

## INTERNATIONAL COMPARISON AND BREAKDOWN OF THE DELIVERED COST OF BATTERY CELLS TO THE UK

### **Request for Proposal: “Stage 1 – An Initial Assessment”**

The Faraday Institution requests proposals for a study to assess the competitiveness of battery cell manufacturing in the UK. Competitiveness will be assessed by identifying, estimating and comparing the different cost components of (automotive) battery cell manufacturing in leading countries. The main part of the study involves developing a spreadsheet model of costs.

The Faraday Institution is collaborating with UK Battery Industrialisation Centre (UKBIC), Advanced Propulsion Centre (APC) and Innovate UK on this study. We are working together as we all want to ensure that battery manufacturing in the UK is the most competitive in Europe and that the highest margins can be achieved by companies investing in the UK.

#### **Requirement**

The requirement is set out in more detailed in Annex A.

The purpose of this study is to undertake an initial assessment of the UK’s competitive position for battery cell manufacture. Competitiveness will be determined through the development of a cross-country comparison spreadsheet model of the delivered cost of battery cells to the UK. The overarching aim is to identify the key cost factors where the UK could and should focus on in the future to ensure it can lead the EU in terms of (cost)competitive cell manufacturing.

The final deliverables are a report and an Excel spreadsheet model that enables scenario modelling and demonstrates sensitivities to various inputs.

This Request for Proposal (RFP) is relevant to the first part of a two-stage process:

- Stage 1 is an ‘initial assessment’ of the costs of battery cells manufactured overseas and delivered to the UK. The initial assessment is a focused review and synthesis of publicly available literature, data and evidence, and the development of a spreadsheet model. It is focused on two overseas countries only (i.e. China/Korea and 1 EU country).
- Stage 2 is a ‘detailed assessment’ of the costs of battery cells manufactured overseas and delivered to the UK. Whilst the scope and approach would be determined during Stage 1, we envisage it would be a data-driven project involving detailed primary research, detailed data collection and evidence-based modelling to deconstruct at a granular level the costs of battery cells manufactured overseas. We envisage that the detail assessment would compare five countries (e.g. China, Japan, Poland, Germany and the US) to the UK.

Stage 2 will be commissioned with a new RFP and it may be that a different consultant is awarded the contract. At this stage, a decision has not been made on whether to proceed with Stage 2.

Our expectation is that any work conducted by Tenderers in Stage 1 would be transferable to a new consultant for Stage 2. Tenderers should make clear if this is not the case, for example, if they have proprietary models that they intend to use in Stage 1.

**Price**

Detail of pricing Breakdown	Price (INC VAT)
Total cost:  Bid should break down cost by <ul style="list-style-type: none"><li>• Staff costs/time (including daily rates)</li><li>• Travel and subsistence</li><li>• Other costs</li></ul>	

**Compliance**

Please note that by completing and returning this quotation form you are confirming an offer which is made against Faraday Institution terms and conditions (Annex B) and which, to your best knowledge, meets our requirements as set out in the terms of Reference (Annex A). Should this NOT be the case please make this clear in your proposal. Faraday Institution reserves the right not to consider any quotation which is not in compliance with our requirement or terms.

**All questions and or return of quotation should be directed to:**

[stephen.gifford@faraday.ac.uk](mailto:stephen.gifford@faraday.ac.uk) with the email subject starting PROPOSAL.

**Please return your quotation by 5pm on Friday 24<sup>th</sup> May 2019**

**COMPLETED BY CONTRACTOR****Validity Period**

This quotation is valid until (**date**)

**Supplier details:**

For and on behalf of: (**insert supplier company name and Company Number**)

Person submitting quotation: (**name**)

Telephone and email details:

Dated:

## **Annex A – Statement of Requirement**

### **INTERNATIONAL COMPARISON AND BREAKDOWN OF THE DELIVERED COST OF BATTERY CELLS TO THE UK**

#### **REQUEST FOR PROPOSAL: “STAGE 1 – AN INITIAL ASSESSMENT”**

##### **1. INTRODUCTION**

The Faraday Institution and the UK BIC are key parts of the £246 million Faraday Battery Challenge programme to support the growth of the UK battery supply chain and enable the UK to realise the opportunities from the market. The UK BIC will be a facility which aims to enable industry, via open access, to scale up and commercialise advanced technologies central to the development and manufacture of batteries, initially for the automotive sector but with wider application. The Faraday Institution has been established as the UK’s independent institute for electrochemical energy storage science and technology, supporting research, training, and analysis.

This study will feed into a strategic aim to land battery manufacturing in the UK to support the rapid growth of electric vehicle (EV) production and future proof jobs in the UK car industry. A recent McKinsey study for the Faraday Institution estimated 60-200 GWh p.a. of battery manufacturing capacity and 4 to 13 Gigafactories could be based in the UK. We are collaborating as a group of institutions, as we all want to ensure that battery manufacturing in the UK is the most competitive in Europe and that the highest margins can be achieved by companies investing in the UK.

A small Steering Group containing personnel from the Faraday Institution, UKBIC, APC and UK Research and Innovation will provide overall direction and sign-off for this project. Day to day management and the contact point for the successful contractor will be a Stephen Gifford from the Faraday Institution.

