LBT/BTT rebuild technical specification.

It is the intention of the UK & Ireland Blood Transfusion network (UK&IBTN) to work collaboratively to develop a UK and Ireland wide replacement for the current transfusion eLearning programmes (see Appendix II). The technical specification requirements can be found in Appendix I and have been drafted to ensure compatibility with each nations learning management system (LMS)/platform.

The vision of the network is that the full functionality of modern eLearning software will be used to produce an engaging and interactive learning experience for users. It is hoped this will maximise potential learning outputs and in turn improve patient care and safety. An example of the current provision is included in Appendix II.

The outline of the work request is to develop the following eLearning modules with the indicated pathways, the pathways are role based. A go back option will be required for the selection process point:

- 1. ETP /Safe transfusion practice
 - 1. Paediatric (authorisers & administrators)
 - 2. Adult full course (authorisers & administrators) and pathways:
 - a) Requester
 - b) Collectors
 - c) Sample takers
 - d) Observer
- 2. Blood components (full course and below pathways)
 - 1. Authorisers
 - 2. Administrators
- 3. Transfusion reactions (full course and below pathways)
 - 1. Recognition and initial response
 - 2. Management and reporting
- 4. Cell salvage (full course and below pathways)
 - 1. Set up & collection
 - 2. Reinfusion

- 5. Anti-D
 - 1. Clinical: midwives and medical staff
 - 2. Laboratory staff
- 6. Consent
- 7. Good Manufacturing Practice (GMP)
- 8. Introduction to Safer Transfusion Laboratory Practice

In addition, there may be a requirement to update the animated videos in ETP and of course potentially produce new ones.

The following criteria must be met:

- Widely available software must be used (e.g., Articulate Rise and Storyboard), it must not be subject to ongoing licencing obligations/fees.
- The full interactive functionality of the software is required and expert guidance on the application of this will be provided by the developer.
- The use of a range of formats is required e.g. animation, video, audio interactive tools etc.
- Assessments are to be embedded within the learning content (facilitating pathways) with some scenario based, other techniques to test knowledge and understanding will also be required.
- The contract will be based on a one-off payment for development with no ongoing user- number based fees. A maintenance contract may be considered at a later date.
- All the intellectual property rights (design, branding and content) will be held by the UK&IBTN except for the development code.
- Two separately branded versions will be required, but the content will be the same:
 - Blood Transfusion Training
 - Learnbloodtransfusion
- The order of rebuild of modules will be decided by the editorial board and determined by currency of content, volume of users, and the programme learning journey.

The developer will be required to share the developed programmes with the main platforms within the devolved countries and ROI and maintain the version control of the shared content. These platforms will be specified at the start of the development and will not exceed 7 in total. Any further dissemination and version control is the responsibility of the devolved country and their platform provider.

Appendix I

Technical requirements/specification for LBT/BTT rebuild

UK&I BT Network	England, Northern Ireland, Republic of Ireland, Scotland, and Wales
Formats required	 SCORM 1.2, SCORM 2004 Tin Can/XAPI, AICC (HTML5)
Authoring tools	 Articulate 360 preferred. Articulate 360 (Storyline 360/Rise) Content created by different authoring tools will also be considered e.g., Evolve
Browser	 Content to be developed in a fully mobile responsive format Available for all Operating Systems i.e., Android, Apple, and Windows Edge Chrome (101 - Latest version) Firefox (Latest version) Safari IOS 9 and above Android browser: Version 4.4 and above including 13 Chrome for Android: Version 47 and above
Completion tracking	Programmes developed or provided for placement must communicate completion, incompletion, pass, and failure to the LMS as per the publishing options in Rise and Storyline (e.g. cmi.completion _status, cmi.core.lesson_status.)

Resolution	 Responsive screen resolution Standard resolution which should be supported is 1024 x 768 for non-adaptive software packages.
Accessibility	 Be compliant with Web Content Accessibility Guideline (WCAG) 2.1 Level AA or higher. Accessibility statement required including: level of web accessibility of website/content, description of additional accessibility tools available, any known limitations or areas of the website/content that are inaccessible. Contact information for reporting accessibility difficulties.
Assessment	 Preferred separate assessment packages with pass marks set within the LMS (e.g. Separate xAPI packages with single attempt internal policies) Flexibility to set number of attempts rules locally within individual LMSs
Permissions	Developer held licences for software use and image development required

The developer will be required to share the original files with each the chosen platform in each country (England, Scotland, Northern Ireland, Republic of Ireland and Wales) in their preferred format and with their preferred branding. This will also apply to every subsequent version.

Appendix II

The existing eLearning programmes are as follows.

Learnbloodtransfusion

- Safe transfusion practice
- Safe transfusion practice paediatrics
- Safe transfusion practice laboratory
- Blood Components and indications for use
- Consent for transfusion
- Acute transfusion reactions
- Learn cell salvage
- Good Manufacturing practice GMP
- Anti D
- Blood collection pathway
- Phlebotomy
- Safe sampling for transfusion video

Blood Transfusion Training

- Essential Transfusion Practice: https://360.articulate.com/review/content/d346fbc5-7c02-41dc-97e9-01ebe410f210/review
- Good Manufacturing Practice
- Consent
- Transfusion Reactions
- Blood Components
- Cell Salvage
- Introduction to Safer Transfusion Laboratory Practice
- Use of Anti-D Immunoglobulin in Pregnancy