Supplement 04 to the Tender No ND-207

The Supplement 04 modifications to the Tender No ND-207 issues for the project "Pilot Telemetering and Management System for the Electric Power Supply Demand by Residential and Small Commercial Consumers and Implementation of Smart Grids" are presented below.

Issue A, "Invitation"

1. In "REQUEST FOR TENDERS WITH OPEN PROCEDURE", the following text:

e. Comparative assessment of the project's results prior and after its implementation, and also delivery of integrated data for the preparation of a cost-benefit study. The assessment criteria shall involve:

Is <u>modified</u> as follows:

e. Comparative assessment study of the project's results prior and after its implementation, and also delivery of integrated data for the preparation of a cost-benefit study. The assessment criteria shall involve:

2. In "REQUEST FOR TENDERS WITH OPEN PROCEDURE", after the following paragraph:

- Working methods for the design of the nationwide project.

The following paragraph is <u>added</u>:

- Voltage quality and interruptible electrical energy provision services.

3. In Article 1, the following paragraph:

The deadline for receipt of Tenders is January 30, 2015, Friday.

Is <u>modified</u> as follows:

The deadline for receipt of Tenders is March 26, 2015, Thursday.

4. In Article 3, the following text:

- Study of the consequences of the smart meter technologies under implementation, telemetering systems and smart grid to the consumers personal data.

  …

- Training of HEDNO's personnel on the system's installation and operations and also on field work.

Is <u>modified</u> as follows:

- Assessment Study of the consequences of the smart meter technologies under implementation, telemetering systems and smart grid to personal data protection.

  …

- Training of HEDNO's personnel on the system's installation and operations and also on field work, as described in the Tender Special Terms.

  …

Based on the requirements of the aforementioned Ministerial Decision, the above information as well as any other information that might deem appropriate by the external consultant, which, in collaboration with the competent HEDNO departments and the Contractor, at the beginning will perform a study with respect to further data that will be required for the satisfaction of the Ministerial Decision. The abovementioned data will be used by the external consultant for drafting the final project assessment study both with respect to economic cost-benefit and with respect to improvement of services provided to the users.

…

Based on the requirements of the GG B 297/13.2.2013 Ministerial Decision, the above information will be used by HEDNO (with possible external consultant collaboration) for drafting the final project assessment study both with respect to economic cost-benefit and with respect to improvement of services provided to the users.

5. In Article 3, the following paragraph:

<u>Phase A</u> - Design, supply, installation and commissioning of the main AMI/MDM central system and also installation and operation of at least 10,000 meters (designated by HEDNO) and at least 500 in-home displays (designated by HEDNO).

Is <u>modified</u> as follows:

Phase A Includes:

- Assessment Study of the consequences of the smart meter, telemetering systems and smart grid technologies under implementation to personal data protection.

  The study above should be considered during the stage of design, requirement analysis and specifications setting, in order to timely identify the high risk areas, in which the security measures of the Information Security Management System (ISMS) and the personal data protection mechanisms should focus.

  The assessment study of the consequences in personal data protection must comply with HEDNO's Personal Data Protection Policy.

- Design, supply, installation and commissioning of the main AMI/MDM central system and also installation and operation of at least 10,000 meters (designated by HEDNO) and at least 500 in-home displays (designated by HEDNO).

6. In Article 3, the following paragraph is deleted:

During Phase A the following deliverables must be completed:

7. In Article 3, the following paragraph:

- The consumer mobile platform

Is modified as follows:

- The consumer mobile devices platform

8. In Article 3, the following paragraph:

- Implementation and Installation of the backup central system within three months from phase A acceptance.

  …

- Comparative assessment of the project's results prior and after its implementation, and also delivery of integrated data for the preparation of a cost-benefit study. Potential past consumption data that will be required for the comparative assessment prior the project's implementation, will be given by HEDNO.

Is modified as follows:

- Implementation and commissioning of the backup central system within three months from phase A acceptance.

  …

- Comparative assessment study of the project's results prior and after its implementation, and also delivery of integrated data for the preparation of a cost-benefit study. Potential past consumption data that will be required for the comparative assessment prior the project's implementation, will be given by HEDNO.

9. In Article 3, the following "Personal Data Security and Protection" section:

Personal Data Security and Protection

The Contractor must ensure all requirements for personal security and protection for the complete system as described in the relevant issues. In Addition, the Contractor must implement for the entire proposed system (meter, communications, AMI – MDM) an Integrated Information Security Management System (ISMS) according to the ISO / IEC 27001.

Regarding security and protection of personal data:

A. The Contractor is Responsible for Processing and shall comply to the provisions:

   a) of the national legal framework, especially Law 2472/1997 (and 3471/2006 for electronic communications)

   b) of the european legal framework for personal data protections, as it applies, especially directive 95/46 and Recommendation 2012/148/EC, as well as the findings of the article 29 Working Group, especially their No 12/2011, 04/2013 and 07/2013 opinions, as well as

   c) The Strategical Consequences Study for the personal data protection during the development and operation of smart meters, in application of the abovementioned legal framework.

   d) The entirety of the processes specified in the ISO/IEC 27001 standard.

B. The Responsible for Processing knows, agrees and accepts that shall conform the aforementioned obligations, which, among others, indicatively, are:

   1. Collect personal data in a fair and legal manner.

   2. Process only the required personal data for the purpose/purposes that the Responsible for Processing has already notified.

   3. Ensure that the data are accurate and up to date.

   4. Maintain the data only for the duration that is required for the implementation of the purpose of their collection and processing.

   5. For the processing of data, select persons with corresponding professional qualifications that provide enough guarantees from

technical knowledge and personal integrity in order to ensure confidentiality.

6. Take all organizational and technical measures for data protection and security of accidental or unlawful destruction, accidental loss, tampering, unlawful distribution or access or any other form of unfair processing.

7. If the processing is carried out on behalf of the responsible from a person that is not dependent to the responsible, the responsible Whall perform the assignment in writing with written type similar to specimen C2, issue F, that is submitted to HEDNO, expressly reference herein and the legal framework of personal data protection.

8. Respect the rights to information, access and objection of subjects.

9. Be consistent in obligations towards the Authority (notification, receipt of license).

10. Be up to date with Decisions, Directives, Recommendations of the Authority that concern the Responsible for Processing.

C.

a) The responsibility for actions and omissions of those who perform processing within this project belongs exclusively in an objective manner the Contractor.

b) The Contractor shall bear against HEDNO for payment, of any administrative or other fines and penalties or compensation to third parties due to or in connection with acts or omissions of subsidiaries, associated or anyone who conducts any processing of personal data. HEDNO may retain from the price payable to the Contractor corresponding amount to and subject to the above payment of the above amounts of fines or compensation and to impose a penalty equal to 5% of individual conventional object for the controller and 5% conventional object of the Contractor for the Contractor. Any penalties imposed on subcontractors are collected through the Contractor.

c) HEDNO is not responsible for, any, violations of the above legal obligations of the Responsible for Processing Contractor, dependent or simply cooperating with him, or anyone that conducts relative processing under this project, even if HEDNO is not aware of or of their involvement on them. In case of recurrence of violations on a personal data HEDNO terminates the contractual relationship and eliminates the culprit (Contractor, subcontractors, service providers and anyone involved) from the project.

Any consequences for non-compliance of the above charge both the Contractor and any subcontractors or sub-suppliers of the project in the

part concerning them.

Is <u>modified</u> as follows:

Personal Data Security and Protection

The Contractor must ensure all requirements for personal security and protection for the complete system already by design (data protection by design) and by default (data protection by default).

As the Contractor defines the purposes (with HEDNO), the preconditions and the means for personal data processing, as Controller for Processing according to Law 2472/1997, shall comply with obligations arising from the National and European institutional framework.

In particular:

A. The Contractor is Controller for processing and shall comply to the provisions, as applied:

   a) of the national legal framework, especially Law 2472/1997 (and 3471/2006 for electronic communications)

   b) of the European legal framework for personal data protections, as it applies, especially directive 95/46 and Recommendation 2012/148/EC, as well as the findings of the article 29 Working Group, especially their No 12/2011, 04/2013 and 07/2013 opinions, as well as

   c) The procedures specified in the Integrated Information Security Management System (ISMS).

It is mentioned that:

The Controller shall adopt policies and implement appropriate measures to ensure and be able to demonstrate that the processing of personal data is performed in compliance with the regulations, as they apply.

The Controller shall, both at the time of the determination of the means for processing and at the time of the processing itself, implement appropriate technical and organizational measures and procedures in such a way that the processing will meet the requirements of the relevant regulations and ensure the protection of the rights of the data subject.

The Controller shall implement mechanisms for ensuring that, by default, only those personal data are processed which are necessary for each specific purpose of the processing and are especially not collected or retained beyond the minimum necessary for those purposes, both in terms of the amount of the data and the time of their storage. In particular, those mechanisms shall ensure that by default personal data are not made

accessible to an indefinite number of individuals.

<u>The Controller performs assessment (study) of the consequences of the specified processing acts with respect to personal data protection.</u>

The assessment shall contain at least a general description of the envisaged processing operations, an assessment of the risks to the rights and freedoms of data subjects, the measures envisaged to address the risks, safeguards, security measures and mechanisms to ensure the protection of personal data and to demonstrate compliance with the regulations as they apply, taking into account the rights and legitimate interests of data subjects and other persons concerned.