##### **2. BACKGROUND**

The UK automotive industry is undergoing a disruptive transformation, transitioning from internal combustion engine (ICE) powered vehicle production to fully EV production by 2040. The UK appears to be in a good position to attract prospective EV and battery manufacturers. The UK is the 4th largest vehicle manufacturer in Europe and typically attracts the largest amount of foreign direct investment projects in Europe.

The UK is also already experienced in battery production through the establishment of the Sunderland battery plant in 2010. We are also working with the management of AESC too ensure that it has the ability to significantly scale up its operation as investment occurs in the UK.

The economics of EV production drives EV and battery manufacturers to be located in close proximity to one another. The presence of major EV production lines in the UK would, therefore, be dependent on the willingness of the battery manufacturers to locate in the UK which, in turn, would be based on the competitiveness of UK-based battery manufacturing. The location decisions of potential battery manufacturers will be dependent on whether they can offer cells to the UK market at a price which is comparable to the price offered by overseas manufacturers.

However, there is a question whether the global battery manufacturing market is currently, and will continue in the future, to operate on a level playing field. The market is experiencing a growth spurt and so there is a considerable first-mover advantage in investing early and securing market share. In such a period of growth, the market price may not relate to costs. Companies may be attempting to drive out competition by pricing below market value and state subsidies or government support for industry supply chains may be common and not feature in the price. Undesirable practices such as exploited labour may

also even be present. In these circumstances, UK-based battery manufacturers would not be able to compete unless offsetting funding is provided by the government.

### 3. OBJECTIVE

The purpose of this study is to undertake an initial assessment of the UK's competitive position for battery cell manufacture. Competitiveness will be determined through a cross-country comparison of the total delivered cost of battery cells to the UK. The overarching aim is to identify the key cost factors where the UK could and should focus on in the future to ensure it can lead the EU in terms of (cost)competitive cell manufacturing.

This RFP is relevant to the first stage of a two-stage process:

- Stage 1 is an 'initial assessment' of the costs of battery cells manufactured overseas and delivered to the UK. The initial assessment is a focused review and synthesis of publicly available literature, data and evidence, and the development of a spreadsheet model. It is focused on two overseas countries only (i.e. China/Korea and 1 EU country).
- Stage 2 is a 'detailed assessment' of the costs of battery cells manufactured overseas and delivered to the UK. Whilst the scope and approach would be determined during Stage 1, we envisage it would be a data-driven project involving detailed primary research, detailed data collection and evidence-based modelling to deconstruct to a granular level the costs of battery cells manufactured overseas. We envisage that the detail assessment would compare five countries (e.g. China, Japan, Poland, Germany and the US) to the UK.

Stage 2 will be commissioned with a new RFP and it may be that a different consultant is awarded the contract. At this stage, a decision has not been made on whether to proceed with Stage 2.

There are four study objectives for the Stage 1 'initial assessment':

- Research the component costs which make up the price of Lithium-ion battery cells manufactured in two overseas countries (e.g. China/Japan and 1 EU country) for one baseline year (2019 or 2020);
- Develop a spreadsheet model which compares the costs manufactured overseas with that of the costs manufactured in the UK;
- Identify any hidden costs or practices which could distort the market price offered by overseas manufacturers; and
- Set out a methodology for undertaking a more detailed data collection and modelling exercise of the battery cell costs manufactured in China, Korea, Poland, Germany and the United States (Stage 2).

The overall output is a report, model and study conclusions which clearly indicate the circumstances under which the UK would be most competitive and where the UK should focus on to improve its competitiveness in the near term. The reports from Stage 1 and 2 will be used to communicate the competitiveness of the UK battery manufacturing to government and stakeholders and the steps to improve competitiveness.

## 4. THE SCOPE

The scope of the work involved in the 'initial assessment' covers a literature review, desk-top research, modelling and bespoke analysis, and the development of a spreadsheet model. Extensive primary research is not envisaged for the initial assessment.

### 4.1 Cell definition

We propose that the initial assessment research is targeted at the costs of lithium-ion battery 'cells', rather than 'modules' or 'packs', and also targeted at the following cell formats:

- 21700 cylindrical;
- Doubled-ended VDA pouch; and
- NMC 622 specification.

The initial assessment should focus on two overseas countries (China/Korea and 1 EU country). Stage 2 would be a more detailed assessment across a wider group of five countries (e.g. China, Korea, Poland, Germany and the United States) and reach conclusions on how to improve the UK's competitive position.

### 4.2 Stage 1

Stage 1 would involve developing the structure of an Excel spreadsheet model and populating with initial cost data for the UK and two countries using publicly available or indicative data. Stage 2 would involve turning the structured model into a detailed evidence-based model cell manufacturing costs for five countries and the UK.

The purpose of separating the project into these two steps is to test the methodology and understand the practicalities and benefits of the Stage 2 study. There is already a wealth of information available in the public domain on battery cell costs, so it may be that many of our questions can be answered from the initial study. Alternatively, we may find that it is not possible to identify and separate out the costs in enough granularity to provide meaningful insight and therefore that the usefulness of Stage 2 is questionable.

