# CHAPTER 5. Legal pluralism and harmonization – how can we reach a common minimum understanding on how to regulate the cloud?

## a. Introduction – scope of this chapter

As it has been already exposed[358] cloud computing brought about one fundamental change in the standards regarding data handling: it has rendered largely invalid the notion of a specific physical space within which any instance of data processing – or any part thereof – takes place. Of course, exceptions still are – and presumably will always be – technically feasible to exist but the norm nowadays is that the cloud, as the vital space where data 'live' and 'circulate', is a boundless, limitless area, at least in terms of the geographical meaning of boundaries. Clearly, this is not the first time we are faced with such a concept of lack of borders, or more precisely, of lack of clearly manifested borders: the internet itself is a limitless conception, an entity that can be verbally and technically defined but cannot be physically delineated.

It should be made clear from the very beginning that the internet and cloud computing are not the same thing. In fact, cloud computing is, as it has been demonstrated[359], a technological concept for the ultimate use of available tools facilitating computing while, the internet could be described as one of the main constituting parts of this technological concept, as its backbone. Nevertheless, given the internet's pivotal role in facilitating cloud computing applications, it is reasonable to look among the theoretical approaches and patterns used for its regulation for answers and tools that can potentially help also with the challenge of an effective regulation of the cloud.

Regulation of the internet is, of course, an all but settled issue[360]. Still, there are a few clearly prevailing approaches or suggestions that can serve

358 See Chapter 2.

359 Id.

360 Dan Jerker B. Svantesson, *Privacy, the Internet and transborder data flows – An Australian perspective*, 4.1 Masaryk University journal of law and technology 1–20 (2010.)

as an efficient starting point in a quest for a unique and dedicated framework for cloud computing regulation. Legal pluralism and harmonization of laws are two juridical norms largely compatible with the particularities of the internet and the challenges its nature poses to any legislator. These two approaches have over the past decades offered some of the boldest propositions in the debate for effective internet regulation, ideas that were clearly in touch with the actual nature of the internet sphere[361]. The solutions constructed on the basis of legal pluralism and harmonization of laws are discussed in this chapter as potential answers or starting points to the challenge of a pragmatic cloud computing regulatory framework.

In this chapter, the legal methodologies that will be the main instruments of this research are presented and put in context. These are legal pluralism and harmonization of regulatory principles in the context of global administrative law, which are argued to be the most suitable approaches in the quest for an efficient regulatory framework for the cloud. In addition, it has been argued that the cloud's universal nature necessitates not a conventional harmonization of laws on a regional level (as harmonization has been traditionally understood until today) but an original process that will aim to bring closer the way regulators worldwide think about and develop rules that govern it. This proposal is also brought in context along with the legal methodologies named above as the instruments with which the following parts of this study are constructed.

## b. Internet Regulation: a paramount of unilateralism

The internet has emerged to be one prime example of legal unilateralism[362]. Although the medium itself was by no means defined by limits or boundaries in the traditional sense – with the exception, probably, of some of its earliest versions which still had not reached an adequate level of maturity – early efforts to regulate it followed the traditional pattern of national (or intergovernmental) regulators getting down to set up legal frameworks which would control how the internet 'worked' within the ex-

361 David R. Johnson & David G. Post, *Law And Borders--The Rise of Law in Cyberspace*, 48 Stanford Law Review 1367–1402 (1996.)

362 Y. Benkler, *Internet regulation: a case study in the problem of unilateralism*, 11 European Journal of International Law 171–185 (2000.)

tent of their competence[363]. Unilateralism clearly prevailed over cooperation among nations and, as a result, internet related legislation quickly became fragmented, while it is meant to address one and the same thing[364].

Nevertheless, unilateralism in producing internet laws should not be so effortlessly dismissed as a bad choice[365]. One side of the coin being a fragmented mosaic of laws governing the internet, on the other side of the debating table stand those who believe that unilateralism in internet regulation may have given a boost to the evolution of the net as a medium[366]. In fact, there has been repeatedly suggested that differing legislations may have impeded internet growth and evolution in certain legal orders but may well have accelerated them in others. After one point, these gaps in internet advancement among different jurisdictions have paved the way for two distinct consequences[367]:

– from a technological point of view, this imbalance among internet laws of different legal orders meant that the net developed much faster in certain parts of the world than others. At the same time, though, after a certain point, the universality of the net permitted it to expand also in areas where stricter control and regulations had been responsible for poorer evolution. The economics of scale of internet based activities made it eventually defiant of borders and limitations and served as the driving force behind the emergence of global technological standards. The latter found the way to establish themselves even in jurisdictions where prima facie they were not allowed; yet, consumer demand made them a de facto necessity.
– from a legal point of view, irregularities in internet laws may, from the one side, be responsible for the fragmented legal mosaic with which the internet is governed today. Notwithstanding, these differing legislations mean exactly that there have been specific geographical areas and respective jurisdictions where internet laws became powerful more quickly and robust enough to affect regulatory trends in other jurisdictions as well. Just as technological standards were manifesting themselves more and more as of a truly global nature, so did internet

363 Chris Reed, *How to Make Bad Law: Lessons from Cyberspace*, 73 The Modern Law Review 903–932 (2010.)
364 *Id.*
365 Y. Benkler (note 362).
366 David R. Johnson & David G. Post (note 361).
367 Paul M. Schwartz (note 157).

laws[368]: some of them managed to rise above the others and to dictate pretty much the legal landscape regarding the internet in vast areas of the world[369].

To sum up, a system with imperfectly defined relations between local and global, private and public regulatory processes, and between exceptionalism and harmonization, as is the system of laws regulating the internet, serves as an institutional environment ideal for non-representative commercial or other organizations to embed their values in the regulatory framework that will eventually emerge[370]. This is a tendency we already witness in the field of internet law; more and more non-legislative entities contest a seat on the law-making table and several of them, either directly or representatively, manage to make their voice heard[371]. Similarly, an area which started to develop so recklessly as that of cloud computing, mainly due to the fact that it was not immediately recognized as a distinct phenomenon, might have set off from a unilateral basis regulation-wise but this is not necessarily bad. As long as, from now on, we make sure that we take the best from every cup (i.e. from every national or regional jurisdiction) and end up with a set of rules that will give universal and working answers to handling the cloud, unilateralism can turn out to be a good thing.

As the US Supreme Court stipulated in a landmark judgement of 1997[372]: "law dictates behavior and technology dictates behavior. Efforts to regulate technology usually end up in pushing technological develop-

368 Y. Benkler (note 362).

369 Paul M. Schwartz (note 157).

370 Baudouin. Dupret, *Legal pluralism, plurality of laws, and legal practices*, 1 European Journal of Legal Studies (2007.)

371 *Id.*

372 Reno v. American Civil Liberties Union, 521 U.S. 844 (1997); The case in brief: Two provisions of the Communications Decency Act of 1996 (CDA) that criminalized providing obscene materials to minors by on the internet were held unconstitutional by the Supreme Court of the United States (Supreme Court). Synopsis of Rule of Law: Where a content-based blanket restriction on speech is overly broad by prohibiting protected speech as well as unprotected speech, such restriction is unconstitutional. Facts: At issue was the constitutionality of two statutory provisions enacted to protect minors from "indecent" and "patently offensive" communications on the Internet. The District Court made extensive findings of fact about the Internet and the CDA. It held that the statute abridges the "freedom of speech" protected by the First Amendment of the United States Constitution (Constitution).

ment towards the desired direction". Regulating technology in one jurisdiction, although not a matter of clearly unilateral nature, usually prompts technology development towards the desired direction also in other jurisdictions as technological standards today are of a truly global nature[373]. Consequently, the choices regulators, especially those of the prominent legal orders, will make in the path they will shape for the regulation of the cloud in the years to come will play a decisive role in the development of cloud computing on a global scale. Therefore, it is of vital importance to make the best out of what unilateralism has produced so far as regulatory perceptions regarding the cloud and come up with a representative and, at the same time, effective governing scheme.

c. From governments to governance; learning to do laws for a borderless world[374]

Regulating a dynamic phenomenon such as the internet or cloud computing requires a profoundly different approach from legislators. It is not the scope of this study to go on and propose such far-fetched ideas as global laws for cloud computing. Even if this is what cloud computing and IT technologies regulations eventually evolve into, this cannot happen overnight and, certainly, it cannot be proposed at this moment as the next step; there is yet a great distance to be covered till such a development. The need for evolution in law making in such dynamic areas as cloud computing calls, however, for at least two significant changes of perspective:

– regulators need to be more in tune with the borderless nature of more and more constituting parts of today's world[375]. And this not by bringing down borders or homogenizing jurisdictions but by making sure that the laws put in place will take into account that they are meant to give sufficient answers and persuasive solutions to a far greater vital space than that of the geographical area where they are immediately applicable[376].

