



apsys

SECURING YOUR BUSINESS

Budget Proposal

Plant Wellness Way EAM Strategy

Date : 5th December 2017

Addressee : Client Representative – Tel. : +000 0000000
email client.representative@organisation

Contact APSYS : Mr Pierre Secher – Tel. : +33 (0)6 1850 2886
email pierre.secher@apsys-airbus.com

Contact LRS : Mr Mike Sondalini – Tel. : +61 (0)8 9457 6297
email mike@lifetime-reliability.com

Proposal Reference : **BUDGET**

Siège Social
ZAC du Grand Noble
37 avenue Escadrille Normandie Niemen
31700 BLAGNAC - France
Tél. : +33 (0)6 61 30 99 00

Agence Ile de France
ZAC de la Clé Saint-Pierre
1 boulevard Jean Moulin
CS 70562
78996 ELANCOURT Cedex - France
Tél. : +33 (0)1 72 67 96 64

Agence Sud-Est
Zi la Couperigne
Centre Tertiaire Marseille Aéroport - Bât B
BP 60244
13747 VITROLLES Cedex - France
Tél. : +33 (0)4 42 89 12 05

CONTENTS

- 1 Overview3
 - 1.1 Context.....3
 - 1.2 Project Approach3
 - 1.3 PWW EAM Methodology3
- 2 Budget Proposal4
 - 2.1 Scope of Work4
 - 2.2 Additional Training Courses5
 - 2.3 Project Plan.....5
 - 2.4 Project Schedule6
 - 2.5 Inputs7
 - 2.6 Deliverables7
 - 2.7 Meetings and Workshops7
 - 2.8 Budget Estimate.....10
- 3 Formal Proposal and Quotation11
 - 3.1 Quality Assurance.....11
 - 3.2 HSE Policy11
 - 3.3 Proposal Validity11
 - 3.4 Commercial Conditions11
 - 3.5 Confidentiality Requirements11
 - 3.6 Project Team Organization12
- 4 APPENDICES13
 - 4.1 Appendix A: APSYS Terms and Conditions14

1 Overview

1.1 Context

██████████ has requested a proposal to establish a Plant Wellness Way Enterprise Asset Management (PWW EAM) solution for their ██████ water production facility.

██████████ operate in the utility sector supplying water to the people of ██████. The operation concerned uses a reverse osmosis system and produces the power required for the water production process. Water production plant capacity is around ██████ cbm/day, and █ MW power generation.

Since many failures are occurring in both the power and water system, ██████ requested Lifetime Reliability Solutions (LRS) to visit their facility site and apply PWW EAM to ten critical equipment items to develop a reliable maintenance system for those assets.

1.2 Project Approach

LRS will partner with APSYS, an Airbus company based in Toulouse, France, to deliver the PWW EAM solution to the ██████ operation. The APSYS and LRS collaboration provides the necessary PWW EAM expertise and technical resources to do the project.

For the project, APSYS is the Principle Consultant, and LRS is the Technical Lead on PWW EAM. Invoices for project work will come from APSYS, and payments by ██████ are made to APSYS.

The project team will comprise a project manager part-time, a full-time mechanical equipment specialist, a full-time electrical and control equipment specialist, an Information Technology and Computerised Maintenance Management System (CMMS) specialist part-time, and a risk management specialist part-time.

1.3 PWW EAM Methodology

PWW EAM is a total life cycle asset management methodology. It is used to generate highly effective enterprise asset management and maintenance processes and tasks for an organization's operating assets. Outputs include business systems and processes, complete EAM and maintenance strategy for all physical assets, and writing all maintenance procedures and work orders. It also identifies supporting tasks and activities to be done by other groups and people not in Maintenance, such as the Operations, Supply, and Engineering teams.

The PWW EAM methodology typically flows through the six stages listed below.

- 1 Equipment service, operating history, and maintenance history risk analysis;
- 2 Engineering standards and maintenance strategy development;
- 3 A process engineering to design the EAM and maintenance systems;
- 4 Maintenance processes and equipment maintenance procedures are documented;
- 5 Site personnel are trained in the processes and procedures;
- 6 The necessary processes and procedures are established onsite.

2 Budget Proposal

2.1 Scope of Work

██████████ designated the water production facility equipment in Table 1 as priority assets maintained under a Plant Wellness Way EAM regime.

Loc	Equipment	Description	Function	Details
██████████	██████████-RO11.1-HPP-M	MOTOR, SIEMENS, 160kW	HIGH PRESSURE PUMP, BMEX MOTOR	
██████████	██████████-RO11.1-HPP-P	PUMP, BME 30-21, GRUNDFOS, 63.2 M3/HR	HIGH PRESSURE PUMP, BMEX PUMP	
██████████	██████████-RO12.1-HPP-M	Motor, Quantum Energy Saver, 350 HP	HIGH PRESSURE PUMP SYSTEM	██████████
██████████	██████████-RO12.1-HPP-P	HIGH PRESSURE PUMP A	HIGH PRESSURE PUMP SYSTEM	██████████
██████████	██████████-GENSET10-E	Engine, 3516B, CATERPILLAR, 1.8MW	Power Generation	██████████
██████████	██████████-GENSET10-G	Generator, 3516B, CATERPILLAR, 1.8MW	Power Generation	██████████
██████████	██████████-BH18-M	MMS8000, 63KW, GRUNDFOS	Supply feed water from borehole to RO plant	
██████████	██████████-E-BH18-P	SP215-3R, GRUNDFOS, 215m3/hr	Supply feed water from borehole to RO plant	
██████████	██████████-BH18-VFD	VFD, Micromaster 430, 75KW	Speed control for borehole	██████████
██████████	██████████-BSB-P	Generator Busbar Panel, ████ MW	Power distribution	

Table 1 Equipment to be Maintained Under a Plant Wellness Way EAM regime

Plant Wellness Way EAM will be applied to the ten assets to develop both the necessary maintenance processes to use, as well as the minimum set of maintenance tasks to be performed. All other equipment in the facility continues operation under the existing maintenance regime.

