Deliverable D4.1

Overview of European and international policies relevant for the uptake of OER

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Contents

Executive Summary ........................................................................................................................................... 3

1 Introduction and the aims and objectives of this document ......................................................... 4

2 Introduction to POERUP and the background to this document .............................................. 5

2.1 About POERUP ..................................................................................................................................................... 5

2.2 The background to this document .................................................................................................... 5

2.3 Definitions ....................................................................................................................................................... 6

2.4 Historical contexts .......................................................................................................................................... 7

2.5 Mapping policies ............................................................................................................................................. 8

3 National and international policies ........................................................................................................... 9

3.1 International ................................................................................................................................................... 9

3.2 Europe ............................................................................................................................................................. 11

3.2.1 Policies, related initiatives and significant ‘declarations of intent’ ................................................. 11

3.2.2 The European Commission ......................................................................................................................... 22

3.3 The USA and Canada ................................................................................................................................. 27

3.4 Elsewhere in the world ................................................................................................................................. 28

4 Discussion of OER-related policies and initiatives ............................................................................. 30

4.1 The policy landscape ................................................................................................................................. 30

4.1.1 Overview ................................................................................................................................................... 30

4.1.2 Sectors: schools, VET and HE .................................................................................................................... 31

4.1.3 Copyright and IPR ..................................................................................................................................... 33

4.2 The significance of policies ....................................................................................................................... 34

4.2.1 Contexts ..................................................................................................................................................... 34

4.2.2 Impact ......................................................................................................................................................... 36

4.2.3 Translating policies into actions ................................................................................................................ 36

5 Concluding remarks ................................................................................................................................. 38
Executive Summary

This report (Deliverable 4.1) is developed as part of Work Package 4 of POERUP. It reviews current (April 2014) policies around Europe and in other parts of the world which are directly or indirectly related to the fostering of OER uptake. The research is drawn from POERUP country reports, IAC workshops and expert external sources.

In reviewing policies, distinctions need to be drawn between active, operational policies, declarations of policy intentions – often reflecting aspirations rather than reality – strategies promoted by governments and educational organisations, OER initiatives and programmes.

Only a minority of EU countries have any national OER policies and where these exist they are often limited to about open access to publicly funded research. This is largely true of countries outside Europe: the USA is an exception, with many national policies, but these tend to be limited in scope because of the organisation and control of state education systems, particularly schools.

There are substantial numbers of policies about ‘open’ education at institutional level, especially in higher education. However, there are relatively few policies in the schools sector and almost none in the VET sector. Few policies refer directly to OER, both at national and institutional level, but there is an increasing number of national declarations on open access and OER. However, most of these have yet to be translated into policies. The UNESCO Paris declaration of 2012 is often taken as a starting point for national declarations: this has both the virtue and drawback of being very generalised in its approach.

The EU’s 2013 Opening Up Education initiative, whilst broader than simply focusing on OER, provides a framework for policy development and implementation. At the same time, the EU has returned to addressing copyright legislation, which is a key part of facilitating the uptake of OER. The application of national OER policy is likely to depend on context: the key contexts are related to IT infrastructure and sectoral priorities.

Whilst direct action by practitioners at the grassroots is key to changing practice in all sectors, the development and implementation of policies at national level is important in both legitimising grassroots movements and providing leverage – potentially through funding – for longer term change.
1 Introduction and the aims and objectives of this document

This is Deliverable 4.1 of Work Package 4 of POERUP. The Deliverable Title from the proposal is:

Overview of European and international policies relevant for the uptake of OER

The Work Package title is:

The role of national and international policies and strategy

The brief for the Deliverable states:

Based on the input of the inventory and the country reports (including the mini-reports) national policy-oriented papers already produced on OER, SCIENTER will create an overview of all existing relevant policies (with specific focus on partner institutions’ countries) that aim (directly or indirectly) to foster (or at least not inhibit) the uptake of OER. This will include copyright law, quality standards in education, funding models, etc.

Countries’ current policies will be categorised, compared and contrasted with others in the EU and beyond. The analytic framework proposed by KERIS is likely to be a good starting point for our framework – see http://www.slideshare.net/OCWConsortium/analysis-of-the-contextual-factors-for-developing-national-oer-policy.

This report should have been compiled by SCIENTER during 2013. However, following the enforced withdrawal of SCIENTER from the partnership, their work was taken over by Sero Consulting and this deliverable was significantly delayed as a result. With hindsight, this has proved more beneficial than might have been expected, as the updates of country reports have unearthed a number of potentially significant policy-related developments which were not in place by the middle of 2013.

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1 Hye-Kyung YANG (KERIS): Memoir of a Professional Master’s degree (Republic of Korea)
2 Introduction to POERUP and the background to this document

2.1 About POERUP

POERUP is part funded by the European Commission’s Lifelong Learning Programme. The project, which builds on previous OER initiatives, such as OPAL², OLnet³ and OERtest⁴, produces country reports, case studies investigating the communities behind OER activities, and policy papers. The overall aim of POERUP is to develop policies to promote the uptake of OER, especially across the EU, in all main educational sectors. The project is led by a consortium of institutions and organisations in Europe and Canada. Partners are the University of Leicester (UK), Sero Consulting (UK), Open University of Netherlands (Netherlands), University of Lorraine (France), EDEN (UK/Hungary) and Athabasca University (Canada).

POERUP started in November 2011, and is funded to June 2014. The project has already created an inventory of more than 500 OER initiatives worldwide which are documented on the project wiki⁵. POERUP put substantial effort into understanding the state of play of OER in a range of countries, within the policy context and as part of the wider development of online learning in these countries. The project has already produced 11 country reports and 22 mini-reports, each covering individual countries including all the Gulf States⁶. Each report provides an overview of the educational system, internet policy and provision, state of e-learning, copyright law, and major OER initiatives in that particular country.

2.2 The background to this document

This document brings together research from the POERUP country reports, discussions in International Advisory Committee workshops and information from other expert sources, including the Creative Commons OER Policy Registry⁷. The policies – or apparent policies – that have emerged from this research have been explored to identify whether they represent actual operating policies, proposals for policies (and aspirations), OER strategies, initiatives, or programmes. The lines between these categories are not always clearly drawn and this is discussed later in the section below. It is also important to distinguish between OER and Open Access – these lines, too, are often blurred.

POERUP is focussed on policies at national and regional level – ‘regional’ covering those countries where all or part of education policy and governance is devolved to individual countries within a

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² http://www.oer-quality.org/
³ http://www.olnet.org/
⁴ http://www.oer-europe.net/
⁵ http://poerup.referata.com/wiki/Countries_with_OER_initiatives
⁶ http://poerup.referata.com/wiki/Countries
⁷ http://wiki.creativecommons.org/OER_Policy_Registry
union (e.g. the UK) or autonomous communities (e.g. Spain). It is not within the scope of the project to list or review the OER policies and practices of individual institutions, though where policies and strategies are adopted by a consortium of institutions these have been identified in our policies inventory\(^8\); they are of particular interest where consortia operate across regional and/or national boundaries.

Our overview of OER policies is discussed in the context of Hye-Kyung Yang’s *Analysis of the contextual factors for developing national OER policy* for KERIS\(^9\).

### 2.3 Definitions

**Wikipedia notes:**\(^{10}\)

The idea of open educational resources (OER) has numerous working definitions. The term was firstly coined at UNESCO’s 2002 Forum on Open Courseware and designates “teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions. Open licensing is built within the existing framework of intellectual property rights as defined by relevant international conventions and respects the authorship of the work”. Often cited is the William and Flora Hewlett Foundation term which defines OER as: “teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge”. The Organization for Economic Co-operation and Development (OECD) defines OER as: “digitised materials offered freely and openly for educators, students, and self-learners to use and reuse for teaching, learning, and research. OER includes learning content, software tools to develop, use, and distribute content, and implementation resources such as open licences”. (This is the definition cited by Wikipedia’s sister project, Wikiversity.) By way of comparison, the Commonwealth of Learning has adopted the widest definition of Open Educational Resources (OER) as ‘materials offered freely and openly to use and adapt for teaching, learning, development and research’”. The WikiEducator project suggests that OER refers “to educational resources (lesson plans, quizzes, syllabi, instructional modules, simulations, etc.) that are freely available for use, reuse, adaptation, and sharing’.

The above definitions expose some of the tensions that exist with OER:

- **Nature of the resource**: Several of the definitions above limit the definition of OER to digital resources, while others consider that any educational resource can be included in the definition.

\(^{8}\) The policies inventory will be linked from the Main Page at [http://poerup.referata.com/wiki/Main_Page](http://poerup.referata.com/wiki/Main_Page)


• **Source of the resource:** While some of the definitions require a resource to be produced with an explicit educational aim in mind, others broaden this to include any resource which may potentially be used for learning.

• **Level of openness:** Most definitions require that a resource be placed in the public domain. Others require for use to be granted merely for educational purposes, or exclude commercial uses.

At the same time, these definitions also share some universal commonalities, namely they all:

- cover both use and reuse, repurposing, and modification of the resources;
- include free use for educational purposes by teachers and learners;
- encompass all types of digital media.

For its research the POERUP project has taken a broad view of OER and has included in its inventory of initiatives resource collections and repositories where use and re-purposing of some of the material may be restricted and access to the initiative may not be free for all potential users.

When it comes to policies we have distinguished between ‘declarations of intent’ and current policies. There are a substantial number of declarations intended to foreshadow open education policies, some of which, but not all, mention OER specifically. Some of these declarations are discussed in this report, to consider the extent to which they have gained traction with policy makers.

Often there appear to be fine dividing lines between the points at which declarations become policies, policies spawn strategies (and vice versa).

### 2.4 Historical contexts

The OER movement originated from developments in open and distance learning (ODL) and in the wider context of a culture of open knowledge, open source, free sharing and peer collaboration, which emerged just before and just after the turn of the century. The MIT OpenCourseWare project is credited for having sparked a global Open Educational Resources Movement after announcing in 2001 that it was going to put MIT’s entire course catalog online and launching this project in 2002. In a first manifestation of this movement, MIT entered a partnership with Utah State University, where assistant professor of instructional technology David Wiley set up a distributed peer support network for the OCW’s content through voluntary, self-organizing communities of interest.