It is envisaged that the Stage 1 model would be detailed enough to look at the cost build up (based on publicly available data) of the UK relative to China/Korea and 1 EU country. The detailed cost categories are to be agreed during the kick off meeting but should as a minimum include input materials (broken down by cathode, anode, electrolyte and others), energy, labour, overheads, investment cost amortisation etc.

It is expected that sources for the data are clearly labelled and referenced and that sensitivity analysis is performed on the input data available but also on how the UK could be most competitive. This is likely to be performed by with considering a number of scenarios concentrating on those factors that the UK and UK-based companies can actively influence.

Stage 1 should also identify the hidden costs or practices which affect the market prices of overseas manufacturers, but it is envisaged that only estimates of the broad order of magnitude of these costs would be made. Detailed quantification of these costs would be for the Stage 2 study.

### 4.3 Stage 2

Stage 2 would be a data-driven project with data collected at a very granular level for the UK and five comparative countries (e.g. China, Korea, Poland, Germany and the United States). The model would also be expanded to cover the cost trajectory over time (e.g. 2020 to 2030) and Greenhouse gas impacts.

As well as data collection and modelling, Stage 2 should make recommendations on the areas that make a material difference to UK competitiveness that can be influenced by either the UK government or companies based in the UK. The exact scope of Stage 2 would be an output of Stage 1.

## 5. OUR REQUIREMENTS

The requirements are described in greater detail for each of the four key study objectives for the initial assessment. While we have described some proposed activities under each objective, the consultant is actively encouraged to develop and present its own preferred methodology.

### 5.1 Estimate the breakdown of total delivered costs of battery cells to the UK

The first objective is to disaggregate the costs which make up the price of Lithium-ion battery cells manufactured overseas. The tenderer is not expected to undertake extensive primary research for stage 1 of the project but instead aim to estimate the cost breakdown for one country in broad terms by analysing and synthesising the many sources of publicly available studies, data and information. If some required data is proprietary or subscription data then the contractor should make this clear in their proposal and provide an estimate and breakdown of the costs involved in purchasing this data.

As a minimum, we would expect to see such evidence collected from a variety of sources such as:

- Periodic reports from Bloomberg New Energy Finance and Bernstein etc;
- Benchmark Minerals;
- Avicenne Energy;
- Specific studies examining battery cell costs across countries;
- Cross-country studies covering wider costs such as labour, property, tax, transport etc; and
- Documents published by the US Department of Energy and CEMAC.

The tenderer should examine in detail the Battery Performance and Cost model developed at Argonne National Laboratory, and any other battery cost-models available.

The study should also review the “UK Electric Vehicle and Battery Production Potential to 2040” study completed by McKinsey and Oxford University. The project examined the costs and incentives around tax, land, planning permission, energy, skills, materials, and research base as UK automotive transitions from ICE to EV manufacturing out to 2040.

One of the key reasons for undertaking a staged approach is that granular data may be confidential, hard to obtain or difficult to disentangle between the manufacturer and the activities of the state (e.g. government-led research). The initial assessment would enable us to understand the granularity of data and these issues in greater depth.

### 5.2 Identify any unaccounted costs and hidden costs in the price of battery cells

The third objective is to understand the extent to which there are any unaccounted or hidden costs which are not present in the total delivered cost examined above. Examples include:

- State subsidies or financial incentives;
- Financing support which artificially reduces the cost of capital;
- Not properly accounting for R&D costs, depreciation or intellectual property rights;
- Exploited labour and illegal workers; and
- No accounting for the cost of carbon.

It is important that the UK attracts battery cell manufacturing to the UK to support the growth of EV production in the UK. We are actively trying to ensure that the UK is the most competitive place in Europe to manufacture battery cells and its components.

Any indications of these hidden costs should be flagged for further investigation and detailed quantification in Stage 2

### **5.3 Develop a model of total and breakdown costs manufactured overseas and UK**

The third objective is to compare the total and breakdown of costs of battery cells delivered to the UK with the costs of the same battery cells manufactured in the UK through the development of a spreadsheet model.

We envisage Stage 1 involves developing the model structure to show the comparison with the UK and populating this with initial data. This model would be structured to cover:

- Raw materials costs (Lithium, Cobalt, Nickel etc.);
- Direct and indirect labour costs;
- Energy costs;
- Transportation costs;
- R&D;
- Depreciation;
- Taxes (corporation, land, labour etc);
- Trade tariffs;
- Explicit/ implicit financial incentives and subsidies; and
- Operating margin.

This model would need to be in a structure which could be increased in Stage 2 to cover 5 countries (e.g. UK, China, Korea, Poland, Germany and United States) and the UK, and populated with detailed cost data.

The model would have the ability to flex the sourcing of different parts of the battery cell production and supply chain. For example:

- Most refined materials such as nickel and carbon sourced from the UK (i.e. not Cobalt) and all cell components manufactured in the UK; and
- Different parts to be manufactured in the UK (e.g. Electrolyte, Collectors, Anode, Cathode).

Spreadsheet modelling will focus in Stage 1 on setting up the model structure and populating with initial data. The spreadsheet would be populated with more detailed data and evidence in Stage 2 and show the detailed breakdown of battery cell manufacturing (and hidden) costs for five countries (China, Korea, Poland, Germany and United States) and the UK.

