

ORMEE - Observatory on Rights Management for e-Learning in Europe
A project financed in the framework of the European Commission e-Learning initiative
Agreement N° 2003-4727/001-001 EDU ELEARN

ORMEE

Observatory on Rights Management for eLearning in Europe

Agreement N° 2003-4727/001-001 EDU ELEARN

WORKPACKAGE No. 2

**European best practices
in PPPs in eLearning**

The logo for OrmeE, featuring the text "OrmeE" in a yellow, stylized font on a dark blue rectangular background.The logo for elearningeuropa.info, featuring a small icon of two stylized human figures in yellow and blue, followed by the text "elearningeuropa.info" in white on a dark blue rectangular background.

**AIE - Associazione Italiana Editori, Italy
BolognaFiere, Italy
FEP - Federation of European Publishers, Belgium
Research Center for Network Technologies and Multimedia Applications
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1 Presentation of the Study

The objective of this study is to provide an overview of the current situation in the European E-Learning market after the European Union Copyright Directive¹. In the context of the other three studies² of the OrmeE project this document focuses on the results the observatory has found related to the adoption of Public-Private Partnerships as cooperative models for public and private players in the eLearning market. The role of the emerging Digital Rights Management technology in this context and its use for eLearning content was also of some importance.

The OrmeE project partners initiated an observatory to assess the current situation of European E-Learning market. One important part of this process was the creation, realisation and evaluation of a questionnaire sent to market players³ that were carefully selected by the project partners.

It should be noted, that our perspective as a public educational institution differs from that of the other project partners which are more linked to that of the private sector and the publishing part of it in particular. This is of course a strong point of the project as it creates good prerequisites for a balanced approach to the subjects involved. We all agree about the understanding that lifelong learning is a necessity and that the ongoing digitalisation is a reality that has to be addressed by the whole society.

Conclusions

From the research we did we can conclude that Public-Private Partnership currently can not be seen as well described model for business relations. It is difficult to exactly differentiate PPPs from other forms of public-private co-operation, because of the lack of a generally accepted definition. Nevertheless several criteria have been found that can help to characterise what a PPP is and can at least help to rate a specific case. Using these guidelines we found many successful examples of co-operation between public and private sector in the E-Learning market, but also had to conclude that most of them cannot be seen as Public-Private Partnerships. Regarding the access to

¹ Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society

² "Implementation of the EU Directive on Copyright" (T2.1), "DRM Solutions Addressed to eLearning Environment" (T2,2) and "Best Practices in Dealing with Learning Objects" (T2.4)

³ Including eLearning companies, publishers and educational institutions.

copyrighted learning content we were able to identify several successful business models some of them with good potential for the implementation as PPPs.

Regarding the use of digital technology to manage, control and enforce rights to intellectual property, aka DRM⁴, we found this technology not yet to be common for sales, distribution and consumption control in the digital education market.

We found the term DRM also to be used in a very generic, sometimes even blurred way. The evaluation shows that for eLearning material rights management is usually informally included in information material for public institutions as well as in some contracts – but not yet as a technical solution for contract management or accounting.

⁴ DRM, Digital Rights Management.

The management of rights to intellectual property using digital technology.

2 Public-Private Partnerships

Public-Private Partnerships have become an increasingly popular form of cooperation between public authorities and private businesses, sometimes even referred to as “the public-private partnership phenomenon”⁵. The great popularity can be explained by various factors.

Important motivations are the increasing budget constraints of the public sector. In this context Public-Private Partnerships can meet the need for private funding of the public sector. Another factor driving the development is increased desire of the public side to benefit from the know-how and modern, often more efficient working methods of the private sector. PPPs are also an expression of the general trend shifting the role of the State in the economy from a direct operator to more of an organiser, regulator and controller.

2.1 What is a Public-Private Partnership?

The term Public-Private Partnership (PPP) is quite blurred and a generally accepted definition is yet to be found. Regarding the literature and the use on political and economic levels Public-Private Partnership is often used as a collective term for many different kinds of cooperation between public authorities and private capital.