The term “open educational resources” was first adopted at UNESCO’s 2002 Forum on the Impact of Open Courseware for Higher Education in Developing Countries.

In 2005 OECD’s Centre for Educational Research and Innovation (CERI) launched a 20-month study to analyse and map the scale and scope of initiatives regarding “open educational resources” in terms
of their purpose, content, and funding. The report “Giving Knowledge for Free: The Emergence of Open Educational Resources”, published in May 2007, is the main output of the project.

The Cape Town Open Education Declaration was released on 22 January 2008, urging governments and publishers to make publicly funded educational materials available at no charge via the internet.

The most significant global event during the lifetime of this project has been the ‘Paris OER declaration of 2012’. UNESCO hosted the 2012 World Open Educational Resources (OER) Congress to showcase the world’s best practices in OER policies, initiatives, and experts and celebrate the 10th anniversary of the 2002 UNESCO Forum that created the term “OER.” UNESCO member States unanimously approved the Declaration which calls on Governments to support the development and use of OERs and:

a. Foster awareness and use of OER.

b. Facilitate enabling environments for use of Information and Communications Technologies (ICT).

c. Reinforce the development of strategies and policies on OER.

d. Promote the understanding and use of open licensing frameworks.

e. Support capacity building for the sustainable development of quality learning materials.

f. Foster strategic alliances for OER.

g. Encourage the development and adaptation of OER in a variety of languages and cultural contexts.

h. Encourage research on OER.

i. Facilitate finding, retrieving and sharing of OER.

j. Encourage the open licensing of educational materials produced with public funds.

2.5 Mapping policies

Following the mapping of the POERUP inventory of OER initiatives, a parallel inventory and map will be developed for OER policies after the end of the project, as part of ongoing exploitation. Mapping will provide a visual representation of the general location of policies. Using our present techniques this is likely to be less informative than the inventory map, as pins will inevitably be located at the geographical seats of government of countries and regions; however, we will add colour coding of countries and regions to improve the utility of the policies map(s).


12 “The Cape Town Open Education Declaration”.


14 See http://poerup.referata.com/wiki/Maps
3 National and international policies

As part of the tasks of updating the POERUP country reports in 2014, authors were asked to identify OER initiatives and policies in tabular formats that could be used for mapping. Whereas the updating process yielded many initiatives which had not been catalogued in the first set of reports, genuine OER policies were thin on the ground. This chapter describes some of the main policies which were listed. We found that many developments described as policies were still merely declarations of intent with no clear evidence that significant implementation had taken place.

This chapter summarises the current OER policy scene in mid-2014, looking first at international policy initiatives, then at Europe and the USA and finally the rest of the world.

3.1 International

In the UNESCO Guidelines for Open Educational Resources (OER) in Higher Education,15 Section 2.1 Guidelines for Governments recommends:

(a) Support the use of OER through their policy-making role in higher education. This could include encouraging and supporting the use of OER in adapting learning experiences to a greater diversity of learners and supporting national social-inclusion agendas. In this way, it would be possible to encourage equitable access to higher education and improve learning outcomes for all learners. Sustainability of this endeavour might be encouraged by setting up a government programme of support for OER creation and reuse.16

(b) Consider adopting open licensing frameworks. One effective way to accelerate open licensing and the sharing of higher education resources would be to adopt, within policy frameworks, an appropriate national open licensing framework. This might form part of an overarching policy framework on intellectual property rights (IPR) and copyright in higher education that spans both research and teaching activities. Such a licensing framework could also cover the copyright and IPR status of educational materials produced by government departments and agencies.

(c) Consider adopting open standards. Linked to the above could be the adoption of appropriate open standards. The purpose would be to ensure full access to and use/sharing of resources in higher education. This could span both research and educational publications, serving to ensure the perpetuity of editable electronic documents, regardless of changes to software. Such standards could cover educational materials produced by government departments and agencies and by institutions receiving government support for developing educational resources.

(d) Contribute to raising awareness of key OER issues. This could include the development and sharing of case studies of good practice and relevant examples of use to support implementation efforts. Governments can assist higher education stakeholders to

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15 See http://unesdoc.unesco.org/images/0021/002136/213605e.pdf
16 This now seems very unlikely in HE in most EU countries.
understand issues surrounding IPR, as well as how IPR are being challenged and reshaped by the rapid digitisation and online sharing of information and resources.

(e) **Promote national ICT/connectivity strategies.** Given the centrality of ICT to accessing and sharing content online, such support could focus on ensuring sustained provision of connectivity and staff/student access to ICT within higher education systems.

(f) **Support the sustainable development and sharing of quality learning materials.** Key to the sustainable development and use of OER will be supporting higher education institutions, individually and collectively, in their efforts to produce and share high quality educational resources. This could include support for national initiatives to develop local content and regional/global efforts to develop OER repositories and directories, as well as fostering mechanisms to promote quality in OER. There is no single strategy that will work for every context, but a coordinated approach would likely yield the best results.

In addition, Section 2.5 *Guidelines for quality assurance/accreditation bodies and academic recognition bodies* recommends:

(a) **Develop their understanding of OER and how it impacts quality assurance and recognition.** This could include ensuring that professionals involved in quality assurance and recognition are aware of the increasing importance of OER in the development and use of educational resources by higher education institutions. Particular attention might be paid to the shifting terrain of IPR and copyright, and to developing an understanding of the range of licensing options available for educational resources.

(b) **Engage in debates on OER, in particular on copyright.** Like all other stakeholders in higher education, quality assurance bodies and recognition bodies will need to influence policy developments around OER, focusing on both the opportunities and challenges that OER create.

(c) **Consider the effects of OER on quality assurance and recognition.** As OER become more common it is increasingly important to ensure that quality assurance and recognition principles and processes support the effective use of OER. In this regard, it will be important to review the role and use of OER in improving the quality of teaching and learning and develop criteria for assessing the effectiveness of the integration of OER into institutional practice.14

(d) **Accept OER as good practice in quality assurance and recognition.** If contributing to OER is accepted as good practice by higher education, then external quality assurance processes may redefine their scope and outreach. This would ensure a shift in focus towards embedding the creation and use of OER in the institutional culture while monitoring their integration into internal quality assurance practices.

UNESCO is not, of course, cannot mandate countries with policy recommendations. However, the Paris Declaration has given a stimulus to national governments and organisations across the world, not least in Europe, to declare strategies (and potential policies) for implementation in the future.
3.2 Europe

Only a small number of European countries have current policies specifically identifying OER. Where there are policies, these tend to be relatively limited in scope, either to educational sectors, or to the publication of research funded by public monies.

This section describes the policies and significant ‘declarations of intent’ in European countries (3.2.1); describes key EU activity (3.2.2); summarises policies in the USA (3.3) and the rest of the world (3.4).

3.2.1 Policies, related initiatives and significant ‘declarations of intent’

Our assessment of the current state of play in the EU countries is given below. Many universities have policies about aspects of ‘openness’, although few of these make specific mention of OER. The list below does not include institutional policies (which are not in scope for POERUP), but identifies regional and national policies and key ‘declarations’.

**Austria:** Not a POERUP study country. The Federal Ministry for Science and Research wants to set up a framework that encourages institutions to develop their own materials and make them available to all students\(^{17}\). This would be for HE, but is at present aspiration, not reality.

**Belgium:** There are no OER initiatives taken by the Belgian federal state common to the three communities. The Flemish Ministry supports Klascement\(^{18}\), a large portal site for mostly Dutch-language digital learning materials, which now has three country-specific sites for the three communities.

**Bulgaria:** Not a POERUP study country. Whilst there are a number of institutional initiatives, there does not appear to be any national policy.

**Croatia:** Not a POERUP study country, but covered briefly by a Yugosphere overview. Whilst there are a number of institutional initiatives, there does not appear to be any national policy.

**Cyprus:** Not a POERUP study country. Whilst there are a number of institutional initiatives, there does not appear to be any national policy.

**Czech Republic:** Not a POERUP study country. Although there is no official government policy, the RVP Metodicky Portal is an educational portal to Czech open educational resources (OER) targeting teachers. It is a government-funded initiative by the Czech Republic and the European Social Fund, and is run as part of a research project by the Institute of Education in Prague and the National Institute of Vocational Education. The project aims to provide “systematic support for teachers in teaching methodology and didactics, development of learning communities,” and more “effective ways of learning.”\(^{19}\)

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18 [http://www.klascement.be/](http://www.klascement.be/)

Denmark: Although there are no comprehensive national policies, the government provides funding for EMU20, which is the main public portal for educational content in Denmark. It is provided by UNI∙C which is an agency that delivers a variety of ICT related services to the Danish Ministry of Education. The site provides several portals with OER content.

Estonia: Not a POERUP study country. Whilst there are a number of institutional initiatives, there does not appear to be any national policy.

Finland: Finland has a long tradition of openness and whereas there is no single national policy which specifically mentions OER, there have been government-funded OER programmes for a number of years. EDU21 is set up and maintained by the Finnish National Board of Education (FNBE), a national agency under the Ministry of Education and Culture. FNBE has a wide range of tasks related to the development of education all through pre-primary and basic education, general and vocational upper secondary education and training, adult education and basic education in the arts.

The purpose of the website is to offer Finnish teachers tools, resources and information to support their work. Decisions regarding the content included in the web service are made by FNBE specialists. All content must be in line with the national educational guidelines and available to users free of charge. EDU.fi is mainly used by Finnish teachers in basic education and upper secondary education.

The web service is divided into four main sections: 1. General education; 2. Vocational education; 3. Materials and methods; 4. Competitions and theme days.

