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You've Got Mail: The Modern Trend towards Universal Electronic Service of Process

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A modern trend exists in the law toward universal electronic service.[1] Indeed, federal courts have recently

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1. *See* BLACK'S LAW DICTIONARY 1372 (7th ed. 1999) (defining "service" as the "formal delivery of a writ, summons, or other legal process" and defining "service of process" as the "formal delivery of some other legal notice, such as a pleading"). Electronic service refers to service made by e-mail, facsimile or other electronic means. "E-mail" is shorthand for "electronic mail," which the New York State Court of Appeals has described as an:

> Evolutionary hybrid of traditional telephone line communications and regular postal service mail .... [T]o transmit a message, one must have access to an on-line service's e-mail system and must know the recipient's personal e-mail address. Once this is accomplished, a person may communicate by composing a message in the e-mail computer system and dispatching it telephonically (or through some other dedicated electronic line) to one or more recipients' electronic mailboxes.

Lunney v. Prodigy Servs. Co., 723 N.E.2d 539, 541 (N.Y. 1999) (citation and footnote omitted). *See also* Reno v. Am. Civil Liberties Union, 521 U.S. 844, 851 (1997) ("E-mail enables an individual to send an electronic message—generally akin to a note or letter—to another individual or to a group of addressees. The message is generally stored electronically, sometimes waiting for the recipient to check her 'mailbox' and sometimes making its receipt known through some type of prompt."); Steven R. Salbu, *Who Should Govern the Internet?: Monitoring and Supporting a New Frontier*, 11 HARV. J.L. & TECH. 429, 471-72 (1998) (noting that regular postal service mail is known colloquially as "snail mail"). E-mail is sent over the Internet, which is "an international network of interconnected computers ... enabl[ing] tens of millions of people to communicate with one another and to access vast amounts of information from around the world." *Reno*, 521 U.S. at 849-50; *see also* Philip Giordano, *Invoking*

issued a series of decisions allowing electronic service of process on parties[2] outside the United States, particularly where traditional methods of service prove inadequate.[3] Part I of this article contains a brief overview of the historical expansion of the territorial scope of service of process, which has generally mirrored expanded notions of personal jurisdiction. Part II discusses the provisions in the Federal Rules of Civil Procedure ("FRCP") authorizing electronic service of process on parties outside the United States under certain circumstances. Part III reviews instances where courts have permitted such electronic service of process. Part IV summarizes the circumstances under which electronic service of process has been permitted on parties outside the United States. Part V identifies a trend in the law toward universal electronic service. Moreover, Part V argues that this trend should be extended by amending FRCP 4 in order to allow parties to effect electronic service of process inside the United States in the same manner that courts allow electronic service of process outside the United States. Part V further contends that existing portions of the FRCP should be interpreted to permit electronic service of subpoenas and other papers. Finally, Part VI concludes that the trend towards electronic service will eventually become the rule rather than the exception in light of increasing globalization and technological advancements that will improve the certainty and reliability of electronic service.

I. SERVICE OF PROCESS AND PERSONAL JURISDICTION: A HISTORICAL OVERVIEW

When examining the bounds of permissible service of process, it is necessary to discuss the distinct but related concept of personal jurisdiction.[4] Personal jurisdiction is not

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Law as a Basis for Identity in Cyberspace, 1998 STAN. TECH. L. REV. 1, 1 n.2 (defining the Internet as "a vast inter-connection of computer networks that communicate according to the same rules and now span the globe").

2. This article uses "parties" as a general description of all persons and entities; it is not necessarily used to refer to litigants or named parties to a suit.

3. This trend has influenced New York law, which has recently been interpreted to permit electronic service of process on a party located outside the United States. *See infra* Part III.

4. These concepts are sometimes confused for one another. According to Professor James Moore:

the focus of this article and it is discussed at length by scores of commentators.[5] Nonetheless, a brief discussion of the development of personal jurisdiction in American jurisprudence is essential to a proper understanding of the rules governing service of process[6]—which is designed to notify interested parties of pending proceedings.[7] Both

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> [S]ervice of process is distinct from the requirement of a jurisdictional basis. Consequently, even if a proper jurisdictional basis exists, service of process that does not meet due process and statutory requirements will vitiate jurisdiction . . . . Similarly, the fact that proper service was made does not mean that the court may exercise jurisdiction over the defendant.

See 16 JAMES WM. MOORE, ET AL. MOORE'S FEDERAL PRACTICE ¶ 108.01(2)(c) (3d ed. 1997) (internal citations omitted). Professor Moore further suggests that the "traditional territorial power theory is likely responsible for any confusion between the basis and process requirements for jurisdiction, because, according to early theory, personal service of process within the forum state was the only adequate basis for personal jurisdiction over a non-consenting nonresident defendant." *Id.*

5. *See generally In re* DES Cases, 789 F. Supp. 552, 577-84 (E.D.N.Y. 1992) (discussing the evolution of the law of personal jurisdiction); Sarah R. Cebik, *"A Riddle Wrapped in a Mystery Inside an Enigma": General Personal Jurisdiction and Notions of Sovereignty*, 1998 ANN. SURV. AM. L. 1 (same); William M. Richman, *Understanding Personal Jurisdiction*, 25 ARIZ. ST. L.J. 599 (1993) (same). Moreover, "[a]s the Internet has experienced nearly exponential growth over the past few years, its impact on conventional notions of personal jurisdiction has been hotly debated in courts throughout the country and in countless law review articles and treatises." Edberg v. Neogen Corp., 17 F. Supp. 2d 104, 113 (D. Conn. 1998); *see, e.g.*, 4A CHARLES ALAN WRIGHT & ARTHUR R. MILLER, FEDERAL PRACTICE AND PROCEDURE § 1073.1 (3d ed. 2002) (discussing the Internet's impact on personal jurisdiction); Michael A. Geist, *Is There a There There? Toward Greater Certainty for Internet Jurisdiction*, 16 BERKELEY TECH. L.J. 1345 (2001) (same); Susan Nauss Exon, *A New Shoe is Needed to Walk Through Cyberspace Jurisdiction,* 11 ALB. L.J. SCI. & TECH. 1 (2000) (same); Joseph Schmitt & Peter Nikolai, *Application of Personal Jurisdiction Principles to Electronic Commerce: A User's Guide*, 27 WM. MITCHELL L. REV. 1571 (2001) (same); Note, *Civil Procedure—D.C. Circuit Rejects Sliding Scale Approach To Finding Personal Jurisdiction Based On Internet Contacts*-GTE New Media Servs. Inc. v. Bellsouth Corp., 113 HARV. L. REV. 2128, 2133 (2000) (arguing that traditional principles of personal jurisdiction should be applied to the Internet). Accordingly, anything more than a brief discussion of personal jurisdiction is beyond the scope of this article. A more comprehensive discussion is found in several volumes of a leading treatise devoted to personal jurisdiction and service of process. *See generally* 4-4B WRIGHT & MILLER, *supra*, § 1061 *et seq.* (3d eds. 2002).

6. *See* 4A WRIGHT & MILLER, *supra* note 5, § 1064 (noting that FRCP 4 "cannot be understood without an appreciation of the history and current status of the law relating to the personal jurisdiction of American courts").

7. *See* 4A WRIGHT & MILLER, *supra* note 5, § 1094 (noting that "the federal courts generally place emphasis on the principle that the purpose of service is to

personal jurisdiction and proper service of process must exist in order for a court to exercise its authority over a defendant.[8] As discussed below, the nineteenth century standard for personal jurisdiction required consent, domicile, or service of process in the forum.[9] National expansion, however, soon made this standard impractical.[10] Accordingly, courts developed the modern standard to permit the assertion of personal jurisdiction over defendants outside the forum where such defendants maintained minimum contacts with the forum state.[11] Indeed, expanding notions of personal jurisdiction resulted in the subsequent expansion of the territorial scope of permissible service of process.

In the nineteenth and early twentieth centuries, personal jurisdiction generally required service of process within the forum state.[12] This territorial power theory of jurisdiction was adopted by the Supreme Court in *Pennoyer v. Neff*, which held that service of process for *in personam*

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give the defendant notice of the institution of the proceedings"); *id.* § 1063 (same); Henry H. Perritt, Jr., *Jurisdiction in Cyberspace*, 41 VILL. L. REV. 1, 31 (1996) ("Service of process performs two functions in Anglo-American civil procedure: it represents assertion of judicial power of the forum state over the person of the defendant, and it is the formal means of providing notice to the defendant so that he or she may defend the lawsuit.").

8. *See* Murphy Bros., Inc. v. Michetti Pipe Stringing, Inc., 526 U.S. 344, 350 (1999) ("In the absence of service of process (or waiver of service by the defendant), a court ordinarily may not exercise power over a party the complaint names as defendant."); World-Wide Volkswagen Corp. v. Woodson, 444 U.S. 286, 291 (1980) (noting that both personal jurisdiction and notice must exist for a court to exercise jurisdiction over a defendant).

9. Pennoyer v. Neff, 95 U.S. 714, 722-24 (1877); MOORE ET AL., *supra* note 4, ¶ 108.22 (discussing *Pennoyer*).

10. *See In re DES Cases*, 789 F. Supp. at 577-79. The *In re DES Cases* Court noted that:

> A legion of commentators and judges have demonstrated that the mid-nineteenth century territorial nexus requirement needs modification for end-of-twentieth century litigation. The growing interconnectedness of the national economy and increased social mobility often have rendered the requirement unworkable in its original form . . . . From 1877 forward, the courts were forced to expend considerable effort to sustain *Pennoyer* in the face of historical developments that had rendered its holding obsolete.

Id.; *see also* McGee v. Int'l Life Ins. Co., 355 U.S. 220, 222-23 (1957) (noting that the shift away from *Pennoyer* was "attributable to the fundamental transformation of our national economy").

11. *See* 4 WRIGHT & MILLER, *supra* note 5, § 1067 (discussing the modern standard established by *International Shoe*).

12. *See* MOORE ET AL., *supra* note 4, ¶ 108.01(2)(c).

actions was only effective where a defendant was personally served within the forum state.[13] Under *Pennoyer* "the historical basis of *in personam* jurisdiction was a court's power over the defendant's person," making presence within the forum a prerequisite to personal jurisdiction.[14] By 1945, however, the unparalleled growth and commercial expansion of the United States made *Pennoyer*'s narrow concept of personal jurisdiction impractical.[15]

Pennoyer's anachronistic standard began to yield to modern notions of personal jurisdiction developed to meet the needs of a growing and increasingly mobile society.[16] In its seminal decision, *International Shoe Co. v. State of Washington*, the Supreme Court first employed the modern "minimum contacts" analysis for personal jurisdiction.[17] *International Shoe* held that, inasmuch as:

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13. *See Pennoyer*, 95 U.S. at 733; *see also* Payne v. Tennessee, 501 U.S. 808, 830 n.1 (1991) (noting that *Pennoyer* was overruled by *Shaffer v. Heitner*, 433 U.S. 186, 203 (1977)); MOORE ET AL., *supra* note 4, ¶ 108.20 (discussing *Pennoyer*'s physical power theory of jurisdiction). Under *Pennoyer*, personal jurisdiction also existed where a defendant: (1) consented to such; or (2) was domiciled in the forum. *Id.* ¶ 108.22.

14. *Shaffer*, 433 U.S. at 203; *see also* Int'l Shoe Co. v. Washington, 326 U.S. 310, 316 (1945) ("Historically the jurisdiction of courts to render judgment in personam is grounded on their de facto power over the defendant's person. Hence his presence within the territorial jurisdiction of [the] court was prerequisite to its rendition of a judgment personally binding him.") (citing *Pennoyer*, 95 U.S. at 733); Mennonite Bd. of Missions v. Adams, 462 U.S. 791, 796 n.3 (1983) ("Traditionally, when a state court based its jurisdiction upon its authority over the defendant's person, personal service was considered essential for the court to bind individuals who did not submit to its jurisdiction."); *In re DES Cases*, 789 F. Supp. at 578 (noting that the "traditional due process concerns—whether the defendant will suffer a deprivation of liberty or property without fair notice and a reasonable opportunity to defend—are at best only tangentially related to [*Pennoyer*'s] sovereignty concerns").

15. *See In re DES Cases*, 789 F. Supp. at 580 (noting that *Pennoyer* has often been attacked and "[f]rom its inception, *Pennoyer* was awkward in application"); Richman, *supra* note 5, at 599, 606.

16. *See In re DES Cases*, 789 F. Supp. at 577-84 (noting that *International Shoe* did not completely abandon *Pennoyer*'s sovereignty inquiry and that the "salient feature of the history of the two independent inquiries into sovereignty and fairness is that, when they made their formal debut together in *International Shoe*, they *both* imported *Pennoyer*'s territorial nexus requirement") (emphasis in the original).

17. It is not clear that the *International Shoe* Court considered its "minimum contacts" analysis to be the monumental doctrinal shift that subsequent courts and commentators consider it to be. *See, e.g.*, Richman, *supra* note 5, at 624. Justice Black, however, may have perceived as much where he noted that he would "decline the invitation to formulate broad rules as to the

> [T]he *capias ad respondendum*[18] has given way to personal service of summons or other form of notice, due process requires only that in order to subject a defendant to a judgment *in personam*, if he be not present within the territory of the forum, he have certain minimum contacts with it such that the maintenance of the suit does not offend "traditional notions of fair play and substantial justice.[19]

Such minimum contacts with the forum are required in order to make it reasonable in the context of federalism to

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meaning of due process." *Int'l Shoe*, 326 U.S. at 322 (Black., J., concurring). Nonetheless, *International Shoe* did not completely depart from *Pennoyer* inasmuch as it relied on a sovereignty analysis where it found the defendant to be constructively present within the forum. The Court noted that "the corporate personality is a fiction" and concluded that:

> [A corporation's] presence [is] used merely to symbolize those activities of the corporation's agent within the state which courts will deem to be sufficient to satisfy the demands of due process. . . . 'Presence' in the state in this sense has never been doubted when the activities of the corporation there have not only been continuous and systematic, but also give rise to the liabilities sued on, even though no consent to be sued or authorization to an agent to accept service of process has been given.

Id. at 316-17; *see also In re DES Cases*, 789 F. Supp. at 582-83 (noting that *International Shoe* manifested "a genuine transformation" in adopting a fairness analysis, but that it did not completely depart from *Pennoyer* where it retained "a sovereignty inquiry"). The Court's retention of sovereignty analysis is also evidenced in its finding that a corporation's "casual presence" such as "single or isolated items of activities" would be insufficient to establish personal jurisdiction for suits that were "unconnected" with such activities. *See Int'l Shoe*, 326 U.S. at 317. Nonetheless, *International Shoe* anticipated that its holding would be extended to individuals as well as corporations:

> Whether due process is satisfied must depend rather upon the quality and nature of the activity in relation to the fair and orderly administration of the laws which it was the purpose of the due process clause to insure. That clause does not contemplate that a state may make binding a judgment *in personam against an individual or corporate defendant* with which the state has no contacts, or relations.

See id. at 319 (emphasis added).

18. The *capias ad respondendum* was an English writ directing the sheriff to arrest a defendant, who would only be released upon the posting of a bond sufficient to satisfy a potential judgment against him. *See* MOORE ET AL., *supra* note 4, ¶ 108.21; *see also* BLACK'S LAW DICTIONARY 200 (7th ed. 1999) (defining *capias ad respondendum* as a "writ commanding the sheriff to take the defendant into custody to ensure that the defendant will appear in court"). This medieval practice is the predecessor of modern day service of process. MOORE ET AL., *supra* note 4, ¶ 108.21. Indeed, the most common form of service of process upon individuals is personal service or "tagging"—a historical remnant of the *capias ad respondendum*. *See* 4A WRIGHT & MILLER, *supra* note 5, § 1094.

