

BHARAT HEAVY ELECTRICALS LIMITED

(A Government of India Undertaking)

Delhi – 110 049

India

Notice for Inviting

Expression of Interest (Eol)

for

Technology Tie-up for Circulating Fluidized Bed Combustion (CFBC) Boilers including Sub Critical and Once Through Super Critical (OTSC) technology for major fuels including biomass

EoI Ref No.: AA/TL/0102

Date: January 05, 2022



INDEX

SI. No.	DESCRIPTION
1.	SECTION - 1: Disclaimer
2.	SECTION – 2: Schedule of EoI Process & Contact Details
3.	SECTION – 3: Details of EoI
4.	Annexure-1: Indicative Scope of Technology Transfer
5.	Annexure-2: Broad technical capabilities of Prospective Collaborator and indicative technical features of CFBC boiler proposed for TCA
6.	Annexure-3: Prospective Collaborator's Experience in the field of CFBC Boilers for Thermal Power Plants & other applications
7.	Annexure-4: Reference List: The Prospective Collaborator's major supplies in last 10 years
8.	Annexure-5: Typical Fuel Analysis





SECTION-1 Disclaimer

The information contained in this Expression of Interest (EoI) document provided to the Prospective Collaborators, by or on behalf of Bharat Heavy Electricals Limited (BHEL) or any of its employees or advisors, is provided to the Prospective Collaborator on the terms and conditions set out in this EoI document and all other terms and conditions subject to which such information is provided.

- 1. The purpose of this EoI document is to provide the Prospective Collaborator with information to assist the formulation of their proposal. This EoI document does not purport to contain all the information each Prospective Collaborator may require. This EoI document may not be appropriate for all persons, and it is not possible for BHEL, its employees or advisors to consider the business/investment objectives, financial situation and particular needs of each Prospective Collaborator who reads or uses this EoI document. Each Prospective Collaborator should conduct his own investigations and analysis and should check the accuracy, reliability and completeness of the information in this EoI document and where necessary obtain independent advice from appropriate sources.
- 2. BHEL, its employees and advisors make no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of the EoI document.
- 3. BHEL may, in its absolute discretion, but without being under any obligation to do so, modify, amend or supplement the information in this EoI document.
- 4. The issue of this EoI does not imply that BHEL is bound to select and shortlist any or all the Prospective Collaborator(s). Even after selection of suitable Prospective Collaborator, BHEL is not bound to proceed ahead with the Prospective Collaborator and in no case be responsible or liable for any commercial and consequential liabilities in any manner whatsoever.
- 5. The Prospective Collaborator shall bear all costs associated with the preparation, technical discussion/presentation and submission of response against this EoI. BHEL shall in no case be responsible or liable for these costs regardless of the conduct or outcome of the EoI process.
- 6. Canvassing in any form by the Prospective Collaborator or by any other agency on their behalf shall lead to disqualification of their EoI.
- 7. Notwithstanding anything contained in this EoI, BHEL reserves the right to accept or reject any application and to annul the EoI process and reject all applications, at any time without any liability or any obligation for such acceptance, rejection or annulment and without assigning any reasons, thereof. In the event that BHEL rejects or annuls all the applications, it may at its discretion, invite all eligible Prospective Collaborators to submit fresh applications.
- 8. BHEL reserves the right to disqualify any applicant during or after completion of Eol process, if it is found there was a material misrepresentation by any such applicant or the applicant fails to provide within the specified time, supplemental information sought by BHEL.
- 9. BHEL reserves the right to verify all statements, information and documents submitted by the applicant in response to the EoI. Any such verification or lack of such verification by BHEL shall not relieve the applicant of his obligations or liabilities hereunder nor will it affect any rights of BHEL.