The assessment of the consequences to personal data protection shall be based on the detailed presentation of the personal data types that shall be generated and collected by the system and on their specified processing operations, it includes assessment of the consequences for the rights and freedom of the data subjects, safeguards, mitigating measures procedures for personal data protection and provision of evidentiary documentation for compliance with the legal data protection framework (Law 2472/1997 and 95/46/EC Directive) as well as the 2012/148/EC Recommendation of the European Commission, taking into consideration the rights and legitimate interests of the data subjects and persons concerned.

This assessment shall be conducted by the Contractor before the development and start of processing in order to better understand in full the threats for personal data protection and the counter measures required for smart grids and smart metering systems. This assessment shall be performed timely, in order to identify the high risk areas, in which the security measures of the Integrated Information Security Management System (ISMS) and the personal data protection mechanisms should focus. During project implementation, regular evaluations are required, which may lead to improve the applied security and data protection measures.

In Addition, the Contractor must implement for the entire proposed system (meters, concentrators, communications, servers, AMI – MDM and in general all project software and hardware components) an Integrated Information Security Management System (ISMS).

10.   In Article 4, the following paragraphs are <u>deleted</u>:

The approval to employ a Subcontractor for meter and communication unit installation works requires that:

- The subcontractor has experience in at least 5,000 electric energy meters installation during the last ten years. This experience is certified by the respective project owners.

OR

- The subcontractor is registered to at least the third rank in the Register of Contractors' Enterprises (MEEP), in the Electromechanical category.

Issue B, Tendering Terms and Guidelines

11.   In Article 2, the following paragraph:

e. Comparative assessment of the project's results prior and after its implementation, and also delivery of integrated data for the preparation of a cost-benefit study. The assessment criteria shall involve:

Is modified as follows:

e. Comparative assessment study of the project's results prior and after its implementation, and also delivery of integrated data for the preparation of a cost-benefit study. The assessment criteria shall involve:

12.   In Article 2, after the following paragraph:

- Working methods for the design of the nationwide project.

The following paragraph is <u>added</u>.

- Voltage quality and interruptible electrical energy provision services.

13.   In Article 6, the following paragraph:

2.3 Otherwise, the Tenderer's tender shall be rejected, unless the tenderer has submitted a statement that in case of award of the Pilot Project he will comply with the technical terms of the Declaration, unconditional and without any financial or time burden for HEDNO for all of the suggested as equivalent techniques solutions that were not accepted by the Corporation. It is clarified that apart from the above statement, the submitted evidence should prove that it is possible to comply with the requirements of the technical specifications of the Corporation.

Is <u>modified</u> as follows:

2.3 As long as the above documentation is deemed not to be satisfactory by the Corporation, the Tenderer's tender shall be rejected.

14.   In Article 6, section 3.7, the following paragraph:

A certified Solemn declaration as per Law 1599/86 by which the Tenderer has not been convicted by virtue of an irrevocable court judgment for any of the offences of embezzlement, fraud, blackmail, counterfeiting, perjury, bribery and corruption pursuant to Law 3560/2007 as applicable, fraudulent bankruptcy and money laundering in accordance with the relevant Law as applicable or of an offence related to his professional conduct.

Is modified as follows:

A Solemn declaration as per Law 1599/86 by which the Tenderer has not been convicted by virtue of an irrevocable court judgment for any of the offences of embezzlement, fraud, blackmail, counterfeiting, perjury, bribery and corruption pursuant to Law 3560/2007 as applicable, fraudulent bankruptcy and money laundering in accordance with the relevant Law as applicable or of an offence related to his professional conduct.

15.   In Article 6, section 3.9, the following paragraphs:

3.9 A Solemn Declaration filled in and signed based on the specimen provided by HEDNO regarding the full acceptance of the terms of the Notice of Request for Tenders and any written amendments made by HEDNO, as well as regarding awareness of the local conditions of the Project, etc.

Additionally, it will state that even if any discrepancy(ies) are identified in the Tender, arising from comments, clarifications, observations etc, during the evaluation of the content of ENVELOPE B and also during the period up to signing the Contract, the Technical Specifications of the Request for Tenders are valid and if awarded, the contract that will be signed will incorporate the Technical Specifications of the Request for Tenders and the Tenderer will raise no claim, with regards to time and/or financial, in any phase at which he will be notified of said discrepancy(ies).

Is modified as follows:

3.9 A Solemn Declaration filled in and signed, dated within the last 30 calendar days before the offers submission deadline, based on the specimen provided by HEDNO regarding the full acceptance of the terms of the Notice of Request for Tenders and any written amendments made by HEDNO, as well as regarding awareness of the local conditions of the Project, etc.

16.   In Article 6, section 3.14, the following paragraph:

Following awarding and signing of the contract, subcontractors may not be replaced without prior approval by the awarding authority and only on condition that the sub-supplier or subcontractor has the same qualifications with the one initially proposed in the tender of the said

Tenderer (see Issue C' Special Terms, Article 6 Contractor's Submission – Sub-suppliers - Subcontractor).

Is <u>modified</u> as follows:

Following awarding and signing of the contract, the above third party may not be replaced without prior approval by the awarding authority and only on condition that the replacing third party has the same qualifications with the one initially approved in the Contract.

17.   In Article 6, section 3.15, the following paragraph:

3.15. DATA PROTECTION

3.15.1.   Solemn Declaration of Acceptance of Data Protection

Solemn Declaration of the Law 1599/86, from the Contractor, on Personal Data Security and Protection of specimen C2, Issue F:

Is <u>modified</u> as follows:

3.15 Solemn Declaration of Acceptance of the Security and Data Protection terms, dated within the last 30 calendar days before the offers submission deadline:

Solemn Declaration of the Law 1599/86 from the Contractor, on Personal Data Security and Protection of specimen C2, Issue F:

18.   In Article 6, section 3.16, the following paragraph:

3.16. In case of an offer including Table of Technically Equivalent Solutions, the Table of Technically Equivalent Solutions fully filled.

- A Declaration that in case of project assignment, the Tenderer shall comply with the Technical Specifications of the Request for Tenders implicitly, without any economic burden or delay for HEDNO, with regards to any proposed technically equivalent solutions that the Company did not qualify.

It is noted that if the Tenderer wishes not to include this Declaration in their Tender, the non-qualification of any proposed technically equivalent solution on behalf of HEDNO will result in the Tender's rejection.

Is <u>modified</u> as follows:

3.16. In case of an offer including Table of Technically Equivalent Solutions, the Table of Technically Equivalent Solutions fully filled.

19.   In Article 6, section 4, the following:

4.   ENVELOPE B shall include:

Is modified as follows:

4.   ENVELOPE B:

20.   In Article 6, section 4.4.2, after the following paragraph:

h. Analysis of the criteria for defining provisional acceptances and the final acceptance.

The following paragraph is added:

i. Documentation for implementation the personal data protection principles by design (data protection by design) and by default (data protection by default) during the systems implementation and commissioning.

21.   In Article 6, section 4.12, the following paragraph:

4.1 Software for mass parameterization for each kind/type of meter, according to the technical specification.

Is modified as follows:

4.2   Software for mass parameterization for each kind/type of meter.

22.   In Article 6, section 4.14, the following paragraph:

4.14 The meters' manufacturing plants should have the following certifications at the time of bid:

Is modified as follows:

4.14 The meters' manufacturing plants should have the following certifications or equivalent at the time of bid:

23.   In Article 6, section 4.14, the following paragraph is deleted:

- Integrated Information Security Management System (ISMS) according to ISO/IEC 27001 standard.

24.   In Article 6, section 4.15, the following paragraph:

4.15 The communication devices' manufacturing plants should have the following certifications at the time of bid:

Is modified as follows:

4.15 The communication devices' manufacturing plants should have the following certifications or equivalent at the time of bid:

25. In Article 6, section 4.15, the following paragraph is <u>deleted</u>:

- Integrated Information Security Management System (ISMS) according to ISO/IEC 27001 standard.

26. In Article 6, section 4.16, the following paragraph:

4.16 The communication devices' manufacturing plants should have the following certifications at the time of bid:

Is <u>modified</u> as follows:

4.16 The communication devices' manufacturing plants should have the following certifications or equivalent at the time of bid:

27. In Article 6, section 4.16, the following paragraph is <u>deleted</u>:

- Integrated Information Security Management System (ISMS) according to ISO/IEC 27001 standard.

28. In Article 6, section 4.17, the following paragraph:

4.17 The Tenderer or the subcontractor who is responsible for the operation and maintenance of the system should have the following certifications or equivalent at the time of bid:

Is <u>modified</u> as follows:

4.17 The Tenderer or the subcontractor who is responsible for the operation and maintenance of the system should have the following certifications or equivalent at the time of bid:

29. In Article 6, section 4.17, the following paragraph is <u>deleted</u>:

- Integrated Information Security Management System (ISMS) according to ISO/IEC 27001 standard.

In Article 6, the following section 4.18 is <u>deleted</u>:

4.18   Every other subcontractor employed in the project must submit solemn declaration for personal data security and protection. It should be mentioned that all subcontractors/ sub suppliers shall commit with Confidentiality Contract during contract signing, or whenever they are employed in the project.