19. *Int'l Shoe*, 326 U.S. at 316 (citation omitted).

require a defendant to defend a suit brought within the forum.[20] Thus, the Court concluded that:

> [T]o the extent that a corporation exercises the privilege of conducting activities within a state, it enjoys the benefits and protection of the laws of that state. The exercise of that privilege may give rise to obligations, and, so far as those obligations arise out of or are connected with the activities within the state, a procedure which requires the corporation to respond to a suit brought to enforce them can, in most instances, hardly be said to be undue.[21]

Applying this standard, the *International Shoe* Court found sufficient minimum contacts existed where the defendant maintained "systematic and continuous" contacts with the forum and where the defendant availed itself of the benefits and privileges of doing business in the forum.[22] Therefore, the Court found that personal jurisdiction existed because it was "reasonable and just, according to our traditional conception of fair play and substantial justice" to require the defendant to defend suit in the forum.[23]

The Court also held that service of process within the forum upon the defendant's agent, who established the defendant's "presence" within the forum, provided sufficient notice of the suit.[24] Indeed, the Court found that "the particular form of substituted service" is adequate where it "gives reasonable assurance that the notice [to defendant] will be actual."[25] Notably, the Court also found that sending defendant notice of the suit by registered mail was

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20. *See id.* at 317.

21. *Id.* at 319.

22. *Id.* at 320.

23. *Id.*; *see also id.* at 321 (finding that inasmuch as the defendant "rendered itself amenable to suit upon obligations arising out of the activities of its salesmen in Washington, the state may maintain the present suit *in personam* to collect the tax laid upon the exercise of the privilege of employing [defendant's] salesmen within the state"). *But see id.* at 324-26 (Black., J., concurring) (criticizing the elastic notions of "fair play," "justice," and "reasonableness").

24. *Id.* at 320; *see also id.* at 323 (Black., J., concurring) (noting that the defendant cannot "claim that notice by registered mail and by personal service on its sales solicitors in Washington did not meet the requirements of procedural due process").

25. *Id. at* 320.

"reasonably calculated to apprise [defendant] of the suit."[26] Indeed, by 1945 the propriety of service by mail was well-established.[27]

In sum, notions of personal jurisdiction expanded from *Pennoyer's* rigid territorial approach to the more flexible standard set forth in *International Shoe*,[28] which represents the predominant test for ascertaining personal jurisdiction.[29] Likewise, as the scope of personal jurisdiction expanded, so too did the geographic scope of service of process. In 1950, soon after the "jurisdictional revolution" of *International Shoe*,[30] the Supreme Court established a more flexible standard of constitutionally permissible notice. In *Mullane v. Central Hanover Trust & Bank Co.*,[31] the Supreme Court held that the Due Process Clause

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26. *Id.*

27. *See* Mennonite Bd. of Missions v. Adams, 462 U.S. 791, 796 n.3 (1983) ("In *Hess v. Pawloski*, [274 U.S. 352 (1927),] the Court recognized for the first time that service by registered mail, in place of personal service, may satisfy the requirements of due process.").

28. *See* Burnham v. Super. Ct. of Cal., 495 U.S. 604, 616-19 (1990) (discussing the transition from *Pennoyer* to *International Shoe*, which represented an "inevitable relaxation of the strict limits on state jurisdiction"); McGee v. Int'l Life Ins. Co., 355 U.S. 220, 222-23 (1957) ("[A] trend is clearly discernable toward expanding the permissible scope of state jurisdiction over foreign corporations and other nonresidents . . . attributable to the fundamental transformation of our national economy."). Nonetheless, traditional means of service such as "tagging" a defendant within the forum remain viable. *See Burnham*, 495 U.S. at 610, 619 (holding that defendant was subject to service of process while temporarily in the forum and noting that "[a]mong the most firmly established principles of personal jurisdiction in American tradition is that the courts of a State have jurisdiction over nonresidents who are physically present in the State"); N. Light Tech, Inc. v. N. Lights Club, 236 F.3d 57, 62-63 (1st Cir.) (holding that personal service upon defendant appearing in the forum for the purpose of contesting personal jurisdiction is a permissible method of effecting service and noting that "process immunity" is only applicable where the defendant is in the forum attending to *different* litigation), *cert. denied*, 533 U.S. 911 (2001).

29. *See* Rex R. Perschbacher, Symposium Foreword, *Fifty Years of International Shoe: The Past and Future of Personal Jurisdiction*, 28 U.C. DAVIS L. REV. 513, 514 (1995) ("Although *Shoe's* minimum contacts test during the last half-century may have dominated, and may continue to influence profoundly, personal jurisdiction in the United States, *International Shoe* has never completely fulfilled its promise to provide an adequate general theory of state-court jurisdiction. *International Shoe's* approach has never fully overcome the vagueness of the minimum-contacts general principle.").

30. *See* Richman, *supra* note 5, at 624.

31. 339 U.S. 306, 314 (1950); *see generally* 4A WRIGHT & MILLER, *supra* note 5, § 1074 (discussing *Mullane*).

requires that methods of service, and hence notice to interested parties, must be "reasonably calculated, under all the circumstances, to apprise interested parties of the pendency of the action and afford them an opportunity to present their objections."[32] *Mullane* held that this standard was satisfied where a trustee notified unknown beneficiaries by publication and known beneficiaries by mail.[33] Accordingly, *Mullane* established the modern standard that courts have relied on for testing the constitutionality of service of process when permitting electronic service.[34]

Similar in effect to the technological advances that prompted expanded notions of personal jurisdiction in the mid-twentieth century, the rise in prevalence of the Internet and e-mail usage during the end of the twentieth century and start of the twenty-first century have also resulted in increased inter-jurisdictional contacts among and between individuals and businesses.[35] This explosion in the popularity of e-mail has affected the law in various

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32. *Mullane*, 339 U.S. at 314.

33. *See id.* at 314-20.

34. *See id.* at 312-16. When ascertaining whether personal jurisdiction exists, courts must ensure that an exercise of personal jurisdiction comports with both the United States Constitution as well as the forum state's long-arm statute. *See* World-Wide Volkswagen Corp. v. Woodson, 444 U.S. 286, 291 (1980); *see also* Bank Brussels Lambert v. Fiddler Gonzalez & Rodriguez, 305 F.3d 120, 124-28 (2d Cir. 2002) (applying bifurcated personal jurisdiction analysis); 4A WRIGHT & MILLER, *supra* note 5, § 1069. Long-arm statutes, which "typically authorize the exercise of jurisdiction to the extent permitted constitutionally under a line of Supreme Court cases beginning with *International Shoe*," are beyond the scope of this article. Perritt, *supra* note 7, at 15.

35. *See* Frank Conley, Comment, *:-) Service with a Smiley: The Effect of E-mail and Other Communications on Service of Process*, 11 TEMP. INT'L & COMP. L.J. 407, 407 (1997) ("One of the profound legal effects of this expanding technology is the increased contact among people in widely scattered geographic locations who are banking, forming contracts, transacting business through electronic means, and otherwise carrying on traditional commercial transactions."); *see also* Doe v. 2TheMart.Com, Inc., 140 F. Supp. 2d 1088, 1091 (W.D. Wash. 2001) ("The Internet represents a revolutionary advance in communication technology. It has been suggested that the Internet may be the 'greatest innovation in speech since the invention of the printing press . . . .' It allows people from all over the world to exchange ideas and information freely and in 'real-time.'") (citation omitted).

ways,[36] including through the increased use of e-mail and other electronic means to effect service of process.[37] Although a few commentators have addressed electronic service of process, all such work predates recent court decisions allowing electronic service of process.[38] Therefore, this article will discuss these developments in this evolving area of the law.

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36. *See Doe*, 140 F. Supp. 2d at 1091 (noting that the "rapid growth of Internet communication and Internet commerce has raised novel and complex legal issues and has challenged existing legal doctrine in many areas").

37. *See infra* Part III.

38. *See generally* Yvonne A. Tamayo, *Are You Being Served?: E-mail and (Due) Service of Process*, 51 S.C. L. REV. 227, 228 (2000) (discussing the "feasibility of electronic or e-mail service of process to give defendants notice of legal proceedings instituted against them in United States courts"); *id.* at 251 ("To date, however, no United States court has found that e-mail may serve as an adequate method of delivering initial notice of litigation to an individual defendant or business entity."); Rachel Cantor, Comment, *Internet Service of Process: A Constitutionally Adequate Alternative?*, 66 U. CHI. L. REV. 943, 954-66 (1999) (contending that electronic service is permissible under *Mullane* but that it is not expressly permitted under the FRCP unless permitted by state law; *n.b.* that Cantor does not consider the possibility of electronic service under FRCP 4(f)(3)); Conley, *supra* note 36, at 408-10, 428 (suggesting that e-mail service of process should be adopted where it is "the only available method of communication with a defendant"); *see also* Perritt, *supra* note 8, at 32 ("[The] growing use of digital information technologies introduces the possibility of electronic service of process, including telex, fax and e-mail, although these methods of service are not yet countenanced widely. Despite the practical feasibility and attractiveness of electronic service of process, authorization for electronic service is thin."); Phillip K. Buhler, Transnational Services of Process and Discovery in Federal Court Proceedings: An Overview, 27 TUL. MAR. L.J. 1, 20 (2002) ("As service by e-mail is still in its formative stages even in domestic litigation, this is best left to another discussion."); Susan Nauss Exon, *The Internet Meets Obi-Wan Kenobi in the Court of Next Resort*, 8 B.U. J. SCI. & TECH. L. 1, 18 n.73 (2002) (proposing an international cyber-court that would permit electronic service of process, but erroneously noting that FRCP 4(f) does "not yet permit electronic service of process"); Major Mary J. Bradley, *Calling for a Truce on the Military Divorce Battlefield: A Proposal to Amend the USFSPA*, 168 MIL. L. REV. 40, 146 (2001) (suggesting that "[e]lectronic service of process will increase the efficiency of the [Uniformed Services Former Spouses' Protection Act] process"); Donald I. Baker et al., *Defendant's Motion to Dismiss; Memorandum of Points and Authorities in Support Thereof*, 33 LOY. L.A. L. REV. 1061, 1087 (2000) (arguing against the propriety of service of process via e-mail in a fictional brief); Terrence P. McMahon, *Plaintiff's Opposition to Defendants' Motion to Dismiss; Memorandum of Points and Authorities in Support Thereof*, 33 LOY. L.A. L. REV. 1099, 1133 (2000) (arguing in favor of service of process via e-mail in a fictional brief).

II. ELECTRONIC SERVICE UPON PARTIES OUTSIDE THE UNITED STATES IS PERMITTED UNDER THE FEDERAL RULES OF CIVIL PROCEDURE

As discussed in Part III below, several recent federal court decisions have permitted electronic service of process on parties outside the United States. When ascertaining the propriety of electronic service of process, courts examine FRCP 4.[39] FRCP 4(h)(2) authorizes service of process on business entities outside the United States via the same methods of service permissible for individuals provided by FRCP 4(f), with the exception of personal delivery.[40] FRCP 4(h)(2) provides in relevant part as follows:

> (h) SERVICE UPON CORPORATIONS AND ASSOCIATIONS. Unless otherwise provided by federal law, service upon a domestic or foreign corporation . . . from which a waiver of service has not been obtained and filed, shall be effected: . . . (2) in a place not within any judicial district of the United States in any manner prescribed for individuals by subdivision (f) except personal delivery as provided in paragraph 2(C)(i) thereof.

Accordingly, FRCP 4(f) prescribes the methods of service for individuals and corporations outside the United States.[41] FRCP 4(f) provides in relevant part that:

> (f) SERVICE UPON INDIVIDUALS IN A FOREIGN COUNTRY. Unless otherwise provided by federal law, service upon an individual from whom a waiver has not been obtained and filed, other than an

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39. *See infra* Part III.

40. *See* FED. R. CIV. P. 4(h)(2); Rio Props. Inc. v. Rio Int'l Interlink, 284 F.3d 1007, 1014 (9th Cir. 2002); Mayoral-Amy v. BHI Corp., 180 F.R.D. 456, 459 (S.D. Fla. 1998).

41. FED. R. CIV. P. 4(f). *See generally* 4B WRIGHT & MILLER, *supra* note 5, §§ 1133-34 (discussing FRCP 4(f)(3)). Notably, FRCP 4 addresses service of individuals and corporate entities *outside* of the United States, which is not to say that such individuals must be foreign citizens or entities. *Compare* FED. R. CIV. P. 4(f)(1) advisory committee notes (1993) ("This subdivision provides for service on individuals *who are in* a foreign country.") (emphasis added) *and* FED. R. CIV. P. 4(h)(2) (permitting "service upon a *domestic or foreign* corporation") (emphasis added) *with Rio Props.*, 284 F.3d at 1015 (noting that FRCP 4(f)(3) provides one of several means of "service of process on an *international* defendant") (emphasis added). The ambiguity of "international defendant" in *Rio Properties*, however, may have been unintentional. In any event, such an interpretation would not be supported by either FRCP 4(h)(2) or FRCP 4(f)(3).

> infant or an incompetent person, may be effected in a place not within any judicial district of the United States:
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> (1) by any internationally agreed means reasonably calculated to give notice, such as those means authorized by the Hague Convention on the Service Abroad of Judicial and Extrajudicial Documents; or
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> (2) if there is no internationally agreed means of service or the applicable international agreement allows other means of service, provided that service is reasonably calculated to give notice: (A) in the manner prescribed by the law of the foreign country for service in that country in an action in any of its courts of general jurisdiction; or (B) as directed by the foreign authority in response to a letter rogatory or letter of request; or (C) unless prohibited by the law of the foreign country by (i) delivery to the individual personally of a copy of the summons and the complaint; or (ii) any form of mail requiring a signed receipt, to be addressed and dispatched by the clerk of the court to the party to be served; or
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> (3) by other means not prohibited by international agreement as may be directed by the court.

In other words, subsection (f)(1) permits service by any means established by international agreement[42]—such as the Hague Convention on the Service Abroad of Judicial and Extrajudicial Documents[43]—where such means are "reasonably calculated to give notice"[44] to the defendant.[45]

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42. *Compare* FED. R. CIV. P. 4(f)(1) ("internationally agreed means") *and* FED. R. CIV. P. 4(f)(2) (same) *with* FED. R. CIV. P. 4(f)(3) ("international agreement"). This article assumes that "international agreement" is synonymous with "internationally agreed means." Such terms, however, are somewhat ambiguous. It is not clear that an "international agreement" must be a treaty, but such appears to be the case inasmuch as FRCP 4(f)(1) uses the Hague Convention as an example of "internationally agreed means." FED. R. CIV. P. 4(f)(1).

43. *See* Convention on Service Abroad of Judicial and Extrajudicial Documents in Civil or Commercial Matters, Nov. 15, 1965, art. 1, 20 U.S.T. 361, 658 U.N.T.S. 163 (hereinafter "Hague Convention"), *available at* http://www.hcch.net/e/conventions/text14e.html (last visited Apr. 4, 2003); *see generally* Buhler, *supra* note 38, at 9-12 (discussing service of process under the Hague Convention).

