**EXHIBIT VI**

**APPENDIX 4 – PRIMAVERA P6 SETTINGS**

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# PURPOSE

## The purpose of this document is to define mandatory settings for the SELLER`s PRIMAVERA P6 planning files in order to allow seamless exchange of information between the contractual parties. For that, files basic configuration requirements are set forth herein.

## Those requirements aim to ease the information flow and traceability amongst all PRIMAVERA P6 files of the project, feeding the monitoring and controlling system adopted by BUYER, also based on the PRIMAVERA P6 software and integrated with several company`s corporate systems, including SAP.

## During the Planning kick-off meeting more detailed information will be made available to the SELLER and from then consolidated during the contractual term.

# GENERAL PROVISIONS

Items described on this document are related to the PRIMAVERA P6 files developed and maintained by the SELLER.

Instructions are referred to the version 16.2, English interface, of the PRIMAVERA P6 software.

The philosophy adopted by the BUYER is that both parties, the SELLER and the BUYER, will monitor and control the project running their own PRIMAVERA P6 systems in parallel, during the contract term.

The SELLER must issue its PRIMAVERA P6 files in the XER format timely, as per contract´s planning requirements detailed in the document EXHIBIT VI - DIRECTIVES FOR PLANNING AND CONTROL.

# PRIMAVERA P6 CONFIGURATIONS

## Currency

The SELLER must set, at least, the following currencies:

1. BRL – Brazilian Real: utilizing the Brazilian Portuguese system, which must be the one set on the Excel transfer files;
2. SD – Dollar: utilizing the US English system, which must be the one set on the import and export XER files.

## Project Details

SELLER must set the parameters herein selected, for the section Project/Details, as per the information provided for each tab. There are no specific requirements for the other parameters. In case of conflict, SELLER may suggest alterations in the setting herein defined.

* + - * 1. *General:* Project ID field must be set as “P-XX\_aaaa-mm-dd-n”, where “aaaa-mm-dd” is the schedule date and “n” is the related version counter.
				2. *Dates*:Must Finish Dates must be left blank.
				3. *Defaults*: Defaults for New Activities, and all activities, must be set as:
* Duration Type: Fixed Duration & Units
* Percent Complete Type: Units

SELLER may use different *Duration Type* set in order to perform resources analysis and leveling. In this case the BUYER must be informed of such alterations.

1. *Settings: Critical path definition is the one with Total Float less than, or equal to, zero.*
2. *Calculations: Calculations settings:*
* Activity percent complete based on activity steps: no (disabled).
* Link Budget and At Completion for not started activities: yes (enabled).
* Reset Original Duration and Units to Remaining: yes.
* When updating Actual to Units or Cost: Subtract Actual from At Completion.
* Recalculate Actual Units and Cost when % complete changes: no.
* Update units when costs change resource assignments: no.

# CALENDARS, UDFs, OBSs AND RESOURCES CURVES

The SELLER must define global calendars for the project labeled "P-XX - GLOBAL - <name>", in order to avoid conflict with standard calendars when importing on the BUYER basis.

All the revisions of the *Resources Curves* must be approved by the BUYER.

The customized registries for the UDF (User Defined Field), OBS (Organizational Breakdown Structure) and Resource Curves must be labeled “P-XX-1 – [name]”.

# GLOBAL ACTIVITIES’ CODES SETTINGS

The SELLER must classify all schedules’ activities according to the Global Activity Codes listed below.

Global Activity Codes List must be structured in the same level as per the following requirements:

1. P-XX – PBS: Code Value and Description must be in accordance with the integrated project PBS, to be issued by the BUYER on the KOM.
2. P-XX – Discipline: Code Value and Description must be according to the Table 2. SELLER may adjust its content as deemed.

Table 2 – Disciplines Codes

| ***Code Value*** | ***Description*** |
| --- | --- |
| NV | Naval |
| EL | Electric |
| ST | Structure |
| IN | Instrumentation |
| MS | Mechanic / Static Equipment |
| MD | Mechanic / Dynamic Equipment |
| ME | Mechanic / Special |
| TB | Piping |
| TE | Telecommunication |
| HV | HVAC (Heating, Ventilating, Air Conditioning) |
| PR | Process |
| GR | General |
| AQ | Architecture |
| PF | Fire protection |
| IS | Insulation |
| PN | Coating  |
| SE | Safety |
| NA | Not applicable |