### **5.4 Scoping out the methodology and approach to Stage 2**

The first stage should also scope out the methodology and approach to undertaking the more 'detailed assessment' (Stage 2). This should cover:

- A strategy to identify and gather detailed cost data across each of the components of the battery manufacturing value chain (raw materials, production, transportation, tariffs etc) and across each of the comparative countries; and
- An approach to assessing the technological, productivity or other factors behind any competitive differences between the UK and the five overseas countries.

## 6. WORKING ARRANGEMENTS

### 6.1 Expected outputs and deliverables

The main deliverables from Stage 1 would be a report and an Excel spreadsheet model that enables scenario modelling and clearly demonstrates the sensitivities to the various inputs.

The report with an executive summary would describe the methodology, the results of the initial assessment and the illustrative model developed. It will also detail the approach to undertaking more detailed work for Stage 2. The report would be used by Faraday Institution, UK BIC, APC and Innovate UK to decide whether to proceed with the Stage 2 work.

The Excel spreadsheet would be structured to show the cost breakdown for the UK and two other overseas countries. It would allow scenarios to be modelled for the UK where parts of the supply chain are moved into the UK or kept abroad.

It is not expected that we would publish either the report or the spreadsheet. It is however likely that the results will be used in a glossy brochure to be used by the contracting parties and UK government departments to attract battery cell manufacturing investment to the UK. Your logo as the author of the original report can be included if the contractor wishes to do so.

The output of Stage 2 is a detailed and validated cost model for the delivery of Lithium-ion battery cells. This would be used by Faraday Institution, UK BIC, APC and Innovate UK to inform government and stakeholders of the competitiveness of any UK battery manufacturing industry.

### 6.2 Timetable

The milestones for the submission of the tender

Milestone	Date
Invitation to tender published	Friday 3 <sup>rd</sup> May
Deadline for clarification questions from tenderers	Friday 17 <sup>th</sup> May
<b>Deadline for Tender responses</b>	<b>Friday 24<sup>th</sup> May (5:00pm)</b>
Presentation by short-listed tenders	Wednesday 29 <sup>th</sup> May
Contract award	Thursday 30 <sup>th</sup> May

The 'draft' timetable for the project is as follows. A draft report should be presented ahead of a steering group for discussion. The draft final results from the spreadsheet model will be discussed at another steering group. Sign off and delivery of the final report and model will complete the project.

Milestone	Date
Project kick-off	Thursday 30 <sup>th</sup> May
Draft report and Draft model structure	Friday 12 <sup>th</sup> July
Draft spreadsheet model	Friday 9 <sup>th</sup> August
Final model and Final report	Friday 30 <sup>th</sup> August

### 6.3 Indicative budget

Our indicative budget for Stage 1 is £50,000 excluding VAT. Any bids proposing costs higher than this will be expected to provide evidence within the methodology including any robust justification for the additional funds. Tenderers should quote their price in accordance with the price schedule guidance, the figure before VAT is the figure that will be used for evaluation

The budget for Stage 2 has not been defined and will depend on the proposed scope recommended during the Stage 1 process.

### 6.4 Steering Group and Project management

The Faraday Institution will set up a small Steering Group to review, shape and provide expert input into the work as it progresses. This will include representatives from the Faraday Institution, UK BIC, APC and Innovate UK.

The consultant is expected to report directly to Stephen Gifford who will manage the study on behalf of the Faraday Institution and in consultation with the Steering Group. It is expected that the consultants will provide a brief update on progress to Stephen Gifford via meetings or conference calls at least every 2 weeks during the study period, at which members of the steering group may periodically attend.

For questions about this opportunity, contact [stephen.gifford@faraday.ac.uk](mailto:stephen.gifford@faraday.ac.uk)

## 7. COMPETITION PROCESS AND ASSESSMENT CRITERIA

The proposal will comprise your proposed work in sufficient detail to allow the Faraday Institution to assess your methodology and capabilities, which will include the experience of the individuals who will perform the work.

The assessment criteria will be:

- Proposed methodology (30%);
- Experience of the team and organisation (40%). In particular, credentials which demonstrate:
  - Access to datasets on battery manufacturing costs;
  - Experience in developing models which compare costs across countries;
  - Technical expertise on energy storage and battery technologies.
- Value for money / price (30%).

Any CVs and other supporting material should be attached as an Appendix.

The contractor should also provide a list of any projects undertaken for The Faraday Institution, UK BIC, the Advanced Propulsion Centre or Innovate UK.

Each criterion will be scored through a paper sift. The assessors may invite one or more bidders for a clarification interview prior to making a final decision. The proposals will be re-scored after the interview. Scoring below a set hurdle rate in any criterion will eliminate the proposal. The tenderer with the highest scoring proposal is scheduled to start work in May 2019.

