes - completely   | Yes - completely                                | Yes - completely  | Yes - completely  |
| Is data from within the period of interest for management purposes?  | Yes - completely                           | Yes - completely   | Yes - completely                                | Yes - completely  | Yes - completely  |
| Is data reported as soon as possible after collection?   | Yes - completely                           | Yes - completely   | Yes - completely                                | Yes - completely  | Yes - completely  |
| Is the date of collection clearly identified in the report?  | No - not at all                            | No - not at all  | No - not at all                                 | Yes - completely  | Yes - completely  |
| 3.3. Practicality  |  |  |   |   |   |
| Is the collection of data for the indicator a reasonably viable matter (human and financial resources are adequate)? | No - not at all                            | Yes - completely   | Partly  | Yes - completely  | Yes - completely  |
| Is the data collection cost effective (are costs acceptable and justifiable)?  | Yes - completely                           | Yes - completely   | Yes - completely                                | Yes - completely  | Yes - completely  |
| Are conditions favourable for timely data collection?  | Partly                                     | Yes - completely   | Yes - completely                                | Yes - completely  | Yes - completely  |
| Average score  | 2,44                                       | 2,78   | 2,67  | 3,00  | 3,00  |
| Recommendations on Timeliness  | need a reminder<br>from M&E                |  |   | As actions its followed<br>up through AE an IE<br>and actions are<br>reported by<br>contractors | As actions its<br>followed up through<br>AE an IE and actions<br>are reported by<br>contractors |

|  |   | Outcome  |   | Out  | put   |
|--|---|--|---|--|---|
| Dimension / Question   | Incidents of<br>sewage overflow<br>reduced  | Quantity of<br>wastewater<br>collected from<br>Zarqa<br>Governorate<br>increased | Access to<br>wastewater<br>network<br>increased | Expand network<br>(West Zarqa, East<br>Zarqa and<br>Ruseifa) | Reinforce and<br>rehabilitate<br>network (West<br>Zarqa, East Zarqa<br>and Ruseifa) |
| 4.1. Reproducibility   |   |  |   |  |   |
| Would repeated measurement yield the same results under similar conditions?  | Partly  | Yes - completely   | Yes - completely                                | Yes - completely   | Yes - completely  |
| 4.2. Precision (survey data only)  |   |  |   |  |   |
| Is the margin of error less than the expected change being measured?   | N/A   | N/A  | N/A   | N/A  | N/A   |
| Is the margin of error acceptable given the likely management decisions to be<br>affected? (consider the consequences of the program or policy decisions based<br>on the data) | N/A   | N/A  | N/A   | N/A  | N/A   |
| Have targets been set for the acceptable margin of error?  | N/A   | N/A  | N/A   | N/A  | N/A   |
| Has the margin of error been reported along with the data?   | N/A   | N/A  | N/A   | N/A  | N/A   |
| Average score  | 2,00  | 3,00   | 3,00  | 3,00   | 3,00  |
| Recommendations on Precision   | repeated records in<br>different consistent<br>way will not lead to<br>the same numbers |  | correction factor<br>95% (narrative)            |  |   |

|  |  | Outcome  |  | Out  | put   |
|--|--|--|--|--|---|
| Dimension / Question   | Incidents of<br>sewage overflow<br>reduced | Quantity of<br>wastewater<br>collected from<br>Zarqa<br>Governorate<br>increased | Access to<br>wastewater<br>network<br>increased                        | Expand network<br>(West Zarqa, East<br>Zarqa and<br>Ruseifa) | Reinforce and<br>rehabilitate<br>network (West<br>Zarqa, East Zarqa<br>and Ruseifa) |
| 5.1. Integrity   |  |  |  |  |   |
| Are mechanisms in place to reduce the possibility that data are manipulated for political or personal reasons? | No - not at all                            | Yes - completely   | Yes - completely   | Yes - completely   | Yes - completely  |
| Is there objectivity and independence in key data collection, management, and assessment procedures?           | No - not at all                            | Yes - completely   | Yes - completely   | Yes - completely   | Yes - completely  |
| Have data collection, management and analysis processes been reviewed by an independant body?                  | No - not at all                            | No - not at all  | Partly   | Yes - completely   | Yes - completely  |
| If data is from a secondary source, is the credibility of the data verified?                                   | N/A  | N/A  | N/A  | N/A  | N/A   |
| If relevant, is personal data maintained according to national or international confidentiality guidelines?    | N/A  | N/A  | Yes - completely   | N/A  | N/A   |
| Average score  | 1,00                                       | 2,33   | 2,75   | 3,00   | 3,00  |
| Recommendations on Accuracy  | there are no written procedures            | one source of data<br>collection   | billing system is the<br>base and it has<br>some technical<br>problems |  |   |