1. P-XX – Modules: Code Value and Description must be according to the Table 3.

Table 3 – Modules

|  |  |
| --- | --- |
| ***Code Value*** | ***Description*** |
| HU | Hull |
| INT | Integration |
| M01 | Modules 01 - Xxxx  |
| M02 | Modules 02 - Yyyy |
| M03 | Modules 03 thru nn |
| … | … |

1. P-XX – System: Code Value and Description must be according to the Table 6.

Table 4 – Systems

| ***Code Value*** | ***Description*** |
| --- | --- |
| 1 | Mooring |
| 2 | Ballast |
| 3 | Cargo |
| 4 | Inert Gas |
| 5 | Oil Separation |
| 6 | Oil Treatment |
| 7 | ***…*** |

e) P-XX – SOP: Code Value e Description must be in accordance with the List of System and Sub-Systems, part of the Commissioning Appendix.

f) P-XX – SSOP: Code Value e Description must be in accordance with the List of System and Sub-Systems, part of the Commissioning Appendix.

Systems (SOP) and Sub-Systems (SSOP) Activity Codes must be created and named as P-XX\_SOP, The Code Value must follow this structure:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| SOP | - | XXXX | - | PP-YYYY | - | ZZZZ |
| Fixed |  | SOP Unity 4 numbers  |  | SOP Type 2 letters - SOP code 4 numbers |  | Sub-SOP Sequence 4 numbers |

The SELLER can create more Activity Codes, named as “P-XX-1 – <name>”, subjected to the BUYER’s approval.

# ACTIVITY ID SETTINGS

The Activity ID field must be named as “P-XX-LL-000000000”, where “P-XX” is the deliverable, “L” is the PBS level code, as listed on the Table 5, and “000000000” is the PRIMAVERA P6 automatically generated sequential number.

Table 5 – PBS Level Codes

| **Code** | **PBS Level Activities** |
| --- | --- |
| HE | Hull – Engineering |
| HP | Hull - Procurement |
| HC | Hull - Construction and Assembly |
| HO | Hull - Commissioning |
| TE | Topsides – Engineering |
| TP | Topsides – Procurement |
| TM | Topsides – Construction and Assembly – Modules |
| TI | Topsides – Construction and Assembly – Integration |
| TO | Topsides - Commissioning |

The ID of the first activity of the detailed schedule must be numbered 1,000 and the subsequent ones must be multiple of thousands. The ID of activities detailed in the planning waves must be based in the same Activity ID from the original activity, numbered increasingly of 100, 10 or 1, as needed.

# WBS SETTINGS

The PRIMAVERA P6 *WBS* (*Work Breakdown Structure*) must be identical to the Appendix 01 - Project Breakdown Structure, from the last level the SELLER may create new sub-levels as defined in item 6 of EXHIBIT VI.

The schedule must have a level named Milestones, with WBS Code 0 (zero). In this level must be created four sub-levels: Input Milestones, Output Milestones (referred to the contract scope), Control Milestones and Contractual Milestones, as per the following settings:

* + - * 1. Input Milestones: Start Milestone type and Mandatory Start restrictions from the contractual dates.
				2. Output Milestones: Finish Milestone, no restrictions, they are used by the BUYER in order to control the deliverables from and the interfaces with the SELLER.
				3. Contractual Milestones: no restrictions, they are used by the BUYER in order to control the contractual events;
				4. Control Milestones: no restrictions, they are used by the BUYER in order to control the contractual specific events.

The SELLER may create more sub-levels, subject to BUYER’s approval.

# RESOURCES STANDARDIZATION

The SELLER must input in the system all the resources, including the weighted ones, as per contract´s planning requirements detailed in the document EXHIBIT VI - DIRECTIVES FOR PLANNING AND CONTROL.

## 8.1 Weighted Resources

The SELLER must set a single resource of the type Nonlabor, for all schedules, with Resource Name as “Weighted P-XX-1” and Resource ID as “P-XX-1\_AVFIS\_POND”, in order to indirectly weight the WBS levels and obtain physical progress.

Only the weighted resource can be of the type Nonlabor.

The weighted resources must be allocated in all Task Dependent or Resource Dependent activities contributing for the contract’s physical progress. Weights must be in line with the ones in the Appendix 01 - Project Breakdown Structure.

The weighted resources cannot be allocated in any of the WBS Summary, Level of Effort, Start Milestone and Finish Milestone activities.

The SELLER must keep the Nonlabor Units Percent Complete, or the Actual Units, always updated.