373 Paul M. Schwartz (note 157).
374 A. Froomkin (note 322).
375 David R. Johnson & David G. Post (note 361).
376 A. Froomkin (note 322).

– law making process has to be more open towards non-legislative bodies and actors and their input[377]. Of course, this is not to mean that existing jurisdictions and their law-processing workflows are ready or should admit non-legislative actors as peers on the table; however, it is imperative to come up with ways in which the key players of an area can provide their crucial first-hand experience, suggestions and proposals and that this input shall be taken into serious consideration when formulating laws for such unconventional phenomena as the cloud.

In order to initiate a transition from laws for governing to laws for governance scholarly opinion has brought forward certain guiding principles that should characterize the new law-making mindset. Without prejudice to other propositions, the ideas that are suggested as the most crucial ones are:

– private sector should lead the debate on how sectors, whose development was spurred primarily by non-state actors, need to be regulated[378]. This proposal should not be understood as a call for a carte blanche to private entities. It goes without saying that the answer to the need for more efficient laws is not laws that would facilitate recklessness. However, legislators need to make sure that private actors, especially those spearheading the way in a specific field, will have considerable autonomy to take their sector one step further at any time and that their ideas about how activity in the sector could be streamlined through laws are carefully heard.
– governments are encouraged to avoid undue restrictions[379]. Experience and history tell us that in dynamic phenomena, such as cloud computing, restrictive approaches usually either hinder progress or are simply rendered invalid via a workaround. Consequently, it does not seem meaningful to try to control what will happen next in a sector by forbidding certain things from happening. The key to better regulation is definitely not greater or unjustified restrictions.

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377 Dennis D. Hirsch, *In Search of the Holy Grail: Achieving Global Privacy Rules Through Sector-Based Codes of Conduct*, 74 Ohio State Law Journal 1030–1069 (2013.)

378 *Id.*

379 A. Froomkin (note 322).

– the legislators' mindset should be towards fostering a predictable, minimalist, consistent and simple legal environment[380]. In fact, many scholars agree that this should not be just the wish pursued with every new adopted legislation but rather the primary goal future laws should serve: ensuring that the regulated environment in which law subjects will be let to act will be a simple-to-understand and opaque one.
– legislators should recognize the unique qualities of cloud computing[381]. This means that, first of all, the cloud should not be confused with any other neighboring phenomenon and should be clearly defined before regulated. In this manner, we can be more certain that the laws we will end up with will correspond to the actual matters they aim to settle.
– further development of cloud computing should be facilitated in an orchestrated global manner[382]. This call for globalized action does not immediately mean reckless, unimpeded growth that knows and needs to respect no boundaries or particularities. Nevertheless, a minimum common understanding between legislators of different legal orders would definitely foster this globalized growth much more effectively.

As far as the most suitable locus to facilitate this transition from governing to governance is concerned, scholarly opinion largely agrees that international law can be a good first playing field in the progress towards greater harmonization of laws about phenomena such as the internet or cloud computing. By carefully studying what has been happening already on the front of the internet, which is a relatively riper phenomenon than cloud technologies, one could recognize the following forces that facilitate harmonization processes[383]:

– the most decentralized form of harmonization mechanism generally occurs when norms spontaneously develop within a usually specialized transnational community (e.g. lex mercatoria)[384].
– a strong harmonization drive also builds up when one jurisdiction's law becomes the de facto rule also for other places, perhaps due to regula-

380 Paul M. Schwartz (note 157).
381 David R. Johnson & David G. Post (note 361).
382 Ralf Michaels, *Global Legal Pluralism*, 5 Annual Review of Law & Social Science (2009.)
383 Joel Reidenberg (note 173).
384 *Id.*

tory arbitrage (e.g. a country with excellent internet connectivity manages to set the pace in the field of internet regulation globally)[385]
- harmonization may also be accelerated under conditions of regulatory competition. i.e. when one jurisdiction copies elements of another in a race for supremacy in a harmonized field[386]
- participation of governments in communal law reform projects also fosters harmonization forces (e.g. UNCITRAL[387]).
- proven contributors to harmonization are the supranational bodies with a mandate to harmonize national laws of member-states (e.g. the United Nations bodies)
- last but not least, international and, especially, multilateral treaties also serve the harmonization goal.

## d. So far, existing laws about cyberspace are bad laws. Lessons learnt?

Excessively complicated legal frameworks tend to prove themselves as bad laws[388]. Classical examples of this rule are laws governing phenomena which are global or borderless by nature but which are dealt with in a conventional jurisdictionally compartmentalized manner. Such over-complex sets of laws have serious disadvantages, particularly a greatly weakened normative effect, and problems of contradiction and over-frequent amendment. One of the most common paradigms is the until now produced cyberspace law.

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385 David R. Johnson & David G. Post (note 361).; see also Chapter 3.

386 Ralf Michaels (note 382).

387 UNCITRAL is the core legal body of the United Nations system in the field of international trade law. A legal body with universal membership specializing in commercial law reform worldwide for over 40 years, UNCITRAL's business is the modernization and harmonization of rules on international business.
Interpreting trade as meaning faster growth, higher living standards, and new opportunities through commerce, UNCITRAL is formulating modern, fair, and harmonized rules on commercial transactions. These include:
Conventions, model laws and rules which are acceptable worldwide
Legal and legislative guides and recommendations of great practical value
Updated information on case law and enactments of uniform commercial law
Technical assistance in law reform projects
Regional and national seminars on uniform commercial law.

388 Chris Reed (note 363).

In legal theory, it is possible to judge the quality of law as long as, at any such attempt, you adopt a specific legal perspective from which to execute this judgement[389]. Law is broadly defined to be 'a system of rules which a particular country or community or group of subjects recognize as regulating their actions and which may be enforced by the imposition of penalties'[390]. A fundamental aim of any law, inherent in this definition, is to influence its subjects' behavior to some useful end. Thus, when a law fails to achieve such influence, it is necessarily not as good as one which does achieve these aims. This conclusion also applies to whole groups of laws regulating different aspects of the same phenomenon.

The law system which attempts to regulate activities in cyberspace is, taken as a whole and as it currently stands, of a lower quality than of what if could have been had the laws which constitute that system been devised more effectively. One of the reasons for this low quality of the existing corpus legis for the cyberspace is that cyberspace laws have, until present, fixated on the precision of rules to the exclusion of the basic morality, which must underlie all systems of law[391].

The basic morality that any law or system of laws needs to be characterized with in order to prove successful has been greatly discussed and formulated by legal philosopher, Lon Luvois Fuller[392]. Throughout his academic discourse, Fuller went at great lengths to understand what made laws fail. In the end, he proposed his famous 'eight routes of failure of any legal system', a set of principles and conditions which, if met at the heart of a corpus legis or an entire legal system, can answer as for the reasons of their failure[393]. It is worth pointing out that the Fuller routes (or principles as they are commonly alternatively denominated) do not need to be cumulatively traceable in a system of laws for it to be regarded as a failed one; presence of even one of them suffice to explain for failure. These eight principles are:

389 Y. Benkler (note 362).

390 Legal Information Institute – an Open Access to Law Project, Conrell University, Faculty of Law; available online at: https://www.law.cornell.edu/wex/legal_systems, last accessed: 03/12/2015.

391 Chris Reed (note 363).

392 Edwin Tucker, *The Morality of Law, by Lon L. Fuller*, 40 40 Indiana Law Journal 270 (1965) 270–279 (1965.)

393 Lon L. Fuller, The morality of law (1965.)

– The lack of rules or law, which leads to ad hoc and inconsistent adjudication.

This is not so relevant in the case of laws on cyberspace. Quite the opposite, for those aspects of cyberspace for which laws have already been put together, they are so numerous and contradictory towards each other that, in the end, failure is due to their abundance.

– Failure to publicize or make known the rules of law.

Although not the most prevalent, this principle can indeed be attributed to the current body of laws governing cyberspace. Especially on the level of international law, there are treaties and conventions dealing with specific aspects of the cyber world which are only on the sidelines of legal attention and remain largely unused as legal tools.

– Unclear or obscure legislation that is impossible to understand.

This is one of the Fuller principles most excessively defining the problematic nature of cyberspace law till today. Cyber laws attempted to regulate technological concepts which had already been considerably advanced and complicated, while, equally frequently, the real life repercussions of these complex technological notions were also perplexed situations. Regrettably, these laws fell victims to this perplexity and, instead of trying to clear out the way and provide simple answers to complicated situations, they went on reiterating this complexity on the regulatory level. This danger is one of the things that needs to be avoided at all costs also in the case of any regulation for cloud computing. The fact that the cloud, its applications and the real life situations it facilitates are already quite advanced should not trick us into believing that the laws governing them need to be equally perplexed.

– Retrospective legislation.

In an effort to bridge the gap between the time when cyberspace had started to matter and affect real life and the time when, finally, laws to regulate it were adopted, legislators tend at times to devise legal instruments with a retrospective nature. However, unless we are talking about aspects of human activity that cannot be left unregulated, even for a short block of time, such as the issues dealt with by criminal law, retrospectivity is not always the way to go. After all, until laws came to exist, areas such as the internet were self-regulated in a de facto sense and it is of little, if any use, to try and arrange otherwise ex post situations that have been settled since long ago in a particular functioning manner.

– Contradictions in the law.

This is the second most prevalent problem with currently existing cyberspace legislation. Given that Fuller was applying these principles not only against individual laws but also against bodies of laws governing one topic across borders and jurisdictions, contradictions are probably the gravest wound on the body of cyberspace law. What is more, this is probably the gravest issue also with frameworks dealing with cloud computing affairs till now: as these laws were developed simply under the mindset and legal traditions prevalent in each and every legal order, forgetful of the fact that they are meant to be applied to issues of purely cross-border nature that call for unanimous response otherwise we can only expect even more complicated situations after than prior to the application of a particular law.

– Demands that are beyond the power of the subjects and the ruled.

When it comes to cyberspace laws, this Fuller principle could be traced to the burdensome procedures some pieces of legislation necessitate from cyber law subjects. For instance, the licensing processes that some national laws impose on entities that wish to execute trans-border data transfers compared to the volume and frequency with which such transfers occur in the course of their business is nowadays clearly counter-productive.

– Unstable legislation (e.g. daily revisions of laws).

It is not so much the case in cyberspace laws. On the contrary, one might say that the delays occurring in the revision processes of cyberspace laws are mostly the problem rather than the very frequent revisions of them.

– Divergence between adjudication/administration and legislation.

This is an often malice across many areas of law, the EU law produced through Directives being prominent among them. Such was the case also with the EU Data Protection Directive and the differentiating applications it came to have across jurisdictions of the EU Member States. This is attempted to be ameliorated with the General Data Protection Regulation, which will be directly applicable across EU jurisdictions and is meant to replace the Directive[394].

In summary, already existing laws for cyberspace issues teach us a thing or two about the reasons that could lead to the production of bad laws, which, if disregarded for long, can cause this body of poor quality

394 However, there are still counterarguments as to the extent in which the GDPR will manage to establish a truly unanimous regulatory space across the EU. For more, see Chapter 4.

legislation to grow exponentially[395]. Since, so far, there has been no concrete cloud regulation, it is a golden opportunity to avoid past mistakes committed in neighboring fields and produce laws that will be effective and to-the-point bearing in mind the particularities of the cloud right from the beginning.

### e. Lex informatica: The formulation of policy rules for the web through applied technology. Can it offer any useful insight for the conceptualization of a dedicated cloud computing regime?

The notion of 'lex informatica' was originally introduced in legal discourse over internet affairs around the second half of 1990s, when the web started to gain momentum as a new space or means of human activity. By 'lex informatica' it is to be understood the whole range of interpretations, adaptations and approaches to practices and activities on the web and the norms and generally accepted policy rules that have been concretized thereof[396]. Lex informatica is, one could assert, the de facto way in which participating actors fine-tuned and self-regulated their activities on the internet. A significant amount of these policies and norms have, over the years, transformed into laws or have, at least, influenced the respective law making processes. Of course, there is at the same time an equally great deal of lex informatica that has not yet made it to law status. However, promoters of the notion have constantly suggested that this set of rules for information flows imposed by technology and communication networks call for policymakers to understand, consciously recognize, and encourage them.

It goes without saying that lex informatica is not law, in the conventional sense of the term, because it has certain differences from typical laws. On the other side, it is these very differences that have permitted it to establish itself and serve well the functioning of regulating online activities. To begin with, jurisdictionally, the regime that lex informatica encourages provides overlapping of rule systems. Jurisdiction for conventional legal regulation is primarily based on territory. Legal rules apply only in a well-defined place where a sovereign can exert its power. In contrast, the juris-

395 Chris Reed (note 363).
396 Joel Reidenberg (note 173).

dictional lines for lex informatica do not depend on or necessarily agree with territorial borders[397].

Instead, the jurisdictional space of lex informatica is the network itself because the governing rules apply to information flows across network spheres rather than physical places. Consequently, lex informatica does not contest to replace legal rules. The latter can still apply to each constituent part of the network that is located in a particular physical jurisdiction.

Lex informatica, bearing all basic characteristics of a legal regime, offers both the possibilities of customization of rules and inalienable rules. The most commonplace customization mechanism for lex informatica is the various technological configurations. It has also been attributed with distinct enforcement properties. Legal regulation depends primarily on judicial authorities for rule enforcement. Rule violations are pursued on an ex post basis before the courts. Lex informatica, on the contrary, allows for automated and self-executing rule enforcement. Technological standards can be designed to prevent actions from taking place without the proper permission or authority.

In summary, lex informatica is defined by three sets of particularly valuable characteristics for establishing information policy and rule-making in an information society. First, technological rules do not rely on national borders. Second, lex Informatica permits easy customization of rules through a variety of technical mechanisms. Finally, lex informatica rules may also benefit from built-in self-enforcement and compliance-monitoring capabilities[398].

As already previously stated, lex informatica and legal rules exist both parallel to and overlapping one another. Therefore, legal discourse never suggested that lex informatica should substitute law. Instead, this relationship means that policymakers should add lex informatica to their set of policy instruments and pursue lex informatica norms as an effective substitute for law where self-executing, customized rules are desirable.

In conclusion, lex informatica is a de facto existing complex source of information policy rules on global networks. Lex informatica does not constitute a separate jurisdiction, antagonistic to the conventional ones. It just provides useful tools to formulate rules customized for particular situ-

397 David R. Johnson & David G. Post (note 361).
398 Joel Reidenberg (note 173).

ations, allowing the coexistence of varying information policies in a heterogeneous environment. The pursuit of technological rules that embody flexibility for information flows maximizes public policy options; at the same time, the ability to embed an immutable rule in the architecture of a legal system allows for the preservation of public-order values. These tools can lessen a number of problems that traditional legal solutions face in regulating information society. As it has been pointed out, despite being on the table as a concept, already since about 20 years, lex informatica has not yet been unquestionably recognized as a working supplement to legal regulation. Yet, the numerous instances at which it has proven to be of use can serve as a reference for the perspective we should view cloud computing regulation from.

