

Supplement 3 to the Tender for the project *"Pilot Telemetry and Management System for the Electric Power Supply Demand by Residential and Small Commercial Consumers and Implementation of Smart Grids"*

Modifications for Issue A, Invitation

1. At the end of Paragraph "REQUEST FOR TENDERS WITH OPEN PROCEDURE", add the following paragraph:

The pilot project is under inclusion to the co-financed projects from EU and is included in the co-financed, from the PPC budget, HEDNO projects.

2. In article 1:

The Service of HEDNO in charge of the Request for Tenders, which is also responsible for all matters related to it, is the Network Department, **24 Syggrou Avenue** ~~22 Chalkokondili Street~~, Athens, tel. +30 210-5292516 9090822.

The deadline for receipt of Tenders is January 30, 2015, Friday. The time for the Tenders submission deadline is 10:00 am. The receipt and opening of bids will take place the same day at 12:00 in the "Conference" events room, at **24 Syggrou Avenue** ~~30 Chalkokondili Street~~, ground 6th floor, Athens, ~~on Monday, 03/11/2014, at 10:00 am (closing time for the submission of the tenders) before a Committee to be assembled by the Company.~~

Tenders may also be submitted by registered mail or courier service to the registration office of the NETWORK DEPARTMENT, **24, Syggrou Avenue** ~~22, Chalkokondili Street~~, 85th Floor, Office ~~818, 104 32 117 42~~ Athens. Tenderers shall assume full responsibility for both the timely delivery of the tender and the tender's contents.

In case of submission by mail or submission to the Registration Office, the Tender envelopes will be accepted Such tenders shall be considered only if delivered sealed to the Registration Office of the above Department no later than the closing date and time for receipt of tenders, as defined above ~~not later than the above closing date and time for the submission of tenders.~~

3. In Article 3:

Each of the above technologies (PLC, GPRS) will be applied to at least 20% of the total meters of the Pilot Project (at least 20% PLC and at least 20% GPRS per geographical area). It is at the Contractor's discretion to select either PLC or GPRS technology for the remaining 60% per geographical area. It is noted that the actual ratio of installed

communications' technology may not deviate from the suggested ratio per area and in total.

Meters installed in the same location can communicate with the central system using a common GPRS communication medium and appropriate connection between them (i.e. RS-485). Those meters shall be considered as GPRS meters for the 20-80% percentage regarding the installed meters.

4. In Article 3:

The Pilot Project is expected to include the comprehensive design, procurement and installation of the equipment, the execution of all necessary tests and configuration, and the delivery to HEDNO, ready for commercial operation, ("Turn-key solution") of the following:

The Contractor shall perform all the necessary studies, have all the required licences, proceed to the procurement of all the necessary equipment and required software, to the lease contract for available resources, construct the necessary works, install, configure and finally construct the system in full, according to the terms of the issues of this Tender.

In particular, the pilot project includes:

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

5. In Article 3:

- Installation of the above smart meters and simultaneous dismantlement of existing meters estimated as 85,000 person-hours for such works.

6. In Article 3:

- Approximately 4,300 three-phase electronic meters to connect to current-transformer (CT) accompanied with the respective adequate transform ratio and accuracy, as specified in Issue 9, current transformers for monitoring LV transformers associated with distribution substations in the selected areas.

7. In Article 3:

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:

... ..

- Assessment of technologies regarding the aforementioned benefits.
- Working methods for the design of the nationwide project.
- Voltage quality and interruptible electrical energy provision services.

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.

8. In Article 3:

Phase A - Design, supply, installation and commissioning of the main AMI/MDM central system systems and also installation and operation of at least 10,000 meters (designated by HEDNO) and at least 100 500 in-home displays (designated by HEDNO) ~~in proportion to the two communication technologies.~~

The set of customers chosen for meter installation during phase A will form a representative customers sample, including exclusively residential load substations, commercial usage load substations, industrial usage, etc and of different social and financial status.

The selection of customers for the installation of the 500 in-home displays will be implemented based on the tariff and the level of their consumption, including customers with time charge (night tariff) and customers with tariff based on power and energy charge, as well as based on new criteria that may arise during the project implementation and after proposals from Authorities, HEDNO or HEDNO's consultants, as well as the Electrical Energy Suppliers.

During Phase A the following deliverables must be completed:

- The interconnection and the communication between the main Central System Systems and the information system "ERMIS HEDNO".
- The consumer web-portal
- The consumer mobile platform
- Implementation time of Phase A: nine (9) months from the Project's contract award.

Prerequisite for the completion of Phase A is the successful execution of (quantitative / qualitative) acceptance testings.

Phase B – Involves the following:

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

9. In Article 3:

Phase A - 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).

The set of customers chosen for meter installation during phase A will form a representative customers sample, including exclusively residential load substations, commercial usage load substations, industrial usage, etc and of different social and financial status.

The selection of customers for the installation of the 500 in-home displays will be implemented based on the tariff and the level of their consumption, including customers with time charge (night tariff) and customers with tariff based on power and energy charge, as well as based on new criteria that may arise during the project implementation and after proposals from Authorities, HEDNO or HEDNO's consultants, as well as the Electrical Energy Suppliers.

10. In Article 3:

- The costs for the telecommunication links between the meters and the AMI/MDM systems for data transfers and telecommunication links between the central and the backup system for the entire period of the Pilot Project, its delivery, and the five (5) year system operation.

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 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 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.

11. In Article 3:

- To gather knowledge and experience concerning the feasibility of the use of advanced metering functions in HEDNO's respective processes.
- To evaluate the personal data security and protection procedures in cases of extended application of meter data collection.

12. In Article 3:

~~The Contractor shall carry out all necessary studies, obtain all necessary permits, proceed to the procurement of all necessary equipment and necessary software, contract lease of available resources, execute the necessary works, install, configure and test the equipment and, eventually, fully construct the system, in absolute compliance with those cited in the~~

~~Issues of the present Notice of Request for Tenders.~~

~~The Contractor shall ensure the entire system's compliance with all the requirements regarding the security and protection of personal data as cited in the respective Issues of the present Notice of Request for Tenders. Also the Contractor shall apply, for the suggested System (meters, communications, AMI-MDM) an integrated information security management system (ISMS) according to the ISO/IEC 27001 standard.~~

13. In B.2, Article 4:

- 20,000 units of GSM/GPRS/**3G** modems

14. In B.2, Article 4:

It is clarified, that in case of offer of a type of communication device from the manufacturer (PLC or GSM/GPRS/3G), certifications are required for this particular communication device type.

The technical characteristics of the referred to the Certificates type of communication devices, should be included in the offer.

15. In D, Article 4:

The Tenderer shall have the appropriate experience and staff for the meters' installation having installed at least 5,000 electricity meters in the last **ten six** years. In case the Tenderer does not have the above experience, they must indicate as a respective Sub-contractor a specialized company that will possess the required experience and staff for the fulfillment of the above requirements. **Alternative to the experience of 5000 meters installed, the Tenderer of the subcontractor shall be registered at least to the 3rd rank in the Register of Contractors' Enterprises (MEEP), in the Electromechanical category.**

16. In D, Article 4:

~~The approval to employ, after the contract signing, a Subcontractor for Electromechanical **meter and communication unit installation** works, which for this particular project include meter connection/disconnection works and meter boxes installation/dismantling works on HEDNO network and maintenance works thereof, requires that:~~

- ~~The subcontractor has appropriate experience in **at least 5,000** electric energy meters installation **during the last ten years**, in proportion of the budget of the part of the work the subcontractor is responsible for and with a minimum of 500 electric energy meters. This experience is certified by the respective project owners.~~

OR

- ~~The subcontractor is registered to **at least** the **third** appropriate rank in the Register of Contractors' Enterprises (MEEP), in proportion of the~~

budget of the part of the work the subcontractor is responsible for, in the Electromechanical category.

~~The requirement for MEEP registration applies only to subcontractors of Electromechanical works who are going to be employed in the project and in particular in meter connection/disconnection works, boxes installation/dismantling works on HEDNO network and maintenance works thereof.~~

17. In D, Article 4:

Tenderers should, under the penalty of rejection, submit all the above items at the date of submission of tenders.

Technical Deviations from the Technical Specifications of the Tender are not allowed, but as it is mentioned in Issue B "Tendering Terms And Guidelines", the participants may offer technical solutions, which according to them satisfy in an equivalent manner the technical terms and requirements of the Tender.

18. In Article 5:

In order for HEDNO to certify the compatibility and successful operation of the offered Telemetering System and the communication devices with offered the L.V. meters, the tests described below shall be carried out during the technical evaluation of the tenders:

19. In D, Article 5:

In case of failure to fulfill any of the above requirements, the Tenderer, following written notice, is allowed for one month to attempt to lift of the reasons for the failure. During that period, the Tender may submit up to two (2) times samples (hardware or/and software) as well as complementary supporting documentation in order to attempt to lift the reasons of failure. In case of failures during those repeated tests, the offer shall be definitively determined as technically unacceptable.

Modifications for Issue B, Tendering Terms and Guidelines

20. In Article 1:

Issue 12 Technical Description of Necessary Works

Issue 13 Technical Description of the Communication Device

21. In Article 3:

Tenderers are bound by their tender for a period of three hundred and sixty ~~five~~ (360 ~~365~~) calendar days as of the date of the Request Receipt and Unsealing for Tenders.

22. In Article 4:

The above guarantee shall be valid ~~at least until the [insert date that leads to a validity period equal to or greater than the validity period of the tender],~~ **for a period at least three hundred sixty five (365) calendar days from the date of receipt and unsealing of the offers** with an extension option, provided it is requested by HEDNO with the consent of the Tenderers.

23. In Article 6:

2.5 Technical Deviations from the Technical Specifications of the Tender are not allowed.

~~Deviations from the Technical Specifications of the Notice of the Request for Tenders shall be acceptable only temporarily during the technical evaluation under the condition that the Tenderer properly fills and submits in Envelope A, the Table of Technical Deviations in accordance with the specimen provided in the Notice of the Request for Tenders. Before the contract signing, the offer should comply fully with the requirements of the Notice.~~

~~The above Table must also indicate the reasons for each deviation from what is specified in the Notice.~~

~~Within two (2) months from the opening of the economic offers and the successful Tenderer awarding, it is required that the technical deviations shall be removed and that the tests of the initial phase that were not performed due to technical deviations should be performed. If the tests are not successful, then within one (1) month from the notice to the Tender about the tests failure, the tenderer should submit new samples and perform the tests successfully. Successful completion of the tests is a prerequisite for the signing of the Contract.~~

~~In case of failure of the additional tests, the offer of the successful tenderer will be definitively determined as technically unacceptable and HEDNO shall proceed to evaluate the removal of possible technical deviations of the next in order of the lowest bid offer until a technically acceptable offer is found in order to assign the project.~~

24. In Article 6:

~~In case that the Tenderer has not submitted in Envelope A the Table of Technical Deviations or a Table of Technically Equivalent Solutions, he must submit a Declaration stating that the supplied project is in full compliance with the Technical Specifications of the Request for Tenders.~~

25. In Article 6:

3.1 The Participation Letter of Guarantee, according to the Company's attached specimen in Issue F and those set forth in Article 4 hereof.

26. In Article 6:

It is noted that the above Solemn Declaration ~~and its certification~~ shall not be dated earlier than ~~three (3) days~~ **one (1) month** before the Tenders submission date. In the award the Contractor is **the obliged to timely and adequately submit the documents of the tables 1 to 5 of Article 8 of Law. 1599/1986 (A 75) as applicable, as appropriate and in accordance with the terms and conditions of Articles 6 and 20 of PD 118/2007 and Article 25 of Law. 3614/2007.**

27. In Article 6:

~~3.14.1 A declaration of cooperation with the Tenderer shall be submitted for each subcontractor, sub-supplier or manufacturer of the equipment that the Tenderer will not manufacture which shall be signed by an authorized representative of the above and verified respectively.~~

28. In Article 6:

3.15.1 Solemn Declaration of Acceptance of Data Protection

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

a. shall comply with all relevant provisions of the data protection legislation of Greece (L.2472/97) and European Community and any other applicable data protection legislation in any relevant jurisdiction (together the "Data Privacy Legislation").

b. shall ensure during the implementation of the Pilot Project its compliance with the provisions of Directive 2012/27/EC and of European Commission Recommendation of 9 March 2012 (2012/148/EC) in relation to "Privacy by Design".

