

Openforum Academy

REPORT OF THE ROUND TABLE

“HORIZONS 2020 - OPEN INNOVATION AND IP”

BRUSSELS, 1ST DECEMBER 2011

SUMMARY

This was the first of what is planned to be a series of discussions on 'Open Innovation'. The first of these discussions is focused on the whole role of IP within the ICT sector, and the impact it can have on innovation, particularly in the global ICT market. Of particular interest is to understand how the EU's approach to IP can be used to encourage competition in an open market, taking into consideration the suggested plans by the European Commission to change the rules on its funded Research Programmes.

SPEAKERS

Right Hon. Professor Sir Robin Jacob

Professor Maria da Graça Carvalho, MEP

Dr. John Temple Lang, Cleary Gottlieb Steen and Hamilton LLP

Moderator: Graham Taylor, OFE

Rapporteur: Dr. Roger Burt

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INTRODUCTION

Graham Taylor, Chief Executive Openforum Europe opened the Round Table with the announcement that the Proposal for a regulation of the European Parliament and of the Council laying down the rules for participation and dissemination in “Horizon 2020 – the Framework Programme for Research and Innovation (2014-2020)” COM(2011) Proposed Regulation final 2011/0399 (COD) had published the day before (30 November 2011), referred to in this paper as the “Proposed Regulation”. A focal point for the Round Table would be whether aspects of the Proposed regulation could have a detrimental impact on Open Innovation within Europe.

The Round Table was the first in a planned series of OFA discussions on 'Open Innovation' within which it was proposed to develop the meaning of the term within an open, competitive IT market. The term is inspired by the work of Henry Chesbrough in his series of books, particularly the latest on “Open Services Innovation, rethinking your business to grow and compete in new era” . Chesbrough warns that “An economy comprising companies that offer commoditized products will not prosper and will itself confront diminishing returns and prosperity for its citizens”. He relates as core to his theory the structuring of partnerships and ecosystems as a way of building value, with Apple being a good example of how this can be done. There was synergy with the work of Geoffrey Moore in his book “Crossing the Chasm” which looks at the changing relationship between buyers and product requirements as the life cycle develops. Key is the concept of the “Whole Product” in which everything related to the provision of a complete solution, not just a component product. The final analogy given was from “The World is Flat” by Thomas Friedman and his conversation on the inevitability of the impact of the global economy “if you are an American you better be good at the touchy-feely stuff, because anything that can be digitized can be outsourced to either the smartest or the cheapest producer, or both” with the reply “everyone has to focus on what exactly is their value add”.

In June 2011 the Final Report on Key Enabling Technologies (KETs) was published by the European Commission High-Level Expert Group (HLG). The report focussed on the problem in Europe of moving European made inventions and innovations from the ideas stage to the manufacturing stage, with manufacturing in Europe. The HLG used the term crossing the “Valley of Death” to describe the path from idea to manufacture.

One of the recommendations from the HLG was that there should be a Europe-first policy applied to all EU funded research and development under the Horizons 2020 Programme. The Proposed Regulation contains IP provisions which are aimed at putting Europe first but may have other serious considerations.

Article 41 of the Proposed Regulation relates to transfer and licensing of results and Article 41(3) reads as follows:

3. With regard to results which are generated by participants that have received Union funding, the Commission or funding body may object to transfers of ownership or to grants of an exclusive license, to

third parties established in a third country not associated to Horizon 2020, if it considers that the grant or transfer is not in accordance with the interests of developing the competitiveness of the Union economy or is inconsistent with ethical principles or security considerations.

In such cases, the transfer of ownership or grant of exclusive license shall not take place unless the Commission or funding body is satisfied that appropriate safeguards will be put in place.

Where appropriate, the grant agreement shall provide that the Commission or funding body is to be notified in advance of any such transfer of ownership or grant of an exclusive licence. The grant agreement shall lay down time-limits.

SPEAKER SUMMARIES

Right Honourable Professor Sir Robin Jacob then applauded the European Commission for finding money to fund research but pointed out that the history of governments providing money for research is not great in terms of the outcome – nearly always the most important innovations in history have been funded by private money. There are good examples from history of private individuals taking on the risk of the research and development leading to the innovation, ultimately leading to the widespread adoption of the technology – he cited the example of Matthew Bolton who took on the establishment in the days of the steam engine and ensured wide adoption of steam power.