44. FED. R. CIV. P. 4(f)(1). FRCP 4(f) expressly requires methods of service to be "reasonably calculated to give notice"—which is the constitutional standard

Where no treaty exists or a treaty is silent as to appropriate methods of service, subsection (f)(2) permits service by: (A) any method provided by local foreign law; (B) letter rogatory;[46] or (C) where not prohibited by local law, by personal service or "any form of mail" dispatched by the clerk of the court requiring a signed receipt.[47] Finally, subsection (f)(3) permits service by "other means" so long as such means are "not prohibited by international agreement" and are "directed by the court."[48]

Notably, service pursuant to FRCP 4(f)(3) stands on equal footing with service pursuant to FRCP 4(f)(1) or 4(f)(2).[49] In *Rio Properties*, the Ninth Circuit Court of Appeals held that service under FRCP 4(f)(3) is "neither a 'last resort' nor 'extraordinary relief'" that may only be used after service is attempted under either FRCP 4(f)(1) or 4(f)(2).[50] Indeed, the Ninth Circuit noted that, "court-directed service under Rule 4(f)(3) is as favored as service available under Rule 4(f)(1) or Rule 4(f)(2) . . . . [Inasmuch as] Rule 4(f)(3) is one of three separately numbered subsections in Rule 4(f) . . . [separated] by the simple conjunction 'or.'"[51] Consequently, it seems likely that

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under the Due Process Clause as interpreted by the Supreme Court in *Mullane*. *Id.*

45. *Id.*

46. *See* BLACK'S LAW DICTIONARY 916 (7th ed. 1999) (defining "letters rogatory/letter of request" as a "document issued by one court to a foreign court, requesting that the foreign court: (1) take evidence from a specific person within the foreign jurisdiction or serve process on an individual or corporation within the foreign jurisdiction; and (2) return the testimony or proof of service for use in a pending case").

47. FED. R. CIV. P. 4(f)(2)(c)(ii).

48. FED. R. CIV. P. 4(f)(3). One court has noted that "[b]y design, the contours of FRCP 4(f)(3) are not precisely demarcated." Smith v. The Islamic Emirate of Afghanistan, Nos. 01 CIV. 10132 (HB), 01 CIV. 10144 (HB), 2001 WL 1658211, at *2 (S.D.N.Y. Dec. 26, 2001) (permitting service via publication upon Osama Bin-Laden and Al Qaeda pursuant to FRCP 4(f)(3)).

49. *See* Rio Props. Inc. v. Rio Int'l Interlink, 284 F.3d 1007, 1015 (9th Cir. 2002) (noting that FRCP 4(f)(3) "is merely one means among several which enables service of process on an international defendant").

50. *Id.* at 1014-15 (rejecting defendant's argument that FRCP 4(f) "should be read to create a hierarchy of preferred methods of service of process" because such an interpretation is unsupported by the text of the rule or "even hinted at in the advisory committee notes").

51. *Id.* at 1015 ("Rule 4(f)(3) is not subsumed within or in any way dominated by Rule 4(f)'s other subsections; it stands independently, on equal footing. Moreover, no language in Rules 4(f)(1) or 4(f)(2) indicates their primacy, and certainly Rule 4(f)(3) includes no qualifiers or limitations which indicate its

litigants will attempt to use "other means" of service, such as electronic service, under FRCP 4(f)(3) because such means will often be easier and less expensive than more traditional means of service.[52]

Courts permitting electronic service of process on parties outside the United States have relied on FRCP 4(f)(3).[53] Once a federal court directs electronic service, the only remaining hurdle[54] under FRCP 4(f)(3) provides that the method so directed "not [be] prohibited by international agreement."[55] So long as the authorized method of service is

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availability only after attempting service of process by other means."); *see also* Forum Fin. Group, LLC v. Harvard Coll., 199 F.R.D. 22, 23 (D. Me. 2001) ("By its plain language and syntax, Rule 4(f)(3)'s alternative is not a last resort, nor is it any less favored than service under subsections (1) and (2).").

52. *See* Cantor, *supra* note 38, at 944, 958, 966.

53. *See infra* Part III. Although *Rio Properties* stated that "email service is not available absent a Rule 4(f)(3) court decree," *Rio Props.*, 284 F.3d at 1018, it is nonetheless conceivable that a court could rely on FRCP 4(f)(2)(C)(ii) in the event that: (1) "*any form* of mail" is interpreted to include e-mail; and (2) the clerk of the court dispatches the e-mail using a program that requires an electronic signature by the recipient. *Cf.* Cantor, *supra* note 38, at 960 (noting that the clerk's office could issue an e-summons, which the plaintiff could then forward to the defendant). Congress has defined "electronic signature" as an "electronic sound, symbol, or process, attached to or logically associated with a contract or other record and executed or adopted by a person with the intent to sign the record." 15 U.S.C. § 7006 (2001). Service under FRCP 4(f)(2)(C)(ii) would only be available where there is no applicable international agreement or where an applicable international agreement "allows other means of service." FED. R. CIV. P. 4(f)(2); *see also infra* notes 65-67 (discussing the Inter-American Convention on Letters Rogatory). At least one commentator has expressed doubt with respect to the likelihood that courts would construe "mail" within the meaning of the FRCP to encompass e-mail. *See* Cantor, *supra* note 38, at 956-62 (suggesting that courts are not likely to accept that electronic mail is "mail" under rules governing notice procedures, but noting that e-mail distributed by the United States Postal Service would stand a better chance of being construed as "mail").

54. *See generally supra* Part I and *infra* Parts III-IV (discussing the requirement that service satisfy the Due Process Clause).

55. FED. R. CIV. P. 4(f)(3); *see also Rio Props.*, 284 F.3d at 1014 ("As obvious from its plain language, service under Rule 4(f)(3) must be (1) directed by the court; and (2) not prohibited by international agreement. No other limitations are evident from the text."); Smith v. The Islamic Emirate of Afghanistan, Nos. 01 CIV. 10132 (HB), 01 CIV. 10144 (HB), 2001 WL 1658211, at *2 (S.D.N.Y. Dec. 26, 2001) (noting that the "only limit on a court's discretion" is that the method of service is not prohibited by international agreement); Mayoral-Amy v. BHI Corp., 180 F.R.D. 456, 460 (S.D. Fla. 1998) (declining to "exercise the authority seemingly granted to it by Rule 4(f)(3), which appears to allow [district courts] to unilaterally define an appropriate method for service in the absence of a clear international standard").

not prohibited by international agreement, it need not comply with foreign law.[56] Thus, in many instances, courts must examine the Hague Convention to ascertain whether to permit electronic service of process.

The Hague Convention neither explicitly authorizes nor explicitly prohibits service of process by e-mail.[57] This, however, is not surprising since the Hague Convention was promulgated in 1965.[58] Article 10(a) of the Hague Convention permits litigants to "send judicial documents, by postal channels, directly to persons abroad" if the "State of destination does not object."[59] Consequently, the Hague

56. *See Rio Props.*, 284 F.3d at 1014 ("In fact, as long as court-directed and not prohibited by an international agreement, service of process ordered under Rule 4(f)(3) may be accomplished in contravention of the laws of the foreign country."); *see also Mayoral-Amy*, 180 F.R.D. at 459 n.4 (noting that FRCP 4(f)(3) "does not necessarily preclude this Court from issuing such an order in contradiction to the law of a foreign state"). If the method of service is not prohibited by the law of the foreign country where service is being effected, however, the plaintiff may have more difficulty enforcing judgment in such a country. *See Forum Fin. Group*, 199 F.R.D. at 25.

57. *See* Hague Convention, *supra* note 43, 20 U.S.T. at 361; *see also* Charles T. Kotuby, Jr., Note, *International Anonymity: The Hague Conventions on Service And Evidence and their Applicability to Internet-Related Litigation*, 20 J.L. & COM. 103, 111 (2000) ("As the Hague Service Convention was adopted over thirty-five years ago, none of the specified methods of transmission refers expressly to the use of electronic media, such as e-mail, the Internet or facsimile machines."). Although some courts have found that the Hague Convention does not permit service by mail, the majority of courts have held that it does. *See* Ackerman v. Levine, 788 F.2d 830, 839 (2d Cir. 1986) (holding that article 10(a) of the Hague Convention permits service by registered mail); *see also* Alexandra Amiel, Note, *Recent Developments in the Interpretation of Article 10(a) of the Hague Convention on the Service Abroad of Judicial and Extrajudicial Documents in Civil or Commercial Matters*, 24 SUFFOLK TRANSNAT'L L. REV. 387, 388 (2001) (noting that "U.S. courts are witnessing a contemporary trend where a majority of decisions have held that Article 10(a) allows for service of process by mail"). No published opinion in the United States, however, has examined whether section 10(a) permits electronic service. *Cf.* WAWA, Inc. v. Christensen, No. Civ. A. 99-1454, 1999 WL 557936, at *1-2 (E.D. Pa. July 27, 1999) (finding that service by e-mail was improper under the FRCP and that service by mail was proper under section 10(a) of the Hague Convention, but not addressing electronic service under the Hague Convention).

58. *See* Hague Convention, *supra* note 43, 20 U.S.T. at 361; *see also* Kotuby, *supra* note 57, at 111; Reno v. Am. Civil Liberties Union, 521 U.S. 844, 849-50 (1997) (noting that the Internet is an outgrowth of the ARPANET—a military communication system established in 1969 designed to maintain military communications during a war).

59. Hague Convention, *supra* note 43, art. 10, 20 U.S.T. at 363; *see also* 4B WRIGHT & MILLER, *supra* note 5, § 1134 (discussing service of process under section 10(a) of the Hague Convention).

Convention may permit service by electronic means to the extent that such means constitute "postal channels" within the meaning of article 10(a).[60] Inasmuch as the Hague

60. It is arguable that article 10(a) of the Hague Convention permits service by e-mail to the extent that "postal channels" may be interpreted to include e-mail. Although e-mail was not yet born in 1965, use of "postal channels"—which is broader than "mail"—indicates an intent to include channels in addition to mail, and thus arguably includes e-mail. *See* Kotuby, *supra* note 57, at 111 (noting that a 1999 roundtable discussion of "national representatives of member states to the Hague Conference pondered the issue of electronic service under the Convention . . . [and] noted that the language of the Convention is neutral as to the communication method to be used . . . [which] allows the Convention to adjust with technological progress."); *see also id.* at 114-20 (discussing the possibility that e-mail could be construed as a "postal channel" within the meaning of the Hague Convention); Conley, *supra* note 35, at 414 (noting that the drafter's of Article 10(a) of the Hague Convention "did not mean the term 'send' only in the narrow sense of registered mail; it also meant the term to include service by telegram."); *cf.* Lunney v. Prodigy Servs. Co., 94 N.Y.2d 242, 248 (2000) (noting that e-mail is an "evolutionary hybrid of traditional telephone line communications and regular postal service mail"); Cantor, *supra* note 38, at 956-58 (suggesting that the term "mail" in state long-arm statutes could be construed to encompass e-mail, but noting that courts have held that electronic forms of communication do not constitute "mail" within the meaning of FRCP 4). Moreover, the Supreme Court has held that the Hague Convention is "mandatory in all cases to which it applies" and that it applies where the law of the forum requires the transmittal of judicial documents abroad. Volkswagenwerk Aktiengesellschaft v. Schlunk, 486 U.S. 694, 704-06 (1988). To the extent that electronic service does not constitute "transmittal abroad," the Hague Convention would be inapplicable. Such, however, seems unlikely. Nonetheless, *Volkswagenwerk* suggests that a forum could obviate the Hague Convention procedures by requiring foreign nationals doing business (including e-business) in the forum to register with an electronic agent for service of process. In any event, although the Hague Convention does not expressly prohibit electronic service, it may implicitly prohibit electronic service of process. Amiel, *supra* note 57, at 390-92 (citing *Volkswagenwerk*). Indeed, Article 1 of the Hague Convention contains mandatory language where it states that it "shall apply in all cases . . . where there is occasion to transmit a judicial or extrajudicial document for service abroad." Hague Convention, *supra* note 43, art. 1, 20 U.S.T. at 362; *see Schlunk*, 486 U.S. at 699 (citing article 1 and holding that the Hague Convention preempts inconsistent methods of service); Kreimerman v. Casa Veerkamp, 22 F.3d 634, 639-41 (5th Cir. 1994) (same). Accordingly, the Hague Convention supplies the only permissible methods of service abroad in signatory nations where the Hague Convention is applicable. *See* Amiel, *supra* note 57, at 389 n.21 (listing forty signatories to the Hague Convention). As noted above, however, the Hague Convention is not applicable where the law of the forum does not require the transmittal abroad of judicial documents. Moreover, Article 1 provides that the Hague Convention "shall not apply where the address of the person to be served with the document is not known." Hague Convention, *supra* note 43, art. 1. Accordingly, the Hague Convention does not appear to prohibit electronic service of process where the address of the party to be served is unknown—as is often the case where courts

Convention arguably permits electronic service, and, in any event, does not expressly prohibit it, electronic service appears to be permissible under FRCP 4(f)(3). The advisory committee's notes for FRCP 4(f)(3) confirm as much by stating that "the court may direct a special method of service not explicitly authorized by international agreement if not prohibited by the agreement."[61] Accordingly, the Hague Convention does not appear to be an obstacle to electronic service effected pursuant to FRCP 4(f)(3).[62]

The Inter-American Convention on Letters Rogatory ("IACLR"),[63] another relevant international agreement,[64] provides that "letters rogatory *may* be transmitted."[65] Courts have construed such language to mean that the IACLR only provides one method of service, but "does not

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authorize electronic service. *See infra* Parts III and IV (discussing instances where courts have authorized electronic service of process on parties located outside the United States). In any event, as noted above, e-mail should be construed as a "postal channel" because it exhibits the characteristics of a "postal channel" and provides a simpler way of effectively serving defendants abroad that ensures that defendants receive actual and timely notice to the same extent (and perhaps more so) as service by mail. *See, e.g.*, *Volkswagenwerk Aktiengesellschaft*, 486 U.S. at 698 (1988) (noting that the Hague Convention "was intended to provide a simpler way to serve process abroad, to assure that defendants sued in foreign jurisdictions would receive actual and timely notice of suit, and to facilitate proof of service abroad"); Kotuby, *supra* note 57, at 111 (same); Amiel, *supra* note 57, at 407 (noting that the "recent trend illustrates that courts are broadening the interpretation of methods of service under the Hague Convention").

61. FED. R. CIV. P. 4(f)(3) advisory committee's note (1993).

62. Although the Hague Convention "pre-empts inconsistent methods of service prescribed by state law in all cases to which it applies," *Volkswagenwerk Aktiengesellschaft*, 486 U.S. at 699, it only applies when serving parties *abroad*—but not when serving foreign nationals in the United States. *Id.* at 707-08. Accordingly, to the extent that a court would construe electronic service as effecting service within the United States, the Hague Convention would not be applicable.

63. Inter-American Convention on Letters Rogatory, Jan. 30, 1975, 14 I.L.M. 339 (entered into force Jan. 16, 1976) (reprinted following 28 U.S.C. § 1781) (hereinafter "IACLR"), *available at* http://www.oas.org/juridico/english/treaties/b-36.html (last visited Apr. 30, 2003).

64. *See generally* Buhler, *supra* note 38, at 13-14 (discussing the IACLR); Anne-Marie Kim, Note, *The Inter-American Convention and Additional Protocol on Letters Rogatory: The Hague Service Convention's "Country Cousins"?*, 36 COLUM. J. TRANSNAT'L L. 687 (1998) (same); Kim M. Forcino, Note, *International Service of Process: The Trend Moves Away from Uniformity*, 8 PACE INT'L L. REV. 485 (1996) (same).