29. In Article 6:

3.15.2 Copy of the integrated information security management system (ISMS) according to the ISO/ IEC 27001 standard.

30. In Article 6:

~~3.15.3 In order to further ensure the Personal Data Protection and if the employment of subcontractors is announced, for each subcontractor the following should be submitted:~~

~~a. Copy of the certificate of Information Security Management System (ISMS) according to ISO/IEC 27001~~

~~OR~~

~~b. Solemn declaration of acceptance about Personal Data Protection.~~

~~Alternatively, a solemn declaration that at the time of the Contract signing a Tripartite Confidentiality Contract will be signed between the Contractor, the Subcontractor and HEDNO is acceptable.~~

~~The abovementioned Tripartite Confidentiality Contract is also required in case that a Subcontractor is announced after the Contract signing.~~

31. In Article 6:

3.16 The following Tables and Declarations per case:

In case the offer involves Technical deviations the following need to be included:

- ~~• Table of Technical Deviations fully completed.~~
- ~~• Declarations that the Tenderer accepts to remove the Technical Deviations, included in the above Table of Technical Deviations, in incorporation of the respective Technical Specifications set in the Request for Tenders.~~

~~Declaration that for all other points, the Tenderer complies, with the technical specifications of the Request for Tenders and that, if any deviations are ascertained in its tender that possibly occur from comments, clarifications, remarks etc., both during the evaluation of the content of ENVELOPE B and during the period until the Contract is signed, the Technical Specifications of the Request for Tenders shall apply and shall not provide for any time and/or financial claims, regardless of the phase during which the said deviations are communicated.~~

32. In Article 6:

3.16 In case of an offer including Table of Technically Equivalent Solutions:

33. In Article 6:

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.

3.17 Copy of the certificate for integrated Quality Assurance System according to EN/ISO 9001:2008.

3.18 For each subcontractor, sub-supplier or equipment manufacturer, a collaboration agreement with the Tenderer must be submitted, signed from authorized representatives of the above and certified.

34. In Article 6:

~~IF THE AFOREMENTIONED DECLARATIONS, AS THE CASE MAY BE, ARE NOT SUBMITTED, THE TENDER SHALL BE REJECTED.~~

35. In Article 6:

4.1. Tenders shall submit fully filled the Table of Experience and Professional Capability where it shall state the experience of tenderers for the criteria of Technical and Professional Capability in accordance with those mentioned in Article ~~3~~ 4, paragraphs A, B, C and D and E of the Issue A' "Invitation".

36. In Article 6:

~~In case of a tender not containing a Table of Technically Equivalent Solutions:~~

4.3 ~~In any case of offer, the~~ The Tenderers shall submit properly filled in the Technical Compliance Tables.

37. In Article 6:

4.5 Tenderers shall submit a declaration stating that they have the proper experience and properly specialized personnel to provide System operation, technical support and maintenance services, and fault recovery services for the entire metering and communications equipment **that shall include estimation of the required person-hours of the corresponding personnel for the implementation of field works (meters, boxes dismantling and installation, etc).** The head of the personnel must be a qualified Engineer. **It is noted that said personnel should be declared to HEDNO before their employment in the project.**

38. In Article 6:

Supplement No 3 to the Tender for the project "Pilot Telemetry and Management System for the Electric Power Supply Demand by Residential and Small Commercial Consumers and Implementation of Smart Grids"

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

- Quality management system (QMS) ~~in accordance with~~ according to EN/ISO 9001:2008.

39. In Article 6:

- Tenderers shall state in their tender the manufacturing plant and the inspection site of the types of meters under supply.
- **Integrated Information Security Management System (ISMS) according to ISO/IEC 27001 standard.**

40. In Article 6:

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

- Quality management system (QMS) ~~in accordance~~ according to with EN/ISO 9001:2008.
- **Tenderers shall state in their tender the manufacturing plant and the inspection site of the types of communication devices under supply.**
- **Integrated Information Security Management System (ISMS) according to ISO/IEC 27001 standard.**

4.16 **The AMI – MDM systems manufacturers** should have the following certifications at the time of bid:

- **Quality management system (QMS) according to EN/ISO 9001:2008.**
- **Integrated Information Security Management System (ISMS) according to ISO/IEC 27001 standard.**

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

- **Quality management system (QMS) according to EN/ISO 9001:2008.**
- **Integrated Information Security Management System (ISMS) according to ISO/IEC 27001 standard.**

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.**

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 of the specific Participant, according to the drawn sequence.
- 4.20 The Tenderer shall submit certification of compatibility with the COSEM-OBIS/DLMS standard for the application layer according to the procedure specified by the DLMS User Association.
- 4.21 The Tenderer shall submit certificate of laboratory certified by ISO / IEC 17025 that proves the system operation with communication speed of at least 4.8 kbits/s.
- 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.

41. In Article 6:

It is mandatory to submit the tender in an electronic form as well (CD contained in Envelope B). In case of disagreement, hard copies apply.

42. In Article 6:

5.1 Special printed forms or issues being available by the Company, based on which the Tenderer shall submit the tender offer. These printed forms or issues shall be clearly filled in. More specifically, the printed forms to be submitted by the Tenderer in relation to the present Notice of Request for Tenders, given that the Request for Tenders is carried out through the tendering system which includes engineering and construction, are the following:

- a. "Table of Total Prices"
- b. "Table of Materials and Prices"

in accordance with the specimens included in Issue F' "Appendices".

~~The offered price will include the cost of the deviations declared.~~

The Tenderers shall fill in the "Table of Total Prices" and the "Table of Materials and Prices" in which the offered priced that corresponds to every part of the Project, ~~including all the deviations that have been declared in the Table of Technical Deviations in Envelope A,~~ shall be declared.

Note that with respect to "Additional Services" as defined in the "Table of Materials and Prices", their cost cannot exceed EUR three hundred thousand (300.000,00).

43. In Article 8:

Article 8. Receipt and Unsealing of Tenders – Evaluation of Envelopes A and B

1.1. As date of the receipt of offers to the Tender is defined January, 30, 2015, Friday. The time for the end of the offers submission is 10:00 am. In case of force majeure, if the conference of the Unsealing – Evaluation Committee is not possible that day in order to receive the offers, this happens the very next working day that this is possible.

1.2. The Unsealing – Evaluation Committee meets in open session, one hour before the end of the deadline of the relevant article of the present. The beginning of the offers receipt is declared, after 10:00, each envelope offer is received, which is submitted to the committee, the receipt date and time is noted and the envelope is initialed.

Following, the end of the offers receipt is declared, after 10:00, the President announces the end of the time and declares the end of receipt.

1.3. The President of the Unsealing – Evaluation Committee communicates with the Registration Office in order to find if offers have been delivered by mail or courier according to paragraph 1.4 below and in case of positive, a member of the committee, after the president's command, fetches the offers in order to continue with the Tender procedure.

1.4. In case of mail submission or submission to the Registration office, the offer envelopes are accepted, only, if they are registered with the Registration Office the later by the date and time of the Tender, as defined above.

The Registration Office records the date and time of arrival, it is noted on the envelope and this is initialed by the competent employee.

The company does not bear any responsibility for any omissions in the content of the offers that are submitted by mail, nor for any delays in their arrival.

No envelopes or other documents will be retrieved from any post office, even if the company is notified in time.

2.1. Offers submitted after the end of the abovementioned deadline for any reason are not acceptable and are returned without being opened.

The unconditional acceptance of the offer by the late submitter is considered as acceptance of exclusion and waiver of litigation exclusion objection.

If the submitter disagrees and explicitly states to the President of the Unsealing – Evaluation Committee that will submit an objection, the envelope belated bid is received and unsealed with other offers.

2.2 The Unsealing – Evaluation Committee notes in the minute the unacceptable as belated submission, especially the exact time that the offer was submitted to the committee, and rejects it as unacceptable.

The same procedure is used in every case that the Unsealing – Evaluation Committee considers an offer as unacceptable.

3.1. The Unsealing – Evaluation Committee receives all the Tenderer offers according to 1.2 and 1.4 of the present Article, and following, records their name In the Table of Offers Unsealing.

3.2. The day of the unsealing also, the committee shall draw of tenderers in open session to determine the order of execution of tests required in the technical evaluation stage.

3.3. After the completion of the receipt and recording of the above, the unsealing follows and the examination of the offers by the Unsealing – Evaluation Committee on the same day, in open session at 12:00, right away, in order to verify the participation supporting documents and the technical evaluation supporting documents.

3.4. Following, the committee unseals the OFFER ENVELOPES with the order the participants have been recorded and verifies the existence of the envelopes A, B and C. If all three envelopes are not found in the OFFER ENVELOPE, this is noted in the minute and the offer is not acceptable and is returned as unacceptable.

4.1. In particular, envelope A is unsealed first, initialed and all documents and information available in the envelope and it is verified if the relevant documents are mentioned in the table of contents that the offerer should have drafted. The pages of all submitted documents should be numbered individually and the total number of pages of every document should be mentioned in the Table of Contents.

4.2. Following, the Committee unseals, with the order that all Tenderers are recorded, the Envelopes B, initials and all documents and information available are numbered (with recording of the number of pages of every document) that are in the envelope and checks if the relevant documents are mentioned in the Table of Contents that the Tenderer should have drafted.

4.3. Following, the end of the open session of the Unsealing – Evaluation Committee is declared.

4.4. The work of the Committee is continued with check of the content of the Envelopes A and B in one or more sessions and after the end of the technical evaluation an enforceable act is issued (Unified minute for the Envelopes A and B) according to the terms set in 3614/2007, as it applies. The minute for the envelopes A and B depicts the unified enforceable act according to those set in the no 117/18.7.2014 decision of the HEDNO Board of Directors and Law 3886/2010, as it applies.

5.1 In particular, the check of the envelope A from the Unsealing – Evaluation Committee consists of:

Following the recording of all items of Envelope A, the Committee shall check all typical and legalization details contained in the Envelope A and the inclusion of the required Tables and Declarations. Moreover, the Committee shall check whether there are any documents included in the ENVELOPE A beyond those provided for by the Notice of Request for Tenders, in which there are included terms and conditions which fall within paragraph 3 of article 5 hereof.

5.2 The Committee, through a common Decision for Envelopes A and B, after taking into consideration those provided for by the Notice of Request for Tenders, shall decide which tenders are to be excluded from the subsequent procedure, due to their non-compliance with the requirements

of the Notice of Request for Tenders as regards the completeness of ENVELOPE A and the adequacy of typical and legalization details as well with regards to the existence of commercial deviations.

5.3 During the check of items included in ENVELOPE A a validation check of the Participation Letters' of Guarantee authenticity, will be also performed, as stipulated in Ministry of Infrastructure Circular Δ17γ/09/154/ΦN437/21.09.2010.

5.4 In case the Letters are deemed counterfeit, Tenderers will be rejected due to non-submission of the appropriate Participation Letters of Guarantee (the counterfeit Letter does not meet the prerequisites of Law and is not considered guarantee – Council of State 2147/2001) and legal action will be filed to the responsible prosecutor.

6.1. During technical evaluation, the Committee shall certify the meeting of criteria, under exclusion penalty, that have been set in the technical scope of the Issue A "Invitation" and the ENVELOPE B as described above i.e. the technical evaluation has a pass/fail rationale and in no way poses a comparative evaluation of tenders and/or rating.

7.1 Apart from the evaluation envelope submitted by the participants as per above, tests of the offered equipment and evaluation of the offered AMI – MDM systems will also take place.

7.2 In order for HEDNO to certify the compatibility and successful operation of the offered System and the communication devices with the offered L.V. meters, the test described below shall be carried out during the technical evaluation of the tenders:

The tenderers shall install in their own computer the software of the AMI-MDM System (trial version).

They shall perform metering data extraction using the proposed communication devices PLC/ GPRS, from the offered meter types and concentrators.

The trial installation for PLC communication shall include an actual low voltage line. For equipment demonstration purposes, the tenderer shall install a concentrator at the output point of a predefined MV/LV transformer. Two smart meters of each offered type shall be installed at HEDNO's facilities, powered by the above transformer.

The same trial will be performed for GPRS communication.

They shall perform data extraction from meters with the appropriate data extraction software for on-site data collection via portable computer (laptop) or, respectively via portable concentrator (HHU) and transfer and import of the data collected via the AMI / MDM trial system.