The section on materials and methods offers users listings of different online teaching materials produced by the FNBE as well as information on distance studies, learning environments and the use of ICT in education. Online teaching materials are categorized based on school-level and school subject. The sub-section on ICT includes ample material on e.g. the use of social media, copyright issues, smartboards etc. There is also a blog where teachers write about how they use ICT in their everyday teaching situations.

The Finnish Broadcasting Corporation (YLE) offers free-of-charge educational and informative content through YLE Learning Online22. YLE Teacher’s TV is also available in Finnish23.

With Swedish a minority language in some parts of the country Vetamix24 is an online learning resource provided by the Swedish department of YLE in collaboration with Utbildningsstyrelsen and Svenska kulturfonden.

France: National policies for Open Educational Resources, within primary and secondary education, are incorporated in the Ministry of National Education’s global strategy which aims to bring all schools into the digital age. This ambitious strategy is accompanied by a number of closely related, supplementary projects. They have a common purpose which is to help schools to fulfill their core mission of instruction, education and empowerment.

20 www.emu.dk
21 www.edu.fi
22 At the time of completing this report the link to this site was disabled, but the work does appear still active
23 http://opettajatv.yle.fi/
24 http://vetamix.net/
In order to implement this strategy, the Ministry set up a Directorate for Digital Learning Technology (DNE) in 2013, which consists of a ‘digital education development service’ and a ‘technologies and information systems service’ which handle digital education challenges, the development of new high-quality content and services online, infrastructure, technical conditions and security to ensure the success of these projects. The directorate is also bestowed with general jurisdiction in terms of management and implementation of information systems. The promotion of OER is embedded in the strategy.

National OER policies for higher education are laid down by the Ministry of Higher Education and Research (MESR). Like the Ministry of National Education, they fit into a strategic programme which is centred on digital technology. The Law of 22 July 2013\(^\text{25}\) on higher education and research sets digital technology as a driver for change within the university system. Development work since then has led to the creation of a national MOOC platform – FUN\(^\text{26}\). The digital agenda sets out the digital strategy for the French higher education system for the next five years.

**Germany**: Until recently Germany had raised a number of fundamental objections to the idea of OER, but in past two years the attitude in general has changed since then and some national policies have been enacted. In November 2013, OER was even a topic in the CDU/CSU – SPD coalition agreement, with the assertion that free digital teaching material must be strengthened by the state and the federal states. The basis for this is an educational and research friendly copyright law and an open-access-policy. The access to textbooks for schools and teaching materials for universities should be – as much as possible – free and the usage of free licences and formats should be strengthened. So, despite the fact that OER was not seen as an issue which was expected to become a policy priority in the near future, some actions in that field have occurred. Because of pressure from teachers, other educational institutions and non-profit organisations, a hearing took place in November 2012 between the Federal Ministry of Education and Research (BMBF) and the Standing Committee of the German Ministers of Education and Cultural Affairs (KMK) about the issues of OER and especially the copyright problems of digitalising parts of textbooks for the classroom. In the end, an agreement was found between KMK, the publishers of educational media (Verband Bildungsmedien) and the collecting societies on rules for the digitalization and photo copying of content from textbooks for the classroom (“Digitale Schulbücher, einscannen und kopieren in der Schule”). Teachers and schools were not very happy with the agreement since it did not solve all the problems of OER and copyright law.

In August 2013 the Federal Ministry of Education and Research (BMBF) launched three surveys to determine their policy in the different aspects concerning OER:

- **Outline of OER in Germany (“Freie Bildungsmedien (OER)”):** The first survey covered the fields of action, actors and development options in Germany in an international perspective.
- **Judicial matters (“Open-Content und Urheberrecht”):** The second survey tried to solve some questions concerning open-content and copyright law.

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OER and Metadata ("Metadaten für Open Educational Resources (OER)"): The third survey is about metadata and how these can help to find, produce and distribute OER in Germany and internationally.

Another policy of the BMBF is finding scenarios for the usage of copyright protected material in education and research till 2020 “Ein wissenschafts- und innovationsfreundliches Urheberrecht für die digitale Wissensgesellschaft.” It is still not clear which scenario will be implemented in the end. If copyright protected material should be free for everybody is still widely discussed in Germany. A desirable perspective in the future is to have open access with a CC-BY licence to all scientific literature. A free access to everything in the web would be even better, but the question is how this can be financed.

This significant recent activity has encouraged some national institutions to develop free OER material.

One of the reasons for the lack of very many national OER initiatives is also the fact that Germany is a Federal Republic. Each of the 16 federal states has nearly full control of the education system including universities. Therefore the state cannot normally fund national projects for education in schools and universities in the states. But recently the KMK (Standing Committee of the German Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany) has established (in September 2013) a working committee in order to develop a commentary to OER in Germany till autumn 2014.

**Greece**: The Greek government has used EU grants to promote OER, with an implicit, if not explicit, policy of encouragement. The **Digital School** initiative by the Ministry of Education, Religious Affairs, Culture and Sports, is the official repository of all the textbooks in the form of e-books for all levels of education (primary, secondary, upper secondary and professional education). It is not clear whether these textbooks constitute an OER or not (content is not designed in a mode allowing its reinvestment in contexts others from their target context: formal learning settings in Greece), but in its response to the 2012 OECD questionnaire, Greece noted that the documents describing the function and areas of responsibility of the Directorate that handles the educational portal in the Ministry of Education, Religious Affairs, Culture and Sports of Greece make reference to OER. The same applies to the **Digital learning supportive materials** (Psifiaka sholika voithimata), also at the initiative of the Ministry of Education, Religious Affairs, Culture and Sports. These materials are all available under Creative Commons licences.

**Hungary**: Since 2007, a government decree has mandated that all funded researchers must deposit their results in an OA repository or publish in an OA journal. This also applies to Doctoral dissertations.

The Hungarian government has decided that, from April 2012, public administrations in Hungary should only provide official documents in internationally recognised open standards-based
document formats and must be able to accept and process such documents\textsuperscript{30}. The Hungarian government recommends that public administrations and other public organisations switch to free open source office software – otherwise, they will need to give reasons for their continued use of proprietary software.

The government also decided that the licence for proprietary office suites in all schools would not be renewed. The Hungarian ministry of Education explained that “\textit{The ministry is convinced that the needs of the educational institutions can be satisfied by using free and open source software}”.

There is a government Digital Renewal Action Plan 2010-2014, which promotes the use of OER in line with the recommendations and goals of the Europe 2020 Digital Renewal Action Plan strategy.

\textbf{Ireland:} There is no national policy for OER in schools or VET. Nor was there until recently for higher education. The National Strategy for Higher Education to 2030\textsuperscript{31} made a large number of recommendations, but none mentioned OER or open educational resources specifically.

However, in May 2014 the report on \textit{Building Digital Capacity in Irish Higher Education}\textsuperscript{32} was published, containing several references to ‘open education’, and as this document was being finalised a Call for Proposals was released which invited higher education institutions “to make collaborative proposals for funding under the Teaching and Learning Enhancement Fund 2014 (Building Digital Capacity in Irish Higher Education) The fund amounts to €6 million and the total investment will be over a 3-year time-frame ending in 2016. In this inaugural call, £2 million will be available for allocation of phase 1 funding. Proposals will be evaluated on a competitive basis in accordance with the criteria and processes outlined in this call.”\textsuperscript{33}

\textbf{Italy:} Much responsibility for education policy is devolved to the regions: groups of provinces. There is a regional project in Lombardy – Il Progetto Scuole Lombardia Digitale – to develop the ICT skills of school teachers and their use of OER, funded and managed from the Regional School office\textsuperscript{34}.

\textbf{Latvia:} Not a POERUP study country. Whilst there are a number of institutional initiatives and Latvia has developed at least three flourishing virtual schools, there does not appear to be any national policy.

\textbf{Lithuania:} Not a POERUP study country. The topic of OER is part of the broader Lithuanian Strategy on ICT Implementation in General and Vocational Education for 2008–2012\textsuperscript{35}. The recent UNESCO report \textit{Open Educational Resources in Lithuania: State-of-the-Art, Challenges and Prospects for Development}\textsuperscript{36} indicates substantial OER activity – until recently, this has been largely at HE level, in contrast to Latvia.

\textsuperscript{30} http://www.h-online.com/open/news/item/Hungary-Open-standards-for-documents-1404096.html  
\textsuperscript{31} http://www.hea.ie/sites/default/files/national_strategy_for_higher_education_2030.pdf  
\textsuperscript{32} http://teachingandlearning.ie/wp-content/uploads/2014/05/Digital-Roadmap-PHASE1MAY282014.pdf  
\textsuperscript{33} http://teachingandlearning.ie/priority-themes/benchmarking-digital-platform/teaching-learning-enhancement-fund-call-proposals  
\textsuperscript{35} http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l7p_id=439761  
Luxembourg: Not a POERUP study country.

Malta: Not a POERUP study country.

Netherlands: In 2009 the Ministry of Education, Culture & Science initiated a programme to mainstream OER in all educational sectors through creating the Wikiwijs portal for finding, sharing and reworking OER. Government support for this comprehensive programme was withdrawn at the end of 2013 and Wikiwijs was refocused to concentrate on open and online education in HE only.

Poland: Digital School Programme in Poland: The Prime Minister’s Office has initiated a programme for the use of free digital textbooks under Creative Commons License in Polish schools.

The government has endorsed the value of open education in today’s digital society: Their digital school programme, the largest government-sponsored open education programme in Polish history, has created a full set of educational materials for grades 4-6 licensed under CC-BY licence.

The “Digital School” programme with the “Digital Textbooks” component was initially drafted and proposed to the Prime Minister Office by the Modern Poland Foundation, the Centre for Civic Education, and Creative Commons Poland (with the cooperation of the Prime Minister’s Office). All those organisations are members of the Coalition for Open Education (KOED), a network of NGOs and educational institutions promoting open education in Poland.

One of the most ambitious features was the creation of a national repository of training materials. Teachers in all of the test schools will have access to this nationwide database.