### 3.4. AS-SAMRA EXPANSION PROJECT

#### 1. Validity - Do the data adequately represent the desired performance?

|   |  | Outo   | come   |   | Output   |  |  |
|---|--|--|--|---|--|--|--|
| Dimension / Question  | Treated<br>wastewater used<br>in agriculture | Quality of As-<br>Samra effluent<br>meets standard | Volume of waste<br>water effluent<br>discharged from<br>the As-Samra<br>plant per year | Agriculture use of<br>treated<br>wastewater | Actual<br>"substitution<br>calculation"<br>(TBD) | Expansion of As-<br>Samra Treatment<br>Plant (TBD) |  |
| 1.1. Relevance  |  |  |  |   |  |  |  |
| Is there a solid, logical relation between the activity or program and what is being measured, or are there significant uncontrollable factors? | Yes - completely                             | Yes - completely                                   | Yes - completely   | Yes - completely                            | N/A  | N/A  |  |
| 1.2. Adequacy   |  |  |  |   |  |  |  |
| Do the indicators for particular expected results fully measure them?<br>(completeness)   | Partly                                       | Partly   | Yes - completely   | Yes - completely                            | N/A  | N/A  |  |
| Are definitions clear enough for all users to have the same understanding?  | Yes - completely                             | Yes - completely                                   | Yes - completely   | Yes - completely                            | N/A  | N/A  |  |
| If applicable, were national definitions used to define impact and outcome indicators?  | Yes - completely                             | Yes - completely                                   | Yes - completely   | Yes - completely                            | N/A  | N/A  |  |
| Are the indicators sufficient to characterize and/or measure the results?   | Partly                                       | Yes - completely                                   | Partly   | Yes - completely                            | N/A  | N/A  |  |
| Does data include sufficient detail for disaggregated analysis if necessary?  |  |  |  |   |  |  |  |
| 1.3. Data collection tools (non-survey data only)   |  |  |  |   |  |  |  |
| Is the data collection instrument well designed (e.g., reporting formats)?  | Partly                                       | Yes - completely                                   | Yes - completely   | Partly                                      | N/A  | N/A  |  |
| Are data collectors well trained? How were they trained?  | Partly                                       | Yes - completely                                   | Yes - completely   | Yes - completely                            | N/A  | N/A  |  |
| If the instrument was self-reporting were adequate instructions provided?   | N/A  | Yes - completely                                   | N/A  | N/A   | N/A  | N/A  |  |
| 1.4. Non Sampling or Measurement Error (survey data only)   |  |  |  |   |  |  |  |
| Is the data collection instrument well designed? I.e., does it enable to inform the indicator?  | N/A  | N/A  | N/A  | N/A   | N/A  | N/A  |  |
| Were the questions in the survey/questionnaire clear, direct, easy to<br>understand?  | N/A  | N/A  | N/A  | N/A   | N/A  | N/A  |  |
| Are definitions for data to be collected operationally precise?   | N/A  | N/A  | N/A  | N/A   | N/A  | N/A  |  |
| Was there any quality control in the selection process of the enumerators?  | N/A  | N/A  | N/A  | N/A   | N/A  | N/A  |  |
| Were trainers insiders of the program/project?  | N/A  | N/A  | N/A  | N/A   | N/A  | N/A  |  |
| Were enumerators well trained?  | N/A  | N/A  | N/A  | N/A   | N/A  | N/A  |  |
| If the instrument was self-reporting were adequate instructions provided?   | N/A  | N/A  | N/A  | N/A   | N/A  | N/A  |  |
| Were response rates sufficiently large?   | N/A  | N/A  | N/A  | N/A   | N/A  | N/A  |  |
| Has non-response rate been followed up?   | N/A  | N/A  | N/A  | N/A   | N/A  | N/A  |  |
| Were there reasons for respondents to give incomplete or untruthful information?  | N/A  | N/A  | N/A  | N/A   | N/A  | N/A  |  |
| Were there efforts to reduce the potential for personal bias by enumerators?  | N/A  | N/A  | N/A  | N/A   | N/A  | N/A  |  |