To set a clear scope-of-work for installing a PWW EAM system, each asset requires specified boundary limits. For budgeting purposes, the electrical and controls boundary is a cable or wire

connection point to an asset. The mechanical boundary is an operating process connection point to the asset. An equipment’s foundation, base and support structure are counted as part of the asset.

2.2 Additional Training Courses

The three training courses listed below are requested to be included into the program. They will be delivered by APSYS/LRS following completion of the PWW EAM regime project work.

- Failure Mode Effects Criticality Analysis (FMECA)
- Root Cause Failure Analysis (RCFA) Training for Industrial Plant and Equipment
- Maintenance Planning and Scheduling for Reliability Training Course

2.3 Project Plan

Figure 1 shows the project phases, the Party with the main responsibility to accomplish each phase, and the key deliverable from each phase. A brief description of the phases follows Figure 1.

PROJECT PHASE	RESPONSIBILITY	PROJECT MILESTONE
1. Receive [REDACTED] Project Confirmation	<ul style="list-style-type: none"> • [REDACTED] to provide 	Signed Contract
2. Collect Operating Data and Maintenance History	<ul style="list-style-type: none"> • [REDACTED] to provide 	All Asset technical, operating, and maintenance records
3. Component Criticality Analysis	<ul style="list-style-type: none"> • APSYS / LRS to provide 	Completed Criticality spreadsheet
4. Develop Reliability and Maintenance Strategy	<ul style="list-style-type: none"> • APSYS / LRS to provide 	Completed Strategy spreadsheet
5. Engineer EAM and Maintenance Processes	<ul style="list-style-type: none"> • APSYS / LRS to provide • Assistance from [REDACTED] 	Completed Maintenance Processes flowcharts
6. Develop Maintenance Procedures	<ul style="list-style-type: none"> • APSYS / LRS to provide 	Completed Maintenance Procedures
7. Teach Personnel Processes and Procedures	<ul style="list-style-type: none"> • APSYS / LRS to provide • Assistance from [REDACTED] 	PWW EAM regime Work Orders in use at facility
8. Install PWW Processes and Procedures Onsite	<ul style="list-style-type: none"> • APSYS / LRS to provide • Assistance from [REDACTED] 	CMMS updated with PWW EAM regime Work Orders

Figure 1 – Plant Wellness Way EAM Project Phases

Phase 1: Once formal approval is received from [REDACTED] to conduct the project, APSYS/LRS will then assemble the project team.

Phase 2: The team will travel to site to meet [REDACTED] personnel, get familiarised with the facility, and collect all necessary technical, operational, and maintenance information and history on the ten priority assets identified by [REDACTED].

Phase 3: The mechanical and electrical specialists remain in [REDACTED] to do the equipment service, operating history, and maintenance history data analysis, including parts criticality review for [REDACTED]-RO11.1-HPP-M, [REDACTED]-RO11.1-HPP-P, and [REDACTED]-RO12.1-HPP-M, [REDACTED]-RO12.1-HPP-P.

Phase 4: The engineering standards and maintenance strategy development work will be done at APSYS/LRS head office. During the maintenance strategy development phase, relevant maintenance tasks vital to the reliability of the assets are identified.

Phase 5: The process engineering design for the PWW EAM system and resulting maintenance processes are drafted by APSYS/LRS. The draft processes are then brought to [REDACTED] for review and finalisation with relevant management and supervision.

Phase 6: Maintenance tasks from the strategy development phase are embedded by the APSYS/LRS team into maintenance procedures. Existing [REDACTED] procedures, if available, will be enhanced to cover the PWW EAM maintenance strategy. When new maintenance procedures are required, they will be developed by APSYS/LRS in the format used by [REDACTED].

Phase 7: Review, discussion, training and teaching onsite [REDACTED] management and personnel in the PWW EAM processes, and use of the enhanced maintenance strategies, will be done by the mechanical and electrical specialists, and the IT/CMMS Specialist.

Phase 8: The complete set of EAM processes and maintenance procedures are incorporated into the [REDACTED] operation. It is typically done by updating the business system and affected documentation, establishing related databases in the CMMS and the Enterprise Resource Planning (ERP) system, and creating maintenance work orders containing the PWW EAM procedures. It is the role of the IT/CMMS Specialist to work with [REDACTED] to perform this phase of work.

Ongoing support in the form of phone calls, teleconferencing, and visits to site will be available at project rates to [REDACTED], while their operating and maintenance staff and crews become familiar and proficient in the new PWW EAM regimen, for six months following project completion.

2.4 Project Schedule

The project is expected to take five (5) months to complete following the onsite kick-off meeting.

An agile project design will be adopted on the project. Figure 2 shows the agile scheduling. Each connected asset is processed through the PWW EAM phases of Figure 1 as one set. For example, a pump and motor set, or an engine and generator set, are connected assets. The agile approach:

- minimises [REDACTED] and APSYS/LRS manning requirements;
- allows continual feedback between [REDACTED] and APSYS/LRS;
- permits repetitive strategy and solutions previously developed to be reused;
- reduces disruption to [REDACTED] operations, as the project work is distributed across time and so can be more easily arranged into peoples' workdays;
- starts [REDACTED] operating profits increasing as soon as is possible.

2.5 Inputs

██████████ will provide as a minimum the following project documents for conducting the studies:

- System and equipment description
- Technical documentation
- Operating philosophy
- Maintenance history
- Condition Monitoring history
- Equipment reliability data

A list of all necessary documents and data will be provided before the site visit.

2.6 Deliverables

APSYS/LRS will deliver the following PWW EAM regimen requirements for the assets in the Scope-of-Work.

- Maintenance processes, including flow diagrams,
- Maintenance strategy,
- Maintenance procedures,
- Maintenance work orders,
- Leadership in establishing the PWW EAM regimen into the ██████████ ERP/CMMS
- ██████████ staff and crew training

All deliverables will be written in English and provided only in electronic copy. A draft version of any deliverable will be submitted for a review period of 10 days. APSYS/LRS will consider one consolidated set of comments from ██████████ per deliverable.

