**Supply chain efficiency project**

October 2017

Agriculture and Horticulture Development Board (AHDB)

Scoping Document for project on behalf of AHDB Market Intelligence

1. **Scene setting**

AHDB Dairy’s strategic aspiration includes a desire to stimulate supply chain improvements and efficiencies by comparing domestic and global performance pre and post farm gate to learn from the best in the world. This will enable the industry to better understand its competitive position, and where to target collective effort, in order to thrive in a post-Brexit environment.

AHDB has offered benchmarking tools to dairy farmers for a number of years, but there continues to be an information gap for the remainder of the supply chain. This project looks to help build understanding of the milk processing part of the supply chain and what influences efficiency. The project will take inspiration from the best operators in the world, with the aim of determining how those practices could be applied within GB.

Initial work was undertaken looking at the cost of production for cheese processors, by-product values for whey and the impact of processing costs on different farm production systems. The project is being expanded to cover a number of further areas of analysis, and as a result, a new invitation to tender is presented.

In addition to the areas covered in this document, the project is likely to lead to further work related to supply chain efficiency. This includes milk haulage and finished goods distribution, but is likely to include other areas that will become apparent as the project progresses.

1. **Project context**

The AHDB is a statutory levy board, funded by farmers, growers and others in the supply chain and managed as an independent organisation (independent of both commercial industry and of Government). Our purpose is to inspire our farmers, growers and industry to succeed in a rapidly changing world. We equip the industry with easy to use, practical know-how which they can apply straight away to make better decisions and improve their performance. AHDB is a statutory levy board and is funded by farmers, growers and others in the supply chain

AHDB provides unbiased, high quality market information that helps business decision making and improves supply chain transparency. This independent and impartial market intelligence is disseminated to the GB dairy industry under the AHDB Dairy brand.

In order to drive improved supply chain efficiency, AHDB is looking to work with a third party to identify and assess key drivers and opportunities that can deliver supply chain efficiency solutions in GB. This means looking at what the best operators in the world are doing, and seeing if they can be applied within GB.

1. **Scope and expected outputs of the project**

The project has a number of elements as detailed below. In undertaking the work, where appropriate, the contractors should take into consideration how GB processors are performing against global competitors, and in particular those who would be considered to be best in class.

Protein standardisation

Details: Understanding of the current rules and regulations around protein standardisation in the UK for liquid milk. Expectation is that we do not protein standardise for liquid milk because of the EU regulations. What would be the implications if we did protein standardise, and how could we do it? What are the options at the processing end, and what would the costs be to deliver?

Expected outputs: Written report covering the following:

* Current position – both legally and practically (i.e. if anyone does, who are they)
* Options (including flow-charts) for doing protein standardisation
* Benefits/challenges of each option
* Investment costs
* Sourcing of any base ingredients and/or disposal of by-products
* Reflection of the implications if UK did allow protein standardisation post Brexit. i.e. What should we think about?

Investment in processing

Details: Investigation into the level of investment made by UK dairy processors in recent years, and an assessment of the age of processing capability across the UK, broken down by product type. Investment assessment should be split into three areas; regulatory requirement, efficiency gains and added-value.

Expected outputs: Written report covering the following:

* Details of the key investments made by UK processors – expectation that this shows each major investment by site, and whether it is for regulations, efficiency or added-value.
* Benchmarking for a “typical” industry and how the UK compares with other key dairy nations such as Ireland, Netherlands, France and Germany.
* Detailed investment details for other countries are not required, but just an overview of how much the UK should be looking to invest if it wants to keep up with other nations.
* Details of any changes seen in investment strategies for UK dairy companies over recent years.

Fat/Protein/Lactose mass balances

Details: Three separate mass balances for the UK covering fat, protein and lactose, to show the production off farm and where the products end up. Phase two of this element will include the addition of estimates of the value of products through each outlet.

Expected outputs: Three flow charts showing quantity (in tonnes) of fat, protein and lactose coming off farm, how much ends up in different areas.

Aim is to also include values in £s/tonne of solids against each route. Expectation is that the complexity of the mass balances will build up over time, so we may have 2-3 levels initially but we will then add on a split by supermarket, or split between brand and own-label at some point in the future, for example.

