

in the event of a price increase by either Cingular or AT&T Wireless.<sup>349</sup> In addition, they reference a Consumer Reports survey which indicates that many customers would find Sprint to be a comparable alternative to the merged firm.<sup>350</sup>

120. ThriftyCall critiques the Applicants' unilateral effects analysis by claiming that it "is inconsistent with the assumptions of the Bertrand model that assumes a single homogeneous product with capacity constraints."<sup>351</sup> ThriftyCall argues that firms are distinguished primarily on the basis of their relative advantage in serving different groups of buyers.<sup>352</sup> In addition, ThriftyCall advocates use of a "Cournot" model to describe competition in the CMRS industry. The Cournot model assumes firms produce a homogeneous product and that firms compete by choosing the optimal amounts of output to produce, rather than by choosing optimal prices.

121. The Applicants and The Communications Workers of America point to the fact that churn is quite high in the CMRS industry and that nearly one-third of mobile wireless customers leave their carriers each year. They also indicate that wireless LNP, which took effect in November 2003 and allows consumers to retain their mobile phone numbers when they switch carriers, has facilitated consumer choice and churn and has made competition more intense.<sup>353</sup> The Consumer Federation of America and Consumers Union agree that wireless LNP has removed a switching cost affecting the wireless market; however, they argue that wireless LNP simply removes a cost that is not present in most industries. Therefore, they state that the *DOJ/FTC Guidelines* should not be relaxed simply because wireless LNP has been implemented.<sup>354</sup>

122. CompTel/ASCENT argues that the transaction is likely to result in a significant loss in consumer welfare.<sup>355</sup> Based on a "merger simulation" study (an analysis employing "theoretical economic models of competition and real world data to simulate the effects of a merger between two rival firms"<sup>356</sup>), CompTel/ASCENT predicts the effect of the merger on both mobile wireless and wireline telecommunications prices. It finds that the merged entity's wireless prices are likely to increase about 10 percent, and that the total harm to mobile customers would be about \$2.7 billion.<sup>357</sup>

123. We agree with the Applicants that the market for mobile telephony service can be fairly characterized as differentiated.<sup>358</sup> Firms differ in dimensions such as network quality, thoroughness of local geographic coverage, and scope of national coverage. They compete both on price and on numerous

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<sup>349</sup> Applicants Joint Opposition to Petitions to Deny and Comments at 25.

<sup>350</sup> *Cell Phones: New Rules, New Choices*, CONSUMER REPORTS, February 2004, at 12-26.

<sup>351</sup> DeltaVector for ThriftyCall, Reply to Joint Opposition to Petitions to Deny and Comments at 10.

<sup>352</sup> DeltaVector for Thrifty Call at 18.

<sup>353</sup> Gilbert Declaration at ¶¶ 11, 42; Communications Workers of America at 6.

<sup>354</sup> Consumer Federation of America and Consumers Union Petition to Deny at 11.

<sup>355</sup> See Letter from Jonathan Lee, Sr. Vice President – Regulatory Affairs, CompTel/ASCENT, to Marlene H. Dortch, Secretary, Federal Communications Commission (Oct. 1, 2004) (CompTel/ASCENT Oct. 1 *Ex Parte* Letter).

<sup>356</sup> *Id.*, Attachment, at 2.

<sup>357</sup> *Id.*, Attachment, at 4, 10.

<sup>358</sup> We reject ThriftyCall's criticism that the Applicants' use of a Bertrand-based model is inconsistent with this view. While a pure Bertrand model assumes a single homogeneous product, this is not the case for a differentiated products Bertrand model, to which the Applicants are likely referring.

non-price features. Dynamic rivalry is ongoing as well, with firms competing via research and development, and via investment in new infrastructure and services.<sup>359</sup>

124. The services provided by the mobile telephony carriers are differentiated on the following key bases: (1) quality, (2) coverage, and (3) plan features. Quality includes the probability of blocked and dropped calls, and the quality of the connection. Surveys by Telephia indicate that consumers place a high value on quality in making their choices of carriers and their decisions to switch carriers.<sup>360</sup> Customer support is a separate but important dimension of service quality. Surveys indicate that customers also frequently cite this factor as important in their decisions to switch carriers.<sup>361</sup>

125. Coverage includes where the service is available either on the carrier's own network or on the network of one of its roaming partners. The breadth of a carrier's geographic coverage is important for consumers who intend to use their phone while traveling. The cellular carriers are generally more extensively built out than are the PCS carriers and thus have better local coverage.

126. Plan features include various dimensions of subscriber usage provided by the plan. Usage means minutes of voice connection defined by the time at which a call is placed, the location from which it is placed, and the destination to which it is directed. Types of usage are typically defined by "buckets" of minutes. Each bucket typically has an amount of included minutes and then a price per minute for additional minutes, although a given bucket may have no included minutes or unlimited free minutes. Buckets are first created according to when the call is placed. Plans typically include buckets of peak minutes (weekday hours) and off-peak minutes (nights and weekends). Second, buckets are also created according to where the call is placed. National plans allow the minutes of usage in each bucket to be placed anywhere in the United States. Regional and local plans allow the minutes of usage in each bucket to be placed in only a limited geographic area. Other buckets with a price per minute are then created for calls placed outside that geographic area, and, depending on the plan, a roaming charge may be assessed. Finally, buckets are created according to the destination of the call. Calls may be local or long distance. In addition, calls may terminate on a mobile or a wireline phone, and, if a call terminates on a mobile phone, it may terminate on a mobile phone on or off the carrier's network. Some plans have a separate bucket of in-network mobile-to-mobile minutes.

127. Plan features have evolved, with the number of included minutes in each bucket generally increasing. In some cases, these buckets have become unlimited minutes. However, this evolution has not been uniform across all carriers, and there are differences in the sizes of buckets offered by the carriers at the same monthly charge. For example, a recent informal survey by Commission staff of national plans offered for approximately \$40 per month on the internet showed that Verizon Wireless offered the smallest bucket of peak minutes of the six national carriers (400 minutes), and that T-Mobile offered the highest (600 minutes). Cingular and AWE each offered 450 minutes.<sup>362</sup> Sprint and Nextel each have new plans which move the customer to the plan that minimizes their monthly bill. These types of plans substantially blur the distinctions between specific buckets of minutes and illustrate the complexity of competition among mobile carriers.

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<sup>359</sup> In our discussion of possible collusive effects, below, we describe many factors that differentiate mobile wireless operators and their service offerings.

<sup>360</sup> [REDACTED]

<sup>361</sup> [REDACTED]

<sup>362</sup> See [www.cingular.com](http://www.cingular.com); [www.verizonwireless.com](http://www.verizonwireless.com); [www.nextel.com](http://www.nextel.com); [www.attwireless.com](http://www.attwireless.com); [www.t-mobile.com](http://www.t-mobile.com); [www.sprintpcs.com](http://www.sprintpcs.com).

128. In the remainder of this section, we examine in detail the issues of substitutability, the competitive strength of rival carriers, and rivals' ability to respond to potential anti-competitive unilateral actions on the part of the merged entity. We also examine network effects, spectrum availability for advanced wireless services, and the effects of an expected increase in market penetration. While we find that harm from unilateral action by a combined Cingular/AT&T Wireless is unlikely in most local markets, there are specific markets for which we believe the acquisition poses a significant threat to competition.

129. *Substitutability.* The record contains neither empirical studies nor other information that resolve conclusively the question of the closeness of substitution of the services of Cingular and AT&T Wireless relative to the other mobile telephony operators. While the record does shed light on this question, the evidence is mixed. For example, the difference in their current customer profiles may suggest the Applicants are not especially close substitutes among the group of nationwide mobile telephony operators. AT&T Wireless has had a greater focus on business customers, including Fortune 500 customers, while Cingular's focus has been primarily on residential customers.<sup>363</sup> However, there may be specific customer groups for which the firms are close substitutes. Similarly, some documents in the record suggest that Cingular and AT&T Wireless are the most closely substitutable among the wireless carriers, while other documents suggest otherwise.<sup>364</sup>

130. We have analyzed data on wireless LNP provided to the Commission by NeuStar to gauge how consumers view the substitutability of mobile wireless firms. The launch of wireless LNP occurred in the 100 largest markets on November 24, 2003 and in other markets on May 24, 2004, and we analyzed data on porting through July 2004. This information includes each instance of a customer porting a phone number from one mobile carrier to another, and indicates both the origin and destination carrier.<sup>365</sup> Thus, we can determine the aggregate customer flows between each pair of firms. These flows are summarized in the following table.

[REDACTED]

131. For several reasons, we do not believe that this porting information can reliably quantify the degree of substitutability among the various pairs of firms' product offerings, or in particular establish whether Cingular and AT&T Wireless should be viewed as the closest substitutes for one another.<sup>366</sup>

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<sup>363</sup> [REDACTED]

<sup>364</sup> [REDACTED]

<sup>365</sup> There are certain technical problems with the tracking of porting activity that likely introduce some inaccuracies into the totals in the table below. We believe, however, that the effect of these problems is minor.

<sup>366</sup> A number of ways to determine quantitatively a ranking of substitutes are suggested in the economic literature. Among these are "unit diversion ratios" and "relative unit diversion ratios." Unit diversion ratios are defined as the increase in unit sales of carrier B relative to a decrease in the sales of carrier A. Relative unit diversion ratios are defined as an increase in the unit sales of carrier B, relative to a decrease in the sales of carrier A, relative to that if substitution was proportionate to the carriers' market shares. See Werden, *supra* note 343, at 405 (1998). However, the porting data capture all subscriber switches, including but not limited to switches that may have resulted from a price increase. Switches are also likely to have occurred as a result of customer dissatisfaction with the current provider. Thus, the results derived from the porting data cannot be interpreted necessarily as a measure of the likely outcome of a price increase by the merged entity. Further, since customers often delay switching until their two-year contracts have expired, the act of switching may substantially lag the decision to switch. Therefore, while it is reasonable to assume that the carrier being ported to is the customer's current first choice provider, it may not be reasonable to assume that the carrier being ported from is any longer the customer's second choice. For example, a customer may view the carrier he/she is leaving to be perhaps the sixth best choice, so that a switch from the current

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However, we believe the overall pattern of the movements generally indicates that there is significant substitutability among *all* six nationwide carriers. We note in particular that Verizon Wireless, T-Mobile, and Nextel have attracted shares of ported numbers in excess of their national market shares during this period,<sup>367</sup> so that the net effect has been to increase their market shares. This mutual substitution appears to be present despite product differentiation that exists across the firms, and indicates that the offerings of the other nationwide carriers are serving as effective substitutes for the offerings of the Applicants.<sup>368</sup>

132. Finally, we find that shifts in subscriber-based market shares over time and high levels of churn indicate a degree of substitutability among all of the carriers. Between the fourth quarter of 1998 and the fourth quarter of 2003, Verizon Wireless's and Cingular's national market shares both declined approximately six percentage points.<sup>369</sup> In contrast, AT&T Wireless gained four percentage points, Sprint gained approximately six percentage points, Nextel gained approximately four percentage points, and T-Mobile gained approximately six percentage points.<sup>370</sup> (The share held by carriers other than the six nationwide operators declined about nine percentage points.)<sup>371</sup> Over the more recent past, both of the Applicants have been losing subscriber share nationwide, and Verizon Wireless, Nextel, and T-Mobile have made non-trivial gains. Although the regional carriers provide competitive options in certain local markets, we believe that the six national mobile providers are closer substitutes for one another than they are for the regional carriers.

133. In addition to indicating a considerable degree of substitutability among the national wireless providers, the market share and porting data suggest that Verizon Wireless, T-Mobile, and Nextel may provide more effective competitive constraints on the Applicants than their current subscriber-based market shares might indicate. The increases in market shares and the relatively high numbers of porters to these carriers indicate that Verizon Wireless, T-Mobile, and Nextel are significant future threats to Cingular and AT&T Wireless's customer base. This adds to our confidence that consumers see these firms as effective substitutes for the offerings of the Applicants.

134. *Competitive responses by rivals.* Should the merged entity attempt to raise prices or engage in other exercise of market power, we believe that in many of the markets identified by our initial screen other firms would have the incentive and ability to reposition their offerings in response.<sup>372</sup> In particular, where a firm is already present in a market, has comparable service coverage, and has excess capacity relative to its current subscriber base, it should be able to adjust rates, plan features, handsets,

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carrier to the new carrier may not indicate that these carriers are close substitutes. For these reasons, statistics derived from the porting data cannot be interpreted as corresponding exactly to any of these formal measures.

<sup>367</sup> A Telephia report also finds [REDACTED].

<sup>368</sup> Documents also confirm that churn is a competitive discipline on Cingular and AWS today. [REDACTED]

<sup>369</sup> Morin & Mutschler, *supra* note 247, at 86.

<sup>370</sup> *Id.*

<sup>371</sup> *Id.*

<sup>372</sup> The Applicants claim that "a unilateral effect occurs when a merger increases a firm's profit-maximizing price under the assumption that other firms in the industry do not change their prices." Gilbert Declaration, at ¶ 74. It is important to note that, while it is true that in equilibrium the prices will be set such that any one firm could not profitably raise its price assuming the prices of the other firms remain constant, it is quite possible that the equilibrium, post-merger prices of firms other than the merging parties will change from their pre-merger levels. James Langenfeld and Wenqing Li, *Critical Loss Analysis in Evaluating Mergers*, ANTITRUST BULLETIN, Summer 2001, at 318. That is, to evaluate unilateral effects, the supply responses of the non-merging firms must be taken into account.

advertising, etc., in the short run.<sup>373</sup>

135. As a technical and operational matter, it will generally be feasible for firms to add customers quickly because excess capacity is often available and because non-trivial increases in the capacity to serve customers can be realized rapidly in established cellular and PCS mobile radio systems. [REDACTED].<sup>374</sup> [REDACTED]<sup>375</sup> [REDACTED].<sup>376</sup> This equipment allows the cell site to serve more traffic per unit of time by employing additional bandwidth. The estimated capacity increases [REDACTED], are consistent with our understanding of CDMA systems' technical and operational attributes.<sup>377</sup> It should also be the case that handset manufacturers would be able to supply handsets without a significant lag to satisfy an increase in demand by other carriers. [REDACTED].<sup>378</sup>

136. To examine the issue of competitive response further, we undertook our own analysis of whether other firms could likely absorb subscribers leaving the merged entity in response to attempted exercise of market power. We analyzed a sample of ten markets identified by our initial screen as requiring further analysis, asking whether other carriers could absorb in the near term an increase in subscribers equal to 10 percent of the merged entity's subscribers in that market.<sup>379</sup> We utilized market-based performance measurements and analysis, where off-air data were collected from major carriers' networks, including those of the Applicants, for the period of June 2003.<sup>380</sup> We also integrated data on market shares and allocated spectrum for major competitive carriers. We selected sample markets that varied in attributes such as location, population, and number of carriers offering service. The results of our study indicate that, for these markets caught by the initial screen, rival carriers collectively possess the capability to respond to a unilateral price increase by absorbing at least 10 percent of the combined entity's market share.<sup>381</sup>

137. Of course, there are limits to repositioning. Firms may not be able to add quickly to their operating footprints, purchase additional spectrum if needed, secure tower siting permits, improve overall quality, or deploy a new technology. [REDACTED].<sup>382</sup> Whether addition of cell sites would always be possible even in this time frame, and whether it would always be profitable, is unclear. At a minimum, however, even a firm is present in a market and has comparable service area coverage, the possibility of competitive response is an important factor.<sup>383</sup>

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<sup>373</sup> One recent example of repositioning is the evolution of Nextel, moving from a firm solely focused on business workgroup customers, to advertising for (post-paid) residential customers, to launching a pre-paid service, to now sponsoring NASCAR.

<sup>374</sup> Aug. 26 *ex parte* letter from W. Hogg at 3. [REDACTED]

<sup>375</sup> [REDACTED]

<sup>376</sup> [REDACTED]

<sup>377</sup> See Oct. 12, 2004 *ex parte* letter from Dean R. Brenner, Senior Director, Government Affairs, QUALCOMM Incorporated.

<sup>378</sup> [REDACTED]

<sup>379</sup> We selected ten percent because a ten percent loss of customers is a plausible response to a small but significant price increase.

<sup>380</sup> [REDACTED]

<sup>381</sup> [REDACTED]

<sup>382</sup> [REDACTED]

<sup>383</sup> We also note that the merged company will only retain the Cingular brand name, and it may be the case that the particular product offerings of AT&T Wireless will disappear. Because other firms can reposition and add new

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138. *Spectrum and advanced wireless services.* As a result of this transaction, the current spectrum holdings of Cingular and AT&T Wireless will be combined, resulting in aggregation by one entity of as much as 80 MHz of applicable spectrum in certain local markets.<sup>384</sup> Although we no longer have a *per se* limit on the amount of spectrum suitable for mobile telephony for which an entity may hold the usage rights in any one market, we are mindful of the unique role of spectrum as a critical input in the market for wireless services and have carefully analyzed the potential impact of this merger on that input. As noted in the introduction to mobile telephony, above, this sector is characterized by ongoing growth (in terms of both subscribers and minutes of use) as well as technological change. In particular, next generation technologies are being gradually rolled out by a number of carriers. While some carriers offering next-generation services eventually may require more spectrum than they currently have, depending on their chosen technology and the development of the market, this is not certain. Technologies offering the promise of advanced services may cause a boom in demand, but they also offer more efficient use of spectrum, *i.e.*, the ability to transmit more information per unit of time and bandwidth.

139. We believe it is speculative to predict how much spectrum which carriers will need, and when. The evidence we do have, however, suggests firms generally have access to the spectrum they need to offer next-generation services now. As noted above and in our CMRS Competition Report, we are seeing rollout of such services by a number of carriers. For example, Verizon Wireless has recently launched EV-DO service in five markets where it holds 30 MHz of bandwidth – Austin, Texas; Milwaukee, Wisconsin; and Miami, Tampa, and West Palm Beach, Florida – and in most other locations where it has begun to offer EV-DO, it is doing so with 35 MHz of spectrum.<sup>385</sup> Similarly, Dobson has recently announced launch of EDGE service throughout its 16-state territory, where it holds no more than 30 MHz of bandwidth in over 90 percent of the applicable counties.<sup>386</sup>

140. In this regard, we note that this merger does not take spectrum away from any competing carriers. Therefore, the spectrum-related harm, if any, would be that the merger could result in an imbalance in the availability of spectrum that would cause other carriers to be more spectrum-constrained than Cingular at a later point in the deployment of next-generation services. We believe, however, that the arrival of carriers' 3G-related needs for additional spectrum generally will align with the arrival of suitable spectrum in future auctions, including those for AWS, upper 700 MHz, and lower 700 MHz. We note also that the Commission is, in significant degree, in control of assuring that these auctions occur, and that clearance in these bands occurs, in a suitable timeframe.

141. Our general conclusion that mobile telephony operators have the spectrum capacity they need to provide advanced services may not be true for all operators in all markets. For that reason, we consider spectrum holdings as a part of our market-by-market analysis of local areas identified by our initial screen. In addition, as further explained below, as part of its Application Cingular has committed to divest post-transaction spectrum holdings in excess of 80 MHz in a number of areas. We condition our

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differentiated services, however, it need not be the case that the overall variety of product offerings will be reduced post-merger. One example of a new service is the announcement that, subsequent to a Cingular/AT&T Wireless combination, Sprint will resell mobile service for AT&T Corp. using the AT&T brand name.

<sup>384</sup> See discussion *supra* Section II.B.1.

<sup>385</sup> For Verizon Wireless's spectrum holdings, see the Commission's ULS database; for EV-DO launch information, see Verizon Wireless Expands Broadband Access 3G Network to Cover 14 Markets From Coast to Coast, at <http://news.vzw.com/news/2004/09/pr2004-09-22c.html>.

<sup>386</sup> For Dobson's spectrum holdings, see the Commission's ULS database; for EDGE launch information, see "Dobson launches EDGE services in 16-state service area," RCR Wireless News, October 18, 2004, page 22.

grant of this transaction on fulfillment of these divestitures, which will serve the public interest by making spectrum available to strengthen an incumbent competitor or to allow new entry in these markets.

142. *Network effects.* One of the most obvious consequences of this merger will be to double the size of Cingular in terms of subscribers on its network, as well as to increase its geographic coverage and ability to provide improved service quality and product features. The post-merger Cingular will have almost twice as many subscribers as it has now. Because of the nature of telecommunications and the magnitude of this increase in Cingular's size, we consider the potential network effects of this merger.

143. Network effects arise when the value of a product increases with the number of consumers who purchase it.<sup>387</sup> For example, telephone service to an individual subscriber becomes more valuable to that subscriber as the number of other people he or she can reach using the telephone increases. Since wireless carriers permit physical interconnection among their individually-owned networks, wireless subscribers may complete a call to subscribers on all other carriers' networks. Therefore, this merger does not have the potential to disadvantage any other carrier's subscribers with regard to access to the communications network. Nor does this merger raise the typical network effects possibility that the large network will attract customers away from smaller networks and drive out the smaller networks. However, network effects can arise as a result of incentives the carrier offers to its own subscribers – for example, a carrier may offer a discount or the functional equivalent to its subscribers when calling other subscribers to the same carrier (unlimited in-network calling<sup>388</sup>), or may offer discounted bundling of wireless and landline services, or the carrier may limit certain desirable network features to calls that remain within its network.

144. These carrier-specific network effects can, potentially, result in both consumer benefits and anticompetitive harms. On the one hand, discounted intra-carrier calling offers real value to consumers. On the other hand, this feature and other incentives like bundling could potentially alter a Cingular subscriber's calculation when deciding whether to stay with Cingular or switch to a different carrier, and therefore could potentially reduce the ability of other carriers to act as disciplinary forces with regard to Cingular.