30.   In Article 6, section 4.19, the following paragraph:

4.19 Tenderers must submit two (2) samples for each offered material, as well as the relevant software versions, in order for the technical evaluation of their offers. Failure to timely submit the above does not carry the penalty of rejection of the offer, if they are submitted until the designated by the Committee, start date of the technical evaluation testing ~~of the specific Participant, according to the drawn sequence~~.

Is modified as follows:

4.19 Tenderers must submit two (2) samples for each offered material, as well as the relevant software versions, in order for the technical evaluation of their offers. Failure to timely submit the above does not carry the penalty of rejection of the offer, if they are submitted until the designated by the Committee, start date of the technical evaluation testing.

31.   In Article 6, section 4.22 is deleted:

4.22 The Tenderer shall submit for each offered material, the necessary certifications (i.e. type tests), according to the terms defined on the tender issues. For each offered material, for which indicative technical descriptions are provided or no specifications are provided in the Tender issues, the necessary certifications according to the internationally accredited standards shall be submitted.

32.   In Article 6, section 4, the following paragraph:

Tenderers and Sub-contactors/Sub-suppliers shall submit any required documentation described in Issue A "Invitation", in accordance with the extent of their collaboration and the part of the Project that they shall undertake.

Is modified as follows:

The Tenderer shall submit the specifications (descriptive material, designs, information, standards and corresponding type tests) to which every offered material complies and for which no full technical specification is provided in the Tender issues.

Tenderers and Sub-contactors/Sub-suppliers shall submit any required documentation described in Issue A "Invitation", in accordance with the extent of their collaboration and the part of the Project that they shall undertake.

All sub-suppliers/ subcontractors shall sign Confidentiality Contract during Contract signing, or whenever they are employed in the project.

33. In Article 6, section 5, the following paragraph 5.2 is <u>deleted</u>:

5.2 In case of tender submission with Equivalent Technical Specifications, the Tenderer is required to submit the Tables of Materials and Prices properly adjusted to the proposed Equivalent Technical Specifications, as well as separate Tables of Materials and Prices without the said adjustments, according to the relevant requirements of the Notice of Request for Tenders and without differentiating the price, if he has submitted the declaration concerning the compliance with the Technical Specifications of the Request for Tenders in case of rejection of the Technical Specifications proposed.

34. In Article 8, section 1.1, the following paragraph:

1.1. As date of the receipt of offers to the Tender is defined January, 30, 2015, Friday.

Is <u>modified</u> as follows:

1.1. As date of the receipt of offers to the Tender is defined March 26, Thursday.

35. In Article 8, section 7.2, the following paragraph:

They shall perform a data transfer test between any meter kind/type and the offered display device (In Home Display).

Is <u>modified</u> as follows:

They shall perform a data transfer test between any meter kind/type and the offered display devices (In Home Display).

Issue C, "Special Terms"

36. In Article 5, the following paragraph:

1. The Contractor shall submit for approval the sub-contractors he will use.

The Subcontractor/Subsupplier shall submit solemn declaration for Personal Data Security and Protection according to specimen C2.

Is <u>modified</u> as follows:

1. The Contractor shall submit for approval the sub-contractors he will use.

37.   In Article 5, the following paragraph:

3.1 Original Contract of formation of the subcontract, that mentions to the subject of the subcontract work, the duration and the proportion of the subcontract subject over the total subject of the contractual price of the project or the quantity of the subject of the project (i.e. installation of 5,000 meters), that will be subject to the Contractor's approval according the aforementioned terms and shall include at least the following:

Is <u>modified</u> as follows:

3.1 Contract of formation of the subcontract that mentions to the subject of the subcontract work and the duration that will be subject to approval according the aforementioned terms and shall include at least the following:

38.   In Article 5, the following paragraph:

3.1.3 The part of the Project (Main parts of the Project), that the Sub-contractor undertakes and the sub-contractual price.

Is <u>modified</u> as follows:

3.1.3 The part of the Project that the Sub-contractor undertakes.

39.   In Article 5, the following 3.1.4 paragraph is <u>deleted</u> and following paragraphs are renumbered:

3.1.4 An explicit reference of the participation percentage of each part corresponding to the entire Project, which shall prove the full compliance with the respective requirement of this subcontract approval.

40.   In Article 5, the following paragraph in section 3.1.6:

Moreover, the Contractor will assure that the terms and the conditions of the subcontract Contract are fully compatible with the terms and the conditions of the present Contract.

Is <u>modified</u> as follows:

Moreover, the Contractor will assure that the terms and the conditions of the subcontract Contract are fully compatible with the terms and the conditions of the present Tender.

41. In Article 5, the following paragraph in section 4:

4. The aforementioned certificates will be sent to the ND, together with the justified written opinion of the Supervising Authority.

Is <u>modified</u> as follows:

4. The aforementioned certificates will be sent to the Administrative Authority, together with the justified written opinion of the Supervising Authority.

The decision that approves or not approves the formation of the Subcontract will be taken by the Administrative Authority.

42. In Article 5, the following section 5 is <u>deleted</u>:

5. The approval of the Subcontract Agreement has the following consequences:

   (a) The amount of the Subcontract Agreement is taken into account for the calculation of the Sub-contractor's experience.
   (b) The Contractor shall not be eligible for experience certificate for the amount of the Subcontract Agreement

43. In Article 7, the following paragraphs:

The Contractor shall be responsible to provide a training program to the personnel of the Corporation.

Such program shall cover:

1. All issues pertaining to the engineering, designing, construction, testing and operation of the System and the rest of the equipment.

   The detailed content of the training program shall be submitted for approval to the Corporation and shall include theoretical documentation, visits to the Contractor's technical offices, to the equipment's manufacturing factories, to the testing facilities, as well as a visit to a similar existing worksite that has been completed and is in operation.

   The aforementioned training program shall be accompanied by technical manuals in Greek.

The cost of providing such training program is included in the price agreed for the System's construction and shall cover, among others, accommodation and boarding costs of the trainees for the parts of the program to be conducted outside Greece.

The training program shall be carried out prior to the temporary acceptance of the System, at a time convenient for the Corporation.

In addition, annual repeat training, lasting for at least one week, shall take place for all the above users.

2. Moreover, annual training, lasting for at least one week, shall be provided to Company technicians engaged in the installation and fault recovery of meters (estimated total trainees: 30 persons).

3. The on-site training of the Corporation's employees in matters of operation, maintenance, exploitation of the System, the software and the System's use.

   The aforementioned program, which shall cover at least fifteen (15) working days, shall be borne by the Contractor and shall be completed before commencement of the System's trial operation.

   Especially as regards the System, an additional 10-day training program shall be also provided which shall be completed one (1) year after the System's final acceptance.

Are <u>modified</u> as follows:

The Contractor shall be responsible, with own expenses, to provide a training program to the personnel of the Corporation.

Such program shall cover:

1. All issues pertaining to the engineering, designing, construction, testing and operation of the System and the rest of the equipment.

   The detailed content of the training program shall be submitted for approval to the Corporation and shall include theoretical documentation, visits to the Contractor's technical offices, to the equipment's manufacturing factories, to the testing facilities, as well as a visit to a similar existing worksite that has been completed and is in operation.

   The aforementioned training program shall have total duration of 10 manweeks of the trainees (3-5 people) and shall be accompanied by technical manuals in Greek.

   The cost of providing such training program is included in the price agreed for the System's construction and shall cover, among others,

accommodation and boarding costs of the trainees for the parts of the program to be conducted outside Greece.

The training program shall be carried out prior to the temporary acceptance of the System, at a time convenient for the Corporation.

2. Annual training, lasting for at least one week, shall be provided to Company technicians engaged in the installation and fault recovery of meters (estimated total trainees: 30 persons).

3. The on-site training of the Corporation's employees in matters of operation, maintenance, exploitation of the System, the software and the System's use (estimated program duration 10 manweeks).

   The aforementioned program shall be borne by the Contractor and shall be completed before commencement of the System's trial operation.

   The above program shall be repeated one (1) year after the System's final acceptance.

44.   In Article 16, the following paragraph is <u>added</u> after Table 1:

The phase A tests start has the following prerequisite deliverables:

- The assessment study of the consequences to personal data protection,

- The interface and communication between the main central system and the HEDNO "ERMIS" information system,

- The consumer web-portal

- The consumer mobile devices platform.

45.   In Article 20, the following paragraphs are <u>deleted</u>:

In addition:

A. The Contractor is Responsible for Processing and shall comply to the provisions:

   a) of the national legal framework, especially Law 2472/1997 (and 3471/2006 for electronic communications)

   b) of the european legal framework for personal data protections, as it applies, especially directive 95/46 and Recommendation 2012/148/EC, as well as the findings of the article 29 Working Group, especially their No 12/2011, 04/2013 and 07/2013 opinions, as well as

c) The Strategical Consequences Study for the personal data protection during the development and operation of smart meters, in application of the abovementioned legal framework.

d) The entirety of the processes specified in the ISO/IEC 27001 standard.

B. The Responsible for Processing knows, agrees and accepts that shall conform to the aforementioned obligations, which, among others, indicatively, are:

1. Collect personal data in a fair and legal manner.

2. Process only the required personal data for the purpose/purposes that the Responsible for Processing has already notified.

3. Ensure that the data are accurate and up to date.

4. Maintain the data only for the duration that is required for the implementation of the purpose of their collection and processing.

5. For the processing of data, select persons with corresponding professional qualifications that provide enough guarantees from technical knowledge and personal integrity in order to ensure confidentiality.