## Annex B – Faraday Institution Service Agreement Terms

### FARADAY INSTITUTION

### CONSULTANCY SERVICES AGREEMENT

This consultancy services agreement (“the Agreement”) is dated **[date]** and is made between: **The Faraday Institution** incorporated and registered in England and **Wales** with company number 10959095 whose registered office is at Quad One, Becquerel Avenue, Harwell Campus, Didcot, Oxfordshire, OX11 0RA and **[company name]**, a company registered in England and Wales with registered number **xxx**, whose principal place of business is **xxx** (“You, Your”) hereinafter jointly referred to as “Both of Us”

#### WHEREAS

A You are in the business of providing feasibility studies, supply of expert opinion, protocol review, policy review, general consulting and advisory activities and We would like You to provide, and You are willing to supply such services and to assign all rights in any results of such services to Us, on the terms and conditions in this Agreement

#### BOTH OF US HEREBY AGREE AS FOLLOWS

##### 1 Definitions.

1.1 The following terms have the meanings set forth below whenever they are used in this Agreement:

- “Consultant” means You and/or each of Your staff who have been approved by Us to perform the Services.
- “Commencement Date” means the commencement date of the Services, set out in Schedule **Error! Reference source not found.**
- “Deliverables” means any material and/or results (whether tangible or intangible material) generated by the provision of the Services.
- “Delivery Date” means the date for the delivery of the Services as specified in the applicable Project Schedule or as otherwise agreed in writing by Both of Us from time to time.
- “Licence” means the licence granted to You by Us to use the Faraday Materials in performance of the Services, and which shall apply for the Term subject to the provisions of this Agreement.
- “Faraday Code of Conduct” means Our code of conduct relating to the performance of the Services by a Consultant, as provided to You and as amended by Us from time to time.
- “Faraday Materials” means Faraday equipment, documents and other materials supplied by Us to You for the sole purpose of enabling You to deliver the Services.
- “Fee” means the fee for the Services, as set out in the Project Schedule, or as otherwise agreed in writing by Both of Us.

- "Project Schedule" means a document substantially in the form of Schedule **Error! Reference source not found.** attached hereto and agreed in writing by Both of Us, setting out the details of the Services to be provided to Us such that each Project Schedule will form an agreement separate from all the other Project Schedules and each Project Schedule shall be subject to the terms of this Agreement to the exclusion of all other terms and conditions.
- "Services" means Your services to Us, set out in the Services Specification or as otherwise agreed in writing by Both of Us.
- "Services Specification" means the specification setting out the Services to be provided by You and any Delivery Dates and Deliverables, as set out in Schedule **Error! Reference source not found.**
- "Term" means the duration of this Agreement and of Your Licence to use the Faraday Materials, set out in Schedule **Error! Reference source not found.** or such other term as otherwise agreed in writing by Both of Us.

- 1.2 Except for the purposes of Clause 16, all references to 'in writing' shall include documents sent and communications conducted by email.

## 2 Projects

- 2.1 Upon Our identification of a project We shall prepare a request for quotation and We may discuss Your availability for the project with You.
- 2.2 We shall not be obliged to offer You any project and You are not obliged to agree to any Project Schedule pursuant to this Agreement, but if You respond to Our request for quotation, You shall not unreasonably refuse to agree to a Project Schedule which We might prepare for You.
- 2.3 Once Both of Us have agreed on the scope and timescales for the Services to be carried out by You, We shall prepare a Project Schedule. The signature of a Project Schedule by You and Us shall constitute a legally binding contract under which You agree to deliver the Services and We agree to pay the Fees, subject to the terms and conditions of this Agreement.
- 2.4 The Fee shall be fixed price, unless otherwise set out in the Project Schedule.
- 2.5 We will provide any Faraday Materials to You if required to enable You to perform the Services, and You will provide all other equipment, resources and materials necessary to deliver the Services, unless otherwise stated in the relevant Project Schedule or agreed in writing.
- 2.6 At any time before completion of the Services We may request modification to the Services and/or Delivery Dates and You shall not unreasonably refuse such request provided that Both of Us have mutually agreed the modification and any corresponding change to the Fees and Delivery Dates in writing. Such changes shall be incorporated into an updated Project Schedule which shall be signed by Both of Us or shall be otherwise agreed in writing.
- 2.7 Project Schedules and/or amendments thereto (including modifications pursuant to Clause 2.6) shall not be effective or binding unless agreed in writing by Both of Us.
- 2.8 Both of Us shall meet or speak on a weekly basis, or as otherwise agreed according to the nature of the Services, in order to review the Services and Your progress against the Project Schedule. We shall provide feedback to You on Your progress and You shall provide the Services taking into account such feedback.
- 2.9 You agree that Consultants must sign Our confidentiality agreement and agree to comply with Our Codes of Conduct and policies including social media, use of information, anti-

harassment and bullying, non-smoking and dress code and all applicable laws and regulations including anti-bribery and corruption.

- 2.10 You may not delegate or sub-contract any obligation under this Agreement without Our prior written consent. Any such consent will not relieve You of Your obligations under this Agreement and You shall be liable for all acts or omissions on the part of Your subcontractors as though they were Your acts and omissions.

