INSTALLATION AND MECHANICAL/TECHNOLOGICAL COMMISSIONING OF I&C SYSTEMS
The checklist relates to the scope of work carried out during the shutdown of the ..... at .....

Due to the varying nature of shutdown overhauls at different complexes/plants, the checklist must be reviewed and adjusted each time to reflect current needs, taking into account the overhaul requirements, tasks arising during the course of the shutdown, and the conditions for commissioning.

No.	Activities/tasks Scope: specified in the file.	Done correctly?			Contractor Company Name:	Signature of the Contractor	Date	Comments	Signature PCC	Date	Comments
		YES	NO	N/A							
1.	**Has all the work been completed?**										
2.	**Are there any remnants of overhaul work remaining in the area designated for commissioning?**										
3.	**Has the contractor submitted a statement confirming readiness for commissioning (entry in the work**										
4.	**General verification**	**Done correctly?**			**Nazwa firmy wykonawczej**	**Podpis Wykonawcy**	**Date**	**Comments**	**Podpis PCC**	**Date**	**Comments**
		YES	**NO**	**N/A**							
	Do the instruments have nameplates with TAG numbers or project-specific identifiers?										
	Is the unit installed in the correct location according to the P&ID?										
	Is the device properly mounted mechanically (according to the HookUp drawing and OMM)?										
	Is the instrument installed in such a way that its values can be easily read?										
	Have the flange connections been properly made? (bolt lengths, number of bolts, washers/bridges used, gaskets, bolt colour [for Ex])										
	Have the cable glands been tightened? Is the cable entry positioned from below?										
	Are the wires connected to the correct terminals and properly connected electrically?										
	Have the screens been connected?										
	Does the device have a ground connection to the terminal?										
	Are the wires secured in the conduits?										
	Are the wires marked? (from - to + cable number)										
	Does each cable have an adequate spare length margin?										
	Have insulation resistance and RLC (Ex) measurements been taken for the cables?										
	Is there a correct voltage at the transducers?										
	Does the device have the correct parameter settings (range, etc.)?										
	Has it been verified that the instrument reads correctly in the DCS/PLC/indicator and that its range matches the settings in the DCS/PLC/indicator?										
	Has the quality documentation of the device been submitted? (certificates, declarations of conformity, calibration documents, certificate of verification by LabMatic) and as-built documentation										
	Has a repair certificate been provided for the ATEX-certified device?										
	For new ATEX devices, has the initial inspection been completed?										
	Has the contractor provided cable measurement and device verification protocols?										
5.	**Verification of liquid level indicators:** **Enter no. TAG**	**Done correctly?** **LS-.... , LS-.... , ...** **YES**	**NO**	**N/A**	**Nazwa firmy wykonawczej**	**Podpis Wykonawcy**	**Date**	**Comments**	**Podpis PCC**	**Date**	**Comments**
	Have the MIN / MAX settings been verified?										
	Has the length of the signal cable been verified?										
	Has the mounting direction been verified? (according to flow/filling direction)										
	Has it been verified that the trip-off state is a low "0" state?										
6.	**Verification of pressure and differential pressure transducers:** **Enter no. TAG**	**Done correctly?** **PT-.... , PT-.... , ...** **YES**	**NO**	**N/A**	**Nazwa firmy wykonawczej**	**Podpis Wykonawcy**	**Date**	**Comments**	**Podpis PCC**	**Date**	**Comments**
	Has the correct range been set for all outputs?										
	Has a simulation been carried out on the device?										
	Has a transducer reset been performed?										
	Are there shut-off valves fitted under the transducer?										
	Is the supply valve under the transducer open and the air vent closed?										
	Have measurement cells (LP and HP) been installed correctly for the differential pressure?										
7.	**Verification of liquid level transducers:** **Enter no. TAG**	**Done correctly?** **LT-.... , LT-.... , ...** **YES**	**NO**	**N/A**	**Nazwa firmy wykonawczej**	**Podpis Wykonawcy**	**Date**	**Comments**	**Podpis PCC**	**Date**	**Comments**
	Has the correct range been set for all outputs?										
	Has transducer mapping been carried out?										
	Has tank scaling been carried out?										
	Has a transducer reset been performed?										
	Has the correct mounting direction in relation to the tank's side wall been observed?										
8.	**Verification of temperature transducers:** **Enter no. TAG**	**Done correctly?** **TT-.... , TT-.... , ...** **YES**	**NO**	**N/A**	**Nazwa firmy wykonawczej**	**Podpis Wykonawcy**	**Date**	**Comments**	**Podpis PCC**	**Date**	**Comments**
	Is the sensor mounted in a technological shield?										
	Has the correct range been set for all outputs?										
	Verification of flow meters:	**Done correctly?** **FT-.... , FT-.... , ...**			**Nazwa firmy wykonawczej**	**Podpis Wykonawcy**	**Date**	**Comments**	**Podpis PCC**	**Date**	**Comments**