They shall perform commands of bidirectional data transfers, between each kind/ type of meter and the AMI/ MDM trial system.

They shall perform a trial upgrade of the meter firmware using the proposed communication devices and software systems from the offered meter types and concentrators.

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

The interoperability and the interchangeability between meter types shall be demonstrated by the execution of commands and metering data transmission to and from the concentrator from the different offered meter types and is summarized to the following, at least:

- Data collection from all registers

- Data collection from load curves of active and reactive energy
- ON/OFF operation of the load switch

The call order of tenderers for testing will occur after the Unsealing and Evaluation Committee draw during the the receipt and unsealing of the tenders.

The above tests shall be performed at HEDNO's facilities and shall be considered successful if within three (3) days from the beginning of the testings, the full communication between the above devices is achieved in a consistent way.

In case of failure to fulfill any of the above requirements, the Tenderer, following written notice, is allowed for one month to attempt to lift of the reasons for the failure. During that period, the Tender may submit up to two (2) times samples (hardware or/and software) as well as complementary supporting documentation in order to attempt to lift the reasons of failure. In case of failures during those repeated tests, the offer shall be definitively determined as technically unacceptable.

7.3. In order to confirm the satisfactory operation of the offered Systems (AMI-MDM) it is possible, at the Company's fully and specifically justified judgment, for the three members of HEDNOS's Technical Evaluation Committee to perform a visit as described below.

The Tenderer shall indicate, in consultation with the Evaluation Committee, the place, the time for a three-day visit, to be carried out by the Three-Member Committee to an Electric Utility/ies or Network Operator/s, where the offered AMI - MDM Systems are already installed and in commercial operation, in order to assess their satisfactory operation.

The cost of the three members of the Technical Evaluation Committee's visit shall be borne by the Tenderer (accommodation, and air tickets costs).

8.1. The Evaluation Committee, after taking into consideration the criteria of rejection of the Notice of Request for Tenders and evaluating which of the offered as Equivalent Technical Solutions are accepted, shall decide which tenders shall be rejected. The Evaluation Committee, after taking into consideration the terms of the Invitation, decides about the Tenders that shall be rejected from the following procedure, due to non-meeting of the requirements of the Invitation regarding the completeness of the envelopes A and B and the adequacy of technical evaluation, issuing Minute for ENVELOPES A and B which is an enforceable act.

8.2 Afterwards, the Committee communicates the Minute for ENVELOPES A and B to all the participants, in order to exercise their legitimate rights, according L. 3886/2010, as applicable.

8.3 In case of rejection by the Committee, Envelope C shall be returned sealed and against receipt, along with the Participation Letter of Guarantee.

8.4 Such return shall be performed upon lapse of the deadlines set for raising objections as provided for by Article 10 hereof. These documents may also be returned prior to this deadline, if Tenderers have submitted a declaration in writing to the Chairman of the Committee, stating that they waive the right to raise an objection. Otherwise, Envelope C, as well as the Participation Letter of Guarantee shall be returned to the Tenderer in the following cases:

- A) after an adverse judgement on, possible objection, and, and lapse of the deadline for submission of injunctions without action,
B) after the relevant judgment on the submitted application for injunctions, if it is negative for the competitor.

1. ~~The receipt of the tenders shall be made by the Unsealing—Evaluation Committee, designated by HEDNO, on the specified date, time and place.~~

~~Tenders sent by mail or courier service shall be accepted, provided that they are delivered by the date and time specified by the Registration Office, as set forth in Article 1 of the "INVITATION".~~

2. ~~The Unsealing—Evaluation Committee shall receive the tenders and enter the Tenderers' trade names in the Tender Unsealing List, by order of delivery. Upon expiration of the tender receipt deadline, the Chairman of the Committee shall receive the submitted tenders from the Registration Office and draft the Tender Unsealing List including the trade names of the respective Tenderers and shall then declare the termination of the tender receipt procedure.~~

3. ~~The Committee shall then unseal the TENDER ENVELOPES in the order in which the Tenderers have been recorded and it shall check whether ENVELOPES A, B, and C are included. If these three envelopes are not contained inside the TENDER ENVELOPE, the tender shall not be accepted and it shall be returned as not accepted.~~

4. ~~The Committee shall check the content of ENVELOPE A' and B' and shall issue an enforceable act (Minute for ENVELOPES A' and B'), according the Law 3614/2007, as currently in force. The Minute for ENVELOPES A' and B' will reflect the results of the majority of Committee's meetings and will be an enforceable act according to the No 117/18.7.2014 decision of the Board of Directors of HEDNO and the Law 3886/2010, as currently in force. More specifically, ENVELOPE A' shall be firstly unsealed, all documents and data included therein shall be initialed and the Table of Contents that the Tenderer is obligated to have drawn up shall be checked to ascertain whether the relevant documents required are listed.~~

~~The check of the Envelope A by the Unsealing—Evaluation Committee consists of the following:~~

- 4.1. ~~Following the recording of all items of Envelope A, the Committee shall check all typical and legalization details contained in the Envelope and the inclusion of the required Tables and Declarations. Moreover, the Committee shall check whether there are any documents included in the ENVELOPE A beyond those provided for by the Notice of Request for Tenders, in which there are included terms and conditions which fall within paragraph 3 of article 5 hereof.~~

- 4.2. ~~The Committee, through a common Decision for Envelopes A' and B', after taking into consideration those provided for by the Notice of Request for Tenders, shall decide during the same or next meeting, which tenders are to be excluded from the subsequent procedure, due to their non-compliance with the requirements of the Notice of Request for Tenders as regards the completeness of ENVELOPE A and the adequacy of typical and legalization details as well with regards to the existence of commercial deviations.~~
- 4.3. ~~During the check of items included in ENVELOPE A a validation check of the Participation Letters' of Guarantee authenticity, will be also performed, as stipulated in Ministry of Infrastructure Circular Δ17γ/09/154/ΦΝ437/21.09.2010.~~
- ~~In case the Letters are deemed counterfeit, Tenderers will be rejected due to non-submission of the appropriate Participation Letters of Guarantee (the counterfeit Letter does not meet the prerequisites of Law and is not considered guarantee — Council of State 2147/2001) and legal action will be filed to the responsible prosecutor.~~
- 4.4. ~~Afterwards, the Committee shall unseal, in the order in which the Tenderers have been recorded, ENVELOPE B, shall initial all documents and data included therein and check the Table of Contents that the Tenderer is obligated to have drawn up to ascertain whether the relevant documents required are listed.~~
5. ~~During technical evaluation, the Committee shall certify the meeting of criteria, under exclusion penalty, that have been set in the technical scope of the Issue A' "Invitation" and the ENVELOPE B as described above i.e. the technical evaluation has a pass/fail rational and in no way poses a comparative evaluation of tenders and/or rating.~~

5.1. ~~Technical Evaluation~~

~~Apart from the evaluation folder as per above, the following tests will also take place.~~

5.1.1. ~~Offered Equipment Testing~~

~~In order for HEDNO to certify the compatibility and successful operation of the offered Telemetering System and the communication devices with offered the L.V. meters, the test described below shall be carried out during the technical evaluation of the tenders:~~

- ~~The tenderers shall install in their own computer the software of the AMI-MDM System (trial version).~~
- ~~They shall perform metering data extraction using the proposed communication devices PLC/ GPRS, from the offered meter types and concentrators.~~
- ~~The trial installation for PLC communication shall include an actual low voltage line. For equipment demonstration purposes, the tenderer shall~~

install a concentrator at the output point of a predefined medium to low voltage transformer. Two smart meters of each offered type shall be installed at HEDNO's facilities, powered by the above transformer.

- The same trial will be performed for GPRS communication.
- They shall perform data extraction from meters with the appropriate data extraction software for on-site data collection via portable computer (laptop) or, respectively via portable concentrator (HHU) and transfer and import of the data collected via the AMI / MDM trial system.
- They shall perform commands of bidirectional data transfers, between each kind/type of meter and the AMI/ MDM trial system.
- They shall perform a trial upgrade of the meter firmware using the proposed communication devices and software systems from the offered meter types and concentrators.
- They shall perform a data transfer test between any meter kind/type and the offered display device (In Home Display).

The above tests shall be performed at HEDNO's facilities and shall be considered successful if within three (3) days from the beginning of the testings, the full communication between the above devices is achieved in a consistent way.

In case of failure to fulfill any of the above requirements, the offer shall be definitively determined as technically unacceptable.

5.1.2. Evaluation of the offered Systems AMI – MDM

In order to confirm the satisfactory operation of the offered Systems (AMI-MDM) it is possible, at the Company's discretion, for the three members of HEDNOS's Technical Evaluation Committee to perform a visit as described below:

The Tenderer shall indicate, in consultation with the Evaluation Committee, the place, the time for a three-day visit, to be carried out by the Three-Member Committee to an Electric Utility/ies or Network Operator/s, where the offered AMI – MDM Systems are already installed and in commercial operation, in order to assess their satisfactory operation.

The cost of the three members of the Technical Evaluation Committee's visit shall be borne by the Tenderer (accommodation, and air tickets costs).

The Evaluation Committee, after taking into consideration the criteria of rejection of the Notice of Request for Tenders and evaluating which of the offered as Equivalent Technical Solutions are accepted, shall decide which tenders shall be rejected. The Evaluation Committee, after taking into consideration the terms of the Invitation, decides during a following meeting about the Tenders that shall be rejected from the following procedure, due to non-meeting of the requirements of the Invitation regarding the completeness of the envelopes A' and B' and the adequacy of technical evaluation, issuing Minute for ENVELOPES A and B which is an enforceable act. Afterwards, the Committee communicates the Minute for Supplement No 3 to the Tender for the project "Pilot Telemetry and Management System for the Electric Power Supply Demand by Residential and Small Commercial Consumers and Implementation of Smart Grids"

~~ENVELOPES A and B to all the participants, in order to exercise their legitimate rights, according L. 3886/2010, as currently in force.~~

6. ~~In case of rejection by the Committee, Envelope C is returned sealed and against receipt, along with the Participation Letter of Guarantee.~~

~~Such return shall be performed upon lapse of the deadlines set for raising objections as provided for by Article 9 hereof. These documents may also be returned prior to this deadline, if Tenderers have submitted a declaration in writing to the Chairman of the Committee, stating that they waive the right to raise an objection. Otherwise, Envelope C, as well as the Participation Letter of Guarantee shall be returned to the Tenderer following the issue of a possible decision by HEDNO to overrule the objection and/or appeal.~~

~~The documents contained in ENVELOPE A and B, except for the Participation Letter of Guarantee, shall be kept by HEDNO, at its discretion.~~

~~The process of unsealing the envelopes shall be carried out in the presence of the Tenderers' representatives, who can attend the process.~~

44. In Article 9:

- ~~of the contractual price that appears in Envelope C in the Table of Materials and Prices, corresponding to the project of 170,000 meters, and the new connections during the implementation phase, incorporating all deviation costs that have been documented in the Table of Technical Deviations in Envelope A (where applicable), which will be removed before the Contract signing in full compliance with the Notice's requirements, as following:~~

45. In Article 6:

- ~~It is noted that the contractual budget will also include the~~ of the price for the option of procurement of metering and communication equipment, up to €1.5 million.

Modifications for Issue C, "Special Terms"

46. In Article 3:

2. Whenever the Contractor addresses to the Corporation, he shall be obliged to communicate the relevant document to the **HEDNO Corporation's** "Authorized Engineer" for the relevant works, who shall be duly indicated **also** to the Contractor in writing, following the signing of the Contract.

47. In Article 5:

1. The Contractor shall submit for approval, ~~upon signing of the Contract and certainly before the beginning of the Project's implementation,~~ the sub-contractors he will use.

