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1 Introduction

This paper is based on research carried out since late 2001 by the E-Com research project of the University of Geneva. The research team published in December 2001 a report titled *Online Dispute Resolution: The State of the Art and the Issues*, which is a critical survey of the existing projects of Online Dispute Resolution (ODR) providers. In addition to this empirical research, the report briefly mentioned the issues that were considered central and that deserve further research. An expert colloquium, held in Geneva shortly before the publication of the report, contributed to the definition of these central issues. Since then, the research team has been working on these issues, from both the technical and the legal perspective, delivering a few papers on some technological aspects of ODR, such as security or the overall technological architecture of ODR systems, and addressing the legal issues that have been mentioned in the first report. The present paper is meant as an overview of some of our transitory findings.

The structure of this paper is as follows: the first part provides an overview of the major methods of ODR, how they operate, how much they cost, and how successful they are. The second part addresses some of the major issues in ODR. As such issues are quite numerous, they are categorized along the following lines: what are the pros and cons of online binding arbitration? how should an ODR provider be financed in order to be viable and independent? and how should the technological architecture of ODR systems be set up?

2 ODR methods

In this paper, the term ODR characterizes the new methods of dispute resolution where the major part is provided online. Most ODR methods are ADR provided online, i.e. they are alternatives to litigation and to state justice, but not all methods are online ADR. Online courts, for instance, are also ODR. The procedure does not have to happen entirely online, as it would be too strict to exclude an ODR mechanism which only sends a paper copy of the agreement or the award, or which accepts evidence provided offline.

This first part of this chapter starts with a discussion of the advantages and drawbacks of considering ODR as either primarily online ADR or as a primarily *sui generis* method of dispute resolution. After that, the main methods of ODR, which are negotiation, mediation, and arbitration, are presented,

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4 Consumers International have defined the term in a stricter manner: “Online dispute resolution [is] the term we use in this report for ADR services offered entirely by electronic means, without the need of the disputing parties to leave their home / offices”: Consumers International, "Disputes in Cyberspace. Update of online dispute resolution for consumers in cross-border disputes", November 2001, at 4.
followed by the less frequently deployed methods of ODR. Finally, a short assessment of the state of the art is made.

2.1 ODR: sui generis methods or ADR?

When one intends to develop an ODR system, or when one seeks to promote ODR or carry out research on it, there are fundamentally two ways of proceeding. First, one can focus on the specifics of cyberspace: special possibilities are offered, such as automation or facilitated access to information, and special constraints are imposed, due for instance to the lack of confidence many persons have in the online environment. Second, one can 'simply' transpose traditional ADR methods into the online environment and then analyze in how far the process must be adapted: in mediation for instance, parties must be able to vent, and appropriate communication tools must therefore be provided.

The first approach, which to some degree considers ODR a *sui generis* dispute resolution method, has the benefit of taking the highest advantage of the possibilities offered in cyberspace by focusing precisely on the core problems of dispute resolution in this particular context. It however tends to have two main drawbacks: the insertion of ODR decisions into legal systems and the lack of lessons drawn from ADR. The first drawback is particularly obvious in hybrid forms of arbitration, the decisions of which would not be characterized as arbitral awards under most arbitration laws, for instance. The lack of lessons drawn from ADR affect all methods of dispute resolution that resemble a form of ADR, in the sense that ADR literature and practice has certainly improved the quality of justice of these offline forms of dispute resolution.

The second approach, which to some extent considers that ODR is simply ADR with some specific communication tools, has the benefit of focusing on the legal instruments developed for ADR, such as arbitration convention or the numerous due process protocols generated for offline arbitration and

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5 The following overview of the state of the art is based on empirical research carried out in 2001 and published in T. Schultz, G. Kaufmann-Kohler, D. Langer, V. Bonnet, “Online Dispute Resolution: The State of the Art and the Issues”, E-Com Research Project of the University of Geneva, Geneva, 2001, <http://www.online-adr.org>, which has been regularly updated since its publication. In addition, much very useful empirical information were drawn from a report by the ICC, titled “Business-to-Consumer and Consumer-to-Consumer Alternative Dispute Resolution (ADR) Inventory Project. Summary Report”, released on May 14, 2002, and from Consumers International, “Disputes in Cyberspace. Update of online dispute resolution for consumers in cross-border disputes”, November 2001, and Consumers International, “Online dispute resolution for consumers in cross-border disputes – an international survey”, by P. Lawson, December 2000. It is striking that the research carried out by ICC, by Consumers International and by the E-Com research team of the University of Geneva all came to different findings as regards the number of existing ODR providers, their activity and services. The empirical data reported in this paper are a compilation of those three reports.

6 The automation of negotiation, also called 'blind-bidding', or portals leading to ODR providers are typical results of exploiting the advantages of cyberspace and IT. On a larger scale, there are “applications that enhance the expertise of the third party and thus do more than simply deliver the expertise of the human third party across the network”. These applications are metaphorically called the “fourth party” by Katsh and Rifkin: E. Katsh, “Online Dispute Resolution: The Next Phase”, Lex Electronica, vol. 7, n° 2, spring 2002, <http://www.lex-electronica.org/articles/v7-2/katsh.htm>, at par. 18, and E. Katsh and J. Rifkin, *Online Dispute Resolution, Resolving Conflicts in Cyberspace*, San Francisco, Jossey-Bass, 2001, pp. 93 ff. As the trust of the parties in ODR is an issue, particular methods of dispute resolution have developed: non-binding arbitration, a dispute resolution method largely developed for the online environment, induces for instance probably more confidence than its binding form, because parties are granted a hearing of their case without being bound by the outcome.

7 Decision rendered under the UDRP, for instance, resemble arbitral awards, but would not be considered as such under any major convention or law on arbitration. In other words, such decisions may only hardly be recognized as having any legal effects at all: they may not enter the national legal systems. The same is true for all other forms of non-binding arbitration.

8 In online mediation, for instance, some of the features that are considered central in offline mediation are not always provided: the forms of communication, for instance, may probably be improved in the light of offline practice.
mediation. The main drawback of this approach is that it is confronted with legal obstacles, particularly in arbitration: it is still doubtful whether an arbitral award, rendered after perfectly satisfactory proceedings, will indeed be recognized and enforced by state authorities. This in turn causes legal uncertainty, which decreases confidence.

This paper focuses on the second approach, because it is thought to be leading to more effective dispute resolution and corresponding to the future of ODR. ODR as online ADR will be more effective than new specific forms of dispute resolution once it can benefit from the legal instruments developed for ADR, which may only be a question of time. And ODR may evolve in the direction of ADR, because just as lawyers have conquered the ADR movement, injecting formalities drawn from their judicial experience, they are likely to conquer ODR, injecting formalities drawn from their ADR experience.

2.2 **Online negotiation**

There are two forms of online negotiation: automated negotiation (also called blind-bidding) and assisted negotiation (also called facilitated negotiation). In automated negotiation, the parties successively submit their settlement proposal in the form a monetary figure, which is not communicated to the other party. A computer compares the offer and the demand and, when they are within a given spread, reaches a settlement for the arithmetic mean of the two figures. If the figures are not within the given spread, the parties are asked to enter a new settlement proposal until the number of rounds or the time-limit has expired.