SECTION-2 Schedule of Eol Process & Contact Details

A. Schedule of EoI Process:

The schedule of activities during the EoI Process shall be as follows -

SI. No.	Description	Date
1.	Issue of EoI document	05.01.2022
2.	Last date of submission of Eol response	27.01.2022

B. Contact Details:

Senior Deputy General Manager (CTM) Corporate Technology Management, Bharat Heavy Electricals Limited (BHEL), BHEL House, Siri Fort, New Delhi 110049 Tel: +91-11- 66337218 / 66337198 Mobile: +91 9810072480 E-Mail: <u>techeoi@bhel.in</u>



<u>SECTION – 3</u>

Details of Expression of Interest (EoI)

3.1 Introduction:

This Expression of Interest (EoI) seeks response from Original Equipment Manufacturers (OEMs) of Circulating Fluidized Bed Combustion (CFBC) boilers who are meeting the requirements of this EoI and are willing to be associated with BHEL through a License & Technology Collaboration Agreement (TCA) on long term basis to enable BHEL to design, engineer, manufacture, assemble, quality control, test, supply, erect, commission, repair, service and retrofit, CFBC boilers for thermal power plants and other applications.

3.2 About BHEL:

BHEL is a leading state owned company, wherein Government of India is holding 63.17% of its equity. BHEL is an integrated power plant equipment manufacturer and one of the largest engineering and manufacturing organization in India, catering to the core infrastructure sectors of Indian economy viz. energy, transportation, heavy engineering industry, defence, renewable and non-conventional energy. The energy sector covers generation, transmission and distribution equipment for thermal, gas, hydro, nuclear and solar photo voltaic. BHEL has been in this business for more than 50 years and BHEL supplied equipment account for more than 57% (approx. 180 GW) of the total thermal generating capacity in India. BHEL is also listed in Indian stock exchanges. BHEL has 16 manufacturing units, 4 power sector regions, 8 service centres, 2 repair centre and 15 regional offices besides host of project sites spread all over India and abroad. BHEL has its footprint in all the inhabited continents with references in 86 countries including Malaysia, Oman, Iraq, Syria Sudan, Libya, Cyprus, Malta, Afghanistan, Bangladesh, Bhutan, New Zealand etc. with cumulative overseas installed capacity of BHEL manufactured power plants nearing 10,000 MW. The annual turnover of BHEL for the year 2020-21 was around US\$ 2.3 Billion. BHEL's highly skilled and committed manpower of approx. 31000; state-of-the-art manufacturing, R&D facilities and latest technologies helped BHEL to deliver a consistent track record of performance since long. To position leading state-owned companies as Global Industrial giant and as a recognition for their exemplary performance, Government of India categorized BHEL as "Maharatna Company" in 2013.

The high level of quality & reliability of BHEL products is due to adherence to international standards by acquiring and adapting some of the best technologies from leading companies in the world, together with technologies developed in its own R&D centres.

Our ongoing major technology tie-ups include agreements with Siemens Energy Global GmbH & Co. KG., Germany (for Steam Turbines, Generators and Condensers); MHI, Japan (for Pumps); MHI, Japan (for Flue Gas Desulfurization Systems); Leonardo S.p.A, Italy (for Super Rapid Gun Mount); GE Tech. GmbH, Switzerland (for Steam Turbine for Nuclear Power



Plant); Vogt Power International, USA (for Heat Recovery Steam Generators); Indian Space Research Organization (ISRO) (for Space Grade Lithium-Ion Cells); NANO Company Ltd., Korea (for SCR Catalysts); HLB Power Company Ltd., Korea (for Gates and Dampers); Kawasaki Heavy Industries, Japan (for Stainless Steel Coaches for Metros); Valmet Automation Oy, Finland (for DCS System) and Babcock Power Environmental Inc., USA (for Selective Catalytic Reduction Systems).

*More details about the entire range of BHEL's products and operations can be viewed by visiting our web site <u>www.bhel.com</u>

3.3 About High Pressure Boiler Plant (HPBP), Tiruchirappalli:

High Pressure Boiler Plant (HPBP), established in 1965 at southern part of India at Tiruchirappalli in Tamilnadu state is one of the major manufacturing units of BHEL dedicated to production of various kinds of Steam Generators. HPBP has established itself as leading reliable boiler manufacturer with worldwide references in numerous overseas territories including Europe, Middle-East, CIS countries and South-East Asia. HPBP not only manufactures pulverized coal fired boilers but also manufactures CFBC boilers, HRSGs, valves, oil field equipment and many other products of strategic importance for defence sector. HPBP has strong global reference base of various kind of boilers ranging from 30 MWe to 800 MWe.

3.4 Scope of Cooperation:

BHEL is seeking Expression of Interest from Original Equipment Manufacturers (OEMs) for License and Technology Collaboration Agreement for CFBC boilers (including Sub Critical and Once Through Super Critical (OTSC) technology for major fuels including petcoke & biomass) for thermal power plants and other applications.