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

2. The Sub-contractor will be approved, when, ~~except for the mentioned in the above paragraph,~~ he has additionally the following requirements in order for his technical experience and adequacy to be evaluated by the Company:

~~The Sub-contractor shall be registered to the Register of Contractors' Enterprises (MEEP) and belong at least to the lowest required category of works (E/M and Energy) and ranks, for the part of the Project and the amount of his Contract conferred on by the Contractor. MEEP registration is required only for Electromechanical works subcontractors that will be employed in the project, and in particular for meter connection/disconnection works, for boxes dismantlement/installation works on HEDNO network and maintenance works thereof. In case that the subcontractor has experience in electrical energy meters installation (in proportion to the budget and at least 500 electrical energy meters) certified by the respective project owners, registration to the Register of Contractors' Enterprises (MEEP) is not required."~~

- **Quality Management System according to EN ISO9001: 2008 or equivalent certification issued by bodies having their seat in other countries or other evidence for equivalent measures of quality assurance.**
- **Sufficient in number, qualified, specialized personnel having all qualifications and meeting all requirements provided for by the Greek law and the relevant Regulations, in order to ensure timely and faultless accomplishment of the Project.**

Such experience in construction must be certified in the Table of Experience and Professional Capability that the Contractor is obliged to submit.

For that purpose, certificates of Satisfactory Execution (timely and skillful execution) issued by the owners of such projects shall also be submitted.

The Subcontractor who shall install meters and communications equipment, in order to be approved for employment, shall additionally:

- **Employ personnel with Electric Technician Permit "Speciality F" or any equivalent certification according to Greek Law, or equivalent certification issued by competent bodies having their seat in in other countries.**

- Have experience in installation of 5,000 electrical energy meters during the last decade. This experience is certified from the owners of the respective projects

OR

- Be registered at least to the 3rd rank in MEEP, in the E/M category.

The Equipment Subsupplier or Subcontractor, in order to be approved, shall additionally:

- List of references proving that the prospective sub-supplier or subcontractor is an experienced and reliable firm to undertake the manufacturing or installation of the equipment of the same type and similar or larger size than the one offered.
 - Current technical brochures and a pricelist of the proposed equipment that is manufactured by the Sub-supplier, as well as pricelists for the spare parts of the said equipment supplied by the Sub-supplier.
 - Infrastructure and capabilities of the Sub-supplier as regards the design, manufacturing and operation of the equipment as well as concerning the commercial and financial possibilities of their business.
 - Certificate that they can meet the requirements of the Contract (quality, tests etc.) for the specific equipment, as well as the general requirements of the Contract.
3. For approval, before the establishment of ~~each~~ the Sub-contractor into the Project, the Contractor shall submit to the Supervising Authority, a joint application of the Contractor and Sub-contractor that will include the following:

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:

48. In Article 5:

3. Service providers **for Small Works and Support:**

Also the Contractor is possible to use ~~in many cases~~ personnel that are not Sub-contractors, according to the definition of the present article (~~their subjects do not fall within the provisions of the Tender subjects that require experience~~), nor have an employment relationship with the Contractor but they provide services to the Contractor e.g. with rendered services invoice, or private agreement etc.

49. In Article 6:

- 3.1. For the approval of subcontractor for the installation of meters and communication devices, and following the procedure in paragraph 2 of this article, the provisions of article 5 must be met.
- 3.2. For the approval of subsupplier or equipment subcontractor, and following the procedure in paragraph 2 of this article, the provisions of article 5 must be met.

~~3.1. Equipment Sub-supplier or Subcontractor~~

- ~~a. List of references proving that the prospective sub-supplier or subcontractor is an experienced and reliable firm to undertake the manufacturing or installation of the equipment of the same type and similar or larger size than the one offered.~~
- ~~b. Current technical brochures and a pricelist of the proposed equipment that is manufactured by the Sub-supplier, as well as pricelists for the spare parts of the said equipment supplied by the Sub-supplier.~~
- ~~c. Infrastructure and capabilities of the Sub-supplier as regards the design, manufacturing and operation of the equipment as well as concerning the commercial and financial possibilities of their business.~~
- ~~d. Certificate that they can meet the requirements of the Contract (quality, tests etc.) for the specific equipment, as well as the general requirements of the Contract.~~

~~3.2. For the Subcontractor who shall install the System's electromechanical and communications equipment.~~

~~For the approval of the Subcontractor for the installation of the System's electromechanical and communications equipment, in compliance with the procedure provided for in par. 2 of the present Article, the following conditions shall be met cumulatively:~~

- ~~a. The subcontractor shall have already executed works for the installation of at least 5,000 electricity meters during the last six (6) years.~~
- ~~b. The subcontractor shall have to possess:~~
 - ~~• Quality Management System according to EN ISO9001: 2008 or equivalent certification issued by bodies having their seat in the member states or other evidence for equivalent measures of quality assurance.~~
 - ~~• Sufficient in number, qualified, specialized personnel having all qualifications and meeting all requirements provided for by the Greek law and the relevant Regulations, in order to ensure timely and faultless accomplishment of the Project.~~
 - ~~• Personnel with Electric Technician Permit "Speciality F" or any equivalent certification according to Greek Law, or any equivalent certification issued by competent bodies within the EU.~~

c. ~~Such experience in construction must be certified in the Table of Experience and Professional Capability that the Contractor is obliged to submit.~~

d. ~~Certificates of Satisfactory Execution (timely and skillful execution) issued by the owners of such projects shall also be submitted for the aforementioned executed projects.~~

50. In Article 13:

1. The present Article describes ~~the main characteristics~~ **the procedure** of the temporary and the final acceptance of the project, while a more analytic description for acceptance tests and guaranteed performance results are provided in Article ~~15~~ 17.

51. In Article 16:

The testing will be conducted in Phase A', that involves the establishment of the central systems and the replacement **and operation** of 10,000 meters **as well as the 500 in-home displays** ~~and~~ before the beginning of Phase B.

The testing will take place at the installed **main** central system and will involve Phase A' installed meters and concentrators.

The Table 1 below presents the functions and limits for this test, **in the column Success Criteria (Phase A).**

Table 1: Operational Tests and Success Percentages

No	Description	Functions	Success criteria Phase A	Success criteria Guaranteed Levels of Good Operation (Acceptance)
	Meter Installation	Registration of the meters to the system	99.8%	

No	Description	Functions	Success criteria Phase A	Success criteria Guaranteed Levels of Good Operation (Acceptance)
1	<p>Installation of in-house displays</p> <p>Send and Receive a message to the In-Home Displays</p>	<p>Registration of in-house displays to the system, assignment of displays to the relevant meters</p> <p>Send and Receive a message to the In-Home Displays</p> <p>(100 in-home displays designated by HEDNO)</p>	<p>≥99.8 95%</p> <p>Within 3 hours</p>	<p>≥97%</p> <p>Within 3 hours</p>
2	<p>Activation of Power Limitation</p>	<p>Activation of Power Limitation to meters of selected customers by HEDNO from an indicative list of cut-offs.</p> <p>(100 meters indicated by HEDNO)</p>	<p>≥95%</p> <p>Within 3 hours</p>	<p>≥97%</p> <p>Within 3 hours</p>
3	<p>Disconnection of switching element</p>	<p>Disconnection of meters from an indicative list of cut-offs.</p> <p>(100 meters indicated by HEDNO)</p>	<p>≥95%</p> <p>Within 3 hours</p>	<p>≥97%</p> <p>Within 3 hours</p>

No	Description	Functions	Success criteria Phase A	Success criteria Guaranteed Levels of Good Operation (Acceptance)
4	Reconnection of switching element	Reconnection of meters from an indicative list of reconnections. (100 meters indicated by HEDNO)	≥95% Within 3 hours	≥97% Within 3 hours
5	Registers' data reading	Registers' data reading from all registered meters. Reading time period 00:01-08:00	≥95% Within 8 hours	≥97% Within 72 hours*
6	Load curves reading	Reading of load curves from all registered meters. Reading time period 00:01-08:00	≥95% Within 8 hours	≥97% Within 72 hours*
7	Auto-diagnostic messages for the State of the Meter (Alarm, etc.)	Reading of the log file from all registered meters.	≥95% Within 24 hours	≥97% Within 8 hours
8	Setting Operation Parameters	Setting of tariff zones for selected by HEDNO meters from an indicative list of suppliers (100 meters indicated by HEDNO)	≥95% Within 3 hours	≥97% Within 24 hours
9	Processing of metering data by MDM	Processing and validation of metering data for all registered meters.	≥95% Within 24 hours	100% Within 72 hours

No	Description	Functions	Success criteria Phase A	Success criteria Guaranteed Levels of Good Operation (Acceptance)
10	Provision of validated metering data for billing purposes	Availability of validated metering data from the registers for billing purposes in the central system.	≥99.5 95% Within 72 hours	100% Within 72 hours*
11	Data export to the Information Platforms	Availability of metering data from the registered meters to the Consumer Web-Based Platform, Mobile Platform	≥95% Within 24 hours	100% Within 72 hours*

** Or in any case accordance with the specific institutional framework with the signature of the operation and maintenance contract for the guaranteed levels of good operation.

For the start of the phase A tests, a specific date is jointly defined. The tests are performed in parallel or sequentially. The expected test result should be accomplished for the specified percentage within the specified for each test time frame, according to the specified in the table above, independent of the number of repetitive attempts (i.e. multiple attempts for reconnection of the 100 meters within 3 hours, for test No4).

In case that during those tests deviations occur from the originally defined success criteria, according to the table above, a new date is agreed for the **failed tests**, at most one month after the completion of those tests.

In case that during those additional tests deviation of more that 5% occur from the success criteria according to the table above, the contract is terminated (i.e. failure to send and confirm receipt of a message for more than 10 in-home displays of the 100, test No1). No case that during those additional tests deviations less than 5% occur from the success criteria, a new date for the failed tests is agreed at most one month after the completion of the tests. (i.e. failure to send and confirm receipt of a message in more than 5 in-home displays from 100, test No 1).

In case of deviations from the specified success percentage of the last tests, as they are presented in the table above, the contract is terminated.

The 5% percentage refers to each test separately and is a separate deviation.

I.e. Assume that in the initial tests the system fails in tests 3 and 4 with success percentages 89% and 91% respectively. New tests are scheduled at most one month after the initial tests, only for tests 3 and 4. Assume that for those tests the success percentages are 91% and 96% respectively. A retest is scheduled for test 3 at most one month after the completion of the last test. In case that in this retest the success percentage is not at least 95% successful for test 3, the contract is terminated.

For the acceptance of the backup central system, the abovementioned procedure is followed and the tests of the table are realized for the backup central system operation. In addition to the tests above, interconnection tests and data transfers between the central systems will be performed, with transition test from one central system to the other, within the specified time and data completeness check for the backup central system.

~~The above criteria should be met within one (1) month from the beginning of the testing. If the above criteria are not met within the one month of testing, it is possible to repeat testing for an additional month.~~

~~In case of deviations exceeding 5% of the initial qualification rate, during these additional testing, the contract will be terminated and the relevant penalty clauses shall apply.~~

~~In case of deviations below 5% of the initial qualification rate, during these additional testing, an additional month of testing shall be provided.~~

~~If the limits are still not reached, the contract will be terminated.~~

52. In Article 17:

1. The equipment shall be designed such as the successful communication and meter data collection performance from the entire set of the telemetered LV metering points is maximized. The system performance should exceed the guaranteed level of good performance as defined in the article 16 table, above (last column).
2. The acceptance test aims to the verification of the guaranteed level of good performance. The acceptance test shall be performed in the installed central system, shall include the installed meters and concentrators of phase B and shall be implemented as follows:

- The duration of the test is defined as the period of seven (7) consecutive days of uninterruptible operation of Article 13 herein. The Contractor in written application defines this period.
 - For every one of the 7 days of the tests, the system operates with the entire set of the integrated metering points of the system.
 - The system shall issue a three-days rolling periodic report of the telemetering results, from which the percentages of successful communication and meter data collection from the entire set of the integrated to the system metering points shall be possible.
 - HEDNO may confirm the accuracy of the information provided in the abovementioned reports in any way, including own tests, tests and procedures offered by third parties, as well as validation procedures that the Contractor proposes and HEDNO approves.
 - For the calculation of the abovementioned percentage, points for which it is impossible to communicate and collect data due to continued customer power outage are not considered. To that end, the system shall issue a report, taking into consideration, automatically, through the HEDNO information system, the customer connections that are "disconnected due to dept". In the opposite, points where the possible fault is due to equipment installed by the Contractor or the way of installation, are considered.
 - In the abovementioned report, metering points up to 5% of the total project customers, where temporary difficulties due to extraordinary large-scale events are not considered. For the proof for such events, the Contractor is solely responsible.
 - For the exclusion of metering points HEDNO approval is required, upon thorough report from the Contractor.
 - According to the above, for every test day, the corresponding successful communication percentage is calculated for each test, as well as the mean of 7 days of the test, which is defined as System Performance Percentage with respect to the specific test.
3. The Acceptance Test is considered finished after 7 consecutive days if no daily percentage of rolling three-day period is not below the success criteria of the table above per test. If this is not satisfied, the acceptance test is performed again in its entirety, within the period that the Contractor shall define in writing during the test operation period.
 4. For each test of the Table, if the success percentage with respect to the corresponding test is up to 5% less than the one defined in the table above for acceptance, then for each percentage point deviating for the guaranteed, a penalty clause is imposed for not meeting the SLA according to Article 6 of the Contract.
 5. In case that the success percentage is below the percentage of the table above by more than five (5) points per test or the test cannot be completed within the test period, the contract is terminated.
 6. In the Acceptance Test is included the load test for concurrent access with the Customer Web Platform at least for 3% of the included customers, for retrieving information about the load curve for each. This test procedure shall be proposed by the contractor and shall be agreed by HEDNO.