The Proposed Regulation was seen to have problems. At this stage, not all the conditions under which the money for research will be provided have been articulated but there is the basis for them to be introduced. The provision that is of most concern is that the innovation resulting from the funded research activities will have to be exploited in Europe and not elsewhere. Firstly there is a concern about the amount of administration necessary; taking the example of a research institution, it will be required to patent any innovation with all the associated organisation and costs associated with that, and will have to be prepared to patent widely. Most funded academic research institutions are not able to exploit their patented inventions themselves and need to be able to license their patents. Article 41 of the Proposed Regulation gives the possibility for the European Commission to object to licensing third parties outside the EU. The fact that permission needs to be sought from the Commission will inevitably lead to delays as licensing proposals are written up in a form suitable for submission to the Commission. Clearly the Commission will take time to consider each proposal. The permission process will be too slow for many high tech industries where the market moves quickly; the patent system itself has already shown itself to be too slow in such circumstances. The provisions of Article 41 could well impair innovations being taken to the market. In his opinion, most big businesses could not work under the restraints of Article 41(3) in particular. The strings attached to the funding could well undermine the value of innovations to Europe. Also it must be borne in mind that the true nature of the strings may not be just those of Article 41 but may also be written into the grant document.

Professor Maria da Graca Carvalho, MEP had been the Rapporteur for the work on the simplification of the EU Research Framework Programmes and had recently been involved in

the discussions in the European Parliament on the future Framework Programmes. She will follow the Horizon 2020 within Parliament.

The increase in budget for research and innovation to at least Euros 80 billion was very much welcomed. However, the European Parliament has proposed the doubling of the budget and it is waiting for the negotiations with the Member States. In addition to increasing the budget there has been the first report on simplification of the rules for participation in the Framework Programmes in order to make participation easier. Key points of simplification will be in relation to the financial and administration rules; there is no point having a large budget if the programmes are too complicated to join. Examples of provisions to be simplified were the recovery of VAT, abolishing the need for researchers to record their time, accepting the usual accounting systems of the participants, and reimbursement of direct costs. There is the proposal for one single set of participation rules for all participants. The feeling in Parliament is that it was time to look at the way ahead for the research programmes by analysing and discussing the details of the rules of participation and "to make everything as simple as possible, but not simpler" to quote Albert Einstein.

The big challenge for Horizon 2020 will be to cover the full research and development chain from the initial research, through pilot scale, into introduction to the market. The Horizon 2020 programme is devoted to supporting the whole of the innovation chain. The IP problems encountered were solved in many examples of previous consortia working under the earlier programmes so solutions to such problems are possible.

The question of exploitation of the results outside Europe is a question still to be analysed in the European Parliament. Parliament will aim to make improvements to the version of the Proposed Regulation put forward by the Commission; there will be discussions in Parliament on this in the next two or three months and opinions are welcome.

In response to a question from the audience on how the debate in Parliament would unfold in view of the need for the programme to be seen to be offering jobs in Europe, Professor Carvalho confirmed that the debate would be lively in the European Parliament involving stakeholders and the rapporteurs of the nine reports constituting the Horizon 2020 package who will be appointed in December and January.

In response to a second question, she conceded that the ICT sector is different from other sectors such as pharmaceuticals and biotech. All sectors are not the same and must be treated differently. The ICT sector is global, requires products and services developed to standards and is open by nature but there is the question of how Europe can ensure SMEs can be assisted to participate in this sector.

Dr John Temple Lang, partner at Clearly Gottlieb Steen & Hamilton LLP began his contribution by expressing the concern that the "Europe first" proposal that is indicated in Article 41(3) of the Proposed Regulation had not been carefully considered from a legal viewpoint, or from a licensing viewpoint.

The KETs are nanotechnology, micro and nano electronics, advanced materials, photonics, industrial biotechnology, and advanced manufacturing systems. These are all areas in which (1) cooperation with companies outside the EU might be useful, and (2) the amounts of money needed for successful development can be very large. Any proposal that discouraged cooperation, or interfered with fund raising, is unlikely to be a success.