Prospective collaborator shall be responsible for transferring necessary know-how & know-why to BHEL for Circulating Fluidized Bed Combustion (CFBC) boilers.

Interested reputed OEMs with proven CFBC boiler technology are invited to submit their offer in response to this EoI, as per indicative scope of technology transfer given in **Annexure-1**.

Upon receipt of responses against this EoI, BHEL will review the responses to ascertain suitability of the offer and shortlist Prospective Collaborators for further discussions. Detailed discussions on commercial and other terms and conditions to finalize the Technology Collaboration Agreement (TCA) shall be held with shortlisted Prospective Collaborators. The detailed terms and conditions for such a paid-up license agreement shall be mutually agreed upon.

Business sharing option, during the initial period of technology assimilation by BHEL may also be considered.



3.5 Prequalification requirements (PQRs):

The Prospective Collaborator shall meet following qualification requirements as on the date of submission of EoI:

a) Prospective collaborator should have at least ten (10) years of experience in designing, engineering, manufacturing, supply, erection and commissioning of CFBC Boilers.
(Prospective collaborator is required to substantiate this PQR by providing suitable *supply reference as documentary evidence)

And

- b) Prospective Collaborator should have designed, engineered, manufactured, supplied, erected and commissioned / supervised commissioning during the last ten (10) years, at least two (2) number of CFBC Boilers with Steam/Water cooled cyclone design firing Coal/ Lignite, of which at least one (1) number of boiler having supercritical parameters and at least one (1) number of sub-critical boiler of greater than 300 TPH steaming capacity. Both these references i.e. supercritical & subcritical boilers should be in successful operation for a period of not less than one (1) year as on closing date of this EoI. (Prospective collaborator is required to substantiate this PQR by providing performance certificate issued by end client/customer as documentary proof)
 - * <u>Note:</u> Supply reference to be duly authenticated by the prospective collaborator through submission of necessary supporting documents like Purchase Order (PO) on prospective collaborator by its End Customer or Performance certificate etc.

3.6 Instructions:

3.6.1 The interested Prospective Collaborators shall ensure that their duly filled up complete response along with following annexures are received by BHEL on or before 27th January 2022 (Thursday).

Annexure 1- Indicative Scope of Technology Transfer Annexure 2- Broad technical capabilities of Prospective Collaborator and indicative technical features of CFBC boilers Annexure 3- Experience in the field of CFBC boilers Annexure 4- Detailed product reference for major supplies in last 10 years

- Annexure 5- Typical Fuel Analysis
- 3.6.2 The response shall necessarily be accompanied with details on following:
 - 1. Company Background
 - 2. Product Profile
 - 3. CFBC Boiler technical details
 - 4. Reference list of Customers
 - 5. Performance Certificates from end customers



- 6. CFBC boiler data sheet and
- 7. Annual audited financial reports for last 3 (three) years including auditor's report
- 3.6.3 Language: All correspondences and documents related to the EoI response shall be in English language, provided that any printed literature furnished by the Prospective Collaborator may be written in another language, as long as such literature is accompanied by a translation of its pertinent passages in English language in which case, for purposes of interpretation of the bid, the English translation shall govern.
- 3.6.4 The Prospective Collaborator(s) shall abide by the terms & conditions, as applicable, of the EoI.
- 3.6.5 All pages of the response against this EoI shall be duly signed by the authorised signatory.
- 3.6.6 Multiple proposals from the same Prospective Collaborator should not be submitted.
- 3.6.7 BHEL at its discretion shall inspect the Prospective Collaborator's works / office / reference site premises for the purpose of evaluation, as deemed necessary before selection of Collaborator. BHEL decision in this regard shall be final.
- 3.6.8 Any Prospective Collaborator which is debarred / blacklisted by Indian Central/State Governments or by any entity controlled by Indian Central / State Governments from participating in any of their project, as on date of submission of EoI, shall not be eligible to submit the EoI.
- 3.6.9 BHEL shall receive applications pursuant to this EoI in accordance with the terms set forth herein, as modified, altered, amended and clarified from time to time by BHEL, and all applications shall be submitted in accordance with such terms on or before the date specified in this EoI for submission of applications.