## f. Sectoral codes of conduct: the most dedicated attempt to come up with cloud computing laws so far and how it could be improved

Globalization of commerce and the intensification of cross-border trade were the main driving forces behind a relatively recent effort to regulate affairs in a homogenous and dedicated manner as regards specific business sectors. Sectoral codes of conduct are regulations concluded and agreed by the most prominent actors in a specific sector of (usually) economic activity, which, thanks to the gravitational positions these actors hold within the sector, reach a status of governing principles for the affairs they apply to[399]. A quasi bi-product of the sectoral rules of conduct are the 'binding corporate rules' (BCRs). These are regulations devised and self-imposed by multinational companies active in the field of cross-border data transfers[400]. BCRs were created in response to the need for ensuring adequate and comparable levels of protection to those upheld within the European Union when data is transferred to a third country. BCRs have been the most ad hoc effort till now in the strive to construct regulatory schemes for IT related issues for which currently existing regulations are not concretized enough and deal only in an analogous manner with.

The problem with sectoral codes of conduct so far has been that, although they are concluded precisely in an effort to help the industry work

399 Dennis D. Hirsch (note 377).
400 Christopher Millard, Cloud Computing Law (2013.)

more efficiently in the environment delineated by the laws applicable at the time, they lack the legitimacy of law per se[401]. The minds behind sectoral codes are members of a given sector themselves who, no matter how much gravity they may exert in their sector, they are not in the same institutional position as law makers. A great share of scholarly opinion asserts that if this bridging between sector actors and their working principles and institutional regulators is somehow achieved, then sectoral codes could well be the forerunner of sectoral legislations much more in touch with the specific nature of each sector. Actually, this challenge, i.e. how to shorten the gap between actors of a sector and law makers that are charged with formulating laws that will govern this sector, is at the root of the problem of efficient law making[402]. When it comes to increasing the efficiency of sectoral codes for the IT business, one of the most promising proposals put forward is the adoption of internationally approved industry codes of conduct[403]. This could work as follows: The IT sector would draft a code of conduct on issues such as privacy, cloud computing, big data etc., which would be ensured that it fulfills the core requirements of the main pieces of legislation on the table, at that given time, on a global scale (for instance, the E.U.'s relevant pieces of legislation, the APEC forum's Privacy Principles and, maybe, also other regional privacy regimes). Competent sector representatives would then submit the code to the relevant authority of each regional jurisdiction. If the authority gives the green light for the code, firms that comply with it can know that their activities meet the requirements for that jurisdiction (the E.U., the APEC countries, etc.). In this way, a single industry code, approved in each of the regional jurisdictions, can step-by-step reach a status of a nearly global set of privacy rules for that sector.

So far, all the attempts to develop such codes of conduct were initiatives of a single firm or group of companies, usually of a multinational nature[404]. It goes without saying that this was a factor weakening the efficacy of these efforts. Apart from any discipline it might ensure for the company which self-imposed the code on it, any code of binding corporate rules is, by nature, impractical for the great majority of companies to abide

401 Paul M. Schwartz (note 157).
402 Paul M. Schwartz (note 157); Joseph Raz, *Legal Principles and the Limits of Law*, 81 The Yale Law Journal 823–854 (1972.)
403 Dennis D. Hirsch (note 377).
404 Chris Reed (note 363).

by, expensive for governments to administer and enforce, and difficult for stakeholder groups to track and monitor. By looking into the possibility of developing sector based codes, not only does a profoundly different attempt to regulate effectively such fast developing sectors like cloud computing emerge, but we can also gain significant insights into the collective and synthetic way in which regulators should work when devising new laws for cloud computing or even other similar subject matters.

A sectoral code for cloud computing would need to provide persuasive answers to, among others, the following two pressing questions:

– problems related to privacy protection

Differences among national privacy regimes pose a fundamental challenge for the protection of individual privacy[405]. Some companies may purposely orchestrate their operations in such a way in order to take advantage of "regulatory arbitrage" prevalent in certain jurisdictions. Global data flows, combined with national privacy laws, can result in migration of personal data primarily to nations with the weakest laws or, at minimum, to temporary gaps in privacy protection as the data moves from one jurisdiction to the other. Even in instances when each of the nations a given set of data crosses has implemented meaningful privacy laws, the cross-border nature of a standard data transfer today makes it difficult to track compliance with them.

– problems for the business

This lack of consistency among national laws additionally poses problems for the businesses that engage in cross-border transfers of personal data and wish to be compliant with legal requirements[406]. These companies must closely track the flow of their data in order to know which jurisdiction's rules apply at any given moment, a process that can be quite costly.

As a result, a new framework for privacy protection needs to be constructed bearing in mind this global scale of the phenomenon it is expected to regulate. Through this law, it will be attempted to decrease the cost of doing business globally, provide consumers with consistent levels of protection worldwide, and contribute to global economic growth.

Now that the aims of a new law on privacy and the cloud have been crystallized the big question is how to achieve these goals. This is, of

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405 Joel Reidenberg, *Resolving Conflicting International Data Privacy Rules in Cyberspace*, 52 Stan. L. Rev. 1315–1371 (1999.)

406 P. Blume, *Transborder data flow: is there a solution in sight?*, 8 International Journal of Law and Information Technology 65–86 (2000.)

course, a question of regulatory design and by consulting regulatory theory we can have answers with respect to the possible approaches. Any question of regulatory design requires the designer to answer two basic questions: Who will regulate? At what level will that entity regulate?

In the case of a sectoral code for the market of cloud computing the regulators need to be clearly more than one and spread out in a horizontal and vertical manner[407]: (1) government will regulate industry (direct government regulation), (2) industry will regulate itself (self-regulation), and (3) government and industry will intentionally and expressly share responsibility for the drafting and enforcement of rules (co-regulation). Regarding the question at what level each of these entities will regulate, there are likewise three possible answers[408]: (1) regulating at the level of the individual company (company-based regulation), (2) regulating at the level of the industry sector (sector-based regulation), or (3) regulating at the level of the economy as a whole (economy-wide regulation). Each of these three levels of regulation presents distinct features:

– direct government regulation[409]

In direct regulation, government bodies create, monitor compliance with, and enforce the regulatory requirements.

The advantages of such an approach are all those commonly associated with direct regulation. Governments are expected to establish relatively uniform sets of rules. Uniformity would make it easier for regulators to monitor compliance with, and enforceability of these rules. Such a regulatory regime would also create a level playing field for business. Nevertheless, direct regulation, in the form of national laws enforcing an international treaty, traditionally face important obstacles and presents significant downsides. At first and from a purely practical perspective, it is extremely difficult to establish an international treaty of any sort, let alone one that will merge together all the differing views existing today around the world on the issue of privacy and IT technologies.

– self-regulation[410]

Because of the concerns pointed out above some question the viability of direct government regulation and consider self-regulation as the most suitable approach to privacy over IT governance. Under this approach, indus-

407 Dennis D. Hirsch (note 377).
408 *Id.*
409 A. Froomkin (note 322).
410 Joel Reidenberg (note 173).

try sets, monitors, and enforces its own standards. Multinational companies could utilize self-regulation to formulate and impose uniform, cross-border privacy rules. To achieve this a specific company, or a sector organization that represents it, would firstly establish a voluntary set of privacy rules. It would then commit itself to following that set of rules throughout its international operations establishing in this manner a single, global set of privacy rules for the company.

Promoters of self-regulation argue that, since the rules developed in this method come from industry itself, they are able to tap into business knowledge and thereby produce more intelligent and effective rules than government regulation[411]. It is further argued that self-regulatory entities, which do not need to comply with notice-and-comment procedures and other such bureaucratic legal requirements, should be able to update their rules far more quickly than government regulators can.

Notwithstanding its promoters' arguments, there are both practical and theoretical reasons to question whether self-regulation is the best choice for international privacy rules. For starters, self-regulation, by definition, does not involve formal government approval[412]. As a consequence, it neither provides the legal safe harbor that companies need to engage confidently in cross-border data transfers, nor saves firms from the costly duty of having to track and comply with multiple national privacy laws.

Regulatory theory suggests additional reasons to be cautious about self-regulation. Businesses have an incentive to draft self-regulatory rules on the surface offer solid protection but are not, in fact, very stringent[413]. Self-regulation accordingly tends to be more lenient than government requirements, and may not achieve public goals like privacy. Theory further indicates that companies may commit to impressive-sounding self-regulatory goals but then fail to subject themselves to the independent monitoring needed to make these claims credible.