All numbers need to be referenced so we know the source with the aim we will publish and update annually.

Useful links:

<https://dairy.ahdb.org.uk/news/news-articles/november-2016/butterfat-balance-in-the-uk/#.WY2b0k32b4g>

<https://dairy.ahdb.org.uk/news/news-articles/november-2016/is-there-enough-cream-for-christmas/#.WY2brk32b4g>

AMPE/MCVE in Europe

Details: An assessment of the AHDB AMPE and MCVE calculations to see if they are relevant for the EU. Key questions are whether the costs and yields are still relevant – are sites larger in EU, or have lower energy costs etc? But also are the products relevant (particularly for MCVE which assumes cheddar)

Expected outputs: AMPE and MCVE calculations based on sound evidence and for EU markets that we can then apply EU quoted prices to and get milk price equivalents.

Multi-product site benefits

Details: How much benefit is gained from operating a multi-product site (cheese plus butter/powder for example) which allows a processor to switch between products?

Expected outputs: A detailed report including:

* A swot analysis looking at the benefits and challenges of multi-product sites
* Where does it work, where is it more challenging?
* How do other countries use them?
* Whether they could work in the UK and if so for what products?

1. **Future work**

Further project work is currently envisaged covering a number of supply chain efficiency areas. While these do not need to be covered in the initial tender, contractors should be aware that AHDB is looking to identify a key partner to help deliver solutions for further work in this area. Examples of which are given below:

1. Identification of areas that are fast moving in terms of technology, and where the next step-change in efficiency improvements is likely to come from.
2. Cost benefits and implications of the by-product options available to processors, particularly for cheese manufacturers.
3. Identification of the quantity of end product that can be achieved for a given milk volume (product yield) for various key dairy products, comparison with current yield calculations with the aim of making this information publically available.
4. Comparison of performance by GB manufacturers in terms of product yield versus the theoretical best in class and versus manufacturers outside GB, including details of what is driving the differences.
5. The impact of raw milk quality (butterfat, protein, lactose, somatic cell counts, bactoscan) on product yield and manufacturer performance.
6. **Service requirement**

AHDB invites suitably skilled and experienced organisations or individuals i.e***. ‘evidencing strong experience in milk processing and the financial costs associated with processing raw milk’*** to work alongside it to deliver this project.

In particular, the chosen organisation or individual will be asked to provide insight into how they will undertake the work identified and what AHDB will receive for its investment.

Specifically, the chosen organisation or individual will be asked to:

Attend meetings with AHDB

1. An initial briefing meeting. This will give AHDB an opportunity to highlight its current offering to the dairy industry and enable the chosen organisation or individual to ask any questions.
2. A progress update. A verbal update (not necessarily face-to-face) on initial findings.
3. A final presentation. A presentation of the reports and results when available and in line with the timetable in this specification.
4. **Outputs**

AHDB requires the contractor to present the reports and findings to a group of AHDB staff at Stoneleigh Park, Kenilworth and to:

1. Provide an electronic copy of any calculations in Microsoft Excel, along with suitable instructions.
2. Provide an electronic copy of any written reports in Microsoft Word
3. Provide a summary of the key assumptions used, and any limitations or risks with those assumptions.

The contractor should also be prepared to give verbal input or feedback where clarification of responses may be required.

1. **IP ownership and use of outputs**

AHDB will take the intellectual property ownership of all outputs from the project on completion of the project. AHDB may make available to levy payers, or industry, any outputs from the project as it sees fit. The successful contractor must not publicise the outputs from the project without prior written consent from AHDB.

In publicising outputs from the project, AHDB will be mindful that the information is aimed at identifying opportunities that benefit, not prejudice, the interests of the industry.