6. Take all organizational and technical measures for data protection and security of accidental or unlawful destruction, accidental loss, tampering, unlawful distribution or access or any other form of unfair processing.

7. If the processing is carried out on behalf of the responsible from a person that is not dependent to the responsible, the responsible Whall perform the assignment in writing with written type similar to specimen C2, issue F, that is submitted to HEDNO, expressly herein and the legal framework of personal data protection.

8. Respect the rights to information, access and objection of subjects.

9. Be consistent in obligations towards the Authority (notification, receipt of license).

10. Be up to date with Decisions, Directives, Recommendations of the Authority that concern the Responsible for Processing.

C.

a) The responsibility for actions and omissions of those who carry out processing within this project belongs exclusively in an objective manner the Contractor.

b) The Contractor shall bear against HEDNO for payment, of any administrative or other fines and penalties or compensation to third parties due to or in connection withacts or omissions of

subsidiaries, associated or anyone who conducts any processing of personal data. HEDNO may retain from the price payable to the Contractor corresponding amount to and subject to the above payment of the above amounts of fines or compensation and to impose a penalty equal to 5% of individual conventional object for the controller and 5% conventional object of the Contractor for the Contractor. Any penalties imposed on subcontractors are collected through the Contractor.

c) HEDNO is not responsible for any violations of the above legal obligations of the Responsible for Processing Contractor, dependent or simply cooperating with him, or anyone that conducts relative processing under this project, even if HEDNO is not aware of or of their involvement on them. In case of recurrence of violations on a personal data HEDNO terminates the contractual relationship and eliminates the culprit (Contractor, subcontractors, service providers and anyone involved) from the project.

Issue F, "Appendices"

46.   In the Contract draft specimen, Article 1, paragraph 1, after the following paragraph:

- Issue 13 Technical Description of Communication Device

The following paragraph is <u>added</u>:

C. CONTRACTOR'S OFFER

47.   In the Contract draft specimen, Article 2, the following paragraph:

- Comparative assessment of the project's results prior and after its implementation, and also delivery of integrated data for the preparation of a cost-benefit study. The assessment criteria shall involve:

Is <u>modified</u> as follows:

- Comparative assessment study of the project's results prior and after its implementation, and also delivery of integrated data for the preparation of a cost-benefit study. The assessment criteria shall involve:

48. In the Contract draft specimen, Article 2, the following paragraph:

- Assessment of technologies

Is <u>modified</u> as follows:

- Assessment of technologies

- Voltage quality and interruptible electrical energy provision services.

49. In the Contract draft specimen, Article 4, the following paragraph:

1. Advance payment of two million (2.000.000) euro to the Project's Contractor shall be made, for which no further guarantees are required, as it does not exceed the amount of the good performance guarantee.

Is <u>modified</u> as follows:

1. Advance payment of three million (3.000.000) euro to the Project's Contractor shall be made, for which no further guarantees are required, as it does not exceed the amount of the good performance guarantee.

50. In the Contract draft specimen, Article 5, section 2.1, the following:

Upon lapse of such period, the following tasks must be completed:

1. The interconnection and the communication of the Main Central System with the information system "ERMIS HEDNO"
   …
6. Radio-frequency research for GSM/GPRS/2G/3G coverage.

Is <u>modified</u> as follows:

Upon lapse of such period, the following tasks must also be completed:

1. The interconnection and the communication of the Main Central System with the information system "ERMIS HEDNO"
   …
6. Radio-frequency research for GSM/GPRS/2G/3G coverage.
7. Assessment Study of the consequences of the smart meter technologies under implementation, telemetering systems and smart grid personal data protection.

51. In the Contract draft specimen, Article 6, the following:

6. In any case, after the exhausting the maximum penalty clauses the contract is terminated.

Is <u>modified</u> as follows:

<u>6. Penalty clauses for violation of security and personal data protection clauses terms</u>
6.1 For violation or omissions by the Contractor, dependents, collaborators or anyone performing data processing on the Contractor's behalf, HEDNO can impose penalty clause equal to 5% of the contractual price.

52. The following paragraphs from the Contract draft specimen, Article 8:

A. The Contractor is Responsible for Processing and shall comply to the provisions:

    a) of the national legal framework, especially Law 2472/1997 (and 3471/2006 for electronic communications)

    b) of the European legal framework for personal data protections, as it applies, especially directive 95/46 and Recommendation 2012/148/EC, as well as the findings of the article 29 Working Group, especially their No 12/2011, 04/2013 and 07/2013 opinions, as well as

    c) The Strategical Consequences Study for the personal data protection during the development and operation of smart meters, in application of the abovementioned legal framework.

    d) The entirety of the processes specified in the ISO/IEC 27001 standard.

B. The Responsible for Processing knows, agrees and accepts that shall conform to the aforementioned obligations, which, among others, indicatively, are:

    1. Collect personal data in a fair and legal manner.

    2. Process only the required personal data for the purpose/purposes that the Responsible for Processing has already notified.

    3. Ensure that the data are accurate and up to date.

    4. Maintain the data only for the duration that is required for the implementation of the purpose of their collection and processing.

    5. For the processing of data, select persons with corresponding professional qualifications that provide enough guarantees from technical knowledge and personal integrity in order to ensure confidentiality.

    6. Take all organizational and technical measures for data

protection and security of accidental or unlawful destruction, accidental loss, tampering, unlawful distribution or access or any other form of unfair processing.

7. If the processing is carried out on behalf of the responsible from a person that is not dependent to the responsible, the responsible Whall perform the assignment in writing with written type similar to specimen C2, issue F, that is submitted to HEDNO, expressly reference herein and the legal framework of personal data protection.

8. Respect the rights to information, access and objection of subjects.

9. Be consistent in obligations towards the Authority (notification, receipt of license).

10. Be up to date with Decisions, Directives, Recommendations of the Authority that concern the Responsible for Processing.

C.

a) The responsibility for actions and omissions of those who perform processing within this project belongs exclusively in an objective manner the Contractor.

b) The Contractor shall bear against HEDNO for payment, of any administrative or other fines and penalties or compensation to third parties due to or in connection with acts or omissions of subsidiaries, associated or anyone who conducts any processing of personal data. HEDNO may retain from the price payable to the Contractor corresponding amount to and subject to the above payment of the above amounts of fines or compensation and to impose a penalty equal to 5% of individual conventional object for the controller and 5% conventional object of the Contractor for the Contractor. Any penalties imposed on subcontractors are collected through the Contractor.

c) HEDNO is not responsible for, any, violations of the above legal obligations of the Responsible for Processing Contractor, dependent or simply cooperating with him, or anyone that conducts relative processing under this project, even if HEDNO is not aware of or of their involvement on them. In case of recurrence of violations on a personal data HEDNO terminates the contractual relationship and eliminates the culprit (Contractor, subcontractors, service providers and anyone involved) from the project.

Any consequences for non-compliance of the above charge the Contractor both with respect to financial requirements of third parties and any other charge that may arise and is withheld either from the project certifications or from the forfeit of the good performance guarantee letter.

Are <u>modified</u> as follows:

A. The Contractor is Controller for Processing and shall comply to the provisions, as they apply:

    a) of the national legal framework, especially Law 2472/1997 (and 3471/2006 for electronic communications)

    b) of the European legal framework for personal data protections, as it applies, especially directive 95/46 and Recommendation 2012/148/EC, as well as the findings of the article 29 Working Group, especially their No 12/2011, 04/2013 and 07/2013 opinions, as well as

    c) The procedures specified in the Integrated Information Security Management System (ISMS).

B. The Controller knows, agrees and accepts that shall conform to the aforementioned obligations, which, among others, indicatively, are:

    1. Collect personal data in a fair and legal manner.

    2. Process only the required personal data for the purpose/purposes that the Responsible for Processing has already notified.

    3. Ensure that the data are accurate and up to date.

    4. Maintain the data only for the duration that is required for the implementation of the purpose of their collection and processing.

    5. For the processing of data, select persons with corresponding professional qualifications that provide enough guarantees from technical knowledge and personal integrity in order to ensure confidentiality.

    6. Take all organizational and technical measures for data protection and security of accidental or unlawful destruction, accidental loss, tampering, unlawful distribution or access or any other form of unfair processing.

    7. If the processing is carried out on behalf of the responsible from a person that is not dependent to the responsible, the responsible shall perform the assignment in writing with written type similar to specimen C2, issue F, that is submitted to HEDNO, expressly reference herein and the legal framework of personal data protection.

    8. Respect the rights to information, access and objection of subjects.

    9. Be consistent in obligations towards the Hellenic Data Protection Authority (notification, receipt of license).

    10. Be up to date with and comply with Decisions, Directives, and Recommendations of the Hellenic Data Protection Authority that concern the Controller.

C.

    a) The responsibility for actions and omissions of those who perform processing within this project belongs exclusively in an objective manner the Contractor.

    b) The Contractor shall bear against HEDNO for payment, of any administrative or other fines and penalties or compensation to third parties due to or in connection with acts or omissions of subsidiaries, associated or anyone who conducts any processing of personal data. HEDNO may retain from the price payable to the Contractor corresponding amount to and subject to the above payment of the above amounts of fines or compensation and to impose a penalty equal 5% of the contractual object.

    c) HEDNO is not responsible for, any, violations of the above legal obligations of the Controller, dependent or simply cooperating with him, or anyone that conducts relative processing under this project, even if HEDNO is not aware of or of their involvement on them.