In case any amendment/corrigendum to this EoI is issued, it shall be notified only at <u>www.bhel.com</u>

3.7 Confidentiality:

3.7.1 Information relating to the examination, clarification, evaluation and comparison of Eol and recommendations shall not be disclosed to Prospective Collaborator. Any effort by Prospective Collaborator to influence BHEL in processing of Eol or selection decisions may result in the rejection of the response against Eol.

3.8 Governing Laws & Jurisdiction:

3.8.1 The EoI process shall be governed by, and construed in accordance with the laws of India and the Courts at New Delhi (India) shall have exclusive jurisdiction over all disputes arising under, pursuant to and / or in connection with the EoI process.



<u>Annexure-1</u>

Indicative Scope of Technology Transfer

a)	Transfer of up-to-date Technical Information relating to the design, engineer, manufacture, assemble, quality control, test, supply, erect, commission, repair, service and retrofit of the CFBC boiler.
b)	Training of BHEL Engineers at Collaborator's design office/manufacturing facilities to enable them design, engineer, manufacture, assemble, quality control, test, erect and commission the CFBC boiler in Thermal Power Plants and other applications.
c)	Transfer of improvements/modifications/developments/up gradations to meet market requirements and environment norms / statutory requirements during the period of TCA.
d)	Transfer of information to enable BHEL to source/procure those items, which the Prospective Collaborator sources from outside (as these are not manufactured by the Prospective Collaborator) for use in the CFBC boiler.
e)	Transfer of site feedback and troubleshooting information
f)	Transfer of applicable proprietary computer programs including logics and source code
g)	Assist BHEL in stabilizing manufacturing of various critical components in CFBC boiler. Assist BHEL in identifying sub vendors for all the sub systems and bought out items.
h)	Provide technical assistance and quality surveillance /supervision during design, engineer, manufacture, assemble, quality control, test, supply, erect, commission, repair, service and retrofit of CFBC boiler.
i)	Provide support through engineering services from Collaborator's design office / manufacturing facilities for design vetting of CFBC boiler
j)	Deputation of Collaborator's experts either at BHEL's manufacturing facilities or project sites to assist BHEL in assimilating technology for CFBC boiler in Thermal Power Plants and other applications.



Annexure-2

Broad technical capabilities of Prospective Collaborator and indicative technical features of CFBC boiler proposed for TCA

SI. No.	Description	Prospective Collaborator's
1	Indicate whether Prespective Collaborator has the capability	response
1.	to perform the following for CFBC Boilers design	
	a) Capability in preparation of complete arrangement	
	including layout of all equipment	
	b) P&ID of the CFBC boiler	
	c) Design calculations for design and selection of CFBC system-	
	combustor water wall, cyclone, seal pot, super heaters,	
	reheaters, economizers, evaporator, boiler auxiliaries design,	
	efficiency calculation.	
	d) Stress analysis and design of the various components and	
	supports in CFBC Boiler system and also provide basic design	
	and detailed engineering for all components to enable BHEL	
	for in-house manufacturing, even if same is outsourced by	
	Prospective Collaborator	
	CEBC Boiler along with valves piping &	
	instrumentation and their location	
	f) Capability in proparing specification for various Pought out	
	Items which are required for completeness of the CEBC	
	Boiler	
	g) Selection of analysers, electrical equipment.	
	control & instrumentation system (architecture	
	and control logics) for complete CFBC Boiler	
	h) Capability in preparation of Hazard and	
	Operability (HAZOP) study for complete CFBC boiler	
	i) Manufacturing drawings for the total CFBC Boiler	
	j) Erection procedure for complete CFBC Boiler including	
	erection drawings	
	k) Capability in preparation of complete bill of materials for	
	CFBC Boiler	
	I) Operation and maintenance of CFBC Boiler	
	m) Performance guarantee test procedure	

Signature & Seal:

Authorised Signatory of the Prospective Collaborator



<u>Annexure-3</u>

Prospective Collaborator's Experience in the field of CFBC Boilers for Thermal Power