It is important to consider International treaties that the participants must take into consideration. However this "Europe first" proposal might be carried out :

1. It seems likely to involve a breach of non-discrimination (most favoured nation) and national treatment rules, contrary to WTO and TRIPS Article 3(1).

2. It seems likely to involve a breach of non-discrimination and national treatment rules under the older intellectual property treaty, the Paris Convention.

3. It seems contrary to the non-discrimination and national treatment rules under Friendship, Commerce and Navigation Treaties and investment protection treaties of the USA.

There are many bilateral treaties, most of them entered into before the State in question joined the EU, and so overriding EU obligations.

4. It seems likely to be contrary to the non-discrimination and national treatment provisions of the EU's free trade and association agreements with a number of non-EU Member States.

5. The European Economic Area Agreement prohibits "any discrimination on grounds of nationality" within the scope of application of the Agreement(Article 4). It prohibits restrictions on services (Art.36, and Annexes IX toXI). Surveillance of State aids is intended to maintain "equal conditions of competition" (Art.64). Protocol 28 Article 1 provides:

Without prejudice to the provisions of this Protocol and of Annex XVII, the Contracting Parties shall upon the entry into force of the Agreement adjust their legislation on intellectual property so as to make it compatible with the principles of free circulation of goods and services and with the level of protection of intellectual property attained in Community law, including the level of enforcement of those rights.

Article 3 of the Protocol envisages that Norway, Iceland and Liechtenstein should become parties to the Community Patent, Article 5 lists all the international treaties to which all the States should become parties. The aim is to achieve "homogeneity" throughout the EEA and the EU.

None of these questions were mentioned in the Key Enabling Technologies Report.

The proposal is not comparable to compulsory licences to allow production in Europe. The proposal is to prevent licensing or dissemination outside Europe, and purely on industrial policy grounds. This would be a partial taking of property, without compensation.

Considering the risks of lessening the value of the unitary European Union Patent. It is now generally agreed that Europe urgently needs a unitary European Union Patent, and that companies should be encouraged to obtain those patents as soon as they are available. It would be extremely unwise, just when the Patent is to become available, to lessen the value of

these patents by measures preventing the associated patent rights, even in some circumstances, from being exploited in the most profitable way.

The proposed Patent is expected to be especially valuable for SMEs, because it costs so much less than twenty-seven (plus three EEA States) national patents. But SMEs are even more likely to need to cooperate with other companies than large companies are. Some of the companies that they may need to cooperate with will be outside Europe. The "Europe first" policy would discourage that cooperation, and make SMEs undesirably dependent on other European companies even when it is not in their interests.

The Proposed Regulation will be forcing companies to choose between funding and freedom to maximise profits. Any company that starts a programme of research and development needs to be sure that it will be free to make the best use of the results in the most profitable way. That might mean licensing use by customers or licensees or sub-contractors outside the EU. At the initial financing stage, a company cannot be sure what it should do when the R & D has been completed. It needs to be flexible. If the company knew in advance that it might not be free to licence outside the EU, the uncertainty would inhibit investment, and the risk of inflexibility might lead the company either to do without the European funding, or to carry out the R & D outside Europe. In other words, the proposal would force companies in some cases to choose between European funding and optimum freedom to develop their inventions.

This would be particularly unwise because open innovation and world-wide cross licensing has proved to be increasingly useful and necessary in the KET industries. Since worldwide standards require guaranteed licensing, a Europe first policy would make it impossible for the results of R & D to be included in a world standard, because a world standard could not be confined to Europe, and could not discriminate in favour of Europe.

In the KET industries in question, even if the best scientists and technicians are in Europe, big companies could certainly offer them positions in other countries.

The Proposed regulation will also be discouraging investment from outside Europe. The proposal would discourage investment by non-EU companies in R & D in Europe, since getting European funding would involve the risk that the results could not be freely exploited outside Europe. European funding, even if all the other recommendations of the High Level Expert Group on Key Enabling Technologies are carried out fully, will not be the only funding available for worthwhile R & D projects in these industries. If comparable funding is obtainable outside Europe without the risk or likelihood of restrictions on place of manufacture, companies may prefer to get funding elsewhere.