A resource (Labor or Material type) must be created and assigned to the payment milestones as provided for in the contract. This resource must be the only one priced 1 (price / unit), in order to obtain the financial projection. All other resources must be priced 0 (zero).

To make it possible to assign the resource to payment events, these must be configured as a 1-day Task Dependent Activity, and not a Start or Finish Milestone.

## 8.2 Labor

Labor resources must be properly evaluated, allocated and kept in a logical relation to the productivity indexes adopted.

Resources ID must be labeled as “P-XX-1\_<resource>”.

# SCHEDULES DEVELOPMENT AND MAINTENANCE

The schedule must be developed in compliance with the following requirements, additional to those detailed in the document EXHIBIT VI - DIRECTIVES FOR PLANNING AND CONTROL***:***

* + - * 1. Only the WBS lowest level of the schedule must include activities, at least one per level;
				2. Activity Name must be mnemonic and self-explanatory.
				3. In the WBS of milestones, Input Milestones, and only them, may have external precedent and Output Milestones, and only them, may have succeeding external activities. Those relationships must be defined by the SELLER.
				4. First Contractual Base Line issued must have zero progress.
				5. Remaining Duration of ongoing activities must be kept updated.
				6. Base Line must be frozen and saved in the PRIMAVERA P6 system, after BUYER’s approval.
				7. Schedule Check must be configured according to the Table 6 below. The schedules sent must comply with each target parameter, in order to guarantee the quality of the schedule information. Any exceptions must be submitted and approved to the BUYER.

Table 6 – Schedule Check setup

|  |  |  |
| --- | --- | --- |
| **Check** | **Description** | **Target** |
| Hard Constraints  | Constraints that prevent activities being moved  | 0% |
| Invalid Progress Dates (after the data date)  | Activities with actual dates after the data date  | 0% |
| Invalid Progress Dates (before the data date)  | Incomplete activities before the data date  | 0% |
| Large Durations  | Activities that have a remaining duration greater than 60 days  | < 2% |
| Large Float  | Activities with total float greater than 90 days  | < 5% |
| Logic  | Activities missing predecessors or successors  | < 1% |
| Long Lags  | Relationships with a lag duration greater than 30 days  | 0% |
| Negative Float  | Activities with a total float less than 0  | 0% |
| Negative Lags  | Relationships with a lag duration of less than 0  | 0% |
| Positive Lags  | Relationships with a positive lag duration  | < 2% |
| Relationship Types  | The majority of relationships should be Finish to Start  | > 90% |
| Soft Constraints  | Constraints that do not prevent activities being moved  | < 2% |

## 9.1 Activities Detailing

When necessary further detailing, it must be developed as per the procedure below, to ensure compatibility between current and baseline schedules:

the

* + - * 1. The first detailed activity must have the same *Activity ID* of the original activity.
				2. The remaining detailed activities must have an Activity ID related to the numbering of the original activity as defined in item 6 of this appendix.
				3. The weight of the original activity must be redistributed amongst the new activities.
				4. A User Defined Field (UDF) must be created with the title “P-XX-1 - Original Activity” with the original activity Activity ID.
1. The new activities created must be in the same WBS level of the original activity.

# SCHEDULES ISSUANCE

The SELLER must configure the schedule files through the window *Schedule* (F9), according to the requirements herein described and the Figure 1, for the other settings, not addressed by those requirements, the SELLER is free to define them. Any deviation from those requirements must be approved by the BUYER.

The Current Data Date must be 11:59pm on the cut date.

The Log to File option must be enabled in order to generate the file SCHEDLOG.TXT.



Figure – Settings for the Schedule Option

The SELLER must issue the PRIMAVERA P6 files in the XER format and name them as “P-XX-1-AAAA-MM-DD.XER”, where AAAA-MM-DD is the Data Date.

All XER files must be issued to the BUYER together with the schedule log files. Schedule log files must be named as “P-XX-1-AAAA-MM-DD.TXT”, where AAAA-MM-DD is the Data Date. Also, the SELLER must issue a summary of the key activities in PDF format.

XER files to be sent by the SELLER must contain only global data related to this project. SELLER must provide eventual removal of unwanted global and risk data from .XER files in order to avoid pollution of BUYER's database, mainly in RISKTYPE and POBS data.

The SELLER´s schedule must be in accordance with the contract´s planning requirements detailed in the document EXHIBIT VI - DIRECTIVES FOR PLANNING AND CONTROL.