1. **Timeline**

AHDB require the results for the relative sections of the project to be delivered as detailed below:-

|  |  |
| --- | --- |
| Protein standardisation for liquid milk | End December 2017 |
| Investment in processing | End January 2018 |
| Fat/protein/lactose mass balances | End of March 2018 |
| AMPE/MCVE in Europe | End of March 2018 |
| Multi-site benefits | End of March 2018 |

In order to achieve these deadlines, a time table is given below:-

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| --- | --- |
| Tender advertised | 9th October 2017 |
| Deadline for receipt of responses | Monday 30th October 2017 |
| Notification of decision | Thursday 2nd November 2017 |
| Appoint contractor | Friday 3rd November 2017 |
| Initial briefing meeting | W/C 13th November 2017 |

1. **Submission of tenders**

AHDB invites tender submissions for this external input research from organisations or individuals with suitable expertise or experience in milk processing, the implications of and financial costs associated with processing raw milk.

Organisations or individuals submitting tenders should indicate how they envisage undertaking the project. They should also give an indication of the likely outputs of the project.

The contract will be on a fixed term, fixed price basis with the assignment of all rights regarding the report to AHDB. Additional work related to this project, over and above that detailed in Section 3 - Scope and expected outputs of the project, will be on a fixed daily rate with the number of days agreed prior to the outset of undertaken that additional work.

Tenderers should produce a concise but appropriately inclusive document that demonstrates how they will be able to fulfil the requirements of the specification.

The proposal should provide the following details:

* Name and full contact details of project manager
* A brief summary of suitability of the organisation
* A breakdown of costs for all stages of the project, including VAT
* A breakdown of the number of days and day rates for the sections of the project
* Day rates for additional work over and above that detailed in Section 3
* CVs for key members of staff involved with the project, including information about competencies, relevant industry qualifications and experience and evidence of previous work undertaken.
* Tenderers should declare any conflicts of interest which might arise and how they propose to handle these.

Tenderers should clearly outline previous experience they have of undertaking similar commissions, and outline the strategy they will take to ensure good value for money for AHDB levy payers.

Budget

We anticipate that the costs of this external commission should be circa £40,000, all inclusive of expenses and fees (excluding VAT). Tenderers should provide a costing based on their experience of undertaking similar projects.

Evaluation of Tender

Evaluation of the tender will be undertaken in accordance with the following criteria and weightings:

***Essential –* ‘evidencing strong experience in milk processing, the implications and financial costs associated with processing raw milk as well as meeting the deadlines’**

|  |  |
| --- | --- |
| **Details** | **Weighting** |
| **80% of the evaluation weighting will be based on the quality of the proposal.** This will entail:   * Demonstrate a clear understanding of the brief and objectives in the proposal * Demonstrate hands-on experience of the key drivers and influencers involved in processing raw milk * Demonstrate an understanding of how GB and non-GB milk processors are currently performing, and the key influencers on that performance * Demonstrate an understanding and willingness to work with AHDB on future work linked with this project * Demonstrate a clear project plan to deliver the financial model within the timescales outlined | 5%  30%  25%  10%  10% |
| **20% of the evaluation weighting will be based on the cost of the proposal.**   * To enable comparability of proposals, a full breakdown of costs must be provided with hourly rates. Pricing proposals to be fixed for 2 years to cover the period that any agreed additional work may be commissioned. | 20% |

AHDB MI will review tenders following the closing date, and may consult with interested parties as part of the selection process. AHDB reserves the right to seek alteration of individual tenders to meet the exact requirements and to decline all tenders should the requirements not be met.

AHDB Terms and Conditions for the supply of Goods and Services shall apply  
<https://ahdb.org.uk/about/Procurement.aspx>

Submission

Should you wish to submit a proposal, please send a note of interest to [luke.crossman@ahdb.org.uk](mailto:luke.crossman@ahdb.org.uk) by 16th October 2017 and a full proposal, to the same email address, by **5pm on 30th October 2017**. It is the tenderer’s responsibility to ensure that all submissions have reached the intended recipient by the due date and time.

Failure to submit by the due date and time will result in the automatic rejection of the submission.

Queries

All queries regarding clarification of the details set out in the tender document should be directed to Luke Crossman, AHDB Dairy Senior Analyst.

Telephone 0247 647 8722

Email [luke.crossman@ahdb.org.uk](mailto:luke.crossman@ahdb.org.uk)