7. Following the Acceptance Test and during the System Operation, the system must exceed the Acceptance Test performance with respect to the success percentages for each test, for the entire operation period.
- 7.1. The rolling reports produced by the system shall be checked against period of check of guaranteed level of good performance quantities, which is defined to be one month.
- 7.2. Whenever a subset of meters is mentioned in the table above, the set of meters that this operation applies to for the specific day is considered (i.e. list of disconnections for test 3, list of reconnections for test 4, etc). In case that in the above calendar month there is no corresponding meter list (i.e. meter list for tariff modification, test 8) the test is considered successful.
- 7.3. For each percentage unit deviation of the success percentage from the system guaranteed level of good performance, a penalty clause is imposed for shutdown or due to temporarily reduced performance operation according to the contract.
- 7.4. If during the period that starts with the end of the test operation period and end with the end of the guarantee period, a system shutdown or operation with daily Performance Rate under 50%, a penalty clause is imposed according to the Contract.
- 7.5. For operation with temporarily diminished performance, above the percentage that corresponds to system shutdown (50%), a penalty clause is imposed according to the degree of deviation of the success percentage from the guaranteed level of good performance of the table, according to the Contract and the Operation and Maintenance Contract.
- 7.6. As for the success percentages and performance percentages during operation, no distinction is between the central system operations and on-site operations by Contractor personnel, provided that each confirmation is appropriately and in time recorded in the Central System. Especially for tests 9, 10 and 11 that correspond to metering data availability to Energy Market Parties and consumers that are result of telemetering and from HEDNO approved procedures of automatic gap filling, validation, estimation and edit: **In case of Contractor failure with tests 9, 10 and 11, the contract is terminated**, except in cases of force majeure or exceptional large-scale events. The proof of such unexpected situations is responsibility of the Contractor.

~~The testing will be conducted upon the completion of Phase B', involving the replacement of all meters.~~

~~The test will take place at the installed central system and will involve the installed meters and concentrators of Phase B. For the testing purposes the above table is applicable (Table 1).~~

~~The above criteria should be met within one (1) month from the activation of provisions on Temporary Acceptance, as per Article 12.~~

~~If the above limits are not reached within the one month of testing, it is possible to repeat testing for an additional month.~~

~~In case of deviations exceeding 5% of the initial qualification rate, during these additional testing, the contract will be terminated and the relevant penalty clauses shall apply.~~

~~In case of deviations below 5% of the initial qualification rate, during these additional testing, an additional month of testing shall be provided.~~

~~If the limits are still not reached, the contract will be terminated.~~

53. In Article 20:

The tenderer awarded the project shall sign a 'CONFIDENTIALITY AGREEMENT' along with the Contract of execution with HEDNO.

In addition:

D. 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.

E. 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 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 Authority (notification, receipt of license).
10. Be up to date with Decisions, Directives, Recommendations of the Authority that concern the Responsible for Processing.

F.

- 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 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.

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.

Modifications for Issue F, Appendices

54. In B. TECHNICAL PART, Article 1, Specimen A.

- Issue 13 Technical Description of Communication Device

55. In Article 2, Specimen A:

Supplement No 3 to the Tender for the project "Pilot Telemetry and Management System for the Electric Power Supply Demand by Residential and Small Commercial Consumers and Implementation of Smart Grids"

1. Option that involves:

The possibility of procurement of metering and communication equipment of up to **1,5 million €** ~~10% of the total contractual subject matter~~ relevant to the aforementioned equipment (metering and communication equipment) as provided by the Tables of Materials and Prices.

56. In Article 4, Specimen A:

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.** The advance payment will be interest bearing with the six-month Euribor rate, that will valid for two working days before the tenders' submission date, renewed every six months, with a margin of eight (8%) percent.

57. In Article 5, Specimen A:

2.1 Partial deadline for the design, supply, installation and commissioning of the combined AMI/MDM system (Phase A').

The partial deadline for the completion of the design, supply, installation and commissioning of the combined AMI/MDM **main** central system and also installation and operation of at least 10.000 meters and at least **500** ~~100~~ in-home displays, shall be set at **nine (9) months** from the signing date of the project's contract.

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

1. The interconnection and the communication of **the Main Central System** ~~Systems~~ with the information system "ERMIS HEDNO"
2. The implementation of consumer web-portal

58. In Article 5, Specimen A:

2.2 Partial deadline for the installation and operation start of the backup central system.

The partial deadline for the installation and operation start of the backup central system is set at **twelve (12) months** from the signing date of the project's contract.

59. In Article 5, Specimen A:

3.1 Within **thirty (30)** ~~15~~ days from the signing of the Contract, the Contractor shall submit the detailed schedule of the Project's

construction, in accordance with Article 23 of the General Terms, in cooperation with the Supervising Office.

This schedule should fully, clearly and accurately cover all categories and phases of work carried out by the Contractor, in order to achieve and deliver to the Corporation an operationally and constructively sound System.

The total detailed schedule of the project will be approved by the Supervising Office within ~~five~~ **twenty** (5 **20**) days, while the Contractor will be informed in written form in case of disagreement. The submitted schedule for approval must necessarily provide for the installation and commissioning of the Central System within nine (9) months from the signing of the Contract and the replacement and the integration of 10.000 meters **as well as the integration of at least 500 in-home displays** into the System. The replacement and integration of all meters and communication equipment (modems) to the System in selected geographic areas of the Distribution Network must be completed within a total of twenty four (24) months from the signing date of the project's Contract.

60. In Article 6, Specimen A:

- 3.1.1 For total interruption of operation or for operation with daily ~~performance rate~~ **Performance Rate** per Guaranteed Operation Quantity lower than 50%, a daily penalty equal to 0.04% of the Contractual Price of the Project, as set in Article 3 of the present Contract Agreement, increased with the price for any additional works and Addendums to the Contract, shall be imposed. For shorter interruptions, the respective fraction of the aforementioned penalty shall apply.
- 3.1.2 For operation with temporarily reduced capacity exceeding the rate corresponding to total interruption of operation, a daily penalty to be calculated according to the deviation of the performance rate from the **corresponding** guaranteed level of good operation, as set out in Article 17 of the Special Terms, shall be imposed. The penalty imposed shall amount to ~~0,001~~ **0.0005**% of the Project Contractual Price, as set in Article 3 hereof, increased by the price for any additional works and Addendums to the Contract, per percentage point of deviation.
- 3.2 Penalties under this paragraph shall be imposed if the cumulative sum of hours of total interruption of operation and of hours of operation with temporarily reduced capacity exceeds the grace period of a total of forty eight (48) hours.

The calculation of the System's performance shall be carried out as determined in Article ~~16~~ **17** of the Special Terms for the System's acceptance test and shall be checked following any collection of metering data performed by the System.

- 3.3 The total of the above imposed penalties may not cumulatively exceed **10%** ~~3%~~ of the Project's Contractual Price, as set out under Article 3 hereof, increased by the price of any additional works and Contract Addendums.

61. In Article 6, Specimen A:

1. Penalties for non-achievement of guaranteed figures during the Acceptance Test

- 1.1. In case that, during the acceptance test, the guaranteed figures of the Project, are not achieved (**as defined in article ~~16~~ 17 of Issue C "Special Terms"**) and on condition that the Project has not been rejected for such reason, the Contractor shall pay, for each percentage point of deviation below the respective guaranteed figure, a penalty equal to **0.5** ~~1%~~ of the Contractual Price of the Project, as set in Article 3 hereof, increased by the price for any additional works and Addendums to the Contract.
- 1.2. For deviation fractions, penalties shall be calculated in respective fractions of the penalty.
- 2.** All penalties cited in this Article, summed up with the penalties also imposed to the Contractor for other reasons, as provided for by other clauses of the Contract, shall in no case exceed 15% of the Contractual Price, increased by the price for any additional works and Addendums to the Contract.
- 3.** **In any case, after the exhausting the maximum penalty clauses the contract is terminated.**

62. Add the following Article after Article 7 in Specimen A:

Article 1. Personal Data Security and Protection

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 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 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.

63. Articles 8 through 11 are renumbered as Articles 9 through 12 in Specimen A.

64. In Article 5, Specimen B:

2.3 Maintain the equipment throughout the maintenance term, in accordance with its guaranteed features under which the equipment was procured. The recovery of the equipment's guaranteed features shall be carried out at the Contractor's expense ~~who, at his own judgment, may repair or replace the equipment.~~ The term guaranteed features includes the main performance features that may be objectively measured. **The entire software (main software, database systems, operating systems, rest auxiliary software) shall be at the latest version every time, as provided by the respective manufacturer. For each upgrade of hardware/software written HEDNO approval is required.**

65. In Article 5, Specimen B:

2.4 Undertake the obligation to perform preventive inspection and maintenance of the equipment installed and at regular intervals **during the entire duration of the contract**. The execution of the preventive maintenance shall be agreed promptly in advance and shall not require the interruption of the System's operation.

Checks every abnormal situation, which would be indication of tampering or power theft. In case of findings, the Contractor crews shall notify the Area immediately in order for the Area to proceed to the necessary procedures, and also notify the Area in writing.

66. Article 5, Specimen B , Issue F:

~~The 72-hour period excludes Saturdays, Sundays and public holidays.~~

67. In Article 10, Specimen B:

The industrial import price index for computers and peripheral equipment (~~HEDNO~~ **PPC** Code 6402 of Table VI) for the 6th month of the ith 6 month Contract extension period (i=1,2,.....10).

Lo = The industrial import price index for computers and Peripheral equipment (~~HEDNO~~ **PPC** Code 6402 of Table VI) for the 60th month for the commencement of the five year Maintenance period.

Mi = The Social Security Foundation's daily salary index for office machine Constructions and computers (CODE 30 of Table VII) for the 6th month of the ith 6 month Contract extension period (i=1,2,.....10).

Mo = The Social Security Foundation's daily salary index for office machine Constructions and computers (CODE 30 of Table VII) for the 60th month for the commencement of the five year Maintenance period.

The above mentioned Tables are included in the ~~HEDNO~~ **PPC** MONTHLY PRICING BULLETIN FOR ELECTRICITY AND RAW MATERIALS which is posted on HEDNO's website www.deddie.gr, as applicable.

68. Add the following Article after Article 9 in Specimen B:

Article 10. PERSONAL DATA SECURITY AND PROTECTION

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 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 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.

69. Articles 10 through 19 are renumbered as Articles 11 through 20 in Specimen A.

70. In Article 5, Specimen B:

7. Penalty clauses due to operation shutdown and due to temporarily reduced capacity operation.

If during the period that starts with the end of the system test operation period and ends with the end of the warranty period, a complete shutdown of the system operation happens or the system operates with temporarily reduced capacity, due to Contractor fault or equipment and software fault, the Contractor, subject to HEDNO for all obligations arising from the Contract, shall pay the following penalties:

- 7.1 For complete shutdown or for operation with daily percentage rate per guaranteed operation level less than 50%, penalty clause for each day equal to 0.04% of the contractual price of the project as this is set in Article 3 of this Contract, plus to the price of any

- additional works and the Supplements of the Contract. For outages of smaller duration, a fraction of the above penalty clause is applied.
- 7.2 For operation with temporarily reduced capacity, above the percentage that corresponds to complete operation shutdown, Penalty Clause for each day that shall be calculated from the corresponding guaranteed level of good operation of Article 17 of Special Terms. The applied penalty clause is 0.0005% of the Contractual Price of the Project as this is set in Article 3 of this Contract, plus the price for any additional works and Contract Supplements, for each percentage unit of deviation.
- 7.3 The application of penalty clauses of this paragraph is done if the cumulative sum of the complete operation shutdown and the hours of operation with temporarily reduced capacity exceeds grace period of forty eight (48) hours.
- 7.4 The calculation of the Performance Rate shall be performed as set in Article 17 of the Special Terms for the System Acceptance Test and shall be checked after every meter data collection by the System.
- 7.5 The total amount of the above penalty clauses cannot exceed cumulatively 10% of the Contractual Price of the Project, as this is set in Article 3 of this Contract, plus the price of any additional works and Contract Supplements.
- 7.6 In any case, after the exhaustion of the maximum penalty clauses the contract is terminated.