A Commission Communication of 1998 refers to PPPs as follows:

“The concept of public-private partnership encompasses the different ways in which private capital can take part in the financing and operation of infrastructures and public services.”⁶

⁵ See the Commissions Communication COM (2004) 327, “Green Paper on Public-Private Partnerships and Community Law on Public Contracts and Concessions”, Brussels, April 30, 2004

⁶ From the Commission Communication COM (98) 143, “Public Procurement in the European Union”, Brussels, March 11, 1998

A more recent paper of the commission underlines the problem of a missing general definition for the term that is widely accepted:

“The term public-private partnership (“PPP”) is not defined at Community level. In general, the term refers to forms of cooperation between public authorities and the world of business which aim to ensure the funding, construction, renovation, management or maintenance of an infrastructure or the provision of a service.”⁷

Until a clear common understanding is reached for what a Public-Private Partnership is and what it is not, we have to accept some degree of fuzziness when we talk about PPPs without specifying the exact type of PPP we mean.

Currently the best way to get a common understanding seems to be to point out the elements that characterise a Public-Private Partnership and that altogether differentiate Public-Private Partnerships of other forms of cooperation between public authorities and the world of business. The following features can be singled out:

- **Sustainability / long-term cooperation.**
The cooperation of public and private partners within PPPs is rather long term than short term oriented motivated by the wish to achieve a sustainable result, for example a better quality of service.
- **The roles typically assigned to each of the partners in a PPP.**
The public partner defines objectives like the quality of service that is to be provided or the price for the service, that are of public interest and monitors the compliance with these objectives.
The private partner concentrates on the role of the economic operator following his own economic interests in order achieve the revenues needed for a long-term partnership.
- **The general goal to create a win-win situation and to distribute risks.**
In a Public-Private Partnership both partners should benefit, but not at the expense of the other. Both should bring their individual strengths, resulting in the creation of synergetic effects. By involving a private partner risks are generally transferred from the public sector to the private one, but the precise distribution of risks is determined case by case.

⁷ From the Commissions Communication COM (2004) 327,
“Green Paper on Public-Private Partnerships and Community Law on Public Contracts and Concessions”, Brussels, April 30, 2004

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- **The way of funding.**

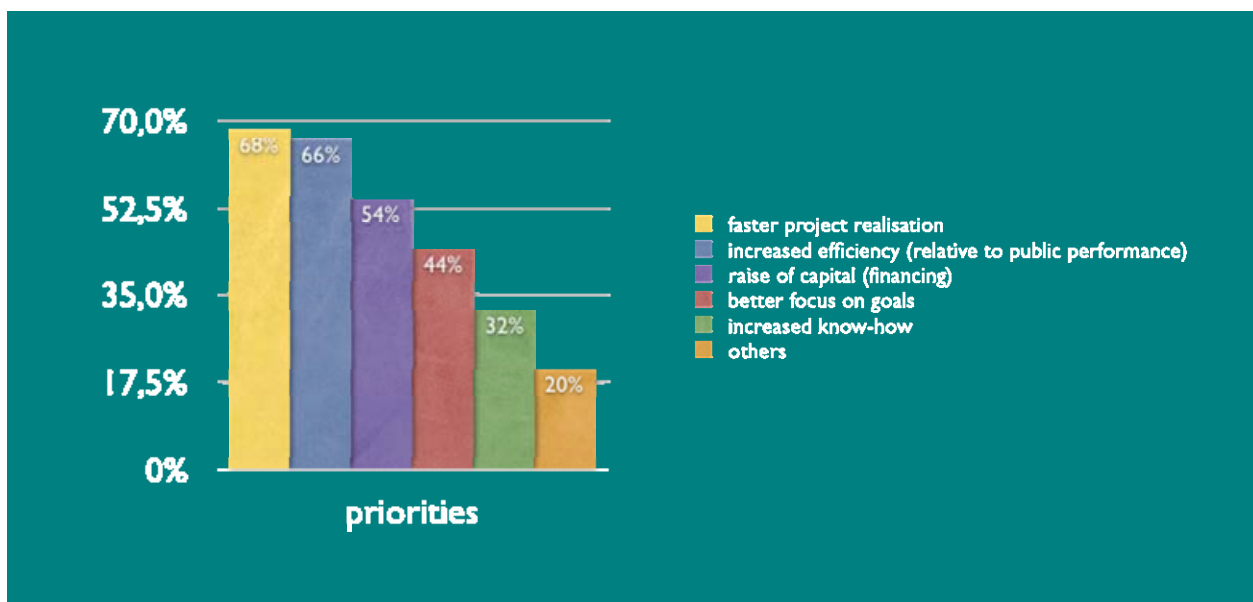
Private funding is generally the basis for a Public-Private Partnership, which is often supplemented by public funds.

