

ARROW Business Model

Executive Summary

This document outlines a mid- and long- term business model covering the continuation of ARROW from the first phase and participation of all or majority of EU states. It outlines the organisational background and its value propositions to its main customers, and then describes its business architecture before finally addressing the funding model and budget.

The objective of ARROW is to facilitate the identification of rights, rightholders and rights status, and through this, also to enable digitisation projects. It is open to all kinds of users and it aims to close the information gap, contribute to enhanced efficiency and serve players equally. Its core service is the efficient service to identify rights, rights status and rightholders and to establish a European wide orphan works registry. The key distinguishing features of ARROW are interoperability, standards deployment and stakeholder involvement. There is already an extensive informal network of bodies delivering into the project including libraries, authors and publishers associations, Reproduction Rights Organisations (RROs) which in turn is linked to a wider network including organisations delivering into Europeana.

There are many digitisation initiatives including Europeana, Google Book Search and national library projects. A common element is the growing recognition that the making available of digitised copyright works involves ensuring at the same time that the rights of rightholders to commercialise their works are not infringed. Facilitation of diligent search is the core service offered by ARROW. ARROW should allow users to perform the same tasks while employing less resources. The costs of diligent search can be roughly divided into 50% on identifying in-commerce books and 50% finding possible rightholders of “orphan” works. ARROW aims at offering the automating of the first part of the search, whilst for the second it depends on the comprehensiveness of the RRO databases.

For Libraries, the benefits of the ARROW System include not digitising books that rightholders will later ask to remove; the possibility to negotiate with rightholders the permission to make their works available; not digitising books already digitised by other libraries; and all the benefits accruing to increased legal certainty. On a different plane it will be clear that to have a diligent search is both more respectful of the copyright principle, facilitates the digitisation process, and is convenient and economic.

In the short and middle term, libraries and other expected institutions are expected to be main users of ARROW. These are requested to digitise their collections and make them available through Europeana, with the aim to make 25 million objects available by 2014 compared to the 14 million at present. Other non Europeana Library digitisation projects and digitisation projects such as Google and Microsoft will have the same obligation to find rights information and clear rights. A 2009 Study report¹ indicated that 50% of European Libraries

¹ Available at: http://cordis.europa.eu/fp7/ict/telearn-digicult/publications_en.html.

had plans to digitise their collections while only 3.5% of the digitisation had actually been done and that library budgets were unequal to the task.

ARROW is designed to be business neutral and will service any private company interested in the digitisation of books, and searching for rights information and rights clearance including search engines such as Google, as well as others in the e-book or e-value chain such as Amazon, Microsoft, the Gutenberg Project, the World Digital Library, the Internet Archive, publishers, RROS and so on. Such private companies have an equal duty to undertake diligent search for their digitisation projects.

The Business Architecture of the ARROW System is made up of the following components - The Rights Information Infrastructure (RII); The ARROW Work Registry (AWR) and The Registry of Orphan Works (ROW). The RII is the backbone and the engine that enables ARROW to query and retrieve information from many different data providers, in multiple formats, to make the formats interoperable, to process this information and take decisions on the successive elaboration and finally to exchange information according to a planned workflow. It operates three main processes corresponding to the three business domains – the Library domain (The European Library) for gathering authors information and clustering; the Books in Print (BIP) domain for ascertaining the status on availability of works and the RRO domain for discovering the rights status.

This results in a set of ARROW Assertions on Copyright status, publishing status and Orphan status which is stored and maintained in the ARROW Work Registry (AWR). The Registry of Orphan Works (ROW) is a subset, which starts empty and gets populated by digitisation requests being processed through the ARROW system in an automatic way whenever the output of the RII process indicates that the work could be an orphan.

The architecture of the ARROW system comprises a number of software and hardware components. The ARROW Data centre has the main task of managing the whole workflow, retrieving and sending data from and to data providers. Besides that, ARROW also runs a website. The ARROW hardware infrastructure is made of an application component and a database component both hosted by CINECA. CINECA also provides data backup and disaster recovery.

As a stable, up and running entity, ARROW will need some kind of normal operative office structure and will need to be endowed with its own human resources. The exact level of personnel required will depend on the degree of outsourcing of ARROW's activities and on its overall level of activity. The ARROW infrastructure will be organised as a federated rather than a centralised system. It will be a network of resources, accessible from a single access point. Because of its network nature, the ARROW system consists also of a set of relationships with other players. ARROW needs the involvement of such key players in its governance and to design stable contractual agreements with third parties that are crucial to provide the service (e.g. The European Library, VIAF, Books in print providers, RROs). The relationship with other entities is likely to take the form of a network of contractual links, which will constitute yet another cost category.

Finally, to the question of finance and budgets: As a project under the eContentPlus programme the development of ARROW has been financed 50% by the European

Commission and managed by a consortium of partners, which pay the other 50%. Several original partners, together with a number of new ones, have applied for a 2.5 year extension of the project for the broad implementation of ARROW throughout Europe (ARROW plus), after which the system will need a stable and sustainable flow of revenues to cover its costs and a suitable governance model.

Although some of this revenue will become the core ARROW services and form its additional value, there is also a rationale for a sustained public funding to the system. The ARROW services will enhance the EU's cultural policy and address key EU goals by facilitating digitisation initiatives and offering solutions to issues related to out-of-print and orphan works. A stable funding provided by the public sector will be required in the introductory phase and the first years of regular operation following the project periods. It is proposed that there should be a flat rate of € 0.0011 per inhabitant payable on the basis of population by the EU Member States, EEA countries and Switzerland against free use of ARROW for their publicly owned institutions.

In the long run the European Commission and the EU Member States should continue their contributions to the financing of ARROW through payment for the use of services so long as institutions make use of them. Governments which plan to fund national digitisation programmes should create a separate budget line for "diligent search" in general or fund ARROW directly in order to support the diligent search in institutions they own. A yearly contribution from the European Commission on behalf of all EU Member States would be a cost-efficient solution. The Commission is requested to contribute to 50% of the cost of the establishment of ARROW and its operation for the first five years of the operation.

As the current ARROW project is likely to be replaced by a best practice project on it would be sensible to gather the additional experience that a new project period will enable before finalising the outline of a budget for ARROW as an ongoing company.

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