71. At the end of Specimen B, add the following text as Annex to Specimen B:

Article 1 Scope of the Contract

1. The scope of the Contract lies in the thorough, timely, flawless, workmanlike execution of the work described in the Contract in accordance with all the terms thereof and these general terms whereas this Annex sets forth the General Terms of the Contract and is an integral part thereof.
2. It is expressly stipulated and unreservedly admitted that the Contractor is prohibited from deviating from the obligations and undertakings of the contract and these General Terms, and the Contractor is obliged to strictly comply with all terms and conditions.

Article 2 Commence and Progress of Work

1. The Contractor is under obligation to execute all work within the deadlines stipulated in the Contract.

2. If the Contractor does not abide by the deadlines set in the Contract for work completion, the Contractor shall be obliged to pay HEDNO the penalty clause fixed by the latter. In addition HEDNO, at its discretion, shall be entitled to rescind the Contract at the contractors' fault.

Article 3 Work Execution

The stipulated work shall be executed in the site set forth in the contract. Once the Contractor receives the materials listed in the contract, the Contractor shall bear all responsibilities for their safeguard and shall bear all risks of damage, destruction or loss including force majeure events, until such objects are returned to HEDNO.

1. **Law – order.** Throughout the validity period of the contract, the Contractor should comply with all applicable laws, decrees, market provisions and with the legal requirements of any public, municipal or other authority, which refer to or apply in whatsoever manner to the Contractor or its work and should see to the issue of all types of permits at own expenses.
2. **Personnel.** The Contractor guarantees that it keeps and has specialized technical staff and work crew, technically equipped for carrying out the work of this contract. Night-time work, overtime, etc may be carried out at the Contractor's expenses following written permission by the competent public authority and in compliance with applicable laws.
3. **Tools and materials.** All materials required for the proper execution of work, special tools, ordinary tools and consumables should be made available by the Contractor throughout the contract unless otherwise stipulated in the contract. Any machinery, tools or materials used by the Contractor should be fit for the purpose they are intended for and should provide the necessary safety at work and protect the staff so as to avoid any damage or accident that may derive from their use. HEDNO may prohibit the use of any machine, tool, etc that could be considered unfit or dangerous in work execution. Regardless of whether HEDNO shall exercise such right or not, the liability of the Contractor deriving from this Contract shall not be diminished in whatsoever manner. The work to be carried out should be flawless and as precise as required in each case and should fully comply with the stipulated terms of the contract.
4. **Knowledge of local conditions.** The Contractor, having visited the site where work will be carried out, expressly stated that it examined the same in all respects and took into account all difficulties that may be encountered when fulfilling its obligations to HEDNO.

Article 4 Supervision of Work

It is expressly agreed that the Contractor shall bear all liability pursuant to the contract and these general terms regarding the supervision and execution of work. During execution of work, the Contractor shall be obliged to comply with the instructions of any competent representative appointed by HEDNO without, however, having its liability reduced. In case of disagreement as for the safety of the work executed, the Contractor should notify HEDNO thereof in writing.

Article 5 Obligations of the Contractor

1. **Accidents Prevention.** The prevention of accidents caused to employees and the improvement in terms of hygiene of working conditions shall be part of the Contractor's obligations. More specifically, the Contractor shall be obliged to carry out work in a safe manner, pursuant to the laws, decrees and market provisions related to the health and safety of employees, food handling, water supply, first aid, wastewater disposal, etc.
2. **Insurance.** No insurance cover of the Contractor discharges the same from their obligations and liabilities to the Corporation. By way of example, it is indicated that the Contractor shall be liable in all events for all exceptions and discounts included in insurance policies.
3. **Patents.** The Contractor guarantees that they have in their possession the necessary patents or the right to use the same in a way enabling the Contractor to execute work pursuant to the terms of this contract. In addition, the Contractor shall be obliged at own expense, if necessary, to hold harmless HEDNO in any action brought against HEDNO in whatsoever manner and based on claims that the Contractor infringed rights deriving from patents when fulfilling the obligations of this contract. In case none of the foregoing is possible, the Contractor based on the provisions of this contract shall be obliged to restore any damage incurred by HEDNO on these grounds.

Article 6 Liability of the Contractor

1. **Work Execution.** The Contractor shall be fully liable for the thorough, timely and satisfactory execution of work in accordance with the rules of science, the terms of Contract and all drawings,

plans, particulars, instructions, recommendations and orders provided from time to time by the Corporation during execution of work. In the case of any poor workmanship, omission or non-execution of work or in case the Contractor does not comply with or violates any contractual or legal obligations, the Contractor shall be obliged to restore any damage incurred by the Corporation for this reason. The Corporation shall be entitled to demand the payment of any penalty clause stipulated in the contract. If at any point in time the working method of the Contractor or the materials, labourers and technicians employed by the same; or the equipment, machinery, tools and supplies transported to warehouses or worksites; or the facilities of the Contractor's worksites are not considered by the Corporation as suitable or able to ensure the flawless, cost-effective, timely execution of work in strict compliance with the terms of the contract or cannot guarantee the safety of both staff and third parties, the Corporation shall be entitled to ask the Contractor to meet all contractual obligations and the latter shall be under obligation to comply with the above orders, without being entitled to any additional payment or increase in the price and without having its liability reduced in whatsoever manner as a result of the Corporation's said intervention.

2. **Poor Workmanship.** If during work execution and up until final acceptance of the Project, any section thereof or the quality of work or materials used to carry out work are defective, imperfect or unsuitable or in general do not comply with those stipulated in the contract in the opinion of the Corporation, the latter is entitled by written order to request that the Contractor correct, replace or carry out additional work considered necessary, after providing the Contractor with all necessary instructions. The Contractor is obliged to comply with all due care and speed at own expense with the aforementioned orders issued by the Corporation by carrying out all supplementary work required in accordance with those orders to remove or replace defective, imperfect, incomplete or unsuitable materials or work of poor craftsmanship. In the case where the Contractor disagrees in whole or in part with the orders issued by the Corporation they are obliged within a deadline of 10 calendar days from receiving the order to submit their objections in writing setting out the grounds of objection. Objections shall be examined by the Director of the Service using the machines. If the Contractor does not submit their objections in due time, it shall be taken as accepting the orders the Contractor should carry out. On the contrary, if the Contractor submits belatedly such objections and these are rejected, the Contractor shall be obliged to carry out the orders and, if they refuse, it shall be taken as unilaterally rescinding the contract at own fault. Under no circumstances shall the Contractor be released from their contractual obligations by relying on the presence of any representative of the Corporation at the place of work if at a later date defective work, omissions or imperfections are identified, unless these are due to written instructions or orders from the Corporation and provided that the

Contractor has stressed such fact in writing to the Corporation before executing such order. Even in these cases, the Contractor shall remain liable for the quality of the work carried out.

3. **Liability of the Contractor.** Throughout execution of work and up until final acceptance by the Corporation, the Contractor shall be liable for any loss, damage, or destruction including force majeure or random events and is obliged to restore work at own expense, care and responsibility and deliver all work to the Corporation in perfect state and thoroughly completed. The Contractor is solely and exclusively liable to hold the Corporation harmless in all legal actions brought against the latter by third parties or the Corporation's staff for all manner of damage or loss incurred by such persons during execution of work or related with work in whatsoever manner. The Contractor is solely and exclusively liable to ensure the safety and protection of their own staff and third parties and of the work, equipment, facilities, etc. In case the Contractor delays or does not fulfill the obligations deriving from this Contract, the Corporation shall be entitled to take all steps required, in its discretion, for protecting the Contractor's staff and that of third parties on behalf and at expenses of the Contractor and order immediate stoppage of the dangerous work. The Contractor shall not be entitled to claim any indemnity or extension of deadline due to such stoppage. Note that the Contractor's liability deriving from this contract shall not be limited in whatsoever manner whether the Corporation exercises such rights or not.
- 4.

Article 7 Performance Bond

1. The Contractor handed over to HEDNO today a performance bond amounting to EUR _____ for the exact, faithful and timely execution of the terms hereof.
2. This letter of guarantee shall be returned to the Bank having issued it and not to the Contractor who states that they expressly, unreservedly and unquestionably waive the right to challenge in whatsoever manner the rights of HEDNO to collect the said letter of guarantee from the guarantor Bank. In addition, the Contractor expressly waives the right to have recourse to courts against HEDNO asking that the letter of guarantee is not forfeited or that it is placed in a state of judicial sequestration.
3. Finally, it is agreed that the letter of guarantee shall be returned within two months following thorough, timely and flawless execution

of the Contract pursuant to the foregoing and in particular following full settlement of such guarantee upon request of the Contractor, unless an issue of total or partial forfeiture thereof in favour of HEDNO arises. In such cases, the Contractor shall be obliged to supplement or replace this letter of guarantee with another, as the case may be.

Article 8 Project Inspection - Acceptance

Once work is complete, as attested by the competent representative of HEDNO, following application of the Contractor and within one month, the project must be accepted by a competent committee of the Corporation provided that work has taken place pursuant to contractual terms and the annexes attached hereto.

Article 9 Prices

1. The unit price that has been agreed and is set forth in the contract refers to the execution of work, pursuant to the terms and conditions of such contract and these General Terms. The above price includes the Contractor's fee as well as all expense incurred by the latter while fulfilling its obligations.

2. The Contractor expressly guarantees the unit price and states that this was fixed following accurate budgeting. The Contractor also expressly waives all rights to claim subsequent increase or adjustment on whatsoever grounds including, among others, the cases under Articles 178, 179, 388 and 696 of Hellenic Civil Code.

Article 10 Payments

Mode of Payment. The Contractor shall be paid pursuant to the contractual stipulations and once the following supporting documents are submitted:

1. A detailed list of the works that took place pursuant to the contract, signed by the Contractor. The said list shall be attested by the competent service of HEDNO cited in the contract.

2. An invoice of the Contractor paid to HEDNO.

No payment shall be made to the Contractor unless the latter furnishes to HEDNO a tax clearance certificate and any other document required by Law.

Article 11 Tax Liabilities

The Contractor shall be solely and exclusively responsible for paying all taxes save VAT, imports duties, fees, bonds, withholdings, contributions, etc that have been imposed (but not those that will be imposed in the future) on whatsoever grounds in favour of the state, municipalities and communities or other local authorities and in general any third party, contributions for the Social Security Foundation or other insurance provider, any fines that may be imposed and other charges, written dealings related to the contract and prepared in pursuance of the latter, the accounts and payments made on the basis of this contract.

In case the Contractor or the Corporation is exempted from paying any taxes, duties or other charges, the said amount shall be refunded to HEDNO by the Contractor and the contractual price shall be reduced accordingly.

The Contractor shall also be responsible to pay contributions to the relevant main and supplementary insurance providers for its staff.

Article 12 Non-substitution & non-assignment

1. The Contractor may not be substituted by another natural or legal person in its obligations under this Contract or any part thereof without the previous consent of HEDNO in writing. In case of substitution, the Contractor shall still be held jointly and severally liable for the actions or omissions of the persons substituting the Contractor, as well as its staff, as if these were its own actions or omissions.

2. The Contractor may not assign its rights arising from this Contract or any part thereof to any person without the previous consent of HEDNO in writing. Exceptionally, such assignment may only be made to Banks, Public Law Bodies, Corporate and Public Utility Organizations, following written consent of HEDNO under the terms cited in such consent. Approval of assignment shall require that no counterclaims of HEDNO arising from this Contract or due to other reasons, which HEDNO may legally raise for offsetting, to be freely exercised, despite the assignment and announcement thereof, as well as any debt of the assigning Contractor to any third party which would be entitled to a collection from HEDNO, are in place against the assigned claim until the day that HEDNO must pay such assigned claim.