– co-regulation

What has been discussed so far may well explain why the greatest focus is lately on "co-regulatory" initiatives in which government and industry expressly share responsibility for drafting, monitoring, and enforcing privacy

411 Christopher T. Marsden, Internet Co-Regulation. European Law, Regulatory Governance and Legitimacy in Cyberspace (2011.)

412 Neil Gunningham & Joseph Rees, *Industry Self-Regulation: An Institutional Perspective*, 19 Law & Policy 363–414 (1997.)

413 Christopher T. Marsden (note 411).

standards[414]. Proponents of co-regulation claim that it combines the advantages of self-regulation with those of direct regulation[415]. Like self-regulation, co-regulatory methods such as enforceable codes of conduct allow industry to draft the specific privacy rules. They therefore profit from industry knowledge and expertise in the same way that self-regulation does. They are also more likely to get industry to accept and buy in to rules that they or their peers have drafted. Like direct regulation, co-regulatory strategies generally call on government to establish the privacy framework which all industry-drafted rules must conform to. Co-regulatory schemes also get regulators involved in assessing, monitoring compliance with, and enforcing rules. This governmental involvement increases the guarantees that the rules will truly protect the public interest, and that companies will comply with them. In conclusion, co-regulation promises rules that are stringent, intelligent and up-to-date, that government enforces and industry accepts. This is a promising picture for an area like cloud computing and privacy law where technologies and business models change too quickly for direct regulation, but where the stakes are too high to rely solely on industry self-regulation.

Co-regulation, of course, has its weaknesses too. It envisions a government–industry negotiation over rules. Such regulation through "deal-making" can lead to sweetheart deals that favor industry interests over those of the public[416]. An equally alarming point is that co-regulation can sometimes provide certain companies with an advantage over others, with the chances being, most likely, with those controlling a decisive share of the market. Last but not least, co-regulation will likely be less nimble and adaptive than self-regulation.

### g. Efforts undertaken so far on the front of sector-based regulation of IT and their common weakness

The initiatives that have been undertaken so far towards self-regulation in the IT sector — binding corporate rules (BCRs), community based partici-

414 Dennis D. Hirsch (note 377).

415 M. Gillen, *Internet Co-Regulation: European Law, Regulatory Governance and Legitimacy in Cyberspace*, 20 International Journal of Law and Information Technology 147–149 (2012.)

416 Christopher T. Marsden (note 411).

patory research (CBPRs), and the once mighty U.S.–E.U. Safe Harbor Agreement[417]— definitely have shared certain common virtues. They have served as bases for companies (and, in the case of the Safe Harbor Agreement, self-regulatory privacy programs such as TRUSTe[418]) with the means to create an approved, cross-border set of privacy rules by which to do business[419]. They have attempted to do this through co-regulatory mechanisms that utilize industry knowledge to produce intelligent rules. Unfortunately, each of them has worked only with respect to certain regions (i.e. BCRs within the borders of the E.U.; CBPRs among APEC member nations; and the Safe Harbor Agreement between the EU and the United States), and none managed to provide a truly global solution[420].

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417 The international Safe Harbor Privacy Principles or Safe Harbor Privacy Principles or the Safe Harbor Agreement were principles developed between 1998 and 2000 in order to prevent private organizations within the European Union or United States which store customer data from accidentally disclosing or losing personal information. They were struck down on October 6, 2015 by the Court of Justice of the European Union (CJEU) with its Judgement in the case Maximillian Schrems v Data Protection Commissioner. Under the Safe Harbor Regime, US companies storing customer data could self-certify that they adhered to 7 principles, to comply with the EU Data Protection Directive and with Swiss requirements. The US Department of Commerce developed privacy frameworks in conjunction with both the European Union and the Federal Data Protection and Information Commissioner of Switzerland.
Within the context of a series of decisions on the adequacy of the protection of personal data transferred to other countries, the European Commission made a decision in 2000 that the United States' principles did comply with the EU Directive applicable at the time (the DPD) – the so-called "Safe Harbor decision". However, after a customer complained that his Facebook data were insufficiently protected, the ECJ declared in October 2015 that the Safe Harbor Decision was invalid, leading to further talks being held by the Commission with the US authorities towards "a renewed and sound framework for transatlantic data flows".
Consequently, the European Commission and the United States agreed to establish a new framework for transatlantic data flows on 2nd February 2016, known as the "EU-US Privacy Shield", which governs relevant data transfers between the two jurisdictions since then. See also the CJEU's Judgement in Maximillian Schrems v Data Protection Commissioner, C-362/14, ECLI:EU:C:2015:650.

418 TrustArc (formerly TRUSTe) is a technology compliance and security company based in San Francisco, California. It became famous worldwide thanks to its software and tools were used to help corporations update their technology so that it complies with government laws, or operates using best practices.

419 Paul M. Schwartz (note 157).

420 Dan Jerker B. Svantesson (note 360).

Notwithstanding, each of them has been worthy as an effort toward the goal of broadly applicable, cross-border privacy rules.

At the same time, all three initiatives suffer from the same fundamental weakness: They rely on individual companies, rather than industry sectors, to draft the cross-border privacy rules[421]. In other words, they are company-based rather than sector-based codes, which undermine their contribution to the ultimate goal of universally effective IT regulation. Additionally, company-based codes also frustrate public participation thus enduring reduced accountability.

In light of these observations, it is becoming more and more tempting to switch to the sectoral approach regarding construction of a regulatory framework for the cloud, over company initiated solutions.

h. Seeking the way forward on cloud computing regulation in the field of global administrative law

i. Defining global administrative law

As it has been demonstrated so far, seeking to produce dedicated and in principle harmonized cloud computing regulation, either in the form of concrete laws or just as generic regulatory principles, cannot be achieved via conventional routes of law making (i.e. international law treaties or supervisory bodies) nor via arbitrary ventures such as the construction of an IT-only legal order that will be built on its own foundations, totally separated by other disciplines of law (such as a full-fledged corpus of lex informatica).

For cloud computing regulation to develop in a coherent manner to mature and bond along with other co-competent disciplines of regulation and provide persuasive answers a mid-solution needs to be found, one that will permit adopting the innovative attitude that IT law should be defined by but, at the same time, will not make the resulting principles look unrealistic or out of touch with the reality they aim at regulating. The path towards achieving this precarious balance goes through the field of global administrative law, its methods and tools.

421 Christopher T. Marsden (note 411).; M. Gillen (note 415).

The term 'global administrative law' indicates an emerging field of law development that is founded on a twofold principle: on the one side, that a great deal of what has been recently termed in law and international studies as "global governance" essentially constitutes, one way or another, administrative action; and, on the other side, that it is more and more typical of such action to be regulated by administrative law-kind principles, rules and mechanisms – particularly, those putting am emphasis on participation, transparency, accountability and review[422]. Consequently, global administrative law is a concept and set of methods for developing regulatory frameworks regarding cross-border phenomena of modern life which does not seek to turn a blind eye on existing legal norms and structures but rather aims to co-ordinate all suitable structures, procedures and normative standards for regulatory decision-making including transparency, participation, and review, and the rule-governed mechanisms for implementing these standards[423]. However, what it does differently compared to conventional sub-disciplines of international or public law is that, instead of limiting itself to the means available within each sub-discipline alone, it gathers all of the previously named resources that may be applicable to formal intergovernmental regulatory bodies but also to informal intergovernmental regulatory networks, to regulatory decisions of national governments where these are part of or constrained by an international intergovernmental regime, even to hybrid public-private or private transnational bodies[424]. To put it plainly, the main focus of global administrative law is not the specific content of substantive rules, but rather the coordination on the operation of existing or possible principles, procedural rules and reviewing and other mechanisms relating to accountability, transparency, participation, and assurance of legality[425] from different jurisdictions or legal orders with a view to achieving an as sound as possible global governance in the field under discussion, i.e., in this case, in IT and, specifically, in cloud computing regulation.

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422 http://www.iilj.org/GAL/.

