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Electronic Discovery/Disclosure: From Litigation to International Commercial Arbitration[1]

by CHER SEAT DEVEY

1. ELECTRONIC DISCOVERY/DISCLOSURE

What is Electronic Discovery/Disclosure? Electronic discovery (ediscovery or edisclosure) refers to any process in which electronic data and documents (*e.g.* e-mails, Word documents) are sought, located, secured, and searched with the intent of using them as evidence in a civil (or criminal) legal case. Viewed in relation to discovery of paper-based documents for evidence, electronic discovery is thus no more than an evolutionary step forward in the discovery process. This transformation has resulted in the 'myriad of issues'[2] which are perceived as challenging to litigators and the courts.

Interpretation of technical terms in the context of electronic discovery disputes or case management will potentially pose challenges in litigation and arbitrations such as have occurred in electronic commerce and internet related disputes. In these, technology changes the notion of business records and the authenticity of contracts (*e.g.* electronic signatures).[3] As technology changes and evolves, the technical challenges associated with electronic discovery will change. Additionally, rules that are in place today may not be viewed as flexible or broad enough to address future developments and the issues associated with the widespread use of technology in homes and businesses.

Electronic Rules for Changing Technology "Rigid justice is the greatest injustice." Thomas Fuller (1654-1734).[4] Rules regarding 'data compilations' have been in place since 1970 under the American Federal Rules of Civil Procedure (FRCP) Rule 34(a),[5] which was revised to 'accord with changing technology', so resulting in the amended Rule 34(a)(1).[6] This was designed to be broad enough to cover all current types

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[1] The author would like to thank Martin Goodman and Roger Clough for their individual reviews. This essay is based on the author's dissertation for a post-graduate diploma in International Commercial Arbitration. The author also wishes to thank Angie Raymond and Stavros Brekoulakis, Queen Mary College, London for their support. Special thanks to Derek Roebuck for his editing. Also, many thanks to those who kindly provided access to their articles on their websites/blogs, *e.g.* Ken Withers at http://www.kenwithers.com/. The law is stated as at December 30, 2007.

[2] The Federal Rules of Civil Procedure and several state civil procedure rules have been derived and based on the 'The Sedona Principles: Best Practices Recommendations and Principles for Addressing Electronic Document Production', created (mainly for judges) to handle and resolve 'myriad of issues' related to electronic documents. The Sedona Principles and the working group (the Sedona Conference) are at www.thesedonaconference.com.

[3] As regards electronic signatures, despite the provisions of the EU Directive (Electronic Communications Act 2000),these have not been universally recognised in Europe, *e.g.* the name in an e-mail address can be a form of electronic signature as recognised in US and Italy but in England and Wales a recent decision (*J Pereira Fernandes SA v Mehta* [2006] 1 WLR 1543) reached a contrary conclusion that cannot be reconciled with the international cases.

[4] Simon James and Chantal Stebbings *A Dictionary of Legal Quotations*, Croom Helm, London and Sydney 1987.

[5] FRCP P 34 advisory committee's note, subdivision (a)(1970).

[6] According to the Rules Committee Commentary; Rule 26(a)(1)(B) is amended to parallel Rule 34(a) by recognising that a party must disclose electronically stored information as well as documents that it may

of computer-based information and flexible enough to encompass future changes and developments. The Sedona Principles[7] were revised in 2007 following the FRCP amendments.

Addressing these issues is complex, as they require an understanding of laws, rules and technology. Today's technology may be obsolete before the implications of these rules can be fully assessed. E-mails have challenged the courts in the US and England[8] and the rules have recognised the preponderance of e-mails. It will be interesting to see how the rules will be interpreted to address new technologies such as radio frequency identification (RFID) tag systems,[9] as well as other devices in which electronically stored information (ESI) can hide. Today the 'smoking gun' is in e-mails; tomorrow it may be hidden in someone's pocket/wallet. One of the challenges in processing ESI is that technology is an ever evolving moving target. Whether ediscovery rules can meet and address emerging trends in storage and communications or not remains to be seen.[10]

Costs and Efficiency Changing technology is bound to incur additional transactional costs in ediscovery disputes.[11] In *Zubulake v UBS Warburg*[12], e-mail restorations from backup tapes created disputes on costs associated with the restoration/recovery. Ediscovery that involves searching for the relevant information from vast databases and problems with obsolete software are just a few of the challenges. Volumes of electronic documentation are constantly being created and stored in various media. Besides, businesses and individuals are now exposed to a multitude of regulations. These will also result in making electronic discovery far more hazardous. Implementation in terms of maintaining and managing processes, policies and data for electronic discovery will incur costs no matter how efficient or organised an organisation is in its IT operations.

The CPR and FRCP were designed to ensure that litigation is 'speedy and less expensive' (FRCP Rule 1), 'with the overriding objectives to be cost efficient - expeditiously and fairly' (CPR Part 1.1(2)). These goals may potentially be unrealisable. Unlike in the USA, where several electronic discovery cases[13] have

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use to support its claims or defences. The term "electronically stored information" has the same broad meaning in Rule 26(a)(1) as in Rule 34(a). This amendment is consistent with the 1993 addition of Rule 26(a)(1)(B).

[7] The Sedona Principles (2nd edn): Best Practices Recommendations & Principles for Addressing Electronic Document Production (June 2007) available at www.thesedonaconference.com.

[8] The English rules of procedure, Civil Procedure Rules 1998 (CPR) apply to England and Wales.

[9] RFID technology will revolutionise the way companies around the world do business as reported in 'Beijing Olympic Games Prompts RFID Development in China', http://www.networkworld.com/community/node/18988.

[10] Web 2.0 applications are evolving and the widespread legal challenges such as privacy and confidentiality and jurisdiction are discussed by Carlisle George and Jackie Scerri, 'Web 2.0 and User-Generated Content: Legal Challenges in the New Frontier', (2007) 2 *Journal of Information and Law Technology*, posted online at http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2007_2/george_scerri.

[11] The costs of document discovery by some estimates, are expected to rise to 2.9 billion by 2007 Leigh Jones "More Firms use Temp Attorneys" *National Law Journal* October 10, 2005.

