Committee(s):	Date(s):
Culture, Heritage and Libraries Committee	26 January 2015
Subject: **London Metropolitan Archives – digitisation update**	**Public**
Report of: Director of Culture, Heritage and Libraries	**For Information**

Summary

This report provides an update on the project, now entitled **London's Memory, Digitally** (LMD), to develop digitisation at London Metropolitan Archives. It stems from the report and policy approach agreed by this Committee at its meeting on 27 January 2014. The report provides information on the research undertaken on the City's archive holdings managed through London Metropolitan Archives (LMA) and on other large scale digitisation work undertaken by major institutions in the UK and abroad. It is clear from the conversations with the Heritage Lottery Fund (paragraph 3) and with the analysis already undertaken on key archives (Appendix 1) that a programme of work backed by substantial funding to be sourced internally and externally could achieve a very significant step change in access to London's memory to be achieved over the next six years i.e. by 2020.

Recommendation(s)

It is recommended that Members note the report and in particular the next steps up to March 2015.

1. Construction of the first five year/ten year digitisation action plan based on the multi-strand approach described at paragraph 17 to set goals to 2020 and 2025. This will include the potential bid to the HLF

2. Full identification of the requirements for the web platform, including lead times and the capital and revenue cost implications. NB This research work will require significant support from IS

3. A timetable and action plan agreed by senior staff in Comptrollers, Chamberlains and LMA on work for the next contract for the commercial digitisation programme, with Ancestry or another provider. The current Ancestry contract ends in 2017

4. Specifically the potential for a closer strategic partnership with the Wellcome; and the identification of role the Venice Time Machine project could play in LMD, particularly in the use of emerging technologies

Main Report

Current Position

1. In January 2014 a report was brought to your Committee outlining a vision for future large-scale digitisation of the collections at London Metropolitan Archives, to open them up to the world. The Corporation is the custodian of hugely important heritage resources that represent a significant proportion of London's recorded memory, and in an increasingly digital age this is an important way of maximising their usefulness for their many audiences, including educators, academic researchers, family historians, designers, architects, and many others. LMA has already had significant success in this area through its partnership with Ancestry.

2. Following the agreement of this Committee, the LMD project has been researched for further development with the support of the Supporting London Group of Chief Officers.

Value of undertaking the project

3. Key meetings to assess current thinking on the value of large scale digitisation of archives have taken place with the Heritage Lottery Fund (HLF) and with Dr Simon Tanner, Director of King's Digital Consultancy Services at Kings College London, who has been involved as a consultant on many UK and international projects of this kind and has recently been researching the impact and benefits of digital resources.

4. The HLF was particularly supportive of the vision behind LMD and its stress on supporting education and skills. HLF's main policy strand is 'engaging people with heritage' and in principle it would definitely encourage a substantial grant bid. It is prepared to fund actual digitisation costs providing they are a smaller percentage than engagement costs. Their recommendation is that any bid around LMD should be seeking funds within the framework of £2m to £4.9m. It would be unlikely to attract support if it were in the £5m+ bracket but would not be of the ambition to be in the under £2m category. It would also want to see policy and financial commitment from the City and private philanthropic or other grant giver support.

5. Simon Tanner was also supportive of the LMD vision and commented that while the large scale digitisation of archives was often to be found as part of bigger projects including library and museum collections, such as at the Smithsonian where he had assisted in their digitisation thinking and planning, he was not aware of projects that originated specifically from large public service archival institutions such as LMA.

6. In addition to the above, the research undertaken with and on the institutions referred to in Appendix 1 shows that they all clearly see and are committed to providing the public value benefits that large scale digitisation of their collections can bring in developing new audiences by providing new forms of access, making exciting new links across their collections that would have been impossible otherwise and encouraging, as the Wellcome Library states in its mission statement, "new insights by building and sharing our collections in ways that stimulate, enlighten and surprise our users."

Prioritisation of LMA collections

7. The 100 kilometres of archive holdings managed by LMA comprises:

- 6,200 collections. These range from the archives of large institutions such as the City itself and the London County Council to small religious organisations and charities. Information on 100% of these collections is already available digitally both via LMA's own catalogue (M2A) and the collaborative AIM25 portal, a major web based research resource for archives in Greater London. More detailed information to 'item' level e.g. a correspondence file or a volume, is already available on M2A for two thirds of LMA's holdings. It should be noted that the Smithsonian's digitisation strategy encompasses both the making available of a digital catalogue as well as images of individual documents.
- An estimated 300 million individual plans, letters, pages, photographs etc.
- A large proportion of material (over 60%) owned by the City which would assist in the first phases of LMD.