During the maintenance procedures writing, and during onsite deployment of procedures, time is needed for ██████████ personnel to read, review, and embrace the contents of procedures. Delays in procedure reviews will lengthen the duration of the project.

If required, deliverables can be transmitted in French (this option is at additional cost).

2.7 Meetings and Workshops

The agile project approach requires onsite meetings and/or training workshops at the following points in the timeline:

- Project kick off meeting onsite
- Data collection and interviews (██████████ office and site)
- Asset Group 1 deployment
- Asset Group 2 deployment
- Asset Group 3 and 4 deployments
- Three requested training courses
- Project conclusion meeting onsite

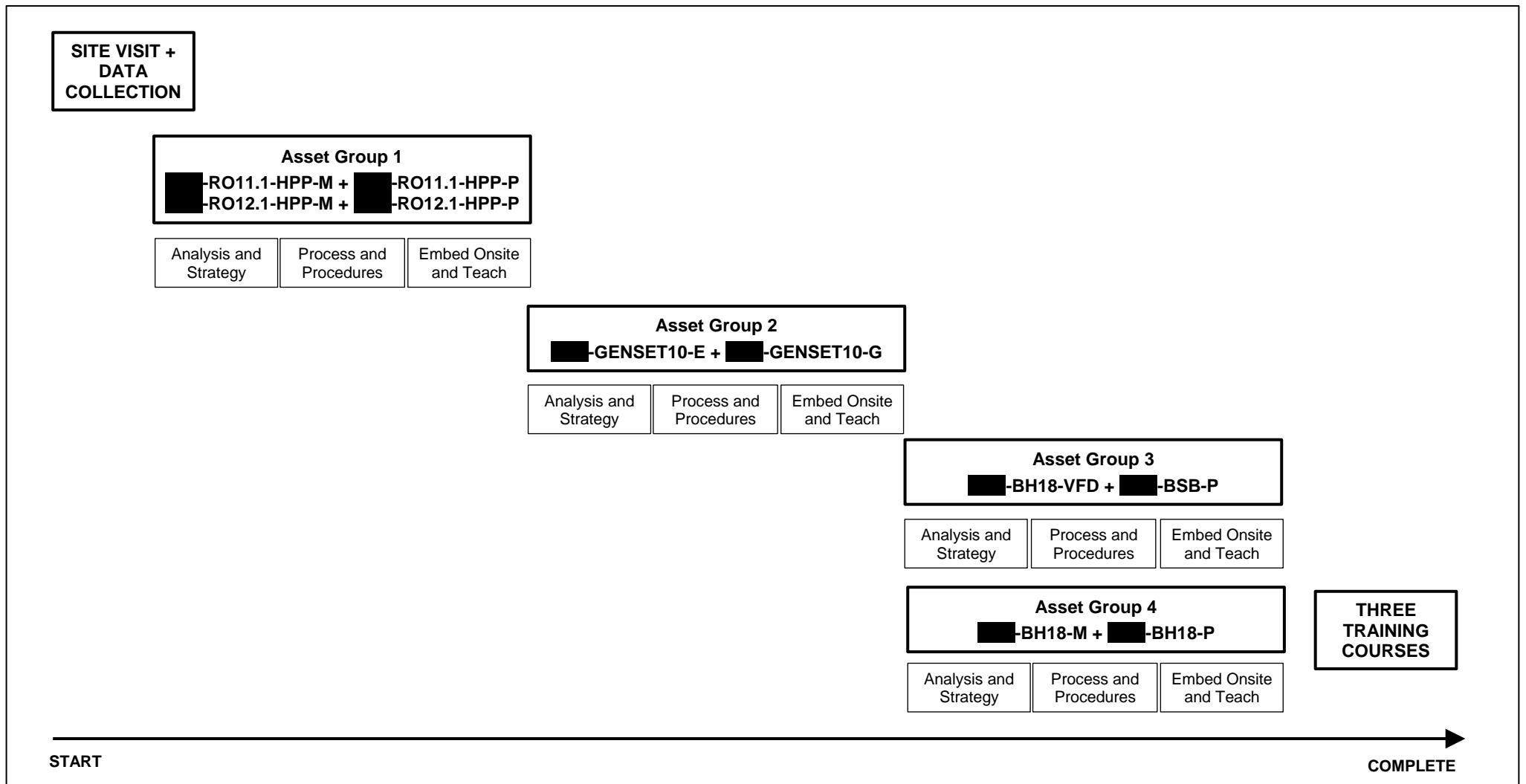


Figure 2 – Agile Project Design

A provisional schedule is presented in Table 2. Should the project start before the end of 2017, the two weeks of the Christmas and New Year period are excluded from the timeline.

Agile Project Phase	Timeline Conclusion
1. Receive [REDACTED] Project Confirmation	T0
Preparation and project organization work	T0 + 4 work weeks
Onsite Kick Off Meeting	T1
2. Collect Operating Data and Maintenance History	T1 + 1 week
3. Asset Group 1 Component Criticality Analysis	T1 + 2 weeks
4. Asset Group 1 Develop Reliability and Maintenance Strategy	T1 + 3 weeks
5. Asset Group 1 Engineer EAM and Maintenance Processes	T1 + 4 weeks
6. Asset Group 1 Develop Maintenance Procedures	T1 + 4 weeks
7. Asset Group 1 Introduce Personnel to Processes and Procedures	T1 + 5 weeks
8. Asset Group 1 Install PWW Processes and Procedures Onsite	T1 + 6 weeks
3. Asset Group 2 Component Criticality Analysis	T1 + 7 weeks
4. Asset Group 2 Develop Reliability and Maintenance Strategy	T1 + 8 weeks
5. Asset Group 2 Engineer EAM and Maintenance Processes	T1 + 9 weeks
6. Asset Group 2 Develop Maintenance Procedures	T1 + 9 weeks
7. Asset Group 2 Introduce Personnel to Processes and Procedures	T1 + 11 weeks
8. Asset Group 2 Install PWW Processes and Procedures Onsite	T1 + 12 weeks
3. Asset Group 3 and 4 Component Criticality Analysis	T1 + 14 weeks
4. Asset Group 3 and 4 Develop Reliability and Maintenance Strategy	T1 + 13 weeks
5. Asset Group 3 and 4 Engineer EAM and Maintenance Processes	T1 + 13 weeks
6. Asset Group 3 and 4 Develop Maintenance Procedures	T1 + 16 weeks
7. Asset Group 3 and 4 Introduce Personnel to Processes and Procedures	T1 + 17 weeks
8. Asset Group 3 and 4 Install PWW Processes and Procedures Onsite	T1 + 18 weeks
Deliver three training courses	T1 + 20 weeks
Project Completion Meeting	T1 + 20 weeks