2.2 Expectations and Restraints

The individual decision for or against the implementation of a Public-Private Partnership for a specific public service is highly dependent on the expectations the involved parties connect with the venture. Hence it is helpful to look closer at the hopes but also at the restraints the public actors see, when they value the pros and cons of PPPs.

A recent study⁸ carried out by the Difu⁹ examines how public partners assess PPPs and examines expectations on as well as possible restraints for the implementation of PPPs as they are seen by the public partners polled for the study.

The following chart derived from the results of the Difu study shows the most important expectations public partners have regarding the benefits of Public-Private Partnerships. The faster and more efficient handling and realisation of projects are most frequently named by the public partners, followed by the wish to raise capital to ease tight public budget situations.

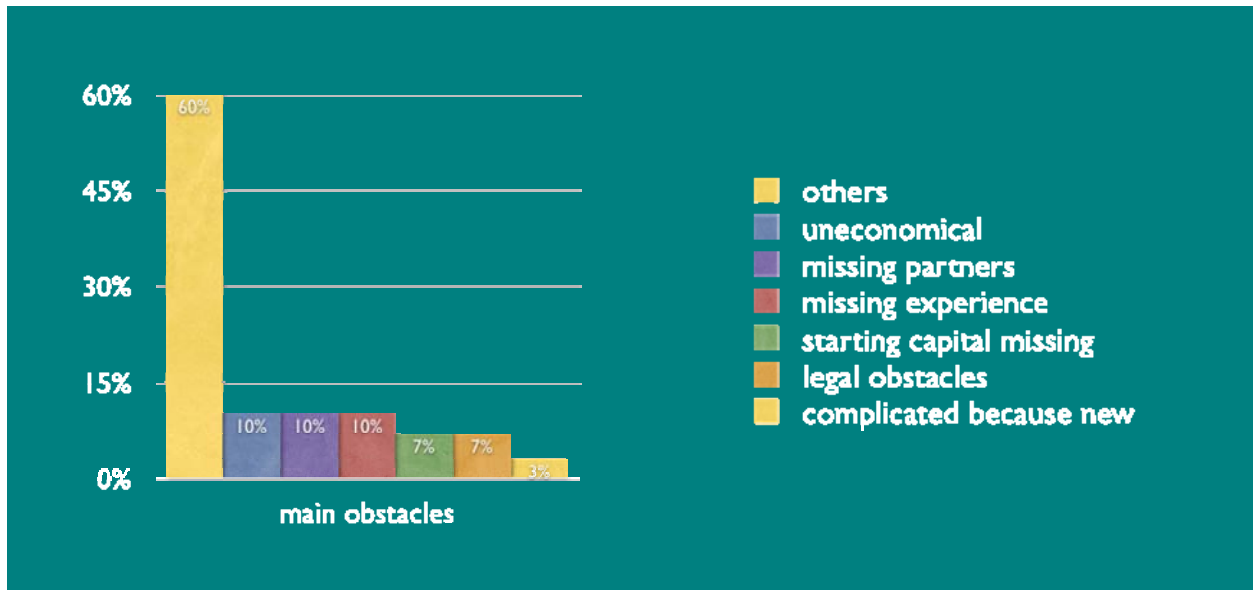


Expectations regarding PPPs (all areas) Source: Deutsches Institut für Urbanistik, 2005

⁸ „Public Private Partnership Projekte – Eine aktuelle Bestandsaufnahme in Bund, Ländern und Kommunen“, published in September 2005

⁹ Deutsches Institut für Urbanistik (<http://www.difu.de>)

Regarding the reasons expressed against the implementation of Public-Private Partnerships no specific criterion stands out from the answers given by the public institutions. The following chart gives an overview of the results.