145. Although there is evidence in the record that Cingular (like other carriers) is attempting to market to increase network effects, we do not have evidence yet that these effects are a major influence in consumer mobile telephony choices, or that either the benefits or the harms from these effects are particularly strong at this point. On balance, however, we find that because all mobile networks interconnect to each other – and of course to the wireline network as well – it appears unlikely that a mobile network with more subscribers would be more attractive to additional customers simply because of its size. Moreover, if this sort of network externality *were* a major factor, we would not expect to see either the significant growth of a smaller nationwide carrier such as T-Mobile or the continued viability of small and regional carriers that characterize the mobile telephony sector today. Network effects, therefore, do not weigh heavily in our analysis of the effects of the merger.

146. *Penetration.* Another factor we consider in determining the consequences of a unilateral attempt to exercise market power are the penetration rates prevailing today in local markets and the fact

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<sup>387</sup> Carl Shapiro and Hal Varian, *Information Rules*, Harvard Business School Press, Boston, 1999, at 13.

<sup>388</sup> As an example, Cingular offers a feature in many of its calling plans that permits two Cingular subscribers to speak to each other on their wireless phones without using the minutes provided under their calling plans. This free in-network calling feature is a benefit to Cingular subscribers, so long as they stay on the Cingular network. Other wireless carriers offer similar free or discounted in-network calling features. See section V.A.1.a., and the discussion earlier in this section.

that, as noted previously, increases in penetration are generally expected.<sup>389</sup> We believe this means, first, that carriers are currently planning for and investing in anticipation of significant growth. This gives added confidence that existing operators will have the capacity to attract customers and increase output should the merged entity attempt to exercise market power. Second, were the merged firm to raise prices or adversely modify plan features, it would stand to lose not only some percentage of existing customers, but also new customers in significant numbers. And, third, since new customers, by definition, are not tied by contract to an existing firm, they are able immediately to avoid less attractive offerings of the merged firm and sign up with another operator. In local markets where mobile telephony penetration is lower than the U.S. average, these effects should be particularly strong. In addition, relatively under-penetrated markets may be the most attractive markets for new entrants, all other factors being equal. Entry will be particularly likely for these markets where spectrum is available either on the secondary market or in our Auction No. 58, commencing in January 2005.

147. *Implications.* In conclusion, we find that this transaction is unlikely to result in adverse unilateral effects in most of the markets identified by the initial screen. It appears that the nationwide firms are all relatively close substitutes for each other in the eyes of consumers, and that the nationwide firms have the incentive and ability to reposition in response to any attempted exercise of market power by the merged firm. Thus, where the nationwide firms, other than the Applicants, have substantial presence in a market and the ability to add capacity and subscribers relatively quickly, unilateral harm is unlikely. In addition, of course, for consumers who do not demand price-competitive nationwide service plans, the regional service providers constitute an additional option that should further protect competition.<sup>390</sup> As further explained below, we find that in all but 22 local geographic areas competitive harm is unlikely to result from Cingular's acquisition of the operations of AT&T Wireless.

148. For many markets where the facts of a high subscriber-based HHI and a high change in HHI might seem to suggest a potential competitive problem, there is in fact little likelihood of harm. We find that the presence and capacity of other firms matter more for future competitive conditions than do current subscriber-based market shares. In particular, current market shares understate the likely future competitive importance of Verizon Wireless, Sprint, T-Mobile, and Nextel. These firms all compete fiercely for customers; all are investing substantially in capacity and new services in this sector; and Verizon Wireless, T-Mobile, and Nextel have been gaining nationwide market share over recent quarters.

149. While we find that anti-competitive unilateral effects are unlikely in most markets, however, there are specific markets in which competitive conditions are sufficiently different such that unilateral effects pose a threat to competition. Especially worrisome are markets in which the total number of providers – or the total number of providers of nationwide service – is low, and markets in which providers are present but are constrained from repositioning and expanding output for some reason such as incomplete footprint or inadequate spectrum bandwidth. In addition, because market shares do

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<sup>389</sup> See section V.A.1.a.

<sup>390</sup> The CompTel/ASCENT study of mobile prices does not undercut these judgments. There are several problems with CompTel/ASCENT's analysis of the mobile wireless sector. First, it does not allow for product repositioning (*i.e.*, reaction by other firms) which, as we have explained, we believe to be an important factor affecting the level of competition. In addition, it incorporates a greatly simplified pricing structure, and the product offerings are aggregated to the level of one per firm. Pricing and plan offerings in the wireless industry are quite complex, however, and it is therefore difficult to draw conclusions based on a simulation of this nature. Third, CompTel/ASCENT assumes that the relevant market is national and ignores local and regional conditions. Fourth, the data relied on to represent prices may lead to biased results. For example, it appears that the price for Verizon Wireless is significantly underestimated relative to those of the other wireless firms in this analysis. Therefore, we are not persuaded that CompTel/ASCENT's conclusions regarding the mobile wireless sector. See CompTel/ASCENT Oct. 1 *Ex Parte* Letter, Attachment.

tend to persist – albeit changing over time – they are not entirely unimportant. Thus, also worrisome are markets in which the combined market share of the merged entity is very high. In each of these markets with characteristics that raise special concern, we have looked closely at the interaction of all the relevant competitive circumstances, as described in Section V.A.3.d., below.

(ii) **Coordinated Interaction**

150. In markets where only a few firms account for most of the sales of a product, those firms may be able to exercise market power by either explicitly or tacitly coordinating their actions.<sup>391</sup> Accordingly, one way in which a merger may create or enhance market power or facilitate its exercise is by making such coordinated interaction among firms more likely, more successful, or more complete.<sup>392</sup> For example, by reducing the number of firms necessary to control a given percentage of total supply, a merger may lower the difficulties and costs of reaching and enforcing the terms of an agreement to restrict output. The significant increases in concentration and high post-merger concentration levels in some mobile telephony markets indicated by the structural analysis in Section V.A.3.a., above, thus raise the concern that the merger could facilitate coordinated interaction in those markets. However, such increases in concentration and high concentration levels in the relevant markets following the merger do not by themselves provide a sufficient basis for determining that the merger will facilitate coordinated interaction, for two related reasons. First, the ability to reach and enforce terms of coordination may also depend on many other distinctive characteristics of individual markets apart from concentration.<sup>393</sup> Second, and consequently, although a high concentration level is among the factors that may make coordinated interaction easier and therefore more likely, there is no unique critical threshold of market concentration above which the exercise of market power through coordinated interaction is likely.<sup>394</sup> Therefore, the Commission will also consider whether conditions in the post-merger environment other than market concentration will be conducive to reaching and enforcing the terms of coordination.

151. The *DOJ/FTC Guidelines* define coordinated interaction as comprising actions by a group of firms that are profitable for each of the firms involved only because the other firms react by accommodating these actions rather than attempting to undercut them.<sup>395</sup> Successful coordination depends critically on two key factors. The first is the ability to reach terms that are profitable for each of the firms involved, and the second is the ability to detect and punish deviations that would undermine the coordinated interaction. Rapid detection and punishment of deviations facilitates successful coordinated interaction by lowering the profitability of deviating from the terms of coordination and thereby reducing incentives to cheat. Terms of coordination need not perfectly achieve a monopoly outcome in order to harm consumers, however. Terms of coordination may omit some market participants or dimensions of competition and still result in competitive harm.<sup>396</sup>

152. A number of market conditions may affect one or both elements of coordination, including the availability of information about market conditions, the extent of firm and product homogeneity, and the presence of maverick carriers. In general, moreover, market conditions are more

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<sup>391</sup> *DOJ/FTC Merger Guidelines* § 0.1.

<sup>392</sup> *Id.* § 2.1.

<sup>393</sup> Barry C. Harris and David D. Smith, *The Merger Guidelines vs. Economics: A Survey of Economic Studies*, PERSPECTIVES ON FUNDAMENTAL ANTITRUST THEORY, American Bar Association, Section of Antitrust Law, July 2001, at 10-12.

<sup>394</sup> *Id.*

<sup>395</sup> *DOJ/FTC Merger Guidelines* § 2.1.

<sup>396</sup> *Id.* § 2.11.

likely to be conducive to coordinated interaction when the firms in a market previously have engaged in express collusion. In examining whether mobile telephony market conditions other than concentration are conducive to coordinated interaction, we focus on those market conditions that seem most pertinent to the mobile telephony sector in light of salient sector characteristics and trends. As background to this analysis, we begin with a summary of the Applicants' view of coordinated effects.

153. *Applicants' view.* After describing the market conditions that could be conducive to coordinated effects, the Applicants cite a number of reasons why coordinated effects are unlikely to result from the transaction.<sup>397</sup> First, the industry has a history of competition on price and quality as well as rapid innovation. Second, the post-transaction environment will still have five major national carriers and more than a dozen regional carriers. Third, the history of price declines and the large mix of services and price offerings are inconsistent with the stable relationship required to maintain collusive outcomes. Fourth, wireless providers compete in different dimensions, including equipment subsidies as well as monthly price, number of free minutes, breakdown by off-peak and on-peak periods, roaming charges, and other services. Fifth, wireless providers also differ with regard to quality of service and amount of excess capacity. The latter difference, in particular, creates different incentives for price-cutting by different service providers. For example, newer entrants such as T-Mobile and regional competitors such as MetroPCS are eager to take business away from more established providers and have the capacity to do so. Finally, the Applicants contend that relationships among the wireless carriers are unlikely to become less complex and varied after the merger.

154. *Transparency of information.* Terms of coordination are often easier to reach, and detection and punishment of deviations is often more rapid and more effective, when key information about specific transactions or individual price or output levels is routinely available to rival firms.<sup>398</sup> In this regard, it has been suggested that the trend toward national pricing plans raises concerns about coordinated interaction by making pricing more transparent, and that the merger would exacerbate this trend and remove a constraint on coordinated interaction by increasing industry transparency.<sup>399</sup> While this argument is not spelled out in sufficient detail to make it completely clear how national pricing plans have made pricing more transparent, one plausible interpretation is that carriers can easily observe the prices and other features of their rivals' national pricing plans, enabling them to punish one another for deviations. There is ample evidence in the record that the carriers regularly monitor their rivals' pricing plans, promotions, marketing strategies, and other aspects of their rivals' operations,<sup>400</sup> and further that the carriers use this information as a basis for designing and modifying their own pricing plans, promotions, and marketing strategies.<sup>401</sup> However, nothing in the record supports the contention that the carriers have actually used such transparency of pricing plans or other features to detect and punish deviations to date. To the contrary, the record shows that carriers try to use the information they obtain about their rivals to improve their own ability to compete in attracting and retaining customers, either by matching the offers of rivals or by making more aggressive offers.<sup>402</sup> Furthermore, there is nothing in the record to indicate that the transaction will alter market conditions in such a way as to increase the ability and incentive of the remaining carriers to exploit transparency of pricing plans and other features for the purpose of detecting and punishing deviations. In light of the fact that this merger constitutes a reduction

<sup>397</sup> Gilbert Declaration at 27-28.

<sup>398</sup> DOJ/FTC Merger Guidelines § 2.11-2.12.

<sup>399</sup> *Competitive Concerns Regarding Cingular Wireless's Acquisition of AT&T Wireless*, Presentation to FCC on Behalf of Thrifty Call, Aug. 4, 2004, at 10 and 12.

<sup>400</sup> For example, [REDACTED]

<sup>401</sup> [REDACTED]

<sup>402</sup> [REDACTED]

in competitors of no worse than six to five in most large markets and many smaller markets, we find that the structural change resulting from this merger is not sufficient to alter market conditions in this fashion.

155. Moreover, we believe that national wireless pricing innovations have been a major driver of price rivalry in the U.S. mobile telephony market, rather than a vehicle for coordinated interaction due to increased pricing transparency. The typical pattern has been that one of the major nationwide wireless carriers is the first to introduce a particular pricing innovation, and some or all of the other major wireless carriers quickly follow suit by offering a rival version of the leader's new pricing plan within the space of a year or less. This pattern suggests that intense competitive pressure, rather than coordinated interaction, has compelled the major wireless carriers to match the national pricing innovations of rival carriers. In addition, even though the first national single-rate pricing plan was introduced in 1998 and all six nationwide carriers now offer some version of a national rate pricing plan, this pattern of innovation followed by imitation has been repeated with respect to subsequent national pricing innovations such as free night and weekend minutes and free mobile-to-mobile calling. The continuation of national pricing innovations suggests that increased pricing transparency has not had the effect of facilitating coordinated interaction. To be sure, the absence of any evidence of past collusion does not ensure that collusion will not take place in the future, but it is nonetheless an important factor to consider in assessing the likely impact of the transaction on future competitive conduct. We conclude that increased pricing transparency as a result of the trend toward national pricing plans has not facilitated coordinated interaction prior to this transaction, and that there is no evidence in the record or in our own investigation to indicate that the merger is likely to alter the market in such a way as to increase industry transparency and make coordinated interaction more likely, more successful, or more complete.

156. *Firm and product homogeneity.* A market condition that may facilitate the ability to reach terms of coordination is firm and product homogeneity.<sup>403</sup> In this regard, it has been suggested that competing wireless carriers have become more similar due to the rise of nationwide carriers and the decreased presence of regional players, and that the increased carrier symmetry implied by this trend raises concerns about coordinated interaction.<sup>404</sup> However, since the proposed merger combines two nationwide carriers, it will not contribute directly to the decreased presence of regional players. Moreover, competition from the remaining large regional carriers and smaller local carriers may still be sufficient to constrain the ability of the nationwide carriers to coordinate pricing and other terms and conditions of service in the many local geographic markets in which such smaller players compete.

157. As a corollary of the above argument, it is also argued that the proposed merger will further narrow competitor asymmetries and thereby remove another constraint on coordinated interaction.<sup>405</sup> Actually, however, the way the merger will affect asymmetries among the nationwide carriers is somewhat more complicated. On the one hand, by combining two similarly sized nationwide carriers into the largest nationwide carrier, the merger would actually enhance the asymmetry between the two largest nationwide carriers, Verizon Wireless and Cingular, and the three remaining nationwide carriers (Sprint, T-Mobile, and Nextel). On the other hand, the merger would make Verizon Wireless and Cingular more similar in size to each other. There are, however, other differences between Cingular and Verizon Wireless that could make it difficult for these two carriers to reach agreement on the terms of coordination. For example, since Verizon Wireless has already differentiated its brand from rival offerings based on network coverage and voice quality,<sup>406</sup> Cingular may be less willing to agree to restrict

<sup>403</sup> *DOJ/FTC Merger Guidelines* § 2.11.

<sup>404</sup> *Competitive Concerns Regarding Cingular Wireless's Acquisition of AT&T Wireless*, Presentation to FCC on Behalf of Thrifty Call, Aug. 4, 2004, at 10.

<sup>405</sup> *Id.* at 12.

<sup>406</sup> *Ninth Report*, FCC 04-216, at 62-63 ¶ 149.

competition on other terms, such as promotions and advertising, which could offset or narrow this advantage. Cingular and Verizon Wireless also use competing 2G digital technologies and are following divergent next-generation migration paths.<sup>407</sup> Due to factors that distinguish these competing wireless standards, Cingular and Verizon Wireless face significant differences in equipment costs, the speed and cost of network upgrades, and migration prospects that may impede their ability to reach agreement on terms of coordination, including on non-price terms such as territorial restrictions.<sup>408</sup> In this regard, we note that both Verizon Wireless and AT&T Wireless have launched high-speed wireless data services in San Diego, thus setting up the first opportunity for customers in a market to compare Verizon Wireless's 1X EV-DO services with AT&T Wireless's WCDMA-based services.<sup>409</sup>

158. Apart from these differences, we note that, while Verizon Wireless and the post-transaction Cingular will be the largest wireless carriers in terms of the number of subscribers on a national basis, their respective subscriber shares in the relevant local markets vary widely across different geographic regions, and there are many local markets in which one or the other still has a relatively small subscriber share. Thus, they will not invariably be the top two players in local markets, including many local markets where the original cellular incumbents still retain relatively large market shares. Moreover, in those markets in which Verizon Wireless and either Cingular or AT&T Wireless are the top two players today, prior to this transaction, we do not see evidence of coordinated interaction; in general, we see vigorous and successful competition from the smaller nationwide carriers as well as regional and other carriers.

159. The three smaller nationwide carriers also differ among themselves, and from Verizon Wireless or Cingular, in ways that may make it difficult for any coalition of nationwide carriers to reach terms of coordination. For example, since Nextel has differentiated its brand based in part on its signature PTT offering,<sup>410</sup> and also is the only nationwide carrier to use iDEN, rather than CDMA or GSM/TDMA, as its 2G digital technology, the distinctive characteristics of Nextel's service offering or differences in equipment costs may prevent the other nationwide carriers from reaching an agreement with Nextel to restrict competition on price or other terms and conditions of service. Moreover, there is no evidence that similarities among some of the nationwide carriers have facilitated their reaching agreement on terms of coordination. For example, the use of CDMA has not enabled Verizon Wireless and Sprint to reach an agreement to reduce spending on the deployment of CDMA network upgrades. To the contrary, the evidence indicates that increased spending by Verizon Wireless on EV-DO deployment put pressure on Sprint to increase its capital spending on the same network upgrade.<sup>411</sup> Based on the foregoing

<sup>407</sup> As noted previously, both Cingular and AT&T Wireless are using GSM/TDMA as their 2G digital technologies and are following the GSM migration path that will eventually lead to the deployment of WCDMA. In contrast, Verizon Wireless has been following the CDMA migration path by upgrading its 2G CDMA network first to CDMA2000 1xRTT, and more recently has been rolling out a national high-speed wireless data network based on CDMA2000 1X EV-DO.

<sup>408</sup> These distinguishing factors include the greater global coverage and usage of GSM, the backward compatibility of CDMA, and the relative ease of CDMA network upgrades. Neil Gandall, David Salant, and Leonard Waverman, *Standards in Wireless Telephone Networks*, 23 TELECOMMUNICATIONS POLICY 328-30 (2003); Governali, Barry & Soova, *supra* note 255, at 2, 6; Jonathan Chambers, *Costs of Terminating Traffic on Mobile Networks*, Callahan Associates International LLC, presentation made to the Commission on Aug. 28, 2001, at 11.

<sup>409</sup> Dan Meyer, *AWS Launches UMTS in Two More Markets*, RCR WIRELESS NEWS, Sept. 1, 2004.

<sup>410</sup> Although, as noted previously, several other major carriers recently introduced rival PTT offerings, some analysts believe these competitors' products are somewhat less attractive than Nextel's PTT service due to their longer "latency," a term that refers to delays in setting up a PTT call and the pushes between conversation breaks. *Ninth Report*, FCC 04-216, at 63-64 ¶ 152.

<sup>411</sup> Sprint previously had announced plans to delay its next network upgrade until 1XEV-DV is available for commercial deployment, rather than building out 1XEV-DO as Verizon Wireless was doing. Subsequently, (continued....)

considerations, we conclude that the extent of carrier heterogeneity may constrain the ability of competing carriers to reach terms of coordination in U.S. mobile telephony markets, and that the proposed merger will not further narrow competitor asymmetries in such a way as to remove or undermine this constraint.

160. *Presence of mavericks.* In some circumstances, maverick firms can effectively prevent or limit coordinated interaction.<sup>412</sup> Maverick firms are firms that have a greater economic incentive to deviate from the terms of coordination than do most of their rivals. Therefore, a merger may make coordinated interaction more likely, more successful, or more complete if it involves the acquisition of a maverick firm. In the context of U.S. mobile telephony markets, maverick carriers may be identified by the innovative pricing plans or services they introduce. The enhanced incentive to deviate may arise because the maverick carrier controls substantially more spectrum than it needs to serve the demands of its currently limited customer base, and also because its costs of expanding sales in the relevant market are relatively low and (or) it is well positioned to attract customers currently served by its competitors. Such a carrier has a strong incentive to deviate because it receives less benefit from the higher coordinated prices than do carriers with larger market shares and is well positioned to profit from expanding its sales.

161. In this connection it has been suggested that, in addition to increasing symmetry among carriers, the decreased presence of regional players implies the disappearance of likely mavericks, and therefore the merger will facilitate coordinated interaction by increasing the effectiveness of punishment.<sup>413</sup> However, while we recognize the critical role of maverick carriers in preventing or limiting coordinated interaction, we are not persuaded that the proposed merger will facilitate coordinated interaction due to the disappearance of likely mavericks among regional carriers. Since the proposed merger combines two nationwide carriers, it will not directly eliminate any likely maverick carriers among the regional players. In addition, although some of the large regional carriers offer nationwide service plans along with the six nationwide carriers, it is the nationwide carriers, rather than regional carriers, that have taken the lead in introducing innovations in national plans such as national single-rate pricing plans, free night and weekend minutes, and free mobile-to-mobile calling.

162. The concerns raised about the disappearance of likely mavericks might be valid if the proposed merger involved the acquisition of a nationwide carrier that is uniquely positioned to be a maverick carrier. With the introduction of its Digital One Rate plan in May 1998, AT&T Wireless emerged as a leader of innovations for national pricing plans.<sup>414</sup> However, other nationwide carriers have taken the lead in introducing other innovative pricing plans or services, including Verizon Wireless for on-network national pricing plans, Cingular for free night and weekend minutes and rollover minutes, and Nextel for PTT services.<sup>415</sup> We believe that conditions in the market for national mobile telephony services/plans are such that no single nationwide carrier is uniquely positioned to be a maverick. To the contrary, any of the three smallest nationwide carriers could find itself facing the conditions identified

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however, Sprint revised its strategy and announced plans to deploy EV-DO in the majority of top metropolitan markets in 2005. *Id.* at 57-58 ¶ 134.

<sup>412</sup> *DOJ/FTC Merger Guidelines* § 2.12.

<sup>413</sup> *Competitive Concerns Regarding Cingular Wireless's Acquisition of AT&T Wireless*, Presentation to FCC on Behalf of Thrifty Call, Aug. 4, 2004, at 10.

<sup>414</sup> *Ninth Report*, FCC 04-216, at 49 ¶ 113.

<sup>415</sup> Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, *Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, *Seventh Report*, 17 FCC Rcd. at 13,014; *Eighth Report*, 18 FCC Rcd. at 14807-08 (2003); *Ninth Report*, FCC 04-216, at 63 ¶ 152.

above as creating a strong incentive to deviate from the terms of coordination: excess spectrum and (or) network capacity relative to the traffic generated by its existing customer base, and low direct and opportunity costs of expanding sales in the relevant market. Even Verizon Wireless and the post-transaction Cingular may face such conditions in certain local markets where they still have a relatively small market share. In light of these considerations, we conclude that the proposed merger will not facilitate coordinated interaction by increasing the effectiveness of punishment. To the contrary, we believe it is likely that maverick carriers will continue to prevent or limit coordinated interaction in most of the local markets identified above despite the merger. While we do not quantify the number of markets in which it is likely that the presence of a maverick would inhibit anticompetitive coordinated interactions, we take account of this factor in our market-by-market analysis by examining the ability of rival firms in the market to expand output, as described in Section V.A.3.d., below.

163. *Existing cooperative ventures.* As noted previously, it is more likely that market conditions are conducive to coordinated interaction when market participants have previously engaged in express collusion.<sup>416</sup> In recent years, several infrastructure sharing joint ventures or agreements have been formed by different pairs of major wireless carriers. These include a Cingular/AT&T Wireless venture to build out a GSM/GPRS network along interstate highways, primarily in western and midwestern states and also New England; a Cingular/T-Mobile venture to share existing GSM networks in California, Nevada, and New York; an AT&T Wireless/Sprint agreement to cooperate in the construction of new wireless towers; and a T-Mobile/Western Wireless agreement to expand GSM/GPRS coverage in the western United States.<sup>417</sup> Such infrastructure sharing joint ventures and agreements have been cited as examples of previous cooperation among major wireless competitors that raise concerns about potential coordinated interaction.<sup>418</sup> We note, however, that one consequence of the proposed merger is that Cingular and T-Mobile have agreed to end and unwind their joint venture to share GSM networks in California, Nevada, and New York.<sup>419</sup> More importantly, viewed in the context of the historical development of the mobile telephony sector, these infrastructure sharing arrangements arguably do not represent a qualitatively new business practice, but rather can be seen as one of a variety of different types of partnerships and contractual arrangements that mobile telephony carriers have used to expand their geographic coverage in a regulatory environment based on regional licenses. In this regard, infrastructure sharing arrangements have already yielded, or show promise of yielding, the pro-competitive benefit of enabling carriers who are parties to such arrangements to launch service in regions that they previously have not served.<sup>420</sup> We conclude that the recent trend toward infrastructure sharing does not raise concerns about coordinated interaction, and we see no evidence that the merger will have any effect in this regard. We therefore conclude that the proposed merger will not alter the market in a way that would make infrastructure sharing arrangements a likely precursor of other forms of cooperation among competing wireless carriers that would harm consumers.

164. *Implications.* As indicated in the foregoing analysis, there is no evidence in the record to indicate that mobile telephony carriers have successfully restricted competition on price or non-price

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<sup>416</sup> *DOJ/FTC Merger Guidelines* § 2.1.

<sup>417</sup> *Eighth Report*, 18 FCC Rcd. at 14807-14808; *Ninth Report*, FCC 04-216, at 29 ¶ 68.

<sup>418</sup> *Competitive Concerns Regarding Cingular Wireless's Acquisition of AT&T Wireless*, Presentation to FCC on Behalf of Thrifty Call, Aug. 4, 2004, at 10.

<sup>419</sup> *Ninth Report*, FCC 04-216, at 29-30 ¶ 69. *See supra* Section II.B.2..

<sup>420</sup> For example, following the formation of their joint venture to share existing GSM networks in California, Nevada, and New York, T-Mobile launched service in California and Nevada, where Cingular already offered service, while Cingular launched service in New York, where T-Mobile already offered service. *See Eighth Report*, 18 FCC Rcd. at 14807-08.

terms through coordinated interaction in specific markets, or that this merger will make such interaction more likely as a general matter. In addition, we are persuaded by the Applicants' argument that certain characteristics of the mobile telephony market environment, including firm heterogeneity and the presence of carriers with excess spectrum or network capacity, may continue to make it difficult for carriers first to reach terms of coordination and then effectively to detect and punish deviations in specific markets. We acknowledge, however, that there is considerable variation across local geographic markets with regard to the number and identity of competing carriers, firm homogeneity, and the presence of excess spectrum or network capacity. Because of this local variation, it is difficult to generalize about the impact of the transaction in facilitating coordinated interaction to restrict competition on price or non-price terms in specific markets. Therefore, although our analysis tends strongly to discount the possibility that the transaction will make coordinated interaction more likely, more successful, or more complete, as a precaution we take the possibility of coordinated interaction into account in our analysis of specific markets by carefully scrutinizing, among other variables, the presence and capacity of rival carriers.

**c. Vertical Issues**

165. In this section, we consider the potential vertical or other non-horizontal harms of the proposed transaction. Aside from the intermodal issues discussed in Section V.B. below, the only issues of this type on the record or that we identify in our independent analysis are the possible impacts of the transaction on roaming and special access.

**(i) Roaming**

**(a) Background**

166. Wireless calling plans specify a geographic "home" area within which the subscriber can make a call without incurring additional charges. "Roaming" occurs when the subscriber of one wireless carrier travels beyond the home area and utilizes the facilities of another wireless carrier to place an outgoing call, receive an incoming call, or continue a call.<sup>421</sup> Subscribers can roam manually by giving a credit card number to the host carrier. We are concerned here with automatic roaming, whereby, pursuant to agreements established between carriers, subscribers are able to roam seamlessly on other providers' networks.<sup>422</sup> As detailed below, over the last several years automatic roaming has become widespread. Carriers may or may not impose additional per minute charges for automatic roaming on other carriers' networks, depending on the customer's service plan.

167. Cingular contends that the proposed transaction will not have an adverse effect on the availability of automatic roaming services. Cingular expects its business plan for the merged entity to benefit its roaming partners as well as enable it to provide wider coverage, improved service quality, and advanced data services for its subscribers.<sup>423</sup> In support of these claims, Cingular states that the combined company will still have over a hundred domestic roaming agreements.<sup>424</sup> Cingular further asserts that it "will continue to have strong incentives, driven by intense competition throughout the wireless industry, to enter into reasonable roaming arrangements with other carriers and will actually improve the roaming experience of other carriers' subscribers."<sup>425</sup> Cingular hopes "to have a substantial majority of its new

<sup>421</sup> See Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services, CC Docket No. 94-54, *Second Report and Order and Third Notice of Proposed Rulemaking*, 11 FCC Rcd. 9462, 9464 ¶ 3 (1996).

<sup>422</sup> *Id.* at ¶ 2.

<sup>423</sup> Cingular Response To Information Request at 5.

<sup>424</sup> Cingular Opposition to Petition to Deny at 18.

<sup>425</sup> *Id.* at 28.

customers on national plans by the end of the year.”<sup>426</sup> Cingular typically enters into reciprocal roaming rates and has “long-term agreements with its most important roaming partners,” including T-Mobile until 2009, and Dobson and Western Wireless until 2008.<sup>427</sup> Cingular asserts that it has no incentive to drive up roaming rates because its roaming partners would simply switch to its competitors instead, thus reducing Cingular’s roaming revenues.<sup>428</sup> Cingular’s business plan for the merged entity also includes a gradual, not a “flash-cut,” transition of its tens of millions of TDMA customers to its GSM networks. Among the reasons for Cingular’s gradual migration strategy is that a short cut transition would cost billions of dollars, inconvenience its customers, and possibly lead to its roaming partners’ service disruption.<sup>429</sup>

168. Cingular states that its merger with AT&T Wireless will reduce its roaming costs because Cingular subscribers will no longer have to roam in order to receive service in many areas, including such major cities as Denver, Pittsburgh, Phoenix, and Minneapolis.<sup>430</sup> By the same token, former AT&T Wireless subscribers who stay with Cingular will no longer roam in order to receive service in a number of areas, including such major cities as Portland, Salt Lake City, and Tulsa.<sup>431</sup> Cingular contends that this elimination of roaming agreements will benefit its customers directly, because some customers will no longer be charged to roam in those areas, and indirectly because Cingular can pass its savings on to its customers through reduced price plans or improved voice service and advanced data services.<sup>432</sup>

169. Some of Cingular’s roaming partners filed comments in support of the merger. Rural Cellular Corporation (“RCC”), which has automatic roaming agreements with both AT&T Wireless and Cingular, asserts that, because Cingular intends to expand coverage and deploy next-generation services, the merger will benefit RCC customers for years to come.<sup>433</sup> Highland Cellular, LLC, a non-LEC rural wireless carrier that uses a TDMA system overlaid with GSM to provide service in one of the poorest and most sparsely populated areas of the eastern United States, claims it needs a strong GSM roaming partner, like Cingular, because it does not have the market strength to force GSM development.<sup>434</sup> If the merger allows Cingular to offer more robust national GSM roaming, Highland says it will benefit because more GSM customers will roam on Highland, providing it with valuable revenues.<sup>435</sup> Dobson Communications Corporation, a GSM roaming partner with Cingular, emphasizes that its customers will benefit from Cingular’s plans to deploy next-generation services.<sup>436</sup> Edge Wireless agrees with Cingular’s assessment that, after the merger, Cingular will be a net payor in roaming fees and, therefore, will have the incentive to enter into agreements with reasonable roaming rates.<sup>437</sup>

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<sup>426</sup> Cingular Application at 32.

<sup>427</sup> *Id.*

<sup>428</sup> Cingular Opposition to Petition to Deny at 47.

<sup>429</sup> Cingular Response to Information Request at 8, 9, 29.

<sup>430</sup> Cingular Application at 21.

<sup>431</sup> *Id.*

<sup>432</sup> *Id.*

<sup>433</sup> Rural Cellular Comments at 1.

<sup>434</sup> Highland Cellular Comments at 3.

<sup>435</sup> *Id.* at 4.

<sup>436</sup> Dobson Communications Comments at 3.

<sup>437</sup> Letter from Wayne Perry, Edge Wireless, to Marlene Dortch, Secretary, Federal Communications Commission (Oct. 7, 2004).

170. Consumers Union and Consumer Federation of America, on the other hand, argue that Cingular would leverage its substantially increased subscriber share to exact discriminatory roaming rates.<sup>438</sup> They argue that “with Cingular being 50 percent larger than its nearest rival and three to five times as large as the other national players, it is almost certain to shift from being a net payor in reciprocal roaming agreements to a net receiver.”<sup>439</sup> Though it does not oppose the merger, U.S. Cellular Corporation filed a comment urging Cingular to negotiate reasonable roaming arrangements and asking the Commission to enforce vigorously the Communication Act’s prohibition against unreasonable prices.<sup>440</sup>

171. A few parties claim that Cingular and AT&T Wireless have begun engaging in anticompetitive conduct against small rural wireless providers and, therefore, request that the Commission not grant the merger application unless it imposes conditions prohibiting the merged entity from continuing this conduct.<sup>441</sup> For example, Public Service Communications (“PSC”), National Telecommunications Cooperative Association (“NTCA”), and Organization for the Promotion and Advancement of Small Telecommunications Companies (“OPASTCO”) contend that Cingular and AT&T Wireless have begun shifting traffic to each other’s networks and away from rural carriers with which they used to roam and that, after the merger, Cingular might engage in discriminatory acts such as charging certain rural carriers roaming premiums.<sup>442</sup>

#### (b) Discussion

172. In evaluating the impact of the proposed merger on roaming services, we focus on the potential harm to consumers of mobile telephony services, rather than to mobile telephony providers. Consumers would be harmed if, as a result of the merger, Cingular’s roaming partners pay higher roaming rates that are passed on to their customers, or the roaming partners’ customers are no longer able to obtain roaming services in certain markets and they cannot replace that loss with equivalent or superior alternatives. We distinguish such harm to consumers from effects on mobile telephony carriers such as a reduction in the roaming revenues of one or more of Cingular’s roaming partners as a result of the merger.

173. We conclude that the proposed merger will not adversely affect the availability of roaming services or raise roaming rates passed through to customers. As discussed in greater detail below, the record shows that the provision of automatic roaming services has become increasingly competitive over time, and that the continued presence of two nationwide and numerous regional carriers using GSM technology after the merger should be sufficient to ensure the continued availability of roaming services at competitive rates to Cingular’s potential roaming partners.

174. Since the first broadband PCS auction in 1995, the provision of automatic roaming services has become increasingly competitive, and roaming services have become increasingly available

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<sup>438</sup> CU and CFA Joint Petition to Deny at 11.

<sup>439</sup> CU and CFA Joint Reply at 6-7. See also Newcomb Comment at 3.

<sup>440</sup> U.S. Cellular Comments at 3-4.

<sup>441</sup> See Michael Kurtis *ex parte* letter to Marlene Dortch (Sept. 9, 2004).

<sup>442</sup> See Michael Kurtis *ex parte* letter to Marlene Dortch (September 9, 2004). Kaplan Telephone Company filed an informal objection in which it claimed that Cingular had refused to honor a 2003 switching agreement with Kaplan because Cingular wants AT&T Wireless to have an unfair advantage over Kaplan in certain markets in which AT&T Wireless and Kaplan compete against each other. See Kaplan Informal Objection at 2-3. Subsequently, however, Kaplan filed a motion to withdraw its informal objection on the basis that it and Cingular had executed an addendum to its 2003 agreement that resolved its contractual dispute. See Kaplan Motion at 1.

and progressively less expensive, in part because many automatic roaming agreements provide for reciprocal rates. One estimate of the average per-minute roaming rate charged to other carriers by six large regional carriers showed an 18 percent decrease from \$0.43 per minute in 1999 to \$0.36 per minute in 2000.<sup>443</sup> Similarly, Verizon Wireless has estimated that its roaming costs with various carriers declined between 5 and 64 percent from December 1999 to December 2000.<sup>444</sup> Recent trends in roaming revenues confirm that roaming rates have continued to fall. CTIA reported that roaming revenues for the mobile telephony industry declined from \$3.9 billion in 2002 to \$3.8 billion in 2003.<sup>445</sup> As explained in one recent analyst report, given that roaming revenues are driven by roaming minutes and the roaming fees negotiated among the carriers, and that roaming minutes have risen significantly, roaming revenues have trended downward because roaming fees have fallen at a rate that more than offsets the rise in roaming minutes.<sup>446</sup> Several factors have contributed to the increased availability and competitiveness of roaming services, including the entry of broadband PCS operators and their continued deployment of digital networks,<sup>447</sup> the development of dual-band and multimode handsets permitting the interoperability of cellular and broadband PCS systems,<sup>448</sup> the increasing presence of carriers with national footprints, and the introduction and spread of national single-rate pricing plans that include roaming service at no additional charge to subscribers.<sup>449</sup>

175. As broadband PCS licensees constructed their digital networks and cellular licensees began to overlay their networks with digital technology, the number of potential roaming partners multiplied in many geographic markets, making the provision of roaming services more competitive. The development of dual-band and multimode handsets that allow roaming on both cellular bands (A and B) and on PCS bands, and also between digital and analog technologies, further facilitated the ability of PCS and cellular service providers to roam with each other. Nevertheless, given the range of handsets currently available, the number of potential roaming partners in a given geographic market is still limited by technological incompatibility and frequency bands. We note in particular that TDMA/GSM carriers do not have the ability to roam with CDMA carriers, and vice versa.

176. Currently, all the major nationwide carriers as well as many regional and small carriers offer nationwide or nearly nationwide plans that include roaming service to their subscribers at no additional charge. Even the "nationwide" carriers still have holes in their licensed service areas, however, and therefore have a strong incentive to enter into roaming agreements with other carriers in order to fill in coverage gaps, compete on the basis of coverage, and thereby meet growing consumer demand for nationwide single-rate calling plans. Since the average price per minute under this type of plan is the same regardless of whether the call is initiated or received on the provider's own network or another carrier's network, carriers offering a single-rate price plan have a strong incentive to negotiate to lower roaming rates they pay to other carriers. Conversely, competition and the need to generate revenues prevent nationwide carriers from refusing to enter into roaming agreements with smaller local and

<sup>443</sup> *In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, 16 FCC Rcd. 13350, 13379 (2001) ("Sixth Annual CMRS Competition Report").

<sup>444</sup> *Sixth Annual CMRS Competition Report*, 16 FCC Rcd. 13379 n.194; Verizon Wireless Comments at 4 (data derived from raw billing figures from four of Verizon Wireless's largest roaming partners).

<sup>445</sup> CTIA, *Semi-Annual Wireless Industry Survey*, available at <http://www.wow-com.com/industry/stats/surveys/>.

<sup>446</sup> Colette M. Fleming, *et al.*, *US Wireless 411*, UBS Warburg, UBS Investment Research, Sept. 15, 2004, at 34.

<sup>447</sup> See *Automatic and Manual Roaming Obligations Pertaining to Commercial Mobile Radio Services*, WT Docket No. 00-193, *Notice of Proposed Rulemaking*, 15 FCC Rcd. 21,628, 21,633 ¶ 12 (2000).

<sup>448</sup> *Id.*

<sup>449</sup> *Id.* ¶ 13.

regional carriers or raising the roaming rates they charge other carriers above competitive levels.

177. As a consequence of the proposed merger, the number of nationwide carriers using GSM as their digital standard will decrease from three to two (Cingular and T-Mobile), and the number of potential roaming partners for other GSM carriers will decrease by one in each overlapping geographic market. This raises the question of whether the merger could have anti-competitive effects that would impair the ability of Cingular's potential GSM roaming partners to negotiate reasonable roaming agreements. As a benchmark for evaluating the potential competitive effects of the merger with respect to the provision of roaming services, we note that currently there are two nationwide CDMA carriers (Verizon Wireless and Sprint), plus a number of regional and local carriers that use CDMA as their digital standard. We have heard no complaints from CDMA carriers or seen other evidence to indicate that the availability and pricing of roaming services have been less favorable for CDMA carriers than for GSM carriers. Based on this comparison, we conclude that the continued presence of two nationwide GSM carriers in conjunction with the existence of other regional and local GSM carriers should be sufficient to ensure the availability of GSM roaming services at competitive rates. Although the number of nationwide carriers using TDMA will decrease from two to one as a consequence of the proposed merger (because T-Mobile has no TDMA network), we are not overly concerned about the effect on Cingular's potential roaming partners because, like Cingular, those partners are transitioning their business from TDMA to GSM (or, in some cases, to CDMA). These carriers will have a strong incentive, in direct proportion to their dependence on roaming revenue, to accomplish their transitions away from TDMA as expeditiously as possible in order not to be left behind when their largest roaming partner phases out TDMA. Any subscribers to these smaller carriers who are denied access to advanced handsets and services because of their carriers' lagging transitions away from TDMA will have other options in the competitive mobile telephony marketplace.

178. We also consider the possible effect of the merger on the roaming market for those wireless telephony consumers who rely on analog service. There are 28 CMAs (out of 734) in which AT&T Wireless and Cingular control the two cellular licenses,<sup>450</sup> and in which the merger could therefore result in a reduction from two analog carriers to one. Because, as explained below, we order divestitures of operating units affecting six of these CMAs, there will be 22 CMAs in which this reduction will actually occur. No party has argued, and we do not find, that this two-to-one reduction in analog carriers will result in a significant adverse effect on the roaming market. These 22 CMAs are not located in the same state or region of the country,<sup>451</sup> and we think it unlikely that Cingular would attempt to restructure its roaming agreements generally so that roaming rates in these areas would be different from the rest of the country. The transactions costs of attempting to impose and enforce a higher roaming price on a roaming partner in one CMA (or in some cases, part of one CMA) when that CMA is near other CMAs in which Cingular is *not* the only analog carrier are likely to be too high to be worth the trouble, particularly in light of Cingular's historical practice of negotiating larger-scale, reciprocal roaming agreements, as well as the fact that any possible benefit will disappear after a few years.

179. In addition, the general migration to digital technology in this industry mitigates any effect that the reduction in analog carriers might have on the roaming market. Cellular licensees are required to provide analog service only until February 18, 2008.<sup>452</sup> Furthermore, except for the small number of subscribers who have analog-only phones, an "analog monopoly" is only a concern to the extent that a subscriber is in an area in which there is no appropriate digital service (in this case, TDMA/GSM) available. Our analysis indicates that, in each of these markets, there is also a carrier other

<sup>450</sup> See FCC Universal Licensing System, available at [www.fcc.gov/uls](http://www.fcc.gov/uls).

<sup>451</sup> The affected CMAs are located in Florida, Ohio, and Texas.

<sup>452</sup> 47 C.F.R. § 22.901(b).

than Cingular or AT&T Wireless offering TDMA/GSM service. Finally, the fact that dual-mode handsets allow users to roam between analog and digital technologies also persuades us that the reduction in analog carriers is not likely to result in significant adverse effect on the availability and price of roaming services.

180. Finally, we stress again that our concern in this context is with the effect of this merger on consumers of mobile telephony services, not on particular mobile telephony carriers per se. In this regard, we believe that an overall disciplinary force in the context of the intercarrier market for roaming services is that customers of various firms always have the option to switch to firms employing other air interfaces. In other words, if any mobile telephony consumers – regardless of whether they are on GSM, TDMA, or analog-only plans – were to find that the roaming aspects of their wireless service plans became less favorable (whether in terms of price or in terms of coverage) as a result of this merger, they would always have the option not only to upgrade to a GSM plan (in the case of TDMA or analog customers), but to switch to a CDMA-based carrier altogether. Thus, the availability of service from Verizon Wireless, Sprint, ALLTEL, or smaller CDMA-based carriers that comes with favorable roaming arrangements should also act to constrain Cingular's behavior in this regard.

181. We are therefore not persuaded by the arguments of Consumers Union and Consumer Federation of America that, after the merger, Cingular will have the ability and the incentive to use its larger share of subscribers to exact discriminatory rates from roaming partners.<sup>453</sup> We find these claims to be unsupported speculation.<sup>454</sup> The parties making these claims have not presented any evidence, or made any specific allegations, that Cingular has taken steps in the past to charge a particular carrier unreasonable roaming rates,<sup>455</sup> and as discussed above we are not persuaded that this merger makes such action more likely in the future.

182. In addition, Cingular states that it has been and, after the merger, will continue to be a net payor of roaming fees,<sup>456</sup> and publicly available evidence tends to support this claim.<sup>457</sup> Since its practice is to enter into roaming agreements with reciprocal roaming rates (*i.e.*, Cingular and its roaming partner pay each other the same per minute roaming rate), Cingular argues that, as a net payor, its incentive is to seek reasonable roaming rates with roaming partners.<sup>458</sup> Edge Wireless, which has roaming agreements with both Cingular and AT&T Wireless, supports Cingular's assessment on this issue.<sup>459</sup> In their joint reply, CFA and CU contend that the more likely result of the merger is that Cingular will become a net

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<sup>453</sup> CU and CFA Joint Reply at 6-7.

<sup>454</sup> See *Telephone and Data Systems, Inc. v. FCC*, 19 F.3d 42, 47-48 (D.C. Cir. 1994) (appellant's claim that Comcast, after receiving a license transfer, would engage in anticompetitive action to drive down roaming revenues of another carrier is nothing more than "unadorned speculation.").

<sup>455</sup> See CFA and CU Joint Petition to Deny at 11; Letter from Michael Kurtis, counsel for Public Service Communications to Marlene H. Dortch (Sept. 9, 2004).

<sup>456</sup> See Cingular Opposition at 47.

<sup>457</sup> Cingular's public financial reports indicate that, during fiscal year 2003, it received more incollect roaming revenues (\$757 million) than outcollect roaming revenue (\$586 million). See Cingular 10-K at 29. Incollect roaming revenue is what Cingular receives from its subscribers when they roam on other carriers' networks. Outcollect roaming revenue is what Cingular receives from other carriers when their subscribers roam on Cingular's network. Therefore, greater incollect than outcollect roaming revenue can indicate that Cingular is a net payor of roaming fees. AT&T Wireless's public financial records do not distinguish between incollect and outcollect revenue.

<sup>458</sup> See Cingular Opposition at 47-48.

<sup>459</sup> See Edge Wireless Ex Parte, dated September 14, 2004.

receiver of roaming revenues and, therefore, Cingular's incentive will be to use that position to exact discriminatory rates.<sup>460</sup> However, CU and CFA have not provided any support for this assertion. We note also that the consensus of the roaming partners who have filed comments is that they expect the merger to benefit themselves and their customers.<sup>461</sup> Nevertheless, we are concerned about the claims of PSC, NTCA, and OPASTCO that the merged entity intends to engage in allegedly anticompetitive and other unreasonable conduct such as blocking its subscribers' access to other carriers' networks.<sup>462</sup> We note that our manual roaming rule requires other carriers to complete calls initiated by Cingular's customers where Cingular cannot because it has neither its own signal nor an automatic roaming agreement.<sup>463</sup> We adopt as a condition to our grant in this Order a reciprocal duty, *i.e.*, that Cingular may not prevent its customers from reaching another carrier and completing their calls in these circumstances, unless specifically requested to do so by a subscriber. Finally, in the future, if a roaming partner believes that Cingular is charging unreasonable roaming rates, it can always file a complaint with the Commission under Section 208 of the Communications Act.<sup>464</sup>

### (ii) Special Access

183. Like other independent wireless or wireline carriers, AT&T Wireless enters into interconnection agreements with, and purchases special access services from, BellSouth, SBC, and other carriers. Thrifty Call argues that the Commission should reject the proposed merger because it will significantly increase BellSouth's and SBC's incentives to discriminate against Cingular's wireless competitors in the provision of interconnection and special access services.<sup>465</sup> With respect to interconnection, SBC and BellSouth are prohibited by section 251(c)(2) of the Act from discriminating against other telecommunications carriers, including wireless providers.<sup>466</sup> To the extent that certain incumbent LECs have the incentive and ability under our existing rules to discriminate against competitors, whether such carriers are wireless or wireline, in the provisioning of special access services, such a concern is more appropriately addressed in our existing rulemaking proceedings on special access performance metrics and special access pricing.<sup>467</sup> By addressing these issues in the context of a rulemaking, we will be able to develop a comprehensive approach based on a full record that applies to all incumbent LECs so that the Commission treats similarly-situated incumbent LECs in the same manner.

<sup>460</sup> See CFA and CU Joint Reply at 6-7.

<sup>461</sup> See discussion *supra* ¶ 169.

<sup>462</sup> See Sept. 9, 2004, Kurtis Letter to Marlene H. Dortch; Kaplan Informal objection at 2-3.

<sup>463</sup> See 47 C.F.R. § 20.12.

<sup>464</sup> 47 U.S.C. § 208.

<sup>465</sup> See Thrifty Petition at 16-18; Thrifty Reply at 15-16; Letter from Jonathan Lee, Sr. Vice President – Regulatory Affairs, CompTel/ASCENT, to Marlene H. Dortch, Secretary, FCC, Docket No. 04-70 (filed Oct. 1, 2004) (CompTel/ASCENT Oct. 1 *Ex Parte* Letter), at 1, Attach. at 14-15. Thrifty also argues that the removal of AT&T Wireless as an independent purchaser of special access services will so reduce demand for special access services provided by competitive special access providers that competition in the special access market will be negatively affected for all customers of this service. See Thrifty Petition at 17. We are not persuaded by Thrifty's argument. There is no evidence that AT&T is a significant purchaser of competitively-provided special access services and, even if it were, we do not believe that its acquisition by Cingular will affect the special access market.

<sup>466</sup> See 47 U.S.C. § 251(c)(2).

<sup>467</sup> See *Performance Measurements and Standards for Interstate Special Access Services*, CC Docket No. 01-321, Notice of Proposed Rulemaking, 16 FCC Rcd. 20,896 (2001) (inviting comment on whether the Commission should adopt metrics to prevent discrimination in the provision of special access services); AT&T Corp., Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, RM-10593 (filed Oct. 15, 2002). See also 47 U.S.C. § 272(e)(1).

**d. Market-by-Market Evaluation****(i) Analytical Standard**

184. As stated previously, a calculation of the HHI in a market is only the beginning of our analysis of the competitive effects of the merger, because its purpose is to eliminate from further analysis markets in which there is no potential for competitive harm. In our analyses of potential unilateral effects, coordinated interaction, and vertical issues, above, we have undertaken a general assessment of factors beyond concentration that are important to determining likely competitive effects of the merger. On the basis of these analyses, we have concluded that, as a general matter, even the markets identified for further review by our preliminary HHI and spectrum analysis are unlikely to suffer anticompetitive effects as a result of the merger. In any one of these markets, however, the actual array of factors that we have evaluated on a generalized basis could lead to a different conclusion for that market. Our next step, therefore, was to apply those general analyses on a market-specific basis to determine those markets in which anticompetitive effects are likely. The variables we used to conduct this analysis, which we drew from those larger analyses, can be divided into two basic categories, discussed in greater detail below. The first category consists of variables selected to take account of the response of rival carriers to a price increase and output reduction, or an adverse change in other terms and conditions of service, by the combined entity. In addition to unilateral effects, the variables in the first category also take account of conditions affecting the likelihood of adverse coordinated effects. The second category consists of variables selected to account for distinguishing characteristics of the combined entity that may affect its incentive to raise price and suppress output, or to make an adverse change in other terms and conditions of service. Apart from the variables relating to the response of rival carriers and the characteristics of the merged entity, we also examined whether the near-term availability of additional spectrum suitable for the provision of mobile telephony services will affect the likelihood of adverse competitive effects in specific markets.

185. *Potential Rival Response.* The combined carrier will have little incentive to raise its price or alter other terms and conditions of service to the detriment of consumers if, after such action, a sufficiently large number of its customers could obtain comparable services on what would now be better terms from other carriers. This depends, in turn, on both the presence and the capacity of rival carriers in specific markets, rather than simply on their current subscriber market shares. To take account of the presence of rival carriers, we counted the number of rival carriers that have launched service in the relevant market.<sup>468</sup> However, because the transaction will eliminate one of the six nationwide carriers, we were particularly concerned to ensure that rival carriers will have the ability to respond to a unilateral price increase for nationwide service plans that include roaming services at no additional charge to subscribers. Accordingly, in determining the number of rival carriers in each market, we particularly focused on those carriers offering competitive nationwide service plans as well as regional and local plans.

186. If rival carriers face binding capacity constraints, such as limited access to spectrum that cannot be overcome economically in a reasonably short period of time, then they likely will not be able to respond to the combined carrier's price increase or other harmful conduct in a manner sufficient in the aggregate to make the action of the combined carrier unprofitable. In other words, if the rival carriers do not have the capacity to add customers (or do not have the capacity to do so without a noticeable deterioration in service quality), then they will not be attractive alternatives for customers and will not restrain the combined carrier's price increase. On the other hand, as discussed in Section V.A.3.b.(i),

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<sup>468</sup> Although, for reasons outlined above, we were more concerned in this instance about the possibility of adverse unilateral effects than coordinated effects in specific markets, we note that this variable would also be useful for identifying specific markets in which adverse coordinated effects are likely.

above, even rival carriers with relatively small market shares currently may have the ability to discipline the market in the future if they do have adequate capacity to add customers. To account for the capacity of rival carriers, we examined the amount of spectrum suitable for the provision of mobile telephony services that each rival carrier controls in the relevant market and also the geographic coverage of each rival carrier's network in the market.<sup>469</sup>

187. As discussed previously, in the section on coordinated effects, the fewer the rivals in a market, the easier it may be for them to reach an understanding, either explicit or tacit, not to compete vigorously against each other. In addition, a rival carrier may have a strong incentive to deviate from the terms of coordination if it has excess spectrum and (or) network capacity relative to the traffic generated by its existing customer base. Therefore, the variables selected to measure the presence and capacity of rival carriers were used to take into account coordinated effects as well as unilateral effects.

188. *Incentive of Merged Entity.* There are two variables in the second category. The first variable is the subscriber market share of the combined entity. The transaction affords the combined entity a larger base of sales on which to gain from a price increase, and eliminates a competitor to which customers otherwise might have diverted their business. However, the incentive to raise price depends on whether the gain on sales made at the higher price outweighs the loss in sales due to the price increase. A large market share may make it more likely that a price increase will be profitable by reducing the size of the output restriction needed to produce a given price increase. The second variable in this category is the amount of spectrum suitable for the provision of mobile telephony services that the combined entity would control in the relevant markets. The transaction may make a price increase particularly profitable in markets where it enables the combined carrier to acquire control of a large share of the total relevant spectrum and thereby eliminate capacity that otherwise might have been used by competing carriers to attract its customers.

189. *Access to Additional Spectrum.* Apart from the presence and current capacity of rival carriers, the response of rivals to a price increase or reduction in quality by the merged entity may also depend on their ability to obtain access to additional spectrum suitable for the provision of mobile telephony services in the relevant market in a reasonably short period of time. Access to additional spectrum may also deter adverse unilateral effects in specific markets by making possible the entry of new carriers. We were especially concerned about this factor in dense urban areas, where call traffic at any given cell site can put high demand on available bandwidth, which can result in blocked and dropped calls. Although there are several significant blocks of suitable spectrum due to be auctioned by the Commission in the future, for the purposes of this transaction we limited our analysis of the potential competitive impact of additional suitable spectrum to two specific sources of spectrum. The first is the Commission's Auction No. 58, which is currently scheduled to begin on January 12, 2005. This will be an auction for 242 broadband PCS licenses comprising spectrum that had been offered previously in other auctions, but was returned to the Commission as a result of license cancellation or termination.<sup>470</sup> In addition, inasmuch as a significant portion of the spectrum to be re-auctioned in Auction No. 58 was returned as a result of a settlement agreement between the Commission and NextWave, we also consider the possibility that the broadband PCS licenses that NextWave retained under this settlement agreement may be made available for purchase, or lease, on the secondary market directly from NextWave in a

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<sup>469</sup> We placed greater weight in this regard on the six national carriers and the three major regional carriers. We assumed that each of these carriers operating in the market already has significant name recognition and advertising presence in the market, and had sufficient access to any capital or equipment necessary to expand.

<sup>470</sup> Broadband PCS Spectrum Auction Scheduled For January 12, 2005, *Public Notice*, DA 04-1639, Report No. AUC-03-58-A (Auction No. 58) (rel. June 18, 2004); Revised Inventory For Broadband PCS Spectrum Auction, *Public Notice*, DA 04-2451, Report No. AUC-04-58-C (Auction No. 58) (rel. Aug. 3, 2004).

reasonably short period of time.<sup>471</sup> However, we acknowledge the possibility that NextWave may use all or some of the broadband PCS licenses it has retained under the settlement agreement to launch its own service in certain markets.

190. *Interaction of Variables.* To summarize, we relied on the following variables to identify markets where the transaction is likely to diminish competition: (1) the number of rival carriers that offer competitive nationwide service plans as well as regional and local plans; (2) the spectrum holdings of each of the rival carriers identified in (1) above; (3) the geographic coverage of their respective networks; (4) the combined entity's post-transaction market share; (5) the share of spectrum suitable for the provision of mobile telephony services controlled by the combined entity; and (6) whether additional spectrum suitable for the provision of mobile telephony services will be made available in the Commission's Auction No. 58 or in the secondary market directly from NextWave.<sup>472</sup> In reaching determinations on specific markets, we balanced these factors on a market-specific basis, and considered the totality of the circumstances in each market. Thus, if our count of the number of rival carriers and our scrutiny of their spectrum holdings and network coverage indicated that the response of rival carriers will likely be sufficient to limit the ability and incentive of the combined entity to raise price unilaterally, we found that the transaction is not harmful to competition in a specific market even in the presence of a relatively high post-transaction market share of the combined entity. We also scrutinized, and based our determinations on, the uniformity of competitive conditions in local markets. Thus, in some instances, we found that the transaction is not harmful to competition in a particular market if the potential harm from the transaction is confined to a small enclave within the market, and this harm is likely to be ameliorated by the more favorable competitive conditions in the majority of the market.

## (ii) Results of Analysis

191. Our general conclusion, as discussed above, is that there is not a significant likelihood of unilateral effects or coordinated interaction as a result of this transaction, except in certain circumstances. Applying our analysis case by case confirmed that this is true for most markets, and in particular for those markets in which there will still be five or more genuine competitors in the market, post-transaction, each with a sufficiently built out network and sufficient bandwidth to discipline Cingular post-merger through the ability to attract customers away from Cingular should it attempt to increase price or reduce service. In these markets, we conclude that even a relatively high post-merger market share for Cingular does not indicate likely competitive harm. At the other end of the spectrum, we find that, in any market in which the merger would reduce the number of competitors to two or fewer, a market with this degree of concentration presents a significant likelihood of successful unilateral effects and/or coordinated interaction even if the merged entity's market share is not especially high. In between these situations were markets that presented less clear pictures with regard to the factors discussed above, and we have

<sup>471</sup> In April 2004, NextWave entered into a settlement agreement with the FCC whereby it will retain certain of its licenses, and will return the remaining licenses to the FCC. This settlement agreement was approved by the bankruptcy court on May 25, 2004. Order Granting Motion Pursuant to Section 363 of the Bankruptcy Code, *In re: NextWave Personal Communications, Inc. et al.*, 98B21529 (Bankr. S.D.N.Y.) (May 25, 2004).

<sup>472</sup> The impact of entry is incorporated into our overall analysis in two ways. First, as discussed in the unilateral effects section, we place considerable importance on the ability of firms already built-out in a market to expand capacity. This is one of the factors underlying our choice of threshold values for the variables used to identify problem markets. Second, we find that spectrum aggregation by the Applicants in markets where additional spectrum licenses will be auctioned in January 2005 is less potentially harmful than aggregation in other markets. The entry that this auction will enable is largely within the Commission's control, and thus we can be relatively confident it will occur. Beyond this one upcoming auction, we do not rely on other planned auctions of mobile spectrum to enable entry, because they are too far in the future and involve encumbered spectrum. Moreover, we do not rely at all on entry by firms entirely new to the sector to ameliorate any anti-competitive harms.

examined each in detail to determine whether there would be sufficient competitive forces remaining after the merger to conclude that the merger is not likely to result in competitive harm in that market.<sup>473</sup>

192. Using the analytical standard outlined above, our market-specific analysis eliminated all but 22 of the markets identified for further review by the initial screen. Based on our examination of the different variables and the interaction among them, we find that, in these eliminated markets, the transaction is unlikely to diminish competition through either unilateral action by the merged entity or coordinated interaction among competing carriers. Thus, although the structure of these eliminated markets will change as a result of the transaction, our market-specific analysis indicates that competitive pressure to attract and retain customers will still be sufficient to constrain carrier conduct with regard to pricing and other terms and conditions of service.

193. Below are the markets in which our case-by-case analysis indicated that competitive harm is likely as a result of this transaction. Detailed discussion of these markets is contained in Appendix D. As we note above, the transaction would almost certainly be harmful to competition if it resulted in a reduction in the number of rival carriers from 2 to 1, or 3 to 2. We see a reduction in the number of rival carriers from 3 to 2 in seven areas,<sup>474</sup> and in each case we find competitive harm and impose a remedy. We see no markets with a reduction from 2 carriers to 1. The remaining markets are on the list based on the totality of the circumstances, or the interaction of the variables we analyzed. In particular, they represent markets in which the post-transaction market share or spectrum holdings of the combined entity likely make it profitable for the entity to raise price and restrict output, and the presence and capacity of rival carriers, taking into account near-term opportunities to obtain access to additional spectrum, are such that the response of rival carriers is likely insufficient to deter such unilateral actions.

194. Most of the 16 markets in the first list, below, are smaller markets with high market shares for the merged entity and fewer competing carriers than in the majority of markets we reviewed. In these markets, we are concerned that there will not be enough competing carriers remaining, post-merger, to deter anticompetitive behavior by the merged entity. We also find these conditions in one larger market (Oklahoma City).

Market	Market Name
CMA045	Oklahoma City, OK
CMA292	Sherman-Denison, TX
CMA293	Owensboro, KY

<sup>473</sup> For example, in a number of markets, although rival carriers may not currently have sufficient capacity to absorb Cingular's customers if those customers were to choose to leave because of a price increase, additional spectrum is either currently available (e.g., from NextWave) or will be shortly (in Auction No. 58). In several smaller, more rural markets, although Cingular's market share is large, AT&T Wireless's is very small (e.g., 2% or 3%) and there are other national carriers present with either higher or comparable market shares to AT&T Wireless. In these markets, we find that the merger would not significantly add to Cingular's market power or substantially decrease the present level of competition. There are other markets in which, although the merger will decrease the number of competitors to three or four in terms of our market share data, additional nationwide carriers have recently launched and, since they have sufficient spectrum to offer competitive features across the market, we judge that they will be significant competitive forces in these markets. T-Mobile, for example, as a recent entrant in many markets, has experienced rapid share growth. In still other markets, the potential harms we investigated were present primarily in smaller or more sparsely populated parts of the market, and in many of these cases we judged it to be unlikely that the benefit to Cingular of attempting to impose and enforce higher prices or lesser plan characteristics in such areas would outweigh the cost of attempting to do so, so long as the competitive landscape in the bulk of the market was such that Cingular could not raise price or cut plan features generally.

<sup>474</sup> CMAs 213, 326, 327, 328, 329, 330, and 517. See discussion in Appendix D.

CMA326	Arkansas 3-Sharp
CMA327	Arkansas 4-Clay
CMA328	Arkansas 5-Cross
CMA329	Arkansas 6-Cleburne
CMA330	Arkansas 7-Pope
CMA357	Connecticut 1-Litchfield
CMA443	Kentucky 1-Fulton
CMA494	Mississippi 2-Benton
CMA496	Mississippi 4-Yalobusha
CMA517	Missouri 14-Barton
CMA598	Oklahoma 3-Grant
CMA657	Texas 6-Jack
CMA662	Texas 11-Cherokee

195. The two markets in the second list, below, are denser urban markets in which the merged entity would have particularly high spectrum holdings throughout the market. Our concern in these markets is not that there will be too few remaining carriers to sustain the level of competition that the markets have enjoyed, but instead that, in light of the higher spectrum demands in a denser market, not all the remaining carriers have sufficient bandwidth for us to be confident that they can increase output and compete effectively for Cingular's customers should Cingular attempt to raise price or reduce output.

Market	Market Name
CMA009	Dallas, TX
BTA 112	Detroit, MI

196. In each of the four markets in the third list, below, the competitive problem we identify is caused by one of the Applicants' partial, non-passive ownership interest in a competing mobile telephony carrier. Because, in each case, this interest is significant enough to influence the degree to which these carriers actually compete with each other, for purposes of this competitive analysis we therefore attribute to the Applicants (and thus to the merged entity) this other carrier's market share and spectrum holdings. With these attributions in these four markets, the merged entity would have very high market shares and levels of spectrum aggregation, and there would be fewer fully independent carriers than in the majority of markets we reviewed. We are therefore concerned that there will not be enough competing carriers remaining, post-merger, to deter anticompetitive behavior by the merged entity.

Market	Market Name
CMA100	Shreveport, LA
CMA213	Pittsfield, MA
CMA275	St. Joseph, MO
CMA454	Louisiana 1-Claiborne

197. With regard to a number of additional markets identified for further review by the initial screen, our market-specific review might have found that the merger was likely to cause competitive harm, absent the consummation of related transactions being undertaken by Cingular and AT&T

Wireless. First, a number of markets in California and Nevada are subject to an agreement whereby T-Mobile shares Cingular's infrastructure in those areas. Pursuant to these sharing agreements, Cingular also shares T-Mobile's infrastructure in New York City. As a result of its acquisition of AT&T Wireless, Cingular will no longer need to rely on T-Mobile's infrastructure in New York City, and it would therefore be in a position to terminate the infrastructure-sharing joint venture, with the potential result that T-Mobile would lose access to any network facilities in the California and Nevada markets. Cingular's acquisition of AT&T Wireless therefore has the potential to eliminate not just one, but effectively two mobile telephony competitors in these markets. However, Cingular and T-Mobile have reached an agreement to unwind the infrastructure-sharing joint venture, whereby T-Mobile will acquire from Cingular the joint venture's network facilities in California and Nevada, as well as certain of its spectrum holdings. For the first time, T-Mobile will control the necessary assets for full, facilities-based competition in these markets. Our further review of these markets (listed in Appendix E), taking into account what T-Mobile will acquire from Cingular, indicates that the transaction is unlikely to diminish competition in these markets because there will be sufficient competitors (nowhere fewer than five) with sufficient coverage and capacity to deter anticompetitive behavior. In particular, T-Mobile, which is a relatively new and energetic entrant in these markets that has experienced rapid growth in market share, will now have both the incentive and the ability to be a significant competitive force. In order to ensure that this conclusion is realized, we condition grant of the Application on consummation of Cingular's agreement with T-Mobile.