423 Benedict Kingsbury, Nico Krisch & Richard Stewart, *The Emergence of Global Administrative Law*, 68 Law and Contemporary Problems 15–62 (2005.)

424 Sabino Cassese, *Administrative Law without the State – The Challenge of Global Regulation*, 37 N.Y.U. J. Int 663–694 (2005.)

425 Alexander Somek, *The Concept of 'Law' in Global Administrative Law: A Reply to Benedict Kingsbury*, 20 Eur J Int Law 985–995 (2009.)

ii. The general theory on global administrative law and its principles

Pursuant to the definition above, the theory backing global administrative law instead of viewing clearly divided levels of regulation (private, local, national, intergovernmental etc.), affirms the existence of numerous overlaps among different actors and layers forming the wider pool of 'global administrative space'[426]. These overlaps can occur between international institutions and transnational networks, but also domestic administrative bodies when these form part of international regimes or when their acts can provoke transboundary regulatory effects[427] or even when the subject matter for which they are responsible extends by nature beyond the geographical borders of their competence, just as it happens with cloud computing.

Global administrative law and its principal device the 'global administrative space' were devised precisely due to the pressing need for the law, with relation to several regulatory issues, to get detached from the conventional understandings of international law by virtue of which there is a sharp separation between the domestic and international element[428]. However, in an ever increasing range of regulatory affairs this global administrative space is nowadays taken up by actors such as transnational private regulators, hybrid entities such as public-private partnerships involving states or inter-state organizations, national public regulators whose regulatory call has external effects but may not be controlled by the central executive authority, informal inter-state bodies with no treaty basis or formal interstate institutions (such as the United Nations system of organizations) affecting third parties through administrative type actions[429]. As it can be easily inferred, a great deal of the administration of global governance has become highly decentralized and not very systematic. This arrangement affects not only the executive but also the judiciary practice with national courts finding themselves in a position where they need to review the acts of international, transnational, even national bodies that are essentially administering decentralized global governance systems; in this manner, na-

426 Benedict Kingsbury, *The Concept of 'Law' in Global Administrative Law*, 20 Eur J Int Law 23–57 (2009.)
427 N. Krisch, *The Pluralism of Global Administrative Law*, 17 European Journal of International Law 247–278 (2006.)
428 Benedict Kingsbury (note 426).
429 Sabino Cassese (note 424).

tional courts also form part not only of the review but of the actual administration of a global governance regime[430], given that they are called to interpret laws developed by bodies on the regulatory level of global administrative law or ones that they address cross-border phenomena.

Equally confluent as the actors making it are also the sources of global administrative law; due to the fact that it is practiced at multiple fora, its norms may come to be the result of convergence among different sources of obligation applicable to a matter, ranging from national laws to regulations of law-applying institutions, to contracts establishing private rights based on those laws, to rules of international law on the same issues.

### iii. Theoretical foundations of global administrative law based on US and EU administrative law

Scholarship in the US has been pondering on the legitimizing elements of global administrative law for several years since the term came to the forefront of academic discourse. Lately and after extensive debate, it has been proposed that for global administrative law the same fundamental principles that define US administrative law should apply as well[431]. These are:

- Transparency: in US public administrative legal discourse the call for transparency is fulfilled by means of a series of practices, namely, publication of agency rules, decisions, procedures and policies, as well as public access to agency records.
- Fair and equitable decision making procedures: the main means of guaranteeing fairness and equal treatment in public administrative procedures under US law are notice of proposed agency decisions and opportunity of affected or interested persons to submit evidence and argument to the decision maker.
- Decision requirements: decisions made up following procedures prescribed by US administrative law should be accompanied by agency statements of factual findings and reasons for decisions, based on an administrative record that includes relevant agency records and submissions by affected or interested persons.
- Availability of judicial review of final agency decisions.

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430 Alexander Somek (note 425).

431 Richard B. Stewart, *The Global Regulatory Challenge to U.S. Administrative Law*, 37 N.Y.U. J. Int 695–762 (2006.)

– Legality: the term refers to the need for reassurance regarding any decision made by public administrative agencies that it was made in conformity with binding legal norms, including those established by the Constitution, statutes, Executive Orders (if reviewable), and agency regulations and adjudicatory decisions.
– Reasoned and responsive exercise of discretion: this principle refers to the need for assuring that the deciding agency has considered relevant alternatives and their implications and provided a reasoned justification for its choice among the alternatives, giving due account and responding to the material evidence and arguments in the submissions of affected or interested persons.

At the same time, the doctrine of global administrative law has received considerable attention within EU legal scholarship as well. Besides, as Hans-Heinrich Trute is noting, the European Union, with all its administrative authorities that are competent for regulating on numerous issues along with national counterparts from the EU's Member States, is possibly one of the prominent venues where essential administrative law and practice with acute cross-border characteristics is made[432]. Consequently, it is only reasonable that there has been discourse on the theoretical foundations of global administrative law in Europe as well the outcome of which finds democracy and the rule of law as the principles at the core of global administrative praxis. In particular, for European legal thinking 'the legitimating principles of any Western administrative law system are found in the twin ideals of democracy and the rule of law'[433]. To a certain extent, as the European Union has demonstrated through its enlargement or cooperation procedures with third countries[434], it holds these two ideals as the cradle of every system of administrative law. Within the EU itself, democracy and the rule of law have matured into constitutional principles, firmly embedded in the political arrangements and institutional texts of the Union[435]. As a result, these dual values have come to be regarded sine qua non conditions for any Western system of government and political theory. Expectedly, this also applies for global and transnational systems of gover-

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432 Hans-Heinrich Trute, *Law and Knowledge – Remarks on a Debate in German Legal Science*, 32 Ewha Journal of Social Sciences 34 (2016.)
433 Carol Harlow, *Global Administrative Law: The Quest for Principles and Values*, 17 Eur J Int Law 187–214 (2006.)
434 P. P. Craig & G. de Búrca (note 287).
435 *Id.*

nance, such as the ones developed under the auspices of global administrative law.

## i. Legal pluralism in global administrative law

### i. The proposal

The juridical concept of 'legal pluralism' has been part of the discourse about how laws are made, how their applicability is determined and how supremacy is recognized for several decades. Naturally, at the beginning, legal pluralism could be perceived only through the lens of sovereign jurisdictions, which were largely concurrent with national legal systems. Until about mid-1980s scarce were the scholars that had come forward to suggest an idea of synthesis and co-existence under rules of hierarchy of laws and norms from varying legal orders, on a regional or even global scale[436].

Equal was the evolution of the meaning of legal pluralism which is defined as 'the existence of multiple legal systems within one (human) population and/or geographic area'[437]. At the early steps of legal pluralism as an arrangement among co-existing laws 'one human population' was generally understood to mean the populace of a country or the people of the same tribal origins who, even though they might have been living across different, but as a rule neighboring, countries, were allowed to uphold at least one additional legal system apart from that of the state where they resided. Similarly, the notion of 'geographic area' usually meant the territory of a sovereign state or, at best, a region extending across more but still neighboring countries. This remains the case also today, as plural legal systems are particularly prevalent in former colonies, where the law of a former colonial authority may exist alongside more traditional legal systems (i.e. customary law)[438]. However, as the mechanics of coexistence and cooperation among different laws are evolving, today legal pluralism is not understood only through the stricto sensu interpretation discussed

436 John Griffiths, *What is Legal Pluralism?*, 18 The Journal of Legal Pluralism and Unofficial Law 1–55 (1986.)
437 *Id.*
438 *Id.*

above but there is a lato sensu dimension of legal pluralism as well[439]. Through that perspective, the vital space for legal pluralism can be much broader than the borders of a sovereign state; it can extend to entire geographical regions, continents or even the world. It goes without saying that the population bound by the rules of a system constructed under the rules of legal pluralism can be much greater; it can actually even include the global population[440].