8. Approximately 5% of the 100 kilometres has already been digitised, the vast majority by the commercial provider Ancestry and covering genealogical sources such as parish registers and workhouse registers. This material has been indexed by Ancestry and is accessed through its website – there were 23 million page views of LMA material in 2013-14. The other significant area is the graphic collections where some 300,000 photographs, prints and maps are already available through Collage, the City's image website. Both projects have only been possible through significant external funding and in the case of Collage, City investment in the original (Guildhall Art Gallery based) project in the early 1990s. The 5% figure is broadly in line with other big institutions such as TNA (8%) and the Smithsonian (4%).

9. All the major institutions contacted or researched, whether they have a vision to digitise everything or not, have prioritised their approach based on a number of similar criteria. These have been summarised in Appendix 1.

10. The detailed construction of priority digitisation packages has begun following an internal review in LMA to identify those which could be achieved early in the LMD programme and have the most impact, taking into account the criteria above. The two packages first researched are described below – Image London and The Medieval City. They would form part of an HLF bid as outlined at paragraph 4. Strategic level work to group all the LMA holdings into identifiable and prioritised areas has also been undertaken. It is noted that commercially valuable material will be covered by contracts with Ancestry and/or other providers. An overview is attached at Appendix 2.

Prioritisation of LMA collections: Image London

11. The background is that early in 2014 LMA completed a project to fund four placements with the Haringey Job Fund through the arts employment charity the Creative Society. The young unemployed people concerned have worked at LMA and been trained in how to digitise photographic material and create metadata, gaining transferable skills which they can take on elsewhere. This is the successor to a programme LMA ran in 2010-11, again in partnership with the Creative Society (then known as New Deal of the Mind), which gave over 50 young people a similar introduction to the world of work and the skills to find employment afterwards. Over 250,000 photographs have already been made publicly available through this project. There is the potential for this project to be extended to cover all of LMA's very extensive graphic collections The benefits of this approach would be that:

- It fits with the skills development agenda
- The web platform already exists (Collage)
- The funding and training model already exists (as tested by the Creative Society)
- Within LMA the relevant management/supervisory experience and skills already exist
- It will make accessible a large amount of material that will reach and be of great value to individuals and communities in London

12. Recent analysis has identified a further 500,000 images in the collections which could be added to Collage. Many will have third party issues such as owner permission and copyright to address and this would be a big piece of the work. However, Collage is a heavily used website already (over 2 million page views in 2013-14) and the opportunity to create the biggest digital resource for graphic collections about London in the country is significant. Based on the earlier programmes with the Creative Society and a challenging timeframe of three years from start to completion, the indicative costs would be in the region of £750,000. Over 80% of this would be required for the funding of the trainees themselves, with the remainder covering conservation and technical support and equipment costs. In addition, the potential ongoing revenue costs for cloud storage could be of the order of £10,000 per year.

Prioritisation of LMA collections: The Medieval City

13. There is a huge wealth of resources on the City for the period 1067-1485 when it represented virtually the whole of London and was one of the most important cities in the medieval world. Beyond such iconic documents as Magna Carta and the William charter, there are items such as Letter Books, Custumals, Journals of Common Council, Court Rolls, Deeds, Accounts, Rentals and Coroners Rolls. It has been estimated that this would comprise approximately 55,000 digital images and though not the largest collection at LMA, it is one of the most significant and the City is at its heart. There are inevitably conservation, handling and copying issues and the current audience is predominantly academic/specialist. However, digitisation has the potential to make it much more widely accessible. For example, with the right interpretative package records such as the Assize of Nuisance, the Coroners Rolls and the Plea & Memoranda Rolls would become an important popular and educational resource – they featured in the recent BBC history programme 'Filthy Cities'. While much of the material is in Latin and in manuscript, there are projects such as the Venice Time Machine, Smithsonian and TNA that are using crowd sourced volunteers and technology to transcribe and translate similar sources.