65. IACLR, *supra* note 63, art. 4 (emphasis added).

preempt all other means of service."[66] Accordingly, electronic service of process is permissible under FRCP 4(f)(3) where directed by the court because neither the Hague Convention nor the IACLR prohibits such service.

III. CASE LAW ADDRESSING ELECTRONIC SERVICE OF PROCESS

> Courts . . . cannot be blind to changes and advances in technology. No longer do we live in a world where communications are conducted solely by mail carried by fast sailing clipper or steam ships. Electronic communication via satellite can and does provide instantaneous transmission of notice and information. No longer must process be mailed to a defendant's door when he can receive complete notice at an electronic terminal inside his very office, even when the door is steel and bolted shut.[67]

Although several courts have recently permitted service of process by, *inter alia*, e-mail and/or facsimile,[68] a few

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66. *See* Kreimerman v. Casa Veerkamp, 22 F.3d 634, 640-44 (5th Cir. 1994) (holding that the IACLR does not make letters rogatory the exclusive means of serving process in the signatory countries because "nothing in the language of the [IACLR] expressly reflects an intention to supplant all alternative methods of service"); United States v. Padilla, No. Civ. S-01-2301 FCD/JF, 2002 WL 471838, at *1 (E.D. Cal. Feb. 25, 2002) (holding that service pursuant to FRCP 4(f)(3) is not prohibited by the IACLR, which "provides one method of service"); Hein v. Cuprum, S.A. de C.V., 136 F. Supp. 2d 63, 70 (N.D.N.Y. 2001) (same); Pizzabiocche v. Vinelli, 772 F. Supp. 1245, 1249 (M.D. Fla. 1991) (same). *Kreimerman* is the only federal appellate court to have addressed whether the IACLR preempts other methods of service. *Kreimerman*, 22 F.3d at 637. *Kreimerman* noted that the IACLR only addressed one method of service—as opposed to the Hague Convention, which expressly applies in all cases "where there is occasion to transmit a judicial . . . document for service abroad." *Id.* at 639 (quoting article 1 of the Hague Convention).

67. New Eng. Merch. Nat'l Bank v. Iran Power Generation & Transmission Co., 495 F. Supp. 73, 80-81 (S.D.N.Y. 1980). *New England Merchants* was the first federal court decision to permit electronic service of process where it authorized service via telex upon Iranian defendants whom plaintiff could not serve due to the regime change in Iran. *Id.* Although "[s]ome commentators have urged authorization of service by facsimile, most jurisdictions only authorize the use of facsimile or service of process after the initial service of summons and complaint." Perritt, *supra* note 7, at 32-33 (citing David A. Sokasits, Note, *The Long Arm of the Facsimile: Service of Process Using Facsimile Machines*, 16 RUTGERS COMPUTER & TECH. L.J. 531, 539-43 (1990) (promoting use of facsimile machines for serving initial process of summons and complaint)); Conley, *supra* note 35, at 411-12 (discussing service by facsimile).

68. In 1996, the English High Court issued the first known judicial decision permitting service of process by e-mail. *See* Conley, *supra* note 35, at 408-10

federal court decisions did not share *New England Merchant*'s zeitgeist by declining to boldly go where no other federal court has gone before—cyberspace.[69] For example, *Columbia Insurance Co. v. SEESCANDY.COM*[70] is one of the first published decisions to address electronic service of process. Columbia Insurance Co., an assignee of various trademarks related to See's Candy Shops, Inc., brought a trademark action against various owners of the domain names seescandy.com and seecandys.com.[71] The defendants, however, were largely unknown because the domain name registrations held little information other than e-mail addresses.[72] Consequently, plaintiff named various unknown or John Doe defendants, whom plaintiff attempted to serve via e-mail.[73] The court, without any analysis or citation of authority, concluded that service of process via e-mail was "not sufficient to comply with the Federal Rules of Civil Procedure."[74]

Likewise, the court in *WAWA, Inc. v. Christensen*[75] also held that FRCP 4 did not permit the use of e-mail as a

(discussing a 1996 English High Court case that permitted electronic service of process upon a defendant known only by their e-mail address); Tamayo, *supra* note 38, at 244-46 (same).

69. *See* Tamayo, *supra* note 38, at 250 (noting that the District Court for the Northern District of California—in its *Columbia Insurance Co.* decision—resisted "the modern approaches to electronic notice employed by the courts in the British case"); *see also* Borninski v. Texas Instruments, 32 F. Supp. 2d 918, 920 (N.D. Tex. 1998) (noting that the magistrate judge previously denied plaintiff's request to serve deposition notices via e-mail).

70. 185 F.R.D. 573, 579 (N.D. Cal. 1999).

71. *Id.* at 575.

72. *Id.*

73. *Id.* at 577-79.

74. *Id.* at 579; *see also* Tamayo, *supra* note 38, at 250-51 (noting that *Columbia Insurance Co.* "held that service of process by e-mail to a defendant's electronic address, when the plaintiff did not know the actual identity of the defendant, was improper" and that plaintiffs "must ascertain the defendant's name and address to serve the defendant with the summons and complaint in compliance with Rule 4"). Nonetheless, the *Columbia Insurance Co.* Court noted that plaintiff's attempted e-mail service demonstrated "that plaintiff has made a good faith effort to specifically identify defendant and to serve notice on defendant." *Columbia Ins. Co.*, 185 F.R.D. at 579. Consequently, plaintiff was permitted to engage in limited discovery in an attempt to discover defendants' identities. *Id.* 579-81. Inasmuch as several defendants were located inside the United States, FRCP 4(f)(3) was inapplicable. *Id.* at 579.

75. WAWA, Inc. v. Christensen, No. Civ. A.99-1454, 1999 WL 557936 (E.D. Pa. July 27, 1999).

method of service.[76] The *WAWA, Inc.* Court invalidated plaintiff's attempted service upon a Danish citizen via e-mail and regular mail because of its belief that e-mail was "not an approved method of service under" FRCP 4.[77] Although the court noted that the "Judicial Conference Rules Committee has discussed and recommended a change in [FRCP 4] to permit service by electronic transmission,"[78] it nonetheless concluded that, "at this time, email is not a valid means for delivering a summons and complaint to a defendant."[79] Soon after *WAWA, Inc.* was decided, however, a series of federal courts established a trend toward authorizing service of process via e-mail on parties outside the United States pursuant to FRCP 4(h)(2) and FRCP 4(f)(3).

In *Broadfoot v. Diaz (In re Telemedia Associates, Inc.)*,[80] a bankruptcy court in the Northern District of Georgia became the first federal court to permit service of process by e-mail.[81] *Broadfoot* was an adversary proceeding[82] by a Chapter 7 trustee against the debtor's former officer/director, Diaz, for alleged mismanagement.[83] Pursuant to FRCP 4(f)(3), the court permitted the trustee to serve the summons and complaint upon Diaz via facsimile, e-mail, and regular mail at Diaz's last known address on

76. *Id.* at *1-2. *WAWA, Inc.* involved, *inter alia*, alleged violations of the Lanham Act and the Federal Trademark Dilution Act of 1995. *Id.* at *1. Plaintiff requested an injunction against any use of the "WAWAWA.COM" domain name. *Id.*

77. *Id.* The court nonetheless found service upon the defendant by certified mail to be appropriate under FRCP 4(f) and Article 10(a) of the Hague Convention. *Id.* at *2.

78. *Id.* at *1.

79. *Id.*

80. 245 B.R. 713 (Bankr. N.D. Ga. 2000).

81. *Id.* at 717 ("[T]he propriety of the Court's inclusion of electronic mail among the alternative methods by which the trustee may serve process on Diaz appears to be a matter of first impression."); *id.* at 719 (noting that its order "authorizing service by electronic mail . . . has little or no precedent in this or any other Circuit"); *id.* at 721 n.5 (citing press accounts that discussed the court's previous authorization of service by e-mail).

82. *See* BLACK'S LAW DICTIONARY 54 (7th ed. 1999) (defining "adversary proceeding" in relevant part as a "lawsuit that is brought within a bankruptcy proceeding, governed by special procedural rules, and based on conflicting claims [usually] between the debtor (or the trustee) and a creditor or other interested party").

83. *Broadfoot*, 245 B.R. at 715. The trustee asserted claims for, *inter alia*, waste of corporate assets and breach of fiduciary duty. *Id.*

the grounds that Diaz was a "moving target."[84] Diaz, however, failed to respond to the complaint and the trustee sought a default judgment against Diaz.[85] In deciding the trustee's motion, the court reviewed its previous decision authorizing the trustee to serve Diaz via e-mail, which it characterized as a "matter of first impression."[86]

In reviewing the propriety of its previous order authorizing electronic service on Diaz, the court discussed its finding that Diaz was a "moving target" and that it was "virtually impossible for the trustee to find [Diaz] and effect service by any of the traditional means specified in the [FRCP]."[87] Although the trustee communicated with Diaz concerning the bankruptcy proceeding (prior to the trustee's filing of an adversary proceeding against Diaz), such contacts were by telephone and Diaz refused to provide a permanent phone number or address through which he could be contacted.[88] Diaz, however, did provide the trustee with a permanent facsimile number and an e-mail address indicating Diaz's preference "for communication by facsimile and electronic mail."[89] The court concluded that "Diaz simply provided the trustee with an electronic address rather than a traditional postal or street address."[90]

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84. *Id.* at 715-18. Notably, the trustee served Diaz with the Order authorizing electronic service along with the summons and the complaint, thus demonstrating that such service bore the imprimatur of the court. *Id.* at 716. Indeed, service of such an order would likely encourage a defendant to think twice about ignoring a summons to the extent that they would otherwise be inclined to ignore the summons if they perceived that it was not validly served.

85. *Id.* at 717; *see also* Joe Hand Promotions, Inc. v. Rivera, No. 99-CV-983E, 2002 WL 1677699, at *1-2. (W.D.N.Y. July 11, 2002) (describing the bifurcated process for obtaining a default judgment under FRCP 55).

86. *Broadfoot*, 245 B.R. at 715-17. Before reviewing the adequacy of e-mail service, the court first examined whether it had personal jurisdiction over Diaz, concluding that it did. *Id.* at 717-18 (noting that "[b]efore a default can be entered, the court must have jurisdiction over the party against whom judgment is sought, which also means that the party must have been effectively served with process") (citation omitted).

87. *Id.* at 718 ("[N]otwithstanding the trustee's diligence, the physical whereabouts of Diaz could not be ascertained in order to effect service of process on him by traditional means."). The trustee, however, discovered that the debtor leased Diaz a residence in Singapore, which was the last known address upon which the trustee attempted service. *Id.* at 716-19.

88. *Id.* at 718.

89. *Id.*

90. *Id.*

Broadfoot held that FRCP 4(f)(3) permitted electronic service of process.[91] The *Broadfoot* Court noted that FRCP 4(f)(3) and its predecessor, FRCP 4(i)(1)(E), were adopted to provide federal courts with "flexibility and discretion" in selecting alternative methods of service of process in foreign countries.[92] Indeed, when Rule 4 was promulgated in 1963, it provided five methods of service of process.[93] The fifth method for service of process under FRCP 4(i)(1)(E) "was a residual method adopted for the express purpose of 'add[ing] flexibility by permitting the court by order to tailor the manner of service to fit the necessities of a particular case.'"[94] The court found that this flexibility continues in FRCP 4(f)(3).[95] Accordingly, the court held that FRCP 4(f)(3) provides courts with flexibility to adopt methods of service "so long as the particular method of service adopted is not contrary to international agreement . . . ."[96]

In determining whether e-mail was a feasible method of service, the court recognized that it was a cyber-trailblazer where it stated that "any unspecified form of alternate service usually has its genesis in untried or formerly unapproved methodology."[97] The court found service of process by e-mail to be a logical extension of case law permitting methods of service including, *inter alia*, facsimile, publication, and ordinary mail pursuant to FRCP 4(f)(3) or its predecessor.[98] Accordingly, the court held that e-mail service was permitted under the circumstances because e-mail and facsimile were the only means of communicating with Diaz.[99] Indeed, Diaz expressly directed

91. *Id.* at 721.
92. *Id.* at 719.
93. *Id.*
94. *Id.*
95. *Id.*; *see also infra* Part II.
96. *Broadfoot*, 245 B.R. at 419.
97. *Id.* The court further noted that there were nearly 150 million Internet users, and that to ignore such "would be akin to hiding one's head in the sand . . ." *Id.* (citing Cantor, *supra* note 38).
98. *Id.*; *see, e.g.*, New Eng. Merchants Nat'l Bank v. Iran Power Generation & Transmission Co., 495 F. Supp. 73, 80-81 (S.D.N.Y. 1980) (allowing service by telex for Iranian defendants unable to be served due to regime change that was hostile toward the United States); SEC v. Tome, 833 F.2d 1086, 1093 (2d Cir. 1987) (permitting service of process by publication in the *International Herald Tribune*).
99. *Broadfoot*, 245 B.R. at 720.

the trustee to communicate only through such means.[100] Although the court noted that it was unaware of any domestic precedent upon which to rely,[101] the court reasoned that FRCP 4 (f)(3) was sufficient authority as it provided "a nonexhaustive list of alternative means by which service can be authorized," and that such "flexibility necessarily includes the utilization of modern communication technologies to effect service when warranted by the facts."[102] Moreover, the court distinguished *WAWA, Inc.* on the ground that the plaintiff in that case failed to seek prior approval of the court as required under FRCP 4(f)(3).[103]

Broadfoot also held that service via e-mail comported with the constitutional requirements of the Due Process Clause, as interpreted by *Mullane v. Central Hanover Bank & Trust Co.*,[104] because e-mail service was "reasonably calculated, under all the circumstances, to apprise interested parties of the pendency of the action and afford them an opportunity to present their objections."[105] The court reasoned that the methods of service used were the methods of communication expressly preferred by the defendant in his dealings with the plaintiff, and were thus reasonably calculated to provide defendant with actual notice of the suit and an opportunity to appear and defend.[106] The court also noted that facsimile and e-mail are "commonplace in our increasingly global society" and that "federal courts are not required to turn a blind eye to

100. *Id.* Consequently, the court may have deemed Diaz to have impliedly consented to electronic service of process—despite his apparent attempts to remain beyond the court's long-arm.

101. The court, however, noted that a 1996 English court decision was the "only prior judicial decision authorizing service of process by electronic mail in any jurisdiction . . ." *Id.* (citing Conley, *supra* note 35, at 427-28); *see also* Conley, *supra* note 35, at 408-10 (discussing the 1996 English High Court case).

102. *Broadfoot*, 245 B.R. at 720.

103. *Id.* at 721 n.6. A closer reading of *WAWA, Inc.*, however, indicates that the holding was not as narrow as suggested by the *Broadfoot* Court. *See WAWA, Inc.*, 1999 WL 557936, at *1 ("Electronic mail ('email') is not an approved method of service under [FRCP 4].").

104. 339 U.S. 306, 314 (1950); *see also infra* Part I (discussing *Mullane*).

105. *Broadfoot*, 245 B.R. at 721 (quoting *Mullane*).

106. *See id.* ("If any methods of communication can be reasonably calculated to provide a defendant with real notice, surely those communication channels utilized and preferred by the defendant himself must be included among them.").

society's embracement of such technological advances."[107] Accordingly, it appears that, under *Broadfoot*, service of process via e-mail and/or facsimile can be constitutionally permissible even without the defendant's express preference for such methods of communication.[108]

Broadfoot was undoubtedly a watershed case in the area of electronic service of process. However, the Ninth Circuit's decision in *Rio Properties*[109] is obviously of paramount importance because it is the first federal appellate court to address e-mail service of process on a party outside the United States.[110] *Rio Properties* held that

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107. *Id.* (quoting New Eng. Merchants Nat'l Bank v. Iran Power Generation & Transmission Co., 495 F. Supp. 73, 81 (S.D.N.Y. 1980)).