[12] *LLC*, 216 F.R.D. 280.

[13] Besides *Zubulake v UBS Warburg, Rambus, Inc. v Infineon Tech. AG*, 220 F.R.D. 264 (E.D. Va. 2004) and *Coleman (Parent) Holdings, Inc. v Morgan Stanley & Co., Inc.,* 2005 WL 679071 (Fla. Cir. Ct. March 1, 2005).

spearheaded the FRCP amendments, there appear to be no similar high profile electronic disclosure cases in England.[14]

Evaluating the benefits and managing costs to achieve the desired efficiency gains can be complex and elusive, especially where the total costs of the electronic discovery case are unknown. Although the courts control the proceedings, the onus is still on the parties to assess electronic discovery costs, to assist in achieving the aims of the courts and to perform the various activities to produce the information. Assessing the costs to ensure that litigation will meet the criterion on 'speed or efficiency' is not helped by the lack of clear direction on how to determine the scope of electronic discovery. Both the FRCP and CPR rules stress the principle of proportionality [15] and there is also the proportionality test and case law in the USA on cost shifting.[16] Although the concept of proportionality is sensible, its application is likely to be difficult even in familiar areas. Moreover, carrying it over to new technology presents additional challenges. Proportionality requires issues concerning the scope of discovery on metadata, preservation and production form[17] to be clearly identifiable. However these issues are for parties to agree upon.

Scope and choices related to metadata and the extent of the search will depend on accessibility and dispersion of the data, which, if not addressed and agreed upon beforehand will mean that time, volume and cost cannot be ascertained.[18]

Although the sources or storage of the data have been discussed, the 'production form'[19] has been left open, which means that review or inspection activities will invariably involve data conversion (and possibly translation) into a 'form' that is

[14] From discussion with Litigation Support people as indicated in the edisclosure blog and also from searches requested and conducted by The Law Society library services. There have been cases related to e-mails and computer disks but they are not reported as 'electronic disclosure' but as 'disclosure'.

[15] FRCP Rule 26(b)(2) on proportionality, in particular "A party need not provide discovery of electronically stored information from sources that the party identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the party from whom discovery is sought must show that the information is not reasonably accessible because of undue burden or cost…" CPR 1.1(2)(c); "It may, for example, be reasonable to decide not to search for documents coming into existence before some particular date, or to limit the search to documents in some particular place or places, or to documents falling into particular categories". Also note the Sedona Principle 2: "technological feasibility and realistic costs of preserving, retrieving, reviewing and producing in the light of the nature of the litigation and the amount in controversy" and Principle 11 which emphasises "reasonable selection criteria".

[16] B.A. Caulfield and Z.S. Orrick "Electronic Discovery Issues for 2002: Requiring the Losing Party to Pay for the Costs of Digital Discovery", Herrington & Sutcliffe LLP, San Francisco, California, posted online at http://www.kenwithers.com/articles/sedona/caulfield2.htm.

[17] FRCP Rule 34 "...produced in either the form in which it was ordinarily maintained or in a 'reasonably useable' form". CPR Rule 31.4 "contains a broad definition of a document…It also extends to additional information stored and associated with electronic documents known as metadata". Practice Direction CPR 2A.3 states "The parties should co-operate at an early stage as to the format in which electronic copy documents are to be provided on inspection".

[18] As clearly indicated in the need to address these issues, the FRCP specifically incorporated conference rules into Rules 16(b)(c) and 26(f). The Practice Direction CPR Part 31 2A.2 stated "prior to the first Case Management Conference" and also in 2A.3 "co-operate at an early stage".

[19] Although the revised Sedona Principle 12 addresses 'Form of Production' in more depth, conversion of data will invariably still occur due to the different applications and formats in a typical organisation.

presentable and accessible by parties and courts. Conversion of data [20] can be time consuming and may require technical specialists.

Electronic rules are broad in that both data stored on networks and data retained on backup tapes are discoverable. Furthermore, the Practice Direction CPR Part 31 2A.5 states: "It may be reasonable to search some or all of the parties' electronic storage systems".

In the current business environment, given the amount of electronic data stored, even if only part of the system is searched it is still likely to cause upheaval and potential business disruption. This is especially true since most organisations' policies on data retention and data management in general are either non-existent or not aligned with the requirements of the rules and other regulatory compliance requirements.[21] Without data retention policies or data management policies, new problems arise: preservation of data and electronic discovery exercises will not only be unduly burdensome and costly, but will inevitably lead to delay and ultimately to potential sanctions for negligence and contempt of court.

In assessing the scope and costs of ediscovery, perhaps this US commentary best sums up the challenges:

> "It is not possible to define in a rule the different types of technological features that may affect the burdens and costs of accessing electronically stored information. Information systems are designed to provide ready access to information used in regular ongoing activities. They also may be designed so as to provide ready access to information that is not regularly used. But a system may retain information on sources that are accessible only by incurring substantial burdens or costs." [22]

2. INTERNATIONAL ARBITRATION IN THE DIGITAL ERA

Courts in the USA have grappled with electronic discovery and in England there have been cases related to disclosure of computer disks and e-mails.[23] Whether tribunals have similar challenges is not publicised. There have been several interesting questions raised by practitioners at the London Court of International Arbitration (LCIA)-The Grove, touching on 'document production', 'International Bar Association (IBA) Rules of Evidence' and also 'disclosure of electronic documents'.[24]

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[20] Data are the elemental or low-level aggregation of pieces of 'information' with some structure (form). Data in raw or native format (*i.e.* streams of digital electrons) need to be transformed into an output format (*e.g.* doc, pdf) which enable the data to be presented coherently as information.

[21] This is from the author's own work experiences and also confirmed by the number of ediscovery vendors preaching on data retention strategies and document management strategies at various conferences and articles published online.

[22] Rules Committee Commentary to Rule 26 on Subparagraph (B) limitation on sources.

[23] *e.g. Marlton v Tektronix UK Holdings Plc* [2003] EWHC 383 (computer databases) where Tektronic sought an order for the disclosure of Marlton's computer disks.

[24] LCIA- The Grove, 11-13 May 2007: one question was 'Disclosure of electronic document'. Can we devise rules or principles applicable to discovery of electronic materials in international arbitration, or is this a topic better left for case-by-case development (or one that is simply too tough to tackle)?

A sea change has also very recently occurred, again coming from the USA[25] (the AAA view), in that electronic discovery is already happening also, to a limited extent, in international arbitration.

What appears to be a contemporary and pervasive problem in international arbitration is the procedural issues related to 'presentation of evidence' and 'discovery'.[26] Furthermore, as articulated by Park: [27]

> "it is true that many of the disputes that are nowadays brought before arbitral tribunals are much more complex both in terms of law and facts than they were some decades ago. Often tons of documents and huge amounts of information have to be analysed for preparing the case."

Contemporary and Electronic Documents All arbitrations begin with documents which are an integral part of arbitration.[28] Documents are generally written submissions of parties; attached to these are contemporary[29] documentary evidence in support of the parties' claims and defences. Contemporary documentary evidence includes e-mails exchanged with parties, records of discussions or phone calls and licences. Non-contemporary evidence, considered more controversial but increasingly acceptable as 'documents' are CD-ROMs, floppy disks and hard disks.[30]

The thorny problem of interpreting 'document' is addressed in IBA Rules of Evidence (IBA Rules) Article 1: [31]

> 'Document' means a writing of any kind, whether recorded on paper, electronic means, audio or visual recordings or any other mechanical or electronic means of storing or recording information.

Although this definition does cover contemporary and non-contemporary documents, the guidelines in the IBA Rules primarily address conventional 'production of document' and not the procedures for the disclosure or discovery of 'electronic

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[25] J.L. Frank and Julie Bédard "Electronic Discovery in International Arbitration: Where Neither the IBA Rules nor U.S. Litigation Principles are Enough" (2008) 62 *Dispute Resolution Journal* 1.

[26] P.R. Griffin "Recent Trends in the Conduct of International Arbitration - Discovery Procedures and Witness Hearings" (2000) 17 *Journal of International Arbitration* 19–30; also in the introduction by J.D.M. Lew in L.A. Mistelis and J.D.M. Lew (eds) *Pervasive Problems in International Arbitration,* Kluwer Law International (2006).

[27] W.W. Park "The Procedural Soft Law of International Arbitration: Non-Government Instruments" in L.A. Mistelis and J.D.M. Lew (eds) *Pervasive Problems in International Arbitration,* Kluwer Law International (2006) 141.

[28] J.D.M. Lew, L.A. Mistelis, S.M. Kroll *Comparative International Commercial Arbitration,* Kluwer Law International, 2003, pp.22-39.

[29] Alan Redfern, Martin Hunter, Nigel Blackaby and Constantine Partasides *Law and Practice of International Commercial Arbitration,* Sweet & Maxwell, 2004, pp.1-41, 6-68: Methods of presenting evidence : the word contemporary is used in 'production of contemporary document', perhaps to distinguish from 'electronic document' 6–71: Application of the Principle of Proportionality.

[30] J.D.M. Lew, L.A. Mistelis and S.M. Kroll *Comparative International Commercial Arbitration,* Kluwer Law International, 2003, pp.22-40.

[31] The IBA Rules of Evidence were adopted by a resolution of the IBA Council on 1 June 1999 which predates the ediscovery/edisclosure rules.

documents' or 'electronic/digital evidence'. For this digital era, and in the discussion on electronic disclosure,[32] documents that exist in a format other than paper or in hard copy (*i.e.* contemporary) are commonly described as 'electronic documents' or 'digital documents'.

In the litigation world, the aptly coined phrase, the 'myriad of issues', had raised heated debates on 'undue burdens and costs' associated with discovery of ESI and electronic communications. Less debated or touted under the banner of 'electronic discovery' are the characteristics and the associated benefits of electronic documents.

Also, more relevant in arbitration and as indicated by the AAA view: 'parties are disclosing electronic information both voluntarily and when compelled to do so during discovery' and also 'parties to international arbitration are probably treating e-mail and other electronic information like paper documents, with no attention to the implications that the electronic nature of this information may have on discovery."

Notions of Data and Electronic Documents "Computers don't lie, people do" this saying becomes relevant in seeking for truth in the digital era: [33]

> "The smoking guns in court rooms today are found in computers, not filing cabinets. In fact, 98% of all business records are now electronic, and 80% of them are never converted to paper or other tangible form. So if you don't look for the Electronically Stored Information, you will miss the key evidence."

Data are the prerequisite for information and as data are ubiquitous, processing of ESI tends to demand basic skills in data processing to handle electronic documents.

Long before the term IT ('information technology') was coined, 'data processing' was the term applied to the 'computer department'. At their core, most IT efforts and activities involve collecting, distributing, and managing data, providing data where it is needed, when it is needed, how it is needed, and for whom (if authorised) it is needed. These activities performed on the data and the persons managing the data are generally recorded and stored, classed as data 'audit information'. Typically, an IT department will have more than one person managing the corporate data (or databases). This may include disparate systems/applications, massive volumes of data as well as various storage media and potentially in different locations. Establishing the 'custodian' of the data will require not only planning but full cooperation from various teams of people.

Besides these IT activities, data gathered might include word processing, spreadsheets, e-mail, web applications and other computer applications. They might also include images captured from scanned paper-based documents (*e.g.* faxes, photographs, business records, certificates). Increasingly, video images and voice data are also captured and stored. These activities are sometimes referred to as record management.

[32] The term 'electronic disclosure' will be used for discussion in international commercial arbitration (international arbitration).

[33] R.C. Losey, attorney, on his blog at http://ralphlosey.wordpress.com/2007/06/07/top-ten-reasons-e-discovery-is-a-major-headache-for-most-companies-and-lawyers/.

Such activities might further record data pertaining to how the data were manipulated, by whom and when such manipulation took place. This information is commonly known as metadata. Essentially all documents in digital format will contain metadata. As technology gets more advanced, more types of metadata [34] are defined, captured and stored.

One distinguishing feature of electronic documents is that such metadata information, which provides not only data that can be used for searching but other contextual, descriptive information, are linked to a record in electronic format. These metadata records essentially hold traces and trails of information [35] on the electronic documents which in terms of evidence or fact gathering may provide the proverbial 'smoking gun'. However, the metadata information is normally hidden from the information or text as viewed on a screen or on print. Generally the metadata are classed as 'properties or attributes' [36]. Being a digital record, metadata share the same characteristics as any other electronic data: they can be searched for, and are vulnerable to change and duplication. They also tend to be more voluminous and might be located in another file. While more difficult to destroy, metadata can be removed ('scrubbed').

Electronic documents used in electronic communications, *e.g.* e-mail and attachments, pose additional challenges as metadata are contextual. Deciphering the trails (or threads) requires more skills than the normal paper-based review process. As we know, simply opening a Word document changes the metadata. Now imagine opening an e-mail, which may have blind carbon copy and several distribution lists, even attached documents (multiple-duplicates, privileged?). The problems multiply in complexity.

[34] Currently there are broadly three categories of metadata: descriptive metadata, structural metadata and administrative metadata. These are described by Stephen Mason (ed.) in *Electronic Evidence: Disclosure, Discovery & Admissibility* LexisNexis Butterworths, 2007, p.29, 2.10.

[35] Metadata information includes: the author details; file details; when and how a document was created; location from which the file was opened or where it was stored etc. in e-mail, the blind carbon copy addresses.

[36] As in MS Word, metadata can be accessed via the 'properties' link in the application that created the document.

A Novel Challenge for the Uncharted International Arena? Most ediscovery problems stem from the above notion of electronic documents which have hidden and linked metadata, which may not be available on printed or hard copy documents. The metadata may hold tracking information or 'digital fingerprints' which some parties might not want to reveal. When ordered as part of ediscovery, this may result in a host of electronic discovery disputes surrounding spoliation or chain of custody, 'undue burdens and costs' and also present unwelcome issues arising from privilege/confidentiality. In *Williams v Sprint/United Mgmt Co*,[37] the Kansas courts ruled that the defendant's unilateral decision to produce ESI with the metadata removed (scrubbed) was unacceptable. In *In re: Telxon Corporation Securities Litigation v Pricewaterhousecoopers, LLP*, [38] a sanction was imposed for failure to produce metadata.

In the ediscovery litigation world, discovery of metadata is still considered controversial.[39] Metadata is covered under Practice Direction CPR 31 2A.1 but the FRCP [40] does not directly address metadata. Metadata being searchable and holding tracking information, it may reveal information about who created a document, who edited it, when changes were made, and what changes were made. Parties who receive records of a type likely to contain metadata are often able to engage in 'metadata mining' which may lead to a 'fishing expedition'. What is not clear is whether a party is free to assume on the one hand that metadata was intentionally produced (and thus is free to 'mine' it and take advantage of it) or on the other hand to assume that it was inadvertently produced. In international arbitration, where parties may be from different cultures, metadata may be considered as 'background' information revealing the 'private' character of the parties. Parties from civil law countries such as France would most likely view this as intrusive and totally unacceptable.

Besides the uncertainty regarding traditional personal rights as well as the fact that confidentiality is not guaranteed in arbitration, considerable conflict between parties from divergent backgrounds may stem from metadata issues. These arise because legal privileges (and the 'without prejudice' rule) that exist in many jurisdictions differ significantly in detail. These can make public policy issues more unruly in the digital era as electrons do not obey ethics or rules including personal rights. In addition, the parties may be ill-prepared for electronic disclosure and the tribunals may not be cognisant of issues around electronic disclosure. In those cases, no matter how efficient or effective the parties' perception on arbitration, the prospect that their perceived rights may be adversely overruled may undermine the role of arbitration for international disputes.

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[37] 230 FRD 640 (D Kan 2005).

[38] No. 5: 98CV2876, 1 : 01CV1078., July 16, 2004. N.D.Ohio.

[39] C.M. Branthoover and K.I. Marryshow "Ethical Considerations in Light of the Recent E-Discovery Amendments to the Federal Rules" Document Analysis Technology Group (DATG) and Records Management Alert, January 2007.

[40] Rule 26(b)(2) introduces the notion of accessible and inaccessible information. The concept of inaccessible has been defined in terms of substantial economic or of other burdens, not in terms of being 'hidden' or 'embedded'. As a result, the rule indicates that, absent very unusual circumstances, metadata will fall into the reasonably accessible category of ESI.

The practice in international commercial arbitration is that each party starts by producing to the other and to the tribunal only the documents on which it relies in support of its case. The nature of electronic documents being 'warehouse-type',[41] with the associated metadata, will create 'wholesale' document production which is against the ethos of arbitration practice. Moreover, it is widely accepted that 'fishing expeditions' should not be permitted and hence pre-action disclosure [42] or initial disclosure is generally also frowned upon.

Establishing the scope of electronic disclosure is a delicate and complex activity that requires not only understanding the notions of electronic documents and the inherent nature of metadata but also skilfully finding and striking the right balance or the appropriate procedural threshold to meet the international audience. Applying the principle of proportionality in familiar areas is difficult; applying it in areas involving technology will prove additional challenges. [43] The relevance and usability of metadata in electronic disclosure in international arbitration cannot be ignored especially as there are complex correlations between arbitral procedure and the substantive law on rules on evidence and the related burden of proof.[44]

On proportionality and metadata, in US litigation the extent to which metadata need to be scoped includes:

- whether the metadata are relevant;
- whether the information they supply can be obtained more easily elsewhere;
- whether that information is cumulative;
- whether the metadata may enable the use of technology tools to search or sort the information being produced;
- and whether the costs and burdens of producing the metadata outweigh the benefits they provide.

For international arbitration, as regards electronic document production, limiting the scope also requires that it address the extent to which metadata would be required in a particular case and to which guidelines or principles on metadata and also the forms of production would add to the bedrock of principles that makes arbitration flexible.

Whatever principles and guidelines have appeared as a result of electronic discovery, the discretion of the arbitral tribunal in ordering electronic disclosures and organising the proceedings may be limited by arbitration rules, by other provisions agreed by the parties and by the law applicable to the arbitral procedure. Furthermore, the New

[41] 'Wholesale' or 'warehouse-type' document production is not practised in arbitration, Redfern and Hunter *Law and Practice of International Commercial Arbitration*, 6-71.
[42] J.D.M. Lew "Autonomy of International Arbitration Procedure" in John Lowry and Loukas Mistelis *Commercial Law: Perspectives and Practice,* LexisNexis Butterworths, 2006.
[43] R.L. Marcus "Confronting The Future: Coping with Discovery of Electronic Material" (2001) 64 *Law & Contemp. Probs.* 253, posted online at http://www.kenwithers.com/articles/index.html.
[44] Mark Huleatt-James and Robert Hunter "The Law and Rules Applicable to Evidence in International Commercial Arbitrations and Some Issues Relating to their Determination and Application" in G.M. Beresford Hartwell (ed.) *The Commercial Way to Justice* Kluwer Law International 1997, pp45-72.

York Convention Article V(d)[45] should be observed for rendering an enforceable award. There are currently no arbitration rules or laws or international guidelines on electronic disclosure or digital evidence and even though arbitration laws are increasingly harmonised, differences still exist on the procedural rules and practice concerning evidence disclosure. [46] Electronic disclosure will heighten the differences and may be the major difference.

Irrespective of whether electronic discovery is conducted in litigation or arbitration, electronic documents and metadata will pose a novel challenge especially in international arbitration.[47] The current reality is reflected in *Tajik Aluminium Plant v Hydro Aluminium AS* where the English court clearly distinguished where litigation and arbitration do not intersect in respect of documentary procedures: [48]

> "One should not necessarily expect to find complete symmetry, therefore, between the documentary procedures that apply in arbitral proceedings and those that apply to proceedings in court."

Preliminary Hearings in International Arbitration However, one area which clearly intersects is the call for parties in dispute to 'meet and confer'[49], that is to hold a preliminary hearing or case management meeting. A preliminary hearing is the first stage of arbitration proceedings, before the written stage. Despite the fact that institutional rules and arbitration laws do not impose an obligation or prohibit preliminary meetings,[50] subtle differences exist in the power of arbitrators to collect evidence at such hearings. For example, the International Chamber of Commerce (ICC) requires the 'Terms of Reference' to be settled at the preliminary stages of arbitration but it does not provide arbitrators and parties with a means to gain more evidence. Although there are conflicting views as to whether a preliminary meeting is

[45] The composition of the arbitral authority or the arbitral procedure was not in accordance with the agreement of the parties, or, failing such agreement, was not in accordance with the law of the country where the arbitration took place.

[46] B.Y.F. Yang and D.C. Dai "Tipping the Scale to Bring a Balanced Approach: Evidence Disclosure in Chinese International Arbitration", 2007, posted online at http://works.bepress.com/.

[47] Electronic Evidence and Disclosure in International Arbitration, New York City January 31, 2008. The jurisconferences seminar http://www.jurisconferences.com/arbitration.php?id=9&p=1 'recognizes the harsh reality of the problems presented by the creation and maintenance of electronic data in international business transactions and provides a forum for discussion by the leading experts in the electronic data field of how best to deal with the phenomena of electronic data in the context of disputes that are to be resolved in international arbitration'.

[48] *Tajik Aluminium Plant v Hydro Aluminium AS and others* [2005] EWCA Civ 1218, on witness summons and document disclosure: 'Whether it would be desirable for the court to have a power of that kind or not, the fact remains that the 1996 Act curtailed the court's role in relation to arbitral proceedings in certain respects, one of which concerns disclosure. One should not necessarily expect to find complete symmetry, therefore, between the documentary procedures that apply in arbitral proceedings and those that apply to proceedings in court'.

[49] Sedona Principles 3, FRCP Rules 26(f), 16(b) and Practice Direction CPR 31 2A.2, 2A.3.

[50] Redfern and Hunter *Law and Practice of International Commercial Arbitration*, 6-27: "Apart from ICSID, none of the major sets of institutional arbitration rules mention the concept of a preliminary meeting, thus they neither impose an obligation to impose one nor prohibit it."

beneficial to the parties and the arbitral process, it is clear that it should be conducted in complex arbitrations involving electronic disclosure[51].

Furthermore, arbitration clauses and agreements are unlikely to contain express terms incorporating procedural law or any references to rules or laws applicable to documentary evidence or any evidential matters relating to oral examination of witnesses. If included they may be inconsistent with national law.

As electronic disclosure is an evolutionary step from discovery and production of documents, at the preliminary meeting parties and the tribunal could extend the broad UNCITRAL Notes[52] to include issues to be addressed for electronic disclosure.

At the preliminary meeting, parties and the tribunal should agree:

- the scope of the discovery (paper-based and electronic), *e.g.* internal and third party document requests;
- define the issues, accessibility of the data, the types of documents, data integrity requirements, *e.g.* authenticity (original/duplicate), validity of the data, and any other admissibility requirements;
- the procedures or stages for electronic disclosure, including the extent to which metadata would be necessary and required;
- the forms of production, the language (translation requirement), sources of data;
- develop a discovery plan, *e.g.* timescale for submission/exchange/production, collaboration for addressing issues;
- written submissions delivery style, *i.e.* sequential or simultaneous;
- waiver of legal privileges issues, *e.g.* use of claw-back agreements or a specific order where appropriate, or device to protect commercially sensitive information, *e.g.* confidentiality-rings;
- parties' obligations and expectations.

Additionally, the Sedona Principles could be incorporated and reviewed to address issues which are specific to the circumstances of the case, *e.g.* on the forms of production. A common glossary covering electronic disclosure terms should also be included in the discovery plan for all parties.

One issue which needs to be raised early, *i.e.* before it is clear that a decision is needed, is the need to order procedure to preserve ESI. Decision making or procedure order by tribunals at a preliminary hearing may be controversial, as the issues of the case are not yet fully submitted. Setting and managing the parties' expectations,

[51] Andrew Tweeddale and Keren Tweeddale *Arbitration of Commercial Disputes: International and English Law and Practice*, Oxford University Press, 2007, 8.28: "Conflicting views and for example, the London Maritime Arbitration Association rules, a preliminary meeting is foreseen and recommended in complex arbitration."

[52] United Nations Commission On International Trade Law (UNCITRAL) Notes on Organizing Arbitral Proceedings, 1996: http://www.uncitral.org/pdf/english/texts/arbitration/arb-notes/arb-notes-e.pdf.

especially their notions on electronic documents, becomes more relevant as the parties' IT environments, from infrastructure to support, will invariably be diverse. Collecting data from potentially diverse sources of storage media not only requires collaboration of the organisation's staff but may also require external forensic experts. Moreover, accessibility should not be taken for granted in the international arena where privacy and data protection vary across jurisdictions. Any privacy and confidentiality requirements will need to be factored in.

Moreover, the law concerning waiver of privileges in electronic discovery and spoliation of evidence is evolving. At the preliminary hearing, the parties' obligations and expectations need to be identified and clarified as electronic disclosure in an international setting will heighten ethical obligations of lawyers and conflict of interests.

Due Competence and Privilege The principle "that each party should be entitled to know, reasonably in advance of any evidentiary hearing, the evidence on which the other parties rely"[53] will not be sufficient when it comes to electronic disclosure.

> "Many lawyers are not well informed on what is required to be discovered, many more are incompetent in transmitting to the client instructions on what the client needs to do in order to afford proper discovery pursuant to an order of the court. Nonetheless, at the end of the day, the common experience is that orders for discovery are honoured."[54]

Parties and their lawyers cannot ignore the fact that electronic disclosure will require understanding the issues and challenges in dealing with electronic documents. Courts in the USA, [55] after *Zubulake v UBS*, have imposed sanctions on clients and lawyers for negligence in the search and production of ESI. Due competence will require all parties and tribunals to become familiar with new concepts and related terminology in the area of electronic disclosure. In general, the arbitrator has a clear duty to act in the interest of the parties and the procedure.

Even though discovery in international arbitration is normally more limited and curtailed than discovery in litigation, with electronic disclosure the potential for inadvertent production of privileged material is far more likely than in traditional disclosure. The volume of data to process and review for privilege will require appropriate safeguards that the parties can agree on to avoid subsequent disputes on disclosure of privilege materials. Also, the confidentiality obligation is not absolute in arbitration. [56] Where appropriate, parties can not only incorporate a claw-back agreement but also obtain an order from the tribunal relieving them of the obligation

[53] Preamble to IBA Rules for the Taking of Evidence in International Commercial Arbitration 1999.
[54] Andrew Rogers "Improving Procedures for Discovery and Documentary Evidence" ICCA Congress series 7 (1996) pp131-144.
[55] FRCP Rule 26(b)(2)(B) requires the parties to identify sources of data which support the case or defence, including sources of data which are "not reasonably accessible."
[56] *e.g.* as ruled in *Esso Australia v Plowman (1995)* in L.E. Trakman "Confidentiality in International Commercial Arbitration" (2002) 18 *Arbitration International* 1-18, and in *Ali Shipping v Shipyard Trogir (1998)* in Jan Paulsson and Nigel Rawding "The Trouble with Confidentiality" (1995) 11 *Arbitration International* 303-320.

to conduct a pre-production review of all electronic documents for privilege, and specifically ordering that the attorney-client and work-product privileges are not waived by the production of such documents.

Party Autonomy versus Due Process Regardless of the differences in cultural or legal background and whether the arbitration is institutional or ad hoc, arbitrators are bound by one overriding principle, natural justice. Observance of natural justice in electronic disclosure may create tensions, as electronic disclosure processes will not only require parties to collaborate and show good faith, but to collect electronic documentary evidence without regard to whether one or other party has possession or custody of it. The traditional benchmark for discovery is that the requested document must be in the party's 'possession, custody or control'. The accessibility of electronic information sets a new benchmark for discovery of ESI.

'Digital evidence' is a new term and concept and the challenge is whether references to 'evidence' extend to it. In arbitration, party autonomy provides the devices and flexibility to set discovery timetables to suit the case. The presumption is that party autonomy also provides the devices to deal with digital evidence.

Many national laws and most arbitration rules[57] confer on the tribunal the power to order a party to disclose documents in its possession (internal documents). Usually a tribunal does not have the power to order disclosure against a person who is not a party to the arbitration (external documents).

IBA Rules, Art 3(8) provides for an 'external' order and Art 3(6) for an 'internal' order and, as 'document' includes electronic documents, the presumption is that an electronic document order is possible, though whether the IBA Rules have been interpreted and applied to electronic disclosures is unknown. Likewise, in circumstances where documents are in the possession of third parties, a party may be entitled under other procedural rules to take other measures to force the production of such evidence. Third party discovery may be available in the USA and in the United Kingdom but the conditions under which it may be ordered vary significantly and with digital evidence the situations are unknown. The 'unknowns' are due to the lack of anecdotal reports of digital evidence and electronic disclosure in international arbitration. The current IBA Rules do not cover the processes and activities prior to the production of the documents, *i.e.* the steps before the evidence is presented to the tribunal, and the handling and interpretation of digital evidence are not covered.

Whether electronic documentary evidence may constitute 'digital assets' and needs to be preserved, and whether the tribunal may resort to interim or conservatory measures for the protection of electronic documentary evidence may be controversial. For an interim or conservatory order, the scope of such powers will depend on the relevant legislation or rules and their interpretation of 'electronic documentary' evidence.[58]

[57] *e.g.* UNCITRAL Arbitration Rules, LCIA Rules and ICC Rules of Arbitration.
[58] *e.g.* UNCITRAL Rules Art 26, LCIA Rules Art 25, Arbitration Act 1996 s.44(2)(b).

Most modern arbitration law and rules impose obligations to preserve evidence,[59] but their scope varies.

Moreover, the notion of preservation of evidence generally relates to preservation of assets, but digital evidence and electronic documents may raise more complex issues. Freezing orders or interim orders however have become more common in cases of international fraud. Also there is an international forum[60] on digital evidence, but the power of the tribunal is not covered, indicating that coercive powers are needed to perform such orders.

Each party in litigation is bound to preserve potentially relevant evidence; failure may lead to serious spoliation sanctions and in arbitration parties have an obligation to preserve relevant evidence. "Spoliation is the destruction or significant alteration of evidence, or the failure to preserve property for another's use as evidence in pending or reasonably foreseeable litigation."[61] The objective of the proceedings is to establish the relevant facts, to reconstruct the past to the extent necessary to adjudicate on the issues raised or the claims made. The tribunal has the 'driver's seat', but the parties generate 'the movement' in the proceedings.

With electronic disclosure, the impetus to use its discretionary powers to deal with relevant issues will require the tribunal to control the evidentiary proceedings and conduct a preliminary determination. Electronic disclosure in unfamiliar settings, and technical challenges to produce and review, may compel the tribunal to establish the accuracy and truthfulness of the statements, using direct intervention and active fact-finding through consultative guidance to fill in the gaps, which may be viewed as hostile by parties. The tension between party autonomy and due process will be heightened as electronic disclosure, if not planned and controlled, may result in miscommunication and delay. The tribunal may have to intervene. The potential for delaying tactics may be more frequent; electronic disclosure may place an 'undue burden' on the process of collecting and presenting the electronic document. There may be more room to allege tribunal partiality unless the tribunal and the parties are well prepared and have agreed on the scope and the procedures.

Denying a fact which one knows to be true, *e.g.* scrubbing metadata to remove facts relied on by the other party, in the hope the other party will fail to prove it, may amount to misrepresentation. If that amounts to fraudulent methods, perjury or forgery, it is a breach of international due process. This may lead to setting aside an award or costs sanctions. [62]

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[59] *e.g.*UNCITRAL Rules Art 26 and London Court of International Arbitration Rules (LCIA) Art 25

[60] Stephen Mason (ed.) *Electronic Evidence: Disclosure, Discovery and Admissibility* LexisNexis Butterworths, 2007 pp23. International Organisation on Computer Evidence, IOCE at http://www.ioce.org/index.php?id=14 is a good guide for civil matters.

[61] *West v Goodyear Tire Rubber Co*., 168 F.3d 776, 779 (2d Cir. 1999).

[62] M.S. Kurkela and Hannes Snellman *Due Process in International Commercial Arbitration*, Oceana, 2005 p128.

Generally, the tribunal has the power to determine the rules [63] relating to evidence, unless otherwise agreed to by the parties. Determining the rules relating to digital evidence may prove challenging, as it will involve understanding the activities associated with its investigation and examination. Digital evidence is easy to alter. The chain of custody is a major issue with electronic disclosure and, if the tribunal exercises its discretion to limit or bar digital evidence (*e.g.* by limiting the scope of electronic disclosure), this may expose the award to a challenge based on the violation of due process.

Procedural Lex Mercatoria for Electronic Disclosure? The electronic discovery related cases that have challenged the FRCP rule makers are confined to civil disputes. Electronic disclosure, with the attendant technology issues, will require tribunals not only to be competent with commerce or trade issues but also have to grapple with technology. It is easy to lose sight of the essence of what makes arbitration different from litigation: namely the hybrid nature of arbitration and the procedural *lex mercatoria*, which, being non-national, provides the mechanism to evolve with changing needs of international business. There is no definitive procedure for international arbitration and appropriate discovery procedures are determined only in the light of the true purpose of the arbitral procedure and, the demands of the individual case.

As electronic disclosure has the tendency to incur transaction costs, the challenge is to design and agree on a flexible procedure that will enable technology to be utilised to search, retrieve, and produce documents in the most cost-effective and just way for the administration of a particular case. At the same time it should allow preservation of required digital evidence. One of the advantages of arbitration is the flexibility of its procedure. Determining the scope of admissible electronic documents is key to making electronic disclosure less prone to undue burdens and costs. In the face of new concepts and daunting technology, it is easy to lose sight of what makes arbitration flexible. The approach applied in traditional disclosure, *e.g.* limiting disclosure to matters, not privileged, which are relevant to a claim or defence, is still relevant for electronic disclosure, perhaps even more relevant in the digital era.

The steps involved in creating and maintaining (searching, retrieving, modifying, deleting, storing/saving) an electronic record/file or data constitute the fundamental activities required to handle electronic documents, a prerequisite when it comes to dealing with electronic disclosure. Complexities stem from the changing technology of managing and using data. The same challenges as for contemporary document production are required namely: to identify the relevant data, the sources of relevant data, preserving the integrity of the data and producing the data. In the collection of evidence, the parties and the tribunal have the power to determine the environment. The procedures for electronic disclosure are not radically different from the traditional procedure for document production: [64] identify potentially relevant data sources; collect potentially relevant documents or materials; review documents for relevance, privilege and other issues; and produce them to the other party and the tribunal.

[63] Model Law Art 19, Arbitration Act 1996 ss.33-34, 34(2)(f).

[64] The guidelines for the discovery of electronic documents in Ontario available at: http://www.cosgrovecomputer.com/documents/OBA%20E-DiscoveryGuidelines.pdf serve as good practice guides which the parties and tribunal can reference and tailor to meet specific requirements.

In performing its electronic disclosure, an organisation should have in place good communications and data management policies, *e.g.* data retention policies and appropriate inventory of their IT systems and applications. Organisations' IT management practices have come under increasingly close scrutiny worldwide with more regulations mandating data retention. Preserving electronic evidence is more difficult than preserving paper because electronic evidence often exists in unexpected places and data also changes autonomously without user intervention. The obligation to preserve data or ESI requires reasonable and good faith efforts to retain ESI that may be relevant to the case. Parties and tribunals therefore need to acquire a detailed understanding of the different types of data and categories of data sources in order to scope them.[65] The data environment is generally complex, with data residing and commingling with heterogeneous systems/applications, desktops, servers and networks, and a life of its own, *e.g.* versions, backups and archives.[66]

The FRCP Rules illustrate the scoping of electronic discovery. They create two kinds of electronic evidence for discovery purposes. The first is represented by relevant active files which are discoverable without a showing of good cause. The second is relevant files that are 'not reasonably accessible'. This is referred to by commentators as the 'two-tiered approach'. There is a third category for paper discovery which is not covered by any of the new rules designed for electronic information. Paper documents must be produced under the traditional standards—relevant documents within a party's possession, custody, or control are discoverable. The preliminary hearing should provide the forum for the parties and the tribunal to agree on the scope of disclosure and the various issues as highlighted above.

Effectiveness of Proceeding Arbitration is generally adversarial but the relationship between the parties, their lawyers and the arbitrators are more complex even without the procedural technicalities.[67] Arbitrators are reluctant to use the broad authority vested by almost all arbitration rules, in particular to regulate and conduct the proceeding efficiently. Many of these rules require the arbitrator to act in a 'speedy' or 'expeditious' manner.[68] With electronic disclosure, a tribunal may have to resort to such a power in order to control proceedings to combat delays. As reported in the litigation world, electronic discovery has triggered concern that litigants were abusing the discovery process to wage a war of attrition against their opponents. For example, the court in the USA must apply the standards, *e.g.* the proportionality test, in an even-handed manner that will prevent use of discovery to wage a war of attrition or as a device to coerce a party.[69]

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[65] Besides metadata, there are also residual data and replicant data. Categories of data sources that have been identified in litigation are active data, archival data and backup data.

[66] A pre-action disclosure case highlighted the challenges faced by the English court in coming to terms with IT concepts and the volume of electronic information.
http://www.nadr.co.uk/articles/published/AdjudicationLawRep/Hands%20v%20Morrison%202006.pdf

[67] N.C. Ulmer "Ethics and Effectiveness: Doing Well by Doing Good" in G.M. Beresford Hartwell (ed.) *The Commercial Way to Justice* Kluwer Law International 1997 pp167-187.

[68] *e.g.* ICC Rules Arts 14(1), 15(1); LCIA Rules Art 5.2, AAA International Rules Art 16.

[69] http://www.law.cornell.edu/rules/frcp/ACRule26.htm.

Arbitrators have a fiduciary obligation in managing the costs. It is generally accepted that the parties and lawyers have an obligation to cooperate in good faith. Determining the scope for electronic disclosure and preserving and collecting data require more than procedures and guidelines. They require parties and counsel to cooperate and show good faith. This good faith is also embodied in the FRCP Rules amendments and the Sedona Principles.[70] Whether 'good faith' will be expected from parties and their counsel and whether a tribunal will perform their obligations and duty scrupulously, fairly and discreetly, to keep the electronic disclosure proceedings on the move and avoiding the faintest suggestion of bias, will depend on reports from the trenches. It seems that the reality is that documents are sometimes produced late in a proceeding, in perfectly good faith, and arbitrators rarely stick to the documentary cut-off dates perhaps to avoid an accusation of not being impartial.

As regards costs, the ICC Publication 843-Techniques for Controlling Time and Costs in Arbitration[71], mentions the 'use of IT' but not 'electronic document production' or 'electronically stored information'. The Redfern Schedule [72] was mentioned for managing requests for document production. Case management was also mentioned; however no specific guidance is given as to how to determine the scope of document production (perhaps a culturally sensitive issue which in a document (paper-based and electronic) intensive dispute can be unmanageable even with the use of IT. The article also pointed out that:

> "special emphasis needs to be placed on steps aimed at reducing the costs connected with the parties' presentation of their cases and that such costs are often caused by unnecessarily long and complicated proceedings with unfocused requests for disclosure of documents …"

It also stated that exchanging documents in electronic form can reduce costs and minimise the volume of hardcopy paper that needs to be produced. In general, paper-based discovery does not achieve its stated aims and frequently causes delay and additional cost. With electronic disclosure, the overall discovery procedures may introduce cost savings in terms of reduced time to review electronic documents instead of tons of paper documents. The process of committing electronic data to paper and then creating electronic data from the paper is not only time and cost prohibitive, but also does not allow access to all of the information within the original electronic file, hampering investigation of the facts and adding to delay. Using electronic data means repeated disclosure requests are avoided, as access to all the information including all drafts up to the final version are available. Moreover, parties

[70] The Sedona Principle 3, now echoed by Rule 26(f) of the 2006 Amendments, encourages parties to "confer early in discovery regarding preservation and production . ..and seek to agree on the scope" of the respective obligations involved. Principle 5 provides that a preservation obligation is met by "reasonable and good faith efforts" but it is "unreasonable to expect parties to take every conceivable step to preserve all potentially relevant data."

[71] http://www.iccwbo.org/uploadedFiles/TimeCost_E.pdf

[72] The Redfern Schedule, devised by Alan Redfern, is a chart containing four columns: identification of the documents/categories of documents that have been requested; short description of the reasons for each request; summary of the objections by the other party to the production of the documents/categories requested; and decision of the arbitral tribunal on each request.

may have little choice, as electronic data is surpassing paper records for practically almost all business transactions.

To truly capitalise on the capabilities provided by electronic disclosure, parties will need to agree on a workable procedure and collaborate with the tribunal towards avoiding delays in the proceedings. In most situations, having procedures and guidelines certainly helps to provide focus and avoid misunderstandings. In complex disputes involving interlocking relationships, if the parties are not willing to cooperate at the preliminary hearing and subsequent hearings, electronic disclosure surprises will no doubt arise. Furthermore, also identified in the AAA view, where the IBA Rules were examined on the cost allocation issues in the context of the scope of ESI production, the "most bitter discovery disputes involved information not in the requesting party's control".

3. CONCLUDING REMARKS[73]

The debate is no longer whether electronic disclosure is relevant. Instead, the focus will be on the accessibility and/or collection of electronic evidence from various custodians within and outside the organisations and how effectively to manage this process and the ESI collected as a result of this process.

[73] As rules and case law will certainly evolve around electronic discovery/disclosure, a website for blogging, www.click2ediscovery.com, has been created to supplement this research and to provide a forum. The dissertation conclusion is posted in the blog.