53.   The following paragraphs from the Operation Contract draft specimen, Article 10:

A. The Contractor is Responsible for Processing and shall comply to the provisions:

    a) of the national legal framework, especially Law 2472/1997 (and 3471/2006 for electronic communications)

    b) of the European legal framework for personal data protections, as it applies, especially directive 95/46 and Recommendation 2012/148/EC, as well as the findings of the article 29 Working Group, especially their No 12/2011, 04/2013 and 07/2013 opinions, as well as

    c) The Strategical Consequences Study for the personal data protection during the development and operation of smart meters, in application of the abovementioned legal framework.

    c) The entirety of the processes specified in the ISO/IEC 27001 standard.

B. The Responsible for Processing knows, agrees and accepts that shall conform to the aforementioned obligations, which, among others, indicatively, are:

    1. Collect personal data in a fair and legal manner.

    2. Process only the required personal data for the purpose/purposes that the Responsible for Processing has already notified.

3. Ensure that the data are accurate and up to date.

4. Maintain the data only for the duration that is required for the implementation of the purpose of their collection and processing.

5. For the processing of data, select persons with corresponding professional qualifications that provide enough guarantees from technical knowledge and personal integrity in order to ensure confidentiality.

6. Take all organizational and technical measures for data protection and security of accidental or unlawful destruction, accidental loss, tampering, unlawful distribution or access or any other form of unfair processing.

7. If the processing is carried out on behalf of the responsible from a person that is not dependent to the responsible, the responsible Whall perform the assignment in writing with written type similar to specimen C2, issue F, that is submitted to HEDNO, expressly reference herein and the legal framework of personal data protection.

8. Respect the rights to information, access and objection of subjects.

9. Be consistent in obligations towards the Authority (notification, receipt of license).

10. Be up to date with Decisions, Directives, Recommendations of the Authority that concern the Responsible for Processing.

C.

a) The responsibility for actions and omissions of those who perform processing within this project belongs exclusively in an objective manner the Contractor.

b) The Contractor shall bear against HEDNO for payment, of any administrative or other fines and penalties or compensation to third parties due to or in connection with acts or omissions of subsidiaries, associated or anyone who conducts any processing of personal data. HEDNO may retain from the price payable to the Contractor corresponding amount to and subject to the above payment of the above amounts of fines or compensation and to impose a penalty equal to 5% of individual conventional object for the controller and 5% conventional object of the Contractor for the Contractor. Any penalties imposed on subcontractors are collected through the Contractor.

c) HEDNO is not responsible for, any, violations of the above legal obligations of the Responsible for Processing Contractor, dependent or simply cooperating with him, or anyone that conducts relative processing under this project, even if HEDNO is not aware of or of their involvement on them. In case of recurrence of violations on a personal data HEDNO terminates

the contractual relationship and eliminates the culprit (Contractor, subcontractors, service providers and anyone involved) from the project.

Any consequences for non-compliance of the above charge the Contractor both with respect to financial requirements of third parties and .any other charge that may arise and is withheld either from the project certifications or from the forfeit of the good performance guarantee letter.

Are <u>modified</u> as follows:

A. The Contractor is Controller for Processing and shall comply to the provisions, as they apply:

   a) of the national legal framework, especially Law 2472/1997 (and 3471/2006 for electronic communications)

   b) of the European legal framework for personal data protections, as it applies, especially directive 95/46 and Recommendation 2012/148/EC, as well as the findings of the article 29 Working Group, especially their No 12/2011, 04/2013 and 07/2013 opinions, as well as

   c) The procedures specified in the Integrated Information Security Management System (ISMS).

B. The Controller knows, agrees and accepts that shall conform to the aforementioned obligations, which, among others, indicatively, are:

   1. Collect personal data in a fair and legal manner.

   2. Process only the required personal data for the purpose/purposes that the Responsible for Processing has already notified.

   3. Ensure that the data are accurate and up to date.

   4. Maintain the data only for the duration that is required for the implementation of the purpose of their collection and processing.

   5. For the processing of data, select persons with corresponding professional qualifications that provide enough guarantees from technical knowledge and personal integrity in order to ensure confidentiality.

   6. Take all organizational and technical measures for data protection and security of accidental or unlawful destruction, accidental loss, tampering, unlawful distribution or access or any other form of unfair processing.

   7. If the processing is carried out on behalf of the responsible from a person that is not dependent to the responsible, the responsible Whall perform the assignment in writing with written type similar to specimen C2, issue F, that is submitted to HEDNO, expressly reference herein and the legal framework of

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personal data protection.

8. Respect the rights to information, access and objection of subjects.

9. Be consistent in obligations towards the Hellenic Data Protection Authority (notification, receipt of license).

10. Be up to date with and comply with Decisions, Directives, and Recommendations of the Hellenic Data Protection Authority that concern the Controller.

C.

a) The responsibility for actions and omissions of those who perform processing within this project belongs exclusively in an objective manner the Contractor.

b) The Contractor shall bear against HEDNO for payment, of any administrative or other fines and penalties or compensation to third parties due to or in connection with acts or omissions of subsidiaries, associated or anyone who conducts any processing of personal data. HEDNO may retain from the price payable to the Contractor corresponding amount to and subject to the above payment of the above amounts of fines or compensation and to impose a penalty equal to 5% of the contractual price.

c) HEDNO is not responsible for, any, violations of the above legal obligations of the Responsible for Processing Contractor, dependent or simply cooperating with him, or anyone that conducts relative processing under this project, even if HEDNO is not aware of or of their involvement on them.

54. The following paragraph from the Operation Contract draft specimen, Article 10:

7.6 In any case, after the exhaustion of the maximum penalty clauses the contract is terminated.

Is <u>modified</u> as follows:

8 **Penalty clauses for violation of security and personal data protection clauses terms**

8.1 For violation or omissions by the Contractor, dependents, collaborators or anyone performing data processing on the Contractor's behalf, HEDNO can impose penalty clause equal to 5% of the contractual price.

55. The following paragraphs from the Solemn Declaration for Personal Data Security and Protection Specimen C2:

(Should be signed by the Contractor, the Subcontractors, the Service Providers and any other involved relatively)

A. The Signer is Responsible for Processing and shall comply to the provisions:

   a) of the national legal framework, especially Law 2472/1997 (and 3471/2006 for electronic communications)

   b) of the European legal framework for personal data protections, as it applies, especially directive 95/46 and Recommendation 2012/148/EC, as well as the findings of the article 29 Working Group, especially their No 12/2011, 04/2013 and 07/2013 opinions, as well as

   c) The Strategical Consequences Study for the personal data protection during the development and operation of smart meters, in application of the abovementioned legal framework.

   d) The entirety of the processes specified in the ISO/IEC 27001 standard.

B. The Responsible for Processing knows, agrees and accepts that shall conform to the aforementioned obligations, which, among others, indicatively, are:

   1. Collect personal data in a fair and legal manner.

   ……

   7. If the processing is carried out on behalf of the responsible from a person that is not dependent to the responsible, the responsible Whall perform the assignment in writing with written type similar to specimen C2, issue F, that is submitted to HEDNO, expressly reference herein and the legal framework of personal data protection.

   8. Respect the rights to information, access and objection of subjects.

   9. Be consistent in obligations towards the Authority (notification, receipt of license).

   10. Be up to date with Decisions, Directives, Recommendations of the Authority that concern the Responsible for Processing.

C.

   a) The responsibility for actions and omissions of those who perform processing within this project belongs exclusively in an

objective manner the Contractor.

b) The Contractor shall bear against HEDNO for payment, of any administrative or other fines and penalties or compensation to third parties due to or in connection with acts or omissions of subsidiaries, associated or anyone who conducts any processing of personal data. HEDNO may retain from the price payable to the Contractor corresponding amount to and subject to the above payment of the above amounts of fines or compensation and to impose a penalty equal to 5% of individual conventional object for the controller and 5% conventional object of the Contractor for the Contractor. Any penalties imposed on subcontractors are collected through the Contractor.

c) HEDNO is not responsible for, any, violations of the above legal obligations of the Responsible for Processing Contractor, dependent or simply cooperating with him, or anyone that conducts relative processing under this project, even if HEDNO is not aware of or of their involvement on them. In case of recurrence of violations on a personal data HEDNO terminates the contractual relationship and eliminates the culprit (Contractor, subcontractors, service providers and anyone involved) from the project.

Are <u>modified</u> as follows:

(Should be signed by the Contractor, and submitted in Envelope A)

A. The Signer as Controller ~~is~~ Responsible for Processing and shall comply to the provisions, as they apply:

a) of the national legal framework, especially Law 2472/1997 (and 3471/2006 for electronic communications)

b) of the European legal framework for personal data protections, as it applies, especially directive 95/46 and Recommendation 2012/148/EC, as well as the findings of the article 29 Working Group, especially their No 12/2011, 04/2013 and 07/2013 opinions, as well as

c) The procedures specified in the Integrated Information Security Management System (ISMS).

B. The Responsible for Processing knows, agrees and accepts that shall conform to the aforementioned obligations, which, among others, indicatively, are:

1. Collect personal data in a fair and legal manner.

……

7. If the processing is carried out on behalf of the responsible from a person that is not dependent to the responsible, the responsible shall perform the assignment in writing with written type similar to specimen C2, issue F, that is submitted to HEDNO, expressly reference herein and the legal framework of personal data protection.