### **3 Delivery of Services**

- 3.1 You shall provide the Services in accordance with:
- a) the scope and terms set out in the Project Schedule and Services Specification;
  - b) any agreed Delivery Dates; and
  - c) Faraday's Code of Conduct.
- 3.2 Subject to You complying with the Services Specification and Delivery Dates, You shall manage Your time and location of working appropriately to meet Your obligations under this Agreement.
- 3.3 You shall at all times comply with all laws and regulations that apply to Your obligations under this Agreement.
- 3.4 We may monitor Your provision of the Services, and We may use reasonable measures to assess Your provision of the Services. If You have failed to comply with Faraday's Code of Conduct, or if the Services fail to comply with the Services Specification or with any of Our quality standards that We inform You of, or with Our reasonable expectations then We shall notify You in writing of the nature of the failure and We shall at Our sole discretion either:
- a) Request that You remedy the non-compliance and redeliver the Services as appropriate at Your own expense and within ten working days (or a mutually agreed period) of receipt of such notification; or
  - b) Remove You from the delivery of the Services whereupon this Agreement or the applicable Project Schedule shall immediately terminate.
- 3.5 If a Services Specification is terminated under this Clause 3.4b), or if You have not remedied any non-compliance in accordance with Clause 3.4a), then We shall only be liable to pay You the proportion of the Fees due in respect of Services that have been properly delivered by You and You agree to repay any applicable Fees already paid by Us for any non-complying or terminated Services.

### **4 Faraday Materials**

- 4.1 Subject to the terms and conditions of this Agreement and the applicable Project Schedule, We grant to You a personal, non-transferable and non-exclusive Licence to use the Faraday Materials for the sole purpose of performing the Services.
- 4.2 You may make copies of the Faraday Materials but only as reasonably necessary for Your performance of the Services, and You shall reproduce all of Our copyright and other notices on all such copies. All such copies shall be part of the Faraday Materials and shall be subject to the terms and conditions of this Agreement.
- 4.3 You agree that:
- a) You will not sell, assign, license, lease, rent, loan, lend, transmit, network, or otherwise distribute, transfer or make available the Faraday Materials in any manner to third parties except for the purposes of providing the Services;
  - b) You will use the Faraday Materials for Your own internal purposes only and solely to provide the Services and You will not use the Faraday Materials to provide services to third parties through a service bureau or other arrangement;

- c) You are expressly prohibited (except where expressly permitted in writing by Us) from adapting, modifying, merging, revising, improving, translating, upgrading, enhancing or creating derivative works of the Faraday Materials for any purpose;
- d) You will take security measures sufficient to safeguard the Faraday Materials from theft or from access by persons other than You or Your authorised employees, subcontractors or agents; and
- e) You will keep the Faraday Materials free and clear of all claims, liens and encumbrances.

## **5 Cooperation**

- 5.1 Each party shall provide cooperation and support to the other in the performance of its obligations under this Agreement including, but not limited to:
  - a) a reasonable level of responsiveness to requirements and communications;
  - b) the timely transmittal and release of appropriate and accurate documentation and information;
  - c) the prompt review and analysis of feedback provided and of work performed; and
  - d) the making available of competent personnel to assist when and to the extent as is reasonably requested.

## **6 Payment & Taxes**

- 6.1 You shall submit invoices for the applicable Fees in accordance with the arrangements set out in the applicable Project Schedule and We shall pay such invoices within thirty (30) days of the date of the invoice. You shall not invoice Us for and We shall not be liable to pay any additional fees or expenses other than where these have been expressly agreed by Us in writing in advance, or provided for in the Project Schedule. You acknowledge that any delay in submitting Your invoice may extend the payment terms.
- 6.2 The Fees are exclusive of value added tax (or its equivalent), which shall be paid by Us at the then-current rate. You shall be liable for all other national, European Union, sales, excise, state, local or other taxes or customs duties applicable in respect of all Fees.
- 6.3 We shall notify You promptly if We reasonably believe that any invoice is incorrect and shall be entitled to dispute such invoice and withhold payment of any disputed amounts until such dispute is resolved. We will pay interest on any overdue undisputed sum due to be paid by Us to You at the rate of two (2%) percent per annum above the Bank of England base rate accruing daily from fifteen (15) days from the date upon which such sum became payable until the date of its payment.
- 6.4 You are solely responsible for the administration of all salary, tax, National Insurance (or equivalent in the Territory), performance appraisal, disciplinary, grievance and other employment-related matters in respect of You and/or Your employees howsoever arising in accordance with the applicable laws and regulations within the Territory.
- 6.5 You hereby agree to pay any and all demands for income tax, National Insurance Contributions (or equivalent in the Territory), employment or worker status related claims, or similar or related payments made against Us in respect of You, Your employees and/or subcontractors as a result of their engagement on delivery of Services under this Agreement and We may retain any fees or expenses owed to You to satisfy such demands in whole or in part at Our sole option.

## **7 Warranty**

- 7.1 You warrant that the Services will be carried out with reasonable skill and care by Consultants who whose qualifications, technical knowledge and experience are appropriate for the tasks to which they are allocated.
- 7.2 You warrant that each Deliverable produced as a result of the Services shall be valid for a period of time specified to Us in writing, not less than 3 months.

- 7.3 If there is any breach of the warranty set out in Clause 7.1 or any other warranty in this Agreement You will remedy the breach at Your expense and will re-perform the applicable Services within ten (10) working days (or such other reasonable period as agreed by Us) of Our notification to You of the breach. If You are unable to remedy the breach to Our reasonable satisfaction You will refund the Fees paid in respect of the breaching Services whereupon this Agreement shall immediately terminate unless otherwise agreed in writing.

