



HAL
open science

Seizing opportunities for international growth - The case of Iliad and the Italian mobile telecommunications market

Pierre Vialle, Jason Whalley, Shengxing Yang

► To cite this version:

Pierre Vialle, Jason Whalley, Shengxing Yang. Seizing opportunities for international growth - The case of Iliad and the Italian mobile telecommunications market. DIF 2021: 3rd International Conference on Digital, Innovation, Entrepreneurship & Financing, Insec U. Research Center; Concordia University; Jilin University, Dec 2021, Lyon, France. hal-03549645

HAL Id: hal-03549645

<https://hal.science/hal-03549645>

Submitted on 31 Jan 2022

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



TITLE: Seizing opportunities for international growth – The case of Iliad and the Italian mobile telecommunications market

Authors

Author 1

Name: Pierre Vialle

Affiliation: Université Paris-Saclay, Univ Evry, IMT-BS, LITEM, 91025, Evry-Courcouronnes, France

Email: pierre.vialle@imt-bs.eu

Author 2

Name: Jason Whalley

Affiliation: Northumbria University, Newcastle upon Tyne, UK

Email: jason.whalley@northumbria.ac.uk

Author 3

Name: Shengxing Yang

Affiliation: Université Paris Saclay

Email: shengxing.yang@universite-paris-saclay.fr

Corresponding author: Pierre Vialle

ABSTRACT

Purpose

To analyse the internationalisation process of a mobile operator and highlight the specificities of this particular industry

Design/methodology/approach

Longitudinal single case study based on document research

Findings

The internationalisation process differs from the main model (Uppsala model). It necessitates the ability to seize opportunities as they arise. Seizing such opportunities leads directly to an initial strong commitment without going through a process of gradual commitment. The role of regulation is also outlined.

Originality/Value

While studies on the internationalisation of (mobile) operators have been, the process of internationalisation has not been conceptualised in comparison with the main model.

Keywords: *Mobile Telecommunications, disruption, entry, internationalisation, innovation, Italy*

1. Introduction

Since the launch of mobile telecommunications in the early 1980s, these markets have changed through a combination of technological change, liberalisation and competition (Curwen & Whalley, 2008, 2010; Vialle, 1998). Technological change has widened the services that mobile devices provide; and while some still use them to communicate to others, they are increasingly used as a way to access the Internet. While liberalisation has increased the number of mobile operators present in each market, and it is generally accepted that these markets should be competitive, there are many barriers to entry that limit the number of companies within each market (Park, 2009). Not only do these barriers include the construction of a network as well as attracting subscribers and developing a brand, but within mobile telecommunications it also means acquiring a licence.

The acquisition of a licence can be costly. At the turn of the millennium, for example, Germany and the UK sold 3G licences for \$46bn and \$34bn respectively (Deighton, 2000; Klemperer, 2002). In both cases, the auction attracted more bidders than the limited number of licences that were available, pushing the price up way beyond initial expectations. With each new generation of mobile technologies (3G, 4G etc.) governments offer only a limited number of licences, for a combination of economic and technical reasons. This limited number of licences constitutes a significant barrier to entry for would-be mobile operators. As a result,

there are effectively only two ways to enter a mobile telecommunications market: participate in the licensing process or acquire an existing operator (which already has a licence).

The Iliad Group and its founder Xavier Niel was initially focused on the French market only and has been a pioneer of broadband Internet in this country. It then used the licensing of an additional 3G licence in the mid-2000s to enter the mobile market (Berne, Vialle & Whalley, 2019). Highly competitive pricing was integral to its strategy (Commsupdate, 2012a). After this successful entry into the French market, Iliad sought unsuccessfully to enter another large European market. Xavier Niel, through his investment holding NJJ Capital had only been able to invest in rather small countries, such as Monaco or Switzerland. This changed, however, in November 2015 when Xavier Niel acquired a significant stake in Telecom Italia Mobile (TIM), the incumbent telecommunications operator in Italy. The Italian market was particularly attractive because of its high consumption of telecommunication service, with TIM being considered a 'slumbering giant' ripe for new management. A better opportunity finally came up in 2016, following the decision made by two mobile operators to merge. The European Commission decided that the merger between 3 Italia and WIND could only go ahead if they shed assets to create a new rival. To ensure that the merge occurred, assets were divested, thereby creating the possibility for Iliad to enter the mobile market in 2018.

The internationalisation of telecommunications operators, and in particular of mobile operators does not conform to a usual pattern. It does not follow a gradual path of increasing commitment in a target country according to the experience accumulated, as formalised in the Upsala model (Johanson & Vahlne, 1977, 1990). It starts directly with a high commitment, by investing in a licence and a network, or, alternatively, by acquiring an incumbent mobile operator. In this particular case we show that the initial strong investment has been followed by an incremental process of leveraging complementary assets through several partnerships.

In this article, we describe and analyse how this opportunity arose and how Iliad has been able to seize it. We first address the market and competitive situation which led two incumbents, 3 Italia and WIND, to merge. Then we show how the perceived risk of insufficient competition resulting from this merger led regulatory authorities to mandate the merged company to shed network assets and frequencies. We also explain how Iliad has been able to be selected and enter the Italian market.

To explore the entry and impact of Iliad into the Italian telecommunications market, we adopt a longitudinal case study approach (Yin, 2014). This enables us to answer a series of 'why' and 'how' questions around the entry of Iliad into the market (Eisenhardt, 1989; Yin, 2014), and sheds further light on the relatively limited theoretical understanding of the entry of

operators into new markets (Eisenhardt & Graebner, 2007). Our analysis draws on data from a variety of sources (such as, for example, annual reports, regulatory statements, the trade and financial press) that were initially combined into a timeline. As the timeline was being developed, sources were triangulated. Those observations where sources disagreed were either removed or treated with a degree of caution in the subsequent analysis. It is worth noting that the sources were mainly published in either English or French, though some Italian sources were translated using Google Translate.

2. Literature review

2.1 General theories of internationalisation

The internationalisation process of firms has raised the interest of scholars for many years and has been the subject of several conceptual contributions. The number and diversity of such contributions is far too high to be presented in this article, so we will restrict our short review. One of the most known is the so-called ‘Eclectic Paradigm’ by Dunning (1979), which originally aimed at explaining the development of FDI. Also called the OLI model, the theory considers that firm’s investment abroad is a rational decision in order to benefit from some advantages. These are Ownership (O) advantages such as ownership rights, Location (L) advantages such as cheaper labour, and Internalisation (I) advantages, as compared to transacting with another firm.

The Resource-Based View (RBV), as the dominant theory in strategic management, can also be applied to internationalisation issues (Collis, 1991; Peng, 2001). There is an obvious relation to the ‘Ownership’ component of the OLI model, as the RBV considers that firm-specific advantages are derived from the resource and capabilities they possess. In this perspective, firms tend to choose internationalisation opportunities in which they can better use their accumulated resources and competences, including the knowledge they can transfer to their subsidiaries or partners (Kogut & Zander, 1993). Alternatively, latecomer firms, which are resource poor, can use internationalisation to access or acquire the new resources and competences that are available in other countries (Matthews, 2002). It can also provide a link to more behavioural approaches, as resource and competence development results from experience and is largely path dependent.

Other theories have adopted a behavioural perspective, in particular the frequently cited Upsala model (Johanson & Vahlne, 1977, 1990). In this model, the uncertainty resulting from the lack of foreign market knowledge leads firms to adopt a cautious and gradual approach in order to limit perceived risks. At a general international strategy level, firms thus tend to

internationalise first in psychically close countries (i.e., in neighbouring countries) before extending the scope of their operations to psychically more distant countries, as they get more skilled in internationalisation. At the target country level, they tend to start with low investment, i.e., with low-commitment forms such as plain sales agents, and progressively increase their commitment as they gain more experiential learning about this market. This process can ultimately result in high commitment forms, such as a fully owned subsidiary.