8. Respect the rights to information, access and objection of subjects.

9. Be consistent in obligations towards the Hellenic Data Protection Authority (notification, receipt of license).

10. Be up to date with Decisions, Directives, and Recommendations of the Hellenic Data Protection Authority that concern the Responsible for Processing.

C.

a) The responsibility for actions and omissions of those who perform processing within this project belongs exclusively in an objective manner the Contractor.

b) The Contractor shall bear against HEDNO for payment, of any administrative or other fines and penalties or compensation to third parties due to or in connection with acts or omissions of subsidiaries, associated or anyone who conducts any processing of personal data. HEDNO may retain from the price payable to the Contractor corresponding amount to and subject to the above payment of the above amounts of fines or compensation and to impose a penalty equal to 5% of the contractual price.

c) HEDNO is not responsible for, any, violations of the above legal obligations of the Responsible for Processing Contractor, dependent or simply cooperating with him, or anyone that conducts relative processing under this project, even if HEDNO is not aware of or of their involvement on them.

56. The following paragraph from the Solemn Declaration of Acceptance of Terms of the Notice of Request for Tenders Specimen D.2:

9. Finally, I declare that if any discrepancy(ies) are identified in the Tender, arising from comments, clarifications, observations etc, during the evaluation of the content of ENVELOPE B and also during the period up to signing the Contract, the Technical Specifications of the Request for Tenders are valid and if awarded, the contract that will be signed will incorporate the Technical Specifications of the Request for Tenders and I will raise no claim, with regards to time and/or financial, in any phase at which I will be notified of said discrepancy(ies).

Is <u>modified</u> as follows:

9. The project is offered in full compliance to the Technical Specifications requirements of the Tender, except for the declared equivalent technical solutions (if a Table of Equivalent Technical Solutions is submitted).

10. The project is offered in full compliance with the requirements of the Tender.

Issue 1, Technical Description of the Project

57.   In section 1.4, the following paragraph:

At this stage and in the scope of this project, the metering points to be included in the Main System shall be approximately 140,000 single phase and 30,000 three phase metering points. Indicative data about the number of metering points, number of substations, as well as representative substations for each category of population density for all the geographical areas are provided in this issue's Annex.

Is <u>modified</u> as follows:

At this stage and in the scope of this project, the metering points to be included in the Main System shall be approximately 140,000 single phase and 30,000 three phase metering points, while the MV/LV substations are approximately 4,300. Indicative data about the number of metering points, number of substations, as well as representative substations for each category of population density for all the geographical areas are provided in this issue's Annex.

58.   In section 1.5, the following paragraph:

The overall detailed project implementation schedule shall be approved by the Supervising Department within five (5) days,while in case of conflict, the Contractor shall be informed in writing. The schedule to be submitted for approval is required to include a provision for implementing, in the first phase, within a maximum of nine (9) months from the effective date of the Contract, the installation and operation of the main and backup AMI/MDM System, as well as 10,000 meters' installation and integration. The replacement and integration in the System of the next 160,000 meters and communication media (modems) of the metering points at the

selected geographical areas must have been completed within 15 additional months after the first phase completion.

Is _modified_ as follows:

The overall detailed project implementation schedule shall be approved by the Supervising Department within five (5) days,while in case of conflict, the Contractor shall be informed in writing. The schedule to be submitted for approval is required to include a provision for implementing, in the first phase, within a maximum of nine (9) months from the effective date of the Contract, the installation and operation of the main AMI/MDM System, as well as at least 10,000 meters' and 500 In-Home Displays installation and integration. The installation and operation start of the backup central system shall be completed three months after the completion of phase A, while replacement and integration in the System of the next 160,000 meters and communication media (modems) of the metering points at the selected geographical areas must have been completed within 15 additional months after the first phase completion.

59. In section 1.11, the following paragraph:

1. Study of the consequences of the smart meter technologies under implementation, telemetering systems and smart grid to the consumers personal data.

Is _modified_ as follows:

1. Assessment Study of the consequences of the smart meter technologies under implementation, telemetering systems and smart grid to personal data protection.

60. In section 2.4, the following paragraph:

- Adequate presentation of security policy as it conforms to IEC/ISO 27001 series standards.

Is _modified_ as follows:

- Adequate presentation of security policy according to an Integrated Information Security Management System (ISMS).

Issue 9, Technical Description Three-Phase Substation Electronic Meters

61.   The following section from issue 9:

THREE-PHASE SUBSTATION ELECTRONIC METERS

In this issue, the substations electronic meters are described, which shall connect to the LV output of the distribution transformers of the pilot project substations.

Attached is <u>indicative</u> technical specification GR-267 for three-phase max-indicating electronic meters for connection through current transformer and for direct connection to the low voltage grid, which should be appropriately followed for the substation electronic meters.

The substation electronic meters shall connect to the network through appropriate split-core current transformers or technically equivalent according to the substation power, <u>which shall be provided by the Contractor</u>, and should have at least 0.5 accuracy.

The meters will be installed on all pilot project substations by the Contractor, housed in an appropriate box for their protection.

The meter and substation boxes shall be according to the LV meter boxes, issue 10.

In addition, the boxes should be appropriately mounted on the substation posts, and in particular:

- They should be mounted with appropriate distance from the posts, in order to allow climbing with climbing irons (as with meters for Lighting of Streets and Squares)
- They should be mounted at height appropriate for indications reading (about 1.5m above ground).
- They should be placed appropriately in order to avoid problems for climbing, i.e. for two-poles substations they should be mounted on the side between the two poles.
- The connection between the substation meters, concentrators and substation pillars should be implemented through appropriate metallic tubes and sealed using glands.

Is modified as follows:

GENERAL REMARKS

In this issue, the substations electronic meters are described, which shall connect to the LV output of the distribution transformers of the pilot project substations.

Attached are the minimal technical requirements of the technical specification "THREE-PHASE MAX-INDICATING LOW-VOLTAGE ELECTRONIC METERS FOR SUBSTATIONS", which should be appropriately followed for the substation electronic meters.

The substation electronic meters shall connect to the network through appropriate split-core current transformers or technically equivalent device according to the substation power, <u>which shall be provided and installed by the Contractor</u>, and should have at least 0.5 accuracy.

In case that a concentrator is installed on the substation for PLC communication with single and three-phase meters, the telemetering – configuration of the substation meter could be accomplished also through the concentrator.

The meters will be installed on all pilot project substations by the Contractor, housed in an appropriate box for their protection.

The substation meter and concentrator boxes should be appropriately mounted on the substations, and in particular:

- In case for overhead substations, they should be mounted with appropriate distance from the posts, in order to allow climbing with climbing irons (as with meters for Lighting of Streets and Squares). In addition, they should be mounted at height appropriate for indications reading (about 1.5m above ground).
- The connection between the substation meters, concentrators and substation pillars should be implemented through appropriate protection tubes and sealed using glands.

62. The following title from issue 9:

<u>**SPECIFICATION GR-267 / 26.4.2010**</u>

<u>**THREE PHASE MAX-INDICATING ELECTRONIC
METERS FOR CONNECTION THROUGH CURRENT
TRANSFORMER & FOR DIRECT CONNECTION**</u>

<u>**TO THE LOW VOLTAGE NETWORK SCOPE**</u>

Is <u>modified</u> as follows:

<u>SPECIFICATION</u>

<u>THREE PHASE MAX-INDICATING ELECTRONIC METERS FOR CONNECTION THROUGH CURRENT TRANSFORMER FOR SUBSTATIONS</u>

63. In section 1, the following paragraph:

This specification defines the manufacture, the tests, the acceptance check and packing, for transportation and delivery to PPC Warehouses, of 3-phase current transformer or direct connection Low Voltage electronic meters with three-element four-conductor and with active and reactive energy measuring and maximum demand indication.

Is <u>modified</u> as follows:

This specification defines the manufacture, the tests, the acceptance check of 3-phase current transformer Low Voltage electronic meters with three-element four-conductor and with active and reactive energy measuring and maximum demand indication.

64. In section 3, the following paragraphs:

The electronic meters shall be industrial products manufactured according to the global l EN / IEC regulations / standards and to the Technical Specifications of PPC as mentioned below, which are valid on the day of the submission of the bids.

In cases where the requirements of this Specification contradict with the above editions of International Regulations / Standards or any other relevant Standards, the corresponding PPC specification shall prevail.

The meters shall have markings pursuant to the European Standards, and they are also required to have the "CE" conformity mark.

The offered meters shall be of **class B**, in compliance with the EU Directive 2004/22/EC (Measuring Instruments) and according to the Ministry Decision (Government Gazette 521 / issue B' / 12.04.2007, No. F2 – 1393).

"All the necessary certificates for the above compliance, that have been issued for the offered meters by a competent Notified Body, should be submitted"

Moreover, the supplier of the meters shall submit a certificate proving that all procedures specified in ISO9001 are observed.

Are modified as follows:

The electronic meters shall be industrial products manufactured according to the global l EN / IEC regulations / standards and to the Technical Specifications of HEDNO as mentioned below, which are valid on the day of the submission of the bids.

In cases where the requirements of this Specification contradict with the above editions of International Regulations / Standards or any other relevant Standards, the corresponding HEDNO specification shall prevail.