Indeed, legal pluralism can be met today as a tool in almost all sectors of law, and definitely in administrative law[441], which is the focus point of this dissertation. What is more, in topics such as the internet the very concept of legal pluralism in global administrative law is suggested as the tool with which to come up with a system of governing rules that will offer pragmatic governance to such a particular phenomenon as the web. As this study will propose legal pluralism as one of the most important tools in constructing the principles of a universally oriented regulatory framework for cloud computing, it is essential to discuss in advance the main characteristics of this approach:

The fact that legal pluralism has spread across different sectors of law over the years means that it has been enriched as legal method with numerous constituencies[442]. Several of them compete for primacy, with different patterns emerging in different institutional settings. Although the entire cadre resulting thereof is highly varied and inconsistent, one can identify three dominant approaches:

– the nationalist approach[443]; it is considered as the classical and probably still the dominant among constituencies of legal pluralism. Its main claim is that final control over regulatory decisions should lie at the national level.
– the internationalist approach[444]; contrary to the former, this approach views the international community of states as the main constituency. In this context, on such issues as human rights or the environment, in-

439 Brian Z. Tamanaha, *Understanding Legal Pluralism: Past to Present, Local to Global*, 30 Sydney L. Rev. 375–411 (2008.)
440 Benedict Kingsbury, Nico Krisch & Richard Stewart (note 423).
441 Paul Schiff Berman, *The New Legal Pluralism*, 5 Annual Review of Law and Social Science 225–242 (2009.)
442 Paul Schiff Berman, *Global Legal Pluralism*, 80 S. Cal. L. Rev. 1155–1238 (2006.)
443 Sally Engle Merry, *Legal Pluralism*, 22 Law & Society Review 869–896 (1988.)
444 Baudouin. Dupret (note 370).

ternational law is regarded as having already moved beyond the narrow confines of the state perspective. The internationalist approach deems that nowadays law is increasingly shaped by concerns common to all states[445].

– the cosmopolitan approach[446]; it goes even further in proposing a genuinely global constituency for issues of global governance. The cosmopolitan shares with the international approach the view that accountability to national constituencies is insufficient. It is firmly founded on a theoretical framework of liberal individualism according to which the role of modern states is not to act as vessels of fundamental diversity but only as organizational tools to ensure division of labor and harness the dangers of a world state[447]. For cosmopolitans, the basic constituency in law nowadays would not be based on the community of states, but on the global community of individuals, on a truly global public. However, there is still great ambiguity as to how accountability should be institutionalized in the cosmopolitan perspective. The proposals voiced so far range from representative options such as a world parliament to more liberal proposals[448].

Bearing in mind the nature of cloud computing, this study will primarily use elements from the nationalist and internationalist approach in its effort to construct a dedicated regulatory framework for the cloud. It is true that, from a very bold perspective, the cosmopolitan element could be also utilized; nevertheless, a realistic analysis of where things stand right now can reveal that the general legal and political mindset, at a global scale, is not ready for the adoption of a purely universal legal system. Therefore, this dissertation will primarily focus on constructing a governance spectrum for cloud computing which will serve the global nature of the cloud, as its subject matter, but, at the same time, will pay respect to the divergence and the clear dividing lines that remain strong and are expected to stay so among various state or regional jurisdictions. After all, legal history has repeatedly proven that law matures much better when the next step is taken upon what is already in place as prevalent legal culture than by trying

445 Earl M. Maltz, *Statutory Interpretation and Legislative Power: The Case for a Modified Intentionalist Approach*, 63 Tul. L. Rev. 1–28 (1988.)

446 Ralf Michaels (note 382).

447 Richard Jones, *Legal Pluralism and the Adjudication of Internet Disputes*, 13 International Review of Law, Computers & Technology 49–68 (1999.)

448 Paul Schiff Berman (note 442).

to take strides from the current status quo to profoundly different constructions. In the first instance, the rate of adoption of the newly proposed legal framework is by far greater both by law subjects and law makers or controllers while, in the second case, the theoretical frameworks brought forward face great difficulty in gaining acceptance and recognition.

### ii. The problems of legal pluralism

Understandably, legal pluralism is far from flawless as an approach to the challenge of constructing efficiently working legal frameworks[449]. Going over its main weaknesses will allow to identify what are the main gaps we will need to fill up in constructing a governing framework for cloud technologies and will permit well in advance to look elsewhere for regulatory solutions on certain challenges associated to the cloud for which legal pluralism does not provide persuasive answers.

One problem is the lack of certainty: as legal pluralism suggests a balancing act among various legal orders, the disappearance of a clearly competent authority and the resulting fluidity of decisions, the clarity and stabilization that we usually expect from the law can be compromised[450]. On most issues, however, a pluralist order will operate much more smoothly exactly because it is suggested as a way to adjudicate on issues that necessitate fluidity in handling by nature. And, of course, if it appears necessary to provide for greater clarity and stability in some contexts, one might decide to establish institutions along jurisdictional lines, or even on a federal model by sacrificing a certain amount of procedural fairness for the sake of substantive goals. In the end, legal pluralism offers significant tradeoffs, and it is highly debatable whether the added uncertainty of a pluralist order is indeed as problematic as the risk of blockade and the lack of inclusiveness of conventional models.

A yet more serious problem is power disparities[451]. Pluralist approaches (even those of a less radical level) have long had to face the objection that some groups, societal, regional or even of global proportions, possess superior organizational capabilities and, in general, more power than others, so that relying on free interplay between them will merely favor the

449 Baudouin. Dupret (note 370).
450 Ralf Michaels (note 382).
451 N. Krisch (note 427).

powerful at the expense of the weak. Yet it is absolutely questionable whether a pluralist landscape would be much different in this respect from a classical, hierarchically ordered structure. This will ultimately have to be assessed in specific contexts of global regulation, but as we know from domestic contexts, differences in organizational capacities are extremely important also in procedural models with clearly defined participation rights for affected interest groups; the power relations outside an institution are always to some extent reflected inside it, despite provisions for formal equality[452]. Therefore, reluctance to adopt elements of legal pluralism only because of fear that they might put affected parties on disadvantageous positions, while this inequality is a feature already inherent to the current arrangements of public administration law is not enough reason to dismiss the pluralistic perspective altogether[453].

A pluralist global administrative law may not correspond to anybody's ideal; its design is far too open-ended and leaves too much room for political struggle. Yet this is precisely its virtue. Being nobody's ideal, legal pluralism refrains from taking sides in the fundamental contests that define the global order[454]. Bracketing its current deficiencies, and finding ways to work around them pragmatically, may after all not only be prudent but also morally preferable. What is more, it might also be politically advantageous: rather than stabilizing a particular institutional setting, a pluralist order is poised to open up space for the political transformation of a structure of global governance whose legitimacy is far from settled[455]. In parallel to that, putting legal pluralism to work for constructing regulatory arrangements for naturally global phenomena such as cloud computing, will not only help us achieve fruitful answers to the pressing need for efficient regulation of such phenomena but it will also contribute to the maturing process of the new generation of administrative law and governance that today's multilayered global agenda calls for[456].

452 Baudouin. Dupret (note 370).
453 N. Krisch (note 427).
454 *Id.*
455 Brian Z. Tamanaha (note 439).
456 A. Froomkin (note 322).

j. Can effective cloud computing regulation be achieved through international law? Not really.

Having extensively talked about the nature of cloud computing, the technologies it is based on and the applications it facilitates, one would reasonably bring forward the idea of regulating the cloud with recourse to the tools offered by international law, i.e. an international convention, an international body inspecting its application etc. Alas, the differences in perceiving the key legal issues associated with the cloud, such as privacy, secure communications and online anonymity, to name a few, make this option invalid or, at least, insufficient[457]. What is more, it would be highly problematic to try to regulate the cloud only via recourse to international law given, first of all, the way the primary world jurisdictions understand their own relationship to it[458].

Case law of the EU's and US' top courts are the ultimate pool of evidence for anyone who would like to understand how these two jurisdictions understand the hierarchical structure binding them to the international legal order. Over the years, this perception has been clarified, enriched and evolved for each of the two legal orders on the occasion of various cases with greatly diversified subject matters. We will examine here the latest instances where the CJEU and the US Supreme Court touched upon the issue of the relationship between the EU and the US legal order, respectively, and international law.

