Request for Proposals: Cotton Traceability Data Standardisation

RFP n#:	2021-11-TRC-DATA
Location:	Remote
Start date:	07 FEB 2022
End date:	02 SEP 2022

Better Cotton key contact:
Jacky Broomhead
Traceability
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<u>All applications must be sent by email, to Better Cotton's key contact, with the subject header:</u>
<u>"Application RFP Cotton Traceability Data Standardisation– RFP n# 2021-11-TRC-DATA".</u>

Questions, requests and applications sent after the deadline (31 January 2022) will only be considered in exceptional circumstances.

Description

Better Cotton is the world's largest cotton sustainability programme. Our mission: to help cotton communities survive and thrive, while protecting and restoring the environment. Through our network of field-level partners we have trained over 2.5 million farmers in 23 countries in more sustainable farming practices. A quarter of the world's cotton is now grown under the Better Cotton Standard. We have united the industry's stakeholders behind our efforts, and by 2030 our aim is to have trained 5 million farmers and doubled global production of Better Cotton.

Background

We are seeking proposals from skilled individuals or organisations interested in leading a multistakeholder working group to define and deliver the data standard for Better Cotton's future traceability solution.

As Better Cotton enters its next strategic phase, to achieve our 2030 vision and drive change on the ground for farmers, Better Cotton will make it possible to trace Better Cotton through the global supply network. By introducing traceability, we will generate additional demand for Better Cotton, supporting our core markets of apparel and textiles while contributing to systemic change in cotton production.

We work with a wide variety of farm types and sizes in multiple countries and cultures. It is crucial that these producers, and the Better Cotton they produce, continue to meet customer requirements and rapidly evolving international regulatory frameworks.

To offer traceability, we expect to partner with an existing traceability solution provider. A comprehensive, relevant data model will be essential in identifying appropriate solutions and developing effective partnerships - ensuring consistency, quality and interoperability of Better Cotton traceability data while maximising efficiency of the overall solution.

Better Cotton's traceability programme has been operational for 9 months. We are currently in phase 2 of our 4-phase plan to deliver a solution. Phase 2 includes detailed requirements gathering covering chain of custody requirements, functional/non-functional requirements, integration, and data requirements.

At each point in the cotton supply chain, we will need to collect and validate data to enable traceability. The role of the data consultant will be to define what those should be and to own all documentation and stakeholder processes required to establish a version 1 data model. To do this, the consultant will lead a series of workshops with a multistakeholder task force made up of different cotton supply chain actors (ginners, traders, spinners, fabric mills, manufacturers, retailers and brands) and other cotton stakeholders (NGOs, solution providers). The task force has been formed by Better Cotton and the consultant will have support from Better Cotton staff to run the workshops.

The Better Cotton traceability data model should reference existing relevant data schemas (internal and external) and align with them where possible - to maximise benefit and efficiency to all supply chain actors adopting our future solution.

Scope of Work

Objectives

The objectives of this consultancy are to:

- Develop, refine and agree a 'super-domain model' clearly identifying all relevant system domains and relationships and showing which domains are implicated in addressing in-scope use / business cases (over all expected phases of implementation).
- Identify and compare the existing, valid cotton and textile data models including but not limited to GOTS, relevant Higg and Textile Exchange datasets, Open Apparel Registry, Blue number, GS1, UNECE and other organisation identity datasets, HS / ISIC and other international product and process classification codes, Better Cotton Platform, Cotton Cloud and other Better Cotton domain data sets. Develop a core list of common attributes where possible.
- Plan and develop content for the multistakeholder workshops to develop the Better Cotton traceability data model
- Lead multistakeholder workshops with the objective of sense checking the common attributes and defining any gaps to develop an industry agreed data model for the data points needed at each stage of the cotton supply chain to enable traceability
- Produce version 1 of the Better Cotton data model including the key attributes needed, semantic definitions, syntactic requirements, acceptable values / ranges, cardinality etc. The attributes should include a recommendation for how Better Cotton should uniquely identify companies, places and assets throughout the supply chain

