1 Aims of the public libraries Task Force (TF)

The Task Force set out to develop a basis for establishing a sustained and productive relationship between Europeana and Europe’s rapidly evolving public libraries – especially in the digital field - building on the work done in Europeana Awareness and taking into account the conclusions reached in the evaluation of that work. In particular, the Task Force has noted that Europeana HQ supports the role of this institutional sector but does not consider itself resourced to prioritise specific actions on its behalf.

Key aspects of the research conducted by the Task Force have addressed how to:

- Exploit the growing trend toward the provision of creative Makerspaces, Media labs and similar ‘doer’ initiatives in public libraries for the creative re-use of Europeana and other digital content, leading to coordination of a proposal for a network initiative to the Creative Europe programme in Autumn 2016;

- Nurture the pervasive and widespread coverage of Europe’s 50,000 public libraries to increase representation in Europeana of localities throughout Europe, by improving the delivery of metadata from smaller local cultural institutions and through ongoing thematic collection of User Generated Content. This will build on previous work in projects such as Europeana Local, LoCloud and Europeana Awareness;

- Design and deliver affordable tools and applications for public libraries to achieve the above and how an infrastructure can be created for their reliable maintenance, building on several strands of existing work;

- Establish a fit-for-purpose coordination and governance model for the continuation of the library network established in Europeana Awareness in order to achieve the above goals.

Contribution to the Europeana Business Plan. The work of the Task Force will demonstrate how the momentum created by Europeana through its mobilizing work with an institutional sector can lead to a sustained relationship driven by the sector itself, thereby stimulating greater institutional awareness and dissemination of the content, more (re-) use and a wider range of activity based on Europeana.
2 Task Force Participants

1. Robert Davies (Independent consultant, UK) - Chair
2. Jeroen de Boer, Frysklab, Netherlands
3. Diego Gracia (MECD, Spain)
4. Breda Karun (Zavod Jara, Slovenia)
5. Dimitris Protopsaltou/Lida Mantzourani (Future Library, Greece)
6. Nienke van Schaverbeke (The European Library)
7. Sorina Stanca (Europeana Network Members Council and Director Cluj County PL, Romania)
8. Gorana Tuskan-Mihocic (Director Rijeka PL, Croatia)
9. Mogens Vestegaard (Director Roskilde PL, Denmark)
10. Marcin Werla/Tomasz Parkola (PSNC, Poland)

3 Methodology

The TF workplan was implemented July-December 2015. Two TF workshops have been organised: in Roskilde, Denmark on 7/8 July 2015; and in conjunction with the Future library Unconference, Thessaloniki, Greece 27-29 November 2015, where final decisions and drafts were considered. In addition, three Skype calls were organised to discuss progress on the TF workplan and discussions were held by TF members with major EU actors in the public libraries sector including IFLA, NAPLE and PL2020 (the post-Gates legatee). TF members submitted and discussed draft proposals and ideas on the TF Basecamp throughout the six-month duration of the work.

3 The Makerspace Movement

Europe’s public libraries are currently engaged in a process of transformation for the digital era. The erosion of demand for their traditional services (such as book lending and printed information sources), as a result of the pervasiveness of the Internet and changes in patterns of public consumption, has led to a need to transform their portfolio of services to match demand, whilst capitalising on the trust which people have in public libraries as neutral and ethical civic institutions. That this process is being carried out quite rapidly and in testing economic circumstances, presents significant leadership challenges at local and wider levels but has also increased receptiveness for new ideas.

A very wide variety of terms are used to describe activities and services which connect to the Maker Movement. A selection includes: DIY Makers, FabLab, Hacker Space, Library Laboratories, Makerspace/Maker Space, Media Lab, Studio and TechShop. There are many other variants. In the United States, where the makerspaces movement has already taken hold, there are numerous examples in public libraries. The implementation of pilot services of this kind has now spread from North America to a number of European countries and interest in their development is high. Examples of public library makerspaces already exist places as diverse Denmark, Finland, Germany, Greece, Netherlands, Poland and Ukraine. However, in some countries, the process has not yet developed. Furthermore, the policies of the responsible national, European and international bodies, such as IFLA and NAPLE, in this aspect, are not yet fully formed.