The first draft was accepted by the Ministry of Education, but at a later stage of the negotiations, the free licensing requirement was left out. Both the Coalition for Open Education and the Modern Poland Foundation took part in the public consultation process; their comments in support of free licensing were agreed and accepted.

As a result of the adopted regulation, schools will be computerized and all educational materials for grades 4-6 will have a Creative Commons license (CC-BY-3.0) to allow for easy sharing and attribution. By accepting the regulation and now also accepting the materials, Polish schools will soon be fully adopting the open education model.

The textbooks are available under the Creative Commons Attribution license, in an open format (with the full specification being freely available both technically and legally), and for Web access as required by the W3C Web Content Accessibility Guidelines. So far, it appears that the only non-accessible material may be some of the images, which contain embedded text and thus may be inaccessible to blind students.

Portugal: In late 2012 the national government approved the Digital Agenda for Portugal. Aligned with the priorities of the Digital Agenda for Europe, the Digital Agenda for Portugal has reviewed the Digital Agenda 2015 and approved the national measures to be implemented by 2016, in the

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39 http://ec.europa.eu/digital-agenda/
following six priority intervention areas: 1) broadband and digital market access; 2) investment in Research and Development (R&D) and Innovation; 3) improve digital literacy, qualification and inclusion; 4) combat tax fraud and evasion; 5) response to societal challenges; and 6) entrepreneurship and internationalization of the ICT sector. Some of these national measures are intended to promote the creation of mechanisms that enable the use of information and knowledge through open formats (not owners). These include: encouragement for progressive appropriation of open standards in the academic institutions (measure 3.1.4); the promotion of open access to scientific libraries, academic repositories, outputs of R&D projects and other academic publications (measure 3.2.3); and the stimulus for creation and distribution of Portuguese digital content according to the open access movement (measure 3.3.5).

- The policy momentum was maintained in 2013 with two further developments. The article nº 50 in Decreto-Lei n.º 115/2013 has made mandatory the archive of a digital copy of PhD thesis and master’s degree dissertations on one of the repository that are a part of the RCAAP network.
- The Fundação para a Ciência e a Tecnologia (FCT), the prime national funding agency for science, technology and innovation, introduced two policy proposals about the open and free availability of investigation results which depended on public funding: 1) “Proposta para a Política da FCT sobre Acesso Aberto a Publicações de Resultados de Projetos de I&D”; and 2) “Proposta para a Política da FCT sobre a Disponibilização de Dados e outros Resultados de Projetos de I&D”.

Romania: There have been significant developments in national OER policies, flowing from the the Knowledge based Economy Project (KEP), implemented by the Ministry of Communication and Information Society between 2005-2013, and funded by the World Bank. The Ministry of Education, Research, Youth and Sport is a partner in this programme, which has three components:

- Expanded access to Information & Communication Technologies and improved digital literacy
- Development and promotion of government e-services
- Promotion of e-commerce and innovation support for SMEs.

One of the important activities of the KEP project towards the field of open education was the elaboration in 2007 of a set of recommendations for the Romanian Ministry of Education for policies supporting the Open Source (OS), Open Educational Resources (OER) and Open Educational Practices (OEP): to adopt a clear definition of open licenses and to support the principle that public funded products should carry such licenses; to facilitate the sustainable implementation of OER by creating incentives for use and reuse, and funding technical infrastructure to increase access to OER. Key points of the recommendations are:

42 http://www.fct.pt/index.phtml.en
44 http://www.ecomunitate.ro/Raport_CPI_%2817549%29.html
1. encourage the use of open source software in schools and in educational institutions for operating systems, applications, for virtual learning environments and content management systems, for open educational content development;
2. the training programmes for teachers and administrators to contain open source solutions presentations and applications, not only proprietary solutions;
3. teach pupils and students skills, not specific applications; the ICT and Technological Education manuals to present both proprietary and open source solutions;
4. create a repository with the educational projects in which Romanian schools and educational organizations have participated;
5. partnership with publishers, broadcasters, libraries, cultural institutions to provide access to their own resources;
6. implement an online system for collaborative production of open educational resources by teachers and students, based on Web2.0 collaborative technologies. OER can make a valuable contribution to a diversified supply of learning resources, supporting methodological diversity, and promoting the individualization of the learning process;
7. the teachers training programmes should contain topics related to OER, new licenses and tools to create educational materials in a collaborative manner;
8. encourage a competitive market for educational resources production, guarantee transparency of supply and equal opportunities to market actors; define a set of quality criteria.

Some of these recommendations were specified in the “Proposal for public policies for ICT integration in the pre-university system” and adopted by the Ministry of Communication and Information Society and by the Ministry of Education, Research, Youth and Sport46 in 2007.

The activities in the KEP project have led schools towards a shift in focus from the resources themselves towards the practices associated with the creation, use and management of OER: that is, open educational practices (OEP). “The vision of open educational practice includes a move from a resource based learning and outcomes based assessment, to a learning process in which social processes, validation and reflection are at the heart of education, and learners become experts in judging, reflection, innovation within a domain and navigation through domain knowledge”47. “Open Educational Practices (OEP) constitute the range of practices around the creation, use and management of open educational resources with the intent to improve quality and innovate education.”48

The Government Programme for 2013-2016 adopted in December 201249 specifies that the Ministry of Information Society and the Ministry of Education will collaborate to support the innovative integration of Web2.0 and Open Educational Resources in education, to promote the use of open/free resources, and the development and sharing of resources by teachers and students.

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In 2014 the Romanian Government has adopted the National Strategy on Digital Agenda for Romania\(^{50}\) which focuses on three main pillars: the modernization of the public administration, supporting the competitiveness of the private sector via ICT, and providing ICT access and digital education to the public at large.

**Slovakia:** Not a POERUP study country. In its response to the OECD questionnaire, Slovakia reported that it might become active in OER in the near future\(^{51}\).

**Slovenia:** Not a POERUP study country, but covered briefly by a Yugosphere overview and because OCWC 2014 was held there. There have been interesting national developments in 2013-14, with the launch of *Opening Up Slovenia*\(^{52}\) by the national government. Before this the national government had supported a range of digital initiatives involving open access and OER, but the new government policy is broader and more co-ordinated. *Opening Up Slovenia* is being implemented through three sub-projects at different stages of learning, as follows:

1) compulsory education, including pre-school, basic and secondary education  
2) OER in higher education and academic environment  
3) vocational education, on-the-job training and life-long learning.

These three sub-projects will cover the creation of  
– advanced technologies and open learning environments  
– open educational resources and  
– means of open connectivity and innovation.

**Spain:** Spain is one of the most active of all European countries in the field of OER initiatives, not just in higher education, but in schools and adult education, both nationally and in individual autonomous communities as well\(^{53}\). However, there is a lack of clear policy direction on OER at national government level – but note again that many educational matters are devolved to the autonomous communities (including, but not only, Catalonia). This is a country where OER initiatives have flourished and expanded rapidly without specific national policies.

**Sweden:** Although Swedish institutions, especially at HE level, are involved in a range of OER initiatives (e.g. Nordic OER\(^{54}\)), there is no national strategic discussion of OER at government level.

**United Kingdom:** Whereas copyright legislation is controlled by the UK government, the education systems of the three of the four home nations are run by the devolved administrations of Northern Ireland, Scotland and Wales, with the central government responsible for England.

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\(^{52}\) [www.k4all.org/openingupslovenia/](http://www.k4all.org/openingupslovenia/)  
\(^{53}\) See [http://poerup.referata.com/wiki/Spain](http://poerup.referata.com/wiki/Spain)  
\(^{54}\) [http://nordicoer.org/](http://nordicoer.org/)
There are, therefore, no national OER policies for the UK as a whole. Before the change of political parties at the helm of the national government in 2010, the central government funded a major OER programme (from 2009-2012), largely for HE, through the JISC/HEA OER Programme\(^\text{55}\). This was run jointly by JISC – Joint Information Systems Committee and HEA – Higher Education Academy, in three phases:

- **UKOER1\(^\text{56}\)** was funded between April 2009 and April 2010, and supported pilot projects and activities around the open release of learning resources. A total number of 29 projects were funded through phase 1 programme in three strands: Institutional, Individual and Subject.
- **UKOER2\(^\text{57}\)** was running between August 2010 and August 2011. Phase 2 programme built on and expanded the work of the Phase 1, and commenced research and technical work examining the discovery and use of OER by academics. A total number of 36 projects were funded through phase 2 programme in three areas: the release, use, and discovery of OER.
- **UKOER3\(^\text{58}\)**: Building on two previous phases, phase 3 programme is released between October 2011 and October 2012 to support the continued application of OER and related activity and processes across the HE and FE sector and related areas. A total number of 13 projects were funded through phase 3 programme, investigating the use of OER approaches to work towards particular strategic, policy and societal goals.

In addition to the OER Programme, with an investment totalling about £5.4m, JISC funded a Content Programme\(^\text{59}\) between 2011 and 2013. This programme builds on previous JISC Digitisation and Content Programmes\(^\text{60}\) which addressed issues related to the creation and delivery of digital content in parallel with the skills and strategies needed within institutions to support digitisation activity. The Content Programme has funded 9 projects focusing on the digitisation and open educational resources (OERs). These projects ran until July 2013, and digitised and openly released archival and special collections of primary sources, aiming to embed such resources within teaching and learning as a way of enhancing the student experience and fostering innovative pedagogies. A key output from the JISC/HEA OER and JISC Content Programmes was the creation and releasing of a substantial amount of OERs to support a particular subject. Funding supported projects to release resources by departments, faculties and schools within a variety of institutions, supported by Academy Subject Centres and Professional Bodies.