9.	Enter no. TAG	YES	NO	N/A	Nazwa firmy wykonawczej	Podpis Wykonawcy	Date	Comments	Podpis PCC	Date	Comments
	Are there appropriate straight sections upstream and downstream of the flow meter?										
	Is the instrument installed in accordance with the flow direction of the medium?										
	Does the flow meter's installation method ensure its correct operation? (note the measurement location: vertical/horizontal/highest point, lowest point)										
	Has the correct range been set for all outputs?										
	Are the pulse width and magnitude for the pulse output appropriate?										
	Has a simulation been carried out on the device?										
	Has flow reset been performed?										
	Has the elemental function been set for venturi flow meters?										
	Have the correct density and minimum flow cut-offs been set?										
	Verification of pressure gauges and thermometers:	**Done correctly?**			**Nazwa firmy wykonawczej**	**Podpis Wykonawcy**	**Date**	**Comments**	**Podpis PCC**	**Date**	**Comments**
		PI-…. , TI-…. , …									
10.	**Enter no. TAG**	**YES**	**NO**	**N/A**							
	Has the marked scope of work (green) been verified?										
	Is the dial easy to read and correctly mounted?										
	Are shut-off valves fitted for pressure gauges and a technological cover for thermometers?										
	Have the settings for contacts been verified? (if applicable)										
	Verification of ON/OFF and control valves:	**Done correctly?**			**Nazwa firmy wykonawczej**	**Podpis Wykonawcy**	**Date**	**Comments**	**Podpis PCC**	**Date**	**Comments**
		XV…. , FV…, TV…, LV… ,									
11.	**Enter no. TAG**	**YES**	**NO**	**N/A**							
	Is the medium being supplied to the actuator? Are all connections sealed correctly?										
	Has the closed/open position of the limiters been verified?										
	Has the safe position been verified for electrical and air supply failure?										
	Has the correct control of the control valve been verified at the five operating setpoints: 0, 25, 50, 75, 100%?										
	Has the direction of flow through the valve been verified?										
	Have the deviations from the assembly axis been verified in accordance with the OMM?										
	Have noise dampers been fitted?										
	Verification of scales:	**Done correctly?**			**Nazwa firmy wykonawczej**	**Podpis Wykonawcy**	**Date**	**Comments**	**Podpis PCC**	**Date**	**Comments**
		WT-… , …									
12.	**Enter no. TAG**	**YES**	**NO**	**N/A**							
	Has the correct range been set for all outputs?										
	Has a zero calibration been carried out?										
	Has the installation of the cells been validated? Have the transport locks been removed?										
	Is the scale level?										
	Have resistance measurements been taken for tensometric bridges?										
	Is the scale protected against mechanical damage?										
	Verification of analysers:	**Done correctly?**			**Nazwa firmy wykonawczej**	**Podpis Wykonawcy**	**Date**	**Comments**	**Podpis PCC**	**Date**	**Comments**
		AT-… , DT-…, …									
13.	**Enter no. TAG**	**YES**	**NO**	**N/A**							
	Has the correct range been set for all outputs?										
	For pH meters, is calibration on the live process line possible?										
	Gas Detection Verification – DGW	**Done correctly?**			**Nazwa firmy wykonawczej**	**Podpis Wykonawcy**	**Date**	**Comments**	**Podpis PCC**	**Date**	**Comments**
		AT-… , …									
14.	**Enter no. TAG**	**YES**	**NO**	**N/A**							
	Has the correct installation of explosive gas detectors been verified with respect to their location?										
	Has calibration of the devices been completed?										
	Has the operation of the optical-acoustic signalling been checked?										
	Has the connection with the fire alarm system (SSP) been verified?										
	Has the connection with the DCS been checked?										
	DCS / PLC / SCADA / Control System Verification	**Done correctly?**			**Nazwa firmy wykonawczej**	**Podpis Wykonawcy**	**Date**	**Comments**	**Podpis PCC**	**Date**	**Comments**
15.		**YES**	**NO**	**N/A**							
	Have the synoptics been checked (e.g. P&ID compliance, lock screens, network and flooding diagnostic screens, colours, symbols, static and dynamic texts, organisation: links, tree, etc.)?										
	Has the correctness of pop-up lock messages, warnings etc. been checked?										
	Have the locking functions been verified through a simulation test?										
	Have the alarm and lock settings been checked?										
	Have the settings and tuning of the PID controllers been checked?										
	Have the uploaded licences been checked for correctness?										
	Has the system load been checked (memory, CPU, controller cycle time, process value refresh time, etc.), including the verification that there is an appropriate headroom for the following, as per the contract/order and the SUT-C standard: computing power, memory, back-up I/O channels and system licences?										
	Have the system communication and network monitoring been checked?										
	Have you checked and performed test runs, control system commissioning, checking the compatibility of I/O inputs with indicators, alarm system indications, warnings, trend tag archiving system, as well as events and refresh on graphics and ignition switches?										
	Has the automatic activation of the DCS after a power failure been checked?										
	Has the correct operation of redundancy been confirmed (Primary/Standby status, no errors, readiness for failover)?										
	Interlock Verification	**Done correctly?**			**Nazwa firmy wykonawczej**	**Podpis Wykonawcy**	**Date**	**Comments**	**Podpis PCC**	**Date**	**Comments**
		I-…, IS-…, S-…									
16.	**Addition / Modification of Interlock**	**YES**	**NO**	**N/A**							
	Trigger: … – Action: … or *Project Documentation Number*										
	Has the documentation (interlock matrices, interlock logic diagrams) been updated accordingly?										

17.	Assignment: Description:	Done correctly?			Nazwa firmy wykonawczej	Podpis Wykonawcy	Date	Comments	Podpis PCC	Date	Comments
		YES	NO	N/A							

Prepared by

Date and signature

Form Approved By:

Date and signature