2 Europeana Task Force on Public Libraries
The growing number of Public Libraries that incorporate makerspaces, Media labs and similar programmes contribute to local development in additional ways. They are able to reach out to, support and engage new audiences who may include local businesses (start-ups, entrepreneurs as individuals and companies), self-publishing authors (or young authors-to-be), artists (filmmakers, musicians, photographers), or people involved in STEM (science, technology, engineering and mathematics) areas.

Public libraries are places of community engagement and a genuine fit for a place of creative inquiry; as a point of reference, collection and exploration that suit the hands-on, do-it-yourself spirit of the maker movement. The physical Maker Space can be as big and as complex needed; using mobile vehicles, pop-up structures, the corner of a room or an entire dedicated space. The maker movement in libraries is about teaching users to think for themselves, to think creatively, and to look for do-it-yourself solutions: a makerspace is a place where people come together to create with technology. Early experiences show that the potential users of library makerspaces are not limited to a specific demographic.

Some makerspace models emphasise citizen involvement and ownership from the very beginning and stress the importance of “Do it together”, as well as “Do it yourself”, activities that provide public value by stimulating the development of networks, skills and innovation. People can work individually or collaboratively, using technology and/or drawing on the collective wisdom of those in the room to help achieve their goal in a Maker Space. They try to create ideas, knowledge and growth for the individual; mutual learning from, and with, local experts; and to increase the overall level of knowledge in the community together with access to new opportunities, new technologies, and new ways of using, providing a basis for innovation. Making is seen as closely connected to creativity, and skills are developed by doing, touching and participating, with different activity thresholds, e.g. for novices or for experts. The activities in these spaces vary wildly—from home bicycle repair, to using 3D printers, to building model airplanes. ‘Digital making’ is an important strand of this work which creates a need to re-use digital content in mash-ups, applications and web-based services, thereby creating an opportunity for Europeana.

4 Conclusions of the Europeana Awareness PL network evaluation

During 2014/15, Europeana commissioned Mary Rowlatt to research and write a report evaluating the implementation of Europeana tools by public libraries (PLs) resulting from the work of the Europeana Awareness project; to research and present some ideas for further collaboration between Europeana and PLs; and to draw up lists list of public library conferences, e-lists and discussions which could be used for future dissemination into PL networks.

The report covered:

- the implementation of two widgets (one from Europeana, one from PSNC) and the Europeana API - who had implemented/ installed them, any problems faced, levels and types of use;
• a brief outline of what was done or attempted with digital storytelling and community collections platforms (i.e. public libraries’ contributions to the Awareness PR campaign and the WW1 and Europe 1989 collection days);
• an assessment of sustainability of the tools/services and potential to open them up to public libraries generally in Europe;
• some ideas for further dissemination – details of public library networks, e-lists and discussion lists and suitable upcoming conferences.

Results of the analyses were presented, together with key findings for each area. A number of specific and practical suggestions were made in the Conclusions and Recommendations section (see below). Appendices contained detailed lists of organisations, conferences and e-lists which might be used for communication with and dissemination to public libraries in the future.

In summary: the report found that:

• There appear to be considerable benefits to both Europeana and PLs in further cooperation and in opening up tools and services, such as those developed during the Awareness project, to public libraries generally in Europe. There was also no shortage of ideas and suggestions about how best Europeana might go about continuing and extending its cooperation with PL.
• Europeana should be aware however that it would need to devote considerable energy and resources to the task, on an ongoing basis, if it wished to meet the needs and expectations of the PLs and maintain credibility with them and, more importantly, their many users across Europe.
• Europeana should consider the facts presented and issues raised and come to a decision in principle as to whether or not it wishes to engage in further cooperation with the PL sector and what level of commitment it is willing to make to this. Only if the decision were positive should Europeana begin a process of dialogue with PLs and others to begin to take things forward. It should define more clearly what it wants to achieve from cooperation with PL.