In assisted negotiation, the parties are assisted in their negotiation by online facilities. They communicate with one another over the Internet, using for instance emails, web-based communication tools or videoconferences. The providers also offer directives for developing agendas, identifying and assessing standard solutions, and writing agreements, as well as storage means and secure sites. In both forms of negotiation, no human third party normally intervenes in the process.

Automated negotiation is quite successful, about 20 providers offer it and some of them handle up to 3'000 disputes a month. Automated negotiation, however, is technically restricted to purely
monetary disputes\textsuperscript{17}, which are often insurance disputes. Assisted negotiation, on the other hand, is extremely successful. There are over 20 providers of assisted negotiation\textsuperscript{18} and SquareTrade, which has the highest caseload in ODR, has handled over 225'000 thousand disputes between February 2000 and April 2002\textsuperscript{19}.

The fees for automated negotiation are usually determined on the basis of the settlement amount and split between the two parties. For a settlement amount below 20'000 USD, the fee is typically around 100 USD. The fees for assisted negotiation are often covered by annual membership or trustmark fees, or are charged on an hourly basis. The fee range is between 50 and 300 USD per party and per hour. Time-limits, in automated negotiation, vary between 30 days and 12 months. In assisted negotiation, time-limits are infrequent; when time-limits are set, they vary between 18 and 35 days.

\subsection*{2.3 Online mediation}

Online mediation is simply the online form of traditional mediation. A third neutral person with no decision power tries to bring the parties to an agreement by using one of the styles developed for traditional mediation, for instance facilitative or evaluative mediation. The only difference is that they communicate online, often over sophisticated communication platforms\textsuperscript{20}. References to guidelines for offline mediation are however infrequent.

Although the number of ODR providers offering online mediation is high\textsuperscript{21}, the caseload is seemingly rather low. Although it is relatively frequent for mediators to advertise with rates of settlement and number of disputes solved, almost no indication can be found on the websites, at least not easily. The range of disputes that can be handled by mediation is very large: legally, mediation is open to all issues which can be settled by a contract. Nevertheless, as electronic communication brings along depersonalization, it presents a particular challenge to emotionally charged disputes, such as family law issues or when physical harm has occurred.

Fees for online mediation are usually computed on an hourly basis, and range from 50 to 250 USD per party and per hour. Time-limits are rare in online mediation, but when they are present, they vary between 4 hours and 60 days.

\begin{itemize}
\item Resolution; ResolveItNow.com; SettleOnline; SettlementOnline; SettleSmart; Trusted Shops; The Claim Room; U.S. Settle; Web Assured; WebMediate; and WeCanSettle. Cybersettle reportedly solves about 3'000 disputes a month.
\item As a concept, automated negotiation is useful only if there is a single monetary issue where the question only is how much money is due. In practice, one provider, which ceased activity in the course of 2001, allowed non-monetary terms in the form of “Additional Settlement Criteria”, which could encompass any desired settlement condition and which are communicated to the other party. Whether they were used at all I do not know.
\item Assisted negotiation is for instance provided by CEDR; the Centre Européen des Consommateurs en Luxembourg; ClaimChoice.com; the Consumer Association of Iceland; Consensus Mediation; ECODIR; Eurochambres; GWMK; Internet Neutral; Internet Ombudsman; MARS; Mediation America.com; the National Arbitration Forum; Nova Forum.com; Online Resolution; Resolution Forum.org; SmartSettle; SquareTrade; The Claim Room; TRUSTe; Trusted Shops; Web Assured; Web Mediate; Web Trader; Which? Web Trader.
\item Most of these disputes came from ebay. SquareTrade also offers mediation as a fall-back mechanism to assisted negotiation, but 80\% of the disputes settle at the stage of negotiation, according to E. Katsh, "Online Dispute Resolution: The Next Phase", Lex Electronica, vol. 7, n° 2, spring 2002, <http://www.lex-electronica.org/articles/v7-2/katsh.htm>, at par. 38.
\item See for instance The Mediation Room.com, <http://www.themediationroom.com> (login as guest and view the available guest case).
\item There are over 20 online mediation providers, which are for instance BBBOnline; the Camera Arbitrale di Milano; Claim Resolver; CEDR; Consensus Mediation; ECODIR; e-Mediator.co.uk; GWMK; Internet Neutral; Internet Ombudsman; MARS; Mediation America.com; NovaForum; Online Resolution; Resolution Forum.org; SmartSettle; SquareTrade; Trusted Shops; Which? Web Trader; Web Assured; and WebMediate.
\end{itemize}
2.4 Online arbitration

Online arbitration is similar to traditional arbitration, in the sense that a third party chosen by the parties, or nominated by the institution chosen by the parties, renders a decision on the case after having heard the relevant arguments and seen the appropriate evidence. The main difference, in addition to the online communication of all parties, is that non-binding arbitration is much developed online. Arbitration traditional produces awards, which have a binding force that is similar to a judgement. Online, non-binding procedures are often proposed and often used, the most notorious example being the UDRP. Whether they should actually be called arbitration may not be so important, at least online non-binding arbitration would probably fall under the US Federal Arbitration Act while they would certainly not fall under the European laws of arbitration. Whether non-binding awards fall under the New York Convention is not an interesting issue, as their non-binding character excludes recognition and enforcement by definition. More important are the advantages and drawbacks attached to both forms of online arbitration. They will be discussed below.

In online arbitration, the parties usually communicate by emails, web-based communication tools and videoconferences.

There are more than 25 ODR providers which offer online arbitration. In most cases, binding and non-binding arbitration is available, but some providers restrict their services to the non-binding form. The caseload of online arbitration seems to be highly dependent on the binding character of the outcome: binding online awards seem to be extremely infrequent, whereas thousands of non-binding decisions have been rendered (most of which have actually been rendered under the UDRP). The business contexts are also different depending on the binding character of the decision: the scope of arbitrability is restricted in some arbitration to protect the weaker party while non-binding arbitration does not raise questions of arbitrability.

Fees for online arbitration are usually the same as for mediation: they are in most cases charged on an hourly basis, and range from 50 to 250 USD per party and per hour. Under the UDRP, fees range from 1500 to 4000 USD, depending on the number of domain names at stake and the number of panelists. They are borne by the complainant, except when the respondent chooses a three-member panel. There are usually no time-limits in arbitration, but when there are, they vary between 4 hours and 60 days. In the UDRP, there are several time-limits, which bring the procedure to an average of 2 months.