## **8 Personnel**

- 8.1 Each party will advise the other party of any rules or health and safety procedures that must be complied with while on its premises. The visiting party will comply with any rules or health and safety procedures of which it is advised while it is on the other party's premises.
- 8.2 You will not remove a Consultant from delivery of the Services without reasonable cause. If You have reasonable cause to request that You or a member of Your staff is removed from delivery of the Services temporarily or permanently You shall ensure progress continues effectively on the Services without unreasonable interruption, either by replacing the member of staff or otherwise as agreed with Us.
- 8.3 Nothing contained in this Agreement shall be deemed or construed as creating a partnership, joint venture, employee and employer, or principal and agent relationship between the parties. Each party's status with respect to one another is that of an independent contractor. Neither party shall have any right, power or authority to create any obligation, express or implied, on behalf of the other or to hold itself out as having such a right.
- 8.4 You hereby agree to ensure that You have in force for the duration of this Agreement and for a period of not less than three (3) years afterwards appropriate insurance including professional indemnity insurance and public liability insurance to cover Your liabilities under this Agreement and You shall, at Our reasonable request, make available for inspection all relevant certificates and evidence of premiums being paid in respect of such insurance.

## **9 Limitation of Liability**

- 9.1 Nothing in this Agreement shall exclude or limit either party's liability for (i) fraud or other criminal act, (ii) personal injury or death caused by the negligence of its employees in connection with the performance of their duties hereunder or by defects in any Deliverable supplied pursuant to this Agreement, or (iii) any other liability that cannot be excluded by law.
- 9.2 Except as provided in Clauses 9.1, 9.3 and 9.4, each party's maximum aggregate liability to the other party for any cause whatsoever shall be for direct costs and damages only and will be limited to the cumulative amounts paid under this contract .
- 9.3 Neither party shall be liable to the other for any losses whatsoever (whether lost future revenues, lost future profits, expenditure incurred to no benefit, or otherwise) suffered or incurred by the other party solely or substantially because a Project Schedule or this Agreement has been terminated.
- 9.4 Subject to Clause 9.1, We shall not be liable to pay any claim to reimburse or otherwise to indemnify You against any expenses or liabilities incurred by You in carrying out Your obligations under this Agreement, unless otherwise agreed by Us in writing.

## **10 Duration & Termination.**

- 10.1 This Agreement shall become effective on the date above first written and shall continue unless and until terminated in accordance with the provisions of Clauses 3.4b), 7.3, 10.2 and/or Clause 10.2c).
- 10.2 Either party ("the Initiating Party") may forthwith terminate this Agreement or a Project Schedule at any time:

- a) on giving written notice to the other party if the other party commits any material breach of any term of this Agreement and in the case of a breach which is reasonably capable of remedy fails to remedy that breach to the reasonable satisfaction of the Initiating Party within thirty (30) days of a written request to remedy the same; or
  - b) if the other party shall have a receiver or administrative receiver appointed over it or any of its undertaking or assets or shall pass a resolution for winding up (otherwise than for the purpose of a bona fide scheme of solvent amalgamation or reconstruction where the resulting entity shall assume all of the liabilities of it) or a court of competent jurisdiction shall make an order to that effect or if the other party shall become subject to an administration order or shall enter into any voluntary arrangement with its creditors or shall cease or threaten to cease to carry on its business or if any substantially similar event shall take place under the laws of another jurisdiction; or
  - c) if (in the case of termination of a particular Project Schedule) the obligations set out in that particular Project Schedule have been completed and all sums due have been paid; or
  - d) if (in the case of termination of the Agreement), all Project Schedules that have been initiated are completed or terminated, and all sums due have been paid, upon the giving of one (1) months notice.
- 10.3 Immediately on termination of this Agreement, You will return all Faraday Materials in Your possession or under Your control to Us and destroy all copies thereof at Your expense and You shall certify in writing to Us that all copies have been destroyed, and You shall cease Your obligations under this Agreement and discontinue use of any of Our trademarks, logos, or branding materials.
- 10.4 The expiry of this Agreement or the termination thereof for whatever reasons shall be without prejudice to any other rights or remedies a party may be entitled to under law and shall not affect the respective rights and liabilities of either of the parties accrued prior to such termination.

## **11 Non-Compete**

- 11.1 You agree that You shall not provide deliverables that are similar or the same as the Deliverables to another client of Yours without Our prior written consent.

## **12 Intellectual Property**

- 12.1 We are the owner or licensee of the patent, copyright, trade secrets, trademarks and any other intellectual property rights which subsist in the Faraday Materials. Title to the Faraday Materials shall remain vested in Us or Our licensors. Any rights not expressly granted herein are reserved to Us.
- 12.2 You hereby assign all intellectual property rights in any Deliverables that You create under this Agreement to Us and You agree to perform all acts and execute all documents that may be required to perfect such assignment, and You shall and shall procure that all Consultants and third parties waive, to the fullest extent permitted by law, any moral rights (under applicable law of the author of a copyright work) existing in any Deliverables in which the intellectual property rights are assigned to Us in accordance with this Clause 12.2.
- 12.3 You shall defend at Your own expense any claim brought against Us alleging that the Deliverables infringe a third party patent, copyright, or similar right (hereinafter referred to as an "Intellectual Property Claim") and You shall pay any and all direct losses, costs and damages awarded by a Court or agreed in settlement, in respect of any Intellectual Property Claim, provided that We promptly notify You of the claim, allow You to control the defence or any settlement negotiations and cooperate with You in the defence of any claim.