Article 13 Breach of Contract – Rescission

Wherever any term of the contract is violated, save the cases in which HEDNO is at fault, the Contractor shall be obliged to indemnify HEDNO for any direct or consequential damage HEDNO may incur due to this reason. The Contractor shall be obliged to pay HEDNO the stipulated penalty clause for each case of breach, as set forth in the contract with HEDNO reserving the right to demand from the Contractor to restore any damage and fulfill all its contractual obligations. In these cases, HEDNO shall have the right to rescind this contract by written notice to the Contractor. In the case of such rescission, the letter of guarantee as per Article 6 of the Contract terms shall be forfeited in favour of HEDNO as additional penalty clause and the Contractor shall be obliged to restore any damage incurred by HEDNO additionally to the above penalty clause.

Notwithstanding the foregoing, HEDNO shall be entitled at any time to rescind unjustifiably he contract either during its initial validity period or following any extension thereof after sending the relevant notice to the Contractor 30 days in advance and without paying the Contractor any indemnity for this reason.

Article 14 Force Majeure

1. In case of force majeure, the deadlines set in the contract shall be extended by the period of time that such event lasted. It is expressly stipulated that violent incidents shall be admitted as reason of delay but shall not give rise to any indemnity.
2. The Contractor should promptly inform HEDNO in writing about any event of force majeure, otherwise the Contractor shall not be able to rely on the same.

Article 15 Special Terms

It is expressly agreed that the Contractor may not refuse performance of provision on any grounds whatsoever. For this purpose, the Contractor expressly and unreservedly declares that it waives any and all rights arising from articles 325 to 329 and 1106 of the Greek Civil Code.

Article 16 Jurisdiction

It is expressly agreed that Athens courts shall have jurisdiction to settle all disputes deriving from this contract.

THE CONTRACTING PARTIES

**FOR THE HELLENIC
ELECTRICITY DISTRIBUTION
NETWORK OPERATOR S.A**

FOR THE CONTRACTOR

.....

.....

72. Modify header of Specimen C:

SPECIMEN C1. Confidentiality Agreement

73. Add the following specimen after Specimen C1 (former C):

SPECIMEN C2 Solemn Declaration for Personal Data Security and Protection

(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 described 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 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 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.

Declared by

74. In Specimen D.1:

Finally, we hereby declare that our guarantee shall remain in force until Tenderer's fulfillment of all obligations undertaken under the respective Contract and any supplements thereof and until this Letter of Guarantee has been returned to us, together with a written declaration from you releasing us from this guarantee. **In any case, this guarantee is valid at least until** [Fill with date that covers at least 365 calendar days from the unsealing date].

75. In Specimen D.2:

7. That the tender I submit shall remain effective for a period of **three hundred and sixty five (360 365) calendar days** as of the date set for its submission; and that I unreservedly waive all my rights to revoke, amend or supplement the tender in any manner, form or under any circumstances, following submission thereof to HEDNO and throughout its effectiveness.

76. Specimen D.7:

S/ N	Description	Price in EUR	
		In full	In figures
1	INFORMATION SYSTEM EQUIPMENT (HARDWARE)		(1)
2	SOFTWARE WITH USER LICENSES		(2)
3	SOFTWARE AND CONSUMER INFORMATION EQUIPMENT		(4)

4	METERS AND COMMUNICATION DEVICES		(6) + (7)
5	INSTALLATION AND OPERATION START FOR TELEMETERING AND LV CUSTOMER METER DATA PROCESSING CENTRAL SYSTEMS AS WELL AS CUSTOMER UPDATE EQUIPMENT		(3) + (5)
6	METERING POINT REPLACEMENT AND COMMUNICATION DEVICES INTEGRATION		(8)
7	OTHER SERVICES* (ADDITIONAL STUDIES, UNEXPECTED COSTS, ETC)		(9)
8	OPERATION & MAINTENANCE SERVICE PROVISION FOR FIVE (5) YEARS		(10)
9	OPERATION & MAINTENANCE SERVICE PROVISION FOR ADDITIONAL FIVE (5) YEARS		(11)
10	OPTION FOR METERING POINT REPLACEMENT AND COMMUNICATION DEVICES INTEGRATION AT THERA, MELOS AND KYTHNOS		(12)+(13)+(14)

	TOTAL PRICE FOR INFORMATION SYSTEM EQUIPMENT			(1)		
	TOTAL PRICE FOR INSTALLATION AND OPERATION START OF THE TELEMETERING AND METER DATA PROCESSING SYSTEM			(2)		
	TOTAL PRICE FOR INSTALLATION AND OPERATION START FOR CUSTOMER UPDATE SOFTWARE AND DEVICES				(3)	
	TOTAL PRICE FOR SOFTWARE WITH USER LICENSE			(4)		
	TOTAL PRICE FOR INSTALLATION AND OPERATION START AND CONSUMER UPDATE DEVICES				(5)	
	TOTAL PRICE FOR THE METERING EQUIPMENT AND INSTALLATION EQUIPMENT			(6)		
	TOTAL PRICE FOR COMMUNICATION DEVICES			(7)		
	TOTAL PRICE FOR REPLACEMENT AND INTEGRATION OF METERING AND COMMUNICATION EQUIPMENT WORKS				(8)	
	OTHER SERVICES					(9)
B.	OPERATION & MAINTENANCE					(2)
	OPERATION SERVICES, COMMUNICATION SERVICES, MAINTENANCE, TECHNICAL SUPPORT AND FAULT REPAIR FOR FIVE (5) YEARS					(10)
	OPERATION SERVICES, COMMUNICATION SERVICES, MAINTENANCE, TECHNICAL SUPPORT AND FAULT REPAIR FOR ADDITIONAL FIVE (5) YEARS					(11)

C.	OPTION FOR THERA, MELOS AND KYTHNOS					
	TOTAL PRICE FOR THE METERING EQUIPMENT			(12)		
	TOTAL PRICE FOR THE COMMUNICATION DEVICES			(13)		
	TOTAL PRICE FOR THE WORKS			(14)		
	OPERATION SERVICES, COMMUNICATION SERVICES, MAINTENANCE, TECHNICAL SUPPORT AND FAULT REPAIR FOR FIVE (5) YEARS FOR OPTION FOR THERA, MELOS AND KYTHNOS					(15)
	OPERATION SERVICES, COMMUNICATION SERVICES, MAINTENANCE, TECHNICAL SUPPORT AND FAULT REPAIR FOR ADDITIONAL FIVE (5) YEARS FOR OPTION FOR THERA, MELOS AND KYTHNOS					(16)
D.	OPTION FOR PROCUREMENT OF METERING AND COMMUNICATION EQUIPMENT					(4)
	OPTION FOR PROCUREMENT OF METERING AND COMMUNICATION EQUIPMENT					(17)

78. Specimen D.10, Table of Technical Deviations is removed.

79. Specimens D.11 and D.12 are renumbered as D.10 and D11.

80. Add Specimen D.12:

SPECIMEN D.12: Table of Tender Abbreviations

Abbreviation	Term
AMI	Advanced Meter Infrastructure
MDM	Meter Data Management
AMR	Automatic meter reading
PLC	Power Line Carrier
GPRS	General Packet Radio Services
GSM	Global System for Mobile Communications, originally Groupe Spécial Mobile
SCADA	Supervisory Control And Data Acquisition
DMS	Distribution Management System
GIS	Geographical Information System
IHD	In Home Display
CENELEC	European Committee for Electrotechnical Standardization (Comité Européen de Normalisation Électrotechnique)
CENELEC/ TC13	European Committee for Electrotechnical Standardization / Technical Committee 13
COSEM	Companion Specification for Energy Metering
OBIS	OBject Identification System
DLMS	Device Language Message Specification
CT	Current transformer
API	Application programming interface
EDM	Energy Data Management
GUI	Graphical User Interface
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
EMC	Electromagnetic Compatibility
HHU	Handheld unit
MODEM	Modulator - Demodulator

Modifications for Issue 1, Technical Description of the Project

81. In section 1.7:

The Contractor and subcontractors crews who shall perform works on the customers metering devices, will participate in a five (5) day training in PPC school, expense of the Contractor, before the field works start. The Contractor's crews, who shall perform works on the customers metering devices, may be accompanied by authorized HEDNO's staff at the discretion of the latter. For this purpose, the Contractor is required to notify HEDNO in writing about the daily works schedule, at least two working days in advance.

82. In section 1.11:

During A phase of implementation, the Contractor, shall perform the following tasks:

1. Study of the consequences of the smart meter technologies under implementation, telemetering systems and smart grid to the consumers personal data.
2. End-to-end system design.
3. Set up / preparation of the areas indicated by HEDNO (installation of air conditioning - firefighting - security system - UPS etc.) for installation of the Main and backup systems.
4. Radio-frequency studies for GSM/GPRS/2G/3G coverage.
5. Surveys of communication infrastructure available for leasing (dark fiber, dark cable).
6. Installation of H/W-S/W of the Main AMI/MDM Central system systems.
7. Arrangement of all issues regarding the correct data transfer to the responsible bodies.
8. Replacement of at least 10,000 meters and integration in the systems AMI/MDM.
9. Upon completion of the above, the main central system's qualitative and quantitative acceptance shall be performed as referred in detail in the Special Terms issue.
10. Installation and integration in the system of at least ~~100~~ 500 in home displays.

Following completion of the above works, the installation and operation start of the backup central system will be performed, which will be completed within three months with its acceptance, while in parallel, meter replacement and integration into the AMI/MDM system shall continue.

83. In section 1.11:

The project shall also include surge protection of electronic telemetering equipment installed in every distribution substation of the selected project areas.

For this reason, all electronic equipment installed in the substations, must include an over-voltage protection system, suitable for three phase TN & or TT systems depending on the installation area.

The protection system elements must be of the Metal Oxide Varistor type or equivalent, class I, capable of withstanding a direct lightning strike with intensity 12.5 kA (10/350 μ s) per phase according to IEC 61643-11.

The protection system should be certified compliant with the above characteristics by an independent body (i.e. KEMA, VDE, TUV, etc.) according to the latest edition of IEC 61643-11 standard for TN & or TT systems depending on the installation area. The certificates should be submitted with

the bid. In case of failure of the protection system should not cause explosion, ignition or emission of smoke, even if exposed to lightning currents greater than the requirements of the protection device **up to the maximum defined by the relevant international standards.**

84. In section 1.11:

5. Removal of the existing meter, installation of the new meter and the communication medium in the metering device to enable its successful integration into the system.

Meters installed in the same location can communicate with the central system using a common GPRS communication device and appropriate connection between them (i.e. RS485).

Modifications for Issue 2, Technical Description of Central System

85. In section 1.3:

28. It shall be possible for utility users to access the data, depending on the access (security) level of the user group to which they belong. This shall enable users to create all types of reports or perform actions in accordance with their access level, and depending on the limitations imposed on them (geographical, administrative, etc.). **For every user modification on the System (meter commands, configuration, user rights modifications, etc), the system should record the modification associated with the user and the recorded timestamp.**

86. In section 1.3:

30. In the event that remote collection of meter data is not possible, a procedure for field collection shall be documented. This procedure must be automatically started so that data will be available to the bodies in time **according to the terms defined in Codes and Metering and Measurement Manuals as they apply.** The Contractor shall be responsible for the execution of the field collection procedure.

Modifications for Issue 3, Electronic Single Phase and Three Phase L.V. Meter Specification

87. Point 10:

~~10. The meter cover shall be according to DIN 43857 for standardized connection of the phase and neutral conductors and for the connection of the signal outputs, communication units etc.~~

The meter cover shall be according to the IEC specifications for direct connection of the phase and neutral conductors as well as the pulses output, signal-output, communication device by terminal blocks.

The meter width shall be according to DIN 43857.

88. Point 18:

~~18. The size and position of the terminals shall be according to DIN 43857 EN/IEC standards.~~

For single-phase meters, the terminals shall be able to connect stranded cable of minimum cross-section 4 mm² and maximum cross-section 35 mm².

For three-phase meters, the terminals shall be able to connect stranded cable of cross-section at least 25 mm².

The minimum cross-section for connection of stranded cable at the signal or pulse terminals shall be at least: 1 mm².

The terminals for output pulses, signal outputs, communication device shall be of spring type without tightening screws.