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22 A. S. Rau, "Contracting Out of the Arbitration Act", 8 Am. Rev. Int'l Arb 225, 261 (1997), at 243 ("[s]uch agreements for [offline] non-binding arbitration have been held to be within the Federal Arbitration Act for the purposes of stays or orders to compel under § 3 and 4"), and A. S. Rau and C. Pédamon, "La contractualisation de l'arbitrage: le modèle américain", Rev. Arb., n° 3, 2001, pp. 453-483, at 461 (repeating this opinion) and 482 ("[l]e modèle que nous avons présenté ici diffère radicalement de celui qui est familier aux avocats et universitaires français, au point qu'il peut sembler, et cela a été évoqué, que ce que nous avons décrit n'est tout simplement pas ce qu'il convient d'appeler « arbitrage ». Une telle critique découle, sans doute, de l'idée a priori que l'arbitrage doit remplir certaines caractéristiques essentielles à sa définition et auxquelles on ne peut déroger").

23 The providers offering online arbitration are for instance the Association of British Travel Agents (ABTA); BBBOnline; the CiberTribunal Peruano; the Commercial Initiative for Dispute Resolution; Cyberarbitration; Cybercourt; eResolution; the Hon Kong International Arbitration Center; IntelliCOURT; iCourthouse; Internet Ombudsman; MARS; NovaForum; ODR.NL; Online Resolution; the Resolution Forum; SettleTheCase; SmartSettle; SquareTrade; Trusted Shops; the Virtual Magistrate; Web Assured; Web Dispute Resolutions; WEBDispute.com; WebMediate; Word&Bond and the four ICANN-approved providers (WIPO; the National Arbitration Forum; the Asian Domain Name Dispute Resolution Center; and the CPR Institute for Dispute Resolution).

24 Exclusively non-binding arbitration is for instance provided by the Asian Domain Name Dispute Resolution Center; the CPR Institute for Dispute Resolution; iCourthouse; the Virtual Magistrate; and WIPO.
Other ODR methods and additional services

Traditional ADR methods provided online represent the majority of ODR methods. But other less represented categories exist, such as online courts, online juries and claim assistance. These processes are part of the ODR movement, because they provide their services almost exclusively online and seek dispute resolution.

Although online hearings are not yet provided at any court of justice, an increasing number of courts accept online filings. In Hamburg, for instance, the parties are allowed to file their claims online since May 1, 2002. One month earlier, the UK had launched a service, called the Money Claim Online Pilot, which may be a little bit more ambitious, in the sense that the parties only have to meet offline in a local court if the defendant decides to challenge the claim25.

There are also a few projects of proper online courts, at which the filings, the hearings and testimonies will all be held online. There are two such projects in Asia, one in Malaysia, called the International Cybcourt of Justice, and one in Singapore, but only limited information is available on them26. A widely developed project is the Cybercourt of the State of Michigan. The Cybercourt, which is due to begin operating on October 1, 2002, will handle such disputes as those involving IT, software, websites or trade secrets, and it will operate on a voluntary basis. The proceedings will be conducted through web-based communication and videoconferencing27.

Mock-trials with online juries are also a form of ODR. On a website, a case is displayed, a jury is formed and the parties can thereby reality-test their case using exclusively online communication means28.

Providers of ODR methods often also offer additional services, such as complaint or claimant assistance29 which consists of support in search for counsel, forwarding complaints to trustmarked traders or calling on them to take action. Other providers offer services of dispute prevention30, which consists for instance of checks of employees prior to employment, standard business contracts and forms, and training of employees and employers. Legal literature or portals to other services are also often provided. An important additional service is also trustmarks or seals, because they help bring the parties to ODR and enforce the subsequent case outcome31.

27 The proposed rules for Michigan's Cybercourt were published by Michigan's Supreme Court on March 28, 2002, and have been posted on its website for comments. For a comprehensive legislative history, http://www.michigancybercourt.net.
28 Online juries are available at LegalVote; iCourthouse; and SettleTheCase.
29 Claimant assistance is provided by BBBOnline, Mars, the Online Ombuds Office, WebAssured.com, and Web Trader (which offers only complaint assistance). Claimant assistance is offered by ClaimChoice.com.
30 Although less interesting for the field of ODR, the importance of dispute prevention, such as in-house complaint management systems, may even be more important in the electronic environment, where disputes certainly still arise out of misunderstandings, technical problems and other non-voluntary causes. In this sense, "[t]he Task Force recognizes that ODR is subsidiary to other mechanisms that can be implemented to prevent and resolve disputes. Merchants should be encouraged, however, to make ODR available for disputes that cannot be resolved through in-house complaints handling.": ABA Task Force On Electronic Commerce and Alternative Dispute Resolution, Addressing disputes in electronic commerce. Recommendations and Report, draft mars 2002, p. 7.
3 Selected issues

The issues in ODR are numerous. There are also many ways to present them, as they influence many aspects of ODR, such as its feasibility, its utility, its ethical implications and its acceptance in the legal and economic communities. In this paper, the most important issues are described focusing in turn on the legal aspects (binding and non-binding arbitration), then on the financial viewpoint (financial structure of ODR providers) and finally on the technical perspective (technological architecture of ODR systems).

3.1 Obstacles to binding online arbitration

In the current state of legislation and of practice, resolving a dispute through arbitration proper provided online faces a large number of obstacles. Such obstacles arise at almost every stage of the process: the agreement to arbitrate, the arbitration procedure, and the recognition and enforcement of the award all raise legal issues.

Agreements to arbitrate online face problems of validity and enforceability. First, most national laws and international convention still require the arbitration agreement to be in writing, and their current interpretation does not include its being recorded by electronic means. But agreements to arbitrate online are usually entered into online. Although it is certainly time to recognize that anything written can be recorded either on paper or on electronic storage, in other words to accept that an electronic document can be the functional equivalent of a paper document, this leads to some technical difficulties. The electronic document must include the identity of the parties, the agreement itself (i.e. the offer and the acceptance), and the content of the agreement (i.e. the specific terms and the general conditions). This information must be stored in a manner that allows its accessibility for further evidence and its admissibility as evidence. In other words, this information must be stored using a technology which permits long-lasting compatibility and which excludes any serious risk of manipulation of the stored data. This raises technical issues, which cause legal controversies as the technological means employed may be characterized differently under different laws.

The second issue with agreements to arbitrate is their enforceability. Many arbitration laws limit the arbitrability of disputes where the parties have substantially different bargaining powers, thereby seeking to protect tenants, employees, or consumers. As the near future of ODR is likely to involve primarily B2C transactions, many current arbitration laws are obstacles to the development of online binding arbitration. This problem may be overcome by the use of unilaterally binding arbitration

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33 For instance, who should store the information? If it is the parties, there is a risk of manipulation, P. G. Fringuelli, M. Wallhäuser, “Formfordernisse beim Vertragsschluss im Internet”, CR, 1999, p. 99.


35 According to the ABA Task Force “ODR is not used to any meaningful degree in the B2B market segment since the parties have made other arrangements for the settlement of disputes between them and disputes among them are rare in any case”: Task Force on Electronic Commerce and Alternative Dispute Resolution, “Addressing Disputes in Electronic Commerce: Recommendations and Report”, draft March 2002, p. 15.
agreements, which would bind only the stronger party, leaving the weaker party free to decide whether to litigate or to arbitrate. But, in some cases, unilaterally binding clauses have also been held not enforceable, on the basis that if one of the parties is not bound, none is

The arbitration procedure faces obstacles regarding due process and electronic evidence. With due process, the problem is that one of the fundamental characteristics and advantages of ODR is speed, which implies simplified procedures and less formalism. But too little opportunities to be heard are a possible jeopardy to due process. Exactly how much one can expedite an arbitration before violating due process requirements, which would mean that the award runs a risk to be set aside in court, is not a clear matter. As electronic evidence is concerned, the issue is how to create a communication scheme which allows proportionate and effective means for the receipt of evidence. The basic principles are that such communication scheme permits the production of documents which for instance authenticate the identity of the parties at the time of the transaction and during the ODR procedure; which show that a file or program has been entirely transmitted to the buyer in case of an online performance of a contract; and which show that the contents of a record have not been manipulated.

Finally, online awards face problems of recognition and enforcement. For instance, under the New York Convention traditionally interpreted, the party moving for recognition or enforcement must supply an award that is in writing, signed by a majority of the arbitrators, and that is either the authenticated original or a duly certified copy thereof. These conditions could be met if electronic documents qualify as writing and if electronic signature is used, because it authenticates the sender as well as the content. But these solutions do not correspond to the current wording of the New York Convention, nor to its common interpretation. In addition, the question arises of who should send the award to the authority in charge of recognition or enforcement. If it is the moving party, the is a risk of manipulation, because the document has been in the electronic storage of the moving party. Even if the document would be ‘frozen’ in its repository by technological means that ensure its authenticity, this

40 The UNCTRAL Working Group on Electronic Commerce, mentioned this issue in its thirty-ninth session, 11-15 March 2002, on Legal aspects of electronic commerce, Legal barriers to the development of electronic commerce in international instruments relating to international trade, at par 152: “Difficulties for the use of electronic communications may result, in particular, from the requirement, in article IV, paragraph 1, that, in order to obtain recognition and enforcement of an arbitral award, the moving party must supply: "(a) the duly authenticated original award or a duly certified copy thereof"; and "(b) the original agreement referred to in article II or a duly certified copy thereof". In view of the growing interest in online dispute settlement mechanisms, sub-paragraph (a) of this provision may be a source of legal uncertainty, in particular in States that have not enacted legislation implementing the Model Law on Electronic Commerce, in particular its article 8, or do not other-wise provide for the functional equivalence between data messages and paper-based originals.” The current trend seems to be in favor of additional material, such as an additional protocol.
solution does not inspire much trust. The award could also be sent by the arbitral institution or the arbitrator(s), but they may no longer be available at the time of the recognition or enforcement. Another solution is to have the award sent by a trusted third party, such as a cybernotary or a centralized registry record. This last solution may be the best, because such a third party could easily be state-controlled, and would thereby run less risk of ceasing activity. Finally, the award must be notified to the parties, but the current email protocols are not able to produce proofs of receipt.

### 3.2 Effectiveness of non-binding ODR methods

Several problems encountered in online binding arbitration disappear when the process is made non-binding. Globally, non-binding methods of-out-court dispute settlement are subject to only very few legal formalities, as they do not significantly restrict the parties’ access to state justice. Non-binding means not binding like a judgment: the case outcome can be binding like a contract, or not binding at all. In non-binding arbitration, this usually means that the parties have a right to demand a trial de novo. The most common forms of non-binding ODR are negotiation, mediation, recommendation, and non-binding arbitration, such as the UDRP.

But if non-binding methods are characterized by their formal liberalism, they are also characterized by a specific problem: the enforcement of their case outcomes. If the losing party in a non-binding ODR procedure is unwilling to comply with the case outcome, one of two things can happen: if the decision is not binding at all, there is usually nothing the winning party can do to have the decision enforced. If the decision is binding like a contract, the winning party will have to enter a judgment to enforce the

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44 The Bolero electronic bill of lading provides exactly such a central registry, called the ‘Title Registry Record’, which “logs and tracks all transactions centrally”. <http://www.bolero.net/downloads/bbls.pdf>.


46 On the binding force of the recommendation phase of ECODIR, A. Cruquenaire and F. Patoul, “Le développement des modes alternatifs de règlement des litiges de consommation : Quelques réflexions inspirées par l’expérience ECODIR”, Lex Electronica, vol. 7, n°2, printemps 2002, <http://www.lex-electronica.org/articles/v7-2/cruquenaire-patoul.htm>, at par. 75 ff. The authors conclude that “the parties reach an agreement at the end of the negotiation process, with or without the aid of a mediator… The legal binding force is that of a contract. […] But the parties have the freedom to decide otherwise by an agreement and to take the risk of accepting the decision even if it is unfavorable to them”, at par. 78.

47 On the validity of contracting for non-binding arbitration, A. S. Rau, “Contracting Out of the Arbitration Act”, op. cit., at 240-241 (advocating for its validity but reporting that “a number of state courts have indeed held such clauses in insurance contracts to be unenforceable. For the Supreme Court of Minnesota, for example, the trial de novo provision "would result in complete frustration of the very essence of the public policy favoring arbitration"; Schmidt v. Midwest Family Mutual Ins. Co., 426 N.W.2d 870, 874-875 (Minn. 1988)". For an update and translation in French, A. S. Rau and C. Pédonon, “La contractualisation de l’arbitrage: le modèle américain”, Rev. Arb., n°3, 2001, pp. 453-483, at 458 ff.

outcome. This will produce costs and delays that may be high enough to deter the winning party from seeking enforcement. In addition, if enforcing the outcome is so difficult for the winning party, where is the incentive for the losing party to perform? Yet other solutions may be at hand: one can either still hope for unforced compliance or one can implement alternative mechanisms of producing binding force.

Unforced compliance to a case outcome produced after sound online proceedings is in fact not so unlikely. Non-binding arbitration may very well be seen as both an “advisory opinion” and a place to vent. As an advisory opinion, it helps the parties to reassess their own opinion on their position, they can test their arguments in a “trial run” and evaluate the likely outcome of adjudication\(^{46}\). As a place to vent, it may provide some catharsis, it may help alleviate anguish and aggression through expression and revelation. For both of these effects to take place, it is important that the parties feel that they have obtained a fair hearing and that they have been handed down a decision from an expert third party who is truly impartial. The most striking examples are UDRP decisions, the compliance rate of which is extremely high, although the UDRP is a somewhat special case, as will be discussed below. The same opinion applies a fortiori to negotiation and mediation: the parties have had a place to vent, in mediation an impartial third neutral has heard their position and they have agreed to the decision.

Alternative mechanisms of producing binding force are of one of two kinds: they can either create incentives to perform or they can provide for the self-execution of the case outcome. In both case, the principle is that the ODR provider ensures control of the resource that is valuable to the parties, which is usually money, but could also be reputation or a domain name\(^{47}\).

The main current form of creating incentives to perform is to trustmark web traders. A trustmark is a logo displayed on the website of the trader, which informs the customer that the trader has committed to complying with a number of qualitative standards or best business practices, including for instance redress mechanism\(^{48}\). The trader can for instance commit to comply with all case outcomes of a specific ODR procedure. If the trader does not execute the outcomes, if he does not comply with this best business practice, the trustmark is removed. This presupposes that the allocation and the removal of the trustmark is controlled by the ODR provider, either directly or indirectly by networking with the controlling entity\(^{49}\). The incentive to execute the decision is in this case created by the possible removal

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\(^{46}\) For offline arbitration, A. S. Rau, “Contracting Out of the Arbitration Act”, 8 Am. Rev. Int’l Arb 225, 261 (1997), at 242 (“the parties may think of a "trial run" of their case, ending in a prediction by a neutral expert, may cause the more recalcitrant among them to reassess their own partisan estimates of the likely outcome of adjudication”). For online arbitration, E. Katsh and J. Rifkin, Online Dispute Resolution, Resolving Conflicts in Cyberspace, San Francisco, Jossey-Bass, 2001, p. 108-109 (“While a loser in such a process could still go to court, it is likely that the litigation option will not be exercised very often if the losing party senses that they have obtained a fair hearing and that their position was not as persuasive as they might have thought it was”).


\(^{49}\) Some ODR providers deliver trustmarks. They are MARS, NovaForum.com, OnlineDisputes, SquareTrade, TRUSTe, WebAssured.com, Web Trader and Word&Bond. In their article related to ECORDIR, Cruquenaire and Patoul argue that "it seems desirable to connect ADR to a labeling system in order to provide a means to ensure
of the trustmark. How strong this incentive would actually be is difficult to assess, because the importance of a trustmark for a website is not easy to evaluate. A trustmark is meant to increase the trust and confidence of customers in a web trader. Most people using the net declare that they would be reassured by a trustmark, some governments advocate for them, and many authors emphasize their importance for e-commerce, but how important this really is for the trader, whether it is important enough to confer jurisdiction to an ODR provider, remains doubtful.

Mechanisms for the self-execution of decisions are for instance escrow accounts; judgment funds; transaction insurance mechanisms; links with credit card companies; and technological tools which allow to enforce the decision. With an escrow account, the buyer first submits payment to the escrow company, who verifies the payment and then authorizes the seller to ship the merchandise. The escrow company tracks the shipment and, a set number of days after reception, pays the seller. The escrow company acts as a secure third party, which holds an account on which the money transits. In the system of judgment funds, the fund is collected prior to the dispute resolution procedure. When an agreement is reached or when a decision is rendered, the awarded sum of money is taken from the judgment fund. If the ODR provider controls this fund, he can execute the outcome of his procedure himself. The ODR provider can also insure the parties: when a solution to the dispute is reached, the provider pays the winner directly, and afterwards reclams this sum of money from the losing party. Credit companies can operate as self-execution mechanisms in this manner: the ODR provider makes a contract with the credit card company according to which the right to charge-back is determined by the ODR provider controls this fund, he can execute the outcome of his procedure himself. The ODR provider can also insure the parties: when a solution to the dispute is reached, the provider pays the winner directly, and afterwards reclams this sum of money from the losing party. Credit companies can operate as self-execution mechanisms in this manner: the ODR provider makes a contract with the credit card company according to which the right to charge-back is determined by the outcome of the ODR procedure. The cardholder is allowed to charge back the trader if the ODR panel has decided so. Technological tools for the self-execution of ODR case outcomes is only possible in the implementation of the agreements or recommendations that are rendered by ECODIR. A label would allow to contractually force the traders to execute the solutions found on the ECODIR platform, A. Cruquenaire and F. Patoul, "Le développement des modes alternatifs de règlement des litiges de consommation : Quelques réflexions inspirées par l'expérience ECODIR", Lex Electronica, vol. 7, n°2, printemps 2002, <http://www.lex-electronica.org/articles/v7-2/cruquenaire-patoul.htm>, at par. 40-41.


Research conducted by BBBOnline reported that 84% of web users declare that they would be reassured by a certificate. This research has been reported in T. Trompette, "Une nouvelle mission : la certification des sites Web de commerce électronique", Les Cahiers de l'Audit, vol. 4, 1999, p. 34. Other empirical research has shown that "[t]he presence of credit card symbols do little to communicate trustworthiness, even though they're universally recognized by consumers. In contrast, Web-based "security brand", seals of approval, such as VeriSign, when recognized, do communicate trustworthiness": Cheskin Research et Studio Archetype/Sapient, "Commerce Trust Study", January 1999, <http://www.studioarchetype.com/cheskin>.


For instance the pioneering work of P. Trudel et alii, Droit du Cyberspace, Montreal, Les Éditions Thémis, 1997, p. 3-46.

For instance Escrow.com, which offers specific services for eBay users: <http://www.escrow.com>.

Trusted Shops, for instance, offers a similar service: "If the goods are not delivered, Trusted Shops will take action immediately after you have registered your complaint. If the dispute cannot be resolved, Gerling will refund your advance payment upon approval of your claim, <http://www.trustedshops.com/en/consumers/guarantee_en.html> and “Trusted Shops with money-back guarantee from Gerling insures you when shopping online against financial loss due to non-delivery or return of goods” <http://www.trustedshops.com/en/consumers/index.html>.

In some cases, the goal of the ODR procedure would not be the right to charge back, because, as D. Langer wrote, "[d]epending on the applicable mandatory law, the customer may even have the unwaivable right to charge back his credit card company if the card has been abused or if the trader has not executed himself. A charge-back right exists especially in the U.S. and the U.K. Art. 8 of the EC Directive on Distance Contracts only grants the right to charge back in case of fraud", T. Schultz, G. Kaufmann-Kohler, D. Langer, V. Bonnet, "Online Dispute Resolution: The State of the Art and the Issues", E-Com Research Project of the University of Geneva.
very specific circumstances. The UDRP provides such a mechanism: ten days after the decision (subject to a party bringing court proceedings), the domain name is canceled or transferred by the registrar of the domain name who is contractually bound to do so. The technological tool which renders this self-executing mechanism possible is the control by ICANN of the database which converts domain names into IP addresses: if a domain name registrar wants his domain names to be converted into IP addresses, he has to accept the conditions set by ICANN, among which to commit to execute all decisions rendered by an ICANN-approved dispute resolution institution. If the dispute is of low economic value, it is unlikely that the losing party would seek to litigate after a decision has been self-executed.

3.3 Financial structure of ODR providers

In addition to the requirements of due process proper to arbitration proceedings, the providers of ODR must ensure that their financial structure does not cause problems of independence. In the current context of ODR, the funding of the provider seems to be the major problem as regards independence and impartiality. The problem is that a for-profit ODR provider, and most providers are for profit, must produce an income which is high enough to ensure its viability, while keeping user fees low enough to be proportionate to the amounts in dispute and not being funded by a source that would raise legitimate concerns about independence.

There are globally three possible financial structures for ODR providers: they can be funded by external sources, by bilateral user fees, and by unilateral user fees. External sources could be for instance a university, a governmental or non-governmental organization, or a consumer association.

Geneva, 2001, <http://www.online-adr.org>, at 74. In these cases, the goal of the ODR procedure would be simply to reflect the likely outcome of the dispute in court and, on this basis, the buyer could decide whether it is reasonable to charge back the trader or not.

Art 4(k) of the UDRP.

In order to obtain a domain name in “com,” “org” or “net”, the prospective domain name holder must make a contract with a registrar approved by ICANN, at least when he follows ways which are accessible to non-technicians. ICANN approves only registrars which accept to commit to execute UDRP decisions.

As the UDRP is concerned, the words of Thornburg are very clear: “If the domain name holder who has lost the ICANN proceeding cannot afford to hire an attorney to draft a complaint and to pay the filing and service fees for a lawsuit, the domain name is gone”: E. G. Thornburg, “Going private: Technology, Due Process, and Internet Dispute Resolution”, 34 U.C. Davis L. Rev. 151, at 197. How likely this makes the emergence of a transnational law of domain names has been briefly addressed in T. Schultz, “Online dispute resolution (ODR) : résolution des litiges et ius numericum”, Revue Interdisciplinaire d'Études Juridiques, vol. 48, Summer 2002, publication forthcoming.

An issue that will not be addressed here is due process in ODR outside arbitration, particularly in mediation. In this context, the conditions of fair hearings, impartiality and equality of the parties are not so much a question of the validity of the case outcome, but of the quality of justice that is produced. If catharsis is to be provided online, and if the dispute is to be settled with both parties being satisfied, ODR providers may be favorably inspired to structure their procedure according to the numerous guidelines developed for offline mediation.

Consumers International found that 23 of the 29 ODR providers surveyed were for-profit initiatives: Consumers International, “Disputes in Cyberspace. Update of online dispute resolution for consumers in cross-border disputes”, November 2001, at 8.

In other words, “[a] mechanism must be adequately funded at a level sufficient to ensure that it is capable of fully meeting its obligations to the parties,” letter from BBBOnline to the Secretary of the Federal Trade Commission, March 21, 2000, entitled “Re: Alternative Dispute Resolution for Consumer Transactions in the Borderless Online Marketplace”, p. 10, <http://www.ftc.gov/bcp/altdisresolution/comments/underillbb.pdf>. It is likely that the costs will decrease with the evolution of technology.

One author took the curiously interesting opinion of proposing a “Cyberspace user tax”: “[m]y recommendation would be to spread the costs of administering the program through a broad Cyberspace “user tax.” This user tax would then be supplemented with funding from a small filing fee paid by each complainant”, R. C. Bordone, “Electronic Online Dispute Resolution: A Systems Approach—Potential, Problems, And A Proposal”, 3 Harv. Negotiation L. Rev. 175, 211, at 209 (1998). Cruquenaire and Patoul, after having analyzed and worked on ECODIR, propose financing by trader and consumer associations: A. Cruquenaire and F. Patoul, “Le développement des modes alternatifs de règlement des litiges de consommation : Quelques réflexions inspirées
Such funding provides indisputably the best guarantees for independence and impartiality because it is largely independent from vested interest, but such source of funding seems difficult to secure\(^64\). Bilateral user fees are easy to implement, but they are problematic in usual B2C and C2C cases, because they are either too low to cover the actual costs of the provider, fees and costs of the neutral included, or they are too high compared to the disputed amount. Such funding is a reasonable solution in B2B cases and in large B2C cases, but these cases are probably still infrequent in ODR\(^65\).

When the fees are charged unilaterally on the business, for instance a web trader or an insurance company, or when they are charged bilaterally but on widely unequal terms, a sufficient income can easier be produced while keeping the fees low for the consumer, but an appearance of bias inevitably arises\(^66\). But even in case of problematic funding, there are safeguards which can be implemented to limit the risk and appearance of impartiality. Such safeguards can be implemented at least at the levels of the panel composition, the architecture of the provider, and the dispute resolution process at large. The panelists must be selected in a manner that balances the different interests that inevitably arise in such a procedure\(^67\): the provider may wish to favor one type of parties, for instance the complainants if they are the parties who chose the provider, and each party has an interest to chose a certain type of panelist. The best solution in this respect may a three-member panel appointed from a panelist roster which applies strict rules of independence\(^68\).

The architecture of an ODR provider may offer some guarantees of independence, for instance by providing an appellate process\(^69\), by being trustmarked\(^70\), or by displaying a balanced stakeholder representation\(^71\).
The process must for instance be organized according to strict procedural rules and it must be globally transparent. The publication of the case outcomes also permits to monitor the general activity of a provider, but the publication of case outcomes is a controversial issue. First, it is controversial because it may deter some parties from participating while it is a positive incentive for others. On the one hand, some businesses may not want to disclose some of their disputes, because it means bad publicity. On the other hand, consumers may prefer that web traders are named and shamed. Second, the publication of case outcomes is controversial because it may facilitate forum shopping.

Forum shopping is done by rationally selecting an ODR provider who tends to rule in the favor of the party who selects the provider, this party being either the complainant or the party with the highest bargaining power. If the parties are able to choose the provider they wish, and in cyberspace they are not limited by geography, this will certainly produce a price competition, but it will also produce a competition to attract future cases (to increase income or reputation). Attracting future cases is partly done by showing a practice of ruling in favor of the party who selects the provider. The publication of case outcomes can then be used to monitor the practice of the ODR providers, and the party who can choose will avoid ODR providers which have an unappealing practice. This in turn will lead to a race to the bottom, in accommodating the desires of the party who chooses the provider.

This negative by-product of the publication of case outcomes may however be avoided by implementing still another safeguard: an ODR provider clearinghouse. The parties could refer to a central authority, the clearinghouse, which would select the appropriate provider for their case.

3.4 **Technological architecture of ODR systems**

From a technological point of view, ODR is simply a specific web service. As such, the likelihood of its use and its effectiveness is at least partly determined by its technical features and architecture. Most services offered on the web must be easy enough to use, in order to be available to as many people as possible; it must be adaptable to persons who may not be using standard equipment or may be disabled; it must be able to interoperate with other web services; and it must properly secure sensible data and communication.

The digital divide, that is the divide between people who use the Internet and people who do not, is often mentioned as one of the fundamental obstacles to ODR. This obstacle is of course especially

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71 Consumers International, for instance, advocate for “balanced stakeholder representation on the governing or advisory body [...] and providing case results” in order to ensure a minimum of independence in case of funding sources which may cause legitimate questions about independence Consumers International, “Disputes in Cyberspace. Update of online dispute resolution for consumers in cross-border disputes”, November 2001, at 9.


significant for countries where technology is less accessible. But divides also exist in countries where
the Internet is more commonly used, among persons connected to the net. Such divides exist for
instance between so to say low-tech users and high-tech users; between parties who can afford
substantial investments of time and costs in dispute resolution; between repeat players and one-shot
players. Obviously, the less persons are excluded by such a divide, the more such a system will be
used and will be successful.

If an ODR service is to be accessible by low-tech users, its must be exploitable by tools as elementary
as possible. For instance, parties must be able to participate in an ODR procedure even if they only
master emails. If it is to be accessible to parties who can only afford small investments in time and
money, the system must be operational without the parties having to study in detail how the system
works, and without them having to acquire expensive software or hardware. If an ODR service is
intended for one-shot players, it must very easy to figure out what the system offers, how one must
proceed, and what its advantages are. In other words, for a system to meet the largest possible
usership, its architecture must be as simple as possible.

In addition, the simplicity of the architecture of an ODR service induces trust; it allows the costs to
remain relatively low; it levels the playing field; and it eases the monitoring of the procedure by the
parties.

Simplicity is a necessary condition for an ODR system to be easily accessible and to be successful. But
in many cases it may not be a sufficient condition. Some parties and some disputes require specific
communication capabilities. In addition, an evolution can be expected as regards the disputes that are

74 As Gibbons stated, writing about access inequalities in offline arbitration, “repeat players obtain the expertise,
they possess the reasoning contained in the unpublished awards, and they can use it”. L. G. Gibbons, "Private
Resol. 769 (2000), at 786. The more complex the ODR process, the higher the advantage derived from prior
knowledge of the system.

75 According to Linden, “[t]he use of email seems to cut across all age bracket from 4 years old to 90 years old. [...] If
an individual can use the Internet at all, they seem to have mastered to one degree or another, the use of
email. [...] Therefore, it is not necessary for the disputant to learn a new skill set to invoke the use of email in
the process of dispute resolution". J. Linden, “Low Tech On-Line Dispute Resolution”, ADR Online Monthly, May
Resolving Conflicts in Cyberspace, San Francisco, Jossey-Bass, 2001, p. 78: “[F]or those companies or institutions
considering an ODR option, the challenge of convenience is complicated by the fact that the threshold level
must be set at the level of the capabilities of the participant who is least able or willing to participate”.

76 In their pioneering book, Katsh and Rifkin list convenience, trust and expertise as the three fundamental
features that any ODR system must provide in order to be used or to be successful. Convenience, in the words
of the authors, means that ODR systems “need to facilitate access and participation”: E. Katsh and J. Rifkin,
Online Dispute Resolution, Resolving Conflicts in Cyberspace, San Francisco, Jossey-Bass, 2001, p. 73. The
difference between convenience as it is understood there and simplicity is only a matter of viewpoint, simplicity
being architecture oriented and convenience being goal oriented.

77 If the architecture is simple, the user base is easier to understand and therefore the process is easier to
evaluate. If a system is sound and correctly evaluated, it will generate trust.

78 The Internet has already somewhat leveled the playing field between parties that can afford large investments
and parties that can less so, because legal resources are accessible more easily by less wealthy entities, due to
legal research by electronic means. If ODR systems are easily affordable to small parties, the leveling of the
playing field will even be increased: see O. Rahinovich-Einy, “Leveling the Playing Field? Resolving Disputes in
Resolution, Resolving Conflicts in Cyberspace, San Francisco, Jossey-Bass, 2001, p. 78: “[... ] there should not be a
power imbalance between the parties, [...] technological skill and equipment that affects ability to participate
can create a power imbalance”.

79 Accordingly, the first uses of ODR “occurred at the less complex end of the complexity spectrum”: E. Katsh,
“Online Dispute Resolution: The Next Phase”, op. cit., at par. 16.
handled, the technology at hand and the parties involved. ODR systems must be adaptative, in terms of system architecture and applications, to new conditions of interaction with users\textsuperscript{80}.

The particularities that ODR systems have to be able to adapt to are for instance spontaneity; typing and technical skills of the parties; time-zones; emotional stress; socioeconomic and cultural differences; or the scale of investments by the parties that is reasonable and feasible. In some cases, real time communication sessions, be it by email or web-based communication tools, are best because they force the parties to more spontaneous and because it may operate faster. In other cases it creates power imbalances, for instance when parties have different typing skills\textsuperscript{81}. Sometimes, holding conversation in a turn-based and delayed manner, for instance one day between each communication, is best, because the parties live in very different time-zone\textsuperscript{82} or because it reduces the risk of the parties overreacting to statements of the other party\textsuperscript{83}. Sometimes videoconference is needed because it reveals details of cultural and ethnic background, age and gender\textsuperscript{84}. Moreover, complex proceedings will be easier to implement in ongoing relationships, where both parties are repeat-players.

An evolution that can be expected, and to which ODR systems will have to adapt, is that ODR methods will be used in more diverse contexts and in more complex disputes with higher amounts at stake. ODR is for instance likely to extent to multiparty\textsuperscript{85} and multi-issue disputes, it will have to allow witnesses, legal counsels and experts to participate. As a consequence, more sophisticated and powerful applications will be developed, and ODR systems must be adaptable enough to use them rapidly\textsuperscript{86}.


\textsuperscript{81} Research has shown that persons with good typing skills and a connection with high data flow can easily dominate chat-room meetings: A. DuVal Smith, "Problems in Conflict Management in Virtual Communities", Communities in Cyberspace, P. Kollock and M. Smith (eds.), Routledge Press, 1998.

\textsuperscript{82} As Linden states: "the use of an ODR system would compress "time" [...], since Hamburg, Germany is approximately 10 hours later than Bakersfield, California, the use of real time interaction would be difficult": J. Linden, "Low Tech On-Line Dispute Resolution", ADR Online Monthly, May 2002, <http://www.ombuds.org/center/adr2002-5.html>.

\textsuperscript{83} Research reportedly revealed that, in some specific situations, sequential, broken up and relatively slow communication caused persons to pay more attention to the substantive content of messages, lessened the emotional stress brought up by conflict resolution and made it easier to overcome barriers of socioeconomic differences: G. R. Shell, "Computer-Assisted Negotiation and Mediation: Where We Are and Where We Are Going", Negotiation Journal, 11, 2, p. 117-121.

\textsuperscript{84} It is often fundamental to observe body language and inflections in tone and voice, because they provide indications on the degree of trust, the willingness to reach an agreement, and the parties' genuine concerns and interests. To be best interpreted, these indications have to be related to cultural and ethnic background, as well as to such factors as age and gender: R. S. Granat, "Creating An Environment for Mediating Disputes On the Internet", Working Paper for the NCAIR Conference on ODR, Washington, DC, May 22, 1996, <http://mantle.sbs.umass.edu/vmag/disres.html>.


\textsuperscript{86} As Katsh states: "[t]he power of online applications continues to grow and this will be a catalyst for the further growth of ODR": E. Katsh, "Online Dispute Resolution: The Next Phase", op. cit., at par. 12. But if the architecture of an ODR system is not flexible enough, the advantages of these new applications will not be usable to its full extent.
In other words, sometimes the parties and the dispute require a higher intervention of what Katsh and Rifkin call the “fourth party”, applications which can help the third party to “enforce; draft; survey; evaluate; schedule; store; and discuss”.

An ODR system must also be able to interoperate with other systems. Information has to be exchanged with web traders and possibly with courts. The ODR proceedings have to be linked with prior and subsequent events and procedures: evidence has to be gathered, and the enforcement authority has to be contacted. For these communications, data exchange standards are necessary, so that the data collected on the website of the trader can easily be used by the ODR provider and the agreement or decision easily sent to a court or any other entity. Sometimes cases have to transferred from one provider to another, or from a mediator to an arbitrator. Such data exchange standards are technically called “Exchange Markup Languages”, or XML, and in the ODR context ODR-XML. Much work has lately been done to promote the interoperability and transferability of cases by the Joint Research Commission of the European Commission.