The choice (between European funding with restrictions and funding without restrictions) would affect not only a company's initial plans, but its chances of obtaining other financing. The European official funding will never be all the money that is needed, and all private sources of funds would prefer to finance R & D that could be exploited in whatever way was ul-

timately considered most profitable. The proposal would make it more difficult to get funds from private (non-governmental) sources.

There will be interference with open source licensing in that the proposal would prevent the adoption of royalty-free open source licensing policies, because such a policy could not be confined to Europe (for practical reasons, and because that would be illegal discrimination contrary to WTO and TRIPS rules).

The Europe first policy would in practice exclude a significant number of important non-European companies from participating in European R & D projects. This would substantially reduce competition in Europe, and increase the market power of the European companies participating. Since these industries are precisely those in which vigorous competition is most important for the future of European technology, the proposal would be contrary to the aims of European competition policy. Commissioner Almunia has already said that the Commission has found it necessary to look carefully at several of these industries. DG Competition would be unwise to support a policy which would encourage the growth of European monopolies and oligopolies.

The Commission should not be given a wide and uncontrolled discretion to allow or prevent companies from licensing the use of their technologies outside Europe. Any such power would need to be exercisable only on very clearly defined criteria, and with full scope for judicial review. The Commission has never been given such wide and uncontrolled powers over the individual decisions of industrial companies. Competition law and State aid rules do not give the Commission comparable powers, even in individual cases. The Commission is not an industrial development promotion body.

In practice even full judicial review of Commission decisions would be ineffective, because it would take too long. By the time it was clear whether the Commission's decision was valid or not, the most profitable opportunity would have been lost, and the technology would have been superseded.

The Commission could not have all the expertise needed for deciding whether investments in the KETs industries should be confined to Europe, and it could not consult outside experts without causing leaks of very valuable information, and serious conflicts of interest.

The Commission would be unwise to deliberately expose itself to strong and concealed protectionist influences, and to the possibility of corruption.

The proposals would not deal clearly or satisfactorily with unpatented know-how. Secret know-how would be "protected" under the Article on "Protection of Results", and therefore could not be taken over by the Commission under the provision allowing it to acquire unprotected results. Secret know-how is not necessarily patentable, and if the Commission tried to take over know-how, it would be difficult or impossible to ensure that no leak occurred when

the Commission was looking for investors to have the know-how used in Europe.

When a patent or an application is published, it often stimulates research by others. If a patent in Europe led to research outside the EU, the non-European company might propose joint development, which might be profitable for the European companies. But if it were suggested that the development should be outside Europe, they would be unable to take the opportunity.

PANEL DISCUSSION

In the panel Q & A session that followed, Professor Jacob expressed the opinion that Professor Carvalho had not addressed the problems of the Europe first policy and was right not to do so. He reiterated that Europe does not need protectionism. The Commission needs to encourage industry and innovation in Europe but cannot control it. It also cannot control the industry and innovation in the rest of the world which may produce IP rights that need to be licensed to exploit the European-origin innovations.

In the subsequent discussion, reference was made to a DigitalEurope position paper published following the HLG KETs report. Unusually for the ICT industry, both European and non-European were unanimous that the HLG proposals for Europe first were unworkable. The proposal does not take into account that the nature of business is now global. An example was given of a European company doing research in Europe to produce a product – the demand is not present in Europe but there is demand outside, that demand needs to be satisfied to ensure the financial viability of the European company. There is a need to trigger Member States to use public procurement to help create demand but that still should not prevent global exploitation. It should be remembered that European industry asked the Commission to help stop similar proposals coming from China on preventing global exploitation of innovations made there.

The Commission has an obligation to Europe's citizens but that is not a reason to attach strings in the funding proposals. If European companies are saying there is a problem with the proposals then the Commission should listen. Ambiguity about how money spent on R&D – must not think of simple manufacture in Europe and exploiting in that way. If serious about the proposals then have to patent outside Europe to prevent use and that would be costly. It might also be counter-productive, if for example a company was refused permission to export the technology to China but company had patented in China, then Chinese courts could grant a compulsory license. Need to think in terms of maximising the benefit for Europe.