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- Collaborate with the traceability integrity manager to identify how each attribute can be validated, data quality measured and system integrity maintained
- Support the Better Cotton Data Manager to develop the data governance structure for the traceability solution

Activities

The consultant will be required to explore the activities outlined in this section through desk-research, facilitating workshops with the Traceability Data Task Force and interviews with relevant stakeholders (Better Cotton staff, solution providers, NGOs, regulators and other sustainability systems). Better Cotton will facilitate contacts with stakeholders to ensure the consultant has the access needed to conduct the assignment. Better Cotton will also provide background information on our traceability programme, our Chain of Custody revision direction and the Critical Tracking Events that are in scope for our traceability solution.

1. Development of domain model

Desk-based research to identify and document the relevant, intersecting data domains implicated in delivery of in-scope and potential future business cases. For example, the core 'traceability 'data might be restricted to 'processes consuming Better Cotton input material – from gin to finished goods', but there may be relevant business cases (now or in future) for reporting country of origin / process, energy and water consumed, human involvement and compensation etc. The model should identify required 'core' data and relationships to other data in the context of specified queries.

Outputs
- A series of linked, version controlled, data domain diagrams outlining which datasets, meeting which standards are implicated in the delivery of described business cases
- Supporting explanatory documentation (slides / wiki etc.) to help stakeholders understand and gain value from the model(s)

2. Comparison of existing cotton and textile data models to produce a core list of common attributes

Through desk research and interviews, the consultant should identify the relevant existing cotton and textile data models currently in use or being developed. Using the available data models and the confirmed traceability critical tracking events provided by Better Cotton, the consultant should compare the models to identify a common set of relevant attributes. Where there are discrepancies, the consultant should make recommendations as to which data standard should take precedence.

The core list of attributes will form the foundation to start building the traceability core data model

Outputs:
- A table summarising the key cotton and textile data models in use flagging their coverage, strengths and limitations
- A list of the core attributes common to existing cotton and textile data models, and relevant to Better Cotton, to provide a foundation for the Better Cotton traceability data model

3. Plan, agree and lead 8-12 multistakeholder data workshops to develop the Better Cotton traceability data model

Working closely with the Traceability Manager, the consultant should clearly identify the key areas where consensus on scope of the traceability core data is required, and implications for changing scope (to meet additional business cases) over time. The consultant should lead the process of developing, refining and agreeing suitable background / topic briefing materials prior to the workshop, as well as building templates and procedures for engaging participants in the workshops. Stakeholder engagement, logistics and scribing will be delivered by Better Cotton colleagues, but the Consultant is expected to ensure the quality of output from the workshops is suitable for use in traceability solution development and that relevant Better Cotton staff are included in the workshop series.

Outputs:
- Suitable plans and materials for engaging prescribed stakeholders in the development of an agreed core traceability data model
- Structured and semi-structured inputs from all workshop participants in all workshops
- Summaries of insights gained and agreements achieved – suitable for replaying to stakeholders to ensure consensus on the core model and its potential for change over time

4. Produce version 1 of the Better Cotton traceability data model

Using the feedback from the task force and, working closely with the wider Better Cotton IT team, the consultant should lead the process to draft, refine, update and publish agreed and controlled versions of the core traceability data model. This process should include the broader publication – to all relevant stakeholders – of a near-final version (v0.9) of the model for feedback prior to finalisation.

The core data model should include a recommendation for how Better Cotton should uniquely identify companies, locations and assets in its traceability solution. The recommendation should consider cost, efficiency, interoperability, integrity and current adoption.

Outputs:
- A documented process for the development, review and publication of the initial core data model
- A finalised, agreed version (1.0) core traceability data model to serve as a baseline document in Better Cotton's solution development process
- A recommendation for unique identification in a Better Cotton traceability platform

5. Develop and refine data policies for Better Cotton's traceability solution

Working closely with relevant internal stakeholders (including the data integrity manager) – identify, test (for feasibility), agree and document suitable quality metrics for all data items in the core model. These metrics should be consistent with agreed solution design principles, capable of ensuring the value of the traceability data over time and at scale. The consultant should also support the development and documentation of data quality monitoring processes (to test data quality) and corrective action plans.