| 1.5. Representativeness of Data (survey data only)  |   |                                |  |   |   |                     |
|---|---|--------------------------------|--|---|---|---------------------|
| Is the sample from which the data are drawn representative of the population  | N/A   | N/A                            | N/A  | N/A   | N/A   | N/A                 |
| served by the activity?   | N/A   | N/A                            | N/A  | 19/4  | N/A   |                     |
| Did all units of the population have an equal chance of being selected for the sample?  | N/A   | N/A                            | N/A  | N/A   | N/A   | N/A                 |
| Is the sampling frame adequate? (i.e., the list of units in the target population up to date, comprehensive, mutually exclusive (for geographic frames))  | N/A   | N/A                            | N/A  | N/A   | N/A   | N/A                 |
| Is the sample of adequate size?   | N/A   | N/A                            | N/A  | N/A   | N/A   | N/A                 |
| Are the data complete? (i.e., have all data points been recorded?)  | N/A   | N/A                            | N/A  | N/A   | N/A   | N/A                 |
| 1.6. Transcription error  |   |                                |  |   |   |                     |
| Are steps being taken to limit transcription errors? (e.g., double keying of data<br>for large surveys, electronic edit checking program to clean data, random<br>checks of partner data entered by supervisors)                  | N/A   | N/A                            | N/A  | N/A   | N/A   | N/A                 |
| Have data errors been tracked to their original source and mistakes corrected?  | N/A   | N/A                            | N/A  | N/A   | N/A   | N/A                 |
| 1.7. Data processing  |   |                                |  |   |   |                     |
| Are the correct formulae being applied?   | Yes - completely  | Yes - completely               | Partly   | Yes - completely                            | N/A   | N/A                 |
| Are the same formulae applied consistently from year to year, site to site, data source to data source (if data from multiple sources need to be aggregated)?   | Yes - completely  | Yes - completely               | Yes - completely   | Yes - completely                            | N/A   | N/A                 |
| Are procedures for dealing with missing data/outsiders traceable?   | N/A   | N/A                            | N/A  | N/A   | N/A   | N/A                 |
| Have procedures for dealing with missing data/outsiders been correctly applied?   | N/A   | N/A                            | N/A  | N/A   | N/A   | N/A                 |
| 1.8. Does the data set reflect data entered at the source? (non-survey  |   |                                |  |   |   |                     |
| data only)  |   |                                |  |   |   |                     |
| Are final numbers reported accurate? (E.g., does a number reported as a "total" actually add up?)   | Yes - completely  | Yes - completely               | Partly   | Yes - completely                            | N/A   | N/A                 |
| Would an increase in the degree of accuracy be more costly than the increased value of the information? (Yes-completely, if no more marginal value remaining to conquer?)   | Yes - completely  | Yes - completely               | Yes - completely   | Yes - completely                            | N/A   | N/A                 |
| Does the recording and reporting system avoids double counting people (e.g., a person receiving the same service twice in a reporting period, a person registered as receiving the same service in two different locations, etc)? | N/A   | N/A                            | N/A  | N/A   | N/A   | N/A                 |
| Does the reporting system enable the identification and recording of a "drop<br>out", a person "lost to follow-up" and a person who died?   | N/A   | N/A                            | N/A  | N/A   | N/A   | n/a                 |
| Average score   | 2,64  | 2,92                           | 2,73   | 2,91  | N/A   | N/A                 |
| Recommendations on Validity   | no clear<br>measurment were<br>illustrated at the<br>time of this<br>assessment from<br>JVA | validated by third<br>part RSS | volumes of ww<br>effluent reported<br>does not take into<br>account runoff,<br>springs or fresh<br>water that is mixed | revise the indicator<br>to reclaimed water. | in the phase of<br>operation this<br>indicator can be<br>applied. | not applicable yet. |