## **13 Confidentiality**

- 13.1 Confidential Information shall be defined as any information (whether disclosed in oral, written or electronic form) belonging or relating to a party's business affairs or activities and

which: (i) has been marked as confidential or proprietary, (ii) has been identified orally or in writing as being of a confidential nature, or (iii) may reasonably be supposed to be confidential in the circumstances. For the avoidance of doubt, the Faraday Materials shall be considered to be Our Confidential Information for the purposes of this Clause 13.

- 13.2 Each party undertakes that for a period of five years from the date of disclosure it will not, without the prior written consent of the disclosing party, use, disclose, copy or modify the disclosing party's Confidential Information (or permit others to do so) other than is necessary for the performance of its rights and obligations under this Agreement. In any event each party hereby agrees that it shall treat the disclosing party's Confidential Information with the same degree of care as it employs with regard to its own Confidential Information of a like nature and in any event in accordance with best current commercial security practices, disclosing such Confidential Information only to those of its employees, consultants and bona fide professional advisers who need to have such information for the purposes of this Agreement, and ensuring that such employees, consultants and professional advisers shall be bound by the same confidentiality obligations as are set out in this Clause 13.
- 13.3 The provisions of Clause 13.2 shall not apply to: (a) any information in the public domain otherwise than by breach of this Agreement; (b) information lawfully in the possession of the receiving party thereof before disclosure thereof by the disclosing party; (c) information obtained without restriction from a third party; and (d) information required to be disclosed by a court of competent jurisdiction, governmental body or applicable regulatory authority provided that the party under such duty to disclose shall use all reasonable endeavours to give the other party as much prior notice of such disclosure as is reasonably practicable and permissible by law.
- 13.4 You may not publicise Our involvement with You under this Agreement without Our prior written consent.

#### **14 Assignment**

You may not assign this Agreement or otherwise transfer any rights or obligations under this Agreement except with Our prior written consent.

#### **15 Force Majeure**

Neither party is responsible for failure to fulfil its obligations hereunder due to causes beyond its reasonable control that directly or indirectly delay or prevent its timely performance hereunder. Dates or times by which each party is required to render performance under this Agreement shall be postponed automatically to the extent that the party is delayed or prevented from meeting them by such causes.

#### **16 Notices**

All notices made pursuant to this Agreement must be made in writing. Any written notice to be given or made pursuant to the provisions of this Agreement shall be sent postage prepaid by registered or recorded mail or reputable courier service, addressed to the other party's address stated above and marked for the attention of the Company Secretary. Unless otherwise provided in this Agreement, all notices shall be deemed as given on the day of their receipt by the receiving party.

#### **17 Entire Agreement**

This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and shall supersede all previous representations, agreements and other communications between the parties, both oral and written.

#### **18 Law & Jurisdiction**

- 18.1 In the event of any dispute arising under this Agreement the parties will attempt to settle it by mediation. The mediator shall be selected from the Ministry of Justice Civil Mediation

Directory, subject to the agreement of both parties. Save in respect of late or non-payment of undisputed invoices, no party may commence court proceedings in respect of any dispute arising out of this Agreement until it has attempted to settle the dispute by mediation and either the parties have been unable to agree on a mediator or the mediation has terminated or the other party has failed to participate in the mediation, provided that the right to issue proceedings is not prejudiced by a delay. Unless agreed otherwise the mediator's costs and expenses shall be shared equally between the parties. Notwithstanding this Clause 18.1, nothing in this Agreement shall limit either party's right to seek injunctive relief.

18.2 Subject to Clause 18.1 each party irrevocably agrees that the courts of England shall have exclusive jurisdiction to settle any disputes arising out of or relating to this Agreement.

18.3 This Agreement shall be governed by English law.

## 19 Survival

The following clauses shall continue to be in effect after the termination or expiration of this Agreement: 1, 4.3, 6, 8, 9, 10.3, 10.4, 11, 12, 13 and 16 to 20 inclusive.

## 20 General

If any provision of this Agreement is adjudged by a court of competent jurisdiction to be invalid, void, or unenforceable, the parties agree that the remaining provisions of this Agreement shall not be affected thereby, and that the remainder of this Agreement shall remain valid and enforceable. No waiver by either party of any term hereof shall constitute a waiver of any such term in any other case whether prior or subsequent thereto. No single or partial exercise of any power or right by either party shall preclude any other or further exercise thereof or the exercise of any such power or right under this Agreement. This Agreement may not be changed, modified, amended, released or discharged except by a subsequent written agreement or amendment executed by duly authorised representatives of each of the parties. A person who is not a party to this Agreement has no rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this Agreement but this does not affect any right or remedy of a third party that exists or is available apart from the Act.

**IN WITNESS WHEREOF**, the parties hereto have executed this Agreement through their duly authorised representatives on the dates set forth below:

Signed for and on behalf of You.

Signed for and on behalf of Us.

Signature

Signature:

Name:

Name:

Title:

Title:

Date:

Date: