# Title: Anti-Piracy laws: Mobilization process at the European Union

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### **Abstract**

Current regulations and policy initiatives concerning copyright and the Internet use of content in multiple countries have generated a strong lobby process which includes a media campaign between the different agents who consider these regulations essential for their interests. The entertainment industry argues that some uses of new technologies are a risk for their business and because of that they lobby for strong policies against piracy and the free use of content by search engines. The Internet Service Providers (ISP) do not want to assume the supervision cost of internet users' behaviour although they would like to participate in the profits of the digital content business. Activists believe that regulation proposals and policies threaten fundamental rights such as personal privacy, freedom of speech, free circulation of information and knowledge as well as the right of Internet access. In this paper focus our attention in the case of UK and Spain and the media visibility of actors who are part of the conflict. We assess if different sides in the conflict have the same chance to have media visibility and finally if their statement is being followed by the public opinion. We intend to answer these questions drawing upon a content analysis of news and blogs and also doing hyperlinks analysis of the conflict to identify the visibility level of the diverse agents on the Web. Depending on the agents profile and on the countries that we analyze, we find different visibility levels on the multiple spheres. (News, blogs and the Web)

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Key words.

-Antipiracy law, copyrights, media visibility, hyperlink analysis, new media, policy media.

### Introduction

Manuel Castells (2009) in his last book sustains how the control of communication and information is the control of power. Certainly, it is not a new idea (Foucault 1979; Lukes 2007; Giddens 1986) however; we must evaluate this approach not by its newness but by its relevance today. This statement in the present document is relevant in two ways. Firstly in various countries and in different levels (national-supranational) currently the governments are implementing and preparing legal initiatives to control the management of digital contents on the Web (commonly called anti piracy laws). Secondly the importance that media and communication have in politics to frame an issue more in a period characterizes by the superabundance of information, where different types of actors have a wide diversity of media to spread their statements and try to achieve the necessary public support to pressure policy makers and also legitimize their cause. (Bennett & Entman 2001; Crozier 2007; Helms 2008; Hajer 2009)

Referring to the regulation, at the supranational level at this time several countries are negotiating the ACTA<sup>i</sup> and recently the European Union (EU) launch the initiative of a common European Digital Market and has approved the set of laws called the Telecoms package (November 2009). All the states of the EU have to implement these rules before June 2011. At the present multiple national regulations have been approved (The British Digital act, The French Hadopi Law and the Spanish Sustainable Economy Law-LES-). In this paper we just focus to compare the Spanish and the British cases. In near future we hope to consider other cases to compare our results.

In this paper we do not pretend to analyze all the lobby policy process. Usually the lobby implicates multiple types of actions, such as meetings with congressmen and civil servants,

financial campaign support, publicity and diffusion of the statements of the multiple sides of the conflict, etc. We concentrate in just one aspect of the lobby process, the media campaign, and specifically the *media visibility* that the different sides of the conflict achieve in different media. We measure *visibility* according to: 1. the presence of actors in the issue network that is related with the level of back links in the issue network. 2. Data that we compare with the back links of the different issue actors obtained by Google and Alexa and in this way compare actors' visibility on the issue network with visibility on the Web, and 3 finally with the number of times that each actor is mentioned in Blogs and News.

Several authors sustain how media is a fundamental part of the policy process (Hajer 2009; Helms 2008; Newton 1999; Bennett & Entman 2001; Crozier 2007), specifically in the formation of public opinion and its essential role in the definition of the public agenda. Because of that every actor who expects to have influence in the final outcome of a policy and specifically achieve public support will be worried about their visibility on media.

We explore if the different actors in the conflict that we are analysing have the same probability to be visible on the Web as well as on the different media. Nevertheless, it is impossible to try to analyse and explain visibility in all the multiple media that we find on the Web. Because of that we just focus in the media that traditionally have had more political influence, news and blogs although we recognize the rising importance of social networks, micro-blogging, and video services, spheres that we expect to analyze in future works.

What we expect to answer is:

How distributed is the media visibility between the two largest sides involved in this conflict?

Does a particular side of the conflict tend to be in the core (highest visibility) of one sphere, and not in others? What does comparisons between visibility, across sphere tell us about how different actors use new media? To what extend is the visibility of Spanish actors compare to UK actors different, do they have the same visibility in multiple spheres?

With the possible answers of these questions we will finally try to resolve the query if the different sides have the same chance that their statements about how should be internet will be acknowledged. We are analysing how in the debate of the future of digital contents, who really have the chance to spread their point of views and being part of this crucial debate.

The paper is structured in the following way: initially we contextualize and make a description of the conflict and propose our first two hypotheses moreover we justify why we focus on the Spanish and the British case, secondly we present our theoretical framework and with our other hypotheses to try to answer our research questions. Next we present our methodology and explain the hyperlink and content analysis and the way we identified our sources to the description and to build the issue network. Fourthly we expose our preliminary findings, and finally we discuss it.

The conflict and their actors.

### **Copyright advocacy coalition**

The advocacy copyright coalition is composed by a wide diversity of companies, trade associations, and famous members for the entertainment industry. For example, big corporations such as Sony-BMG, Warner, News Corporation, EMI, Universal, the private software alliance (BSA, liderate by Microsoft)...; most of them are members of the International Intellectual Property Alliance (IIPA), associations of editors, producers, writers, singers, photographers and designers who are dedicated to the private creation of contents (music, films, TV programs, news, software applications, video games...). Moreover the coalition is not just the owner of the business of creation of contents, it is also the owner of different channels which spread these contents; as Castells analyzes in his last book (2009) the coalition has strategic investments and strong ties on traditional media (newspapers, journals, radio stations, TV companies) as well as on the Web (i.e.: News corporation with MySpace, or Microsoft with Bing)

In the last decade the advocacy copyright coalition has seen a dramatically reduction of its revenues, for instance in the period 2006-2009, the world music market has drop a 30%, in UK a 24% and in Spain, since 2001 to 2009 a 70% (IFPI 2010). They argue that if the copyrights are not protected on Internet the entertainment industry is not going to have incentives to continue working and developing their works, besides the profession of creator is currently threaten by piracy practices on the Web. Moreover, the copyrights coalition sustains that generates hundreds of employees and a wide variety of products, in some cases products which are master works that

contribute to the development of the society. The coalition lobbies for a strong legal frame and promotes together with the government, media campaigns to try to change internet user's beliefs about consuming "illegal" digital content; measures that the coalition sustains are necessary to avoid the loss of jobs and the collapse of their business. This business in Europe generates more than five million jobs and contributes to the 3% of the European PIB (Verdu 2010).

The coalition implements a campaign of stick and carrot, in one hand they promote the diffusion of messages about the risk of legal infringements because of downloading or sharing "illegal" material and make publicity of the different trials against people who decide to infringe copyrights; in the other hand they develop a media strategy to promote the fair use of authorized downloading sites and try to legitimize their standpoints between people, advertising the significance and value of their sector to the whole society.

As we said the coalition is a very rich lobby, according to the top performers of the Global Fortune index 500, (CNN money team 2008) the business of publishing and entertainment is more profitable and is higher in the ranking than for instance internet services. Obviously there also are rich companies who are against the law like Google, Yahoo, Ebay or Facebook but as a whole, they are not as wealthy as the coalition and they are not really a part of the movement. In the world market the coalition just in the music sector obtained 27.5 billion U\$ of revenues during 2008, (IFPI 2010); UK is the third most important market in terms of world market share with an approximate quote of the 10 %. Spain is located in the number ten with a 2% (IFPI 2010); the number one is the US market.

In addition, on the British case the ICT sector holds an important share of their economy (European Commission 2009b) and the creative content industries of UK have for many years punched above its weight globally. One in 10 of the top album sales in the US market are by British artists. One third of television format sales around the world are originated with British production (Department for Culture Media and Sport UK 2009). The cultural industry in UK is so far stronger and more dynamic compared to the Spanish cultural industry. Besides the UK coalition does not have among their members an organizations as the SGAE" one of the main actors in the Spanish coalition, but also one of the most hated organizations by the Spanish internet users (Ocio Networks 2009). This fact could affect the online visibility of the Spanish coalition because it is unlikely that a lot of people want to be identified with this organization.

Furthermore the UK coalition seems to be better prepared to the business changes and challenges that appear with Internet than the Spanish one; the supply of digital legal platforms to download digital contents is wider in the rest of the world and specifically in UK than in Spain (Cañas 2009), besides the percentage of legal consume of digital products is bigger in UK than in Spain (European Commission 2009a; IFPI 2010). From our point of view these facts are correlated with the bigger size and internationalization of the UK entertainment industry. In this way we expect to see:

1. The visibility of the UK coalition in the different spheres will be higher than the Spanish one.

### The digital Rights Movement

On the contrary side there is the Digital Rights movement against the coalition and government regulation. The movement is composed by associations of internet users and digital rights, The Creative of Commons organization, Free and Open source organizations, P2P and video streaming companies and famous bloggers, some of them are academics and others have *e*-business.

Because of the profile of the organizations that compose the movement, we could consider that they are a high technical skilled group, this fact seems to correspond with the data that more of the people who oppose to internet regulation have a high technical skill profile, or at least it is what we can observe for instance in the British case (Dutton et al. 2009). These features make us think that in the blogosphere the movement will be very strong.

The movement considers these regulations a threat for free circulation of information and knowledge and also a risk to fundamental rights such as personal privacy, freedom of speech and the right of access to a "public service" as Internet, what they call digital rights. They consider that the type of penalty is not proportioned to the type of offence, and that there are not enough warranties for a fair trial in the case that someone is accused of infringing the copyrights laws. The movement sustains that property rights cannot be over fundamental rights.

Referring to the movement in both countries the movement actors have a large tradition of fighting against curtailment of digital rights. In the Spanish case there is a previous mobilization, "all of us against the canon/todos contra el canon", in that case they fought against the

government decision of imposing taxes on products that could be use to make "illegal" copies. In the British case one of the most traditional organizations that in a national and in an international level have participated in demonstrations to defend the rights of internet users and also the free spirit of early years of Internet, is the Open Rights Group. This institution together with the 38 degrees platform has contributed and leaded campaigns against initiatives that could threat the users rights on the Web e.g. campaign against the amendment 138 on the Telecoms Package, or stop Government snooping on the internet. Also international advocacy digital rights groups such as Electronic Frontier Foundation, European Digital Rights, Free Software foundation pronounced against the initiatives.

### Other Internet companies

However, next to the movement there are other companies that have material motivations to be against the regulations, in the case of internet providers, they are not interested to assume the cost of being watchmen of their costumers and furthermore if it is likely that they are expecting to lose subscriptions of premium internet services if illegal downloading is forbidden. In the UK campaign we find the important role that has the company Talk-Talk, which leads the campaign "don't disconnect us". In the case of big companies of the internet business like Google, Yahoo, E-bay and Facebook they have manifest their inconformity to the UK government about the regulation, in the UK case for example they consider:

"The law gives to the secretary state unprecedented and sweeping powers to amend the Copyright, Design and Patent Act, opens the way for arbitrary measures. This power could

be used, for example, to introduce additional technical measures or increase monitoring of user data even where no illegal practice has taken place" (Fildes 2009).

In terms of the media visibility of these actors related to the conflict, except *Talk.-Talk*, the others seem to have a low media profile, and it is likely that they privilege a more direct kind of lobby. Moreover are not against the copyrights schema, they are worried about the cost and the uncertainty to their business of some items that regulations contemplate. These companies thrive on user-generated content and worry that additional regulation might limit (even legal) content reaching their sites and/or increase the cost of monitoring user uploaded content.

# **Government and international agencies**

Other important pieces of this conflict are the national governments and international agencies (WIPO, WTO<sup>ii</sup>, and European Union Commission- EUc-, US trade commercial office). The national governments are lobbied by different sides of the conflict, copyrights coalition, digital rights movement, other companies; they also have the international pressure of supranational and international agencies. Depending on the organization they are interested that national governments respect international agreements of intellectual property and also fundamental rights. At the same time, the governments try to justify to their citizens the social and economy importance of the protection of copyrights and try to persuade them that proposals are not a threat to fundamental rights (Department for Culture Media and Sport UK 2009; Ministry of Culture Spain, Gonzalés Sinde 2010).

### Why Spain and the United Kingdom?

We chose the case of Spain and Britain; nevertheless we recognize the limitations of concentrating our attention just at the national level. In the globalization context as Beck(2005), Held,(1997), Castells, (2009; 2001) and other authors say, we cannot understand the contemporary political events if we continue thinking that the main and only actor is the national state. For this reason we study at the national level Spain (Sustainable Economy law) and Britain (Digital Act), without losing our attention to the regulation of contents and antipiracy laws as a global phenomenon.

We chose Spain because actors who lobby for a more strong antipiracy laws, classify Spain as one of the five countries with the highest level of infringements of intellectual property rights on the Internet (Report 301 of Office of the United States Trade Representative) and although Spain lags behind most of the rest of Europe with respect to most of the measures of political participation, however in terms of protest "Spaniards are among the more enthusiastic endorsers of protest" (McDonough, Barnes, López Pina, 1998:171), and because of that we expect:

2. The Spanish movement visibility on the different spheres will be higher than the British movement.

We decide to follow the British case because the UK entertainment market and industry are the biggest in Europe, as we said the UK coalition is very strong, consequently it is likely that it will be more visible than the Spanish one, but not necessarily it will be more visible in all the spheres which is one of the queries that we expect to resolve.

Referring to internet use and practice, according to the European Commission Digital report compared to other members of EU (27) for the take-up of internet services, Spain is not a frontrunner. A lot of indicators are below average and show low rankings. The exceptions are: doing online courses, reading newspapers and downloading, very important in our study case (European Commission 2009b); see (table 1). According to this data the difference it would appear to be not so high. But according to the report of the European Commission (European Commission 2009b), UK is one of the best performing countries in Europe, with most of the benchmarking indicators above the EU average

In terms of the regulation, Spanish law do not contemplate the possibility to disconnect internet users, the British proposals contemplate this penalty, and we could affirm that British law is stricter than the Spanish proposal. In this vein it is possible that the population response to the regulation will be higher in UK than in Spain. Both regulations contemplate the possibility to order to close those sites that promote downloading or sharing files that are not recognized as copyrights. Besides a specific agency of the government has the autonomy of deciding who are infringing copyrights and if it is the case filtering "illegal" contents.

#### **Theoretical Framework**

The antipiracy regulations have configured the Web as a war landscape, where parts in conflict mobilize and defend publicly their standpoints. We emphasize something apparently obvious: the conflict is not only being developed on the web space but for the type of issue that we are studying, the web mobilization is crucial and also determinant if actors expect to spread their standpoints between internet users who are the main population affected by these laws and also if they expect some public support and drawing attention of policy makers.

We believe that mobilization process is sterile if it does not treat the media (Newton 1999; de Vreese & Boomgaarden 2006; Iyengar & Simon 2000) and specifically in the conflict that we are studying, it is crucial to analyze a media such as the Web. The actors in conflict implement different media strategy campaigns to try to spread and defend their standpoints and also achieve political support to their cause. This practice is a fundamental element to legitimate or delegitimize a policy at least in a democratic regime. Depending on the actor profile their media strategy could be different (B. D. Herman 2009). For instance, strategically the copyrights advocacy coalition together with the government initiative in a first stage of the conflict could be better not to make a lot of noise, and consequently have a low media profile, but when the conflict emerge as part of the media and policy agenda, they will try to justify and defend their standpoints against the critics of the digital rights movement and other actors who oppose to the regulation. On the other hand the digital rights would try to make a high level of noise trying to access to all kind of media, firstly in the cheapest ones in terms of granularity (Benkler 2006) and in this way they would draw the attention of the traditional media, the citizens and the policy makers. (See appendix figure number 1 and 2)

Actually, media has been always part of politics, as there has always been a need for intermediate technologies to transmit news from people to the political centres and vice-versa. But now with the emergence of the information society and with some called mediated age (Bennett & Entman 2001) media seems to be more and more important to politics, there is now a strong relation between media and politics. Bennet and Entman observe that many polities have reached a point where policy process, along with a host of related process such as opinion formation, could not occur in their present forms without various successes in the media. Other scholars coincide with this finding, the role of media in make sense of the world by casting issues within frames (Reese et al. 2003) or Zaller (1996) who illustrate the powerful effects by locating instances of information imbalance, where one campaign is several times more visible than the opposing campaign. In these circumstances, sizable portion of respondents will exhibit a "reception gap," having got one message but not the other (pp. 23-26). In this vein what we expect is that actors try to have the highest level of success in terms of media visibility.

Nevertheless, when we refer to media and specifically on the Web we have to consider that there is a wide diversity of media, and each of them is constituted with their specific characteristics, what Rogers (2008) called as an sphere. On the Web, Rogers (2008) defines sphere as the issue list of sources results of an specific query. For instance when we use Google news, or Google blogs, or the common Google search engine for the query "Digital Economy bill" or "Ley de Economia Sostenible", each search engine returns a list ranking of sources. This list of sources may be thought of in terms of a bounded space. These spaces are increasingly co-constructed by engine algorithms and the site owner behaviour. Each search engine also has different sources privileging mechanisms, with different combinations of authority and freshness. For instance the criteria and

the weight that Google news privilege in their searching are not the same, that Google Blogs, or the common Google (Ohye 2009; SEO Chiangmai 2010; Brin & Page 1998). Sphere in this vein is different of an egalitarian ideal, where every source of information (URLs) is known by the core, and vice versa and have the same chance to appear in the search engines results (Rogers 2008).

As Adamic and Huberman (1993), Barabási (2003), González (2008), Hyndman (2009) and others authors identify on the Web certain sources are central, that means that they concentrate the vast majority of links as well as hits. Following such idea as "the rich get richer" (Barabási 2003; Watts 2003; Taleb 2007) the sites receiving attention tend to acquire only more visibility. The difference between the centre and the other nodes may tend to grow; as Rogers (2008) affirms the ideal of a sphere being a fiction, nevertheless very useful. In this sense, does a particular side of the conflict tend to be in the core (highest visibility) of one sphere and not in the others? It is one of the questions that we expect to answer.

Otherwise, several authors argue that compared to traditional media (Newspapers, radio,TV) the non traditional channels (web pages, blogs, social networks, tweets...) reduce the barrier of entry (Castells 2001; Castells 2009; Benkler 2006; Rheingold 2003; Negroponte 1996)-obviously when you have guaranteed the access to internet, that in our actors we take for granted -. Beyond doubt it is cheaper to create a social network profile, to feed tweets, to send emails or even with a lower level of granularity to create your blog or to upload your own video in YouTube, than trying to appear in a traditional media such as newspapers, TV news or the radio. In what we call non-traditional channels the Web offers the possibility to under-resourced agents that have restricted access to traditional media to spread and to amplify the scope of their message. It is what we

expect on the digital rights movement, that compared to the coalition it is not so rich but has the technical knowledge and public support to its cause (GlobeScan 2009); this fact allows the movement to spread through non traditional channels in just a few seconds to thousands of users its message that their rights could be in danger and in consequence it is necessary a noisy and massive mobilization. Also if they achieve a high visibility on non traditional media it is a way to achieve the traditional media attention, at least this is what we observe in the Spanish case. (Adrián Segovia 2009; El País 2010; Muños 2009)

3. We predict that the movement will have a higher visibility on non traditional spheres (blogs, web) than in traditional spheres (news).

But if we consider the approach about the cost to be central on the web, as Hindman (2008) and González (2008) demonstrated that just an elite of agents and the most resourceful ones are the most visible on the entire web. Although the movement has resources as technical skills compared to the coalition is not so rich. In that sense with the public support that the movement has maybe the movement could have a high visibility on the online issue network but we are not sure if it is going to be enough to be visible on the whole web. Because of that we want to compare the sample visibility in terms of in-link with the Alexa and Goggle visibility. Also González found a strong correlation between numbers of times cited on the news sphere with online presence, in our case we expect to observe a similar tendency in this vein:

4. The issue actors could have a higher visibility in the network (sample in-link) but not on the entire web. (Alexa, Google in-link)

5. The most visible actors in terms of citation in the news are going to be the most visible in terms of in-link. (Importance of new coverage to have in-link visibility)

Moreover, the copyrights coalition is a very rich lobby that has the money to pay for traditional media access and as part of an elite it contributes to its interest (Klaehn 2002; Chomsky & E. S. Herman 2002) and also have strong business ties with them (Castells 2009). According to this we predict that:

6. The coalition who is wealthier compared to the digital rights movement will achieve a greater visibility level on the news-sphere.

Moreover, as we said this is an international conflict, Herman (2009) in his policy analysis of the debate of the digital rights management in US, confirms that the digital rights movement has a higher visibility online compared to the coalition that slightly has a higher visibility in traditional media. Comparing to Herman (2009) research, we do not contemplate parliament debate and we do not focus in specific newspapers; we analyse the main traditional media sources by country obtained by Google news.

We consider that in specific events such as the policy that we are studying, the most resourceful agents (in terms of money and access to traditional media) are not necessarily on the web the most visible ones, as Benkler(2006) sustains other resources or actor attributes like the public support and the technical skills could be determinant to achieve visibility level on the web. As Herman (2009) observes in the U.S case, we expect to confirm in the Spanish and in the UK cases

that in non traditional media the digital rights movement on the online issue network and specifically in blogs will have the chance to have a high level of visibility and consequently to capture people's attention to its cause. Quoting the Dahl (2005)statement we could expect that the political resources are unequal but "non-cumulative"—that most citizens have some power resources and any type of political resource (particularly wealth) eclipses all the rest-.

### Methods

In the present research we applied different methodological approach, hyperlink analysis, textual and automatic content analysis. Referring to the hyperlink analysis, we consider important to make a shortly review in our endnotes of some key concepts that are essential to understand this process. These concepts are links, crawling and seeds<sup>iii</sup>.

### How do we define my crawler seeds?

We launched two set of crawlers with different number of seed in different moments to confirm the configuration of the issue network and to have more robust results. In the first set of crawlers to define the seeds we made the following process:

1. In the Spanish case we consider a diversity of sources. Some of them with a high level of neutrality in terms of the equilibrate way that they present the different sides of the conflict. These sources were two TV programs of journalist research (Sanjuán 2010; Soler & Marin 2010). The other source that we used was the news dedicate to this conflict in two of the main newspapers of Spain El Pais and El Mundo. We complete the selection of actors following these two main newspapers during September 2009 and January 2010. We defined 25 initial actors. Seven are part of the coalition and eighteen are part of the digital rights movement.

- 2. In the British case with Google we made a common search of the terms "Digital Economy bill", OR "Digital Economy Act". We read deeply and review the first twenty traditional media result most of them of the Guardian and BBC news. We consider that with twenty results we have a correct level of reliability, studies such as Spink & Jansen (2004; 2006) demonstrate that common users just focus in the first 10 results in our case we choose 20 sorting by Google ranking, that the main criteria that they consider is what we know as PageRank (Brin & Page 1998). But this criterion tends to privilege in the first results the most popular sites according to the most linked sites that match with the specific querying that we make. However, not necessarily what people consider as good information implies a high quality of information, also newspaper could be a little bit bias in terms of neutrality and different point or interest on the issue. Because of that we contrast these previous seeds with the description of the conflict give by Tony Wales (2009) and Ian Brown (2010) about the Digital Economy Bill. We identify ten initial actors. Six are part of the coalition four are part of the digital rights movement.
- 3. With the list of actors we launched two preliminary crawlers for both cases, to test with our final crawlers and to have more robust results.
- 4. As Park and Thewall (2005:179) said we must be very carefully to ensure that interpretations placed upon links networks are genuinely evident from the data, some individual links appear to have no meaning at all, not performing a communication role (*Thelwall 2009*) This means that the links must be assessed to corroborate if actually they reflect the intention that we suppose. Without studying the websites themselves, one cannot learn what an organization represents, because of that we coding the crawler outcomes (URLs) visiting and

reading each site obtained. If they have any declarations (opinion, comments or logo of the campaign...) about the law, we determine their stance in the conflict (Favour/Oppose). When it is not evident the issue stance of the actor we made and advance search by site looking for "Ley de Economía Sostenible" or "Digital Act" OR "Digital Bill, according if it is a Spanish or UK actor. If we don't find anything we classify as not position (NP). This process allow us to answer how much their website has to say about a given issue, or why it is likely to have been included in the web graph results .

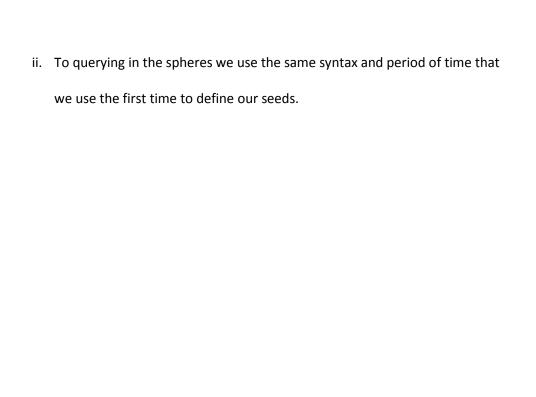
- a. Which criteria we define to classify the URLs actors by type:
  - i. Traditional sphere, (news papers, radio, TV, journal, news agencies)
  - ii. Non traditional channel, (Facebook, blogs, tweeter, videos platforms, Flickr,Mash up and news sites concentrators, mail, chats)
  - iii. Key individual, (personal web page of people who are invited to be member in the negotiation table, or that has a high level of recognition in the issue)
  - iv. Government, (national, and international governmental agencies)
  - v. Digital Rights Movement, (associations of users, and civil and fundamental rights)
  - vi. Copyright advocacy coalition, (members of the entertainment industry, trade associations, private software organizations)
  - vii. Company (enterprises that defend their own interest but not are totally aligned with the coalition or the movement, ISP, Search Engines)
- 5. To define our seeds to the second crawlers, we did a specialize search in Google news and Google blogs, to identify which are the first thirty results about the issue. ("Digital Act" OR

"Digital Economy Bill" OR "Mandelson's law"" OR "Anti-piracy law"/"ley de Economía Sostenible" OR "ley Sinde" OR "ley antidescargas" OR "ley antipiratería") We consider that with thirty we have a correct level of reliability; we choose 30 sorting by Google news relevance. (Ohye 2009). The period of analysis was (01/01/2009-01/06/2010). This time range includes before the government launched the law initiative until the law arrive to the parliament and for the UK case was approved, in Spain the law project is in the parliament but nowadays and because of the economical crisis the final voting has not been.

- 6. In these thirty results for each sphere with the list of actors that we obtain with the first crawlers we did an automatic content analysis to identify the actors with the highest frequency of citations, in the blog sphere and in the new-sphere and we use these list of actors (the URLs) as our new seeds. We obtain 46 seeds for each case, 23 that oppose to the law and 23 which support the law. 23, was the minimum number of actors in the different spheres that present visibility, there are actors that in the number 23 sorting via number of citation have a measure of zero, because of that we choose 23. Also the number of actors has to be the same in both networks to not have the problem of imbalance (in terms of number of seeds) that the preliminary crawlers had. (see the list of final seeds in the appendix-table 2 and 3)
- 7. At the same time we assess the crawlers with and without commercial sites like Apple,
  Vodaphone and Fnac, actors that as and organizations have a position about the conflict but
  theirs site as commercial portals concentrate a huge amount of links that not necessary

reflect relation with the issue network because of that we don't consider these sites as a seeds, even though some of them appear after on the crawler outcomes. Moreover before we launch the crawler, we made an advance search in Google in the specific site of Apple and Fnac, to try to locate if they make any statement about the regulation, the owner of Fnac promotes the regulation in France but this information we found it in a different site, in the official sites of the companies there were not any official declaration about the issue.

- 8. With the outcomes of the second crawler we again classify and coding the URLs following the same previous criteria to identify the stance and type of the different actors in the issue network.
- 9. Also with these outcomes we calculate the in-link of each URLs of the issue network, at the same time we calculate the in-link in Google and Alexa<sup>iv</sup>, to observe if it is a correlation between visibility in the sample, and visibility on the Web.
  - i. With the actors' name list that we obtained after coding and make our database with the crawlers results, we scrape the news-sphere (Google news), and the blogosphere (Google Blogs) to identify the number of times is quoted and actor. Also we assess the correlation level between presences in the different spheres. As we mention we expect to identify if the same actors who have a high level of citation on news and also on blogs have a high level of visibility on the web. In this case we used the first 100 results of each sphere.



### **Findings**

After cleaning and coding the outcomes obtained with the crawlers, we can answer how the visibility is distributed in terms of actor's presence on the online issue network. We organize the URLs by type of actor (table 4) and by issue stance (table 5). From table 4 it can be deduced that UK movement (26.6% of actors in the network) is smaller in terms of presence visibility compared to the Spanish movement (30.4% of actors in the network). Also we can observe that the UK coalition has a 25% of actors on the network versus an 8% of the Spanish case, as we said the UK coalition is wealthier and do not have the public antipathy that has in Spain, moreover in UK the coalition is not just concentrated in a policy of stick, it supplies a wide diversity of legal and free services to download contends compare to Spain. A fact that we really do not expect is that the actors who support the regulation are going to be more visible than the actors who oppose to it (table 5), in terms of type of actors (table 4) in UK the coalition and the movement are very close. These results are against to our third hypothesis and are not in the direction of what we see in Spain and in other countries like US (B. D. Herman 2009) where the movement is stronger on the online debate and more actors are against the laws. In terms of the issue stance the gap between countries is huge. In the UK network a 42.7% of actors support the law versus an 11.9% in Spain, where 53.3% of actors are against the law. Exclusively in terms of presence on the issue network we could confirm our first hypothesis. In regards to the second hypotheses, from table four it can be inferred that the movement in both countries in terms of number of actors is not so different.

But you could have presence on the issue network that is a small part of the web and this is not guaranteed that you really are visible on the web. Because of that and to asses our fourth hypotheses we compare the sample in-links, with Google and Alexa in links. In table six we can see

that the Spearman's correlation coefficient between the number of links that our sample sites receive and the number of links they receive according to Google is 0.24 and it is 0.28 according to Alexa, (both coefficients are significant at 1% level). This results means that even though the visibility on the issue could be related to a certain extent, in most of the cases they are performed independently, the coefficients also tell us that the visibility of our network is marginally related with the visibility on the entire web. The correlation is so weak. For instance we chose the ten first actors in terms of visibility in the three sets (In degree sample, Google and Alexa) for both networks (UK-Spain) and we compare it (table 7 and 8). In the Spanish case just Creative of Commons is visible in the ten first results in the three sets, for the UK network the Electronic Frontier Foundation, the Free Software Foundation and also Creative of Commons we are highly visible on the web and not just in the sample network (blue highlight in the table). There are actors that could have a high visibility on the issue network but are not central on the web, in our example they are highlighted in yellow. Besides if we assess the visibility level between Alexa and Google the correlation coefficient is very high (0.80), opposite to what happen when we compare our sample in links with them. Consequently, the level of visibility of our sample (in links) seems to be restricted to the issue network and not the entire web. This supports our fourth hypotheses.

When we analyze the visibility of the issue actors in terms of number citations on blogs and news, and we compare to the in-links behaviour we expected to observe a similar tendency and that the more central actors (in-links) also will be the more cited. As you know the way that you present and organize the data could generate different lectures of the same phenomena. To reduce this possible bias we present two tables (9-10), the first one is sorted by issue stance the second table by type of actor. According to table 9 what we observe in the UK case in the new sphere is that the

actors who support the regulation, as well as we see on the in-links measure, are more numerous than the actors who are against the law. In the blogosphere we expected was a high visibility of the actor against the Law, but we do not find it. The visibility of both sides is almost the same. In the Spanish case what we suppose compare to the outcomes of the visibility in terms of in links was a high visibility of the actors against the Law, but astonishingly it is not the case. However from table ten it can be observed that the movement in both cases and in both spheres is more visible that the coalition. Obviously if we consider the government agencies who share the same position with the coalition, this alliance will be more visible than the actors against the law (Table 9). If we consider the instance of the different actors we have to accept the hypotheses number six, but if we focus on the types of actors (table 10`), which is a more specific and accurate information we have to refute our hypotheses.

In the case of hypotheses number three, the movement in the Spanish case clearly is more visible than the coalition and not only on the blogosphere also on news and in the online issue network, in the British case the gap between the movement and the coalition visibility is not as wide as in the Spanish case. We confirm our hypothesis, but with considerations to the UK case.

To test our hypothesis number five we analyzed if there is a strong correlation between citation in news and in-degree in the sample (hypothesis five). The results show that in both cases the relation is very weak. Relating to the correlation of in links and number of citation on news, the coefficient is only a 0.15 and it is significant at 0.05 when we analyze the joint the Spanish and UK networks. If we consider each network separately, the correlation is not significant. This suggests that in this specific conflict, to be on the news spheres does not mean having a high level of in-

links. This data refutes our hypothesis. Furthermore we analyse the relation between visibility on news and blogosphere. We do not find a strong correlation. In the Spanish case the coefficient is 0.43 at the level of significant of 0.01 that may indicate certain level of relation but; in the UK case this relation is not significant.

Finally other important finding that we expect to explore more deeply in future works is the high level of concentration visibility in a few actors of the network. In terms of in-links and number of times mentioned in the different spheres. For instance in the UK blogosphere the 10% of networks actors concentrate a 65% of all citations. In the Spanish case the level of concentration is even more dramatic a 10% of the actors contain more than 90% of all citations. When we analyse the news sphere it is even more concentrated. In the UK 10% of actors contain 90% of citations which is roughly equivalent to the Spanish case. By in links sorting by sides, also we found a similar pattern, but as we said not necessarily the most visible actors in one sphere are going to be the most visible in other.

In the Spanish network, the Digital Rights Movement is dominant. We did not predict that the gap between the issue network visibility (presence and in links) of the movement compare to the visibility of the coalition would be so wide. We recognize that the coalition has other strategies to lobby and achieve visibility, but what we can see in the Spanish case is that the coalition visibility (Blogs, News, and the issue network) is really low compare to the movement. These findings are in the same direction as the findings of Herman (2009) for the US case. The predominance of the movement on the debate—specifically on the blogosphere—is evident. The technical advantage and also the public support could explain the massive online mobilization of digital rights activists, furthermore we can't discard the cultural explanation about how "Spaniards are among the more enthusiastic endorsers of protest" (McDonough et al. 1998, p.171)

In contrast with the Spanish case and with US findings (B. D. Herman 2009) the UK coalition has a strong visibility on the online debate (both in number of blog mentions and web in-links). In particular compared to the Spanish coalitions, which as mentioned are quite weak in terms of the media visibility. We can see a great difference between the UK coalition and the Spanish coalition in the sense of size, resources and digital market knowledge. This possibly explains why the UK coalition has a higher visibility than the Spanish coalition. Even so, if we compare the UK case with the study of Herman(2009), the US coalition is the world's largest and their findings were in the other direction of the UK results. Nevertheless, we need to go deeply in the UK case, probably the coalition learned from the US experience and in this sense developed a strong online campaign, and also developed a massive and attractive media campaign of the personal risks and the threats

to the industry and to Internet users from consuming illegal products. Moreover in UK the entertainment industries supplies a wide set of legal platforms to consume digital content, and at present the digital market in Britain is more dynamic and rich than the Spanish one. For instance nowadays Internet publicity in UK is bigger than TV advertising (Sweney Mark 2009).

We do not understand compare to the coalition and also to the Spanish movement the UK movement seems to be so passive (in terms of visibility). Presumably the movement is not as compact as in the Spanish and US cases. This could generate coordination problems in unifying the campaign. Furthermore the contributions of an important company (Talk-Talk) to the campaign may be something that affects the legitimacy of the fight. In addition, despite having stricter laws in UK, as we said, the people have more legal alternatives to downloading digital content. The coalition is not hated as in Spain (the Sgae bad reputation) and seems to have public support. For instance in the parliament just the Pirate Party has voted against the law and as we observe in our issue network more actors support the regulation than are against it. This contrast with the Spanish case, in which the regulation has a very low level of actor support. (Table 4)

Related to our research questions, we could answer that the movement as we expected dominated the blogosphere and in general is stronger in the online debate. However, if we consider the government is on the same side as the coalition, the visibility of the actors who support the regulation is strongest. We can see that the government has a high visibility in both cases (Table 9) As we explain across the paper there are strong differences between the UK and Spanish case that could be explain the differences in visibility.

In terms of our methodology some limitations that we find are: first, it is always important if a third reviewer could confirm the coding process (the issue network outcomes). At present our first crawlers we tested with my colleague Camilo Cristancho, but this final version of the crawlers outcomes although it has many actors in common with the previous has not be externally reviewed yet. Second, the sentiment (positive or negative) of mentions of actors in blogs or news has not been assessed. This means that an actor could have a high level of visibility in terms of citations, but with a negative connotation. In a future work we will try to assess the citation visibility that we have or to test different measures of visibility to improve our inferences.

Moreover as we said, both sides of the conflict have different media strategies. It is likely that the movement frequently mention the coalition actors in their blogs as a way to make the conflict visible and explain it. This also has the effect of increasing the number of times that the coalition's actors are mention in blogs or news. On the other hand, the coalition may try to render the members of the movement invisible and not give them importance by ignoring them. If the coalition quotes them it is only to refute their arguments.

Other issues that we have to explore more deeply are why only a few, specific actors of the conflict are so visible in specific spheres and not in others. According to our data, many of the issue actors and particularly the movement could be visible on the issue network but are peripheral in overall web visibility. Also we have to describe the features of these actors who attain the highest level of visibility (e.g. Creative Commons, GNU org or Arts council).

Ending, in this specific conflict we observe that actors who are not necessary wealthy but have other resources as public support and technical knowledge can spread their standpoints about how the Internet should be. It is not guaranteed that the law will incorporate their interests, but the consequences to policy should be analyzed over the long period. The debate is open, and the movement's arguments are being heard. A suitable next step is to continue analyzing other countries and comparing them to see if the same patterns emerge.

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# Appendix

#### First stage

 A low volume of news coverage may be a strategic value.-They doesn't want the issue becomes to be included on the general public agenda.

# Second stage

 If the proposal is part of the public agenda the coalition would like to defend it against all the critics and look for media access, and try to legitimize their stament.

# Second and third stage

• They use their economical resources and bussiness ties to access to traditional media, applying a campaing of stick and carrot to diffuse their cause

Figure 1: Campaign stage of Copyright Advocacy coalition, elaborated by Jorge L. Salcedo

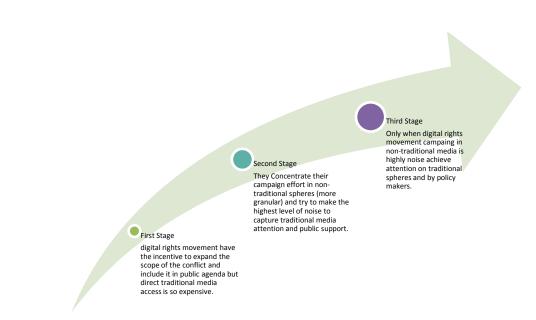


Figure 2 Campaign stage of Digital Rights movement., elaborated by Jorge L. Salcedo.

	UK	Spa	ain
Penetration rate		76%	<b>72</b> %
EU rank (number of users)		2	6
World rank (number of users)		7	14

Table 1. Internet use statistics, source world stats 2009, elaborated by Jorge L. Salcedo

Seeds Spain favor	Seeds Spain oppose
1 http://www.aisge.es	http://www.alt1040.com
2 http://www.asesoriajuridicadelasartes.com/	http://www.archive.org
3 http://www.asociaciondedistribuidoreseimportadorescinema.visualnet.com/	http://www.aui.es
4 http://www.bsa.org/country.aspx?sc_lang=es-ES	http://www.bufetalmeida.com
5 http://www.cedro.org	http://www.conservas.tk
6 http://www.cinemavip.com/companies/adivan	http://www.creativecommons.org
7 http://www.circulo.es/	http://www.culturalibre.org
8 http://www.damautor.es	http://www.eff.org
9 http://www.egeda.es	http://www.elcosmonauta.es
10 http://www.fap.org.es	http://www.enriquedans.com
11 http://www.fnac.com/	http://www.error500.net
12 http://www.llorenteycuenca.com/	http://www.estalella.wordpress.com
13 http://www.mcu.es	http://www.exgae.net
14 http://www.nearco.es/	http://www.fsf.org
15 http://www.promusicae.es	http://www.gnu.org
16 http://www.red.es	http://www.hispalinux.es
17 http://www.sansebastianfestival.com	http://www.internautas.org
18 http://www.secies.com/	http://www.jamendo.com
19 http://www.sgae.es	http://www.laquadrature.net
20 http://www.siereslegalereslegal.com	http://www.mangasverdes.es
21 http://www.tercermercado.com/	http://www.merodeando.com
22 http://www.uveunionvideograficaespanola.visualnet.com/	http://www.noalcierredewebs.com
23 http://www.ecam.es	http://www.nomada.blogs.com

Table 2. List of seeds Spanish, LES elaborated by Jorge L Salcedo.

Seeds UK an favor	Seeds UK oppose
1 http://www.abo.org.uk	http://www.38degrees.org.uk/page/speakout/extremeinternet
2 http://www.berr.gov.uk	http://www.archive.org
3 http://www.billboard.biz	http://www.chillingeffects.org
4 http://www.billboard.com	http://www.creativecommons.org
5 http://www.bmi.com	http://www.dontdisconnect.us
6 http://www.bpi.co.uk	http://www.eff.org
7 http://www.britishacademy.com	http://www.effi.org
8 http://www.britishcopyright.org	http://www.epic.org
9 http://www.brits.co.uk	http://www.ffii.org
10 http://www.ccskills.org.uk	http://www.fipr.org
11 http://www.creative-choices.co.uk	http://www.freeculture.org
12 http://www.culture.gov.uk	http://www.freedom-to-tinker.com
13 http://www.equity.org.uk	http://www.ico.gov.uk
14 http://www.hp.com	http://www.lessig.org
15 http://www.ifpi.org	http://www.magnatune.com
16 http://www.interactive.bis.gov.uk	http://www.musicindie.com
17 http://www.ipo.gov.uk	http://www.musicindie.org
18 http://www.ism.org	http://www.mysociety.org
19 http://www.midem.com	http://www.no2id.net
20 http://www.mpg.org.uk	http://www.openrightsgroup.org
21 http://www.musicweek.com	http://www.privacyinternational.org
22 http://www.own-it.org	http://www.soros.org
23 http://www.patent.gov.uk	http://www.theyworkforyou.com

Table 3. List of UK seeds. Digital Economy Act, elaborated by Jorge L. Salcedo.

		UK ne	UK network		network
		Count	Column N %	Count	Column N %
Туре	NP	1	0.70%	4	3.00%
	Cultural Industry-Copyrights	37	25.90%	11	8.10%
	Digital rights-Internet associations	38	26.60%	41	30.40%
	Non traditional Spheres	9	6.30%	45	33.30%
	Traditional Spheres	(	0.00%	7	5.20%
	State and Gob international Agencies	53	37.10%	4	3.00%
	Companies	5	3.50%	10	7.40%
	Key Individual	(	0.00%	13	9.60%
	TOTAL	143	100%	135	100%

Table 4. Outcomes issue networks by type of actor, elaborated by Jorge L. Salcedo.

			UK network	Spain network	Total
Issue stance	NP	Count	33	9	42
		percentage	23.10%	6.70%	15.10%
	Favor	Count	61	16	77
		percentage	42.70%	11.90%	27.70%
	Oppose	Count	40	72	112
		percentage	28.00%	53.30%	40.30%
	Non Traditional Spheres	Count	9	31	40
		percentage	6.30%	23.00%	14.40%
	Traditional Sphere	Count	0	7	7
		percentage	0%	5.20%	2.50%
TOTAL		Count	143	135	278
		percentage	100%	100%	100%

Table 5. Outcomes issue networks by issue stance, elaborated by Jorge L Salcedo.

	Spearman's rho		
	In-links Alexa	In-links Google	:
In-links sample	0.283	3**	0.254**
In-links Alexa			0.806**
N			278
**. Correlation is significar	nt at the 0.01 level (2	-tailed).	

Table 6. Correlation in-links sample, Alexa and Google, elaborated by Jorge L. Salcedo.

	Spain									
Indegree	Stance	Google indegree	Stance	Alexa indegree	Stance	News (# times mentioned)	Stance	Blogs (#times mentioned)	Stance	
1 creativecommons.org	Oppose	Google	Oppose	apple.com	Favor	red.es	Favor	online.com.es	Oppose	
2 <mark>uberbin.net</mark>	Oppose	openoffice.org	Oppose	creativecommons.org	Oppose	online.com.es	Oppose	red.es	Favor	
3 <mark>loogic.com</mark>	Oppose	apple.com	Favor	gnu.org	Oppose	apple.com	Favor	apple.com	Favor	
4 gnu.org	Oppose	creativecommons.org	Oppose	hotmail.com	Favor	periodistas21.blogspot.com	Oppose	sgae.es	Favor	
5 <mark>alt1040.com</mark>	Oppose	eff.org	Oppose	gmail.com	Oppose	creativecommons.org	Oppose	gmail.com	Oppose	
6 enriquedans.com	Oppose	hotmail.com	Favor	archive.org	Oppose	sgae.es	Favor	hotmail.com	Favor	
7 <mark>culturalibre.org</mark>	Oppose	gimp.org	Oppose	openoffice.org	Oppose	gmail.com	Oppose	wiki.manifiestointernet.org	Oppose	
8 merodeando.com	Oppose	fsf.org	Oppose	gimp.org	Oppose	gnu.org	Oppose	conservas.tk	Oppose	
9 <mark>weblogssl.com</mark>	Oppose	inkscape.org	Oppose	eff.org	Oppose	conservas.tk	Oppose	hispalinux.es	Oppose	
10 <mark>ecuaderno.com</mark>	Oppose	archive.org	Oppose	fsf.org	Oppose	caspa.tv	Oppose	internautas.org	Oppose	

Table 7. Ranking of the 10 most visible actors in-links-and number of times mentioned Spain, elaborated by Jorge L Salcedo

UK									
Indegree	Stance	Google indegree	Stance	Alexa indegree	Stance	News (#times mentioned)	Stance	Blogs (#times mentioned)	Stance
1 creativecommons.org	Oppose	europa.eu	favor	creativecommons.org	Oppose	publicknowledge.org	Oppose	creativecommons.org	Oppose
2 fsf.org	Oppose	w3.org	Oppose	w3.org	Oppose	ukmusic.org	favor	ifpi.org	favor
3 artscouncil.org.uk	favor	wto.org	favor	gnu.org	Oppose	parliament.uk	favor	openrightsgroup.org	Oppos
4 gnu.org	Oppose	creativecommons.org	Oppose	ec.europa.eu	favor	writetothem.com	Oppose	archive.org	Oppos
5 ccskills.org.uk	favor	eff.org	Oppose	archive.org	Oppose	pact.co.uk	favor	dontdisconnect.us	Oppos
6 <mark>bpi.co.uk</mark>	favor	ec.europa.eu	favor	europa.eu	favor	scottisharts.org.uk	favor	ico.gov.uk	Oppos
7 eff.org	Oppose	artscouncil.org.uk	favor	eff.org	Oppose	archive.org	Oppose	europa.eu	favor
8 ppluk.com	favor	uspto.gov	favor	redhat.com	Oppose	skillset.org	favor	ukmusic.org	favor
9 <mark>gos.gov.uk</mark>	favor	redhat.com	Oppose	fsf.org	Oppose	ukfilmcouncil.org.uk	favor	billboard.com	favor
LO archive.org	Oppose	fsf.org	Oppose	uspto.gov	favor	wto.org	favor	ofcom.org.uk	favor

Table 8. Ranking of the 10 most visible actors -in-links--number of times mentioned- UK, elaborated by Jorge L Salcedo

	U	K		SI	pain	
	News	Blogs	N	News	Blogs	N
Favor	56.00%	49%	61	57%	56%	16.00
Oppose	44.00%	51%	40	43%	44%	72.00
TOTAL	100%	100%	101	100%	100%	88.00

Table 9. Number of times the actors are mentioned in different spheres by issue stance, elaborated by Jorge L.Salcedo

		News	UK Blogs	N	News	Spain Blogs	N
Туре	Copyrights coalition	31.36%	30.75%	36	10.45%	22.80%	11
	Digital rights movement	44.34%	45.47%	38	36.85%	41.50%	52
	Governamental -international agencies	24.30%	23.15%	26	46.14%	31.50%	4
	Companies	0.00%	0.64%	1	0.47%	4.20%	8
	Key Individual	0.00%	0.00%	0	6.09%	10.00%	13
	TOTAL	100%	100%	101	100%	100%	88

Table 10. Number of times the actors are mentioned in different spheres by type of actor, elaborated by Jorge

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<sup>&</sup>lt;sup>i</sup> Anti-Counterfeiting Agreement, members Australia, Canada, European Union (EU), Japan, Mexico, Morocco, New Zealand, South Korea, Singapore, Switzerland and United States (US)

<sup>&</sup>quot; World Intellectual Property Organization, World Trade Organization.

- 2. Crawling is the process of fetching (getting / downloading) web pages using what is called a crawl, which is a software robot who is programmed to develop this kind of task. (Rogers 2006a). The process of crawl that we applied is a co-link analysis. That means that the crawl first locate all the out link of your initial URLs(degree one) and save the nodes that share minimum two links in common, it also could go until three levels of deep in each site. After the first degree the crawl begins again the process. It could do it until tree degrees. We use at least three iterations for locating an issue network, usually to define and issue network Rogers recommends two interactions and a deep of maximum two, to have a bigger network with more coverage we made with three interactions.
- 3. Seeds: In any process of hyperlinks analyses is crucial how we define our starting points or what we called seeds. The crawler builds the web graph from the seed of URLs that we provided it. The seed is expected to include significant websites within the issue of interest.

<sup>&</sup>lt;sup>iii</sup> 1. As Gonzalez said (2008) "links are the basic building blocks that define the structure of this information landscape and the routes that on search engines and individuals follow when mapping and browsing its content". In terms of Rogers (2009; 2006b) A link from one website to another is literally an invitation to visit the other site. If one follows hyperlinks via browsing, one is more likely to wind up at sites with a high number of in links; compared to sites.(Brin & Page 1998)

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