#### 2. Reliability - Are data collection processes stable and consistent over time?

|  |   | Outo   | come   |   | Ou   | tput   |
|--|---|--|--|---|--|--|
| Dimension / Question   | Treated<br>wastewater used<br>in agriculture  | Quality of As-<br>Samra effluent<br>meets standard | Volume of waste<br>water effluent<br>discharged from<br>the As-Samra<br>plant per year | Agriculture use of<br>treated<br>wastewater                   | Actual<br>"substitution<br>calculation"<br>(TBD) | Expansion of As-<br>Samra Treatment<br>Plant (TBD) |
| 2.1. Consistency   |   |  |  |   |  |  |
| Is a consistent data collection process used from year to year, location to<br>location, data source to data source (if data come from different sources)? | Yes - completely  | Yes - completely                                   | Yes - completely   | Yes - completely  |  |  |
| Is the same instrument used to collect data from year to year, location to location?   | Yes - completely  | Yes - completely                                   | Yes - completely   | Yes - completely  |  |  |
| If data come from different sources are the instruments similar enough that the reliability of the data are not compromised?                               |   |  |  |   |  |  |
| Is the same sampling method used from year to year, location to location, data source to data source?  |   | Yes - completely                                   |  |   |  |  |
| 2.2. Internal quality control  |   |  |  |   |  |  |
| Are there procedures to ensure that data are free of significant error and that bias is not introduced?  | Yes - completely  | Yes - completely                                   | Yes - completely   | Yes - completely  |  |  |
| Are there procedures in place for periodic review of data collection, maintenance, and processing?   | Yes - completely  | Yes - completely                                   | Yes - completely   | Yes - completely  |  |  |
| Do these procedures provide for periodic sampling (random checks) and quality<br>assessment of data?   | Yes - completely  | Yes - completely                                   | Yes - completely   | Yes - completely  |  |  |
| 2.3. Transparency  |   |  |  |   |  |  |
| Are data collection, cleaning, analysis, reporting, and quality assessment<br>procedures documented in writing?  | Yes - completely  | Yes - completely                                   | Yes - completely   | Yes - completely  |  |  |
| Are data problems at each level reported to the next level?  | Yes - completely  | Yes - completely                                   | Yes - completely   | Yes - completely  |  |  |
| Are data quality problems clearly described in final reports?  | Yes - completely  | Yes - completely                                   | Yes - completely   | Yes - completely  | N/A  | N/A  |
| 2.4 Technology and Software  |   |  |  |   |  |  |
| Does the technology and/or statistical software used to collect, analyse and<br>manage data ensure reliability of data?                                    | Yes - completely  | Yes - completely                                   | Yes - completely   | Yes - completely  | N/A  | N/A  |
| Does the technology and/or statistical software used t oreport data adapted to the needs of internal users?  | Yes - completely  | Yes - completely                                   | Yes - completely   | Yes - completely  | N/A  | N/A  |
| Does the technology and/or statistical software used t oreport data adapted to the needs of internal users?  | Yes - completely  | Yes - completely                                   | Yes - completely   | Yes - completely  | N/A  | N/A  |
| Is the technology used to report data adequate and accessible for external<br>users.   | Yes - completely  | Yes - completely                                   | Yes - completely   | Yes - completely  | N/A  | N/A  |
| Average score  | 3,00  | 3,00   | 3,00   | 3,00  | N/A  | N/A  |
| Recommendations on Reliability   | JVA have developed<br>their calcuation<br>procedures<br>overtime. We did<br>not have acses to<br>the detailed reports | RSS do the validation                              | though in ITT<br>quarterly   | this has a margin or<br>error I belive.<br>Diffcult to detect |  |  |

|  |  | Outo  | ome  |   | Output   |  |
|--|--|---|--|---|--|--|
| Dimension / Question   | Treated<br>wastewater used<br>in agriculture | Quality of As-<br>Samra effluent<br>meets standard  | Volume of waste<br>water effluent<br>discharged from<br>the As-Samra<br>plant per year | Agriculture use of<br>treated<br>wastewater | Actual<br>"substitution<br>calculation"<br>(TBD) | Expansion of As-<br>Samra Treatment<br>Plant (TBD) |
| 3.1. Frequency   |  |   |  |   |  |  |
| Are data available on a frequent enough basis to inform program management decisions?                                | Yes - completely                             | Yes - completely                                    | Yes - completely   | Yes - completely                            |  |  |
| Is a regularized schedule of data collection in place to meet program management needs?                              | Yes - completely                             | Yes - completely                                    | Yes - completely   | Yes - completely                            |  |  |
| 3.2. Availibility  |  |   |  |   |  |  |
| Is data reported in a given period the most current (up-to-date) practically available?                              | Yes - completely                             | Yes - completely                                    | Yes - completely   | Yes - completely                            | n/a  | n/a  |
| Is data from within the period of interest for management purposes?  | Yes - completely                             | Yes - completely                                    | Yes - completely   | Yes - completely                            | n/a  | n/a  |
| Is data reported as soon as possible after collection?   | Yes - completely                             | Yes - completely                                    | Yes - completely   | Yes - completely                            | n/a  | n/a  |
| Is the date of collection clearly identified in the report?  | Yes - completely                             | Yes - completely                                    | Yes - completely   | Yes - completely                            | n/a  | n/a  |
| 3.3. Practicality  |  |   |  |   |  |  |
| Is the collection of data for the indicator a reasonably viable matter (human and financial resources are adequate)? | Yes - completely                             | Yes - completely                                    | Yes - completely   | Yes - completely                            | n/a  | n/a  |
| Is the data collection cost effective (are costs acceptable and justifiable)?  | Yes - completely                             | Yes - completely                                    | Yes - completely   | Yes - completely                            | n/a  | n/a  |
| Are conditions favourable for timely data collection?  | Yes - completely                             | Yes - completely                                    | Yes - completely   | Yes - completely                            | n/a  | n/a  |
| Average score  | 3,00   | 3,00  | 3,00   | 3,00  | N/A  | N/A  |
| Recommendations on Timeliness  | on time upon<br>agreement                    | cost is associated<br>with review of third<br>party |  |   |  |  |