Table 2 – Provisional Project Schedule

2.8 Budget Estimate

The estimated budget allowance to conduct the PWW EAM project for the Scope-of-Work assets is USD \$201,000. This excludes all local taxes, entry visa costs, flights to [REDACTED], accommodation and transport in [REDACTED], for team members while visiting [REDACTED] sites.

The budget allowance is based on the APSYS/LRS team doing its specialist work with freely provided support from a range of [REDACTED] personnel. The types of assistance required from [REDACTED] include the following:

1. Appoint a senior person as lead contact for the project;
2. Induct APSYS/LRS personnel to permit them to enter the facility as necessary;
3. Supply of all Original Equipment Manufacturer (OEM) technical information;
4. Supply of all available operating and maintenance history;
5. Access to management, supervision, and staff by mutually suitable appointment;
6. Involvement of management and supervision for process review and maintenance strategy review meetings;
7. Involvement of supervision, planners, and trades for maintenance procedures and work orders review meetings;
8. Supply CMMS and ERP data entry personnel to embed PWW EAM outputs into [REDACTED] systems and processes;
9. Release staff and employees to pre-arranged training sessions.

3 Formal Proposal and Quotation

This document is only for estimating a budget allowance, gauging project timing, and determining likely project resources to do the PWW EAM project for the priority assets in the Scope of Work.

A full cost breakdown will be provided in a formal proposal once [REDACTED] confirm they want a detailed quotation for the project. It can take up to four weeks to develop, detail, approve, and despatch the formal proposal and quotation after receipt of a request. You can be sure that APSYS/LRS will do all that is possible to shorten this period.

3.1 Quality Assurance

APSYS is certified NF IN ISO9001 version 2008. The organization, the methods and the documentary baseline which establish our **Quality Management System (SMQ)** are described in our **Quality Manual**. This allows us to show our capacity to satisfy the Quality Assurance clauses of the contracts and the main rules concerning the Management of Quality.

APSYS will conduct the project and reporting according this Quality Management System.

3.2 HSE Policy

As an international leader in risk management, APSYS is well positioned to understand the importance of Health, Safety and Environment in our world. We are recognized for delivering high level expertise in Safety and Environment for products, assets and organizations. Therefore, APSYS is intrinsically committed to Health, Safety and Environment for ourselves and our customers and is fully compliant with applicable European regulations.

APSYS can prepare a QHSE plan for the assignment if required.

3.3 Proposal Validity

The proposal is valid for a 3-month period from the date issued to [REDACTED].

Upon receipt of a [REDACTED] request in writing for a formal proposal and quotation, APSYS/LRS will submit a full commercial offer to perform the assignment.

3.4 Commercial Conditions

Payment is required at the following deliverable points during the project.

- 10% at the onsite kick-off meeting
- 30% at the completion of Asset Group 1 activities
- 30% at the completion of Asset Group 2 activities
- 30% at the completion of the project

The APSYS standard Terms and Conditions are provided in the Appendices.

3.5 Confidentiality Requirements

The knowledge of data supplied by [REDACTED] concerning the contract execution presents a character of confidentiality. APSYS/LRS is committed to using all data solely for project purposes. We will

reveal none of this data, whatever information it may be, without a preliminary agreement from [REDACTED]. If required, APSYS/LRS can sign a confidentiality agreement.

During the project, [REDACTED] will have access to privileged and proprietary data, information, knowledge, and trade secrets belonging to APSYS and LRS. All such content is deemed commercially confidential. The [REDACTED] persons involved with the project, or who will use the project outputs, are required to sign a non-disclosure agreement before getting access to any content.

3.6 Project Team Organization

A representative diagram of the proposed team configuration and interaction is shown in Figure 3.

APSYS Project Manager

The APSYS Project Manager will oversee the project management and drive the project details on a weekly basis. They are the focal point and customer contact.

Maintenance Engineers and PWW EAM Experts

The Maintenance Engineering professionals and PWW EAM expert have over 20 years' experience dealing with operational assets.

The CV's informing of project team member experience and expertise will be presented in the formal proposal.