198. Second, because of AT&T Wireless's current equity interest in Triton, we attribute Triton's market share and spectrum holdings in a number of markets in the southeastern United States to AT&T Wireless (and thus to the merged entity). These markets are now the subject of a transaction whereby AT&T Wireless will sell its Triton interest to Triton. Our further review of these markets (listed in Appendix F), taking into account what Triton will acquire from AT&T Wireless, indicates that the transaction is unlikely to diminish competition in these markets because there will be sufficient competitors (nowhere fewer than six) with sufficient coverage and capacity to deter anticompetitive behavior. In order to ensure that this conclusion is realized, we condition our grant of the Application on consummation of AT&T Wireless's agreement with Triton.

199. In addition, we note that, as part of the Application, Cingular indicated that it would divest any post-transaction spectrum holdings in excess of 80 MHz. Specifically, Cingular indicates that "the combined company will divest spectrum in excess of 80 MHz in any county in which it has interests in more than 80 MHz of cellular and Broadband PCS spectrum."<sup>475</sup> Our analysis indicates that this commitment applies to 43 counties (in 9 CEAs or 12 CMAs, and listed in Section VI.A.2. below) in addition to the divestiture areas already discussed above. Because Cingular committed itself to making these divestitures without regard to any finding of competitive harm in these markets, our grant of the Application does not include authorization to hold more than 80 MHz of applicable spectrum in any area, and we therefore condition our grant on Cingular's fulfillment of this commitment. This condition will serve the public interest by making spectrum available to strengthen an incumbent competitor or to allow new entry in these markets.

200. Finally, we note that, as part of the Application, Cingular indicated that, if the Application is granted and the merger is consummated, it would not apply to bid in Auction 58 for any licenses in any BTA in which Cingular controls, or has a 10 percent or greater interest in, 70 MHz or more of cellular and/or PCS spectrum.<sup>476</sup> Cingular committed itself to this restriction without regard to

<sup>475</sup> Cingular Opposition at 9; *see also* Application at 19 n.82.

<sup>476</sup> *See* Letter from Brian F. Fontes, Vice President-Federal Relations, Cingular Wireless, to Marlene H. Dortch, Secretary, Federal Communications Commission (Oct. 22, 2004).

any finding that obtaining additional spectrum in Auction 58 would result in competitive harm in any of these markets, and we condition our grant of the Application on Cingular's commitment not to apply to bid in Auction 58, as described above.

#### 4. Public Interest Benefits

##### a. Introduction

201. In addition to assessing the potential competitive harms of the proposed transaction, we also consider whether the combination of these companies' wireless operations is likely to generate verifiable, merger-specific public interest benefits.<sup>477</sup> In doing so, we ask whether the combined entity will be able, and is likely, to pursue business strategies resulting in demonstrable and verifiable benefits to consumers that could not be pursued but for the combination.

202. The Applicants claim that a number of public interest benefits will result from this transaction. They contend that the proposed transaction will create a stronger and more efficient competitor in the wireless telecommunications marketplace, with sufficient spectrum, infrastructure, and capital resources to achieve: (1) significantly improved quality of service, compared to the current performance of either company; (2) substantially greater geographic coverage than either existing company currently has or could achieve on its own in the foreseeable future; (3) more robust advanced wireless services, delivered to more of the country and in less time than either company could on its own; and (4) more robust and reliable homeland security and public safety applications than either company alone could deliver. The Applicants also maintain that the combined entity will achieve economies of scale and scope and operating synergies resulting in billions of dollars in savings.<sup>478</sup>

203. As discussed below, we find that the proposed transaction is likely to result in some merger-specific public interest benefits, although many of these benefits may be challenging to achieve because of sizable technological and financial requirements and may therefore be realized only over the course of a number of years. As a result, it is difficult for us to quantify very precisely either the magnitude of or the time horizon in which these benefits will be realized.

##### b. Analytical Framework

204. The Commission has recognized that "[e]fficiencies generated through a merger can mitigate competitive harms if such efficiencies enhance the merged firm's ability and incentive to compete and therefore result in lower prices, improved quality, enhanced service or new products."<sup>479</sup> Under Commission precedent, however, the Applicants bear the burden of demonstrating that the potential public interest benefits of the proposed transfer outweigh the potential public interest harms.<sup>480</sup>

205. There are several criteria the Commission applies in deciding whether a claimed benefit should be considered and weighed against potential harms. First, the claimed benefit must be transaction-

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<sup>477</sup> BA/GTE Order, FCC 00-221, ¶ 209; SBC/Ameritech Order, 14 FCC Rcd. at 14,825, ¶ 255; WorldCom/MCI Order, 13 FCC Rcd. at 18,134-35, ¶ 194.

<sup>478</sup> See Application, Exhibit 1, at 9-25.

<sup>479</sup> See *EchoStar-DirecTV HDO*, 17 FCC Rcd. at 20,630 ¶ 188; Applications of NYNEX Corporation, Transferor, and Bell Atlantic Corporation, Transferee, for Consent to Transfer Control, 12 FCC Rcd. 19,885, 20,063, ¶ 158 (1997) ("*Bell Atlantic-NYNEX Order*"); see also *DOJ/FTC Merger Guidelines* § 4.

<sup>480</sup> See, e.g., *EchoStar-DirecTV HDO*, 17 FCC Rcd. at 20,630 ¶ 188; see also *Bell Atlantic-NYNEX Order*, 12 FCC Rcd. at 20,063 ¶ 157; Applications of Ameritech Corp., Transferor, and SBC Communications Inc., Transferee, For Consent to Transfer of Control, 14 FCC Rcd. 14,712, 14,825, ¶ 256 (1999) ("*SBC-Ameritech Order*").

or merger-specific. This means that the claimed benefit “must be likely to be accomplished as a result of the merger but unlikely to be realized by other means that entail fewer anticompetitive effects.”<sup>481</sup> Second, the claimed benefit must be verifiable. Because much of the information relating to the potential benefits of a merger is in the sole possession of the Applicants, they are required to provide sufficient evidence supporting each benefit claim so that the Commission can verify the likelihood and magnitude of the claimed benefit.<sup>482</sup> In addition, as the Commission has noted, “the magnitude of benefits must be calculated net of the cost of achieving them.”<sup>483</sup> Furthermore, speculative benefits that cannot be verified will be discounted or dismissed. Thus, as the Commission explained in the *EchoStar-DirectTV HDO*, “benefits that are to occur only in the distant future may be discounted or dismissed because, among other things, predictions about the more distant future are inherently more speculative than predictions about events that are expected to occur closer to the present.”<sup>484</sup> Third, the Commission has stated that it “will more likely find marginal cost reductions to be cognizable than reductions in fixed cost.”<sup>485</sup> The Commission has justified this criterion on the ground that, in general, reductions in marginal cost are more likely to result in lower prices for consumers.<sup>486</sup>

206. Finally, the Commission applies a “sliding scale approach” to evaluating benefit claims. Under this sliding scale approach, where potential harms appear “both substantial and likely, the Applicants’ demonstration of claimed benefits also must reveal a higher degree of magnitude and likelihood than we would otherwise demand.”<sup>487</sup>

### c. Improvements in Service Quality

207. The Applicants note that both existing companies have been criticized for the quality of

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<sup>481</sup> *EchoStar-DirectTV HDO*, 17 FCC Rcd. at 20,630 ¶ 189; see also *Bell Atlantic-NYNEX Order*, 12 FCC Rcd. at 20063, ¶ 158 (“Pro-competitive efficiencies include only those efficiencies that are merger-specific, *i.e.*, that would not be achievable but for the proposed merger. Efficiencies that can be achieved through means less harmful to competition than the proposed merger . . . cannot be considered to be true pro-competitive benefits of the merger.”); *SBC-Ameritech Order*, 14 FCC Rcd. at 14,825, ¶ 255 (“Public interest benefits also include any cost saving efficiencies arising from the merger if such efficiencies are achievable only as a result of the merger...”); *Comcast-AT&T Order*, 17 FCC Rcd. 23,246, 23,313, ¶ 173 (Commission considers whether benefits are “merger-specific”). Cf. *DOJ/FTC Merger Guidelines* § 4.

<sup>482</sup> *EchoStar-DirectTV HDO*, 17 FCC Rcd. at 20,630, ¶ 190; see also *Bell Atlantic-NYNEX Order*, 12 FCC Rcd. at 20,063, ¶ 157 (“These pro-competitive benefits include any efficiencies arising from the transaction if such efficiencies . . . are sufficiently likely and verifiable . . .”); *AT&T-Comcast Order*, 17 FCC Rcd. at 23,313, ¶ 173 (Commission considers whether benefits are “verifiable”); *SBC-Ameritech Order*, 14 FCC Rcd. at 14,825, ¶ 255; *DOJ/FTC Merger Guidelines* § 4 (“[T]he merging firms must substantiate efficiency claims so that the Agency can verify by reasonable means the likelihood and magnitude of each asserted efficiency, how and when each would be achieved (and any costs of doing so), [and] how each would enhance the merged firm’s ability to compete...”).

<sup>483</sup> *EchoStar-DirectTV HDO*, 17 FCC Rcd. at 20,630, ¶ 190.

<sup>484</sup> *Id.*

<sup>485</sup> *Id.*; see also *DOJ/FTC Merger Guidelines* § 4.

<sup>486</sup> See *EchoStar-DirectTV HDO*, 17 FCC Rcd. at 20,630 ¶ 191; see also *DOJ/FTC Merger Guidelines* § 4.

<sup>487</sup> *Id.* at 20,630, ¶ 192 (citing *SBC-Ameritech Order*, 14 FCC Rcd. at 14,825). Cf. *DOJ/FTC Merger Guidelines* § 4 (“The greater the potential adverse competitive effect of a merger . . . the greater must be cognizable efficiencies in order for the Agency to conclude that the merger will not have an anticompetitive effect in the relevant market. When the potential adverse competitive effect of a merger is likely to be particularly large, extraordinarily great cognizable efficiencies would be necessary to prevent the merger from being anticompetitive.”).

their service, including the number of blocked and dropped calls and calls of marginal quality.<sup>488</sup> The Applicants assert that “[t]he ability of Cingular and AT&T Wireless to improve quality ... has been hampered by the amount of spectrum each holds,”<sup>489</sup> and that “by combining spectrum and network assets, the new company can offer higher quality service and achieve dramatic efficiencies not otherwise available to Cingular or AT&T Wireless individually. These efficiencies will allow the company to offer service with better voice and data quality, fewer dropped calls, and lower blocking rates.”<sup>490</sup> Because the proposed combination involves integrating not just spectrum assets but also existing networks, the Applicants maintain that improvements in service quality will be more significant and will be realized more quickly than would be possible through either company’s mere acquisition of additional spectrum.<sup>491</sup> Not only will the combined entity be able to take advantage quickly of increased capacity where the carriers already have effectively overlapping cell sites, they assert, it will also be able to address many coverage holes where their cell sites are *not* exactly overlapping.<sup>492</sup> “As a result,” they argue, “consumers will quickly experience improved service quality, such as a reduction in blocking and dropped calls during peak call hours.”<sup>493</sup>

208. The Applicants currently operate similar networks based on two standards: IS-136 and GSM. IS-136 combines analog and digital time division multiple access, TDMA, to provide voice capabilities. GSM, also a digital standard, provides both voice and data capabilities.<sup>494</sup> The Applicants project benefits based not just on aggregating their spectrum holdings and network operations but also on spectral efficiencies to be achieved by combining their networks. Under best-case scenarios, and assuming seamless network integration, Cingular estimates that blocked calls will be reduced by 50 percent and that dropped calls will be reduced by 10 percent to 30 percent. These percentages will vary by local area based on pre-merger system loading and spectrum utilization (affecting blocked calls and dropped calls, respectively).<sup>495</sup> As an example, the Applicants state that their analysis of a metropolitan area currently served by both companies indicates that the integration of the two systems<sup>496</sup> will result in 180,000 fewer blocked calls per day, or more than 66,000,000 fewer blocked calls annually.<sup>497</sup>

209. Thrifty Call disagrees that improvements in quality of service should be recognized as

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<sup>488</sup> Application, Exhibit 1, at 12. *See also* Application, Exhibit 1, Attachment 2 - Declaration of William Hogg and Mark Austin at 1 (“Hogg and Austin Declaration”).

<sup>489</sup> Application, Exhibit 1, at 10.

<sup>490</sup> *Id.*

<sup>491</sup> *Id.*

<sup>492</sup> Application, Exhibit 1, Attachment 4 – Declaration of Marc P. Lefar at 10.

<sup>493</sup> Application, Exhibit 1, at 13. The Communications Workers of America also support the Applicants’ argument in this respect. Comments of CWA at 2-3.

<sup>494</sup> TDMA, or “time division multiple access,” is used interchangeably with the TIA IS 136 Standard. While both IS 136 and GSM use TDMA, the two standards are incompatible. GSM uses a specific number of time slots to carry the GSM Packet Radio Service, or GPRS, and the Enhanced Data rate for Global Evolution (EDGE). GPRS and EDGE provide up to 115kbps and 470 kbps, respectively. In some cellular markets the Applicants provide CDPD, Cellular Digital Packet Data, with speeds up to 19.2 Kbps. GSM and IS136 use both 850 MHz and 1900 MHz frequency bands, while CDPD is confined to the 850 MHz band. *See* Hogg and Austin Declaration at 5.

<sup>495</sup> *See* Cingular Response at 84. *See also* Cingular Technology – FCC Presentation at 26 (Mar. 12, 2004).

<sup>496</sup> Assumes full site collocation and fully compatible core, switching, and RF networks; further assumes that subscribers use dual-band and dual-technology handsets. The Applicants do not differentiate between TDMA and GSM with respect to blocked and dropped call behavior.

<sup>497</sup> Application, Exhibit 1, at 14. *See also* Hogg and Austin Declaration at 18.

benefits of the merger because, it asserts, consumers can already get service superior to the Applicants' from other carriers.<sup>498</sup> In Thrifty Call's words, "poor service is simply the result of Cingular's bad business decision-making that makes its service less efficient and more costly. Consumers will realize no direct benefit from this acquisition because consumers already can be relieved of the inferior service that Cingular says it and [AT&T Wireless] provide by simply switching" to another carrier.<sup>499</sup> Thrifty Call also asserts that Cingular's "operational and network ailments" could be "solved for far less than the \$41 billion" price it is paying to acquire AT&T Wireless, if SBC and BellSouth simply invested more into improving Cingular's network.<sup>500</sup> Alternatively, Thrifty Call suggests that, if the companies need additional spectrum, acquiring it at auction is a viable alternative to this proposed transaction, an alternative which Thrifty Call says would avoid the public interest harms posed by this transaction.<sup>501</sup>

210. On the basis of our assessment of the Applicants' technical submissions, we agree that the combination of the Applicants' spectrum and network assets is likely to enable the combined entity to achieve improvements in service quality, generally in the manner and for the reasons asserted by the Applicants. Once the combined entity integrates the two existing systems, including consolidating what will be duplicate analog, TDMA, and GSM/GPRS/EDGE networks, the amount of spectrum available to support current as well as new customers will be greater than either existing company currently commands. Where conditions enable the combined entity to take advantage of spectral and trunking efficiencies, the effective increase in available spectrum will be greater than is represented by the simple addition of the two companies' holdings. The increased effective capacity should enable the merged entity to make progress in reducing the number of blocked, dropped, and marginal calls currently experienced by Cingular and AT&T Wireless customers.

211. Examining field performance data supports this conclusion. Superimposing Telephia's "trouble spots" data<sup>502</sup> included in the record for both Cingular and AT&T Wireless in several tested metropolitan areas<sup>503</sup> suggests that both existing companies' customers would experience improvements in service quality as a result of combining the two companies' existing cell sites into one network, at least where subscribers' current handsets are capable of exploiting the benefits of the combined networks' capacity and coverage. In San Francisco, for example, we estimate that combining the two 1900 MHz GSM networks would result in substantial reductions in the number of trouble spots currently experienced by AT&T Wireless customers, and smaller but still significant reductions in the number of trouble spots currently experienced by Cingular Wireless customers.<sup>504</sup> Our analysis of other markets, including Seattle, Dallas, Boston, and Atlanta, suggests that similar improvements in trouble spots are likely. These are improvements which cannot be obtained without the addition of network and spectrum assets, both of which Cingular will acquire in significant quantity as a result of this merger in a significantly shorter timeframe than it would otherwise be able to do.

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<sup>498</sup> Thrifty Call Petition to Deny at iv-v, 21-24.

<sup>499</sup> Thrifty Call Petition to Deny at 21.

<sup>500</sup> Thrifty Call Petition to Deny at 21.

<sup>501</sup> Thrifty Call Reply at ii, 10.

<sup>502</sup> Telephia provides comparative market-specific performance studies in which data is collected on multiple carriers' networks simultaneously. In these reports, Trouble Spots include: Dropped Calls, No Service, Connect Timeout, Fast Busy/Failed Access, Reorder, Below Average Audio Quality, and Bad Coverage.

<sup>503</sup> [REDACTED]

<sup>504</sup> Telephia provides plots designating trouble spots for the traveled roadways within a given area. [REDACTED] Of course, we cannot exactly quantify this effect on the basis of visual analysis, but this analysis is sufficient to suggest the nature and general scale of the improvement the merged entity can expect.

212. We disagree with Thrifty Call's argument that any improvements in quality of service resulting from this merger should not be counted as benefits of the merger because they would merely correct for past failures of the two companies. Even if it were the case that any benefits resulting from this transaction in the area of service quality would only bring the combined entity up to the service quality level of its competitors, such benefits would nevertheless be real to current and future consumers. Thrifty Call's argument that, in a competitive marketplace, consumers can relieve themselves of poor Cingular or AT&T Wireless service by moving their business to another carrier is of course true, but it does not undermine the public interest benefit offered by this merger; better performance on the part of the combined entity has the potential to improve the competitiveness of the market as a whole by enabling Cingular to present a greater service-quality competitive challenge to the other carriers – with the result that not only Cingular's customers, but all wireless customers will benefit.

213. As for Thrifty Call's argument that the same benefits the Applicants claim for this merger could be achieved through network investments and/or participation in spectrum auctions, we partially agree. On the one hand, we agree with the Applicants that the service quality benefits discussed above are likely to be more easily and quickly achievable as a result of this transaction, which will make additional spectrum available to Cingular sooner than would be likely via auction, at least in some markets, and which will also bring Cingular existing network assets to deploy in lieu of at least some new network development. However, it seems likely that at least some of the network improvements Cingular anticipates could have been achieved through investment into Cingular's network of a portion of the purchase price associated with this transaction.<sup>505</sup>

214. Moreover, we cannot confirm either the magnitude of these benefits or the speed with which they are likely to be achieved. We note, to begin with, that the ability of the combined entity to take advantage of the potential increase in capacity offered by this transaction will largely be determined at the market and regional levels and will be limited by a number of factors, including: whether Cingular and AT&T Wireless are both currently operating in the same frequency band(s) (either 850 MHz or 1900 MHz or both) at a particular site, how compatible their current TDMA systems (which are provided by more than one vendor) are,<sup>506</sup> whether customers have handsets that can take advantage of dual-mode (TDMA/GSM) and dual-band (850 MHz and 1900 MHz) service offerings,<sup>507</sup> and post-merger subscriber growth. As a result, at least in many locations, the improvements may not be immediately achievable. For example, 25 percent of AT&T Wireless's GSM customer base is made up of 1900 MHz GSM users; the combined entity will need to equip these customers with dual-band handsets in order to access the additional capacity represented by Cingular's 850 MHz GSM networks.<sup>508</sup> A specific instance of such an integration issue will be Baton Rouge, LA (CMA 80), where AT&T Wireless has 1900 MHz spectrum with both TDMA and GSM systems, while Cingular provides analog, TDMA, and GSM spectrum service at 850 MHz.

215. Furthermore, the two service quality improvement elements the Applicants discuss in this

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<sup>505</sup> Thrifty Call also asserts that Cingular's ability to pay \$41 billion for AT&T Wireless is the result of the ill-gotten gains of SBC and BellSouth, the two ILEC parents of Cingular. Thrifty Call Petition to Deny at 22-23. This assertion is beyond the scope of our analysis here, which focuses on the competitive harms posed and benefits offered by the proposed transaction.

<sup>506</sup> As the Applicants integrate their TDMA systems, they may need to accommodate equipment from multiple vendors at the individual market level. [REDACTED] The Applicants' ability to achieve trunking efficiencies in this area is dependent on their ability to integrate these systems. This same concept applies to integrating GSM networks, although GSM equipment is generally more compatible across vendors.

<sup>507</sup> See Declaration of William Hogg and Mark Austin at 21 n.24.

<sup>508</sup> See Application, Exhibit 1, Attachment 6 – Declaration of Greg Slemons at 2.

context – increased capacity and reduced coverage holes – must to some extent be traded off against each other, at least in the short run. While closely overlapping cell sites<sup>509</sup> will enable the combined entity to achieve increased utilizable capacity by combining the sites, they will not address coverage holes. In addition, a large increase in frequencies per cell site may force shorter re-use distances, thus increasing interference exposure and requiring Cingular to add (or move retired) cell sites in order to maintain system quality. By contrast, non-overlapping cell sites<sup>510</sup> will enable Cingular to address coverage holes but will not lead to more efficient trunking.

#### d. Increased Coverage

216. The Applicants assert that, in addition to addressing service quality issues, the combined entity will have a significantly larger service footprint than either of the two existing companies, resulting in higher functionality and more ubiquitous coverage for its customers: “[T]he merger will expand the size of Cingular’s footprint and reduce its reliance on roaming networks which has prevented the company from exploiting fully the technological enhancements available over its new GSM networks. ... The combination of AT&T Wireless and Cingular will allow the availability of these services on a seamless, nationwide basis far more promptly than can otherwise be achieved, if they could be achieved at all, by the companies individually.”<sup>511</sup> Cingular indicates that, with the merger, it will be able to offer service in 97 of the top 100 markets nationwide, making it a more effective competitor against the other nationwide mobile telephony providers.<sup>512</sup>

217. The Commission has previously noted the consumer benefits that flow from expanded footprints for nationwide carriers.<sup>513</sup> With a larger footprint, not only can a carrier offer competitive service to more consumers across the country, but also its customers may enjoy enhanced service and/or lower prices because of factors such as the wider area in which the carrier’s full handset functionality is operative and the carrier’s lessened reliance on roaming agreements to fill out its coverage.

218. The combined entity’s service footprint will certainly be broader than either of the existing companies’ current footprints. AT&T Wireless will bring to the combined entity’s network very significant areas of the country in which Cingular does not currently offer service – especially in the Upper Midwest and Rocky Mountain areas, Oregon, major parts of Florida, and certain areas in the Northeast. As a result, while Cingular is currently serving 87 of the top 100 markets nationwide,<sup>514</sup> in 43 states, the combined entity will reach six new states and provide service in 97 of the top 100 markets (excepting only the Newport News, Norfolk, and Richmond markets, all in Virginia). The combined entity’s network footprint is estimated to encompass 250 million people, compared with Cingular’s current 226 million POPs coverage and AT&T Wireless’s 226 million POPs coverage.<sup>515</sup> The combined

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<sup>509</sup> [REDACTED]

<sup>510</sup> [REDACTED]

<sup>511</sup> Application, Exhibit 1, at 15.

<sup>512</sup> *Id.* at 9. Communications Workers of America also support the Applicants argument in this respect. Comments of CWA at 3.

<sup>513</sup> See, e.g., *SBC-BellSouth Order*, 15 FCC Rcd. at 25,480 ¶ 48.

<sup>514</sup> Application, Exhibit 1, at 20.

<sup>515</sup> See October 5 Letter at Attachment A; UBS Securities LLC, UBS Investment Research – US Wireless 411, at 12 (Sept. 15, 2004) (reporting Cingular’s network coverage POPs); see also discussion *supra* note 110 (discussing issues regarding calculation of licensed POPs); *supra* note 111 (discussing issues regarding calculation of network coverage POPs). Cingular has not provided nor has it “publicly reported network coverage figures for its network.” October 5 Letter at 3.

entity's licensed footprint is estimated to encompass 286 million people, compared with Cingular's current 236 million POPs coverage and AT&T Wireless's 279 million.<sup>516</sup> This increase in current (and potential future) service coverage should directly benefit both existing and new customers and is not likely to be attained as quickly absent the merger.

219. Thrifty Call argues that Cingular's coverage problems can be overcome through roaming agreements and do not depend on Cingular acquiring AT&T Wireless.<sup>517</sup> However, roaming may not be an equally acceptable solution, because in many cases a carrier is able to provide coverage more economically from its own facilities than it can through roaming agreements – generating marginal cost reductions that, in a competitive marketplace, are likely to benefit consumers through lower price and/or increased service. Moreover, in many cases a consumer who is roaming on another carrier's network does not have access to the full range of features offered by the consumer's own carrier and supported by the handset the customer is carrying. For reasons such as these, the Commission has consistently supported facilities-based competition, instead of infrastructure-sharing, as ultimately more effective in delivering robust competition to consumers.

220. Nevertheless, we note that the combined entity will still need to rely on numerous roaming agreements to fill out its footprint in many parts of the country, including virtually the entire Great Plains. In this respect, the incremental increase toward a truly nationwide network represented by this transaction is not as significant as it was in the Bell Atlantic-Vodafone transaction which created Verizon Wireless, or indeed as it was in the SBC-BellSouth transaction which created Cingular in the first place.<sup>518</sup> We also recognize, however, that the combined entity will have increased ability to extend its network into licensed areas neither company currently serves, since it will pool the capital resources of the two existing companies and will be able to construct one set of facilities instead of two. We expect that the impact of this future extension of the network will be especially important in rural areas, which are most likely to go unserved or underserved today in any carrier's network. The two companies' current "GSM Corridor" joint venture, which has constructed shared network facilities along rural highways in a number of states,<sup>519</sup> demonstrates the potential benefits to rural areas of such combined efforts. On the other hand, the joint venture also indicates that such benefits are not entirely dependent on consummation of this merger, and we discount this benefit accordingly.

#### e. Promotion of Next-Generation Services

221. The Applicants assert that, because of spectrum constraints, each current company is restricted in its ability to deploy "advanced wireless services"<sup>520</sup> on a significant scale and within the

<sup>516</sup> See October 5 Letter at Attachment A; see also discussion *supra* note 110 (discussing issues regarding calculation of licensed POPs).

<sup>517</sup> Thrifty Call Petition to Deny at 23-24.

<sup>518</sup> Cingular Wireless initially covered 175 million POPs; compare SBC's wireless companies' pre-merger POPs coverage of 120 million and BellSouth's 57 million. The two pre-merger wireless operations overlapped in only 3 MTAs. See *SBC-BellSouth Order*, 15 FCC Rcd. at 25,460-25,462.

<sup>519</sup> Including Alabama, Colorado, Kansas, Minnesota, Missouri, Nebraska, New Hampshire, New Mexico, New York, Ohio, Oklahoma, Texas, Utah, and Vermont.

<sup>520</sup> The Applicants define "advanced services" to include streaming video, high-speed Internet transmission, multimedia messaging, and other services that require large bandwidth and high throughput speed. Declaration of William Hogg and Mark Austin at Appendix 1 – Mapping of Services to Preferred Speeds. In its Seventh Annual CMRS Competition Report, the Commission spoke of "next-generation services" to include "high-speed advanced mobile data services and the next generation of technologies – beyond the 2G technologies of CDMA, TDMA, GSM, and iDEN – that will make such services possible." *Seventh Report*, at 12990, n.32. In the most recent CMRS Competition Report, the Commission characterized "all of the network technologies beyond 2G that carriers (continued....)

timeframe required by the market. They maintain that the proposed transaction will speed the companies' ability to offer these services in the majority of their service territory by providing the merged entity with the spectrum necessary to deploy such services without unduly disrupting existing services.<sup>521</sup>

222. Both of the Applicants have selected the Universal Mobile Telecommunications System ("UMTS") as their technology to support next-generation services. UMTS uses a wide band code division multiple access protocol, or "W-CDMA," for its common air interface, and requires a total of 10 MHz per RF carrier (5 MHz for the down link and 5 MHz for the uplink).<sup>522</sup> The Applicants assert that, although each of the existing companies is in some stage of testing or early market trials of advanced services using UMTS, neither company has the spectrum necessary to deploy a new UMTS network offering broad coverage while simultaneously supporting their existing operations. Cingular asserts that, absent the proposed transaction, it would not be able to offer such service in more than 38 of the top 100 markets, but that with the combined spectrum assets of the two companies it expects to offer such service in 70-80 of the top 100 markets.<sup>523</sup> Two specific benefits it adduces in this regard are the advantages a more ubiquitous network provides to all subscribers to such services, and the increased ability the combined entity will have to offer such services in rural areas.

223. The crux of the Applicants' argument in this regard is that, unlike the other nationwide carriers, they each must support four separate wireless networks, both now and for some time to come, and must dedicate separate bands of spectrum to each of them.<sup>524</sup> Like some but not all other carriers, both Cingular and AT&T Wireless have 850 MHz cellular licenses in a number of markets, one of the obligations of which is to offer analog service until February 18, 2008.<sup>525</sup> Unlike any of the other nationwide carriers, both Cingular and AT&T Wireless selected TDMA (IS-136) as their initial digital air interface, and both subsequently selected GSM/GPRS/EDGE as their platform for "2.5G" services. Migration from TDMA to GSM requires construction of a new network, as does migration from GSM to UMTS.<sup>526</sup> As the Applicants point out, Verizon Wireless, by contrast, selected CDMA as its initial digital common air interface, and its migration path to more advanced services – including not only "2.5G" but also "3G" services – is generally by improvements to its CDMA network that do not require wholesale

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have deployed, as well as those that they plan to deploy in the future" as "next-generation network technologies." *Ninth Report*, FCC 04-216, at 54-55 n.314. As the Commission noted, "[t]here is ambiguity among other industry players, however, as to which network technologies constitute 3G and which constitute interim technologies, often labeled '2.5G.'" *Id.* For purposes of this discussion, we generally encompass in the term "advanced wireless services" or "next-generation services" all those services provided over next-generation networks.

<sup>521</sup> Application, Exhibit 1, at 15-19. The Communications Workers of America and The Alliance for Public Technology both support the Applicants argument in this respect. CWA Comments at 4; APT Comments at 1-3.

<sup>522</sup> As with other CDMA mobile (PCS or cellular) systems, a re-use distance of 1 applies.

<sup>523</sup> Cingular's Response to FCC's General Information Request, Cingular's Response, June 30, 2004 at 91, 92. See also Application, Exhibit 1, at 19; Hogg and Austin Declaration at 22.

<sup>524</sup> Dobson Communications Corp., Highland Cellular, and RCC, all of which are rural carriers migrating from TDMA to GSM, indicate that they face similar network and spectrum challenges, and they support Cingular's arguments in this regard. Dobson at 2-3; Highland Cellular Comments at 1-2; RCC Reply Comments at 1-2. Lucent Technologies also supports the merger as helping to speed deployment of next-generation services. Lucent Technologies Comment at 1.

<sup>525</sup> 47 C.F.R. § 22.901(b). Note that PCS (1900 MHz) operations do not have an analog requirement.

<sup>526</sup> GSM/GPRS/EDGE and UMTS may share some core network elements. UMTS requires an RF overlay since the common air interface (based on CDMA) is different from that of GSM (which is TDMA based). Some RF components at the base station may be shared, depending on the frequency bands.

construction of a new network.<sup>527</sup>

224. In the Applicants' characterization, therefore, Verizon Wireless can support its existing and future services on two networks, analog and CDMA – and eventually just one, if Verizon Wireless phases out analog service. However, since there is no software-based migration path from TDMA to GSM, in many markets both Cingular and AT&T Wireless are currently operating three separate networks to support analog, TDMA, and GSM services.<sup>528</sup> Deployment of UMTS requires still a fourth network. Both companies apparently plan to phase out analog service when the Commission's cellular analog requirement sunsets; both represent that they are actively engaged in building out their GSM/GPRS/EDGE networks and transitioning customers from TDMA to GSM service; and both appear to envision an end state in which they are operating only two networks, providing GSM and UMTS services. However, phasing out analog and TDMA service will take time (the first largely for regulatory reasons, the second because their GSM networks are not yet as extensive as their TDMA networks), and the Applicants assert that neither company's current spectrum holdings are sufficient to serve existing customers adequately, improve service quality, accommodate new customers, and develop UMTS networks of sufficient scale and robustness to be competitive. The Applicants argue that they need 80 MHz of spectrum to accomplish all of this: 50 MHz to support their current networks and 30 MHz to support UMTS.<sup>529</sup> With regard to the latter, the Applicants note that UMTS requires 10 MHz blocks and assert that they need three such blocks – one to launch basic service, a second to accommodate projected growth in demand, and a third to support broadband services.<sup>530</sup>

225. We agree with the Applicants that the additional spectrum the combined entity will have available, in terms of both capacity and geographic coverage, should facilitate the combined entity's deployment of more robust and ubiquitous advanced services. However, this benefit is difficult to quantify in terms either of effect or time, and we are also not convinced that this benefit is fully merger-specific. We accept that Cingular will acquire spectrum more quickly via this transaction than it is likely to via auction, at least in some markets. However, while the merged entity will be able to concentrate its resources and efforts in the construction of one next-generation network, instead of two, we are not convinced that Cingular could not have achieved at least some of these same network gains by investing a portion of the \$41 billion purchase price associated with this transaction into improvements to its own network.

226. Having reviewed the Applicants' technical submissions as well as documents submitted in response to our General Information Request, we are also not convinced that the combined entity will need 80 MHz in every market in order to realize these achievements. However, in making our finding with regard to the benefits likely to result from this proposed transaction, it is not necessary for us to quantify exactly how much spectrum the combined entity "needs" or to confirm or dispute the

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<sup>527</sup> A cdma2000 1x EV (single carrier evolutionary) network is implemented by installing an RF overlay on a cdma2000 1xRTT (single carrier radio transmission technology) network. Accomplishing this requires a backbone software upgrade and new channel card at the base station, without having to change out the RF system components (frequency band dependent) at the base station. Overall, 1x EV shares the core network with 1xRTT, but requires a separate RF network overlay (*i.e.*, a separate RF common air interface). See THEODORE S. RAPPAPORT, WIRELESS COMMUNICATIONS PRINCIPLES AND PRACTICE 39 (2002).

<sup>528</sup> Application, Exhibit 1, at 5 ("Both companies provide service utilizing three distinct networks using three distinct technologies.").

<sup>529</sup> In its comments, Dobson "confirm[s] the validity of the statements ... that as much as 80 MHz is needed." Dobson Comments at 3. An email from Craig Paul, which we have entered into the record in this proceeding, disputes that Cingular and AT&T Wireless need 80 MHz of spectrum. Comments of Craig Paul at 1.

<sup>530</sup> Hogg and Austin Declaration at 21.

Applicants' representations in that regard. We do not conduct such an inquiry in the context of a spectrum auction before allowing a bidder to participate or before issuing a license to a winning bidder, and we do not think it is appropriate in this context either. Instead, our inquiry with regard to the combined entity's spectrum holdings is: (1) whether the level of concentration of spectrum available for mobile telephony services that would result from this transaction presents likely competitive harms (which we have addressed in Section V.A.3.b.(i), above, as well as in our market-specific analysis as described in Section V.A.3.d., above), and (2) whether the combination of these two companies and their spectrum and other assets is likely to produce verifiable public interest benefits. On the latter question, as discussed above, we find that the combination will likely produce some public interest benefits with regard to the deployment of advanced wireless services.

227. For these reasons, we do not agree with the arguments made by Consumer Federation of America and Consumers Union ("CFA/CU") that the Commission (1) should require Cingular to return "spectrum in excess of 40 MHz" after Cingular accomplishes its migration away from the "multiple technologies" it currently supports,<sup>531</sup> and (2) should not "reward" the Applicants (by allowing them to keep certain spectrum holdings) for what they characterize as poor technology choices and poor operations.<sup>532</sup> CFA/CU's objection is essentially that, even if the Applicants were correct that they need a large amount of spectrum (e.g., 80 MHz) in order to support their existing operations and deploy next-generation services, the Commission should not recognize this combination of spectrum as providing a benefit to the public because that need would be the result of poor technology choices by Cingular and AT&T Wireless (to wit, the selection of TDMA), compounded by poor operating performance, resulting in inefficient use of the limited spectrum public resource. In CFA/CU's words, allowing this combination to go forward would "reward[] vastly inefficient companies for their bad stewardship of spectrum."<sup>533</sup> First, we note that we do not place much weight on the claimed benefit in this instance, as discussed above. Furthermore, it is a long-standing principle of the Commission not to dictate technology choices,<sup>534</sup> and while the Commission is not required to "reward" the Applicants for difficulties that may have resulted from their choice of technology, neither is it our role to punish them for those difficulties or those choices. It is our responsibility to assess the likely competitive effects of the level of spectrum holdings involved in this transaction, which we have done in Sections V.A.3.b.(i) and V.A.3.d., above. In those sections of our analysis, we have found that, in the vast majority of the local markets affected by this transaction, the merged entity's level of spectrum holdings does not present any anticompetitive concern. In those markets in which we *have* found likely competitive harm, all the remedies we order (as described in Section VI, below) include divestiture of spectrum licenses or relevant interests therein.

#### f. Support for Homeland Security and Public Safety

228. Building on the improvements in service quality and network coverage that they argue will result from the combination of the two companies, the Applicants assert that the proposed transaction will enhance homeland security and public safety by "strengthening the resiliency and survivability of Cingular's network"<sup>535</sup> and "facilitating a faster more widespread deployment of Wireless Priority Service."<sup>536</sup> The Consumers Federation of America and Consumers Union ("CFA/CU") reject this

<sup>531</sup> CFA/CU Reply at 2.

<sup>532</sup> See generally CFA/CU Comments, Introduction at 1-4.

<sup>533</sup> CFA/CU Comments, Summary at 2; see also CFA/CU Reply at 2-3. Thrifty Call makes a similar argument. Thrifty Call Petition at 21-23.

<sup>534</sup> See, e.g., Spectrum Policy Task Force Report at 14.

<sup>535</sup> Application, Exhibit 1, at 3, 9.

<sup>536</sup> *Id.* at 5.

benefit claim, arguing that Cingular's inefficient use of spectrum makes it unlikely that Cingular would "be able to handle the massive increase in call volumes that are attendant on major security events."<sup>537</sup>

229. We take considerations of homeland security and public safety extremely seriously, and we agree that a single network with greater coverage and capacity, as opposed to two networks with more coverage gaps, may "enhance service to both priority personnel and the general public in emergency situations, when wireless networks experience extreme congestion."<sup>538</sup> In principle, we agree with the Applicants that "diversified routing, greater redundancy and increased reliability in both the signaling and data networks ... will improve the ability of Cingular's wireless network to function if certain assets are destroyed or damaged in an emergency."<sup>539</sup>

230. However, any benefits for homeland security and public safety will not be realized overnight – they depend on the successful integration of the two existing networks, with all of the difficulties entailed in that effort, as we have discussed above. Moreover, the Applicants themselves indicate that a primary reason for this merger is to alleviate current capacity constraints and that they expect to take full advantage of their new capabilities for commercial services going forward. In this respect, we take note of CFA/CU's concern that if Cingular and AT&T Wireless are having operational difficulties in the pre-merger world because of capacity constraints or other factors, such difficulties are unlikely to be eliminated immediately by the combined entity. The magnitude of the potential enhancements to homeland security and public safety is therefore not clear to us. Furthermore, to a certain degree the benefits to priority personnel even after full network integration is achieved depend on factors not under Cingular's control, such as the extent to which first responders carry dual-band phones in areas in which one of these companies currently has an 850 MHz cellular license and the other has a 1.9 GHz PCS license. Therefore, while we agree that the proposed transaction presents the potential for security and safety benefits as the result of the formation of a more robust, more ubiquitous network, with greater survivability, we do not place tremendous weight on this potential benefit.

#### **g. Economies of Scale and Operating Synergies**

231. Finally, Cingular asserts that it "expects to generate operating and capital expense synergies of more than \$1 billion in 2006 and more than \$2 billion in subsequent years due to new economies of scale and scope created by the acquisition of AT&T Wireless."<sup>540</sup> In addition to the elimination of redundant networks,<sup>541</sup> Cingular represents that these synergies will include "greater purchasing and billing system efficiencies and reductions in common expenses – such as network expansion expenses and maintenance and administrative costs."<sup>542</sup> Cingular also points to operating synergies it expects to realize as a result of sharing best practices in "distribution, procurement, advertising, and other functions,"<sup>543</sup> Cingular's expertise at combining billing systems and call centers

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<sup>537</sup> CFA/CU Reply at 7-8. Thrifty Call also complains that the Applicants did not provide any support from homeland security or public safety personnel affirming the claimed benefits and did not explain why these benefits are not achievable absent the merger. Thrifty Call Reply at 11. We note that we have subsequently received a number of letters from public safety organizations and other officials expressing support for this transaction. *See, e.g.*, Connecticut Police Chiefs Association Comment at 1; National Emergency Number Association Comment at 1.

<sup>538</sup> *Id.* at 5, 23-24.

<sup>539</sup> *Id.* at 5, 23-24.

<sup>540</sup> *Id.* at 22.

<sup>541</sup> *Id.*

<sup>542</sup> *Id.*

<sup>543</sup> *Id.*

and implementing Local Number Portability,<sup>544</sup> AT&T Wireless's expertise in serving business customers,<sup>545</sup> and improved handset functionality resulting from the merged entity's greater purchasing power and the larger customer base over which it will be able to spread development and deployment costs.<sup>546</sup>

232. Based on the evidence presented by Applicants, we believe that the transaction is likely to enable the merged entity to achieve certain economies of scope and scale and operating synergies of the type asserted and that, absent the transaction, the parties individually could not have achieved. However, the record does not contain sufficient supporting evidence for us to verify and quantify the claimed savings or to determine the extent to which they are specific to this transaction. Thus, we cannot confirm the total savings estimated by Applicants and do not give significant weight to them in our balancing of potential public interest harms and benefits.

233. However, we do recognize one specific category of cost savings in this context. Cingular's merger with AT&T Wireless will reduce its roaming costs in overlapping geographic markets, and the elimination of roaming agreements in these overlapping markets will directly benefit those of its customers who will no longer be charged to roam in those areas. We further recognize that the cost savings generated by the elimination of roaming agreements in overlapping markets have the potential to benefit Cingular's customers indirectly by giving Cingular the ability and the incentive to compete more aggressively with regard to pricing, coverage, and the provision of advanced data services. We emphasize, however, that the realization of these indirect benefits and their magnitude will depend on whether, and the extent to which, Cingular passes on cost savings to its customers through lower prices or product improvements such as better voice service and advanced data services.