|  |  | Outo   | Output   |   |  |  |
|--|--|--|--|---|--|--|
| Dimension / Question   | Treated<br>wastewater used<br>in agriculture | Quality of As-<br>Samra effluent<br>meets standard | Volume of waste<br>water effluent<br>discharged from<br>the As-Samra<br>plant per year | Agriculture use of<br>treated<br>wastewater | Actual<br>"substitution<br>calculation"<br>(TBD) | Expansion of As-<br>Samra Treatment<br>Plant (TBD) |
| 4.1. Reproducibility   |  |  |  |   |  |  |
| Would repeated measurement yield the same results under similar conditions?  | Yes - completely                             | Partly   | Yes - completely   | Yes - completely                            | N/A  | N/A  |
| 4.2. Precision (survey data only)  |  |  |  |   |  |  |
| Is the margin of error less than the expected change being measured?   |  |  |  |   |  |  |
| Is the margin of error acceptable given the likely management decisions to be<br>affected? (consider the consequences of the program or policy decisions based<br>on the data) |  |  |  |   |  |  |
| Have targets been set for the acceptable margin of error?  |  |  |  |   |  |  |
| Has the margin of error been reported along with the data?   |  |  |  |   |  |  |
| Average score  | 3,00   | 2,00   | 3,00   | 3,00  | N/A  | N/A  |
| Recommendations on Precision   | according to JVA<br>assurance                | according to JVA<br>interview. Qais<br>Oweis       |  |   |  |  |

|  |  | Outo   | come   |   | Out  | tput   |
|--|--|--|--|---|--|--|
| Dimension / Question   | Treated<br>wastewater used<br>in agriculture   | Quality of As-<br>Samra effluent<br>meets standard | Volume of waste<br>water effluent<br>discharged from<br>the As-Samra<br>plant per year | Agriculture use of<br>treated<br>wastewater | Actual<br>"substitution<br>calculation"<br>(TBD) | Expansion of As-<br>Samra Treatment<br>Plant (TBD) |
| 5.1. Integrity   |  |  |  |   |  |  |
| Are mechanisms in place to reduce the possibility that data are manipulated for political or personal reasons? | Yes - completely   | Yes - completely                                   | Yes - completely   | Yes - completely                            | N/A  | N/A  |
| Is there objectivity and independence in key data collection, management, and assessment procedures?           | Yes - completely   | Yes - completely                                   | Yes - completely   | Yes - completely                            | N/A  | N/A  |
| Have data collection, management and analysis processes been reviewed by an independant body?                  | Yes - completely   | Yes - completely                                   | Yes - completely   | Yes - completely                            | N/A  | N/A  |
| If data is from a secondary source, is the credibility of the data verified?                                   | N/A  | N/A  | N/A  | N/A   | N/A  | N/A  |
| If relevant, is personal data maintained according to national or international confidentiality guidelines?    | N/A  | N/A  | N/A  | N/A   | N/A  | N/A  |
| Average score  | 3,00   | 3,00   | 3,00   | 3,00  | N/A  | N/A  |
| Recommendations on Accuracy  | no introsion of<br>manpulation to the<br>data is done<br>according to JVA<br>secretary general |  |  |   |  |  |