In Finland for example they found that manufacturing outside Europe gave the greatest benefit; the cost of manufacturing a mobile telephone handset which is done in China is small compared to the overall value added in Finland. The major benefit comes from having the research and development in Europe bearing in mind that most research and development leads nowhere. The need is to keep scientists and inventors in Europe carrying out valuable innovation. The strings attached in the proposal would reduce that value.

The next speaker picked up that Linux was the biggest mass collaboration ever. The Internet had enable massive collaboration on the Linux project. The problem with Proposed Regulation is that it assumes that everything is proprietary and controlled with no room for open innovation. It appears that publication of results would not be possible under Proposed Regulation and does not take into account that not every innovation can be patented. Proposed Regulation appears to have been written by someone who does not understand patents and how they work, and has not thought through the treaty obligations of the EU member states. One unusual provision in Proposed Regulation is the requirement to put a statement in any patent application that the action received financial support from the Union.

Practical problems arise from the policy if open source software is used and the user was unable to fulfil the terms and conditions of use of the software without breaching the conditions of the grant.

Bearing in mind that research and development projects fail, Proposed Regulation contains a provision that, if a party gives up pursuit of a project, it must hand over the results and any IP to the EC. In this case, the EC will become a waste paper basket for failed technology; this does beg the question as to what the EC will do with this failed technology.

In the past, because academic institutions were required to make a return on their investment, software code was simply lost because no commercial exploitation was possible; however, with the rise of open source software, more software is being used. Similarly with government data, this is now finding use in new applications now that the data is made available freely and without charge.

One participant pointed out that all commercial computer operating systems are from the USA, whereas Linux started in Europe. The importance of open source software to Europe is clear, and the most important open source license, the GPL, in its most recent version aims to remain open by countering the effect of software patents. If one wanted another example of successful open collaborative innovation, it would be the human genome project.

Graham Taylor then pointed out that Chesbrough had looked at open innovation in his research and had concluded that the more technology transfer is encouraged, the better the ecosystem supporting the technology. He noted that the USA, in employing similar approaches for US public procurement, was already causing a problem, and the 2020 approach was only going to make it worse.

At this stage there is very little detail how the Commission will fund the various technologies. Article 41 will lead to corresponding conditions in the grant agreements, and the risk is that ad hoc solutions will be found to enable the Commission to gain control. The fear is that the Commission will be micro-managing industry using the grant agreement. It is imperative that the Commission practices self-restraint and does not abuse the provisions outlined in Recital 19 of the Proposed regulation.

One participant pointed out that the recommendation 9 in the HLG KETs report resulted from misreading of the US Bayh-Dole provisions. Bayh-Dole does not put America first but was intended for US universities to own their IP rather than have it reserved to the government. The HLG picked up that if a US agency owns the IP then they can restrict to US first but that really only applies for military sensitive inventions.

Suppose have a technology in the HLG report that has advanced to the point where it can be used by the end user, manufactured etc. and a non-EU country comes and asks for help to use the technology and also asks for a license. It would be undesirable that the EU inventors would have to talk to the Commission to see if they could do a deal. The risks of delay and possibly, political interference would lead to the loss of interest with consequent loss to the European economy.

CONCLUSIONS

Dr Roger Burt, as Rapporteur, then began his summing up by expressing his sadness at the talk of Europe-first, USA-first, China-first – such talk does not reflect how the innovation process works in today's world. The innovation process has been dramatically changed by innovations in data storage, data dissemination, and communication systems such as the Internet. The efficiency of innovation has increased because of these changes; research by the UK-IRC and in particular Professor Jonathan Haskel at Imperial College has confirmed the increase in efficiency and suggests that we are getting a “bigger bang for the buck” as a consequence. The contribution of open and collaborative innovation to national economies is being underestimated. We need to take care not to inhibit by trying to slow it down or keeping it parochial. Already, we see that the IP system, in particular the patent system is too slow and that, by the time patents are granted the technology has moved on. It is a fact that many inventions will never be used because the technology has moved on rapidly and overtaken the innovation – this should not cause us concern, the innovation will have been published and will have been or can be built upon.