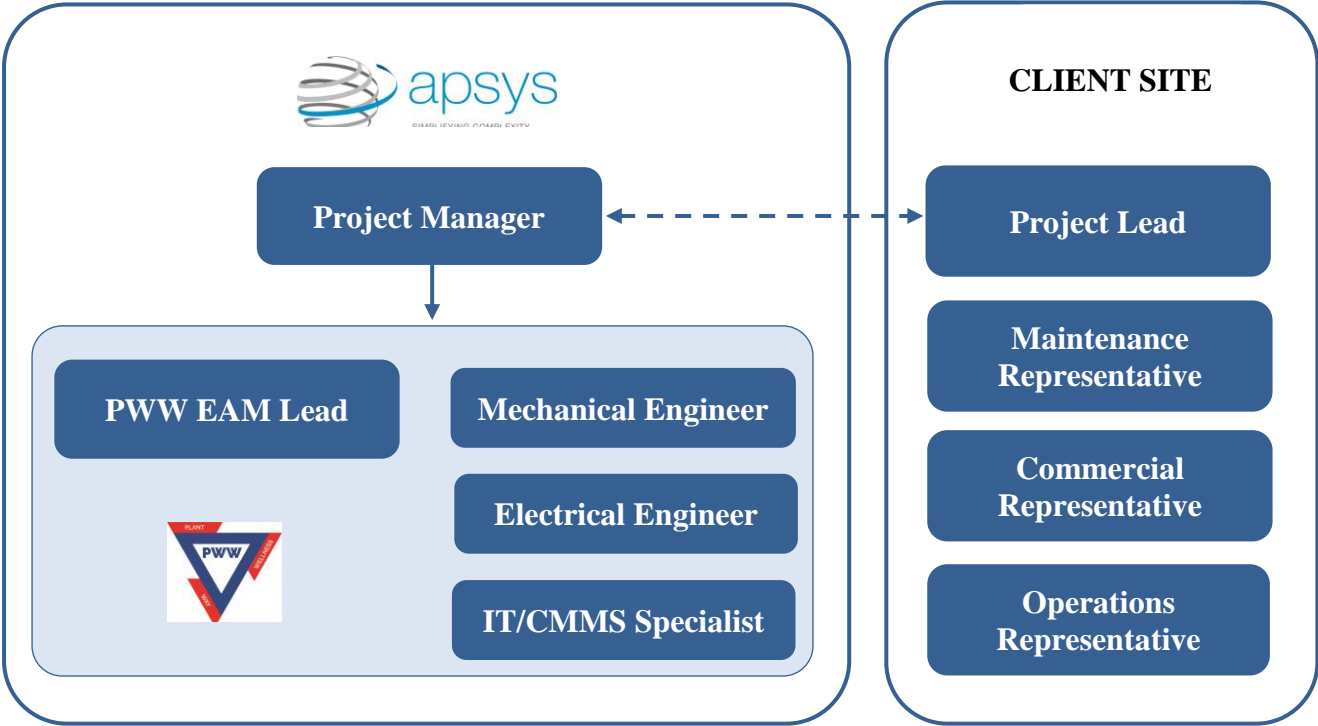


Figure 3 – Project Team Arrangement

4 APPENDICES

4.1 Appendix A: APSYS Terms and Conditions

APSYS TERMS AND CONDITIONS OF SALE (3 Feb 2017)

General Information

The present terms and conditions of sale (hereafter the "TCS") apply to all services provided by APSYS, 'Société par Actions Simplifiée' with capital of 750,000 € - RCS Toulouse 332 252 980 – ZAC du Grand Noble, 37 avenue Escadrille Normandie Niemen, 31700 Blagnac, France (hereafter "APSYS").

The services may consist in supplying materials (hereafter the "Products"), granting software licenses (hereafter the "Software"), with or without assembly, or while executing services (hereafter the "Services") of any kind at any customer (hereafter the "Customer") site.

The Products, Software and Services shall be collectively referred to as the "Services".

Unless otherwise specifically agreed in writing, sending of the order by the Customer implies its adherence to the present TCS, which prevail over any terms and conditions of purchase issued by the Customer. Any additional clauses to the present TCS or those which depart from them must, to be valid, be accepted in writing by APSYS within the framework of the contractual documents binding APSYS and the Customer (hereafter, along with the present TCS, the "Contract").

The Contract governing the relationship between the Customer and APSYS is constituted, in order of priority:

- a) of the special conditions and their amendments negotiated on a case by case basis between APSYS and the Customer for execution of the Services (hereafter the "Special Conditions"), and signed by the authorized representatives of APSYS and the Customer,
- b) of the commercial offer issued by APSYS,
- c) of the present TCS, with which the Customer acknowledges having become familiar and which it accepts,
- d) of the order for Services sent to APSYS by the Customer which will have to refer to the commercial offer from APSYS (hereafter the "Order")
- e) of the terms and conditions of purchase of the Customer, provided that they do not depart from the present TCS and that APSYS has expressly accepted them.

Article 1: Commercial offer

The commercial offers proposed by APSYS (hereafter the "Offer(s)") are valid to the limit of a timeframe of acceptance of one (1) month following the date that the Offer was submitted to the Customer, unless there are provisions to the contrary in the Offer itself.

The amounts, expenses, payment schedules and timeframes stipulated in any commercial Offer from APSYS correspond to the estimation by APSYS of that which is necessary for supplying the Services in question. The cost and time estimates must not be considered as guaranteed maximums, unless otherwise provided for in the Contract.

The information stated in the catalogues, notices, scales or any other commercial document provided by APSYS are only provided for informational purposes and have no contractual value. APSYS reserves the option of modifying them at any time and without notice, due to the evolution of techniques, economic conditions or its commercial policy.

Article 2: Establishment of the Contract

The Contract is established once APSYS issues acceptance of the Order in writing, which has been signed by a representative of the Customer.

Article 3: Duration of the Contract

The Contract duration will be defined in the Special Conditions established between APSYS and the Customer, or otherwise in the Order sent by the Customer.

Article 4: Ownership of the documents

4.1 Ownership of the documents provided by APSYS to the Customer

All plans, studies, designs, drafts, schemas, and generally all documents relative to execution of the Services, as well as all information of a technical or commercial nature provided at the time of an eventual Offer or Order by APSYS to the Customer will not be able to be reproduced, kept or communicated to third parties by the Customer without prior written authorization from APSYS, and remain the exclusive property of APSYS, which may reproduce, keep or communicate them to third parties for its own needs, without the Customer being able to object to this or claim any indemnity.

As an exception to the preceding, all plans, studies, drawings, drafts, schemas and generally any documents relative to execution of the Services, as well as any information of a technical or commercial nature provided at the time of an eventual Offer or Order by APSYS to the Customer, will be able to be freely provided by the Customer to any administrative (i) regulatory, (ii) supervisory and/or (iii) certification authority.

4.2 Ownership of the documents provided by the Customer to APSYS

All plans, studies, designs, drafts, schemas, and generally all documents relative to execution of the Services, as well as all information of a technical or commercial nature provided at the time of an eventual Offer or Order by APSYS to the Customer will be able to be reproduced, kept or communicated to third parties by APSYS without the Customer being able to object to this or claim any indemnity, to the exclusion, meanwhile, of any confidential information designated as such in the Contract or covered by a specific non-disclosure agreement (hereafter all "Confidential Information").