4.1 Summary of conclusions and recommendations from the Europeana Awareness PL network evaluation

Cooperation

• PLs would be good partners for Europeana, bringing a range of benefits and having proved themselves capable, willing, good to work with and delivering the required results.
• PLs could help Europeana broaden its reach, connect with end users, widen its collections, collect and manage User Generated Content (UGC), engage with policy makers below the national level, and engage with local and national press and media.
• PL (members of the PL Network, attendees at the two PL workshops, respondents to the survey and interviewees) were very positive about cooperation with Europeana.
and would like to develop it further and into new areas. They see potential benefits flowing both ways - to PLs and the PL sector as well as to Europeana.

- They have a lot of ideas about what might be done and how.
- They don’t have much information about Europeana and would welcome more.
- Open and two-way communication with the PL sector would be required before planning new services and modes of cooperation.
- It would need active encouragement from Europeana, for Europeana to be more outgoing and reach out in ways which are interesting and relevant to public libraries and public library consortia, like the digital parcels idea, for example.
- The PL Network is valued and PLs would like it or something like it to continue.
- A named person or persons at Europeana to contact and who is responsible for PLs would be welcomed.
- Comments about the falling off of communications during the last year of the project indicate that PLs need to be looked after and encouraged and ‘targeted’ communications are important.
- PLs would like Europeana to translate its documents, technical information, guidelines etc. into all community official and co-official languages.
- Europeana should provide PLs with press and PR material, translated and ready for PLs to disseminate locally via their website, social networks etc.
- The experience in Spain (where 240+ PLs implemented the Europeana widget) shows that support from the Ministry or lead body responsible for PLs is very helpful.
- Europeana should be making contacts, building and maintaining relationships with such organisations.

The PL Network

- The majority of respondents to the survey (79% or 26 PLs) would like the Network (or something similar) to be continued, 15% (5) were not sure and only 6% (2) said they would not.
- The PL sector is very fragmented, with many small PLs operating more or less on their own. They value the communication with other libraries, access to expertise and training, exchange of experience etc.
- PLs have quite a long list of quite high expectations as to what they would like such a network to deliver and how they would like it to operate.
- Europeana will need to decide whether or not they feel that running such a network is an appropriate activity for them to undertake. However, without running at least a basic communication facility it is hard to see how Europeana might seriously advance further cooperative activities with the PL sector.

A preliminary conclusion drawn by Europeana management to this report was that it would require someone other than itself to take the initiative in this area and that its own resources are too limited to do so effectively on its own but that it would support any such initiative as well as it could (see Section 1 above). Against that background, this Task Force has been established.

5 Europeana Task Force on Public Libraries
5 Issues and Strategies

5.1 Tools and infrastructure for re-use

The TF concludes that a technical platform should be developed for PL with user requirements in mind. Therefore, it is critical to gather requirements from all target user groups, including:

- Managers – they already have experience in the context of user engagement and dissemination as well as organisational matters and engagement of domain experts who can mentor/teach people in specific topics.
- Students – people who want to learn and share experiences about specific topics covered by domain experts.
- Domain experts – mentors/teachers that can provide expertise in specific topic for all interested makerspace users.
- Potential managers – that are interested to run a makerspace in their institution, are looking for good practices and advice on how to setup a well-running makerspace which will engage the local community and extend their institution’s impact.

Eliciting requirements needs to be linked to the software development methodology that will govern the whole development activity. The process has to take into consideration various techniques to identify user’s needs, e.g. deep interviews, questionnaires, brainstorming or focus groups. Without thorough investigation and multiple feedback loops it is not possible to provide an appropriate technical solution. However, this TF conducted initial brainstorming that resulted in the following findings:

Installation and configuration of tools

Domain experts have knowledge on how to use specific software tools to develop specific products. The tools can be sometimes complicated to install or configure. It can be therefore beneficial to provide tools as SaaS, so that the makerspace users are focused on use cases, rather than deployment technicalities. Alternatively, it would be possible to provide the tools in preconfigured virtual machines (e.g. to be used in the cloud infrastructure) or via software containers technology (e.g. to deploy preconfigured software on a user’s personal computer).