89. Point 20:

20. Each terminal shall have at least two terminal screws for tightening in order to ensure proper electric contact and no risk of temperature rise or conductor loosening under normal operating conditions.

90. Point 21:

21. The terminal's cover shall feature a tampering alarm and be sealed, so that any internal intervention in the terminals requires breaking the cover seals with simultaneous activation of the alarm signal, while the terminals position shall be according to VDE-0418.

91. Point 30:

Incoming – Outgoing reactive energy (for three-phase meters)

92. Point 71:

- Units: W, kW, Kvar, Kvarh, Wh, kWh, V, A
- Units: Kvar, Kvarh for three-phase meters

93. Issue 3, Point 119:

119. The meter shall have the capability, via appropriate parameterization for the definition of the measured quantities thresholds, of monitoring at least the following events (each event individually), by logging the time (date and time) of appearance and disappearance of each event:

Modifications for Issue 9, Technical Description of Three-Phase Substation Electronic Meters

94. In section "THREE-PHASE SUBSTATION ELECTRONIC METERS"

Attached is indicative 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, which shall be provided by the Contractor, 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.

95. In section 5.7.3:

The provision of an integrated relay output(s) will be included in all meters to provide for the remote switching of dedicated customer circuits in instances where customers have agreed to engage with PPC in the provision of specific load management services.

The relay output(s) will be capable of operating contactors with the ability to isolate the supply to the customer completely (if required); or switching dedicated circuits within the customers installation, or isolating supply at an agreed customer operating threshold, or at an agreed operational parameter within the customers premises.

The load management methodology and any installation modification required (beyond the meter) to support it will be the subject of separate discussion and negotiation between PPC and the customer.

96. In section 6.2:

The bidders shall submit, together with their bid, type tests certificates and samples of series tests certificates specifying the series tests performed in their factories.

~~Any bids that do not include the abovementioned certificates shall be rejected during the technical evaluation stage.~~

As acceptable test certificates are considered those that have been issued by a PPC laboratory, or **a laboratory accredited by an independent public or private body** ~~by an accredited European Union laboratory, or by an internationally accredited laboratory.~~

Modifications for Issue 10, TECHNICAL SPECIFICATION OF INSTALLATION BOXES OF SINGLE PHASE AND THREE PHASE “SMART” ELECTRONIC LOW VOLTAGE METERS

97. In section 5.1.8:

The bids shall be accompanied, on penalty of rejection, with a sample of a finished box identical to those specified.

Modifications for Issue 11, TECHNICAL SPECIFICATION OF INSTALLATION BOXES OF SINGLE PHASE AND THREE PHASE “SMART” ELECTRONIC LOW VOLTAGE METERS

98. In section 3.1:

The circuit Breakers shall operate successfully and continuously under the operating conditions specified in Appendix ~~9.2.1~~ **9.1**.

99. In section 5.3:

Participants in the tendering procedure shall submit along with the tender at least two (2) complete samples of each offered item for material evaluation. ~~Tenders which shall not be accompanied by samples shall be rejected.~~

100. Add section 9.1 with contents:

TABLE OF CLIMATIC AND ENVIRONMENTAL CONDITIONS

Maximum altitude	1,500 m
Minimum ambient air temperature	-15 °C
Average ambient air temperature	20 °C
Maximum temperature on the outer surfaces due to solar radiation	75 °C
Minimum relative humidity	5 %
Maximum relative humidity	90 %

Modifications for Issue 12, TECHNICAL DESCRIPTION OF WORKS

101. Section 2.1, Issue 12:

Any abnormal status, which may indicate tampering or energy theft. Before the start of the meter replacement works, the Contractor shall receive the check procedure of the meter devices that are going to be dismantled. In case of such findings, the Contractor employees will notify immediately the HEDNO Area in order for the HEDNO Area to take the appropriate actions, **while a written notification to the area should follow.**

102. In Section 4.2:

4.2 Replacement of ~~all~~ fuses – **circuit breakers** with circuit breakers in HEDNO connections

During the project implementation, the Contractor will replace all fuses and the porcelain fuse boxes **as well as existing circuit breakers** with new circuit breakers that the contractor shall provide, according to the material technical specifications (attached to the tender), as well as plastic cover for protection against incidental contact.

In order to choose the appropriate protective circuit breaker for the HEDNO connections, the appendix of this issue provides the table of the standard HEDNO connection types.

Note: The No4 connections include fuse box with 3x100A fuses. Those particular boxes are not replaced and the fuses remain as are.

Special cases are considered on a case-by-case basis and under the directions of the supervising department.

103. In Section 4.4:

2. Separation of removed materials (meter boxes, fuse boxes, fuses per type, electromechanical meters, electronic meters, Ripple Control Receivers by type, Auxiliary Relays **with their boxes**, cables) and distinct packaging per material type.

104. The following sentence for AT1-AT4:

The cables, circuit breakers, meter box and installation materials required for connection of the devices are provided by the Contractor and are **not** included in this AT.

105. The following sentence for AT1-AT4:

Connection of the HEDNO and customer cables on the new electronic meter (phase, neutral to the corresponding input terminal blocks of the meter). The possible cable from the Ripple Control Receiver or the auxiliary relay to the meter for the tariff change will be removed, **while the auxiliary conductor from the Ripple Control Receiver to the client shall be appropriately connected to the meter.**

106. The following sentence for AT9-AT10:

The cables and installation materials required for connection of the devices are provided by the Contractor and are **not** included in this AT.

107. AT12 is modified as:

AT 12 : CONNECTION FOR THE SHARED USE INSTALLATION OF COMMUNICATION MEDIUM (GSM/GPRS/3G MODEM) ON MORE THAN ONE (AT THE SAME LOCATION) ELECTRONIC METER AND INTEGRATION OF METERS TO THE CENTRAL SYSTEM.

Works:

~~A GSM modem shall be installed as described above, in~~ **One** of a set of meters **in the same location**, and the said meter shall be **is** defined as the primary meter and shall be considered as reference point **and is considered integrated to the Telemetry Center, with the work AT11.** In order for neighboring meter to communicate with that (the primary meter) an appropriate interconnection (i.e. RS-485) is implmented in order to achieve communication. This work is AT12 as well any additional connection of neighboring meters for this purpose. ~~The rest of the meters are connected using serial communication with appropriate protocol (i.e. RS485) and all of them are integrated in the Central System.~~

Example: For an 8-apartments apartment block, a shared communication device (modem) will be installed on a meter (AT 11), and all other meters will be connected in parallel with 7 AT12 works, this means that in total 1 AT11 + 7 AT12 works are required.

108. The following sentence for AT13:

The cables, the antenna of sensitivity of at least 9Dbi (omni directional) and the installation materials (pipes, plugs, screws, glands, etc) that will be required for the connection of the devices are of provision and responsibility of the Contractor and are **not** included in this AT.

109. The following sentence for AT13:

Cables and installation material (electrical equipment, tubes, plugs, screws, glands etc) that will be required for the connection of the devices are of provision and responsibility of the contractor and are **not** included in this AT.

110. The following sentence for AT16:

The cables and installation materials required for connection of the devices are provided by the Contractor and are **not** included in this AT.

111. Any reference to GSM or GSM/GPRS is replaced with GSM/GPRS/3G in issue 12.

112. In AT17:

The cables, ~~circuit breakers, meter box, test box~~ and installation materials required for connection of the devices are provided by the Contractor and are **not** included in this AT. In addition, any protection device of the electronic equipment (meter and concentrator) required for installation at the substation is included.

Works:

1. Installation of a ~~split-core~~ current transformer **on the substations** ~~inside the pillar on the bars between the three-phase circuit breaker and the feeds fuse bases.~~ In case that there is no circuit-breaker, power shall be disconnected by the HEDNO area in order to install the current transformers ~~on the bars before the fuse bases.~~ The transform ratio for the transformers will be proportional to the transformer power and the pillar feeds fuses. In case where more than one pillar is installed on the substation, separate current transformers and meters will be installed per pillar. It should be mentioned that any existing current transformers inside the pillars shall not be

used for the new meters.

2. The Contractor shall document that:

- The distances between conductors and other equipment (current transformers, etc) are adequate according to standards in order to avoid flashovers between phases/neutral/ground for the seamless operation of the substation.
- The equipment and wiring do not obstruct substation operations (i.e. replacement of LV feed fuses in the pillar).
- The wirings and routings of the equipment do not obstruct the climbing with climbing irons on the wooden posts for various operations (ie replacement of MV fuses) and are safe electrically for personnel protection.

3. Installation of the meter box near to the pillar with test box and circuit breaker. The box will be mounted:

- On the post for open-air substations at the **appropriate for indications reading** height (**about 1.5 m**)~~of the pillar~~. On wooden posts, circular adaptation bases and screws shall be used. On concrete posts, metal collars shall be used (not metal straps) of appropriate size, without penetrating the post.
- **The box installation will be performed according to Streets and Squares Lighting (ΦΟΠ) and the boxes should be appropriately installed such as they do not introduce problems, i.e. for two post substations they should be installed on the side between the posts.**
- On the wall, on closed substations
- Inside the LV space in the compact substations

4. The box may be used for more meters or/and concentrators.

5. Routing cables from ~~the current transformers~~ (**the pillar**) to the meter box through closed pipes **and sealing connections using glands**.

113. In AT18:

The cables and installation materials required for connection of the devices are provided by the Contractor and are **not** included in this

AT.

Works:

1. The concentrator installation may be inside a substation meter installation box. In case of a separate box, the box should be mount:
 - On the post for open-air substations ~~at the height of the pillar~~. On wooden posts, circular adaptation bases and screws shall be used. On concrete posts, metal collars shall be used (not metal straps) of appropriate size, without penetrating the post.
 - The box installation will be performed according to Streets and Squares Lighting (ΦΟΠ) and the boxes should be appropriately installed such as they do not introduce problems, i.e. for two post substations they should be installed on the side between the posts.
 - On the wall for closed substations
 - Inside the LV area for compact substations
2. The Contractor should document that:
 - The distances between conductors and other equipment (current transformers, etc) are adequate according to standards in order to avoid flashovers between phases/neutral/ground for the seamless operation of the substation.
 - The equipment and wiring do not obstruct substation operations (i.e. replacement of LV feed fuses in the pillar).
 - The wirings and routings of the equipment do not obstruct the climbing with climbing irons on the wooden posts for various operations (ie replacement of MV fuses) and are safe electrically for personnel protection.
3. Cables routing from the pillar to the box through the closed pipes **and sealing connections using glands.**

114. In AT21:

It involves the taking and registering in the file with the customer data before and after the end of the works **3 a set of** at least **four (4)**

photographs of the installation, with digital camera of mid resolution (3 MP), in which it should be depicted:

1. The external view of the meter installation box, before the removal of the seal, and the environment space.
2. The internal view of the meter installation box with the old meter and the terminal cover open, the circuit breaker or the fuse box and the relevant wirings. In the photograph the meter readings, the meter serial number and the connection id, which should be marked by hand using permanent marker by the Contractor's crews, should be clearly visible.
3. The internal of the meter installation box, after the completion of the new meter installation works.
4. The external view of the meter installation box, after the completion of the installation works and the box sealing. The customer connection id and the appropriate sealing should be clearly visible.

For the **required evidence** ~~charging of extra AT~~, which are not proved with the photographs above, it is **may be** required to take additional documentation photos. The cost of the **any required** extra photographs is included in this AT. ~~The document photo shall be certified the relevant AT.~~

The registration of the photograph files will include the connection ID and the photograph number (i.e. 512345678_01 for the first photo). The photographs are delivered in electronic form to HEDNO.

115. In AT27:

The cables and installation materials required for connection of the devices are provided by the Contractor and are **not** included in this AT.

Works:

It involves the disconnection and removal of the Ripple Control Receiver, The Auxiliary Relay **and their boxes** and the removal of all the relevant wiring. The auxiliary conductor for each connection will be moved and connected to the corresponding meter.

Note: The Ripple Control Receiver, the Auxiliary Relay, the boxes and the relevant wiring are not dismantled and they remain as they are in case of meters for the Lighting of Streets and Squares (ΦΟΠ).

Modifications for Issue 13, TECHNICAL DESCRIPTION COMMUNICATION UNIT (MODEM)

116. A new issue is introduced with content:

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 Telemetry 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 multislots 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 -20°C to +55°C
 - 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.