Reasons given against the Implementation of PPPs (in Germany)
Source: Deutsches Institut für Urbanistik, 2005

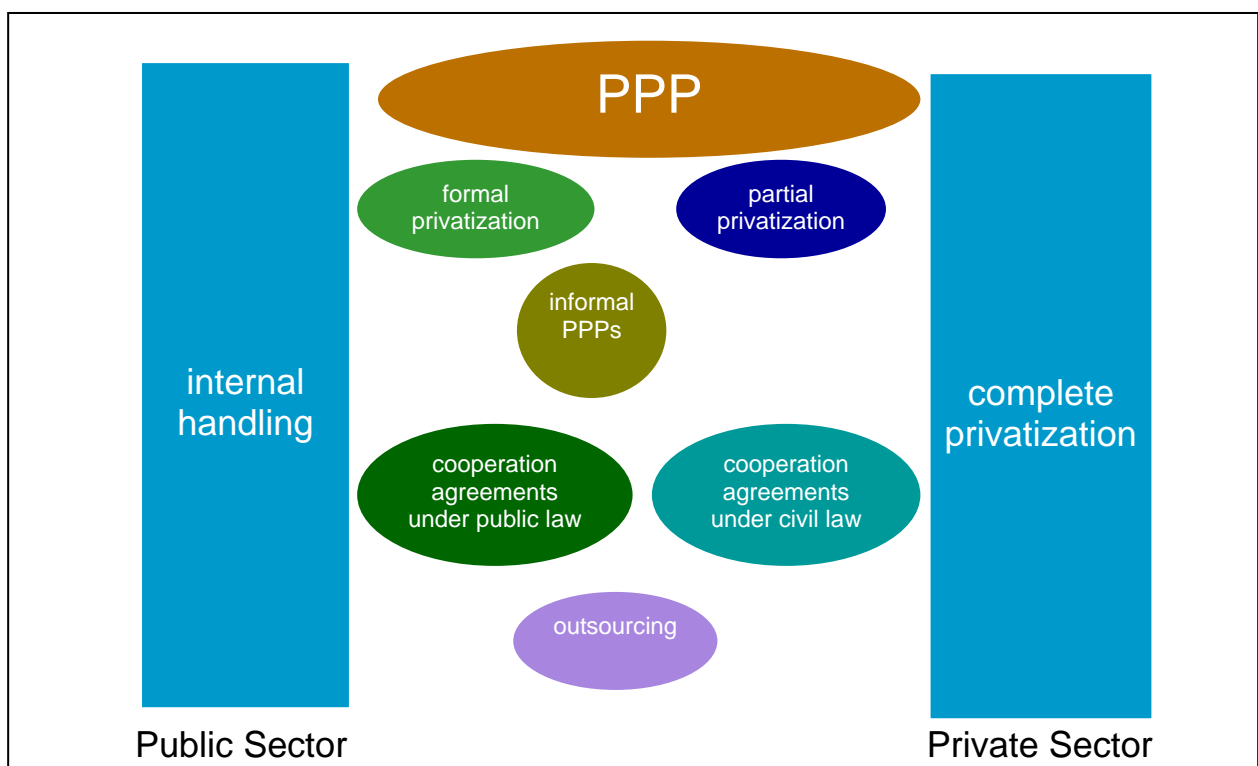
None of the proposed reasons against PPPs reached more than ten percent and the only significantly high value was “others” which when examined in detail had no specific reason that was shared amongst enough respondents to be of higher statistical significance.

This leads to the conclusion that the reasons to not implement a PPP are either very individual – which makes it hard to find a generalized approach to change this attitude – or most of the objectors are rather indifferent about PPPs. The latter could be caused by a lack of information about Public-Private Partnerships.

In the following chapter we look closer at the domain between private and public sector and try to set PPPs in perspective within this domain.

2.3 Setting PPPs in Perspective – the Domain between Internal Handling and Complete Privatization

If we research the domain spanning the extremes from complete internal handling by the public authority to the complete privatization of a public service we find several different forms of public-private co-operation. In this section we try to present the most important of these co-operations in order to set them in perspective regarding to PPPs.



2.3.1 Internal Handling

Internal Handling labels the case where the state offers a public service using solely own personal and own financial means.

2.3.2 Complete Privatization

In case of a complete privatization all shares of the company to offer the service are sold, leaving no direct control over the way the service is handled¹⁰.

¹⁰ Of course law and public regulations apply and allow for some kind of control.

2.3.3 Formal Privatization

In case of a formal privatization a public administration offers a public service using private law instruments, in particular through a company under the legal form of private law that is one hundred percent owned by the public authority.

2.3.4 Cooperative Agreements under Civil Law

A big share of the current fields of co-operation between public and private partners works on a contractual basis under civil law. This could be tenancy agreements, leasing agreements but also long-term service or supply agreements with co-operative elements. The detailed definition of contracts between conclusion of contract, start of usage and end of usage regarding things like planning or maintenance is up to the contractual partners¹¹. The individual complexity regarding the contracts differs significantly between individual co-operation cases.

2.3.5 Cooperative Agreements under Public Law

Apart from the cooperative agreements under civil law one has to distinguish the cooperative agreements under public law. Here private partners are involved in the provision of a public service with the help of contracts regulated by public law. Typical examples are concessions, where a private company is allowed to build and maintain a highway and gets the right to collect tolls in return.

¹¹ These contracts have to operate within the boundaries of national legal frameworks, of course.

2.3.6 Outsourcing

The outsourcing model requires the public side to hand a service formerly performed by itself over to a private company by direct contracting. Typical examples are the outsourcing of cleaning services, IT centres or staff canteens.

2.3.7 Partial Privatization

Partial privatization refers to the case where only parts of a public service are privatized. The municipal public authorities could for example partially privatize the Department of Public Works by selling parts of the company's shares to a private company. This lays the foundations for a long-term well structured and relationship in partnership.

2.3.8 Informal PPPs

Furthermore there are a multitude of co-operations between private sector and public authorities in the social, cultural and environmental domains implemented as informal Partnerships on contractual basis or on the basis of sponsoring.

These are also often termed as Public-Private Partnerships but are not to be seen as PPPs regarding the understanding we use for this study.

2.4 PPPs: Not Just a Way to Access Private Capital

Despite the lack of a precise definition it can be seen as a generally accepted understanding that the pure raising of capital through a public partner can not be considered as a Public-Private Partnership.

Even if the aspect of private funding had greater relevance in the past, it can be recognized that, regarding the current understanding of PPPs, financing is only one element that characterises a Public-Private Partnership. The overall goal to enhance efficiency in a holistic meaning aiming for a sustainable effect is a criterion of paramount importance that has to be met¹².

¹² See "Prozessleitfaden Public Private Partnership", Bertelsmann Stiftung, Initiative D12, p.15

2.5 PPP = Privatization?

So what is the difference between Public Private Partnerships and privatization? Public-Private Partnerships are a form, a variation of privatization. Not every privatization can be seen as a PPP, but every PPP involves some kind of privatization. The ongoing participation of the public authority, cooperating in partnership with the private associate makes the difference.

2.6 Cooperative Models

The following section shows the most common models of cooperation between private and public partners in order to run a public service.

2.6.1 Private Financing of Public Investments

Reading the description of different PPPs it can be noticed that the funding aspect is described predominantly. The term “Private Financing Initiative¹³” (PFI) developed by the United Kingdom government or the commissions PPP definition from 1998¹⁴ underline this impression even more.

Private financing has played a big role in existing Public-Private Partnerships and will certainly play a big role in the future too, but the long-term aspects needed for sustainable and reliable partnerships are more and more coming to the fore¹⁵.

¹³ A method developed by the United Kingdom government in order to provide financial support for Public-Private Partnerships.

¹⁴ Commission Communication COM (98) 143, “Public Procurement in the European Union”, Brussels, March 11, 1998, see also p.6 of this document.

¹⁵ See 2.4 for a more detailed elaboration.

2.6.2 Private Operating

The term refers to operation, maintenance and additional facility management provided by a private partner on the basis of an operating contract¹⁶. These kinds of contracts are common for public services like sewage disposal, where a private company provides the contributions for planning, reconstruction, extension, funding and long-operation¹⁷ in amicable co-operation with the municipal public authorities.

The private partner usually is the building owner and takes the commercial risk. In return he gets money from the municipal public authorities which can be classified – depending on the contractual form – as hire-purchase, rental fee or leasing fee. In case of sewage disposal, the municipal public authorities still have the duty to regarding service provision and still hold the right to define fees.

Regarding the international situation the so called BOT¹⁸ models are a common variant of private operation models. The main difference is that within the BOT models the ownership is transferred to the public authority after the contract period.

2.6.3 Concessions

In the case of a concession a private partner operates a facility or parts of it under a contract or a license granted by a public authority. The concession owner operates the facility as an independent business and pays the public authority in return (via a percent of revenues, a fixed fee or a combination of both).

Typical examples for this kind of public-private cooperation are the toll highways that exist in many countries.

2.6.4 Operational Management Model

In contrast to the private operating model or the other co-operation models, here the public authority still remains – regarding the legal aspects – the operator but delegates the actual operational management to a private company. The private company gets a payment in return.

¹⁶ In Germany the term “Betreibermodell” is used of these kinds of co-operations.

¹⁷ These kind of contracts often last about 20 up to 30 years.

¹⁸ build, operate, transfer

2.6.5 Risk Partnership

Regarding the characterisation of PPP projects the main aspects is that both partners share a part of the overall risk. This is not primarily targeted at the development and preparation of projects whose realisability are uncertain but aims at the installation of partnerships to materialise concrete Task defined projects with clear risks for planning, build-up, investment and operation. So the overall goal is to bring together public and private partner in a risk partnership in order to implement real-world projects.

3 eLearning, Rights Management and PPPs

The OrmeE project in general and the studies conducted by the project partners in particular focus strongly on the field of copyrighted digital learning content, the European Union Copyright Directive and the use of right management technology. Of course we also have to observe the subject of this study; Public-Private Partnerships in this context.

The following chapter focuses the attention on this context and discusses the special conditions PPPs meet here.

3.1 Public-Private Partnerships in eLearning

The domain of eLearning content as well as learning content in general is no typical field of application for Public-Private Partnerships. The traditional PPPs as we find them in public transportation, water and energy supply or highway tolls are characterised by the fact that they are – in most cases – directly paid by a third party¹⁹, the user of the public service now provided by the PPP. The main goal; to offer the service in a more efficient way on the one side, maintaining the same or realising even better quality of service on the other side, assures for good chances to create enough revenue for a sustainable operation of the service through the PPP.

In contrast education and educational content in particular are often paid from public budgets which are indirectly financed through taxes and dues²⁰. The consequence is that public authorities and providers of educational content traditionally have more of a vendor-customer relationship, which leaves less potential for sustainable Public-Private Partnership than the more typical fields of application for PPPs.

¹⁹ Where the public partner is the first and the private one the second party.

²⁰ There are some exceptions of course, like Italy for example, where families purchase the books and materials chosen by teachers at scholastic bookstores (in middle and high schools).

3.2 Digital Right Management

Digital Rights Management or Rights Management as a short form of the term (since we are not leaving the digital domain for this study), as we understand it, is the control and management of digital content and its associated rights throughout the complete value chain and spanning the complete lifecycle of a piece of digital content.

In order to execute the control and management of content and associated rights a proper DRM system has to implement two feature sets; Digital Policy Management and Digital Policy Enforcement.

Digital Policy Management

Digital Policy Management delivers the basic infrastructure every fully qualified DRM system has to have. It implements the handling and management of digital objects (identification and description using metadata) and associated policies (rights, permissions and conditions).

Digital Policy Enforcement

Digital Policy Enforcement works on top of the Digital Policy Management infrastructure and executes, monitors and enforces the policies applied using Digital Policy Management technology. This includes technologies as encryption, secure envelopes, key management, watermarking et al.

3.2.1 Use of DRM

We found a variety of technological content protection schemes to be in place during our research but a noteworthy lack of fully qualified Digital Rights Management technology – as we understand it²¹. In particular the use of digital technology for more complex DRM tasks like defining, describing and enforcing individual rights regarding the distinct roles in the eLearning value chain like distributors, authors or aggregators can not be seen as state-of-the-art within the European eLearning market.

Regarding the cases we considered within our research the digital learning content was sometimes protected by proprietary protection technology, but in general it can be

²¹ Meaning the common understanding of the OrmeE project partners. See the OrmeE study “DRM Solutions Addressed to eLearning Environment” (T2,2) for a detailed definition of DRM.

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ascertained that the use of DRM to protect content and to describe and manage the rights associated with that content is not yet common within the european eLearning market.

4 Case Studies / Best Practices

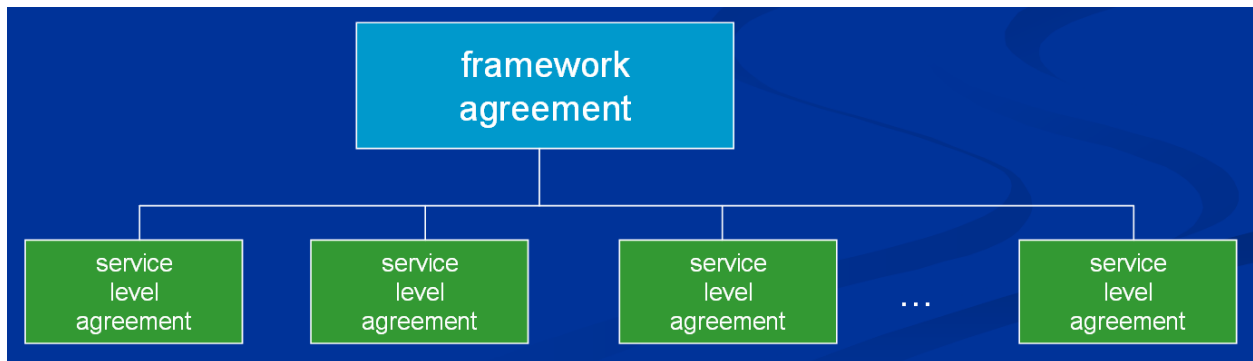
As far Public-Private Partnerships are concerned, we have seen in the previous chapters that it is hard to come to a precise and generally accepted understanding of what a PPP exactly is. Even the players involved in the same market do not always have the same understanding of the term.

It should be also taken into consideration that the market for educational content has traditionally been characterized by a trustful relationship between providers of learning content (publishers) and public sector (educational institutions, ministries of education). The key element of education is content not technology. Taking this into account it is no surprise that the educational digital content market is closely connected with the traditional educational content market (text books et al) and the same players that are present in the traditional educational content market also play an important role in the emerging new digital market.

4.1 Best Practice – By Contracts

The shape of contracts between private and public partners is one of the decisive factors for the successful launch and the effective and sustainable operation of a Public-Private Partnership. Prerequisite for an adequate PPP contract is a clear concept for the structure of the contract and therefore the content, duties and responsibilities regulated by it. The basic decisions on the structure of the PPP to be created have to be made prior to the process of defining the details of the contract and form the basic guidelines that help to structure the contract.

Because of the specific complexity and the differences of individual cases there cannot be one ideal generalized PPP model and therefore no universally valid contract model neither for PPPs in general nor for single public service domains.



It can be considered best practice though, that a hierarchic contract structure can help to handle complex situations better than one monolithic agreement. Although requiring higher efforts and more accuracy during the phase of contract building the structuring into two hierarchic levels assures for much higher flexibility regarding changes for individual services. A framework agreement concluded by the PPP partners helps to regulate fundamental principles and general regulations shared by all service types. The specific services and the rules that apply only for them are to be regulated by individual service level agreements.

This approach enhances the flexibility regarding contract building process and helps to facilitate that the partners start by concentrating on the basic principles of their partnership.

4.2 Identification of / Potential for Public-Private Partnerships

As seen in the study T2.2 done by AIE we identified several distinct business models to be present in the current educational digital content market. The following section analyzes these business models and the associated case studies for the presence and the potential for the appliance of Public-Private Partnerships.

4.2.1 Textbook publisher delivers its own content through its own web site or dedicated portal

Since this scenario implies, that the publisher offers it's content in digital form via his own internet based infrastructure this business model offers little potential for the application of Public-Private Partnerships. Despite several possibilities of public-private cooperation for this business model the relationship between private and public players

can be predominantly characterised as one between vendor (publisher) and client (public player²²).

4.2.2 Textbook publisher delivers its own content through an in-house developed e-learning platform

This business model differs from the previous one only regarding the technology used for the deliverance of the digital educational content – instead of a web site or portal a more sophisticated approach with a LCMS²³ is used.

Nevertheless the different technological approach this business model leaves as less room for the implementation of Public-Private Partnerships as the previous one does.

4.2.3 Public or Private Aggregator gathers and delivers third party contents

The aggregation of content – much more than the delivery for one particular publisher as seen in the previous sections – can well be considered a public service. We found public as well as private content aggregators to be already established in the market²⁴.