14. In terms of costings and timescales, there is not the evidence to base estimates on from previous large scale digitisation of similar material as there is with Image London. There are a relatively small number of images that will be produced, compared to Image London but the material is more complex to digitise, including over 750 parchment/paper rolls. The project would not be suitable for trainees to undertake and suitably qualified staff would need to be employed as well as conservation and technical support and equipment costs. Taking those factors into account, it would be possible to complete this project in one year at an indicative cost of the order of £150,000 - £175,000. This would include the loading of existing transcriptions and translations but not the creation of new ones which would need further work along the lines referred to in paragraph 13. It also does not include at this stage costings for the wider explanation and interpretation on the material which would be necessary particularly with this package. There would be

some ongoing revenue costs for cloud storage but these would not be of the scale of Image London. It should also be noted that the City does not currently have a web platform suitable for making available publicly this kind of material and this issue is discussed in detail in the next paragraph and at Appendix 3.

Web platform

15. A suitable web platform is essential to enable the digital resource that LMD would represent to be properly accessible. LMA currently only has such a platform for its graphic collections (COLLAGE) and virtually all its other digitised material is only publicly available via other providers' websites, primarily Ancestry because of the focus on genealogical sources. As currently configured, the City's own website is not geared up to provide such a platform and it is questionable that should be the way forward, given the LMD requirements outlined in Appendix 3. The example of COLLAGE shows that a free standing website can still link effectively to the City's corporate work. Discussions have taken place with IS and an initial brief has been developed by LMA on the requirements for the platform – the key points are noted in Appendix 3. This has been informed by the website provision of other major organisations providing access to large scale digitisation archive collections such as Ancestry and the Smithsonian. The indicative cost of the initial build for such a website would be of the order of £70,000 but further work is required, with IS, to firm up that figure and to identify the maintenance and future proofing costs which could be in the region of £20,000 a year.

Partnership with other archive holding institutions in London

16. Meetings with the Museum of London indicate that it would be particularly interested in collaborative digitisation around specific projects, such as the Fire of London, rather than a more general programme. London boroughs, which have similar archival holdings to the City, could potentially be interested, as they were in joint cataloguing projects in the early 2000s. However, even the larger archive services would not be able to provide much if any substantial support and bids to external funders such as the HLF would need to be led by LMA. Such partnerships have been successfully achieved in the past and could be in the future, depending on capacity. Digitising LMA's collections alone however, which have material relevant to all of the 32 boroughs, would be of huge benefit to them as it would highlight the richness of the resources available across the capital.

Way forward and current projects

17. From the meetings and research undertaken so far it is clear that the delivery of London's Memory, Digitally will be a multi-strand approach covering:
    - A significant grant bid to the HLF
    - An approach to the big international players such as Microsoft and Google to assess and if possible engage them as partners
    - Contracts with commercial partners. The current contract with Ancestry expires in 2017 and negotiations need to start shortly on the next phase of digitisation as well

as the continuation of access to material already digitised. This may be with Ancestry or another provider

- The major projects programme with institutional funders such as the Wellcome
- The academic programme; and the community programme with smaller organisations

18. At the same time as the strategic development of digitisation has been under research, the following specific projects have been undertaken:

- **Great Parchment Book.** Over the last four years, LMA has been engaged in a cutting edge conservation, digital reconstruction and online publication project on the Great Parchment Book, a survey of the estates of the Irish Society and City livery companies in Northern Ireland begun in 1639. The project was awarded a European Succeed Award Commendation of Merit in 2014. The project was a major collaboration between LMA and the UCL Centre for Digital Humanities and LMA continues to work with UCL and other academic partners on researching and developing digital solutions for accessing damaged documents.

- **Pensions Archive Trust.** LMA's partners the Pensions Archive Trust (PAT) are funding the digitisation of one of the collections held in the Pensions Archive at LMA, the archives of the Association of Consulting Actuaries, and this work is currently being undertaken by LMA's Imaging and Media team. PAT will make the images available on its website in 2015.

- **Wellcome Trust**. LMA is in partnership with the Wellcome Library which is funding the digitisation by the Image and Media team at LMA of the archives of St Luke's Hospital as part of an ambitious project to make 800,000 pages of mental health archives available online via the Wellcome Library's website. Saint Luke's Hospital for Lunatics was founded in 1750 by City of London philanthropists with the intention of curing 'lunacy' and making treatment accessible to poorer people. Previously the only provision for the poor in London was Bethlem Hospital where the public were allowed to come and look at the 'lunatics' on public holidays, as a form of leisure. One of the first rules of the new hospital was 'that patients in this hospital be not exposed to public view'. This unique and complete archive includes records from the foundation of the hospital into the 20th century when it moved to Muswell Hill and eventually became part of the National Health Service.