#### **h. Disability Issues**

234. Self Help for Hard of Hearing People ("SHHH") asserts that the proposed transaction will benefit people with hearing loss because Cingular is a leader in "address[ing] the technological barriers to people who have hearing loss," and the combined entity would increase the reach of that leadership.<sup>547</sup> This assertion has been supported by representations from other organizations, such as the National Spinal Cord Injury Association, the American Council for the Blind, the American Foundation for the Blind, and the Alliance for Technology Access.<sup>548</sup> The Commission has long been concerned to increase the availability of wireless services to Americans with hearing difficulties, as demonstrated by action we have taken in a number of other proceedings.<sup>549</sup> While the record in this proceeding is insufficient for us to determine with exactitude the degree to which approval of this transaction will materially aid in that effort, we recognize this important potential public interest benefit.

#### **i. Labor Issues**

235. The Communications Workers of America assert that "the merger will benefit working

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<sup>544</sup> *Id.* at 23.

<sup>545</sup> *Id.*

<sup>546</sup> *Id.*

<sup>547</sup> SHHH Comments at 1-2.

<sup>548</sup> *Ex parte* letter from Marcie Roth, Executive Director, National Spinal Cord Injury Association, to Marlene H. Dortch, Secretary, Federal Communications Commission (Sept. 13, 2004).

<sup>549</sup> In the Matter of Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones, WT Docket No. 01-309, RM-8658, *Report and Order*, FCC 03-168 (rel. Aug. 14, 2003), *recon. pending*.

families and communities with high-wage, high-skill union jobs” because of Cingular’s commitment to “progressive human resources policies,” and that these benefits will ultimately be realized by consumers in the form of improved customer service.<sup>550</sup> However, the record is insufficient for us to draw any conclusions in this regard, and – unlike in the case of benefits based on technical factors – we do not have any independent basis on which to review this claim.

#### j. Conclusion

236. In sum, while we find that this transaction is likely to result in transaction-specific public interest benefits, we are not able on the basis of this record, using the sliding scale approach described above, to conclude that they are sufficiently large or imminent to outweigh the potential harms we have identified in certain individual markets. In those markets, therefore, remedies are necessary to reduce the harms.

#### B. Intermodal Competition

237. The Commission has taken note of the increasing development of intermodal competition between wireline and wireless services.<sup>551</sup> In this proceeding, evidence indicates that a limited but growing proportion of consumers in the mass market<sup>552</sup> use wireless as their primary line or have chosen to cut the cord and use wireless services in lieu of wireline services for all of their local exchange services.<sup>553</sup> We find it relevant, in analyzing this proposed transaction, that Cingular is owned by the second and third largest RBOCs.<sup>554</sup> Because BellSouth and SBC derive such a significant portion of their

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<sup>550</sup> CWA Comments at 4-5.

<sup>551</sup> See, e.g., Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket Nos. 01-338, 96-98, 98-147, Report and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd. 16,978, 17,119 ¶ 230 (2003) (“Triennial Review Order”), corrected by Errata, 18 FCC Rcd. 19,020 (2003), *aff’d in part, remanded in part, vacated in part on other grounds, United States Telecom Ass’n v. FCC*, 359 F.3d 554 (D.C. Cir. 2004), petitions for cert. filed, Nos. 04-12, 04-15, 04-18 (June 30, 2004); Application by SBC Communications Inc., Nevada Bell Telephony Company, and Southwestern Bell Communications Services, Inc., for Authorization to Provide In-Region, InterLATA Services in Nevada, WC Docket No. 03-11, Memorandum Opinion and Order, 18 FCC Rcd. 7196, 7210 ¶ 26 (2003) (“SBC Nevada Order”). The Commission has also taken note of the increasing migration of toll calls from wireline to wireless services (i.e., “minute substitution” as opposed to replacement of one service with another); see also *Ninth Report*, FCC 04-216, at ¶ 213; In the Matter of Section 272(f)(1) Sunset of the BOC Separate Affiliate and Related Requirements, WC Docket No. 02-112, *Further Notice of Proposed Rulemaking*, 18 FCC Rcd. 10,914, 10,919 ¶ 8 (2003) (noting increasing substitution of mobile wireless service for traditional wireline service, “particularly for interstate calls”); In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45, *Report and Order and Second Further Notice of Proposed Rulemaking*, 17 FCC Rcd. 24,952, 24,965, ¶ 21 (2002) (adjusting wireless carriers’ safe harbor for universal service contributions based on increase in the extent to which mobile wireless consumers utilize their wireless phones for interstate calls).

<sup>552</sup> The mass market consists of residential customers and very small business customers. These categorizations are consistent with the Commission’s approach in prior merger orders. See, e.g., *WorldCom-MCI*, 13 FCC Rcd. 18,025, 18,040-41 ¶¶ 25-26 (1998); *GTE-Bell Atlantic*, 15 FCC Rcd. at 14,088-89 ¶ 102; *Triennial Review Order*, 18 FCC Rcd. at 17,063 ¶ 126.

<sup>553</sup> See *infra* ¶ 241.

<sup>554</sup> SBC has approximately 28.8 million retail residential and 18.3 million retail business access lines within its region. See SBC 10-K at 5. BellSouth has approximately 14.1 million retail residential and 6.9 million retail business lines within its region. See BellSouth 10-K at 30.

revenues from their in-region wireline operations,<sup>555</sup> these companies have an incentive to protect their wireline customer base from intermodal and intramodal competition. In this section, we examine the potential impact on intermodal competition of Cingular's merger with the largest independent wireless carrier.<sup>556</sup>

238. We conclude that any potential public interest harm to intermodal competition arising from the loss of AT&T Wireless as an independent competitor is mitigated by the limited level of wireless-wireline competition at this point in time, and by the continued existence of a number of independent national and regional wireless carriers in the markets relevant to this transaction.<sup>557</sup> We also find that any potential harm is outweighed by the potential benefits that the merged entity could bring to the majority of mass market consumers. At the same time, we caution that further losses of significant independent wireless carriers to wireline-affiliated carriers will be closely scrutinized, and absent significant offsetting public interest benefits, may lead to different conclusions.

### 1. Substitution between Wireless and Wireline Services

239. The Commission has previously found that consumers tend to use wireless and wireline services in a complementary manner and view the services as distinct because of differences in functionality.<sup>558</sup> As a result, a relatively limited number of mass market consumers have chosen to substitute one service for the other.<sup>559</sup> Thus, for purposes of this proceeding, we believe it would be

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<sup>555</sup> SBC's wireline operations generate approximately 72.6 percent of its annual revenues, whereas BellSouth's wireline operations generate approximately 61.8 percent of its annual revenues. Cingular generates approximately 20.7 percent of SBC's annual revenue and approximately 18.5 percent of BellSouth's annual revenue. See SBC 10-K at 5-10; BellSouth at 24-34.

<sup>556</sup> See, e.g., Consumer Federation of America and Consumers Union Petition to Deny at 5, 9; Consumer Federation of America and Consumers Union Reply at 8, 12-15. We use the term independent wireless carrier to mean a wireless carrier that is not owned or controlled by an incumbent LEC, or, if owned or controlled by an incumbent LEC, one that has wireline operations significantly smaller than its wireless operations. For example, we classify Sprint as an independent wireless carrier given that it operates as an incumbent LEC in a relatively small number of markets compared to its wireless footprint; it has significantly fewer local exchange access lines than wireless customers; and it derives a significantly larger portion of its revenues from its wireless operations than from its wireline operations. Sprint's local wireline operation has approximately 7.9 million access lines, whereas it has more than 20 million wireless subscribers. See Sprint SEC Form 10-K for Year-End December 31, 2003 at 25-38; Sprint SEC Form 10-K for Year-End December 31, 2003, Attach. F at 4.

<sup>557</sup> Our conclusion is based on compliance with any conditions necessary to address horizontal concentration in individual wireless markets, as discussed elsewhere in this Order. We also note that SBC and BellSouth face competition in the mass market from other intermodal providers such as cable operators and VoIP providers, as well as intramodal competitors (e.g., carriers purchasing unbundled loop access). See Industry Analysis and Technology Division, Wireline Competition Bureau, FCC, Local Telephone Competition: Status as of Dec. 31, 2003, at 1-2 (rel. June 2003), available at <http://www.fcc.gov/wcb/iatd/stats.html>; Anne Kandra, *Should You Switch to a Net Phone? Making Calls Over Your Broadband Connection Can Save You Some Money*, PC World, Nov. 2004 (2004 WL 65832115), at 1 ("The Yankee Group expects there will be 1 million VoIP subscribers by the end of 2004, up from just 131,000 last year."). At the same time, we note that facilities-based competition is greater for enterprise services than for mass market services.

<sup>558</sup> See, e.g., *Triennial Review Order*, 18 FCC Rcd at 17,119 ¶ 230.

<sup>559</sup> See *Ninth Report*, FCC 04-216, at ¶ 212; *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Further Notice of Proposed Rulemaking and Report and Order, 17 FCC Rcd 3752, 3757 ¶ 11 (2002); *Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Provision of In-Region, InterLATA Services in Louisiana*, CC Docket No. 98-121, Memorandum Opinion and Order, 13 FCC Rcd 20,599, 20,624 ¶ 32 (1998). Whereas wireless services may have a comparative advantage over wireline services in providing the consumer mobility, wireline local exchange services may have comparative advantages in reliability, (continued....)

premature to consider the existence of a separate relevant market in which wireline and wireless services compete for mass market consumers.<sup>560</sup> Instead, in evaluating the extent of intermodal competition between wireline and wireless telecommunications voice services, we consider the number of consumers that have chosen to “cut the cord,” *i.e.*, those that have substituted wireless for wireline service.<sup>561</sup>

240. As the Commission has noted in other proceedings, a number of wireless carriers offer plans designed as a landline replacement service, *e.g.*, MetroPCS, Leap Wireless (Cricket), and Triton, as these plans include unlimited local calling within some specified local calling area and offer a traditional monthly recurring fee long distance calling option that closely resembles the cost for wireline local exchange service.<sup>562</sup> Other wireless service plans that may also serve as a wireline replacement for some consumers are those that (1) are priced competitively to analogous wireline services, (2) include sufficient anytime minutes to accommodate a customer’s normal inbound and outbound calling patterns, and (3) avoid overage charges.<sup>563</sup> While we have insufficient information to determine the particular combination of anytime minutes and price points most desirable to mass market consumers that have either cut the cord or would consider cutting the cord, some record evidence indicates that wireless plans priced no greater than [REDACTED], with a significant number of anytime minutes, could result in a significant

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E-911 coverage, ubiquity, and lower-cost unlimited local calling. *See, e.g., Triennial Review Order*, 18 FCC Rcd at 17,119 ¶ 230.

<sup>560</sup> We do not separately consider a bundled wireline and wireless service package in connection with this proposed transaction because these service packages have only recently become available on the market, demand for them has been severely limited, and it is too early to evaluate their competitive impact. *See Thrifty Petition to Deny* at 4, 7; Applicants’ Joint Opposition to Petitions to Deny and Comments at 42-43.

<sup>561</sup> This approach is consistent with the Applicants’ position in other proceedings that the Commission must consider mobile wireless in its analysis of competition for local exchange and long distance services. *See, e.g., Letter from Mary L. Henze, Asst. Vice President – Federal Regulatory, BellSouth, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 02-112, CC Docket No. 00-175, Attach. at 1-10 (filed Oct. 21, 2003); Letter from Brett A. Kissel, Assoc. Director – Federal Regulatory, SBC, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 02-112, CC Docket No. 00-175, Attach. at 12-15, 21 (filed Dec. 16, 2004); see also Letter from Dee May, Vice President – Federal Regulatory, Verizon, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 02-112, CC Docket No. 00-175, Attach. at 8-11 (filed Feb. 13, 2004); SBC Reply Comments, Reply Declaration of Dennis W. Carlton, Hal Sider and Allan Shampine, WC Docket No. 02-112, CC Docket No. 00-175, ¶ 32 (filed May 19, 2003) (“Bundled local/long distance services offered by ILECs and CLECs compete not only with each other but also with local services and long distance services offered on an unbundled basis and with bundled services offered by wireless carriers.”). It is also consistent with SBC’s position and our finding in the *SBC Nevada Order* that SBC had met the requirements of section 271(c)(1)(A) for residential consumers in Nevada solely based on evidence that mass market residential customers subscribed to Cricket (a PCS mobile telephony service) in lieu of wireline local exchange service in SBC’s region in Nevada. *See SBC Nevada Order*, 18 FCC Rcd at 7206 ¶ 18; *see also Application of Qwest Communications International, Inc., for Authorization to Provide In-Region, InterLATA Services in New Mexico, Oregon, and South Dakota*, WC Docket No. 03-11, *Memorandum Opinion and Order*, 18 FCC Rcd. 7325, 7339, ¶ 26 (2003).*

<sup>562</sup> *See, e.g., Ninth Report*, FCC 04-216, at ¶¶ 215-16.

<sup>563</sup> We assume a consumer looking for a wireline replacement plan will consider only those wireless telecommunications voice service plans that are economical for him given his preferences for vertical features and his local and long distance calling patterns (*e.g.*, frequency, duration, and time preference) and that have a relatively small price premium relative to wireline service. *See AT&T Wireless July 15 Ex Parte Letter, Confidential Attach. at AWSFCC00194000-48; AWSFCC00194193-208; AWSFCC00197204-13; AWSFCC00197955-98; BellSouth July 15 Ex Parte Letter, Confidential Attach. at BLSFCC00038343-69; BLSFCC00096193-248; BLSFCC00098191-212.*

number of households choosing to cut the cord.<sup>564</sup>

241. The record evidence demonstrates that while a small proportion of consumers have chosen to cut the cord, intermodal competition is growing and wireless services may become a more significant direct competitor to wireline services for a larger portion of the mass market in the future. Although the Census Bureau estimates that six percent of households have cut the cord nationwide, documents provided by Cingular, its parent companies, and AT&T Wireless indicate that this percentage is likely to grow in the near future.<sup>565</sup> These documents also indicate that there is significant variation in the proportion of consumers that have cut the cord across metropolitan areas and demographic groups.<sup>566</sup> The growing significance of intermodal competition is revealed in the evidence that these carriers consider the prospect of consumers' subscription to wireless services in lieu of wireline services when engaging in research, and development of corporate strategies and market offerings.<sup>567</sup> However, other evidence suggests that most consumers may still continue to find the costs (including opportunity costs<sup>568</sup>) of cutting the cord and using wireless telecommunications services in lieu of wireline telecommunications services to be prohibitive.<sup>569</sup> For example, the opportunity costs that the consumer may consider before cutting the cord could include the loss of an option to access the Internet via broadband or dial-up,

<sup>564</sup> AT&T Wireless July 15 *Ex Parte* Letter, Confidential Attach. at AWSFCC00193510-604; AWSFCC00193606-641; AWSFCC00194193-208.

<sup>565</sup> See C. Tucker, et al., *2004 Telephone Service in U.S. Households in 2004*, paper presented at the 59th Annual Meeting of the American Association for Public Opinion Research, May 2004 (*2004 Telephone Service Paper*). The U.S. Census Bureau estimates that there are approximately 115.9 million households in the United States. Thus, we estimate that there are approximately 7 million households that have cut the cord. See also AT&T Wireless July 15 *Ex Parte* Letter, Confidential Attach. at AWSFCC00194000-48; AWSFCC00194193-208; AWSFCC00195361-410; AWSFCC00197204-13; AWSFCC00197237-43; BellSouth July 15 *Ex Parte* Letter, Confidential Attach. at BLSFCC00008365-402; BLSFCC00098191-212; BLSFCC00155178-205.

<sup>566</sup> [REDACTED]. The U.S. Census Bureau results suggest the proportion of consumers that have cut the cord is increasing across demographic groups. See AT&T Wireless July 15 *Ex Parte* Letter, Confidential Attach. at AWS00197955-98; SBC July 15 *Ex Parte* Letter, Confidential Attach. at SBCFCC00013167; SBCFCC00016362-409; see also BellSouth July 15 *Ex Parte* Letter, Confidential Attach. at BLSFCC00002658-71; BLSFCC00096067-115; BLSFCC00211764-91; *2004 Telephone Service Paper*.

<sup>567</sup> See discussion of AT&T Wireless's incentives and Cingular's product offerings below; see also BellSouth July 15 *Ex Parte* Letter, Confidential Attach. at BLSFCC00002658-71; BLSFCC00005025-33; BLSFCC00008365-402; BLSFCC00038763-71; BLSFCC00096067-115; BLSFCC00098191-212; BLSFCC00155178-91; BLSFCC00177285-355; BLSFCC00211675-719; BLSFCC00212603-48; Cingular July 15 *Ex Parte* Letter, Confidential Attach. at CNGFCC02995653-65; CNGFCC02998932-55; CNGFCC02998975-96; CNGFCC03000023-29; CNGFCC03098350-71; CNGFCC03099586-606; SBC July 15 *Ex Parte* Letter, Confidential Attach. at SBCFCC00000037-50; SBCFCC00000061-129; SBCFCC00002065-76; SBCFCC00002567-78; SBCFCC00069982-70013; Letter from Douglas I. Brandon, Vice President - External Affairs and Law, AT&T Wireless, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 04-70, Confidential Attach., Declaration of Ted Stine, ¶¶ 2-7 (confidential) (filed Sept. 7, 2004) (AT&T Wireless Sept. 7 *Ex Parte* Letter).

<sup>568</sup> The opportunity cost of an action is the value of the foregone alternative action. THE MIT DICTIONARY OF MODERN ECONOMICS, edited by David W. Peace, at 315 (1996).

<sup>569</sup> See Hearings before the House Committee on Energy and Commerce, Subcommittee on Telecommunications and the Internet, 108th Congress, 2004 WL 84558556 (Feb. 4, 2004) (statement of Frank Louthan, Vice President Equity Research, Raymond James Financial, Inc.) ("Factors such as a need for common points of contact, wireless handset and battery quality, connections to security/monitoring services, and other practical limitations of wireless phones are . . . expected to play a part in multiple-person households retaining a wireline phone.") See also BellSouth July 15 *Ex Parte* Letter, Confidential Attach. at BLSFCC00096193-248; SBC July 15 *Ex Parte* Letter, Confidential Attach. at SBCFCC00014806-66.

possible effects on his credit rating, or inexpensive access to a home security system.<sup>570</sup> Prior to the recent implementation of wireless LNP, the consumer's opportunity cost to disconnect his wireline local exchange service also included the forfeiture of his landline phone number.<sup>571</sup>

242. Thus, while there is some evidence of a small, but growing number of consumers that have chosen to cut the cord and use wireless services in lieu of wireline service, this trend is a relatively recent phenomenon. Although we find that substitution between wireless and wireline services is currently limited, we nevertheless conclude that it has the potential to be a substantial source of facilities-based competition in the future.<sup>572</sup>

## 2. AT&T Wireless's Incentives as an Independent Wireless Carrier

243. As an independent wireless carrier, AT&T Wireless's consumer offerings are designed to add subscribers to its network without regard to any adverse effect these offerings may have on subscription to wireline services.<sup>573</sup> Thus, unlike Cingular whose strategies are influenced by SBC's and BellSouth's concerns about wireline revenues and access lines, AT&T Wireless is not likely to be concerned with the impact of its strategies on wireline revenues or access lines, except to the extent that they represent a potential source of new wireless customers. In fact, the documentary evidence indicates that AT&T Wireless sought to encourage mass market consumers to cut the cord,<sup>574</sup> and to develop technological enhancements and service offerings to encourage consumers to abandon the wireline network and to use wireless services in lieu of wireline services.<sup>575</sup> While there is no evidence that its strategies were discontinued in response to the proposed acquisition,<sup>576</sup> it seems likely that AT&T

<sup>570</sup> "Choosing Cell Over Landline Can Bring Unexpected Pain," *Wall Street Journal*, July 9, 2004. Absent the availability of cable modem service at his residence or a non-BOC affiliated DSL provider in a consumer's residential area, the consumer would forfeit his ability to obtain broadband service within SBC's territory or within BellSouth's territory in Georgia and Louisiana. [http://www02.sbc.com/DSL\\_new/content\\_new/1,,18,00.html?pl\\_code=MSBC245C8952P192180B0S0&pl\\_code=MSBC245C8952P185794B192143S0](http://www02.sbc.com/DSL_new/content_new/1,,18,00.html?pl_code=MSBC245C8952P192180B0S0&pl_code=MSBC245C8952P185794B192143S0) (visited Sept. 23, 2004); [http://www.fastaccess.com/content/consumer/conditions.jsp#one\\_month\\_free](http://www.fastaccess.com/content/consumer/conditions.jsp#one_month_free) (visited Sept. 23, 2004).

<sup>571</sup> While wireless LNP has yet to result in a significant movement of wireline phone numbers to a wireless carrier, the documents indicate that wireless LNP has increased the willingness of some consumers to cut the cord. From December 2003 through July 2004, the number of phone numbers ported (or moved) from a wireline to wireless carrier during a month ranged from 13,000 to 165,000. Over this same time period, the number of phone numbers ported from a wireless to wireline carrier ranged from 1,000 to 3,000 per month. In contrast, the number of phone numbers ported from one wireline carrier to another ranged from 561,000 to 809,000 per month while 591,000 to 873,000 phone numbers per month were ported from one wireless carrier to another. (Calculations are based on confidential data, as of Aug. 12, 2004, from the Number Portability Administration Center databases maintained by NeuStar, Inc.)

<sup>572</sup> The Commission estimates that the number of cable telephony lines, another form of intermodal competition for mass market wireline services, increased from 3 million to 3.2 million lines during the second half of 2003. Industry Analysis and Technology Division, Wireline Competition Bureau, FCC, Local Telephone Competition: Status as of Dec. 31, 2003, at 2 (rel. June 2003), available at <http://www.fcc.gov/wcb/intd/stats.html>.

<sup>573</sup> See, e.g., AT&T Wireless Sept. 7 *Ex Parte* Letter, Confidential Attach., Declarations of Ted Stine, ¶¶ 2-7, and Judith E. Cavalieri, ¶¶ 2-7.