An aggregator – implemented by a PPP – can offer a centralised service using a common platform to integrate content of different content providers.

This business model offers many tasks that can be shared between the private and the public partner.

Typical responsibilities for the public partner could be:

- Ensuring the compliance with international standards for educational content.
- Create and foster new national and international standards for interchangeability of content and interoperability of content technology.
- Ensure fair entry in the market for established as well as smaller content providers.
- Ensure adequate pricing in order to foster education and support life-long learning.

²² e.g. school, university or ministry of education

²³ Learning Content Management System, see OrmeE Research “DRM solutions addressed to e-Learning environment”, p. 23

²⁴ e.g. www.bildung.at (public) or www.proquestlearning.co.uk (private), see OrmeE Research “DRM solutions addressed to e-Learning environment”, p. 25ff. for a more detailed discussion of the examples we found.

- Extra funding to support content access for schools, teachers and scholars on easy terms.

Typical services for this scenario offered by the private side are:

- Build-up, organisation and operation of a technical infrastructure.
- Support and consulting as regards content.
- Offering of own content.

It should be noted though, that expertise for technical infrastructure and competence as regards content are not always found within one private partner. In fact it is much more common to find one partner specialized and qualified for content and one or more additional partners from the private sector to offer other services not related to content. Generally speaking – and this applies to the other forms of identified potential PPPs throughout this document too – it can be ascertained that the structure of the situation can be more complex requiring more than two players each specialized in his own domain.

In general we found aggregation to be a business model very well suited for the application of PPPs, leaving enough room to allow for diverse forms of implemented partnerships.

If the public authority involved is also in charge of defining the individual curricula of educational institutions, the PPP can easily aggregate tailor-made digital content bundles matching these curricula.

Revenue is created from selling the aggregated content bundles, from provisions that come from the original content creators and extra services created on top of that.

4.2.4 Gateway

In contrast to an aggregator a gateway delivers information on third party content instead of delivering the third party content itself, thus acting more like a very specific search engine for digital educational content.

Many gateways as we found them to be existent, are already partly funded or at least sponsored by public institutions, but not commonly implemented as institutionalised Public-Private Partnerships. Nevertheless the centralised approach of a gateway – to implement one central place to find a specific content within a pool of educational content makes this an adequate field of application for Public-Private Partnerships.

It should be noted though, that the gateway model offers less potential for possible PPPs when compared to the aggregator (see 4.2.3) model. The reasons for this are:

- less influence of the public side on pricing
- less possibilities to enforce the use of international standards for digital educational content
- fewer services can be offered compared to the aggregator model, because only references to content and metadata about content is handled, but no content itself.

4.2.5 Textbook publisher provides schools with a bundle of contents

Within this business model the publisher provides the digital educational content, the infrastructure and the needed ICT skills as one solution for schools. Besides the fact that we found this model to be rather uncommon²⁵ it sure qualifies to be implemented in form of a Public-Private Partnership.

4.2.6 Content aggregator provides schools with a bundle of contents

Because of the similarities this model offers to that discussed in 4.2.3 it is also a good example for the opportunity to implement is as a Public-Private Partnership. The greater control over the bundled and packaged content resulting in the aggregation of a new content “product” may offer even more financial possibilities that could help to create sufficient revenue for a sustainable and long-term oriented operation of an implemented PPP.

²⁵ We found only one publisher implementing this business model as result of our research.

4.2.7 E-learning environment offers services and gathers educational content

Because of the diversity of the forms that implement this business model its eligibility for the implementation of PPPs is much harder to judge. The different we researched – as shown in T.2.2 – offer no substantial basis to classify this business model regarding Public-Private Partnerships.

4.2.8 E-learning content e-platform provider develops a courseware solution

From a PPP-oriented point of view this business model qualifies equally good or bad as the model where a E-Learning content provider (publisher) provides the learning content. The main difference regarding the implementation of a Public-Private Partnership is a change of players regarding the private side (partner from the ICT culture instead of the educational/publishing culture). It should be noted though, that through the long tradition of business relationships that public educational institutions and traditional learning content providers (textbook publisher) have, a practical implementation regarding the contractual situation could be made easier.