Within each of the four home nations, recent developments have been patchy:

**England**: following the change of government in 2010, funding was withdrawn from national programmes for ICT support and development in schools and VET and there was no national policy for ICT in education. In 2013, the situation changed slightly, with the establishment of ETAG\(^\text{61}\) (Education Technology Action Group) and FE\(\text{L}\)TAG\(^\text{62}\) (Further Education Learning & Technology

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\(^{55}\) [www.jisc.ac.uk/whatwedo/programmes/ukoer3.aspx](http://www.jisc.ac.uk/whatwedo/programmes/ukoer3.aspx)  
\(^{56}\) [http://www.jisc.ac.uk/whatwedo/programmes/elearning/oer.aspx](http://www.jisc.ac.uk/whatwedo/programmes/elearning/oer.aspx)  
\(^{57}\) [http://www.jisc.ac.uk/whatwedo/programmes/elearning/oer2.aspx](http://www.jisc.ac.uk/whatwedo/programmes/elearning/oer2.aspx)  
\(^{58}\) [http://www.jisc.ac.uk/whatwedo/programmes/ukoer3.aspx](http://www.jisc.ac.uk/whatwedo/programmes/ukoer3.aspx)  
\(^{60}\) [http://www.jisc.ac.uk/whatwedo/programmes/digitisation.aspx](http://www.jisc.ac.uk/whatwedo/programmes/digitisation.aspx)  
\(^{61}\) [http://feltag.org.uk/etag/](http://feltag.org.uk/etag/)  
\(^{62}\) [http://feltag.org.uk/](http://feltag.org.uk/)
Action Group). FELTAG produced a report for the Department of Business, Innovation and Skills\(^63\), to which the Department responded\(^64\); there are indications of some movement towards more positive ICT policy in schools and further education, including mention of online learning, but no mention of OER and no clear indication that there are policies in the pipeline.

The Jisc/OER programme for higher education is completed; it has not generated any policy at national level, but some of the funded initiatives have continued to develop, even in the absence of policy.

In Scotland a number of national curriculum and technology groups – CETIS\(^65\), SQA\(^66\), Jisc RSC Scotland\(^67\) and ALT\(^68\) have come together voluntarily to form Open Scotland\(^69\) which produced an Open Scotland Declaration in the summer of 2013\(^70\). This focuses significantly on developing policies to promote OER uptake, but even though Open Scotland is supported by several government-funded organizations, the Declaration remains aspirational; it has attracted approving comment from the Scottish government, but no concrete actions.

Wales has gone further: it has a national open education group, funded by HEFCW\(^71\) and in September 2013 the Welsh universities committed themselves to open education policies and the promotion of OER with the Wales Open Education Declaration of Intent\(^72\). This is the nearest to a formal government policy promoting OER in any of the home nations and the Welsh government’s intention is that this spread beyond higher education to encompass all sectors, but there is not much current movement in the schools or further education (VET) fields.

**Other European countries**

**Iceland:** Not a POERUP study country, but involved in Nordic OER.

**Norway:** Not a POERUP study country, but involved in Nordic OER. Norway became the first country in the world to appoint a government commission to examine the potential of MOOCs from a national perspective. In June 2013 the Ministry of Education appointed a committee of academics and educational experts to investigate the opportunities and challenges that the rapid growth of MOOCs pose to Norwegian higher education. The commission presented an initial report Time for MOOCs\(^73\) in December 2014 and its final report in June 2014: this includes eight recommendations at government level, covering investment, funding for learners, accreditation and, notably, the active promotion of OER.\(^74\)

**Switzerland:** Not a POERUP study country.

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65 [http://www.cetis.ac.uk/](http://www.cetis.ac.uk/)
67 [http://www.jiscrsc.ac.uk/scotland](http://www.jiscrsc.ac.uk/scotland)
68 [https://www.alt.ac.uk/get-involved/special-interest-groups/scotland](https://www.alt.ac.uk/get-involved/special-interest-groups/scotland)
69 [www.openscot.net](http://www.openscot.net)
70 [http://declaration.openscot.net/](http://declaration.openscot.net/)
71 [http://education.okfn.org/open-education-wales/](http://education.okfn.org/open-education-wales/)
73 [http://www.regjeringen.no/upload/KD/Time_for_MOOCs.pdf](http://www.regjeringen.no/upload/KD/Time_for_MOOCs.pdf)
74 See the useful analysis by Alastair Creelman at [http://acreelman.blogspot.co.uk/2014/06/norwegian-mooc-commission.html](http://acreelman.blogspot.co.uk/2014/06/norwegian-mooc-commission.html)
It should also be noted that almost every European country has at least a short report on it in the POERUP wiki.75

3.2.2 The European Commission

The European Commission has produced several important documents and initiatives during the lifetime of the POERUP project, developing the broader theme of open education. We focus here on three documents in particular: Rethinking Education; Council Recommendation on recognition and validation of non-formal and informal learning; and Opening Up Education. OER is particularly recognised in Opening Up Education76; there are also policy recommendations in Rethinking Education77 and in the Council Recommendation on recognition and validation of non-formal and informal learning78 which are relevant to policy considerations for OER.

In late 2012 the European Commission brought out Rethinking Education. Five of its policy recommendations in particular give hooks to hang OER policies on:

- *It is essential that Member States create flexible options, such as high quality distance learning.* Widening access and engagement through Open Education is a necessity. Technology will play a crucial role in this.
- *We should facilitate the recognition and transparency of all qualifications, including those gained outside formal education.* This will make it easier for individuals to explain their skills and increase mobility in the labour market and across Europe. We shall also talk to employer and workers’ organisations about how to improve training opportunities for working adults.
- *Developing the competences of teaching staff is a continuing and increasingly urgent priority in all Member States.* A completely new generation of teachers is ready to take over and a completely new set of skills are required from them.
- *In times of austerity resources must be used very efficiently.* Today’s communication and accompanying working document provide examples of where investments in education are likely to yield the highest returns.
- *We must also ensure that education and training remain equitable and accessible for those from disadvantaged backgrounds.*

The Council Recommendation on recognition and validation of non-formal and informal learning state that:

Member States should have in place, no later than 2018, in accordance with national circumstances and specificities, and as they deem appropriate, arrangements for the validation of non-formal and informal learning which enable individuals to:

75 http://poerup.referata.com/wiki/Europe
76 See http://ec.europa.eu/governance/impact/planned_ia/docs/2013_eac_003_opening_up_education_en.pdf
(a) have knowledge, skills and competences which have been acquired through non-formal and informal learning validated, including, where applicable, through open educational resources;

(b) obtain a full qualification, or, where applicable, part qualification, on the basis of validated non-formal and informal learning experiences, without prejudice to other applicable Union law, in particular Directive 2005/36/EC on the recognition of professional qualifications.

This has applicability to OER policies on the availability of resources and issues of validation and accreditation.

In September 2013, the paper *Opening Up Education*\(^\text{79}\) was released after several months of formulation and then consultation. This is much more technology-focussed than the other papers. It identifies three major objectives:

I. Creating opportunities for organisations, teachers and learners to innovate
II. Supporting stronger use of Open Educational Resources
III. Upgrading ICT infrastructures and connectivity, supported by European platforms and networks, and by knowledge & evidence

These are mirrored by three major areas of opportunities:

- Increasing effectiveness, equity and reducing costs of education in Europe
- Potential of OER, MOOCs, learning resources and new ways of learning and assessing
- Addressing 21st century skills and global demand for HE in the world

The areas of opportunities are supported by a range of Key Transformative Actions. The first group (*Open Learning Environments: Opportunities to innovate for organisations, teachers and learners*) provides hooks for OER policy recommendations:

- Support educational institutions in developing new business and educational models and launch large-scale research and policy experimentations to test innovative pedagogical approaches, curriculum development and skills assessment.
- Support teachers’ professional development through open online courses, following pledges made under the Grand Coalition for Digital Jobs and by creating new and scaling up existing European platforms for teachers’ communities of practice (e.g. eTwinning, EPALE) to establish collaborative peer-based teaching practices across the EU.
- Explore and test, in cooperation with stakeholders and Member States, digital competence frameworks and self-assessment tools for learners, teachers and organisations.
- Explore how established and emerging tools for the validation and recognition of skills, such as ‘open badges’, can be tailored to the needs of learners. Ensure that transparency and recognition instruments for formal education are adapted to new forms of learning including validation of skills acquired online, in line with national tools in the context of the Council Recommendation for Validation of Non-Formal and Informal Learning.
- Coordinate, facilitate exchange of experiences and results achieved in national programmes between Member States, and provide targeted policy guidance to clusters of Member States to

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help them to identify successful measures for meeting their challenges in view of the specific country recommendations under the European Semester / Europe 2020.

- Support innovative teaching and learning environments, including through the use of structural and investment funds
- Support teachers in acquiring a high level of digital competences and adopt innovative teaching practices through flexible training, incentive schemes, revised curricula for teachers’ initial education and new professional evaluation mechanisms.
- Reinforce digital skills in education and training institutions, including among disadvantaged groups, and revisit learners assessments in order to ensure that all skills acquired through digital learning can be recognised.

The second group is directly relevant to OER policy:

Open Educational Resources: Opportunities to use open knowledge for better quality and access

- Ensure that all educational materials supported by Erasmus+ are available to the public under open licenses and promote similar practices under other EU programmes.
- Use the new programmes Erasmus+ and Horizon 2020 to encourage partnerships between creators of educational content (e.g. teachers, publishers, ICT companies), to increase the supply of quality OER and other digital educational materials in different languages, to develop new business models and to develop technical solutions which provide transparent information on copyrights and open licenses to users of digital educational resources.
- Launch the Open Education Europa portal and linking it to existing OER repositories in different languages and bringing learners, teachers and researchers together, so to improve the attractiveness and visibility of quality OERs produced in the EU.
- Stimulate open access policies for publicly-funded educational materials.
- Encourage formal education and training institutions to include digital content, including OERs, among the recommended educational materials for learners at all educational levels and encourage the production, including through public procurement, of high-quality educational materials whose copyrights would belong to public authorities.