The Customer retains exclusive ownership of all Confidential Information.

Meanwhile, the Customer authorizes APSYS to reproduce, keep or communicate to third parties any Confidential Information for the sole and exclusive needs of defending APSYS within the framework of any disciplinary, administrative or judicial procedure relative to execution of the Contract.

The Customer guarantees that APSYS will have free disposal of all documents and/or information sent for execution of the Services, and that these documents and/or information violate no limitation of diffusion or disclosure or any right of intellectual property.

Article 5: Ownership of the Software

5.1 Ownership of rights for the Software

APSYS and/or its eventual suppliers of licenses retain ownership of all intellectual property rights related to the Software and to the associated documentation used when executing the Services and/or granted as sub-licenses to the Customer.

As a result, the Customer agrees that it will not use them for purposes other than those specified by the license for use in the Contract, or reproduce them and/or communicate them to third parties in any manner, subject to express waivers in the Contract.

5.2 License for use

APSYS grants the Customer a license to use the Software under the conditions defined in any license contract provided to the Customer with the Software.

In the absence of such a Contract, APSYS grants the Customer, for a price and for the duration of protection recognized by international conventions, laws and regulatory provisions of each country with regard to intellectual property rights, and for the territory of the entire world, the right to reproduce, represent or use the Software to the limit of that which seems indispensable to execution of the Contract.

The present license is granted to the Customer for any standard Software used for execution of the Services, and for any specific Software developed by APSYS for the needs of the Customer. Meanwhile, it does not authorize the Customer to modify, translate, adapt, or sub-license the Software, in any manner at all, or to permit a third party to use, copy or reproduce the Software.

The Customer will only be able to proceed with decompiling the Software under the conditions of article L.122-6-1 of the Intellectual Property Code in the case where APSYS, duly questioned by the Customer in this regard, has not provided the necessary information.

In case the Software is not indispensable to execution of the Services, APSYS has the discretionary option of accepting or refusing to grant a license.

Article 6: Additional services

The commitments of APSYS are strictly limited to supplying the Services specified in its Offers and/or in the Contract. For the supply of Services not included in the Offer or the Contract, the prices and time frames will be reflected in a specific written agreement between APSYS and the Customer.

Article 7: Subcontracting

APSYS reserves the right to subcontract all or a portion of the Services, which the Customer declares to accept.

Article 8: Transfer of ownership and risks

8.1 Transfer of ownership

Unless otherwise stipulated and expressly accepted by APSYS, transfer of ownership of the results from the Services to the Customer occurs when the price stated in the Contract has been paid in full by the Customer.

8.2 Transfer of risks

The transfer of risks related to the results from the Services provided occurs ex-works, ex-warehouse or at the location where the results from the Services are stored by APSYS.

Article 9: Transport and Delivery

All special operations of transport, customs, handling, packaging and insurance for the results of the Services outside the factories or warehouses of APSYS are under the responsibility, expense, risks and peril of the Customer, including in case of carriage paid. It is under the responsibility of this party to verify the results from the Services upon arrival and to exercise, if necessary, recourse against the transporters.

Article 10: Time frames and locations for supply of the Services

10.1 Timeframes for supply of the Services

The timeframes for supply of the Services, as well as their respective starting points will be determined in the Contract.

In any event, and unless otherwise indicated in the Contract, these timeframes are provided for informational purposes.

These timeframes are subject to being extended, without granting the Customer the right to any penalties, objection for non-performance or option to cancel, to the benefit of the Customer, when the supply of Products, Software or Services is subject to access to necessary information held by the Customer and it is not communicated to APSYS within the timeframes initially specified in the Contract.

In case of delay by APSYS in the timeframes for supplying the Services for any other reason, no penalty, objection for non-performance or option for cancellation may be asserted by the Customer without having followed prior notification in writing, to no avail, in the 15 days following receipt by APSYS.

The Customer renounces invoking any penalty, objection for non-performance or option of cancellation against APSYS in case of delay by this latter party in the timeframes to supply the Services, once APSYS provides proof that this is not exclusively attributable to it and/or that it is due to an event of force majeure as defined in article 20.3 of the present TCS.

APSYS reserves the right to postpone delivery of the Products or execution of the Services:

- In case of the absence of payment on the part of the Customer,
- In case the Services are not provided within the timeframes stated initially in the Contract, information, documents or other services which are incumbent upon the Customer and which are necessary for supply of the Services,
- In case of an event that is not exclusively attributable to APSYS and/or any event of force majeure as defined in article 20.3 of the present TCS.

10.2 Location of supply of the Services

The Services are provided to the Customer at the address indicated in the Contract.

Article 11: Conformity of the Services

The Services provided by APSYS are deemed as being in conformity with the provisions of the Contract in the absence of reserves issued by the Customer upon expiration of a period of fifteen (15) days following the date of delivery of the Products or execution of the Services.

In case Services are provided consecutively, the aforementioned timeframe starts to run from the delivery of each Product or Software, or from the execution of each successive Service included in the Services.

Article 12: Guarantees of the Products, Services and Software

The guarantees below are granted by APSYS in light, notably, of the price of the Services.

The Customer acknowledges and accepts that the provisions hereafter describe the only obligations of guarantee of APSYS, regardless of the value or significance of the Products or projects of the Customer related to the Services.

12.1 Guarantee of the Products

Unless there is a public legal provision that prolongs the duration, the Products delivered by APSYS to the Customer are guaranteed for one (1) year starting from the date of delivery or starting from the date of the report on service start-up or acceptance in case of assembly work.

APSYS guarantees the materials provided and the start-up or assembly work done, provided that they were done by APSYS, against any construction defects, with the Customer having to prove the existence of these flaws or defects.

