

Technical Evaluation for Forward Stratigraphic Modeling Software (RFP NO.: OGDCL -SCM-FD-CB-EXPL-287798243-202)

Section No.	Descriptions of General Terms	Marks Allocated	Bidder-1: Schlumberger			Bidder-2: Beicip Franlab		
		10 Marks	Bidder's Response	Marks Obtained	Total Marks Scored	Bidder's Response	Marks Obtained	Total Marks Scored
Section – 1	Number of years in Forward Stratigraphic Modelling software sales and M&SS projects all over the world.	>15 years = 4 marks, 11-15 years = 3 marks, 06-10 years = 2 marks.	11 years	3	8	20 years	4	10
	Number of Forward Stratigraphic Modelling software licenses sold (and currently active) throughout the world.	>40 Licenses = 4 marks, 30-40 Licenses = 3 marks, <30 Licenses = 2 marks.	30 licenses	3		45 licenses	4	
	Technical Support Office in Pakistan (Islamabad/ Karachi)	2 marks.	Yes	2		Yes	2	
	Descriptions of Technical Terms	90 Marks (Section 2-9)	Bidder's Response	Marks Obtained	Total Marks Scored	Bidder's Response	Marks Obtained	Total Marks Scored
Section – 2	<u>Project Management and OS</u>	20 Marks						
	• Having a Built-in Database (e.g., MySQL or equivalent) with good security.	10	No (Ref to SAP-Ariba Content Tab)	0	10 (Referring to clause 14.2 of TOR, the bidder could not obtain the minimum passing marks i.e. 60% in this section).	Yes	10	20
	• Having Project Backup Utility	10	Yes	10		Yes	10	

			Bidder-01: Schlumberger			Bidder-02: Beicip Franlab		
Section – 3	<u>Input Facilities</u>	15 Marks						
	<ul style="list-style-type: none"> Well paths, wireline logs, petrophysical logs, seismic data, 3D-grids, faults, and horizons. 	4	Yes	4	10	Yes	4	15
	<ul style="list-style-type: none"> Depth maps, GDE maps, Paleobathymetry maps, Subsidence Analysis maps, and Tectonic Events maps. 	3	Yes	3		Yes	3	
	<ul style="list-style-type: none"> Slope angle (numerical value as input) to control the deposition of turbidites. 	5	No (Ref to SAP-Ariba messages from SLB, 08-08-25)	0		Yes	5	
	<ul style="list-style-type: none"> Eustatic curves. 	1	Yes	1		Yes	1	
	<ul style="list-style-type: none"> Multiple sediment source directions and wave direction. 	2	Yes	2		Yes	2	
Section – 4	<u>Data Generation and Processing</u>	10 Marks						
	<ul style="list-style-type: none"> Built-in and user-defined sea-level curves. 	3	Yes	3	10	Yes	3	10
	<ul style="list-style-type: none"> Integrated empirical carbonate production curves. 	5	Yes	5		Yes	5	

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	<ul style="list-style-type: none"> Generating structural, isopach, eroded thickness and subsidence maps. 	2	Yes	2		Yes	2	
Section – 5	Modelling Capabilities	15 Marks						
	<ul style="list-style-type: none"> Model clastics, carbonates and mixed environments. 	1	Yes	1	13	Yes	1	15
	<ul style="list-style-type: none"> 3D simulation/Modelling in all depositional environments (continental & marine) controlled by both allocyclic and auto-cyclic processes. 	1	Yes	1		Yes	1	
	<ul style="list-style-type: none"> Deposition of turbidites as per input slope conditions. 	1	No (Ref to SAP-Ariba messages from SLB, 08-08-25)	0		Yes	1	
	<ul style="list-style-type: none"> Salt precipitation 	1	Yes	1		Yes	1	
	<ul style="list-style-type: none"> Modelling of Diagenetic Processes 	1	Yes	1		Yes	1	
	<ul style="list-style-type: none"> Erosion modelling for continental and marine environments 	1	Yes	1		Yes	1	
	<ul style="list-style-type: none"> Compaction modelling with empirical and user-defined laws. 	1	Yes	1		Yes	1	
	<ul style="list-style-type: none"> Carbonate production with control over spatial constraints, sea temperature, salinity, balancing evaporation vs rainfall and transformation of Carbonates into bioclasts. 	2	Yes	2		Yes	2	