The third group (Connectivity and Innovation: Partnerships for infrastructures, new products and services, and interoperability) again provides hooks for OER policy recommendations:

- Promote the development of open frameworks and standards for interoperability and portability of digital educational content, applications and services, including OER, exploring potential cooperation with European standardization organisations and programmes, and develop components for an efficient educational technologies market place including the coordination of joint specifications for public procurement of innovative solutions to help the deployment of affordable devices, software and content.
- Promote research and innovation on adaptive learning technologies, learning analytics and digital games for learning, creating links with innovative entrepreneurs.
- Connect every school, ideally including connectivity to individual classrooms, to broadband, upgrade their ICT equipment, and develop accessible, open national digital learning repositories using structural and investment funds by 2020.
The fourth group (A concerted effort to seize the opportunities of the digital revolution) is indirectly linked to potential OER policies and supportive of the promotion of OER:

- **Launch a platform open to all stakeholders (teachers, learners, families, digital communities, economic and social partners, etc.) to record and benchmark the digital state of educational institutions.**

- **Establish a European Hub of Digitally Innovative Education institutions, showcasing and piloting innovative ICT-based pedagogical and organizational practices, complemented by a specific European Award of Digital Excellence.**

- **Promote networks of volunteer teachers, digital communities and ICT experts in launching initiatives (such as coding courses or back-to-school programmes) and establish teachers’ awards for the good pedagogical use of ICT for all educational sectors.**

- **Carry out a comprehensive exercise of foresight scenarios for education in Europe 2030, in consultation with relevant actors such as ERT, EADTU, LERO, EUA and European Schoolnet on the basis of the work carried out by JRC-IPTS and in line with the on-going FUTURIUM project.**

- **As regards higher education, pursue work with the High Level Group for Modernisation of Higher Education to establish recommendations on the new modes of learning.**

- **Develop measuring tools and indicators to monitor more closely the integration of ICT in teaching and training institutions, and support Europe-wide quantitative surveys.**

- **Launch a specific impact assessment on the economic and social impact of an EU initiative to stimulate open access to educational materials produced with public funds.**

- **Exploring ways with rightholders, teaching institutions and other educational stakeholders to understand and assess the current practices and needs of sharing educational materials (including open educational resources), including those resulting from copyright and licensing regimes, multilingualism, quality assurance, etc. both in national and cross-border contexts.**

Paradoxically, this takes the recommendations away from the comfort zone of ministry policy in most countries.

*Opening Up Education* is linked to a Roadmap. This proposes three options. We take option 2 as the natural choice, in line with the normal approach on policy triangulation. (Option 1 is do-nothing; Option 3 is a level of integration and funding implausible in the current economic and political context.)

**Option 2: A coherent set of EU incentives to exploit the potential of digital technologies and content for better access and quality of education**

This option would imply joint action from Commission, Member States and other stakeholders, in line with their respective competences in the field of education. The Commission would devise and implement, with MS, a more coherent strategy for stimulating the integration of digital technologies and content (including OER) in mainstream education and training, to stimulate open educational practices and innovative learning environments.

Supportive actions would be based on incentives financed by the new generation of funds and programmes of the Multiannual Financial Framework (MFF) and on the establishment of reference frameworks

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framework at EU level which should sustain the political guidance provided to MS. The Commission would thus provide a policy impulse to stimulate a coordinated action at MS level through a strategic use of the future Multi-Annual Financial Framework, setting European framework conditions in order to:

(i) **Improve and update digital infrastructures for education and training, including connectivity**

The Commission would support MS to upgrade ICT infrastructures and high-speed broadband connections through the use of Structural Funds. This would support the development of national digital learning platforms and improve school and educational institutional ICT infrastructures. The Commission would also fund research on and implement open frameworks and standards for systems, services, applications and content operability.

(ii) **Up-scale the creation, use, re-use and sharing of quality digital education contents, including OER**

In order to incentivise the collaboration between different stakeholders for the production of quality digital educational materials, the Commission would support (public-private) partnerships between creators of educational content (ex: teachers, publishers, ICT companies); it would also ensure the open access to educational materials funded by Erasmus for All. As a follow up the Commission could also promote the open access to publicly –funded educational resources at national level through the adoption of a recommendation to Member States; this would however require further analysis to fully measure the specific impact of such action.

In order to ensure quality of OER produced in Europe, the Commission would support the development of European quality frameworks for OER, support the development of dedicated tools for improving searches and raise awareness and access to recognised quality content by supporting an EU-wide federated OER platform.

Finally, in order to increase transparency and awareness among users of digital resources on the rights and obligations inherent to the copyright or licensing regime applied in each educational resource, the Commission would support the development of technological methods to provide more information on IPR to the users of digital educational content and explore with stakeholders ways of stimulating the use of educational content via internet or other digital solutions in cross-border contexts.

(iii) **Modernise learning, teaching and assessment practices through digital technologies.**

The Commission would support the development of new business models for education and training institutions through the development of EU consortia for high quality online open course; it would also support schemes for education and training institutions to assess their level of e-maturity and establish educational strategies including digital technologies and content. In order to stimulate cross-border synergies, the Commission would collect best practices of business models developed on the basis of open content (with or without learning services, free or against charges) and provide guidance to institutions on the development of their own business models. The future business models of education and training institutions are yet not fully comprehended given the recent and exponential phenomena of MOOCs and open courses: an important action would therefore entail a better understanding of the impact of MOOCs on the future delivery of education and training.
The Commission would also support the development and uptake of online continuous professional teachers’ development programmes and provide incentive schemes for teachers for professional development through digital technologies.

The support to large-scale transnational projects, including experimentations on innovative pedagogical approaches, curriculum development and skills assessment, would also be ensured in order to stimulate innovation in learning. In the same vein, the Commission would explore in more detail the possibility of incentivising the production and use of digital content (including OER) through a recommendation to Member States. However, more detailed analysis and evidence are necessary at this stage to fully assess the impact of such action.

Finally, the Commission would promote the development of open frameworks for validation and recognition of skills acquired informally and online (ex: open badges)

3.3 The USA and Canada

The Creative Commons Policy registry\(^{81}\) is dominated by entries from North America, especially the USA. The large majority of these are concerned with open access to federally funded doctoral research\(^{82}\) and are very limited in scope. Some States have open textbook policies – e.g. Washington. There is no OER-related national policy at this time, though there has been a series of pro-OER recommendations, e.g. in the Federal Communication Commission’s (FCC’s) National Education Technology Plan (2010)\(^{83}\). President Barack Obama has stressed the importance of openness in a 2014 speech, specifically mentioning the potential of MOOCs and praising low-cost degree programmes, but failing to mention OER\(^{84}\).

Canada. The Commonwealth of Learning Policies Survey\(^{85}\) notes:

In Canada, there are many activities centred on the provision of digital resources, but these are not all necessarily OER initiatives. Several institutions and non-governmental organisations are active in the OER movement, although there is no formal Canadian OER policy or position with regards to expanding the scope of OER. The federal government has embarked on an Open Data\(^{86}\) initiative “making machine readable data freely available to anyone... in order to foster greater openness and accountability, drive innovation, and spur economic growth.”

With education managed at provincial level, no initiatives are possible nationally unless individual provinces collaborate with each other. There is no pan-Canadian agreement on the sharing of educational resources and there are no pan-Canadian studies on the existing OER landscape and its effectiveness, and thus provinces/territories currently say that they do not have access to sufficient data that would allow for properly assessing the economic benefits and potential impacts of OER for all partners and stakeholders involved in the development and procurement of learning resources.

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\(^{81}\) [https://wiki.creativecommons.org/OER_Policy_Registry](https://wiki.creativecommons.org/OER_Policy_Registry)

\(^{82}\) See [https://wiki.creativecommons.org/OER_Policy_Registry](https://wiki.creativecommons.org/OER_Policy_Registry)


\(^{84}\) [https://www.insidehighered.com/news/2013/08/23/higher-ed-reformers-obama-speech-was-welcome-attention](https://www.insidehighered.com/news/2013/08/23/higher-ed-reformers-obama-speech-was-welcome-attention)


\(^{86}\) [http://data.gc.ca/eng](http://data.gc.ca/eng)
The most important development in Canada for the open movement in 2014 was the tri-province Memorandum of Understanding on Open Educational Resources. The three western provinces of Alberta, British Columbia and Saskatchewan have agreed to “cooperate on the development of common OER”. This includes facilitating cooperation among the provinces in sharing and developing OER; identifying, sharing and encouraging the use of OER; and by using technology, foster an understanding of OER issues.

This MOU initiative was led by the British Columbia Ministry for Advanced Education, Innovation and Technology (MAE) influenced by BCCampus. In November 2012, the MAE announced that they will collaborate with post-secondary institutions in implementing an open textbook policy in anticipation of their use in B.C. institutions, supporting students taking 40 of the most popular post-secondary courses. The development of this open textbook initiative has gone ahead with input from B.C. faculty, institutions and publishers through an open Request for Proposal process co-ordinated by BCCampus. In 2014 the number of Ministry financed OER courses was increased to 60. Following from this MOU, the Alberta Ministry of Advanced Education and Innovation announced an OER initiative, pledging $2 million for OER development, promotion and sharing. The CollabOERate Grant Program will provide publicly funded post-secondary institutions within the province of Alberta with the opportunity to apply for funding to support the assembly, use, development, implementation and evaluation of OER to support teaching, learning and research. This is seen as

“a long-term strategy to help reduce, over time, the costs students face for a post-secondary education. By reviewing and recommending how to integrate open educational resources at post-secondary institutions, this initiative will encourage flexibility and access for all Alberta learners.”

- Alberta Premier & Minister of Advanced Education and Innovation, David Hancock

Previously, Alberta, without making direct commitments, has been actively supporting OER-related initiatives for several years.

Although there are several OER initiatives in the central and eastern provinces, there are no inter-provincial agreements or policies.

### 3.4 Elsewhere in the world

In a number of other countries there are OER policies, or proposed policies similar to those found in Europe. These include Australia with AUSGOAL, the Australian Governments Open Access and Licensing Framework, provides support and guidance to government and related sectors to facilitate open access to publicly funded information. AUSGOAL makes it possible for organisations to manage their risks when publishing information and data in a way that drives innovation and entrepreneurial activities; providing enhanced economic and social benefits to the wider community. AUSGOAL incorporates a licence suite that includes: the Australian Creative Commons Version 3.0 licences; the AUSGOAL Restrictive Licence Template and the BSD 3-Clause software licence; Licensing tools; an AUSGOAL Microsoft Office App (coming soon); the Licence Chooser tool and ‘Licence Manager’ licence injector software; Resources; an emphasis on open formats and open access to publicly accessible content.