The guarantee is strictly limited, at the discretion of APSYS, to either exchange of the defective parts at no charge, or repair of these parts, at no charge, in the factories of APSYS, of its suppliers or subcontractors. This guarantee cannot be invoked by the Customer once the defect observed results from use of the Product by the Customer that does not conform to the specifications and recommendations of use indicated in the Contract, from any other event that is not exclusively attributable to APSYS and/or any event of force majeure as defined in article 20.3 of the present TCS.

The guarantee of items purchased and resold by APSYS to the Customer in an accessory manner, without being incorporated into the Products, is limited to the guarantee granted by the supplier or subcontractor of APSYS for the item in question.

All accessories or parts subject to rapid wear (such as, for example, flexible hoses, batteries, accumulators, etc.) are not covered by guarantee from APSYS after they are put into service.

12.2 Guarantee of the Services

APSYS guarantees that the Services will be provided in respect of industry standards in effect as of the date of execution of the Services.

12.3 Guarantee of the Software

Software is guaranteed under the conditions specified by the license for use granted by APSYS for each Software package.

In the absence of provisions in this regard, in case of a reproducible defect that affects the Software commercialized by APSYS, and provided that these defects are apparent in the 30 days following service start-up of the Software in question, APSYS agrees to make every effort, at its expense and as quickly as possible, to eliminate said defects or get around them by providing new Software of the same type.

12.4 Exclusion from guarantee

APSYS grants no other guarantee than those mentioned above or those that could be imposed by an imperative legislative or regulatory provision.

Article 13: Intellectual property and transfer of technologies

13.1 Ownership of the rights

All intellectual property rights and technologies (processes, know-how) related to the Services provided by APSYS and, in particular, the intellectual property rights over the Software commercialized by APSYS, are and remain the exclusive property of APSYS and/or its licensors, and are protected by the laws and treaties relative to intellectual property and to the transfer of technologies applicable throughout the entire world. All of these rights are reserved.

Purchase of the Products and Services offered by APSYS to the Customer results in no transfer, license or automatic concession to the Customer of the intellectual property rights and technologies of APSYS and/or its licensors.

In case, at the time of execution of the Services, APSYS comes to develop elements that could be protected by intellectual property rights, or a technology that could be protected as a process or know-how, APSYS will then be the exclusive owner of all intellectual property rights related to these elements and the exclusive owner of said processes or know-how.

The Customer agrees to protect the secrecy of these elements and/or technologies until the appropriate protection has been put in place by APSYS.

13.2 License

The Customer grants APSYS, for the duration of protection recognized by international conventions, laws and regulatory provisions of each country in matters of intellectual property, and for the territory of the entire world, the right to reproduce, represent or use (i) any element, document or object (trademark, patented technology, etc.) covered by intellectual property rights owned by the Customer, as well as (ii) any process or know-how developed by the Customer, and which is necessary for execution of the Services.

13.3 Complaint, dispute

If the Customer were to be the object of a complaint from a third party regarding intellectual property and/or the technologies concerning the Products, Software and Services provided by APSYS, it would notify APSYS about this without delay, which would then have the option of deciding how to settle said complaint, including the option of determining the defence strategy to be implemented in response to judicial action involving the Customer.

Subject to the foregoing, in case a court came to definitively judge that the Products, Software or Services provided by APSYS violate the intellectual property rights belonging to a third party or infringe upon rights related to technology owned by a third party, APSYS would be able to, at its sole discretion, choose one of the following solutions:

- Obtain, at its expense, the right for the Customer to continue to use the product;
- Replace the incriminated Products, Software or Services with an equivalent Product, Software or Service that does not violate or harm the rights of third parties;
- Modify the incriminated Product, Software or Service so that it is no longer in violation;
- Cancel the Contract and take back the Product or Software in question from the Customer at a price equal to the one for which it bought it, decreased by an amount determined by APSYS to take into account its depreciation.

Article 14: Modification of the Products, Software and Services

At any time and without prior notice, APSYS may make modifications to its Products, Software and/or Services, based on technological developments, changes in economic conditions or in its commercial policy, as long as it does not modify the price or quality of the Product, Software and/or Services in question.

Article 15: Price and terms of payment

The prices for the Services defined in the Contract are established based on the information and documents provided by the Customer, which are presumed as having expressed all of its needs.

Any need not expressed by the Customer at the time of the Order, and which becomes apparent during execution of the Services, will be able to result in a price increase.

Prices for the Services are expressed excluding tax and, unless there are other provisions, the invoices issued by APSYS are payable under the conditions specified by the Contract and, in the absence of an express provision in the Contract, at 45 days end of month.

Article 16: Payment default

In case of payment default by the Customer, APSYS reserves the right to postpone delivery of the Products or Software or execution of the Services in question, and all of the receivables of APSYS for the Customer will become immediately payable fifteen (15) days after APSYS has sent formal notice to pay, by recorded delivery, that has been to no avail. Moreover, after this period of fifteen (15) days, APSYS will be able to either pursue forced execution of the Contract by simple petition presented to the competent Commerce Court, or demand return of the results from the Services, without this last option depriving APSYS of the option to cancel the Contract due to the exclusive fault of the Customer, to engage the liability of the Customer or to apply any clause of the Contract providing for payment of a penalty in case of payment default.

In any event, APSYS will keep the payments already made by the Customer, including in the case where this latter party is the object of a collective procedure.

Late interest is always calculated by applying a rate equal to three (3) times the legal rate of interest.

Article 17: Clause of retention of ownership

In conformity with article 8.1 above, the results from the Services provided to the Customer under the Contract remain the exclusive property of APSYS until the Customer has paid the entire amount of the price specified in the Contract.

Before having paid the full amount of the price, the Customer is prohibited from reselling or authorizing any seizure of the results from the Services without obtaining prior authorization in writing from APSYS.

Article 18: Responsibility

18.1 Limitation of liability

The obligations accepted by APSYS within the framework of supplying the Services are executed in conformity with the provisions of the Contract and in light of the information communicated by the Customer. APSYS accepts no express or tacit commitment regarding the quality or nature of the Services, other than those to which it commits under the Contract. In case of fault attributable to APSYS at the time of execution of the Services, the Customer who provides proof of direct harm effectively endured and having a causal link to the fault proven, shall have the right to obtain remedy of said prejudice from APSYS, and the total cumulative responsibility of APSYS may not, in any event, exceed 50% of the price of the Service(s) whose faulty execution has been proven.