SI. No.	Requirement	Prospective Collaborator's response YES/NO and remarks if any.
1)	For how many years, Prospective Collaborator is in business of CFBC boilers	
2)	Whether Prospective Collaborator has carried out CFBC Boiler system design with water cooled cyclone	
3)	Whether Prospective Collaborator has carried out CFBC Boiler system design with steam cooled cyclone	
4)	Whether Prospective Collaborator has carried out CFBC Boiler system design with in-furnace surfaces	
5)	Whether Prospective Collaborator has operating boilers of once through sub-critical type.	
6)	Whether Prospective Collaborator has operating boilers of once through super-critical type.	
7)	Whether Prospective Collaborator's once through super-critical furnace wall design includes rifled tubes or plain tubes.	
8)	Whether Prospective Collaborator has carried out CFBC Boiler system design for reheater control with gas by pass and steam by-pass control	
9)	Whether Prospective Collaborator has carried out CFBC Boiler system design for following fuels:	
	(i) Biomass	
-	(ii) Pet Coke	
-	(iii) Lignite	
-	(iv) Coal	
-	(v) Peat	
-	(vi) Refuse Derived Fuel (RDF)	
10)	(VII) Washery rejects Whether Prospective Collaborator has carried out CFBC Boiler system design for ASME, IBR standards	
11)	Whether the Prospective Collaborator is an original CFBC boiler designer & supplier	
12)	Whether Prospective Collaborator has proven operational Experience of CFBC Boiler, with NOx emission corresponding to 100 mg/nm3 @6% O2 dry & SOx emission 100 mg/nm3 @ 6% O2 dry with sulphur upto 7% in fuel. Please also	
	Page 11 of 16	



SI. No.	Requirement	Prospective Collaborator's
		response YES/NO and
		remarks if any.
	indicate whether technology for SO2 reduction (scrubber or	
	equivalent) downstream of CFBC boiler to reduce SOx to 100	
	mg/nm3 with Sulphur up to 8% in fuel, is available with	
	Prospective Collaborator as part of the CFBC Boiler system.	
13)	Whether Prospective Collaborator has supplied any CFBC boiler	
	with mercury emission control/ DeNOx-SCR/SNCR system/ Duct	
	Sorbent Injection system.	
14)	Whether Company background and its product profile along	
	with technical details of CFBC boiler which is being offered to	
	BHEL under this EoI enclosed.	
15)	Whether CFBC Boiler data sheet has been enclosed	
16)	Whether information on market share has been enclosed	
17)	Whether Prospective Collaborator's detailed reference list has	
	been enclosed	
18)	Whether Prospective Collaborator's annual audited	
	financial reports including auditor's report for last 3 years has	
	been enclosed	
19)	Whether prospective collaborator have positive net worth as	
	per latest audited financial statements	
20)	"Prospective collaborator should have at least ten (10) years of	
	experience in designing, engineering, manufacturing, supply,	
	erection and commissioning of CFBC Boilers."	
	Whether Prospective Collaborator meets above PQR and	
	requisite supply reference duly authenticated by the	
	prospective collaborator as documentary evidence to	
	substantiate the above PQR has been submitted.	
21)	"Prospective Collaborator should have designed, engineered,	
	manufactured, supplied, erected and commissioned /	
	supervised commissioning during the last ten (10) years at least	
	two (2) number of CFBC Boilers with Steam/Water cooled	
	cyclone design firing Coal/ Lignite, of which at least one (1)	
	number of boiler having supercritical parameters and at least	
	one (1) number of sub-critical boiler of greater than 300 TPH	
	steaming capacity. Both these references i.e. supercritical &	
	subcritical boilers should be in successful operation for a period	
	of not less than one (1) year as on closing date of this EoI."	
	Page 12 of 16	