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87 [http://www.gov.sk.ca/adx/aspx/adxGetMedia.aspx?mediaId=f3d342c4-ab61-44a4-9f96-71ceb7810a5d&PN=Shared](http://www.gov.sk.ca/adx/aspx/adxGetMedia.aspx?mediaId=f3d342c4-ab61-44a4-9f96-71ceb7810a5d&PN=Shared)

funded information; a policy requirement to choose the least restrictive licence appropriate to the material being published.

**New Zealand** has a similar policy, NZGOAL⁸⁹: this advocates for the use of Creative Commons Attribution licences for a range of content and data produced by New Zealand public agencies; it also provides guidance for agencies to follow when releasing copyright works and non-copyright material for re-use by others. Cabinet invites the Boards of Trustees of New Zealand compulsory sector schools to use NZGOAL when releasing works for reuse.

Elsewhere, **China, Indonesia** and **Bahrain** are examples of countries where there are national policies on open access to research.

**Argentina, Brazil** and **Mexico** have proposed wide-ranging national policies, but none of these are yet properly operational. In **Brazil**, policy national policies still have to be adopted by provinces and publishers have put pressure on provincial governments not to adopt. **South Africa** however, has made a major leap forward since 2012⁹⁰.

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⁸⁹ [http://nzgoal.info/](http://nzgoal.info/)

4 Discussion of OER-related policies and initiatives

This chapter reviews the current landscape of in which OER and OER-related policies and initiatives exist, or might be developed. We discuss the challenges and barriers to OER from copyright legislation and IPR issues; the variations between educational sectors; and the relationships between policies, declarations of intent, strategies, programmes and initiatives.

Finally, we discuss the potential significance of policies for promoting OER, the range of contexts which may affect policies, their potential impact and the issues connected with translating policies into actions.

4.1 The policy landscape

4.1.1 Overview

Our review of current OER and OER-related policies shows that whilst there are plenty of policies addressing open education issues at institutional level – largely, though not exclusively in higher education – there are very few active national policies and where national policies on open education exist, they do not often specifically mention OER. It is, however, the case that there is a growing culture of openness across Europe and the rest of the world, partly, at least, driven by the perceived economic benefits of opening up knowledge and resources to a broader public.

At EU level there have been a number of key policy initiatives in the broad area of open education. These have been described in section 3.2 above; suffice it to remark here that together they are much more detailed than any of the national open education initiatives described in section 3.1. If integrated into the ET2020 agenda\(^\text{91}\), they could form the basis for significant progress at a national level.

There are some interesting variations between the size of governmental units and levels of activity in policy making and OER initiatives. In some of the smaller countries (or devolved administrations) across Europe, strong declarations of intent have been made, some of which are being translated into policies (e.g. Slovenia and Wales) whilst some remain without traction at government level (e.g. Scotland). In contrast, in some of the most populous EU countries, whilst there have been many initiatives at institutional level (e.g. Spain, and to a lesser extent, England), there remain no overarching national policies on open education, let alone the specifics of OER. There is growing evidence, too, of a similar pattern from Germany, but there does not appear to be a direct relationship between country size, lack of national policies and devolved governmental units – e.g. the länder in Germany, or comunidades autónomas in Spain. Indeed, Austria is an example of a smaller country which has a similar structure of länder to Germany and here little progress has been made, except a limited amount at institutional level.

\(^{91}\) http://europa.eu/legislation_summaries/education_training_youth/general_framework/ef0016_en.htm
If it is difficult to discern clear patterns from country size or devolved administrative units, it may be necessary to look elsewhere for contextual factors which may influence potential OER policy-making, and some of these are examined in section 4.2.1 below.

4.1.2 Sectors: schools, VET and HE

We have not found any national policies specifically concerned with OER in schools in Europe and where there are national policies on ICT in schools, there is little evidence of awareness of OERs. Where nationally sponsored OER initiatives have taken place – e.g. the Poland textbook programme; the Jisc HE programme in England; the Wikiwijs initiative in the Netherlands), national government funding has ceased in England and been reduced and re-directed in the Netherlands, though it has been maintained in Poland. However, we are aware that a few countries (Wales, Netherlands, Poland) are in the process of developing OER policies.

We have also found no national policies for OER in the European VET sector, though there are moves through the ‘Open Scotland’ initiative92 to develop a policy for Scotland. This, however, is currently being promoted through an unfunded alliance with, as yet, no direct traction on national government.

Similarly, there are no national policies for OER in higher education in any EU country; although most universities have institutional policies on open access (and other aspects of openness), relatively few of these policies specifically address OER. The various schemes for quality in OER are so far ignored by national HE quality agencies or governments – not surprising when they mostly ignore similar schemes for quality in e-learning,93 even though e-learning (on- or off-campus) has far greater penetration than OER.

Few OER or e-learning experts have any dealings with ENQA or the national quality agencies – those that do are much more realistic. In fairness, ENQA has looked at e-learning – but publicly only in one workshop.94 In any country, OER represents a small fraction of the amount of overseas teaching, distance learning, or HE taught in FE – and quality agencies hardly worry about these either.95

Our snapshot of the situation in higher education across Europe showed:

1. There is increasing discussion of OER among university academics and many small-scale initiatives. Yet as the POERUP and other projects’ OER country reports show, there are still many EU countries where OER is little seen in higher education. There are many advanced non-EU countries where this is also the case.

2. The high-profile MOOC providers globally have a total of under 200 universities involved, and with dominance of the US. Outside the UK, Europe is little involved (one or two institutions per

92 http://openscot.net/
93 The most recent example was the Swedish system developed in 2008 for quality in e-learning, but put aside when the new government came in. See http://www.eadtu.nl/e-excellencelabel/files/0811R.pdf
95 With a few honourable exceptions, including (to general surprise) the UK – http://www.qaa.ac.uk/Publications/InformationAndGuidance/Pages/Code-of-practice-section-2.aspx
country). Europe alone has over 3000 universities. MOOCs have had little impact on ISCED 5B providers (“polytechnics”) or indeed on the mid-range of universities, though in 2014 there is some evidence that this situation is changing.

3. The HEA/JISC OER Programme shows that with massive amounts of funding a country’s universities can be made to engage with OER. Most universities in England were involved one or other way with the Programme. However, this level of funding has not been continued and is not seen as likely to happen in other EU countries.

4. The success of the high-profile MOOC providers is impressive but a sustainable business model is slow to emerge and already there have been discontinuous changes in business plans (e.g. at Coursera). Venture funds focussed on higher education are on the whole investing in campus-based private universities and low-cost online providers oriented to increasing access from less advantaged communities, not in OER providers.

5. There is strong traction of OER in the European and global collection of open universities.

6. The development of Futurelearn (officially launched on 18 September 2013) shows a potentially replicable way forward: with modestly-funded national programmes involving the national open university and/or other centres of expertise. However, its members are high-rank universities – thus it does not address the issue of ISCED 5B providers – and it may be relevant only to those countries operating in an environment of a world language and quasi-privatised higher education.

7. MOOCs have made known the concept of distance education to many in the HE sector who did not know about it or had forgotten. MOOCS are revitalising distance education, which needed it. This is especially true in Europe. They have also made clear the low level of ICT-based pedagogic knowledge in some universities in US, EU and the world, despite (in some countries) years of training in such matters.

8. MOOCs have also piloted novel forms of assessment (even if less novel in some countries than devotees think) which deserve wider attention by the HE sector.

9. However, there has been no breakthrough in automated teaching which could drastically reduce the cost of teaching to unsophisticated learners.

10. Little evidence is emerging that consortia are a good model for taking forward OER. It appears that consortia are of little interest to venture funders, unless they are structured in a non-consortial way with a clear “owner” or at least “leader”.

11. The impact of OER on teaching outcomes has so far generated very few papers. It should be noted that the equivalent literature on the impact of ICT on teaching outcomes is now very large and at least 20 years in duration, but only recently are meta-level conclusions emerging.

12. There appears to be so far only one consortium (OER u) focussing clearly on reducing the costs of higher education. But progress is slow and it is not clear what the value-add is of the OER as opposed to other aspects of the “stripped down” model. There are developments in US, UK, Norway, Austria and elsewhere indicating that low-cost online higher education can be delivered without mandating use of OER. There still very few cost analyses of the cost of teaching higher education and even fewer of online higher education compared with face to face.

13. There is high activity in quality of OER among some projects and OER enthusiasts but this is not at all integrated with the European-level and member state quality bodies and with existing experts on quality in online learning.
14. The business case for OER repositories in higher education is not proven yet. In part this is due to the difficulties in providing prescriptive solutions for HE.

15. There are apparently sustainable developments in OER in related fields to higher education such as the success of the Khan Academy, ALISON and Wikipedia. (HE should look at these.)

16. There is considerably greater traction of open access at EU level and in several member states.

17. It is surprising how little attention governments are paying to the use of OER for overseas development in teaching (and continuing professional development) at university-level in developing countries, especially those with good infrastructure in the cities. Projects like TESSA and TESS-India™ show a way forward.

4.1.3 Copyright and IPR

Issues of copyright and IPR have proved significant barriers to the development of OER policies. Wikipedia notes: Open educational resources often involve issues relating to intellectual property rights. Traditional educational materials, such as textbooks, are protected under conventional copyright terms. However, alternative and more flexible licensing options have become available as a result of the work of Creative Commons, an organisation that provides ready-made licensing agreements that are less restrictive than the “all rights reserved” terms of standard international copyright. These new options have become a “critical infrastructure service for the OER movement.” Another license, typically used by developers of OER software, is the GNU General Public License from the free and open-source software (FOSS) community. Open licensing allows uses of the materials that would not be easily permitted under copyright alone.