- **Wellcome Trust.** At the beginning of 2014, LMA was able to announce its part in London's Pulse, a major digitisation project from the Wellcome Library showcasing the work of Medical Officers of Health. The yearly reports of these qualified medical practitioners amount to a health check of the capital over more than a century. London's Pulse brings together more than 5000 fully searchable reports, from 1848 to 1973, from the Wellcome Library and LMA, detailing the health of Londoners borough by borough and often street by street. The digitisation was undertaken by the Wellcome Library supported by LMA's conservation team.

- **Wellcome Trust.** In 2013 LMA was awarded a grant from the Wellcome Trust through its Research Resources in Medical History scheme, to fund a project entitled Mapping and imaging smallpox in London, 1870-1910, which ran until the summer of 2014. One of the aims of the project was to make five very large London-wide maps relating smallpox cases to hospitals of treatment, 1873-85, accessible to researchers through a programme of preservation, conservation and digitisation. The maps were digitised by the LMA Image and Media team and are being made available digitally onsite via LMA's Mediatheque.

- **World Jewish Relief.** September 2014 saw the completion of a major partnership project between LMA and World Jewish Relief to digitise and index the World Jewish Refugee Relief Case Files. The project involved the digitisation and indexing of over 200,000 case files and the naming of image files of over 350,000 registration slips by the LMA Collections and Image and Media teams. Access to these records is currently through World Jewish Relief and the project has greatly improved the enquiry and support service that they offer to those who are recorded in the files or their immediate descendants.
- **Digital Panopticon**. Agreement was reached in 2014 with work to start in 2015. LMA will digitise 53,000 images from archives of the Middlesex Sessions for the project funded by the Arts and Humanities Research Council, 'The Digital Panopticon: The Global Impact of London Punishments, 1780-1925', which investigates the penal outcomes and life histories of those convicted at the Old Bailey and sentenced to either imprisonment or transportation. The project is managed by a consortium of academics based in England with the University of Sheffield as the lead.
- **Training Ship Exmouth**. LMA is in negotiations with the University of Sussex which has requested 13,000 images of archives of the Training Ship Exmouth.
- **Guinness Trust** LMA is in negotiation with the Trust which has asked for just under 2,000 images from their own brewery collection to be digitised.

Conclusion

19. The key work now to be undertaken is the construction of the first five year/ten year digitisation action plan which will be based on the research currently being carried out. It will particularly cover the collections that should be tackled first, the development of the web platform and how both external and internal funding should be addressed to achieve the step change required

Appendices

- Appendix 1: digitisation at other institutions
- Appendix 2: strategic overview of LMA collections
- Appendix 3: web platform brief

Contact
Geoff Pick
Director, London Metropolitan Archives
Culture, Heritage and Libraries Department
T: 020 7332 3833
E; geoff.pick@cityoflondon.gov.uk

Appendix 1: Digitisation at other institutions

1. All the major institutions contacted or researched as part of this project, whether they have a vision to digitise everything or not, have prioritised their approach based on a number of similar criteria. This can be summarised as follows:

2. **The National Archives** (TNA www.nationalarchives.gov.uk): it undertook a major survey in 2010 and while it does aim to continue digitisation at significant levels, it is not aiming at total coverage. It has what is often described as a 'long tail' of material that is not already accessed much if at all and would not be of interest to commercial companies such as Ancestry. TNA's broad approach is to continue its current policy of prioritising material that would be of interest commercially. It has also recently begun large scale crowd sourced/volunteer driven indexing projects to enhance access to its name rich collections...

3. **The Smithsonian Institution, Washington** ("the world's largest museum and research complex" www.si.edu): it is in the first five year phase of its digitisation strategic plan (2010-2015). It aims to make 100% of its collections discoverable through an online catalogue and to digitise a significant proportion. Staff have prioritised 46% of its archival holdings (which total 164,000 cubic feet which, depending on calculations, roughly equates to 31 linear kilometres) to digitise and have achieved 8% of that i.e. 4% of the total holdings. The funding for its programme is drawn partly from its parent body, the US federal government, and partly from external philanthropy and grants.