18.2 Exclusion from liability

APSYS will not be able to held responsible for losses that do not result from proven fault on its part, as well as for indirect losses, economic losses (including, without being exhaustive, lost income, lost data, lost profits, lost Contracts, or commercial losses or expected savings) and for any harm to image (negative impact on image or reputation).

No liability is assumed by APSYS, express or implicit, due to the use made by the Customer of the Services provided by APSYS to third parties, regardless of who they are. In particular, the Customer remains the sole decision-maker regarding any use of the Services provided by APSYS, and APSYS will not answer for any complaint due to harm caused to any third party due to such use, to the extent that APSYS has not been specially and exhaustively informed by the Customer about the purpose and/or use specifically foreseen by the Customer with said third party.

Any remedy of harm by ricochet effect is, as a result, excluded from the scope of liability borne by APSYS.

APSYS will also not have to answer to the Customer if the supply of Services specified in the Contract is delayed or hindered by the absence of supply by the Customer of the resources, access or information required to permit APSYS to fulfil its assignment.

Article 19: Non-poaching

The Customer agrees to neither approach nor entice, directly or indirectly, the personnel of APSYS (including, notably any employee, collaborator and/or director of APSYS) participating or having participated, directly or indirectly, in execution of the Services, for the entire period of execution of the Contract and for a duration of twelve (12) month following its expiration.

Any violation of this commitment will result in payment by the Customer of damages to APSYS, fixed at the set amount of one (1) time the amount of the gross annual salary(ies) of the employee(s) concerned.

Article 20: Time limit

The liability of APSYS or of one of its employees towards the Customer in application of the Contract will be time-barred upon expiration of a period of one year starting from the date of expiration or cancellation of the Contract for any reason at all, or, if it is not expired or cancelled, starting from the date of the last invoice for Services provided issued by APSYS.

Article 21: Cancellation of the Contract

21.1 Cancellation for fault

The Contract may be totally or partially cancelled by mailing of a registered letter with confirmation of receipt by either of the parties in case the other party breaches one of its substantial contractual obligations, and provided that the party in default has not remedied the breach in question within a period of thirty (30) days following written notification of the breach sent by the party not in default.

21.2 Force majeure

The Contract will be cancelled in case of the occurrence of an event of force majeure, as intended under article 1148 of the Civil Code and the interpretation of it by French jurisdictions, that causes a delay in providing the Services of more than thirty (30) days.

21.3 Expenses for cancellation

In case of cancellation before the contractual date of termination of the Contract, and unless this cancellation results from a breach by APSYS of its substantial contractual obligations, additional expenses will be owed by the Customer upon receipt of the corresponding invoice. These additional expenses shall include the costs of discharging and reassigning the personnel of APSYS, as well as the costs of demobilizing the equipment and eventual subcontractors.

Article 22: Confidentiality

In that the Customer is calling upon APSYS for the execution of specific determined Services, it is prohibited from disclosing to third parties, all or a portion of the confidential information relative to the methods, organization, layout of the spaces, Customers, personnel, plans, calculations, drawings and models, drafts, results and, in general, any information relative to the resources implemented by APSYS for the supply of Services and not publicly disclosed by APSYS, regardless of the media, once the Customer has become familiar with them at the time that Service is provided by APSYS.

The Customer guarantees APSYS against any unauthorized disclosure of said documents and information which could be committed by any employees and/or third parties with which the Customer is in a relationship.

In principle, unless otherwise provided for in the Contract, any communication of documents and/or information by APSYS to the Customer done to execute the Services, is covered by confidentiality.

Article 23: Change of control

In case of a change of control of the Customer during the effective period of the Contract, as intended under article L. 233-3 of the Code of Commerce, the Customer agrees to inform APSYS of this beforehand, which will then be able to (i) decide to cancel the Contract without any indemnity being owed to the Customer, and (ii) require that the Customer return all results from the Services already completed.

Article 24: Use of the commercial name of the Customer

The Customer agrees that APSYS is able to use its commercial name as well as the general description of the Services provided as a reference in any commercial document published or in any oral or written presentation, provided that APSYS discloses no Confidential Information on this occasion.

Article 25: Export

25.1 Procedures and licenses for exportation

Certain Products, Software and Services are subject to foreign, European or national regulations with regard to importing and exporting.

Unless otherwise indicated in the Contract, APSYS agrees to undertake all procedures necessary for obtaining the documents required for exporting the Products or Software in question.

For this purpose, the Customer agrees to provide APSYS with any document requested by the competent authorities.

The liability of APSYS may not be engaged in case a license for exportation is not granted to it or is later withdrawn by the competent authorities.

The Customer also agrees to carry out the necessary procedures to obtain the documents required for the Products or Software in question to be imported into its country.

25.2 Customs and embargo

In certain countries, additional taxes may be owed to the local tax administration upon receipt of the Products, Software and related information. The Customer is solely responsible for payment of such import duties and taxes. The Customer is invited to contact the local customs office to obtain further information before placing an Order.

Furthermore, the Customer agrees to respect the laws and regulations applicable in the country for which the Products or Software are intended, with APSYS declining all responsibility in this regard.

Lastly, the Customer agrees that it will not export the Products delivered by APSYS to a country that is on the list of countries declared as under embargo by the American and/or European authorities.

Article 26: Applicable law, assignment of jurisdiction

The present TCS are governed by French law. In case of a dispute, the Commerce Court of Paris shall be solely competent, even in case of multiple defendants or the involvement of third parties.

Article 27: Autonomy of the clauses

The provisions of the present TCS are separate and autonomous from each other. At any time, if one or more of these provisions were to be deemed as invalid, illegal or inapplicable, the validity, legality and applicability of the remaining provisions would not be affected, and the parties agree to substitute similar provisions that are not invalid, illegal or inapplicable.