Outputs:

- Recommendations on the data governance structure for the traceability solution
- An agreed set of 'design principles' designed to ensure measurable data quality throughout all operational phases of the traceability solution
- Agreed and documented quality metrics for all data items in the v1.0 model

Deliverables summary

- A series of linked, version controlled, data domain diagrams outlining which datasets, meeting which standards are implicated in the delivery of described business cases
- Supporting explanatory documentation (slides / wiki etc.) to help stakeholders understand and gain value from the model(s)
- A table summarising the key cotton and textile data models in use flagging their coverage, strengths and limitations
- A list of the core attributes common to existing cotton and textile data models, and relevant to Better Cotton, to provide a foundation for the Better Cotton traceability data model
- Suitable plans and materials for engaging prescribed stakeholders in the development of an agreed core traceability data model
- Structured and semi-structured inputs from all workshop participants in all workshops
- Summaries of insights gained and agreements achieved – suitable for replaying to stakeholders to ensure consensus on the core model and its potential for change over time
- A documented process for the development, review and publication of the initial core data model
- A finalised, agreed version (1.0) core traceability data model to serve as a baseline document in Better Cotton's solution development process. At a minimum the data model must include:
  - o Data definitions
  - o Syntactic requirements
  - o Acceptable ranges or values
  - o Recommendation for unique identification of businesses, locations and assets required for traceability
- An agreed set of 'design principles' designed to ensure measurable data quality throughout all operational phases of the traceability solution
- Agreed and documented quality metrics for all data items in the v1.0 model

High-level Timeline

31 January 2021	Applications deadline All applications must be submitted by email, headed "Application RFP Cotton Traceability Data Standardisation – RFP n#2021-11-TRC-DATA" addressed to Jacky Broomhead at tender@bettercotton.org.
3rd to 31 January 2022	Applications to be reviewed on a rolling basis
By 31st January 2022	The successful shortlisted applicants will be notified and invited to interview (interviews will occur on a rolling basis) Unsuccessful shortlisted applicants will also be notified.
7th February 2022	Start of the consultancy

By 28th February 2022	Foundational core data model
By 7th March 2022	Workshop plan and content agenda
By 1st April 2022	Super domain model
By 13th June 2022	Draft traceability data model
By 29th July 2022	Final data model
By 2nd September 2022	Data governance recommendation

Required Skills & Knowledge

Skills, Knowledge and Experience
Essential
• Degree in Computer Science, MIS, or a related field, or an equivalent combination of education and related work experience.
• Six or more years of logical data modelling experience
• Experience establishing and maintaining an enterprise approach to logical data modelling – including security model, integration services and reporting services
• Proven experience facilitating engaging workshops in a complex multistakeholder environment
• Demonstrable ability to present data model designs and to write clear and concise technical documents
• 3 or more years experience as a Microsoft SQL Server and/or Oracle database administrator and significant experience and interest in Data Warehouse/BI technology
• Strong analytical, requirements gathering, communication skills, and ability to work in cross-functional, multi-disciplined team environment
• Excellent written and verbal communications skills – including ability to communicate with technical and non-technical peers and managers
• Strong teamwork and cooperation skills
• Fluent English: Better Cotton's language of operation is English
• Strong influencing and persuasion skills and the ability to reach consensus among a group
Optional
Experience or understanding of traceability systems

Application Requirements

Proposals responding to this Request for Proposals should be a maximum of 25 pages (excluding CVs), and include the following:

- Overview of relevant experience;
- Proposed methodology and timeline;
- Detailed and transparent budget, preferably in EUROS, including time allocation and day rates.

In addition to skills, competencies and expertise, we will consider value for money and demonstrable commitment to the sustainability field to evaluate applications.

We thank all applicants for their interest; however only shortlisted applicants will be contacted.

Better Cotton is committed to good practice and transparency in the management of natural, human and financial resources. All applications will be reviewed under the principles and subject to Better

Cotton's policies on equal opportunity, non-discrimination, anti-bribery & corruption and conflict of interest.