4. **British Library** (www.bl.uk): it has had a long standing position that it does not have its own resources to fund the large scale digitisation of its collections. This has led it to focus on those projects that would attract external funding and has had considerable success in working with a number of partners, such as Google Books (30 million images), the Qatar government (500,000 images of Arabic related material) and FindMyPast (7 million images of genealogical material). In its strategic plan 'British Library 2020' it states that its ambition "is for users to be able to download, share and re-use public domain digital content for the benefit of the economy and society. The key role we can play in liberating access to public-domain content is through digitisation. We recognise that much of our content will not be digitised by 2020 and our support to researchers will inevitably be provided through a blend of on-site and online services."

5. **Wellcome Library** (www.wellcomelibrary.org): it holds some 9000 manuscripts and over 800 archive collections. Its **'**Transformation Strategy' states "To make our collections available to anyone, anywhere, we are digitising as much of our physical collection as we can, for both our website and the websites of other organisations. We are also digitising and hosting collections from partners that complement our holdings. We select material based on the strengths of our holdings and the interests of current or potential audiences. We also aim to create significant online resources that stimulate research into the same global health themes that underpin our collecting strategy ".

6. LMA has already been a major partner in a number of Wellcome projects including current ones on the reports of Greater London Medical Officers of Health and on mental health archives. The Wellcome has significant funds to finance the digitisation of its own and other related material although it is also exploring commercial partnerships,

particularly to widen access for low-income countries. It is potentially a key player in LMD but to date it has been supportive of funding bids that focus on specific areas in medical history e.g. infection rather than a more general coverage of all LMA's medical (largely hospital) related material. This funding stream can be used for digitisation projects, but LMA has concentrated to date on cataloguing, conservation and preservation projects, with digitisation as an element where appropriate (e.g. the giant smallpox maps). The principal reason for not applying for large-scale digitisation projects to date is the lack of an LMA platform and in some areas that a large proportion may be closed for data protection reasons, for example closed patient case files.

7. **Venice State Archives:** it holds some 80 kilometres of archives from the ninth century to the present day. It has recently announced the Venice Time Machine project to digitise all its collections, the only institution so far identified that has that as its overall vision. The project has links with financial and academic organisations and is placing much of its development in emerging new technologies around scanning and transcription which could potentially dramatically increase the speed of the work and control costs. Detailed funding, timetabling and technical information is not yet publicly available but further enquiries are being made with the project organisers.

Appendix 2: Overview of LMA's collections

1. LMA's collections can broadly be divided into the following 10 areas. As at The National Archives and other institutions researched, it is not usually the case that a whole archive would be classified as being of high or low priority because of its content but that certain parts would be. For example, admission and discharge registers for a Poor Law workhouse would be a very high priority (and in fact have already been digitised commercially) whereas it's financial ledgers would not be.

2. It should be noted that conservation needs (such as the amount of damaged material) are broadly spread across all areas and do not focus in any one in particular. However, there are already over 36,000 items currently assessed as unfit to be publicly accessed and this figure is certain to grow as the detailed analysis of all the holdings moves forward within the LMD project. Conservation requirements for digitisation will be present in all packages.

3. Graphic items are present in all 10 areas as well as in the separate Print and Map collection. While this collection is large of itself (some 40,000 items), it is small statistically in relation to all LMA holdings and has been assessed in detail as part of the Image London research.

Subject area	Description	% of whole archive	Digitisation prioritisation factors
Local government	This includes the City of London, Boards of Guardians, the London and Middlesex County Councils, the Greater London Council, the London Fire Brigade and the Middlesex Sessions.	52	This is the principal category where the City owns the archives concerned and there are comparatively few third party issues. It covers the government of London from 1067 to the present day and is the single richest resource, taken together, at LMA for the history on London. In terms of relevance to and support for the history of the London boroughs it is very strong. Given that it comprises over half of the total holdings, there are a number of high value parts (in digitisation terms) that should be prioritised early. The Medieval City has already been researched in detail and other key areas include the Middlesex Deeds Registry and the papers of the decision making committees, boards etc of the organisations concerned. Certain archives, notably the name based registers of the Boards of Guardians, have been digitised through the current Ancestry contract.
Church of England	This primarily covers parish records but also includes London and	12	Parish registers have been and will continue to be digitised through commercial partnerships, currently Ancestry. As with all

	Southwark diocesan material and St Paul's Cathedral		the other categories below, the majority are not owned by the City and so agreement would need to be reached with the owners, for example here St Paul's, over the details of a digitisation package. This will be more or less straightforward depending on the organisation concerned.
Businesses	This covers a wide range of organisations from Standard Chartered Bank, through gas, water and electricity companies to the Lyons archive	12	Digitisation projects, typically of parts of an archive, have been undertaken with individual businesses and will continue to be so. The key opportunity within **London's Memory, Digitally** is to develop overarching, potentially thematic, packages that would attract external funding from bodies such as the Heritage Lottery Fund and, with academic partners, the Arts and Humanities Research Council as well as in some cases the business itself.
Coroners and Magistrates Courts	Coroner's Court records comprise individual case files from predominately the nineteenth century onwards. Magistrates Court records are primarily registers of cases heard.	6	These are Public Records and as such there have historically been issues around their digitisation on a commercial basis. It is also the case that they have not been to date high on the priority list of commercial partners. There would certainly be public interest in terms of the individual names these records contain but there are clearly important and sensitive issues of data protection too. Further discussions would also be necessary with The National Archives which has strategic responsibilities for Public Records. These may well not be a high early priority for digitisation.
Associations and Charities	This includes well over 1,000 separate organisations, including the Kings Fund, Hampstead Garden Suburb and the London Labour Party	6	The great variety of organisations in this category means that thematic and individual approaches are likely to be the most productive way forward in the short to medium term. Individual projects have already taken place and there are areas, such as the Kings Fund, where the Wellcome Trust has recently given LMA a grant to catalogue the collection.
Hospitals and Health Authorities	The vast majority of this area comprises the archives of individual hospitals from large general institutions such as Guy's and St Thomas's to specialist hospitals	4	The Wellcome Trust has been identified in the report as a current and potential future partner (see paragraph 17 of the report and the note on Saint Luke's Hospital). Further discussion will be needed with the Trust; in many cases the hospital itself; and TNA as these archives are also defined as Public Records. There is the potential for significant public interest in digitisation but there is likely to be a longer lead time for an overall

			approach than for the local government category.
Family and Individuals	This includes approximately 1,500 individual collections	4	The issues of ownership and the number of collections in this category means that the practical way forward is likely to be for individual collections to be included in thematic, potentially academic or community led, packages as part of a later stage the LMD project.
Jewish organisations	This includes the records of individual synagogues and charitable organisations such World Jewish Relief as well as the Office of the Chief Rabbi and the national Board of Deputies of British Jews	2	There is strong community support and engagement, as exampled by the current World Jewish Relief project, but also clear sensitivities and it is likely that the way forward generally here will be for continuing work with the community to develop funded packages.
Livery Companies	LMA holds archives for 88 companies	1	There is great potential to work with the companies both individually and collectively to make their archives more available through digitisation and it is likely that this would be most effective once work has been moved forward on the City's own collections.
Non-established religious bodies	This covers overwhelmingly the records of Non-Conformist churches and chapels	1	Church and chapel registers have been and will continue to be digitised through commercial partnerships. The remainder of the archives are likely to be best tackled in association with work on similar material in the Church of England category.

Appendix 3: web platform brief

A web platform to support the large scale digitisation of the City's archive holdings will require the following:

1. The website should be well designed, featuring clear, engaging layouts which promote LMA and its collections as a key online City of London service.

2. The scale of the project would be a significant factor. Each collection or work package added could vary from 500 to 250,000 digital images. This obviously introduces a significant storage requirement, for millions of digital images (jpegs) which need to be accessible to the public via the web.

3. It should allow the development of thematic packages around the content, to enable work with schools, further education and community audiences. NB other institutions do not really address this issue and there is a significant opportunity for the City to bring innovation to this part of the project

4. It would require a long term hosting, support and maintenance agreement to ensure that the website and viewer are always up to date with the latest browser developments. The support arrangement should ideally be 24/7 as the audience is international.

5. It would allow the public to add data to our databases should they wish to be an online 'volunteer' who transcribes, translates or indexes LMA's documents at home. This would be similar to projects lead by TNA and the Smithsonian.

6. It should provide direct access to the digital images of documents in the LMA collections. Index data would also be provided and linked to the digital images. Users would be able search or browse a database of the indexed data, then either choose to browse through the digital images of a full document (which could be a digitised book, court roll, bundle of single pages etc.) or go directly to a specific page within one of those documents.

7. Searching would need to be intuitive and flexible, giving users the option to build complex searches across the data and presenting search results in a clear and logical way. Filters and sorting tools for search results would be required.

8. The image viewer should give the user the ability to zoom in and out, move the image, and see any transcription of the writing on the page displayed alongside it as text (which can be searched). It's likely that the viewer would need to use a plug in like Adobe Flash.