108. *See id.* (citing Conley, *supra* note 35 and its discussion of the English High Court case as an example of where electronic service is permissible absent an express indication by defendant that such electronic methods are acceptable to them). It therefore appears that courts are willing to accept some degree of risk that a defendant will not receive actual notice of a suit against them where the circumstances are such that electronic service nonetheless provides the best available option for service. Indeed, it appears that courts are unwilling to let plaintiffs go unredressed merely because a defendant is not easily served. *See id.* at 722 ("A defendant should not be allowed to evade service by confining himself to modern technological methods of communication not specifically mentioned in the Federal Rules. Rule 4(f)(3) appears to be designed to prevent such gamesmanship by a party."); Smith v. The Islamic Emirate of Afghanistan, Nos. 01 Civ. 10132 (HB), 01 Civ. 10144 (HB), 2001 WL 1658211, at *1 (S.D.N.Y. Dec. 26, 2001) ("Without proper service by [plaintiffs], this Court lacks personal jurisdiction over the defendants and is powerless to take further action in either lawsuit."); Montesdeoca v. Krams, 755 N.Y.S.2d 581, 582 (N.Y. Civ. Ct. 2003) (citing *Rio Properties* and *Hollow* for the proposition that "innocent parties need not despair and judges do not have to twiddle their thumbs where an elusive party attempts to barricade itself from service of process. The law will follow in step in fashioning appropriate relief."). Accordingly, courts are more inclined to permit non-traditional methods of service where necessary to serve parties over whom the court may exert personal jurisdiction but over whom traditional methods of service are futile. *See id.*

109. Rio Props., Inc. v. Rio Int'l Interlink, 284 F.3d 1007 (9th Cir. 2002); *see also* Jonathan A. Franklin & Roberta J. Morris, *International Jurisdiction and Enforcement of Judgments in the Era of Global Networks: Irrelevance of, Goals for, and Comments on the Current Proposals*, 77 CHI.-KENT L. REV. 1213, 1262 n.138 (2002) (citing *Rio Properties* without discussion).

110. *Rio Props.*, 284 F.3d at 1017 ("We acknowledge that we tread upon untrodden ground. The parties cite no authority condoning service of process over the Internet or via email, and our own investigation has unearthed no decisions by the United States Courts of Appeals dealing with service of process by email and only one case anywhere in the federal courts."); *see also Service of Process - Foreign Defendant - E-mail Service*, FED. LITIGATOR 110, 111 (May 2002) (characterizing the holding in *Rio Properties* as "the first time a federal appeals court has sanctioned service by e-mail").

service by email and/or facsimile was allowed under FRCP 4(f)(3).[111] Rio Properties, a Las Vegas hotel and casino operator, sued Rio International Interlink, a Costa Rican internet gambling operation, for, *inter alia*, trademark infringement.[112] Prior to filing suit, plaintiff encountered defendant's advertisements, inviting patrons to visit its sports gaming website, www.riosports.com.[113] Plaintiff sent defendant a letter demanding that it cease operating the site.[114] Defendant disabled the site, but resumed its operation at www.betrio.com.[115] Consequently, plaintiff filed suit.

Although plaintiff was unable to locate defendant in the United States to effect service, it discovered that defendant's Miami address was an international courier that was not authorized to accept service of process on defendant's behalf.[116] Plaintiff nonetheless served the summons and complaint on defendant's courier.[117] The summons and complaint reached defendant, who in turn had an attorney contact plaintiff's counsel to inquire about the suit.[118] Although defense counsel asked for a legible copy of the complaint, he declined to accept service of process on behalf of his client.[119] Undeterred, plaintiff unsuccessfully attempted to locate defendant's Cost Rican address, but discovered that defendant "preferred communication through its email address, email@betrio.com" and that it received regular mail at the address of its international courier.[120] Accordingly, plaintiff "filed an emergency motion for alternate service of process."[121] The district court granted plaintiff's motion and authorized it to serve defendant through e-mail and its international courier pursuant to FRCP 4(h)(2) and FRCP 4(f)(3).[122] Default judgment was ultimately entered against

111. *Rio Props.*, 284 F.3d at 1016-17.
112. *Id.* at 1012.
113. *Id.*
114. *Id.*
115. *Id.*
116. *Id.* at 1013.
117. *Id.*
118. *Id.*
119. *Id.*
120. *Id.*
121. *Id.* Defendant, however, did not respond. *Id.*
122. *Id.* Plaintiff served defendant by e-mail and via its international courier. *Id.*

the defendant for failure to comply with the district court's discovery orders.[123] Defendant appealed, *inter alia*, the sufficiency of service of process.[124]

The Ninth Circuit Court of Appeals, using the deferential abuse of discretion standard, affirmed the district court's authorization of e-mail service pursuant to FRCP 4(h)(2) and FRCP 4(f)(3).[125] In affirming the district court's authorization of service via e-mail, the Ninth Circuit cited case law construing FRCP 4(f)(3) or its predecessor that established a trend towards authorizing alternative methods of service including telex and e-mail.[126] The Ninth Circuit held that service pursuant to FRCP 4(f)(3) "is an equal means of effecting service of process under the Federal Rules of Civil Procedure."[127] The Ninth Circuit left to the district court's discretion "the task of determining when the particularities and necessities of a given case require alternate service of process" under FRCP 4(f)(3).[128] Consequently, the Ninth Circuit expressly agreed with the district court's use of its discretionary authority to select an alternative method of service to remedy plaintiff's "inability to serve an elusive international defendant, striving to evade service of process" despite plaintiff's reasonable attempts at service.[129]

After determining that e-mail service was permissible under FRCP 4, the Ninth Circuit next ascertained whether service via e-mail upon the defendant was constitutionally permissible under *Mullane*.[130] Noting that the broad standard enunciated in *Mullane* "unshackles the federal

123. *Id.*

124. *Id.* at 1014.

125. *Id.* at 1014-18 (disapproving of a contrary holding in Graval v. P.T. Bakrie & Bros., 986 F. Supp. 1326, 1330 (C.D. Cal. 1996)). The Ninth Circuit distinguished *WAWA, Inc.* on the same grounds as the *Broadfoot* Court, namely, that the plaintiff in *WAWA, Inc.* lacked a court order. *Id.* at 1018; *see also infra* note 103 (discussing *Broadfoot's* discussion of *WAWA, Inc.*).

126. *Id.* at 1016 (citing, *inter alia*, *New England Merchants* and *Broadfoot*).

127. *Id.* at 1014-16 (holding that FRCP 4(f)(3) is not a "last resort" to be used only when service has been attempted under either FRCP 4(f)(1) or FRCP 4(f)(2)).

128. *Id.* at 1018.

129. *Id.* at 1016. ("[Plaintiff] need not have attempted every permissible means of service of process before petitioning the court for alternative relief. Instead, [plaintiff] needed only to demonstrate that the facts and circumstances of the present case necessitated the district court's intervention.").

130. *Id.* at 1016-18.

courts from anachronistic methods of service and permits them entry into the technological renaissance,"[131] the Ninth Circuit found, "[w]ithout hesitation," that each method authorized by the district court was "reasonably calculated" under the circumstances to apprise defendant of the suit and afford it an opportunity to respond.[132] Indeed, the Ninth Circuit found that service by e-mail was "the method of service most likely to reach [defendant]"[133] because the defendant had "embraced the modern e-business model and .... [S]tructured its business such that it could be contacted *only* via its email [sic] address."[134] Moreover, the defendant designated its e-mail address as its "preferred contact information" on its web site and on printed advertisements.[135] Therefore, the Ninth Circuit held that service by e-mail was constitutionally permissible under the facts of the case.[136]

Despite affirming service by e-mail, *Rio Properties* also noted some potential limitations of electronic service.[137] Such limitations included inability to confirm receipt of an e-mail message,[138] limited use of electronic signatures,[139]

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131. *Id.* at 1017.

132. *Id.*

133. *Id.* at 1017. The court noted that service by e-mail was the only method "aimed directly and instantly at" the defendant, as opposed to an intermediary such as defendant's attorney or international courier. *Id.* at 1018; *see also* Tamayo, *supra* note 38, at 256 (suggesting that e-mail service is better than other methods of substitute service because the lack of an intermediary eliminates the risk of misplacement).

134. *Rio Props.*, 284 F.3d at 1017-18.

135. *Id.* at 1018.

136. *Id.* at 1017-18.

137. *Id.* at 1018.

138. *Id.*; *see also* Bowman v. Weeks Marine, Inc, 936 F. Supp. 329, 339 (D.S.C. 1996) (discussing the difficulties involved when confirming receipt of pleadings by facsimile or e-mail for purposes of removal). Commentators suggest that confirmation of receipt of electronic service is not as problematic as *Rio Properties* suggests inasmuch as at least one company offers a service that provides such confirmation. *See* Jenna Karadbil, *Service by Email*, NEV. LAW., July 2002, at 21, 31 ("[T]here is at least one company that provides proof of service of documents sent via email. Proof of Service - electronic, www.pos-e.com, offers, for a nominal fee, certified Internet document delivery and provides proof of what was served, upon whom, and when."); Conley, *supra* note 35, at 409-10 (noting that defense counsel in the English High Court case used an Internet service provider that notified the sender when the e-mail message was received—but could not track when the message was read); *id.* at 424-25 (discussing issues related to the confirmation of receipt of electronic messages); Tamayo, *supra* note 38, at 254-55 (suggesting ways to reduce the problems

problems associated with the transmission of exhibits,[140] and other issues that invariably arise when people interact with computers.[141]

Subsequent court decisions have relied on the Ninth Circuit's decision in *Rio Properties* when authorizing electronic service of process. For example, the court in *Ryan v. Brunswick Corp. et al.*[142] authorized electronic service upon a Taiwanese manufacturer pursuant to FRCP 4(f)(3).[143] *Ryan* was a personal injury action involving an allegedly defective bicycle component.[144] Plaintiff sued the New York bicycle distributor and the Taiwanese component manufacturer.[145] Plaintiff had difficulty serving the Taiwanese manufacturer and suggested that the

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associated with electronic service). Moreover, assuming that a plaintiff can demonstrate that they sent a summons and complaint via e-mail and/or facsimile, and that the address used is correct, the law should presume receipt by the defendant. *See id.* at 256 (discussing the "law's presumption that papers delivered are deemed read is illustrated [by] substituted service"); *cf.* FED. R. CIV. P. 5(b)(3) (making electronic service complete upon transmission except where the sending party learns that the transmission did not reach the recipient).

139. *Rio Props.*, 284 F.3d at 1018; *but see* Cantor, *supra* note 38, at 965 (discussing the reliability of digital signatures).

140. Even assuming that the transmission of exhibits was not technologically feasible or that the defendant was unable to receive or open such attachments, plaintiffs should be allowed to serve the complaint and summons via e-mail, thereby providing defendant notice of the suit. To avoid any problems with the transmission of exhibits, plaintiffs could indicate by cover letter that defendant can contact plaintiff to make arrangements for delivery of the attachments. Indeed, inasmuch as notice and an opportunity to respond are the constitutional hallmarks required by the Due Process Clause, it is not essential that all attachments are sent simultaneous with the complaint, as long as the defendant is placed on notice and given the opportunity to obtain any attachments. Indeed, FRCP 4(d)(2) provides that a defendant "that receives notice of an action in the manner provided in this paragraph has a duty to avoid unnecessary costs of serving the summons." FED. R. CIV. P. 4(d)(2).

141. Nonetheless, courts could take measures to guard against these problems. *Rio Props.*, 284 F.3d at 1018 (indicating that it would be left to the discretion of the district courts to "balance the limitations of email service against its benefits in any particular case"); *see also* Cantor, *supra* note 38, at 961-62 (noting that plaintiffs could hedge against lost or deleted e-mails by making electronic service undeletable for a period of time and/or placing the complaint and summons on a web-site accessible to the defendant).

142. No. 02-CV-133(E)F, 2002 WL 1628933 (W.D.N.Y. May 31, 2002).

143. *Id.* at *1-3. In so holding, *Ryan* followed the lead of *Rio Properties* and *Broadfoot*. *Id.* at *2 nn. 5, 8.

144. *Id.* at *1 n.1.

145. *Id.* at *1.

manufacturer could only be served by a letter rogatory.[146] Consequently, the plaintiff faced the possibility of being unable to recover 100% of his damages if the manufacturer, who had failed to appear despite plaintiff's attempts at service of process, was 50% or more at fault.[147] In an attempt to avoid this result, the plaintiff sought to have the distributor declared jointly and severally liable pursuant to CPLR § 1602(10), which required plaintiff to show "that jurisdiction over the manufacturer could not with due diligence be obtained."[148]

Rather than addressing whether plaintiff's attempts at service constituted a failure to obtain jurisdiction over the manufacturer with due diligence, the district court *sua sponte* authorized plaintiff to serve the manufacturer electronically pursuant to FRCP 4(h) and FRCP 4(f)(3).[149] The court relied on *Rio Properties* in holding that service by "other means" under FRCP 4(f)(3) is allowed where such service is "not prohibited by international agreement" and is "directed by the court."[150] Consequently, the plaintiff in *Ryan* was permitted to serve process on the Taiwanese manufacturer by, *inter alia*, e-mail, facsimile, and regular mail pursuant to FRCP 4(f)(3).[151]

Nonetheless, the *Ryan* Court also held that parties could not whimsically seek to use "other means" of service

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146. *Id.* at *1 n.4.

147. Plaintiff faced this situation because of New York's modified version of the common law rule of joint and several liability set forth in § 1601(1) of New York's Civil Procedure Law and Rules ("CPLR"). *See* DAVID D. SIEGEL, NEW YORK PRACTICE §§ 168A-168E (3d ed. 1999) (discussing New York's modification of the common law rule concerning joint and several liability); *compare* N.Y. CPLR § 1601(1) (McKinney 1997) *with* N.Y. CPLR § 1602(10) (McKinney 1997). Under CPLR § 1601(1), the distributor would only be "severally liable for plaintiff's non-economic loss to the extent of [the distributor's] proportionate share of fault where [it was] 50% or less at fault"—but would remain jointly and severally liable for plaintiff's damages if it was 50% or more at fault. *See Ryan*, 2002 WL 1628933, at *1 n.3. On the other hand, CPLR § 1602(10) provided an exception to the rule of CPLR § 1601(1) where a plaintiff can show that jurisdiction over the defendant "cannot with due diligence be obtained." *Id.* at *1.

148. *Id.*

149. *Id.* at *1-3; *see also infra* Part II.

150. *Ryan*, 2002 WL 1628933, at *2 (citing *Rio Properties* for the proposition that FRCP 4(f)(3) is an "independent basis for service of process" that is not "extraordinary relief" or a "last resort" that is only available when parties are unable to effectuate service under subsections (f)(1) or (f)(2)).

151. *Id.*

under FRCP 4(f)(3), and that district courts are impliedly permitted to impose a threshold requirement under FRCP 4(f)(3).[152] The *Ryan* Court stated that although parties "need not exhaust all possible methods of service" before seeking the court's assistance under FRCP 4(f)(3), they must reasonably attempt to serve the defendant and present circumstances where the "court's intervention is necessary to obviate the need to undertake methods of service that are unduly burdensome or that are untried but likely futile."[153] Finally, *Ryan* concluded that electronic service upon the manufacturer comported with due process requirements under *Mullane* because the manufacturer encouraged parties to conduct business with it via e-mail where it listed its e-mail address on its web-site.[154] Notably, however, the *Ryan* Court did not require the degree of rascality that existed in the *Rio Properties* case.[155]

Addressing an issue of first impression under New York law, the New York Supreme Court[156] for Oswego County became the first New York state court to permit service of process via e-mail in *Hollow v. Hollow*[157]—thereby

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152. *Id.*

153. *Id.* Other district courts have imposed similar thresholds. *See* Elisan Entm't, Inc. v. Suazo, 206 F.R.D. 335, 336 n.2 (D.P.R. 2002) (citing 4B WRIGHT & MILLER § 1134 for the proposition that FRCP 4(f)(3) "permits service in a particular case to be tailored to the necessities of the situation when none of the other methods of service expressly provided for in the rule is satisfactory or likely to be successful . . . ."); Mayoral-Amy v. BHI Corp., 180 F.R.D. 456, 460 (S.D. Fla. 1998) (declining to exercise its authority under FRCP 4(f)(3) to allow service by facsimile on Belizean defendant where the plaintiff did not indicate that he was "incapable of appropriately effectuating . . . service" in Belize).

154. *Ryan*, 2002 WL 1628933, at *2 ("Inasmuch as [the manufacturer] conducts its business through these means of communication, such are reasonably calculated to apprize [the manufacturer] of the pendency of this action and afford it an opportunity to respond.").

155. *Id.* (noting that the defendant in *Rio Props.* was more "elusive" than the Taiwanese defendant in *Ryan*). It appears that a court following *Ryan* would permit electronic service where a foreign defendant ignores a plaintiff's reasonable attempts to effectuate service—thereby attempting to avoid being hauled into a court that likely has personal jurisdiction over it because of the defendant's minimum contacts with the forum.

156. SIEGEL, *supra* note 147, § 12 ("The 'supreme' court is a misnomer. It is not 'supreme.' It is two rungs below the state's court of last resort. It is, however, the state's only court of 'general' jurisdiction.").

157. 747 N.Y.S.2d 704, 705, (N.Y. Sup. Ct. 2002) ("This case presents a fascinating issue of first impression in the State of New York, to wit, whether under the circumstances presented, personal service can be affected through e-mail?"); *N.Y. Court Allows Service of Process by E-mail*, 4 No. 2 ANDREWS E-BUS.

continuing the federal trend.[158] In *Hollow*, plaintiff's husband moved to Saudi Arabia in 1999 to work for an engineering firm.[159] The only contact that plaintiff's husband had with her after he relocated to Saudi Arabia was via e-mail.[160] In June of 2000, plaintiff's husband sent her an email that stated "I am a resident of Saudi Arabia and there's nothing anyone can do to me here."[161] Plaintiff subsequently commenced a divorce action against her husband in May of 2001.[162] Plaintiff's counsel unsuccessfully attempted to serve the defendant through an international process server.[163] The international process server, however, informed plaintiff that the only method of service available was the lengthy and expensive process of obtaining letters rogatory[164] and that personal service would be "virtually impossible" because defendant resided and worked on a company-owned compound.[165] Moreover, defendant's

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L. BULL. 9 (2002) (noting that *Hollow* was the first New York state court decision to allow service of process by e-mail); *cf.* Hon. Judith S. Kaye, *Special Report: The State of the Judiciary*, 70 N.Y. ST. B.J. 50, 50 (May/June 1998) (noting that the New York court system "will continue to seek statutory reforms for litigation in the electronic age—like service of process by facsimile and e-mail"). Other recent decisions in New York have also addressed electronic service. *See* GMA Accessories, Inc. v. Megatoys, Inc., No. 01 Civ. 17743(LAK), 2003 WL 193507, at *1 n.2 (S.D.N.Y. Jan. 6, 2003) (noting that a court order is required for service by e-mail); Maddaloni Jewelers, Inc. v. Rolex Watch USA, Inc., No. 02 Civ. 6438(SAS), 2002 WL 31509881, at *2-4 (S.D.N.Y. Nov. 6, 2002) (holding that defendant's receipt of complaint via e-mail did not start the clock for purposes of removal under 28 U.S.C. § 1446(b) because defendants did not consent to service by e-mail); People v. Welch, 738 N.Y.S.2d 510, 511 (N.Y. Sup. Ct. 2002) (holding that e-mail did not constitute "written notice" within the meaning of CPL 190.50[5][a]). Nonetheless, it appears that—under *Maddaloni Jewelers*—a party may consent to service of process via e-mail, as long as such consent is clear, but not necessarily in writing. *See Maddaloni Jewelers*, 2002 WL 31509881, at *2-4. New York courts have also held that service of papers upon an attorney by facsimile satisfies CPLR § 2103. *See* Calabrese v. Springer Pers. of N. Y., 534 N.Y.S.2d 83 (N.Y. Civ. Ct. 1988) ("Startling as it may seem, however, no published opinion has been found considering the applicability of facsimile machines to the conduct of litigation.").

158. *Hollow*, 747 N.Y.S.2d at 707 (citing *Rio Properties* and *Broadfoot*).

159. *See id.* at 705.

160. *Id.*

161. *Id.*

162. *Id.*

163. *Hollow*, 747 N.Y.S.2d at 705.

164. *Id.*

165. *Id.* Plaintiff's process server also indicated that it risked criminal charges if it attempted to serve the security guards at the company compound. *Id.*

employer refused to accept service of process on defendant's behalf.[166] Consequently, plaintiff sought either an extension of time to serve process or authorization to serve defendant via e-mail.[167]

The court allowed plaintiff to serve defendant via e-mail pursuant to CPLR § 308(5) because it found that service upon the defendant was impracticable.[168] In approving

166. *Id.*

167. *Id.* Plaintiff moved for an alternate method of service pursuant to CPLR § 308(5). *See generally* SIEGEL, *supra* note 147, § 75 (discussing court-ordered service under § 308(5)). Courts may permit an alternate method of service under CPLR § 308(5) where service is "impracticable" under the previous sections of CPLR 308. *See id.* Where such impracticability exists, a plaintiff may make an *ex parte* motion asking the court to authorize an alternate method of service. *See id.* Indeed, Professor Siegel notes that a "court can by order direct any kind of service it wishes, restricted only by the basic demands of due process, the facts of the particular case, and the judge's imagination." *Id.* Accordingly, CPLR § 308(5) appears to operate in a manner similar to that of FRCP 4(f)(3), except that CPLR § 308(5) is not restricted to use outside the United States.

168. *See Hollow*, 747 N.Y.S.2d at 706 ("Although a showing of impracticability does not require proof of due diligence or actual attempts to serve a party under *each and every method* prescribed in CPLR 308 . . . , the movant will be required to make a competent showing as to the actual prior efforts that were made to effect service.") (emphasis added and citations omitted); *see also id.* at 706 n.1 ("'Resort to CPLR § 308[5] is intended for 'unpredictable circumstances,' in which the inability to accomplish service via other methods of service, as fashioned by the court in the exercise [of] its discretion, under the particular circumstances of the case.'") (citation omitted). The *Hollow* decision introduces the possibility of electronic service of process within the State of New York pursuant to FRCP 4(e)(1), which permits service upon individuals "pursuant to the law of the state" where the district court is located or where "service is effected." FED. R. CIV. P. 4(e)(1). Although *Hollow* involved service upon a foreign defendant, such was not necessary to its holding. Indeed, the court merely found that service was impracticable—albeit due to an evasive defendant hiding in a foreign country. *Hollow*, 747 N.Y.S.2d at 706. Accordingly, pursuant to FRCP 4(e)(1) and CPLR § 308(5), a federal court in New York could permit electronic service anywhere in the United States where service is impracticable—subject to *Mullane*. *Cf.* Georgiu v. Sterling Mounting & Finishing, No. 00-7160, 2001 WL 30648, at *1 (2d Cir. Jan. 9, 2001) (holding that FRCP 4(e)(1) permits service "in any judicial district of the United States . . . pursuant to the law of the state in which the district court is located"); Puccio v. Town of Oyster Bay, 229 F. Supp. 2d 173, 176 (E.D.N.Y. 2002) (same); *cf.* Cantor, *supra* note 38, at 956, 961 (suggesting that service could be effected under FRCP 4(e)(1) where state law permits mail service and where e-mail constitutes "mail" under the applicable state law); Kotuby, *supra* note 57, at 108 (same). In other words, under FRCP 4(e)(1), electronic service may be effected within New York State (if service is effected within the state) or anywhere in the United States (if the action is pending in a federal court in New York) where such is impracticable under CPLR §308(5). *See* 4B WRIGHT &

service of process on the defendant in Saudi Arabia via e-mail, the court discussed *Rio Properties* and *Broadfoot*.[169] Although the court indicated that it was "cognizant of the concerns associated with service by e-mail, including the difficulty of verifying the defendant's receipt of the message . . .", it nonetheless held that service of process via e-mail was constitutionally adequate.[170] Indeed, the court held that "a constitutionally proper method of effecting substituted service need not guarantee that in all cases the defendant will in fact receive actual notice"—as long as the method of service is "reasonably calculated . . .to apprise the interested party of the pendency of the action."[171] Consequently, the court did not hesitate in allowing service via e-mail because e-mail was the mode of communication adopted by the defendant.[172] The court therefore directed plaintiff to serve defendant at his last-known e-mail address and by "international registered air mail and international mail standard."[173]

MILLER, *supra* note 5, §§ 1112, 1115 (discussing FRCP 4(e)(1) and noting that FRCP 4(e)(1) "allows service pursuant to state law to be made in any judicial district of the United States"). Additionally, electronic service under FRCP 4(e)(1) could also be allowed if the relevant state long-arm statute permits it. Cantor, *supra* note 38, at 956, 961. For example, a state long-arm statute could require corporations doing business in the state to accept electronic service through a registered agent or at a designated corporate e-mail address. *See* Tamayo, *supra* note 38, at 252, 256; Paul D. Carrington, *Virtual Civil Litigation: A Visit to John Bunyan's Celestial City*, 98 COLUM. L. REV. 1516, 1534 (1998) (suggesting that corporate entities could be required to register electronic addresses for service of process).

169. *See Hollow*, 747 N.Y.S.2d at 707.

170. *Id.* at 708.

171. *Id.* at 708 (citing Dobkin v. Chapman, 21 N.Y.2d 490, 502 (N.Y. 1968), and Mullane v. Central Hanover Bank & Trust Co., 339 U.S. 306, 314 (1950)).

172. *See id.* at 708 (noting that "the defendant has in essence, secreted himself behind a steel door, bolted shut, communicating with the plaintiff and his children exclusively through e-mail"); *see also id.* at 708 n.3 (quoting *Broadfoot* for the proposition that "[i]f any methods of communication can be reasonably calculated to provide a defendant with real notice, surely those communication channels utilized and preferred by the defendant himself must be included among them").

173. *See id.* at 708.

IV. CIRCUMSTANCES UNDER WHICH COURTS HAVE PERMITTED ELECTRONIC SERVICE OF PROCESS OUTSIDE THE UNITED STATES

Courts have permitted electronic service of process on parties located outside the United States pursuant to FRCP 4(h)(2) and FRCP 4(f)(3) where some combination of the following circumstances were present.[174] First, the proposed methods of service are reasonably calculated to provide the defendant with notice.[175] Second, traditional methods of service are, or are likely to prove, futile or inadequate.[176]

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174. *See supra* Part III.

175. *See* Rio Props., Inc. v. Rio Int'l Interlink, 284 F.3d 1007, 1016-19 (9th Cir. 2002); Broadfoot v. Diaz (*In re* Int'l Telemedia Assocs., Inc.), 245 B.R. 713, 721-22 (Bankr. N.D. Ga. 2000); Ryan v. Brunswick, No. 02-CV-133(E)F, 2002 WL 1628933, at *2 (W.D.N.Y. May 31, 2002); *Hollow*, 747 N.Y.S.2d at 707-08. Indeed, any method of service must satisfy the constitutional mandates set forth in *Mullane*. *See supra* Parts I and III (discussing *Mullane*). Notably, however, *Mullane* does not require actual notice and is sufficiently flexible to accommodate electronic service. Mullane, 339 U.S. at 314, 319 (1950) (holding that "notice must be of such nature as reasonably to convey the required information . . . and must afford a reasonable time for those interested to make their appearance . . . [b]ut if *with due regard for the practicalities and peculiarities of the case* these conditions are reasonably met the constitutional requirements are satisfied" and noting that the "statutory notice to known beneficiaries is inadequate, *not because in fact it fails to reach everyone*") (citations omitted) (emphasis added); *Hollow*, 747 N.Y.S.2d at 708 (noting that "[i]t is hornbook law that a constitutionally proper method of effectuating service need not guarantee that in all cases the defendant will in fact receive actual notice") (citations omitted). Indeed, *Mullane* held that the "reasonableness and hence the constitutional validity of *any chosen method* [of service] may be defended on the ground that it is in itself *reasonably certain to inform those affected* . . . ." *Mullane*, 339 U.S. at 315 (emphasis added); Cantor, *supra* note 38, at 964-65 (noting that actual service is not required and contending that Internet service is constitutional under *Mullane* and that it may often be superior to other forms of service). The Court then stated that "where conditions do not reasonably permit such notice [by regular mail], that the form chosen is not substantially less likely to bring home notice than other of the feasible and customary substitutes." *Mullane*, 339 U.S. 315. Accordingly, it appears that the *Mullane* Court envisioned the possibility of alternative substitute forms of service in the future.

176. *See Rio Props.*, 284 F.3d at 1016 (holding that the plaintiff did not have to attempt "every permissible means of service" because it only needed to demonstrate "that the facts and circumstances . . . necessitated the district court's intervention"); *Broadfoot*, 245 B.R. at 718-19; *Ryan*, 2002 WL 1628933, at *2 ("[A]lthough a party need not exhaust all possible methods of service . . . [parties must] show that they have reasonably attempted to effectuate service on the defendant(s) and that the circumstances are such that the district court's intervention is necessary to obviate the need to undertake methods of service

This "futility" factor is often the result of the third factor, to wit, that the defendant is hard to find because it: (1) is unknown; (2) has unknown whereabouts; (3) is a "moving target"; and/or (4) is evading service to some degree.[177] Finally, courts have permitted electronic service where the defendant has relied on electronic methods of communication such as e-mail—either with the plaintiff in particular or with potential customers in general.[178] For example, the defendant in *Broadfoot* did not consent to electronic service, but he consented to have the plaintiff contact him via facsimile and e-mail, prompting the court to find that electronic service was "reasonably calculated" to notify defendant of the pending suit.[179] Although courts have found a defendant's preference for electronic communication significant, courts have not expressly analyzed such preferences in terms of implied consent.[180] For example, it could be argued that the defendants in *Broadfoot* and *Hollow* impliedly consented to electronic

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that are unduly burdensome or that are untried but likely futile."); *Hollow*, 747 N.Y.S.2d at 708 (noting that "the defendant has in essence, secreted himself behind a steel door, bolted shut, communicating with the plaintiff and his children exclusively through e-mail"); *see also* Conley, *supra* note 35, at 409 (noting that the English High Court case permitted electronic service where "it was absolutely impossible to reach the defendant by any traditional means since the defendant's location was not identifiable").