Apart from the RBV, which is general enough to be a “fit-for-all” theory, the usefulness of these models is somehow limited by the fact that they have been elaborated in the context of companies producing products. In particular, their relevance has been challenged in the case of services, and alternative frameworks have been proposed (Clack et al, 1996; Chidlow et al, 2019). While these approaches shed a different light on internationalisation processes, they are too influenced by the ‘marketing of services’ perspective which puts the emphasis on service relation. As such, they also fail to fully account for the case of infrastructure-based and license-based services such as mobile telecommunications services.

2.2. Internationalisation of telecommunications operators

The internationalisation of the telecommunications industry has also been scrutinized in a now large body of literature, some of it being reviewed in Jakopin (2008) and Dike and Rose (2017). The first wave of internationalisation resulting from the market liberalisation in the second half of the 1990s initially attracted the attention of several scholars. Following a combination of a wave of privatisation of former monopolies and of market liberalisation, telecom operators initiated a strong international expansion around two types of strategies: global strategies aiming at offering global services to multinationals; and multidomestic strategies aiming at exploiting firm-specific advantages in foreign markets (Antonelli, 1994; Vialle, 1998). Following the initial wave of privatisations, mobile telecommunications has been the subject of a more extensive and longer-lasting phenomenon of new market entries and internationalisation (Curwen & Whalley, 2008; Whalley & Curwen, 2003, 2005). One of the main reasons for this behaviour is that a significant number of new licences have been issued, often when each new generation of mobile technology emerges. For example, in Europe, the launch of 3G technologies has been accompanied by the creation of one or two new mobile network operators (MNOs) in each country. Some MNOs, such as Vodafone, have therefore seized such opportunities in order to become a global company (Curwen & Whalley, 2006, 2008, 2010). A phenomenon of regionalisation could also be observed. It may be due to cultural and linguistic proximity, with the Spanish Telefonica intensively investing in Latin America

and France Télécom/Orange developing a presence in French-speaking African countries (Curwen and Whalley, 2006, 2008). In Europe, regionalisation was pushed by a common regulatory framework, a common technology, as well as the opportunity to internalise roaming.

Drawing on our understanding of the telecommunications industry, it is possible to identify three points that are sometimes overlooked in non-specialist literature. The first is the importance of complementary assets. For example, new entrants during the 1990s were often utility companies that could use their own infrastructure to easily roll out a telecommunications infrastructure, such as a railway network in France or an electricity network in UK (Vialle, 1998). More recently, companies such as Millicom or Vodafone have emphasised integrating fixed and mobile network and service (Whalley & Curwen, 2020; Curwen, Whalley & Vialle, 2019). Berne, Vialle & Whalley (2019) show how complementary assets such as a core network, a billing system, an installed base of customers, or reputation, have facilitated the entry of Iliad (Free) into mobile telecommunications. The second is the role of licenses. Spectrum is a rare resource and each country limits the number of licenses granted to network operators. It means that despite the role of different other factors, market entry is essentially opportunity-based: a firm can enter a market as MNO only when a new license is issued, or alternatively when an incumbent MNO is on sale. Therefore, regulatory decisions influence mobile telecommunication markets, in terms of both their structure (the number of players) as well as the technologies which are used (3G, 4G, etc). The third point, which is derived from the second, is that there is no possible gradual commitment as described in the Uppsala model (Johanson & Vahlne, 1977). It always starts with a high commitment: a large investment in a licence and a network, or an investment in an incumbent MNO. The process is about searching for opportunities, and then quickly seizing opportunities.

These considerations are important to understand the case we describe below. Iliad had to seize the unique opportunity created by a regulatory decision, and to start operations without complementary assets. Then from this initial high commitment, it followed an incremental process of leveraging complementary assets thanks to several partnerships.