The meters shall have markings pursuant to the European Standards, and they are also required to have the "CE" conformity mark.

The offered meters shall be of **class B**, in compliance with the EU Directive 2004/22/EC (Measuring Instruments) and according to the Ministry Decision (Government Gazette 521 / issue B' / 12.04.2007, No. F2 – 1393).

"All the necessary certificates for the above compliance, that have been issued for the offered meters by a competent Notified Body, should be submitted"

65. In section 4.1.1, the following paragraph:

The meter cover shall be according to the IEC standard for direct connection of the phase and neutral conductors and for the connection of the pulse inputs, pulse outputs, signal inputs, signal outputs and communication unit by terminal blocks.

Is modified as follows:

The meter cover shall be according to the IEC standard for connection of the phase and neutral conductors and for the connection of the pulse inputs, pulse outputs, signal inputs, signal outputs and communication unit by terminal blocks.

66. In section 4.1.2, the following paragraphs:

For the meters for direct connection to the network, the cross-section for connection of multi-wire stranded conductor shall be at least : 25 mm^2

For the meters for connection to the network through current transformers, the cross-section for connection of conductors shall be at least : 6 mm^2

The minimum cross-section for connection of multi-wire cable at the signal or pulse terminals shall be at least : 1 mm^2

The connection terminals for the pulse outputs, signal outputs, communication unit shall be of spring type without tightening screws.

Concerning the terminals for the signal input-output it is also acceptable the use of connection terminals with tightening screws.

Are <u>modified</u> as follows:

The cross-section for connection of conductors to the meters for connection to the network through current transformers shall be at least: 6 mm^2

The minimum cross-section for connection of multi-wire cable at the signal or pulse terminals shall be at least : 1 mm^2

67. In section 4.1.3, the following paragraph:

- The nominal values / ratings shall include the nominal voltage 3 x 230/400 V, the nominal current e.g. 5 A and the maximum current e.g. 10A (5/10 A) or (20/100 A).

Is <u>modified</u> as follows:

- The nominal values / ratings shall include the nominal voltage 3 x 230/400 V, the nominal current e.g. 5 A and the maximum current e.g. 10A (5/10 A).

68. In section 4.1.5, the following paragraphs:

The electronic meter shall be manufactured according to the requirements of DIN 43857 and DIN 43852. This facilitates the installation of the meter inside meter cabinets standardized by PPC.

Is <u>modified</u> as follows:

The electronic meter shall be manufactured according to the size requirements of DIN 43857 and DIN 43852. This facilitates the installation of the meter inside meter cabinets standardized by HEDNO.

69.   In section 5.1, the following paragraphs:

The measuring system shall be set in digital mode, suitable for connection to the network through CT or direct connection to the network.

In particular, the meter shall be equipped with the following analog inputs:

Are <u>modified</u> as follows:

The measuring system shall be set in digital mode, suitable for connection to the network through CT.

The meter shall be equipped with the following analog inputs:

70.   In section 5.2.5, the following is deleted:

<u>DIRECT CONNECTED TO THE NETWORK</u>

The meter maximum current shall be Imax = 100 A.

The meter shall have basic current value Ib = 20 A.

71.   In section 5.3.3, the following paragraph:

The meter's control, programming and data retrieval shall be able to be performed also through the optical head communication port.

Is <u>modified</u> as follows:

The meter's control, programming and data retrieval shall be able to be performed also through the optical head communication port, but also through the RS-485 port.

72.   In section 5.3.4, the following paragraph is <u>deleted</u>:

The Direct connected electronic meter shall begin the energy measuring when the current reaches at least 0.4% of the reference current I_{re}, according to IEC 50470-3.

73.   In section 5.3.6, the following paragraph:

Meter operation supply shall store enough energy so that its operation shall not be disturbed in case of 3-phase voltage loss for up to 500 ms, according to EN/IEC.

When the voltage is restored, the meter shall be ready for operation within a period of 5 sec.

The electronic meter shall be compliant with EN/IEC 62053, EN 50470 regarding the requirements for overloading and surges. In case of continuous voltage loss, the meter non-volatile (EEPROM) memory shall permit the retrieval of information even after a period of 10 years without help from any auxiliary supply.

Are <u>modified</u> as follows:

Meter operation supply shall store enough energy so that its operation shall not be disturbed in case of 3-phase voltage loss for up to 500 ms.

When the voltage is restored, the meter shall be ready for operation within a period of 5 sec.

The electronic meter shall be compliant with EN/IEC 62053, EN 50470 regarding the requirements for overloading and surges. In case of continuous voltage loss, the meter memory shall permit the retrieval of information even after a period of 10 years without help from any auxiliary supply.

74.   In section 5.3.8, the following paragraphs:

The meter shall be equipped with:

- Lithium battery capable of providing sufficient energy for the operation of the internal clock (R.T.C) for three years at least (without the meter being connected to the network). The battery's life-time with the meter connected to the network shall be at least 10 years, with a maximum loss of 10% due to self-discharge.
- Super-capacitor.

In any case the billing values of the meter must be reserved in its memory for at least ten (10) years.

Are <u>modified</u> as follows:

The meter shall be equipped with system (i.e.Lithium Battery) capable of providing sufficient energy for the operation of the internal clock (R.T.C) for three years at least (without the meter being connected to the network

In any case the meter values of the meter must be reserved in its memory for at least ten (10) years.

75.   Section 5.3.9, is <u>deleted</u>:

5.3.9 Installation and Replacement of the Battery

The meter shall be manufactured in such a way that no removal of the seal or intervention into sealed parts shall be required, and the replacement of the battery shall be performed while the meter is in operation. The operator, during the replacement of the battery, shall not come in contact with electrical parts and it will not be possible for the worker to come in contact with any electrical conductor.

76.   In section 5.4.1, the following paragraphs:

The meter shall be provided with at least four (4) tariff zones.

The measured values of selected quantities shall be registered as follows:

- In the active energy registers (in at least eight (8))
- In the active maximum demand registers (in at least eight (8))
- In the cumulative (total) energy registers (in at least eight (8)).

Are <u>modified</u> as follows:

The measured values of selected quantities shall be registered as follows:

- In the active energy registers (in at least two (2))
- In the active maximum demand registers (in at least two (2))
- In the cumulative (total) energy registers (in at least two (2)).

77.   In section 5.4.2, the following paragraph is <u>deleted</u>:

The defined integration period shall be common for the rated (tariff) maximum demand registers.

78.   In section 5.4.3, the following paragraphs:

<u>5.4.3 End of Billing Period</u>

At the end of billing period, the total energy and maximum demand registers store their information into the Historical registers (logs).

The time period between two successful maximum value resets is defined as 'billing period'.

The maximum value reset shall be performed with the following ways:

- Automatically on a predefined date and time
- By telemetering
- Through a reset button (capable of being sealed) that will be operated exclusively and only by authorized personnel

Are <u>modified</u> as follows:

<u>5.4.3 End of Integration Period</u>

At the end of integration period, the total energy and maximum demand registers store their information into the Historical registers (logs).

The time period between two successful maximum value resets is defined as 'integration period'.

The maximum value reset shall be performed with the following ways:

- Automatically on a predefined date and time
- By telemetering
- Through a reset button

79.   In section 5.4.4, the following paragraphs:

This information shall be available to be shown on the display or as events, e.g. demand overstepping, for activation of output signal.

Are <u>modified</u> as follows:

This information shall be available to be shown either on the display or as events, e.g. demand overstepping, for activation of output signal.

80.   In section 5.4.6, the following paragraph is <u>deleted</u>:

- User Tariff zone / calendar information

81.   Section 5.4.8 is <u>deleted</u>:

5.4.8 Definition of Tariff Zones

The definition of the meter's tariff zones shall be performed with the following methods:

- through the internal time switch
- through appropriate S/W for programming the meter

82.   In section 5.5, the following paragraphs:

The meter shall be equipped with a calendar time switch, which shall generate signals for changing tariff zones, for automatic maximum value reset and for setting the end of the billing period for the meters.

The clock mechanism shall be high precision Quartz (according to IEC: <5 ppm).

The calendar time switch shall drive the registers of the energy, power and maximum demand tariff zones according to the programming of "TARIFFS" and "DAILY PROFILES".

The programming of "TARIFF" shall set the combinations of the tariff zone registers that shall be activated for each particular tariff.

The programming of "DAILY PROFILE" shall include the hours where the tariff zones change.

Each daily schedule shall include at least 8 intermediate time periods during the day.

Are modified as follows:

The meter shall be equipped with a calendar time switch for automatic maximum value reset and for setting the end of the integration period for the meters.

The clock mechanism shall be high precision Quartz (<5 ppm).

83.   In section 5.6, the following paragraph:

The display shall be able to show information from the energy and tariff zone maximum (peak) demand registers, as well as information from the historical registers, which have been programmed.

Is modified as follows:

The display shall be able to show information from the energy maximum (peak) demand registers, as well as information from the historical registers, which have been programmed.