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	• Production and estimation of organic matter in accordance with paleobathymetry.	1	No (Ref to SAP-Ariba Content Tab)	0		Yes	1	
	• Sedimentation controlled by tidal currents, waves, storms and longshore drifts.	1	Yes	1		Yes	1	
	• Control over wave impact (energy, speed, frequency and height), variation of impact with time and depth.	1	Yes	1		Yes	1	
	• Spatial distribution, thicknesses and nature of source, reservoir and seal rocks.	1	Yes	1		Yes	1	
	• Modelling the basin architecture evolution.	1	Yes	1		Yes	1	
	• Modelling the syndepositional settings.	1	Yes	1		Yes	1	
Section – 6	<u>Calibration</u> Detailed comparison analysis of modelled results against real data.	10 Marks						
	• Capability to perform qualitative and quantitative calibration of modelled data against real data (G&G data)	5	Qualitative=Yes Quantitative=No (Ref to SAP-Ariba messages from SLB, 15-08-25)	2.5	5.5 (Referring to clause 14.2 of TOR, the bidder could not obtain the minimum passing marks i.e. 60% in this section).	Qualitative=Yes Quantitative=partially yes (Ref to SAP-Ariba messages from Beicip, 13-08-25)	3.5	10
	• Extraction of maps, synthetic well logs, cross sections, and	3	Yes	3		Yes	3	

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	synthetic seismic data from modelled results.							
	<ul style="list-style-type: none"> Error map generation with auto computation. 	2	No (Ref to SAP-Ariba messages from SLB, 08-08-25)	0		Yes	2	
Section – 7	<u>Output Stratigraphic Properties</u> Generation and extraction of property data (maps, grids, 2D sections, 3D volumes etc.)	10 Marks						
	<ul style="list-style-type: none"> Depositional geometries, facies distribution maps and proportions of sediments. 	1	Yes	1	10	Yes	1	10
	<ul style="list-style-type: none"> Modelled/ Synthetic well data (LAS, facies, petrophysical properties etc.) 	1	Yes	1		Yes	1	
	<ul style="list-style-type: none"> Synthetic seismic data (amplitude, impedance and velocities) and wavelet extraction (SEG-Y, ASCII). 	1	Yes	1		Yes	1	
	<ul style="list-style-type: none"> Paleobathymetry (Grids). 	1	Yes	1		Yes	1	
	<ul style="list-style-type: none"> Thickness maps. 	1	Yes	1		Yes	1	
	<ul style="list-style-type: none"> Sedimentation rate, Slope variation and exposure time maps. 	1	Yes	1		Yes	1	

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	• Water level and flow maps.	1	Yes	1		Yes	1	
	• Drift current energy maps.	1	Yes	1		Yes	1	
	• Porosity and permeability.	1	Yes	1		Yes	1	
	• Initial TOC, initial HI, anoxic conditions and spatial distribution of organic matter.	1	Yes	1		Yes	1	
Section – 8	<u>Visualization Capabilities</u>	3 Marks						
	• Ability to display in 3D view, well data (logs and markers) view, cross section view, cross plot view, map view and statistics view.	2	Yes	2	3	Yes	2	3
	• Visualization of structured and unstructured grids, cultural data, faults on surfaces and seismic data.	1	Yes	1		Yes	1	
Section – 9	<u>Mapping & Post-Processing Tools</u>	7 Marks						
	• Ability to extract and filter data from models (different rock properties from simulated output)	1	Yes	1	7	Yes	1	7
	• Multi-scale (model, zone of interest) quantitative reporting associated with graphs (pie charts, bar charts)	1	Yes	1		Yes	1	

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	• Definition of different facies as per output stratigraphic properties.	1	Yes	1		Yes	1	
	• Highlight locations of reservoir and source rocks.	1	Yes	1		Yes	1	
	• Burial analysis	1	Yes	1		Yes	1	
	• Auto-computation for Net To Gross maps	1	Yes	1		Yes	1	
	• Downscaled grid generation for reservoir scale	1	Yes	1		Yes	1	
			Schlumberger's Total=		76.5/100	Beicip Franlab's Total=		98.5/100

Note: Schlumberger could not pass as they scored 50% in Section-02 and 55% in Section-06, while the minimum passing marks for each section are 60% (refer to Clause 14.2 of TOR)