Data conversion

In some cases, it may be required to execute (large-scale) pre-processing of the data handled in a makerspace. For instance, in order to prepare a full-text transcript of some local (historical) document from Europeana, it is necessary to first run OCR and then use special tools for post-OCR correction and even annotation e.g. Virtual Transcription Laboratory http://wlt.synat.pcss.pl/

Another example may be to process data from Europeana to find images that present specific items, e.g. buildings, cars or faces – in order to create derivative works. The technical platform could be used for this kind of pre-processing, including data retrieval from a digital library, conversion and data delivery. There are already good examples of this
kind of approach in other contexts. One of them is an infrastructure developed by PSNC (in
the MAH-HA national project in Poland) which is able to process data in a large-scale
manner, including data from digital libraries. Prototype solution includes large-scale OCR
execution (e.g. on PDF) or technical metadata extraction.

**Educational materials**

It is important that makerspace users (managers, students, domain experts) provide
appropriate documentation of their activities, so that the others can learn how to conduct
similar projects. This does not mean that documentation needs to be in text form, on the
contrary – various techniques should be used such as multimedia content, interactive
documents, a/v content, visualisation and Q&A. In order to increase the quality of the
documentation, it would be possible to introduce documentation space that supports
ratings, so that there are local, regional, national and even international rankings for ‘best
documenters’. That could introduce a competition-like environment, encouraging users to
contribute to the community in this way.

**5.2 Using the new Europeana Platform**

This TF sought the views of Europeana on tools in use or under development within its main
platform which might be useful to public libraries among others and received the following
statement:

‘Europeana constantly strives to improve access to re-usable material for all its user
communities, including audiences such as education, tourism, creative industries and
research. At a policy level, the forthcoming Europeana Publishing Framework sets out the
technical and licensing criteria for providers in terms of four tiers of re-use, encouraging
providers to open up their collections and outlining the impact each tier is likely to achieve.

The underlying infrastructure and services are critical to realising this potential. The Content
Re-use Framework delivers new methods for developers to uncover and provide access to
rich content. For example, though the enhanced API queries can be formulated that provide
not only openly licensed content, but limit results to just those items which give direct access
to media files that fulfil certain technical criteria (for example images of a minimum size, or
video files that are a certain length and format). Within Europeana Labs we feature
notable, high quality, re-usable datasets to give a flavour for the type of content that is
available. These make access to the content easy through links to visual and code
representations of those results. We will be enhancing this offer with further datasets, and
also adding features such as bulk downloads of metadata and media files.

These API methods will also underpin the new Europeana interface (launching late 2015)
which provides a richer and more structured way to browse and search Europeana content,
together with enhanced features such as direct downloads.

Of course we are also very happy to get feedback from our users and ideas for new features
that can make it easier for them to use and re-use Europeana content.
Under the DSI project, the new Europeana platform is strongly focused on the development of services that will enable the re-use of the European digital cultural heritage: Europeana Labs are working on the creation of different datasets (over 80) offering openly licensed media files to the creative industries. The PL network could make use of these datasets to feed its different activities and could also benefit from the over 190 applications and tools that will be designed by Europeana Labs and investigate the possibilities offered by the end-to-end processes that Europeana will design to allow different audiences to create market-ready products using the open licensed materials.

The activities built within the proposed project (see 5.4 below) could result in both on-site and virtual initiatives, meaning that re-use of the digital cultural items can take place in a wide range of scenarios:

A purely virtual approach could involve a set of tools enabling the remix of different types of resources in the making and sharing of new content, taking advantage of the variety of formats provided by the different Europeana Channels: sound clips, videos, artworks, etc. To help in the design of these tools inspiration may be found in the ones created by the BBC through their Mixital initiative: https://www.mixital.co.uk/

5.3 Public Library Network

The PL network set up under Europeana Awareness 2012-14 consists of 115 public libraries from 32 countries, most of which were in direct communication with the project, many of which attended network events in Spain and Greece and some of which tested the widgets made available for search and ‘contextual’ search of Europeana, respectively as well as participating in Collection Days.

Since an interval has elapsed since the project ended, contact will need to be renewed with network members to determine which of them is interested to be involved in a new network a) in general in line with a new set of objectives, new conditions and a structure to be defined and/or b) to participate in a potential Creative Europe project in one of a set of roles.