177. *See Broadfoot*, 245 B.R. at 718-19; *Rio Props.*, 284 F.3d at 1016; *Ryan*, 2002 WL 1628933, at *2; *Hollow*, 747 N.Y.S.2d at 708. *See also* New Eng. Merchants Nat'l Bank v. Iran Power Generation & Transmission Co., 495 F. Supp. 73, 81 (S.D.N.Y. 1980) ("[Iran's] conduct can only be interpreted as an intentional avoidance . . . of service of process in an effort to frustrate the instant suits. Justice demands that a substitute form of service be formulated one calculated to provide defendants with adequate notice of the pendency and nature of the instant suits." (citing World-Wide Volkswagen Corp. v. Woodson, 444 U.S. 286, 291 (1980)); Conley, *supra* note 35, at 409.

178. *See Rio Props.*, 284 F.3d at 1017-18; *Broadfoot*, 245 B.R. at 721-22; *Ryan*, 2002 WL 1628933, at *2 (noting that the defendant "conducts its business through [electronic] means of communication"); *Hollow*, 747 N.Y.S.2d at 708; Conley, *supra* note 35, at 409 (noting that the defendant in the English High Court case favored e-mail communication with the plaintiff in extorting plaintiff).

179. *See Broadfoot*, 245 B.R. at 718 (finding that defendant indicated a preference for communicating by facsimile and e-mail). One could also imagine circumstances under which a defendant expressly consents to electronic service. *See* Tamayo, *supra* note 38, at 253 (suggesting that parties incorporate electronic service requirements in contracts). Indeed, such facts would likely assist a court to find electronic service to be constitutional under the Due Process Clause.

180. *See supra* Part III.

service by expressly consenting to engage in electronic communication with the respective plaintiffs.[181] Likewise, inasmuch as the defendants in *Rio Properties* and *Ryan* encouraged parties to conduct business with them on the internet and/or via e-mail,[182] the courts may have construed such e-invitations as implied consent to have all communications directed to them electronically, including service of process.[183]

V. DOMESTIC ELECTRONIC SERVICE OF PROCESS: A PROPOSED ALTERNATIVE

The trend toward electronic service of process has been described by one commentator as "a logical step forward in the evolution of civil procedure and reflects the popular use of new technologies in common communication."[184] Service of process in the nineteenth century generally required personal service in the forum.[185] This standard, however, soon became obsolete because of increased inter-jurisdictional contacts among people and entities.[186] Consequently, civil procedure evolved in the mid-twentieth century, as demonstrated by such cases as *International Shoe* and *Mullane*. Under the modern standards, personal

181. *See Broadfoot*, 245 B.R. at 721-22; *Hollow*, 747 N.Y.S. 2d at 708.

182. *See Rio Props.*, 284 F.3d at 1017-18; *Ryan*, 2002 WL 1628933, at *2.

183. Although it is doubtful that defendants actually anticipated that their electronic communications subjected them to electronic service of process, courts would be justified in finding implied consent inasmuch as the law will not tolerate defendants who intentionally structure their business and/or relationships in an attempt to avoid courts' long-arm reach. *See, e.g., Rio Props.*, 284 F.3d at 1017-21 (finding that the defendant was subject to electronic service of process and suit in the forum despite its attempts to evade "presence" in the forum by maintaining an exclusively on-line presence); Int'l Shoe Co. v. State of Washington, 326 U.S. 310, 315-21 (1945) (finding that defendant was subject to suit in the forum despite its attempt to structure its business in a manner that avoided "presence" within the meaning of the previously prevailing territorial concept of personal jurisdiction established by *Pennoyer*). Some commentators suggest that cyberspace is a "place" for analytical purposes. *See* Giordano, *supra* note 1, at 4 n.10 (*comparing* David R. Johnson & David G. Post, *Law and Borders: The Rise of Law in Cyberspace*, 48 STAN. L. REV. 1367 (1996) *with* Lawrence Lessig, *The Zones of Cyberspace*, 48 STAN. L. REV. 1403 (1996)). As noted above, however, courts have not adopted this theoretical construct, instead finding that a defendant's on-line presence constitutes presence within the forum where sufficient minimum contacts exist.

184. Conley, *supra* note 35, at 407.

185. *See supra* Part I (discussing *Pennoyer*).

186. *See supra* Part I.

jurisdiction exists where a party maintains "minimum contacts" with the forum[187] and such parties can be served by methods "reasonably calculated, under all the circumstances, to apprise them of the pendency of the action and afford them an opportunity to present their objections."[188] Likewise, inter-jurisdictional contacts among people and entities have increased at an unprecedented rate during the end of the twentieth century and start of the twenty-first century, spurred in large part by the advent of e-mail and other forms of electronic communication.[189] Consequently, civil procedure is once again evolving in response to such globalization.[190] This evolution, however, is ongoing.

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187. *See supra* Part I (discussing *International Shoe*).

188. Mullane v. Central Hanover Bank & Trust Co., 339 U.S. 306, 314 (1950).

189. Conley, *supra* note 35, at 407 ("Technology has progressed to a point where the traditional limitations of geography have been overcome through the use of alternative forms of communication, such as facsimile machines, electronic mail, [and] the Internet . . ."); *see* Samuel A. Thumma & Darrel S. Jackson, *A History of Electronic Mail in Litigation*, 16 SANTA CLARA COMPUTER & HIGH TECH. L.J. 1, 1-4 (1999) (describing the meteoric rise in the volume of e-mails during the 1980's and 1990's); Perritt, *supra* note 7, at 5 (noting that "the new technologies may open up international commerce to types of transactions that heretofore mostly occurred only within a single country. For these reasons, the [internet] will force the international legal community at least to modify the way in which it deals with transnational conflict."); Calabrese v. Springer Pers. of N.Y., 534 N.Y.S.2d 83, 83 (N.Y. Civ. Ct. 1988) (noting that in 1988 facsimiles had "become overwhelmingly the method of choice for the transmission of documents in today's world" and that facsimile machines had "become so widespread that business stationary now commonly carries a 'facsimile' telephone number . . ."). *But see* Salley v. Bd. of Governors, 136 F.R.D. 417, 419 (M.D.N.C. 1991) (holding that facsimile delivery of discovery requests did not satisfy FRCP 5(b) even though "service by facsimile may be the wave of the future"—the court left it to the Advisory Committee to amend FRCP 5(b)—which did so in 2001); United States v. Galiczynski, 44 F. Supp. 2d 707, 713 n.6 (E.D. Pa. 1999) (holding that FRCP 5(b) did not permit service by facsimile but noting that "movement towards permitting service by electronic means is afoot in the federal system").

190. *See supra* Part III (discussing case law that has permitted electronic service of process. Frank Conley described the response of civil procedure to the growth of a more computer-friendly society as follows:

> Just as the evolution from . . . personal service of process, to mail service of process was the result of necessary procedural modifications due to societal changes, so too is the transition from tangible papers service to intangible electronic service. As the world 'shrinks' and individuals become more mobile, new methods of communication will continue to develop . . . . [And these] methods can aid in the proper administration of justice . . . .

Several recent developments in the law exemplify this procedural evolution. First, as noted above, the FRCP permits electronic service of process for persons or entities outside the United States under certain circumstances.[191] Second, FRCP 5(b) was amended in 2001 expressly to permit parties to serve pleadings (other than complaints) and other papers by, *inter alia*, electronic means where the person being served expressly consents in writing.[192]

Conley, *supra* note 35, at 423; Tamayo, *supra* note 38, at 257 ("As methods of communication improve and individual mobility increases, mechanisms for serving process should evolve to allow for more convenient methods [of service and that] . . . electronic service of process will [ultimately] present an additional and effective option for serving process.").

191. *See supra* Parts III and IV (discussing electronic service under FRCP 4(f)(3)).

192. FED. R. CIV. P. 5(b)(2)(d), (b)(3) ("Service by electronic means is complete on transmission . . . . [but such service] is not effective if the party making service learns that the attempted service did not reach the person to be served."). Electronic service of pleadings requires written consent by the person being served. *Id.* This requirement, however, is likely to recede in time as the legal system acknowledges the universality of electronic communication. *Cf.* FED. R. CIV. P. 5(b) advisory committee notes (2001) ("Early experience with electronic filing [with the court] as authorized by Rule 5(d) is positive, supporting service by electronic means as well. Consent is required, however, because it is not yet possible to assume universal entry into the world of electronic communication."); *see also* Tamayo, *supra* note 38, at 246-47 (discussing e-filing by courts). Although the advisory committee notes refer to FRCP 5(d) as authorizing electronic filing with the court, it appears to be erroneous inasmuch as FRCP 5(e) is the subsection that permits such filing. *See* FED. R. CIV. P. 5(e). *But see* Exon, *supra* note 38, at 17 n.73 (noting erroneously that the FRCP's "[r]ules of service regarding pleadings and papers subsequent to the complaint, as well as subpoenas, would have to be modified to permit electronic service"). Accordingly, FRCP 5(b) demonstrates a "significant" change in attitude towards electronic service of papers. *See* 4B WRIGHT & MILLER, *supra* note 5, § 1147. Moreover, "[t]here are many judicial decisions delineating what properly can and cannot be filed or served via e-mail in different jurisdictions." Thumma & Jackson, *supra* note 189, at 23; Yukiyo, Ltd. v. Watanabe, 111 F.3d 883, 885-86 (Fed. Cir. 1997) (noting that FED. R. APP. P. 25 permits electronic filing by "delivery via a network (the Internet), . . . [e-mail], and by filing a computer disk" but holding that parties must seek leave to file a brief in CD-ROM format); Jews for Jesus v. Brodsky, 993 F. Supp. 282, 288 (D.N.J.) (noting that defendant was served with an order to show cause via e-mail), *aff'd*, 159 F.3d 1351 (3d Cir. 1998); *In re* Compact Disc Minimum Advertised Price Antitrust Litig. Settlement, M.D.L. No. 1361 (D. Me. 2003), *available at* http://musiccdsettlement.com (permitting class members to file claims electronically at musiccdsettlement.com); *In re* Texaco, Inc. Shareholder Litig., 20 F. Supp. 2d 577, 594 (S.D.N.Y. 1998) (extolling the public access permitted by making class settlement documents accessible via, *inter alia*, e-mail); Tamayo, *supra* note 38, at 248-51 (discussing cases that have permitted electronic service).

Likewise, the Federal Rules of Appellate Procedure and the Federal Rules of Bankruptcy Procedure were recently amended, effective December 1, 2002, to permit electronic service of papers similar to that permitted under FRCP 5(b).[193] Third, FRCP 5(e) permits district courts to adopt local rules allowing electronic filing.[194] Fourth, the use of e-mail has become increasingly pervasive in litigation.[195] Finally, Congress permits service of process via e-mail under the Anticybersquatting Consumer Protection Act ("ACPA"), which permits *in rem* actions against domain names, where *in personam* jurisdiction over the defendant cannot be obtained or where the plaintiff is unable to find

193. FED. R. APP. P. 25(c)(1)(D) (permitting service by "electronic means, if the party being served consents in writing"); FED. R. APP. P. 25(c)(2) (permitting parties to use a court's transmission equipment, where permitted by local rule, to make electronic service pursuant to FED. R. APP. P. 25(c)(1)(D)); FED. R. APP. P. 25(d)(1)(B) (outlining the proof of service requirements for service by e-mail and facsimile); FED. R. APP. P. 26(c) (providing that three additional days are to be added to the served party's response time when papers are served electronically); *see also* FED. R. BANKR. P. 9014(b) (permitting service of papers subsequent to a motion in a contested manner to be made in the same manner as is permitted under FRCP 5(b)); The Federal Rules of Appellate Procedure, *available at*: http://www.supremecourtus.gov/orders/courtorders/frap02p.pdf (last visited Apr. 30, 2003) and the Bankruptcy Rules, *available at* http://www.supremecourtus.gov/orders/courtorders/frbk02p.pdf (last visited Apr. 30, 2003).

194. *See* FED. R. CIV. P. 5(e). FRCP 5(e) provides that:

> A court may by local rule permit papers to be filed, signed, or verified by electronic means that are consistent with technical standards, if any, that the Judicial Conference of the United States establishes. A paper filed by electronic means in compliance with a local rule constitutes a written paper for the purpose of applying these rules.

Id. See also 4B WRIGHT & MILLER, *supra* note 5, § 1153 (discussing FRCP 5(e)). Indeed, the federal judiciary is currently working on "nationwide implementation of its new Case Management/Electronic Case Files (CM/ECF) systems," which will allow electronic filing. *See* CaseManagement/Electronic CaseFilesCM/ECF, *available at* http://www.uscourts.gov/cmecf/cmecf_about.html (last visited Jan. 1, 2003).

195. *See generally* Martin H. Redish, *Electronic Discovery and the Litigation Matrix*, 51 DUKE L.J. 561 (2001) (discussing electronic discovery); *see also* Conley, *supra* note 35, at 415-16 (discussing e-discovery under FRCP 34); Tamayo, *supra* note 38, at 247-48 (discussing the admission of e-mail as evidence); Playboy Enters., Inc. v. Welles, 60 F. Supp. 2d 1050 (S.D. Cal. 1999) (establishing discovery protocol for a defendant's hard-drive); Thumma & Jackson, *supra* note 189, at 4-14 (discussing the "general evolution of e-mail in litigation, which like e-mail use itself, has expanded drastically in recent years").

the defendant despite due diligence.[196] These developments demonstrate a trend towards universal electronic service.

In order to further advance this evolutionary trend, itself a manifestation of real world necessities, FRCP 4 should be amended to permit electronic service of process upon parties within the United States in the same manner that such service is currently permitted upon parties outside the United States.[197] FRCP 4(e) should be amended by adding the following provision:

> (3) by delivering a copy of the summons and of the complaint to the individual via electronic means such as electronic mail or facsimile where directed by the court.[198]

Such an amendment ("Proposed FRCP 4(e)(3)") should be coupled with a corresponding amendment to FRCP 4(h)(1) in the form of the following italicized text:

> [I]n a judicial district of the United States in the manner prescribed for individuals by subdivisions (e)(1) *or (e)(3)*, or by delivering a copy of the summons and complaint . . .

Proposed FRCP 4(e)(3), in conjunction with Amended FRCP 4(h)(1) (collectively the "Proposed Amendments"), would permit electronic service of process upon individuals and corporate entities inside the United States in the same

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196. *See* 15 U.S.C. §1125(d) (2001); Cable News Network L.P. v. CNNews.com, 162 F. Supp. 2d 484, 489 (E.D. Va. 2001) (permitting service of process via Fed Ex and via e-mail pursuant to ACPA); Banco Inverlat, S.A. v. www.inverlat.com, 112 F. Supp. 2d 521, 523 (E.D. Va. 2000) (permitting service by e-mail and regular mail under ACPA); *see generally* Elizabeth D. Lauzon, *Validity, Construction, and Application of Anticybersquatting Consumer Protection Act, 15 U.S.C.A. § 1125(d)*, 177 A.L.R. Fed. 1 (2002). Although ACPA is beyond the scope of this article, it nonetheless demonstrates that Congress is willing to permit electronic service of process within the United States where there is an unknown or unreachable defendant.

197. *See* Exon, *supra* note 38, at 17 (proposing an international cyber-court and noting that, if the cyber-court's procedural rules were modeled after the FRCP, the FRCP would require "minimal" modification in order to allow electronic service of process); Perritt, *supra* note 7, at 33 n.144 ("The Federal Rules Advisory Committee has not officially proposed these amendments to allow electronic service of process; however, there have been discussions centered around this possibility."). *But see* Tamayo, *supra* note 38, at 252 (suggesting that e-mail service would be viable under two circumstances, neither of which concern the propriety of such service under FRCP 4).