<sup>574</sup> AT&T Wireless Sept. 7 *Ex Parte* Letter, Confidential Attach., Declarations of Ted Stine, paras. 2-7, and Judith E. Cavalieri, paras. 2-7; see also AT&T Wireless July 15 *Ex Parte* Letter, Confidential Attach. at AWSFCC00019144-56; AWSFCC00194000-48; AWSFCC00197237-43; AWSFCC00198124-96.

<sup>575</sup> See AT&T Wireless July 15 *Ex Parte* Letter, Confidential Attach. at AWSFCC00016637-728; AWSFCC00017128-50; AWSFCC00194049-68; AWSFCC00194333-80; AWSFCC00195361-410; AWSFCC00197204-13; AWSFCC00198124-96.

<sup>576</sup> AT&T Wireless Sept. 7 *Ex Parte* Letter, Confidential Attach., Declaration of Judith E. Cavalieri at ¶ 7.

Wireless would have continued to investigate and pursue methods to encourage the displacement of wireline services by wireless services because there is no evidence that AT&T Wireless disbanded the division tasked with these issues.<sup>577</sup>

### 3. Cingular's Product Offerings

244. Evidence in the record indicates that Cingular has developed and marketed many of its wireless products and services to complement – and specifically not to replace – residential wireline voice services. Cingular developed this strategy largely because SBC and BellSouth play a significant role in Cingular's business decisions. For instance, the carriers created cross-company teams which have developed products and services for Cingular.<sup>578</sup> These products and services are designed to integrate Cingular's wireless services with SBC's and BellSouth's wireline services, and thus, address the growth of wireline substitution.<sup>579</sup> Since 2002, the carriers have developed and refined a number of such products and services,<sup>580</sup> and Cingular has rolled out some of the initiatives into the market.<sup>581</sup> Evidence

<sup>577</sup> AT&T Wireless July 15 *Ex Parte* Letter, Confidential Attach. at AWSFCC00026639-51; *see also* AT&T Wireless Sept. 7 *Ex Parte* Letter, Confidential Attach., Declaration of Judith E. Cavalieri, ¶ 1.

<sup>578</sup> SBC states that SBC, BellSouth and Cingular "have dedicated significant resources and senior management attention to successfully implement their integration initiative: [r]epresentatives from nearly every SBC discipline are helping to bring the products to market; Cingular's product development budget is one of the largest in its history; [t]he companies created a working structure that includes joint product-development teams and joint alliance, technology and marketing councils that include each company's chief marketing, technology and information officers." *See* [http://www.sbc.com/Common/files/pdf/sbc\\_fact\\_sheet.pdf](http://www.sbc.com/Common/files/pdf/sbc_fact_sheet.pdf) (visited Sept. 23, 2004); *see also* SBC July 15 *Ex Parte* Letter, Confidential Attach. at SBCFCC00000037-50; SBCFCC00004899-902; SBCFCC00100487-95; Cingular July 15 *Ex Parte* Letter, Confidential Attach. at CNGFCC03099262-3.

<sup>579</sup> According to SBC, "SBC Communications Inc., BellSouth and Cingular Wireless . . . are executing a ground breaking initiative to spur customer acquisition and retention by creating a new category of products that integrate wireline and wireless features and functionality – all through a wireless network overlap competitors cannot match. The integrated products will deliver greater value, simplicity and productivity to customers and will create marketplace distinction for all three companies." *See* [http://www.sbc.com/Common/files/pdf/sbc\\_fact\\_sheet.pdf](http://www.sbc.com/Common/files/pdf/sbc_fact_sheet.pdf) (visited Sept. 23, 2004); *see also* BellSouth July 15 *Ex Parte* Letter, Confidential Attach. at BLSFCC00002658-71; BLSFCC00005025-32; BLSFCC00008859-927; BLSFCC00010005-35; BLSFCC00038546-76; BLSFCC00063774-93; BLSFCC00095363-402; BLSFCC00095436-533; BLSFCC00096193-248; BLSFCC00098191-212; Cingular July 15 *Ex Parte* Letter, Confidential Attach. at CNGFCC02995653-65; SBC July 15 *Ex Parte* Letter, Confidential Attach. at SBCFCC00000488-500; SBCFCC00002567-78; SBCFCC00012856-99; SBCFCC00012900-57; SBCFCC00112914-21.

<sup>580</sup> SBC states that it "is leveraging [Cingular's and SBC's] extensive wireline-wireless network overlap to create robust product bundles and to make more comprehensive use of distribution channels and marketing programs . . . [which allows] customers to consolidate their communications services with SBC companies or BellSouth," and that "[c]ustomers will be able to make a single call and receive discounted SBC or BellSouth wireline and Cingular wireless services on a single bill. Fully integrating these removes the distinction between wireline and wireless services, networks and devices." *See* [http://www.sbc.com/Common/files/pdf/sbc\\_fact\\_sheet.pdf](http://www.sbc.com/Common/files/pdf/sbc_fact_sheet.pdf) (visited Sept. 23, 2004); *see also* BellSouth July 15 *Ex Parte* Letter, Confidential Attach. at BLSFCC00211675-719; BLSFCC00214008-22; SBC July 15 *Ex Parte* Letter, Confidential Attach. at SBCFCC00001383-409; SBCFCC00002269-330; SBCFCC00069651-66; SBCFCC00069982-70013; SBCFCC00100270-4; SBCFCC00100608-32; SBCFCC00103689-703; SBCFCC00104927-68; SBCFCC00113666-87; SBCFCC00121701-34; SBCFCC00129640-707.

<sup>581</sup> For example, in June 2003, Cingular, SBC, and BellSouth introduced MinuteShare as "a new service enabling SBC or BellSouth residential customers to share a single bucket of wireline long distance and [Cingular] wireless local and long distance minutes." *See* [http://www.cingular.com/about/latest\\_news/03\\_09\\_09](http://www.cingular.com/about/latest_news/03_09_09) (visited Sept. 23, 2004). In September 2003, SBC and Cingular ran promotional discounts ranging from 5 percent to 20 percent for SBC landline customers who chose specified Cingular plans and also combined their wireline and

(continued....)

shows that there are current plans for products in 2005 which continue to address wireline retention issues,<sup>582</sup> and the record also demonstrates that SBC and BellSouth plan to use the acquisition of AT&T Wireless to further Cingular's existing wireline retention/integration initiatives.<sup>583</sup> Thus, it is clear from the record that SBC and BellSouth influence the development of Cingular's products and services; that some of Cingular's products and services are focused on retaining/integrating with its Bell Operating Company ("BOC") corporate parents' wireline customers; and that SBC and BellSouth plan to use the acquisition of AT&T Wireless, to some degree, to further this goal.

#### 4. Potential Loss of Intermodal Competition

245. It is likely that Cingular's acquisition of AT&T Wireless will have some impact on the development of intermodal competition.<sup>584</sup> Cingular has sought to win wireless customers by encouraging them to use wireless service in a complementary manner to their wireline service, which is likely provided by one or the other of Cingular's parent companies in the SBC and BellSouth regions. With the acquisition, Cingular will have a greater number of wireless subscribers in its parent company regions, which increases the number of actual or potential Cingular subscribers that have SBC or BellSouth as their wireline provider. This would further reduce Cingular's incentives to make available wireless substitute offerings, as Cingular wireless customers would end up reducing the number of SBC and BellSouth wireline access lines by cutting the cord. As a result, it appears that Cingular is unlikely to initiate its own wireless substitute offering post-acquisition in the SBC and BellSouth regions.<sup>585</sup> Thus, one potential harm arising from Cingular's acquisition of AT&T Wireless is an increased disincentive for the merged entity to offer new innovative plans that would further intermodal competition in these areas.

246. The acquisition will also affect intermodal competition through the likelihood that

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landline billing. [http://www.sbc.com/Common/files/pdf/ff\\_wireless\\_momentum.pdf](http://www.sbc.com/Common/files/pdf/ff_wireless_momentum.pdf) (visited Sept. 23, 2004). In addition, the carriers have also rolled out the following initiatives: "Simplified Ordering" — allows customers to order wireless service through SBC and BellSouth wireline sales channels; "Extensive Distribution Channels" — SBC and BellSouth call centers and Cingular retail locations are used to cross-sell wireline and wireless service; SBC Yahoo! DSL is also available in some Cingular retail stores; and "Wireless Co-branding" — the companies promote a co-branded tag line closely tying the SBC and BellSouth brands to the Cingular brand in advertising and marketing activities. [http://www.sbc.com/Common/files/pdf/sbc\\_fact\\_sheet.pdf](http://www.sbc.com/Common/files/pdf/sbc_fact_sheet.pdf) (visited Sept. 23, 2004); see also SBC July 15 *Ex Parte* Letter, Confidential Attach. at SBCFCC00069982-70013; SBCFCC00100608-32; SBCFCC00103689-703; SBCFCC00113666-87.

<sup>582</sup> According to SBC, the wireline/wireless integrated platform "will allow possible future offerings, such as a single wireless and wireline phone number, interoperability between wireless and wireline instant messaging service, and integrated voice-activated services, such as voice-activated dialing and voice portal services that will allow customers to verbally request Internet content. Products include "Unified Communications," which "gives subscribers a single message center that makes voice mail, e-mails and faxes accessible via phone, computer, or a PDA." See [http://www.sbc.com/Common/files/pdf/sbc\\_fact\\_sheet.pdf](http://www.sbc.com/Common/files/pdf/sbc_fact_sheet.pdf) (visited Sept. 23, 2004); see also BellSouth July 15 *Ex Parte* Letter, Confidential Attach. at BLSFCC00005029-32.

<sup>583</sup> BellSouth July 15 *Ex Parte* Letter, Confidential Attach. at BLSFCC00015716; Cingular July 15 *Ex Parte* Letter, Confidential Attach. at CNGFCC02997390-466; CNGFCC02997441-2.

<sup>584</sup> Consumer Federation of America and Consumer Union Petition to Deny at 12; Thrifty Petition to Deny at 4. *But see* Joint Opposition to Petitions to Deny and Comments at 21, n.68.

<sup>585</sup> Although a review of carriers' pricing plans in connection with this transaction indicates that some LEC-affiliated carriers may offer more attractive pricing plans outside of their LEC region, we note that Cingular does not appear to demonstrate strong regional differences in its plans. Cingular has filed an affidavit consistent with this analysis. Letter from David G. Richards, Cingular Wireless, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 04-70, Confidential Attach., Declaration of Marc P. Lefar, ¶ 2 (filed Sept. 2, 2004).

Cingular will not pursue AT&T Wireless's extensive plans for wireline replacement offerings. As discussed above, before the merger between the two wireless providers was announced, AT&T Wireless had consistently worked to develop an unlimited local wireless offering that could be marketed or used as a substitute for wireline service. Post-merger, AT&T Wireless's incentive to continue offering service packages designed to induce consumers to cut the cord may be reduced. Even with an acquisition, AT&T Wireless's plans could have been kept in place, so long as AT&T Wireless was acquired by an independent wireless carrier. Under that scenario, the merged entity would have experienced an increase in concentration of spectrum that could have prompted the introduction of innovative plans designed to encourage wireline replacement.<sup>586</sup>

## 5. Public Interest Harms and Benefits

247. After considering the issues raised in the record, we conclude that the public interest harm potentially arising from the loss of AT&T Wireless as an intermodal competitor is presently quite limited.<sup>587</sup> As the record makes clear, most wireline customers do not now consider wireless service to be a close substitute for their primary line obtained from a wireline carrier.<sup>588</sup> Consumers are just beginning to evaluate the attractiveness of low-priced, high-minute plans as a possible replacement for their traditional wireline services. In addition, as the Commission has previously recognized, there remain qualitative differences between wireless and wireline services.<sup>589</sup> We therefore consider it likely that many wireline customers will continue to perceive wireline service as necessary for at least some of their communications needs, and thus limit the extent of primary line substitution between wireline and wireless for the foreseeable future.

248. To the extent additional wireline customers come to see wireless service as a close substitute for their primary line, moreover, other independent wireless carriers will have every incentive

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<sup>586</sup> We do not find much harm in the loss of AT&T Wireless as a potential partner in a competitive LEC's offering of a wireline/wireless service bundle as consumers have shown relatively low interest in such offerings. Additionally, other independent wireless carriers, such as Sprint, may be willing to enter into these relationships. See *Mediacom to Sell Phone Service over Cable in Deal with Sprint*, WALL STREET J., Aug. 25, 2004; see also AT&T Wireless July 15 *Ex Parte* Letter, Confidential Attach. at AWSFCC0018378-403; AWSFCC00331190-203.

<sup>587</sup> We are not persuaded by the study submitted by CompTel/ASCENT showing that prices for wireless and wireline services will increase as a result of the proposed acquisition because many of the study's underlying assumptions, as well as the methodology of the study itself, are flawed. For example, the model used by the study to project the price change for wireline services (local exchange and interexchange services) assumes that SBC and BellSouth exercise monopoly power for all wireline services. This assumption is inconsistent with the regulation of local exchange services, the market structure for wireline interexchange services, and the ability of consumers to migrate wireline interexchange minutes to their wireless service. The analysis also fails to consider that wireline and wireless service are purchased in localized markets, which include significant variability in service plans across markets. Without an analysis of more disaggregated data, it is difficult to make informed conclusions about potential harms in any particular relevant geographic market or to consumer welfare in general. Furthermore, CompTel/ASCENT's proposed remedies do not adequately show a nexus between the alleged harms and proposed remedies. See CompTel/ASCENT Oct 1 *Ex Parte* Letter at 2, Attach. at 5, 11-17.

<sup>588</sup> See 2004 Telephone Service Paper.

<sup>589</sup> See, e.g., *Triennial Review Order*, 18 FCC Rcd at 17119 ¶ 230 (recognizing that wireless services may have a comparative advantage in mobility, but wireline services may have comparative advantages with respect to reliability and ubiquity); *Application by Qwest Communications International, Inc. for Authorization to Provide In-Region, InterLATA Services in New Mexico, Oregon, and South Dakota*, WC Docket No. 03-11, 18 FCC Rcd 7325, 7334-5 ¶ 18 (2003) (acknowledging that "there are certain technical and functional differences between broadband PCS and wireline exchange service" where commenters had raised differences related to E-911 coverage and the use of multiple handsets, among others).

to exploit that market opportunity. After this merger, several national carriers as well as numerous regional carriers will continue to compete as independent wireless carriers in markets affected by this transaction.<sup>590</sup> The existence of such market participants should be sufficient to ensure that wireline subscribers willing to cut the cord will be able to choose from among several competitive alternatives.<sup>591</sup> The loss at this juncture of a single independent wireless carrier accordingly should have only a small adverse effect on the overall level of intermodal competition.

249. We also find that the potential public interest benefits from the proposed transaction outweigh the relatively limited public interest harm arising from the loss of AT&T Wireless as an independent wireless carrier. These benefits include the improvements in service quality that likely will arise from the combination of the Applicants' spectrum and network assets, as well as the merged entity's increased ability to extend its network into licensed areas that neither Applicant presently serves. The additional spectrum available to the merged entity also should facilitate its deployment of more robust and ubiquitous advanced services. In addition, this merger will create a stronger intermodal competitor outside of the SBC and BellSouth regions, which could possibly spark a competitive response from other wireless carriers. We find these public interest benefits sufficient to prevent the limited harm from loss of an independent wireless carrier from tipping the balance against the proposed transaction.

250. We caution, however, that we may take a different view with regard to any future transactions that would diminish significantly the ability of independent wireless carriers to offer intermodal alternatives to wireline service. At this time, we recognize that there are benefits to consumers from both wireline replacement offerings and complement offerings. We intend to monitor carefully further developments in this marketplace that may affect intermodal competition, and to consider carefully future transactions that may impede our efforts in that regard. The Commission has worked hard to create the regulatory conditions for robust intermodal competition, and it remains strongly committed to achieving that important policy goal.

## VI. CONDITIONS/REMEDIES

251. Using the analytical standards outlined above, we found that the Applicants' proposed transaction would pose significant competitive harms in a number of local mobile telephony markets. We conclude that, in these markets, these potential harms would not be outweighed by the proposed transaction's alleged public interest benefits. Thus, if our analysis ended at this point, we would have to conclude that the Applicants have not demonstrated that the proposed transaction, on balance, would serve the public interest, convenience, and necessity.

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<sup>590</sup> Our conclusion is based on compliance with any conditions necessary to address horizontal concentration in individual wireless markets, as discussed elsewhere in this Order. We also note that SBC and BellSouth face competition in the mass market from other intermodal providers such as cable operators and VoIP providers, as well as intramodal competitors (e.g., carriers purchasing unbundled loop access). See Industry Analysis and Technology Division, Wireline Competition Bureau, FCC, Local Telephone Competition: Status as of Dec. 31, 2003, at 1-2 (rel. June 2003), available at <http://www.fcc.gov/wcb/iatd/stats.html>; Anne Kandra, *Should You Switch to a Net Phone? Making Calls Over Your Broadband Connection Can Save You Some Money*, PC World, Nov. 2004 (2004 WL 65832115), at 1 ("The Yankee Group expects there will be 1 million VoIP subscribers by the end of 2004, up from just 131,000 last year."). At the same time, we note that facilities-based competition is greater for enterprise services than for mass market services.

<sup>591</sup> We note that regional carriers, such as MetroPCS and Leap Wireless, already offer plans that are designed to persuade consumers to cut the cord. These plans generally allow unlimited local calling within some specified local calling area and include a traditional monthly recurring fee long distance calling option that closely resembles the cost for wireline local exchange service. We also note that a national carrier, T-Mobile, already offers a plan with 3,000 anytime local and long distance minutes for \$49.99 per month within specified regional calling areas. Gilbert Declaration, Appendix at A5.

252. In its review of transactions, the Commission is empowered to impose conditions on the transfer of control of Commission licenses to mitigate the harms the transaction would likely create. Such conditions are tailored to address the specific harms anticipated based on economic analysis, examination of documents submitted in response to our inquiry, and public comment contained in the record of this proceeding. We conclude that the conditions set forth below alter the public interest balance of the proposed transaction by mitigating the potential public interest harms. Accordingly, with the conditions that we adopt in this Order, and assuming the Applicants' compliance with these conditions, we find that the Applicants have demonstrated that the proposed transfer of licenses will serve the public interest, convenience, and necessity.

253. We received a number of additional proposals during the comment period from commenters. As we discuss more fully below, we decline to impose additional conditions proposed by various commenters which we find are not tied to merger-specific harms.

#### A. Divestitures

##### 1. Operating Units

254. In Section V.A.3.d.(ii), we found that the transaction, as proposed, would be likely to cause significant competitive harm in certain geographic markets. Specifically, our analysis indicated that, in certain markets, there will not be enough competing carriers remaining, post-merger, with sufficient network and spectrum assets, to deter anticompetitive behavior by the merged entity. We therefore condition this grant of authority to transfer control of licenses from AT&T Wireless to Cingular on the divestiture of AT&T Wireless operating units (including spectrum associated with such operating units) in the following markets:

Market	Market Name
CMA045	Oklahoma City, OK
CMA292	Sherman-Denison, TX
CMA293	Owensboro, KY
CMA326	Arkansas 3-Sharp
CMA327	Arkansas 4-Clay
CMA328	Arkansas 5-Cross
CMA329	Arkansas 6-Cleburne
CMA330	Arkansas 7-Pope
CMA357	Connecticut 1-Litchfield
CMA443	Kentucky 1-Fulton
CMA494	Mississippi 2-Benton
CMA496	Mississippi 4-Yalobusha
CMA517	Missouri 14-Barton
CMA598	Oklahoma 3-Grant
CMA657	Texas 6-Jack
CMA662	Texas 11-Cherokee

##### 2. Spectrum

255. In two large markets with high population density, we found that the combined entity would have particularly high spectrum holdings. We found, specifically, that because these are dense

urban areas, spectrum needs by competing carriers would likely be higher. We therefore condition our approval of the transaction on divestitures of 10 MHz of PCS spectrum in each of these markets in order to enable competing carriers to acquire sufficient bandwidth to compete effectively against the combined entity:

Market	Market Name
BTA112	Detroit, MI
CMA009	Dallas, TX

256. In addition, as discussed in Section V.A.3.d.(ii), above, the Applicants have committed to divest spectrum held by the combined entity in excess of 80 MHz in any county in which it has interests in more than 80 MHz of cellular and Broadband PCS spectrum.<sup>592</sup> We find that this commitment will require spectrum divestitures in the following counties in addition to the divestitures we have ordered above, and we condition our approval of the transaction on divestiture down to no more than 80 MHz of such spectrum in each of the following counties:

County	CMA	CEA
Anderson, TN	CMA079	CEA147
Blount, TN	CMA079	CEA147
Knox, TN	CMA079	CEA147
Union, TN	CMA079	CEA147
Neuces, TX	CMA112	CEA1880
San Patricio, TX	CMA112	CEA1880
Victoria, TX	CMA300	CEA8750
Murray, GA	CMA371	CEA520
Whitfield, GA	CMA371	CEA520
Floyd, GA	CMA373	CEA520
Polk, GA	CMA373	CEA520
Campbell, TN	CMA645	CEA147
Cumberland, TN	CMA645	CEA341
Hancock, TN	CMA645	CEA147
Morgan, TN	CMA645	CEA147
Roane, TN	CMA645	CEA147
Scott, TN	CMA645	CEA147
Cocke, TN	CMA646	CEA147
Grainger, TN	CMA646	CEA147
Hamblen, TN	CMA646	CEA147
Jefferson, TN	CMA646	CEA147
Sevier, TN	CMA646	CEA147
Loudon, TN	CMA649	CEA147
McMinn, TN	CMA649	CEA053
Monroe, TN	CMA649	CEA053
Jasper, TX	CMA668	CEA840
Newton, TX	CMA668	CEA840
Tyler, TX	CMA668	CEA840
Dimmit, TX	CMA669	CEA7240

<sup>592</sup> See Cingular Opposition at 9; see also Application, Exhibit 1, at 19 n.82.