5.4 Proposal for a Network project under the Creative Europe programme

The TF has agreed that effectiveness and impact of such a network could be greatly enhanced by funding through Creative Network and has already considered in some detail objectives, workplan and partners for a proposal to be submitted under the Networks call in Autumn 2016 (the next ad final such call before 2020. In brief, a need is foreseen to:

- Survey, clarify and assess the current European landscape of (public library) makerspaces, FabLab, Do-It-Together and similar initiatives, in order to produce a quantitative and qualitative typology of service types and to identify best practices and case studies for emulation, emphasising the potential for re-use of digital objects such as those from Europeana, the applicability of approaches such as ‘coding’ initiatives and other technical slants.
- Define one or more community-driven service design approaches suitable for widespread use in the establishment and support of new (library) makerspaces.
• Create an Evaluation and Impact Assessment framework for use in determining the effects of (library) makerspaces on individual and community skills and participation in the creative economy.
• Test in several concrete makerspace scenarios, the delivery and re-use of digital cultural content from Europe's premier source (Europeana) and other resources, especially local ones, e.g. for digital storytelling.
• Draw together the results of this work to create a dissemination, advocacy and training programme, targeted specifically to countries where the (library) makerspace movement has yet to make significant headway, a) designed to encourage and measure take up by library services across Europe b) for use in influencing national and local policies.
• Establish the conditions and a business plan for a permanent European library makerspace network on an open membership basis with a constitution and range of benefits to participating libraries including access to good practices, peer-to-peer advice, training and mentoring, tools and online resources and an annual conference.

Such a project could involve 3 key components, each contributing to the sustainability of an ongoing network activity which serves to connect Public Libraries and Europeana and to achieve mutual benefits.

1. A Platform, probably hosted externally from Europeana, offering tools and pieces of software stored in the cloud a) to be used by be used by the PLs in the activities designed by the Makers Network b) for end users to re-use Europeana content share the results.
2. A Makers Network of specialists in makerspaces, who will design activities and services to be offered to public libraries and specify the tools needed for subsequent development and delivery by the Platform host.
3. A Public Libraries Network: A network of libraries from any European that will benefit from the tools and activities designed by the Makers Network, developed and delivered in conjunction with the Platform.

6 Recommendations

6.1 Alternative models should be considered and assessed for hosting the Platform over the coming months, including the possibilities which may be offered through a) The new Europeana Platform and Europeana Cloud as it finalises b) individual organisations such as TF member PSNC, which may be in a position to provide such a Platform.

6.2 Possibilities for organisations to take responsibility for hosting both the Makers Network (such as the one created around FryskLab) and the Public Libraries Network (such as Future Library, based in Greece) should be and assessed over the three months following the existing Task Force conclusion.

6.3 A business plan, to consider options such as a subscription model, subsidy or sponsorship from one or more commercial organisations or foundations - in addition to a
potential project under Creative Europe - should continue to be developed during the same time period, alongside the conditions for Network participation.

6.4 The work of the Task Force should be continued in the period leading up to submission of the Creative Europe proposal, if possible by extension of the Task Force with Europeana Network support, but failing that on a voluntary basis by interested TF members.

6.5 The initial assistance of Europeana – or the Europeana Members Network - should be sought and provided a) to renew contact with the Awareness PL Network members, with a view to establishing their interest in a new set of conditions for participation to be established by the Network host b) formally transferring responsibility to that organisation. A suitable message can be devised by the TF.

6.6 The potential of public libraries to contribute to the Europeana strategy 2015-20 and related initiatives through this Network should be defined in more detail and tested through experimentation, including:

- those relevant to a service-oriented infrastructure (by providing tools for popular re-use of heritage content available through open licensing and to encourage co-creation by developers, innovators and entrepreneurs through public libraries).
- the potential for public libraries to contribute high-quality thematic content data with a local dimension – and to support its enrichment by users – for new and existing Europeana Channels and in the context of the Europeana publishing framework.

6.7 The proposals of this TF should be considered in relation to those emerging from the parallel Task Force on ‘connecting networks for collaborating and information sharing’ to establish what synergies can be established within the broad context of the Europeana Network.