SI. No.	Requirement	Prospective Collaborator's
		response YES/NO and
		remarks if any.
	Whether Prospective Collaborator meets above PQR and	
	requisite performance certificate issued by the end	
	above POR has been submitted	
22)	Whether above mentioned both references of CEBC Boiler(s) i e	
,	supercritical & subcritical boilers have achieved an average	
	annual Plant Load Factor of not less than 70% or Availability of	
	not less than 85% in any of the two years during the plant	
	operating period.	
221	If Yes, provide details thereof.	
23)	Whether Prospective Collaborator has supplied any CFBC Boiler	
	system with minimum cumulative operation of 5256 hours in	
	any one-year period during the plant operating period.	
	If Yes, provide details thereof.	
24)	Whether the Prospective Collaborator has any experience in	
	designing, engineering, manufacturing, suppling, erection and	
	commissioning of Pet-coke based CFBC boiler.	
	If Yes, please furnish no of such CEBC boilers & its capacity	
	location & customer details, year of commissioning etc.	
25)	Whether the Prospective Collaborator has any experience in	
	designing, engineering, manufacturing, suppling, erection and	
	commissioning of Biomass based CFBC boiler.	
	If Yes, please furnish no of such CFBC bollers & its capacity,	
	commissioning etc	
26)	Whether the Prospective Collaborator owns the Intellectual	
- ,	Property Rights for the technology being proposed for transfer	
	under the Technology Collaboration Agreement (TCA) or have	
	unencumbered rights from the owner of the Intellectual	
	Property Rights to sub-license the technology, if applicable.	
17	If yes, whether list of such Intellectual Property Rights enclosed.	
27)	Whether the Prospective Collaborator has any experience in	
	establishing a new manufacturing, testing and assembly	
	rage 13 01 10	



		Requirement	Prospective Collaborator's response YES/NO and remarks if any.			
28)		Prospective Collaborator shall indicate the following:				
	a)	Reference CFBC Boiler firing maximum sulphur content				
	b)	Reference CFBC Boiler firing maximum ash content				
	c)	Reference CFBC Boiler firing with highest moisture content				
	d)	Reference CFBC Boiler firing with lowest calorific value content				
	e)	Reference CFBC Boiler firing with maximum desulphurization achieved by lime addition in furnace				
29)		Whether Prospective Collaborator has confirmed their design & performance of CFBC Boiler as per the indicative fuel analysis and flue gas parameters provided in Annexure-5.				
30)		Prospective Collaborator shall confirm SOx emission of 100 mg/nm3 @ 6% O2 dry with sulphur content of 0.6 % and calorific value of 2800 Kcal/kg (HHV) with lime stone addition only in furnace.				
		Prospective Collaborator shall indicate NOx emission value in mg/nm3 @ 6% O2 dry corresponding to typical Indian coal parameter (Annexture-5).				
31)		Whether Prospective Collaborator has offered technology license to any other company in the world for supply of CFBC Boilers.				
32)		Whether Prospective Collaborator has supplied subcritical & supercritical CFBC Boilers to the location outside the Prospective Collaborator's country of origin.				
		If Yes, provide details thereof.				
33)		Whether Prospective Collaborator has operated super critical boiler with load cycling operations. If yes, what is the range of load cycling and what are the ramp up & ramp down rate per minute .				



Annexure-4

Reference List: The Prospective Collaborator shall furnish a summary of their product reference as detailed below for major supplies in last 10 years

SI. No.	Customer / Country	Unit Rating MWe	No of units	Type of CFBC Boiler: Steam cooled cyclone / Water cooled cyclone / Hot cyclone	Type of CFBC Boiler: Natural Circulation / Forced circulation (Once Through)/ SC	Type of fuel	Supply type: New / Retrofit	Date of order	Commissioning Date	Steaming capacity- t/h, pressure- bar, temp°C	Availability	Fuel analysis including sulphur content and calorific value	Guaranteed Emission value in NOx, SOx, Mercury (mg/nm3 at 6% O2 dry)

Signature & Seal: Authorised Signatory of the Prospective Collaborator



Annexure-5

Typical Fuel Analysis

Typical	Petcoke	Imported Coals		Indian	Lig	nite	Washery	Biomass
Fuel		High	High	Coal			Reject	
		HHV	moisture content		Low Ash	Low HHV		
Carbon	80.80	61.94	39.21	36.2	29.06	21.46	20.15	20-35
Hydrogen	5.00	3.75	2.47	1.70	2.35	1.42	0.57	1-3
Oxygen	3.00	8.07	9.98	6.00	12.31	7.93	1.00	4-12
Moisture	0.30	9.00	44.0	10.0	48.50	44.00	10.50	30-60
Sulphur	8.20	0.70	0.19	0.50	0.50	4.00	0.90	0.1-1.0
Nitrogen	1.70	1.54	0.44	0.60	0.28	0.61	1.88	0.5-2
Ash	1.00	15.0	3.71	45.0	7.00	20.58	65.00	1-8
HHV (kcal/kg)	8000	5950	3400	3200	2800	2125	1800	1800-4200

Signature & Seal: Authorised Signatory of the Prospective Collaborator