This note summarises both the obstacles to the uptake of OER and suggests some potential solutions.

It is also well known that knowledge of IPR is very limited among teaching staff in universities, let alone in schools and VET. Opening Up Education observes:

3.2. Perceived uncertain legal framework conditions for producing, using, re-using and sharing educational contents

The current copyright framework is considered by stakeholders as difficult to understand and therefore this creates a barrier to develop and implement innovative teaching and learning practices based on collaboration and individualisation, through the re-use and sharing of contents. Users (e.g. teachers) feel that regulations are not transparent enough and are scared about the perceived uncertain legal consequences of re-using and sharing educational materials.

Its Option 2 recommends:

Finally, in order to increase transparency and awareness among users of digital resources on the rights and obligations inherent to the copyright or licencing regime applied in each educational resource, the Commission would support the development of technological methods to provide more information on IPR to the users of digital educational content...

96 http://www.tessafrica.net/ and http://www.tess-india.edu.in/
97 http://en.wikipedia.org/wiki/Open_educational_resources
UNESCO/COL recommends:

- Consider adopting open licensing frameworks. One effective way to accelerate open licensing and the sharing of higher education resources would be to adopt, within policy frameworks, an appropriate national open licensing framework. This might form part of an overarching policy framework on intellectual property rights (IPR) and copyright in higher education that spans both research and teaching activities. Such a licensing framework could also cover the copyright and IPR status of educational materials produced by government departments and agencies.

- Governments can assist higher education stakeholders to understand issues surrounding IPR, as well as how IPR are being challenged and reshaped by the rapid digitisation and online sharing of information and resources.

In those member states (an increasing number) where profit-making companies are part of the delivery chain of education, there have been arguments over a modern interpretation of the “-NC” clause in Creative Commons.

The EU has mandated that the outputs of the Erasmus+ programme should be made available under open licence and the endless “angels on a pin” debates about licenses make it clear that EU-wide decisions on appropriate licenses for public content would be of great benefit. In 2013 the EU launched a public Consultation on the review of the EU copyright rules98, but in 2014 it rejected an international solution to library and archive copyright problems; causes collapse of WIPO meeting99.

Copyright legislation remains a matter for national governments, even where there are devolved administrative units (e.g. UK and Spain) and this makes progress on a broad scale difficult.

### 4.2 The significance of policies

We have already noted the relative lack of national policies related to OER, in contrast to the number of OER initiatives, particularly at institutional level. We have also noted that not all of the ‘declarations of intent’ have led to policy formulation or gained traction at governmental level. In considering the potential significance of policies and their impact, a range of contextual factors can usefully be considered. These include the technical infrastructure in each country, the current levels of e-skills activity and the knowledge of, and attitudes towards, OER amongst teaching staff in institutions and training organisations.

#### 4.2.1 Contexts

The resilience of IT infrastructure and the level of e-skills activity are two of the contexts likely to impact on the type of OER policy interventions that are likely to be effective. DG Enterprise and Industry has produced a series of e-skills country reports on each EU country and has divided the countries into four groups100:

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99 [http://www.ifla.org/node/8600](http://www.ifla.org/node/8600)
I : low NRI + Low level of e-skills policy activity  
II : High NRI + low level of e-skills policy activity

| Romania, Greece, Slovakia, Czech Republic, Slovenia, Portugal, Spain, Cyprus, Lithuania, Bulgaria, Italy, Hungary, Latvia | Luxembourg, Finland |

III : Low NRI + high level of e-skills policy activity  
IV : High NRI + high level of e-skills policy activity

| Poland | United Kingdom, Ireland, Sweden, Netherlands, Denmark, Germany, Belgium, France, Malta, Austria, Estonia |

NRI = Networked Readiness Index (2013)

KERIS notes\(^{101}\) that the application of a tentative OER policy framework could be limited through a range of contextual factors and that national policy for OER should consider not only technological infrastructure but also organisational and legal frameworks in the education sectors. These may include the technical support available to IT users; the interoperability of systems and software; public funding mechanisms and education pricing policy; quality guidelines and quality assurance systems.

For HE across the European Higher Education area, the Bologna process and declaration\(^{102}\) are significant contextual factors. A key part of Bologna is the European Credit Transfer and Accumulation System (ECTS). The introductory document on this states:

*ECTS makes teaching and learning in higher education more transparent across Europe and facilitates the recognition of all studies. The system allows for the transfer of learning experiences between different institutions, greater student mobility and more flexible routes to gain degrees. It also aids curriculum design and quality assurance.*

*Institutions which apply ECTS publish their course catalogues on the web, including detailed descriptions of study programmes, units of learning, university regulations and student services.*

*Course descriptions contain ‘learning outcomes’ (i.e. what students are expected to know, understand and be able to do) and workload (i.e. the time students typically need to achieve these outcomes). Each learning outcome is expressed in terms of credits, with a student workload ranging from 1,500 to 1,800 hours for an academic year, and one credit generally corresponds to 25-30 hours of work.*

*Although ECTS can help recognition of a student’s studies between different institutions and national education systems, higher education providers are autonomous institutions. The final decisions are the responsibility of the relevant authorities: professors involved in student*  

\(^{101}\)http://www.slideshare.net/search/slideshow?searchfrom=header&q=Analysis+of+the+contextual+factors+for+developing+national+OER+policy  
\(^{102}\)http://en.wikipedia.org/wiki/Bologna_declaration
exchanges, university admission officers, recognition advisory centres (ENIC-NARIC), ministry officials or employer.

Note that credits are time-based, rather than outcome-related. The Bologna Process currently has 47 participating countries. While the European Commission is an important contributor to the Bologna Process, the Lisbon Recognition Convention was prepared by the Council of Europe and members of the Europe Region of UNESCO. Paradoxically, this means that it would be much harder for the EU to bring about an update of Bologna, with a move away from time-based accreditation towards the recognition of competence outcomes.

4.2.2 Impact

In considering where OER policies might have the greatest impact, we rehearse some of the arguments in the POERUP policy recommendations. Focussing policy interventions on OER only may have limited impact: – in reality almost no European countries other than England (not the rest of the UK), Netherlands and Poland have had a substantial state-funded programmes of OER – and one of these (UK) it has finished and for another (Netherlands) there has been substantial downsizing and a change in focus.

In contrast, open access (simplistically OER for postgraduate students and research staff at HE level) is much more embedded. So to have maximum impact, policy interventions might be directed at four targets:

- interventions that link OER to open access to research and to standards
- interventions that foster the phenomena (including access, cost and quality; but also others such as development and informed citizenry) that OER is said to facilitate (even if so far without sufficient evidence).
- interventions that serve to reduce or dismantle the barriers to creation of innovative institutions and innovative practice (including OER, MOOCs and open educational practices).
- Interventions that enhance the initial training of teachers and their CPD. There is extensive evidence from the POERUP research that teachers in all sectors of education are poorly trained in the use of OER, and even how to access them.

4.2.3 Translating policies into actions

Translating policies into actions requires both commitment – not just at governmental level, although this is a pre-requisite – but at institutional and individual levels as well. In formulating and implementing policies, the SPARC\textsuperscript{103} policy kit, presented and developed at the OERPolicyWorks conference in February 2014\textsuperscript{104} provide a useful starting point.

\textsuperscript{103} http://www.sparc.arl.org/
\textsuperscript{104} http://www.slideshare.net/txtbks/20140319-oer-advocacy-workshop?qid=964d1a37-e887-4b5b-a9c6-ada76b44b8b2&v=qf1&b=&from_search=1
There is also a very large “elephant in the room”. While suggestions that OER was “an Anglo-Saxon conspiracy” are not borne out by the evidence, it is clear that there is a strong (but not perfect) correlation between autonomous OER activity and the scale of a language (in terms of the total number of speakers in the world – a key parameter for Wikipedia too).\textsuperscript{105} So English OER is dominant, and not just/only because of the size of the US economy. There is a lot of OER going on in French and Spanish also.\textsuperscript{106} The correlation is not perfect – far more is going on in Dutch than expected, and rather less in Portuguese than might be expected. Developing the findings of the LangOER project\textsuperscript{107} will be useful in addressing the languages issue.

\textsuperscript{105} See http://stats.wikimedia.org/EN/Sitemap.htm
\textsuperscript{106} Whenever countries are mentioned, readers are invited to consult the POERUP country pages indexed from http://poerup.referata.com/wiki/Countries
\textsuperscript{107} http://langoer.eun.org/
5 Concluding remarks

Active OER policies – except for relatively narrow policies targeted at the outputs of publicly funded research – are thin on the ground, whereas initiatives are not. In some countries, there is plenty of evidence that progress towards openness and the promotion of OER can take place without national policy interventions. But where there is a continuing culture of resistance towards openness, policy interventions can help to change the climate and legitimise and encourage grassroots OER initiatives.

What type of policy interventions might prove most effective is likely to vary according to a number of contextual factors in the external environment. Since the POERUP project started a number of relevant changes have taken place in the external environment. These include, on the negative side until recently turning positive, in Europe:

- Continued recession or stagnation in several EU partner countries until recent months
- In some cases, government instability, though not in current partner countries
- Continued decline of interest of ministries in policies for ICT in education until an increase in interest in recent months in some countries (which include France, Ireland, UK, and Slovenia)
- Cessation of most large state-funded initiatives, balanced in the last year by growth in activity in other continents, whilst in Europe, growth in some countries in smaller-scale initiatives, some with a public-private aspect.

However, on the fully positive side, we find:

- Increase of government interest in, and actions to support, Open Access (to research), closely linked to OER and especially so in postgraduate higher education
- Continued growth of private-sector interest in and funding of developments in university-level education, including online education, with a particular focus on postgraduate education and employment-related skills
- The sweeping of the MOOC concept across the higher education sector, using many of the concepts from OER as well as from social networking but less concerned about the specific license details of OER – and now moving into VET and schools, even as the momentum may be slowing in higher education as business models remain elusive.