As far as Europe is concerned, the CJEU had the chance to elaborate on how the EU views its relative position against the international legal order most recently in the context of cases C-402/05P and C-415/05P, Kadi and Al Barakaat[459], the judgments on which were published by the Grand Chamber of the Court on 3 September 2008[460]. The cases dealt with certain UN Security Council resolutions which named the two plaintiffs as suspects for terrorist activities and called for the imposition of certain restrictive measures on them, mostly affecting their financial liquidity and

457 Y. Benkler (note 362).
458 Paul M. Schwartz (note 157).
459 Yassin Abdullah Kadi and Al Barakaat International Foundation v Council of the European Union and Commission of the European Communities. Joined cases C-402/05 P and C-415/05 P. ECLI:EU:C:2008:461.
460 P. Takis Tridimas & Jose A. Gutierrez-Fons, EU Law, International Law and Economic Sanctions Against Terrorism: The Judiciary in Distress?

assets in an attempt to prevent them from indeed perpetrating or supporting terrorist acts. The plaintiffs received a judgment in their favor and the CJEU decided to freeze the execution of the measures prescribed by the UN Security Council resolutions on the grounds that they would profoundly violate undisputable values firmly held within the EU legal order regarding fundamental human rights.

Despite the praise which Kadi has drawn from various quarters[461], the reasoning of the Court in this case reaffirms once more "the uncomfortable image the EU has traditionally held for itself as a virtuous international actor in extrapolation to the exceptionalism of the US"[462]. It also reinstates a long-standing political ambition of the European Union to carve out a distinctive international role for itself as a 'normative power' committed to effective multilateralism under international law[463]. What is also paradoxical, yet at the same time demonstrative of where the European Union currently poses itself in relation to international law, is the fact that such a cornerstone judgment about the role, relationship and authority of international law in connection to the EU is versed in some of its most important parts in rather chauvinist and parochial tones. Additionally, it should be pointed out that this decision was delivered not by a court of a powerful nation-state but by the top court of an international organization, which is itself a creature of international law. Nonetheless, the CJEU in Kadi chose to keep a certain distance from the international legal order and place itself and the EU at a distinct, not directly hierarchical position, in relation to the international legal structure.

An equally striking case, this time affirming the privileged role the USA reserves for itself in relation to the international law is Medellin v Texas 552 U.S. (2008)[464]. This case dealt not with Security Council resolutions but with a judgment of the International Court of Justice, which the US Supreme Court found not enforceable in the US without prior congressional action.

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461 H.S.P.L.C.E.L.P. Eeckhout & P.L.T. Tridimas, Yearbook of European Law 2009, v. 28 (2010.)

462 Grainne de Burca, *The EU, the European Court of Justice and the International Legal Order after Kadi. Harvard International Law Journal*, 1 Fordham Law Legal Studies Research 1–51 (2009.)

463 Annalisa Ciampi, *The Potentially Competing Jurisdiction of the European Court of Human Rights and the European Court of Justice*, 28 Yearbook of European Law 601–609 (2009.)

464 Jose Ernesto Medellin v. State of Texas, 552 US 491 (2008.)

Although starting off from totally different context, the striking similarity between the reasoning and interpretative approaches of the US Supreme Court in Medellin and that of the CJEU in Kadi are clear evidence of a very important truth: the relationship EU and US reserve for themselves and the international legal order is at the very least standing at the opposite end from their professed embrace of international law and institutions[465]. Without defying international law, it is clear that both these jurisdictions – which, it should not be failed, are the two most important ones on a global scale – prefer to keep certain reservations and room for flexibility regarding their treatment towards international laws. Even if, in the meantime since 2008, Europe's political institutions have asserted time and again the EU's distinctive role as a global actor committed to multilateralism under international law, and even if the Lisbon Treaty nowadays enshrines the 'strict' commitment to international law in EU's foundational texts, the European Court chose to use that much-anticipated Kadi ruling as the occasion to proclaim the internal and external autonomy and separateness of the EU's legal order from the international domain, and the primacy of its internal constitutional values over the norms of international law[466]. Similarly, the US has kept a comparatively preferential approach for itself against bodies of law or treaties of the international domain; in fact, it could be argued that from the US side this special self-positioning has been even firmer than from the European side.

In light of the above observations, it becomes almost self-evident that, since Europe and the US view their relative connection to the international jurisdiction in such a precarious manner, international law and its instruments per se cannot be viable means for achieving universal and harmonized cloud computing regulation. Since both these jurisdictions keep their distances from such high-ranking instruments of international law as resolutions of the UN Security Council or rulings of the International Criminal Court, it is highly unlikely that they will unreservedly comply with a supposed treaty that would venture to impose a universal way of handling cloud computing related matters. Having demonstrated the importance of the cloud as a facilitator for a wide range of economic activities with undeniable profitability, it is only reasonable to expect that the chances of an

465 Grainne de Burca (note 462).

466 Daniel Halberstam, *Constitutionalism and Pluralism in Marbury and Van Gend*, in: U of Michigan Public Law Working Paper (2008.)

international convention on cloud computing to be abided by and applied unreservedly are rather dim.

### k. A comparatist approach and synthesis is the only way; moving forward to regulate cloud computing through legal pluralism

Having exhaustively discussed all options or arbitrary proposals currently on the table regarding ways in which the cloud could be effectively regulated, it becomes evident that none of the conventional routes or methods for leveling the field over how a specific subject matter is regulated is enough. Cloud computing cannot be governed solely by governmental authorities, nor can it be directed by the free market alone. Similarly, it cannot be governed globally with norms and rules inspired by one and only jurisdiction, be it the European, the US one or any other, nor can its handling become harmonious via a typical international convention.

However, it should be made clear that regulating the cloud will not be an easy venture. At first, cloud computing is one of the most contemporary subject matters that world jurisdictions have to find a way to effectively govern nowadays. This means that caution is necessary in order for law makers to have clear and thorough knowledge of what cloud computing actually is before sitting down to write any law about it. Simultaneously, its novel nature in comparison to other phenomena calling for governance, even to those very close in nature and characteristics to it, means that it will not be easy to make affected parties be bound by laws that will be based on norms different from the traditional ones. It will not be possible to build up these laws or the foundations they should be built upon, based on the views and appraisals of only one school of law. Consequently, this study will follow the middle way in its effort not to build up a universally applicable law about cloud computing but, pragmatically thinking, in formulating the set of principles every law and jurisdiction should take account of when working on a cloud computing law. This path is that of legal pluralism, upon which the following chapters will walk after analyzing, in a comparative manner, and synthesizing the best practices held about the cloud in EU and US law.

Embarking on a legal discourse that needs to be genuinely creative and strongly persuasive at the same time, we will largely rely on the Nico

Krisch's version of 'legal pluralism in a regional context'[467]. In this configuration of legal pluralism, Krisch departs from the traditional norms limiting legal pluralism to one or neighboring legal orders and proposes tools that advocate harmonization on a broader, regional scale (for instance, within Europe, between the EU and the ECHR countries). The aim of this approach is to recognize the common principles within a region that could serve as a basis for better coordinated laws but without aiming to subordinate one jurisdiction to the other but, instead, to promote their reproach through mutual persuasion, while emphasizing the autonomy and authority of each unit[468]. Then, once the connecting links between the EU and US regulatory views over the different aspects of the cloud are accumulated, this dissertation will conclude by demonstrating how these findings can be applied to the European, the US and the rest of the world's jurisdictions paving the way for a system of laws governing cloud computing which will easily interconnect with each other.

After all, much as it is already technically feasible to perceive the cloud as one, purely boundless and global space, totally defiant of geographical or borders of any other nature, in real life terms it would be unrealistic and, possibly, of little use at the moment, to directly propose the adoption of a 'globally applicable law on cloud computing' of any nature. Therefore, instead of dealing with the challenge of regulating such unique phenomena as the cloud in highly experimental ways, it is much wiser to focus on more pragmatic solutions; schemes that strike an accord between originality necessitated by the nature of the cloud and balancing of interests and long-held perceptions of rivaling legal orders are the way to go. One such scheme will be constructed hereafter.

467 N. Krisch (note 427).
468 Daniel Halberstam (note 466).