Finally, an ODR system must secure enough to protect the parties’ interests and thereby to induce confidence in the dispute resolution mechanism. The features that have to be protected are the transmission and storage of information. The risks against which these features have to be protected are the access of the information and, a fortiori, its alteration. There are several tools to protect the transmission of information: emails for instance, can be protected by digital signatures, by the Secure Multipurpose Internet Mail Exchange Protocol (S/MIME) and by Pretty Good Privacy (PGP). Unfortunately, digital signatures and S/MIME require a certificate, which is often too expensive for small transactions, and PGP is difficult to install by laymen. Web-based communication may be easier to protect, for instance by using the Secure Sockets Layer (SSL), which secures the Hypertext Transfer Protocol. For the protection of stored data, the most frequently used devices are firewalls, some of which are freeware. Globally, secure emails are used less frequently in ODR systems than protected web-based communications and firewalls.

Security is still a major aspect of online confidence and trust. But although it is true that absolute security online is not possible, that it is always limited in time, that a system is only as secure as its weakest link, and that, on the Internet, everything can be faked, one must keep in mind that, in the offline world, security is never perfect either.

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89 The JRC has for instance launched the “Demonstrator”, which allows a user to “file a new case with notification mail to the respondent (claimant), respond to a case (claimant and respondent), view case(s) (claimant and respondent), and finally export a case in XML”. A predecessor was CLAIM, which applied a former XML, called the Extensible Forms Description Language (XFDL), developed by the World-Wide-Web Consortium (W3C). It experimented with electronic records that provide non-repudiation evidence by linking form questions to form answers, thus providing evidence of the context of the agreement: <http://odr.jrc.it>. This was more technically addressed in V. Bonnet, K. Boudaoud, J. Harms, T. Schultz, G. Kaufmann-Kohler and D. Langer, “Electronic Communication Issues Related to Online Dispute Resolution Systems”, Proc. WWW2002 – The Eleventh International World Wide Web Conference – Alternate Track CFP: Web Engineering, Honolulu, Hawaii, conference on 7-11, May, 2002, <http://www2002.org/globaltrack.html>.
91 The protection is indicated in the navigator toolbar by https://... instead of http://... . See <http://www.w3.org/Protocols>.
4 Conclusion

As a conclusion, I would like to summarize and make a tentative assessment of ODR along the four following topics: the global utility of ODR; the fields of ODR; the methods of ODR; and the ODR movement.

The global utility of ODR:
- Cyberspace is a place of social interactions\textsuperscript{92}. Consequently, disputes will inevitably arise.
- If cyberspace is to be a complete marketplace, there must not only be seller and buyers, goods and services, but there must also be dispute resolution mechanisms.
- These disputes must be solved in a manner that corresponds to these social interactions, it must happen quickly and inexpensively. ODR meets these requirements like no other dispute resolution mechanism.

The fields of ODR:
- ODR is likely to be used primarily in small disputes\textsuperscript{93}, because the costs of dispute resolution must be kept proportionally low, and ODR is therefore particularly attractive.
- ODR is likely to be used less in fields where legal constraints are higher, such as family law and taxation law\textsuperscript{94}, because the sovereignty of the states are particularly sensitive there.

The methods of ODR:
- Arbitration proper (which is binding and falls under the major conventions, such as the New York Convention) is faced with many legal issues and it will therefore take longer to develop.
- Mediation requires complex and sophisticated communication schemes\textsuperscript{95}, at least if catharsis is to be provided. Such communication schemes are difficult and expensive to set up.
- Automated negotiation is extremely limited. Solving disputes by making a blind bid on the amount of the settlement may not seem appealing to many people.
- Among the existing methods of ODR, assisted negotiation and non-binding arbitration (particularly if it provides some sort of non-legal binding force) are likely to be the most important ODR methods of the near future.

The ODR movement:


\textsuperscript{93} According to the ABA Task Force “ODR is not used to any meaningful degree in the B2B market segment since the parties have made other arrangements for the settlement of disputes between them and disputes among them are rare in any case”: Task Force on Electronic Commerce and Alternative Dispute Resolution, “Addressing Disputes in Electronic Commerce: Recommendations and Report”, draft March 2002, p. 15.


• As in electronic commerce generally, there are many ODR providers ceasing or beginning activity\textsuperscript{96}. This shows that a workable business plan is still difficult to find.
• The current success of ODR is as may hope. It is true that SquareTrade has solved over 200'000 disputes in about two years, but this must be put into context, as eBay, SquareTrade’s largest provider of disputes, has some 2 million transactions each week\textsuperscript{97}.
• One by-product of the ODR movement that is likely to have a bright future is the use of the technology developed for ODR in offline arbitration and other ADR\textsuperscript{98}. In arbitration proceedings which are primarily offline, videoconferencing is still rarely used, with a notable exception for arbitration in the Olympics, although it may be extremely useful to hear witnesses and experts online. Electronic case files accessible online could also save time and costs. In other words, ADR can certainly benefit from ODR.

As a final word, I would say that ODR still has probably as many obstacles as it has advantages, and these obstacles would benefit from being addressed before the current enthusiasm disappears.

\textsuperscript{96} The market of ODR shows that eResolution; iLevel; NewCourtCity; SettleSmart; and 123Settle have ceased activity in the last 6 months, while The Asian Domain Name Dispute Resolution Center; JAMSadr; LegalVote; the NetCheck Commerce Bureau; Public Dispute; Settlex; RisolviOnline; the Finanzgericht in Hamburg; and the Money Claim Online pilot have begun online activities.

\textsuperscript{97} This figure is reported in E. Katsh, “Online Dispute Resolution: The Next Phase”, \textit{Lex Electronica}, vol. 7, no 2, spring 2002, \url{<http://www.lex-electronica.org/articles/v7-2/katsh.htm>}, at par. 7.

\textsuperscript{98} On the use of IT in offline mediation, J. Linden, “Low Tech On-Line Dispute Resolution”, \textit{ADR Online Monthly}, May 2002, \url{<http://www.ombuds.org/center/adr2002-5.html>}. Also Katsh speaking of the future of ODR: “we will learn much from the hybrid ADR/ODR systems that will be employed”, and “bringing online tools and approaches into offline practice can be expected to occur gradually as tools are developed, found to be appropriate, and become a routine part of the mediator or arbitrator’s toolkit.”, E. Katsh, “Online Dispute Resolution: The Next Phase”, \textit{op. cit.}, par. 34-35
5  Appendix: matrix of ODR providers


<table>
<thead>
<tr>
<th>ODR provider</th>
<th>Arbitration</th>
<th>Mediation</th>
<th>Assisted negotiation</th>
<th>Automated negotiation</th>
<th>Online Juries</th>
<th>UDRP</th>
<th>Courts: Online filing</th>
<th>Courts: online proceedings</th>
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