We need the Horizon 2020 funded research to solve real world problems. Taking the example of climate change – if Europe could find a way forward for power production using clean coal technology, would we not want the Chinese to adopt such technology to clean up their power stations for the benefit of the European and world's population?

Sadly, the restrictions imposed by Proposed Regulation will have legal advisors like myself advising against participation because of the risks. It would be sad because the innovation process and the future are too important to let such risks inhibit successful use of this valuable funding.

SPEAKER PROFILES

Right Hon. Professor Sir Robin Jacob, probably the most respected and influential voice across Europe in legal thinking and IP practice. Previously a Lord Justice he is now the first Sir Hugh Laddie Chair in Intellectual Property Law and Director of the Institute of Brand and Innovation Law at University College of London. He is the author of a number of reference books, and has written an extensive list of articles on Intellectual Property matters, and lectured worldwide,

Prof. Maria da Graça Carvalho MEP, who is a well respected MEP within the EPP and was the Rapporteur for the European Parliament's Report on the simplification of the Research Framework Programmes. A Full Professor at the Mechanical Engineering Department of the Technical University of Lisbon, she obtained her Ph.D. at the Imperial College of London. She has participated in and coordinated a large number of international R&D projects and authored several articles published in scientific international journals. She has recently been elected MEP of the year in the category of Research and Innovation.

Dr. John Temple Lang, currently a partner at Cleary Gottlieb Steen & Hamilton LLP, he was the former Director in the Directorate General for Competition of the European Commission. He is a Senior Visiting Research Fellow at the University of Oxford and visiting professor at Trinity College. He lectured widely in Europe and North America and has published articles on a variety of subjects, primarily on all aspects of EU Competition Law, Intellectual Property and International Trade.

Rapporteur:

Dr. Roger Burt. Prior to retirement in March 2011, he was Senior Counsel, IPLaw, IBM Europe, leading all IBM IP Law departments in EMEA. He was President of the IP Federation (formerly Trade Marks, Patents, and Designs Federation, TMPDF) from 2008 to 2010, and is currently a Vice-President of the Federation.

ABOUT OFE/OFA

OpenForum Europe (OFE) is a not-for-profit industry organization which was originally launched in 2002 to accelerate and broaden the use of Open Source Software (OSS) among business, consumers and government. OFE's role has since evolved and its primary role now is to promote the use of Open Standards in ICT as a means of achieving full openness and interoperability of systems throughout Europe. It continues to promote open source software, as well as openness more generally, as part of a vision to facilitate open competitive choice for IT users.

OFE is supported by major IT suppliers, user and consumer organisations, and national partners, together representing tens of thousand individual companies across Europe.

OFE, as a registered interest group with the European Commission, devotes much of its time to explaining the merits of openness in computing to politicians and legislators across Europe. OFE works closely with the European Commission, European Parliament, national and local governments both directly and via its national associates. It fully supports the European Commission's [Digital Agenda](#), which aims to create a flourishing digital economy in Europe by 2020.

OFE maintains an ongoing dialogue with key decision makers and participates actively in public consultations that concern the industry. Once a year it hosts a Summit at which top European policy makers and thought leaders from the industry share their views about the importance of open computing.

OpenForum Academy (OFA) is the programme established within OFE and has been set up to create a bridge with academia. Its specific remit is to facilitate independent and objective research and analysis on the market impact of openness. It acts as a think tank and brings together both highly respected individuals and organisations, acting as Fellows and Academic Partners respectively. It provides a network of contacts and expertise, a source of focussed insight, and a research capability to investigate new thinking and new ideas.

Over recent months both OFE and OFA have undertaken a number of Round Table discussions and Briefings in Brussels. They have provided an opportunity to validate and investigate thinking in new focus areas, and have contributed to OFE submissions to the European Commission and Parliament.

All OFE and OFA work can be viewed freely on the websites:

www.openforumeurope.org

www.openforumacademy.org

Note: OpenForum Europe acknowledges all the input received from its members and partners in the compilation of this document. However, OpenForum Europe does not seek to represent any specific community nor present their opinions as being unanimously supported by their full membership. References given are fully attributed and every effort made to ensure they have been taken in true context.