198. Likewise, the conjunction "or" would need to be added to the end of FRCP 4(e)(2).

manner that is currently allowed under FRCP 4(f)(3) for service outside the United States.[199] Indeed, for purposes of service of process, no apparent reason exists to differentiate between a moving target inside the United States (over whom electronic service is not permitted) from one that is outside the United States (over whom electronic service is permitted as discussed in Parts II and III above).

The Proposed Amendments should be adopted for the same reasons that courts have permitted electronic service under FRCP 4(f)(3).[200] Courts would serve as gatekeepers, thereby prohibiting parties from indiscriminately attempting to use electronic service.[201] Consequently, courts would likely require plaintiffs to make some showing that traditional means of service are inadequate or that the party to be served consented–as courts have done in the FRCP 4(f)(3) context.[202] Of course, courts would be required to evaluate the constitutionality of any requested service to ensure that it comports with *Mullane*.[203] In addition to making the Proposed Amendments, there are a few areas in which the trend towards universal electronic service could be furthered by construing the existing FRCP in a manner that "secure[s] the just, speedy, and inexpensive determination of every action."[204]

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199. *See supra* Parts II and III; *see also supra* note 196 (discussing the circumstances under which domestic electronic service of process is permitted under ACPA). The Proposed Amendments would permit service via e-mail or facsimile, while providing sufficient definitional flexibility to encompass other means as well.

200. *See supra* Parts III and IV.

201. This is not to say that, after experimentation with electronic service under FRCP 4(f)(3) or Proposed FRCP 4(e)(3) electronic service would not ultimately evolve to the point where it becomes as acceptable a method of service as regular mail, thereby eliminating the need for court authorization. Indeed, once courts become more comfortable with the concept of electronic service, this author anticipates that such service will become the norm rather than the exception.

202. Such consent could be express, as it was in *Broadfoot*, or implied as it was in *Rio Properties*. Accordingly, consent would presumably exist where parties: (1) encourage parties to do business or otherwise communicate electronically, such as in *Rio Properties* or *Ryan*; or (2) where parties actually do communicate with the plaintiff electronically, such as in *Broadfoot* or *Hollow*.

203. *See supra* Parts I, III-IV (discussing the requirement that service is constitutional under the Due Process Clause).

204. FED. R. CIV. P. 1. *See generally* Patrick Johnston, *Problems in Raising Prayers to the Level of Rule: The Example of Federal Rule of Civil Procedure 1*, 75 B.U. L. REV. 1325 (1995) (discussing FRCP 1 and its role in the dispute resolution process).

First, it is conceivable that a plaintiff could use e-mail or other electronic means under FRCP 4(d)[205] to request a waiver of service from the defendant.[206] To do so requires that the phrase "other reliable means" be interpreted to include e-mail and/or other electronic means.[207] To the extent that courts have found e-mail and other electronic means "reliable" enough to pass constitutional muster under *Mullane* when authorizing service under FRCP 4(f)(3),[208] it appears likely that a court would find electronic means to be reliable within the meaning of FRCP 4(d)(2)(B).[209] Although it is unlikely that an evasive defendant would waive service of process, the ability to make a waiver request via electronic means is strategically important because parties who fail to comply with a request for waiver of service shall be responsible for the costs of

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205. FED. R. CIV. P. 4(d) (granting defendants certain procedural advantages in return for agreeing to waive service of process).

206. *See, e.g.*, FED. R. CIV. P. 4(d) advisory committee's note (1993) (The amendments to FRCP 4(d)(2)(B) permit parties to make waiver requests via "electronic communications . . . [which] may be equally reliable and on occasion more convenient to the parties. Especially with respect to transmissions to foreign countries, alternative means may be desirable, for in some countries facsimile transmission is the most efficient and economical means of communication"); Cantor, *supra* note 38, at 953-56, 960-61 (noting the possibility of using electronic means of communication for purposes of making waiver requests); Exon, *supra* note 38, at 17-18 (suggesting that e-mail could be used when requesting a waiver of service under FRCP 4(d)); Tamayo, *supra* note 38, at 253 (same). Accordingly, it appears that FRCP 4(d) currently permits parties to make waiver requests electronically. If the Proposed Amendments were enacted, however, the cost-shifting regime of FRCP 4(d)(2) would be less of a deterrent inasmuch as plaintiffs would have the option of effecting service electronically—which is practically costless. This consequence, however, would be desirable inasmuch as FRCP 4(d) is designed to "eliminate the costs of service of a summons . . . ." FED. R. CIV. P. 4(d) advisory committee's note (1993). Although one commentator has suggested imposing a cost-shifting scheme similar to that created by FRCP 4(d)(2) on individuals that do not register electronic addresses for service with process—a proposition that appears to be remain a little ahead of its time—such would be superfluous in light of the Proposed Amendments. *See* Tamayo, *supra* note 38, at 256.

207. *See* FED. R. CIV. P. 4(d)(2)(B) ("The notice and request . . . (B) shall be dispatched through first-class mail *or other reliable means*.") (emphasis added); Cantor, *supra* note 38, at 953-56.

208. *See supra* Parts II-IV.

209. Inasmuch as FRCP 4(d)(2)(B) uses the phrase "other reliable means"—as opposed to "mail"—such a likelihood is not undermined by analysis of case law holding that "mail" encompasses neither private carriers nor facsimile transmissions. *See* Cantor, *supra* note 38, at 956-62.

service.[210] Accordingly, courts should take the small step of interpreting FRCP 4(d)(2)(B) as permitting electronic delivery of a request for waiver of service.

Second, courts should continue the trend towards universal electronic service by interpreting FRCP 45(b)(1) as permitting electronic service of subpoenas.[211] FRCP 45(b)(1) provides that subpoenas are served by "delivering a copy thereof" to the person being subpoenaed.[212] Several courts have recently held that serving a subpoena by mail constitutes "delivery" within the meaning of FRCP 45(b)(1), thus deviating from previous case law that interpreted FRCP 45(b)(1) as requiring personal service.[213] Accordingly,

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210. *See* FED. R. CIV. P. 4(d) advisory committee's note (1993). The advisory committee explains that:

> The rule operates to impose upon the defendant those costs that could have been avoided if the defendant had cooperated reasonably in the manner prescribed. This device is useful in dealing with defendants who are furtive, who reside in places not easily reached by process servers, or who are outside the United States and can be served only at substantial and unnecessary expense.

Id.

211. *See* Exon, *supra* note 38, at 19 (proposing an international cyber-court and suggesting that "[e]-mail and telefax service [of process] could apply to . . . subpoenas").

212. FED. R. CIV. P. 45(b)(1).

213. *See* Ultradent Prods., Inc. v. Hayman, No. M8-85 RPP, 2002 WL 31119425, at *3-4 (S.D.N.Y. Sept. 24, 2002) (holding that service of subpoena by certified mail was sufficient under FRCP 45(b)(1), which merely requires "deliver[y]"); Cohen v. Doyaga, No. 00-CV-2090 (FB), 2001 WL 257828, at *3 (E.D.N.Y. Mar. 9, 2001) (permitting service of a subpoena by mail because "[p]ersonal service of a subpoena on a non-party in a bankruptcy proceeding is not required, and may be accomplished in a manner 'reasonably calculated to give the non-party notice of the proceedings and an opportunity to be heard'"); Cordius Trust v. Kummerfeld, No. 99 Civ. 3200 (DLC), 2000 WL 10268, at *1-2 (S.D.N.Y. Jan. 3, 2000) (holding that certified mail was sufficient to serve a non-party with subpoena, especially in light of repeated attempts at service); Doe v. Hersemann, 155 F.R.D. 630 (N.D. Ind. 1994) (finding service of subpoena by certified mail to be sufficient under FRCP 45 because "delivery" does not require personal service where the mailman is not a party and is not less-than 18 years old); First Nationwide Bank v. Shur (*In re* Shur), 184 B.R. 640, 642-44 (Bankr. E.D.N.Y. 1995) (same); King v. Crown Plastering Corp., 170 F.R.D. 355, 356 (E.D.N.Y. 1997) (citing *In re Shur* with approval); *cf.* First City, Texas-Houston, N.A. v. Rafidain Bank, 197 F.R.D. 250, 255 (S.D.N.Y. 2000); *see also* Orlee Goldfeld, *Rule 45(b): Ambiguity in Federal Subpoena Service*, 20 CARDOZO L. REV. 1065, 1071 n.41 (1999) (discussing FRCP 45(b) and noting that *Doe* was the first decision to permit service of a subpoena by certified mail). Many of these decisions relied on FRCP 1, which requires courts to "secure the just, speedy, and inexpensive determination of every action." FED. R. CIV. P. 1. Accordingly, this ambiguity in FRCP 45(b)(1) should be interpreted to permit

inasmuch as e-mail and/or facsimile transmissions are as reliable as mail delivery (and perhaps more so in some cases), this rationale should be extended to electronic means of "delivery" as well when effected by a person who is not a party and is not less-than 18 years old.[214] Indeed, "delivery" of a summons and complaint "includes any act or series of acts that reasonably assures the entity to which it is addressed fair and timely notice of its issuance, contents, purpose and effect."[215]

In sum, the Proposed Amendments would be a logical extension of an existing trend towards universal electronic service. Like more "traditional" methods of service,[216] courts are starting to find that electronic service is also constitutionally permissible under *Mullane*.[217] Indeed, it is only a matter of time before electronic service becomes the rule rather than the exception and electronic iconoclasts prevail over traditionalists.[218] Moreover, the trend towards

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electronic service of a subpoena. Alternatively, FRCP 45 should be amended to conform with the Proposed Amendments to FRCP 4. *See* Goldfeld, *supra*, at 1090 (concluding that FRCP 45 should be amended to specifically permit "substituted methods of service").

214. *See supra* Part III (discussing the reliability of e-mail and whether e-mail should be included in "mail" within the meaning of statutes and other legal provisions); *cf.* Salbu, *supra* note 1, at 471-72 (suggesting that mail and e-mail are indistinguishable for purposes of defamation). Moreover, the constitutionality of electronic service of a subpoena in any given case may be tested when the subpoenaed party moves to quash the subpoena. Indeed, unlike parties served process by electronic means, subpoenaed parties do not risk being defaulted.

215. *In re Shur*, 184 B.R. at 644 (holding that "the only limitation upon service under Rule 45 is that the procedure employed be reasonably calculated to give the non-party actual notice of the proceedings and an opportunity to be heard"). Accordingly, where electronic service satisfies *Mullane*, parties should be allowed to electronically serve subpoena's. *But see* Firefighters' Inst. for Racial Equal. v. City of St. Louis, 220 F.3d 898, 903 (8th Cir. 2000) (holding that service of a subpoena by facsimile and regular mail was insufficient under FRCP 45 because the court "cannot be assured that delivery has occurred"). Although the Eighth Circuit Court of Appeals noted that "delivery" does not necessarily require personal delivery, it nonetheless suggested that certified mail, at a minimum, would be required to assure delivery. *Id.* (citing *Doe*). This holding appears to be overly restrictive and the line of cases holding that the only limitation upon delivery is *Mullane* are better reasoned.

216. *See, e.g.*, Mullane v. Central Hanover Trust & Bank Co., 339 U.S. 306, 313 (1950) ("Personal service of written notice within the jurisdiction is the classic form of notice always adequate in any type of proceeding.").

217. *See supra* Parts II-IV.

218. *See* Tamayo, *supra* note 38, at 253 ("As individuals and businesses increase their use of electronic communications, statutory and judicial

universal electronic service should also be advanced by interpreting FRCP 4(d)(2)(B) and FRCP 45(b)(1) in a manner that permits electronic service.

CONCLUSION: THERE IS A TREND IN THE LAW TOWARDS ELECTRONIC SERVICE THAT SHOULD BE EXTENDED AND WHICH WILL EVENTUALLY BECOME THE RULE RATHER THAN THE EXCEPTION

Narrow concepts of territoriality established in the nineteenth century generally gave way to the commercial realities of the twentieth century, resulting in an expanded scope of personal jurisdiction, and by extension, new methods of service of process over a greater geographic area within the United States. Likewise, increasing mobility and globalization leading up to and into the twenty-first century have greatly increased the volume and degree of contacts that Americans have with people around the world. In other words, the historical trend has been ever-widening concentric circles of human interaction, which necessitated a more elastic notion of personal jurisdiction in order to keep pace with commercial realities (*e.g., International Shoe*), which in turn prompted courts to adopt a corresponding flexibility with respect to service of process sufficient to effectuate their newly expanded long-arm reach (*e.g., Mullane*, under which service by mail and e-mail has been authorized).

Although society has been quicker to embrace electronic communication than the courts have,[219] the judiciary has

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movement toward legal recognition that a defendant may be found at his or her e-mail address for purposes of service of process may be reasonably expected."). Further, Jenna Karadbil explains that:

> [It] only seems a matter of time before statutes and case law recognize that a defendant is presumed to be found at his or her designated email address. In fact, some courts have routinely held that emails are presumed to have been sent by the person identified in the 'from' section of the address. Consequently, courts should also find that emails are presumed to be received by the person identified in the 'to' section of the address.

Karadbil, *supra* note 138, at 21 .

219. *See, e.g.*, Conley, *supra* note 35, at 417; *cf.* Powell v. State, 717 So. 2d 1050, 1052 (Fla. Dist. Ct. App. 1998) (noting that "[d]efense counsel attempted to communicate with the court by electronic mail and was told to expect no response to such electronic mailings").

nonetheless begun to accept electronic methods of communication.[220] Indeed, there is a trend in the law toward electronic service that will eventually become the rule rather than the exception as human interactions continue to become increasingly global in scope.[221] The real world operates in an electronic age;[222] so too must the courts. Indeed, where personal jurisdiction exists over an elusive defendant, plaintiffs need the freedom to adopt the same means of electronic communication for service of process (and subpoenas) that defendants use in their everyday lives and business activities.[223] Accordingly, the Proposed Amendments to the FRCP suggested herein should be adopted in order to make uniform the circumstances under which electronic service of process is allowed.

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220. *See* Thumma & Jackson, *supra* note 189, at 23 ("Increasing use of e-mail by lawyers and the ability to instantaneously transmit documents via e-mail has resulted in courts considering e-mail in deciding procedural issues."). This article was itself submitted electronically. Although some law reviews do not accept electronically submitted manuscripts, many do. This author anticipates that electronic submission will become the norm among law reviews. *See* Richard A. Bales, *Electronically Submitting Manuscripts to Law Reviews*, 30 STETSON L. REV. 577 (2000) (discussing electronic manuscript submissions and containing a list of journals that accept electronic submissions); *cf.* Stephen R. Heifetz, *Efficient Matching: Reforming The Market for Law Review Articles*, 56 GEO. MASON L. REV. 629 (1997) (discussing the law review submission process and proposing a centralized submission process that would reduce transaction costs and increase efficient matching).

221. *See supra* Parts III and V.

222. Rio Props., Inc. v. Rio Int'l Interlink, 284 F.3d 1007, 1017 (9th Cir. 2002) ("Although communication via email and over the Internet is comparatively new, such communication has been zealously embraced within the business community."). It is noteworthy that the Supreme Court in *Mullane* discussed whether a prudent businessperson would adopt notice by publication, and found it significant that one would not. Mullane v. Central Hanover Trust & Bank Co., 339 U.S. 306, 319-20 (1950). Applying the prudent businessman standard to electronic service, a court would undoubtedly find that a prudent businessperson would use e-mail or facsimile to communicate with someone known to use such means.

223. *Rio Props.*, 284 F.3d at 1018 ("Indeed, when faced with an international e-business scofflaw, playing hide-and-seek with the federal court, email may be the only means of effecting service of process."); Cantor, *supra* note 38, at 963 (concluding that "rules governing service should permit Internet service").