7 Legal Issues in Grid and Cloud Computing

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7.1 Introduction: the Lawyer’s Perspective about Grid and Cloud Computing

A business scenario based on the adoption and implementation of Grid and Cloud technology presents many legal issues that have to be taken into account by companies and individuals that plan to start a Grid/Cloud-based business. In general terms, Grid/Cloud technology is not ‘neutral’, in the sense that it brings several particularities as regards, contractual and security profiles (Parrilli et al. 2008). In other words, a contract between a Grid/Cloud provider and a customer is likely to be slightly different from an agreement between a provider of a different technology (not based on dispersed resources) and a client.

The legal issues that affect a Grid/Cloud-based business are many, and include, just to mention a few, contract law, intellectual property rights, privacy law, taxation, etc. The aim of this chapter is that of providing the reader with some clarifications and guidelines as regards the most relevant legal issues that a typical customer should take into consideration when reviewing the terms for the provision of Grid/Cloud services from a technology provider. Two moments will be specifically analysed: (i) the contract, or contracts, signed by the customer and the Grid/Cloud provider, i.e. formation, validity and enforceability of the agreement(s); (ii) the contractual relationship following the signing of the agreement, in connection with the liabilities of and the remedies at the disposal of the parties. Special attention will be dedicated to security (and privacy) profiles, which are supposed to be the Achilles’ heel in Grid and Cloud computing. A few comments will also be dedicated to the most relevant taxation issue. In other words, we guide a typical customer in the process of entering into an agreement with a technology provider and therefore we will follow the negotiations phase (if any) and the signing of the contract. Furthermore, we will identify the risks underlying the contract and explain how these risks can be reduced or avoided. When the agreement is ready for signature, our mission will end.

From a different perspective, then, the goal of the following pages is to show how legal barriers for customers can be reduced, nevertheless taking into account that these are heavily influenced by the business environment in which the Grid/Cloud provider and the client operate. In other words, in business to business (B2B) scenarios (this chapter does not address business to consumer – B2C – issues) the client does not receive special protection from the law, in recognition of the principle that businesses are normally in positions of equal strength during the nego-
tiations. This statement is clearly unrealistic given the fact that, in most cases, the Grid/Cloud provider is a big international player and the customer might be an SME or even a micro-enterprise. The latter, of course, will have little or no power to negotiate more favourable clauses and the only option is to sign or not to sign the contract drafted by the technology provider. Nevertheless, the customer should check whether this contract is too risky, in the sense, for instance, that the provider does not take any liability and the customer does not have the right to enforce the contract, or the scope for such enforcement is very limited.

This means that the non-legal categories of trust and reputation will play a pivotal role and will guide potential investors to opt for a Grid or Cloud provider instead of its competitors. Trust and reputation, although very important, are not enough: the customer, in other terms, does not have to be impressed by the brand of the Grid/Cloud provider but should verify whether he gets enough protection under the contract offered to him. Things are different, of course, if the parties are in the position to really negotiate the content of the agreement(s), and in this situation they should balance risks and liabilities between them. It is advisable that the contract(s) is as complete and balanced as possible, in the sense that it should encompass possible situations like non-compliance, litigation, etc and should motivate both parties to respect it.

In other terms, a contract which is too unbalanced in favour of the provider, for instance, is likely to offer him reasons not to supply the services at the promised quality and to favour bigger and/or more ‘important’ clients. Selection and differentiation between clients is an obvious practice from the business perspective, but it should not damage or discriminate against a certain group of customers. The law and economics literature showed, in fact, that one of the purposes of contract law is “to secure optimal commitment to performing” and, in particular, that “when liability is set at the efficient level, the promisor will perform if performance is more efficient than breaching, and the promisor will breach if breaching is more efficient than performing” (Cooter and Ulen 2004).

In light of these considerations, the first issue to address regards the contracts made by a Grid or Cloud provider and a customer to regulate their business relationship. Special attention will be dedicated to the Service Level Agreement (SLA) and to its potentially related agreements.

### 7.2 The Contractual Relationship between Grid/Cloud Provider and Customer: the Contract

The provision of Grid or Cloud services by a technology supplier shall obviously be regulated by a contract, or a group of contracts, that will govern the specific

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1 The literature pointed out, as regards civil procedure (but the statement is true also as regards other legal issues), that “because the consumer is the weaker party, who often pays in advance for the transaction to take place and cannot influence the unilateral terms of contract that are offered, the balance in relation to jurisdiction leans towards the consumer.” (Storskrubb 2008)