84. In section 5.6, the following paragraphs:

- Units: W, kW, MW, Wh, kWh, MWh, var, kvar, Mvar, varh, Mvarh, V, kV, Hz
- Error code
- State of selected Outputs
- Active tariff zone

Are <u>modified</u> as follows:

- Units: kW, MW, kWh, MWh, kvar, Mvar, kvarh, Mvarh, V, A, Hz
- Error code
- State of selected Outputs

85. In section 5.6, the following paragraphs:

- Normal (automatic rotation of displayed information)
- Technical Check (Programming - Set mode)

Are <u>modified</u> as follows:

- Automatic alternating cyclical display rotation
- Manual alternating cyclical display rotation
- Technical Check (Programming - Set mode)

86. In section 5.7, the following title:

5.7   OUTPUTS

Is <u>modified</u> as follows:

5.7   INPUTS – OUTPUTS

87. In section 5.7, the following paragraph:

It shall be possible to program the pulse outputs, which shall convey energy pulses for any type of internally measured quantity.

Is <u>modified</u> as follows:

Two programmable pulse outputs should be provided, which shall convey energy pulses for any type of internally measured quantity.

88.   In section 5.7.2 is <u>deleted</u>:

5.7.2 Signal outputs

The signal outputs shall operate with rated voltage from 100 V to 240 VAC/DC.

It shall be possible to program their operation for the following functions:

- Indication of active tariff zone
- Maximum value overstepping warning

The number of open/close actions of the output contacts shall be at least 1 x 105 for resistive loads.

89.   In section 5.7.3 the following paragraph:

The meters should have control capability (on/off) of relay outputs (at least two) by specific commands of the telemetering software.

Is <u>modified</u> as follows:

The meters should have control capability (on/off) of relay outputs (at least two) by specific commands of the AMI software.

90.   A new section is <u>added</u> in 5.7, numbered 5.7.3 (after renumbering):

5.7.3 Inputs

The meters shall have at least two inputs.

The inputs should be able to be activated with voltage between 12V and 240V AC/DC and minimum current 2mA and be able to be programmed for events for alarm activation.

91.   In section 5.8 the following paragraphs:

The meter's manufacturer is required to submit the codes of the objects used (according to DLMS/COSEM), together with the meter technical data, otherwise the bid shall not be accepted succesfully.

Reading and parameterisation (for setting date-time-change of tariff, CT ration or full reparameterisation of the meter) of the meters must be possible with relevant discreet passwords. The list of these codes and their relevant access rights (read-write) shall be communicated in writing and electronic format and will be defined before the production line.

Is <u>modified</u> as follows:

The meter's manufacturer is required to submit the codes of the objects used (according to DLMS/COSEM), together with the meter technical data.

Reading and parameterisation (for setting date-time CT ration or full reparameterisation of the meter) of the meters must be possible with relevant discreet passwords. The list of these codes and their relevant access rights (read-write) shall be communicated in writing and electronic format and will be defined before the production line.

92. Section 5.12 is <u>deleted</u>:

5.12 Fraud detection event logging

The meter shall have the capability, via appropriate arrangements and parameterization, of detecting and logging at least the following events, of potential attempt for tampering the meter while in normal operation under voltage (each event individually), by logging the time (date and hour) of appearance and disappearance of each event :

- strong DC magnetic field influence
- terminals' cover removal
- over-current in the neutral wire

Also, use of passwords for restriction of the access to the meter for data reading, parameterization, etc

93. In section 5.13 the following paragraph:

- power down

Is <u>modified</u> as follows:

- power down
- neutral loss

94. Sections 6.4 and 6.5 are <u>deleted</u>:

6.4 SUBMITTAL OF SAMPLES

The tender's participants are required to submit together with their offer, two (2) complete meter samples (which are returnable), for the technical evaluation of the material.

The meter samples shall be obligatory accompanied by their respective software for parameterization, control and configuration.

Additionally, they shall be accompanied by all the necessary information and instructions for their telemetering and billing data retrieval

The lower bidder shall provide PPC with all the required software drivers and user licenses, which are necessary for the connection and implementation of the meters into the Telemetering Centre (AMR system) of PPC.

Any other information or potential presentation that may be required, concerning the offered material, must be provided to PPC's Technical Department.

It is noted that any additional capabilities of the offered meters, beyond the specified ones, should be described in detail.

6.5 METERS REMOTE MASS REPARAMETERISATION SOFTWARE

The lower bidder shall provide PPC suitable software for remote mass reparameterisation of the meters (at least change of access passwords, change of billing period reset date, definition of time zones, of the meter).

95.   In section 6.6, the following paragraph is <u>deleted</u>:

- Moreover, the manufacturer of the meters shall submit a certificate proving that all procedures specified in ISO 9000 are observed.

96.   In section 6.7, the following paragraph:

The suppliers shall guarantee the availability of spare parts for a period of 10 years after the delivery of the first batch.

Is <u>modified</u> as follows:

The suppliers shall guarantee the availability of spare parts for a period of 5 years after the end of the guarantee.

97.   In section 6.8, the following paragraph:

Together with their bids, the bidders shall submit one copy of the operating instructions of the meters.

Is <u>modified</u> as follows:

Together with their bids, the bidders shall submit one copy of the operating instructions of the meters, in Greek.

98.   In section 7, the following paragraph:

- The meters shall be delivered programmed with the parameterization that will be advised and agreed by PPC (DD / MD),

during the sample approval procedure, before the starting of the series production of the meters

Is <u>modified</u> as follows:

- The meters shall be delivered programmed with the parameterization that will be advised and agreed by PPC (DD / MD) HEDNO, during the sample approval procedure, before the starting of the series production of the meters

99.   Section 9 is <u>deleted</u>:

<u>PACKING</u>

The meters shall be placed, carefully packed, inside protective cardboard boxes.

The cardboard boxes shall be placed on EU palettes to facilitate transport.

These boxes shall be externally and indelibly marked with the Contract number, the material Code and the Manufacturer's Data.

Using the above packing, it shall also be possible to store the meters in open spaces without additional protection against weather conditions (rain or moisture).

Issue 13, Technical Description Communication Unit (MODEM)

In Issue 13, the following paragraphs:

~~**Indicative**~~ **Technical Description of Communication Unit**

The communication unit (modem) that will be used for the communication connection of the new electronic L.V. meters for electrical energy with the Telemetering System for the transfer of metering data using GSM/GPRS/3G, should:

1. Be of type GSM/GPRS/3G or newer type (i.e 4G).
2. Be GPRS multislot at least Class 8 or higher.
3. Support dynamic & static IP address for GPRS communication.
4. Operate at all mobile communication networks of the Country.
5. In case of GPRS/3G communication, when the signal is lost, to perform automatic change to GSM communication and afterwards to have the capability for restoration to GPRS/3G communication.
6. In case of voltage loss and return of voltage, to restart automatically (auto restart) in order to find communication signal GSM or GPRS/3G.
7. Communicate at speed from 9600 - 19.200 bps or higher, with the capability of remotely & locally selection of the desired speed.
8. Be capable of remotely change the communication mode from GSM to GPRS/3G and vice versa.
9. Be capable of parameterization (speed, codes, communication status, signal strength etc.) of the communication unit (modem) via remote instruction.
10. Be accompanied by an antenna of suitable gain and dimensions in order to be installed in the metering device.
11. Provide operating indications (e.g. using led etc) and connector for placement of the removable SIM card.
12. Operate smoothly and without problems at the following environmental conditions:
    - Operating temperature range -20ºC to +55ºC
    - Annual mean humidity up to 75% (IEC 62052-11).
13. Have the symbol of CE and be in conformity with the following E.U. regulation:
    - R&TTE Directive
14. If the modem is external to the meter, it should have protection degree IP51 (IEC 60529) or higher.
15. Provide protection against overvoltages.

Is <u>modified</u> as follows:

Technical Description of Communication Unit

The communication unit (modem) that will be used for the communication connection of the new electronic L.V. meters for electrical energy with the Telemetering System for the transfer of metering data using GSM/GPRS/3G, should at least:

1. Be of type GSM/GPRS/3G or can additional by also newer type (i.e GSM/GPRS/3G/4G).
2. Be GPRS multislot Class 8 or higher.
3. Support communications with TCP protocol.
4. Have "Transparent" operation capability.
5. Support dynamic & static IP address for GPRS communication.
6. Operate at all mobile communication networks of the Country.
7. In case of GPRS/3G communication, when the signal is lost, to perform automatic change to GSM communication with capability for automatic restoration to GPRS/3G communication.
8. In case of voltage loss and return of voltage, to restart automatically (auto restart) in order to find communication signal GSM or GPRS/3G.
9. Have automatic reboot capability at regular intervals, configurable from 1 to 24 hours.
10. Communicate at speeds from 9600 bps and higher with the meter, with the capability of remotely & locally selection of the desired speed.
11. Be capable of remotely change the communication mode from GSM to GPRS/3G and vice versa.
12. Be capable of parameterization (speed, codes, communication status, signal strength etc.) via remote instruction.
13. Be accompanied by an antenna of suitable gain and dimensions in order to be installed in the metering device.
14. Provide operating indications (e.g. using led etc) and connector for placement of the removable SIM card.
15. Operate smoothly and without problems at the following environmental conditions:
    - Operating temperature range -20ºC to +55ºC
    - Annual mean humidity up to 75% (IEC 62052-11).
16. Have the symbol of CE and be in conformity with the following E.U. regulation:
    - R&TTE Directive
17. If the modem is external to the meter, it should have protection degree IP51 (IEC 60529) or higher.

18. Provide protection against overvoltages.
19. Have protection system from damage for the SIM card, when this is removed from the modem, without prior cut of power supply.
20. Software of modem mass configuration software must be supplied.