3. Case study

3.1 Overview

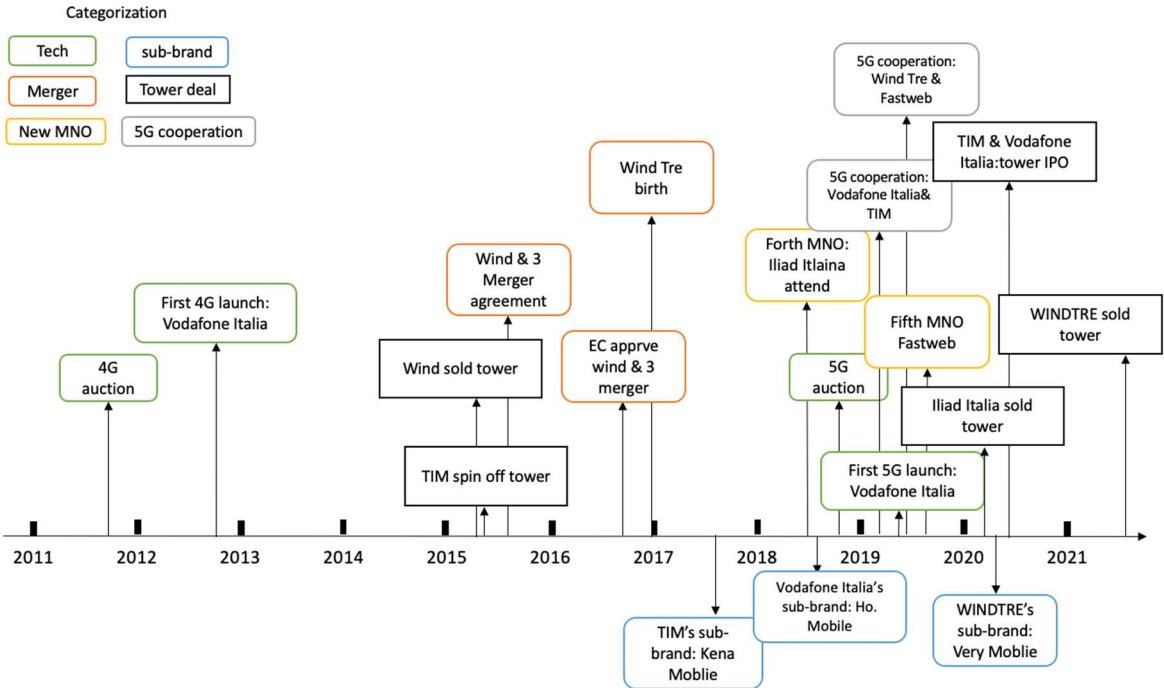
The Italian mobile telecommunication market is arguably competitive; except for the duration of the preparation of the entry of Iliad Italia, there always been at least four MNOs competing in the market. Iliad got the chance to enter the market due to the remedies imposed on Wind and H3G who merged to form Wind Tre, a 20/50 joint venture. Iliad Italia entered this market

in the middle of 2018 with an ‘unlimited’, low-cost service, forcing incumbents and MVNOs to offer similar high ‘value for money’ services. The three incumbents introduced their sub-brands to win back their customers. The former MVNO Fastweb became the fifth MNO in 2019, who already had a large share of the fixed market. With the entry of Fastweb, the price war became more intense.

One significant change was the shift from competition around 4G to co-operation to rollout 5G. It appears that MNOs were annoyed with the operator that started the price war. Iliad Italia is the only MNO with no 5G rollout partnership. The other four MNOs can be divided into two groups: TIM and Vodafone Italia; WINDTRE and Fastweb. Another significant phenomenon is that almost all of the MNOs have tried or are still trying to monetize their tower asset, whether through sale and leaseback deal, their spin-off or IPO (Commsupdate, 2014a, 2015a, 2015b). The market is suffering from subscriber churn and continuously decreasing revenue even when large investments are needed to build new infrastructure and purchase mobile licenses from the government.

In this case study we describe the evolution and events which led to the entry of Iliad in Italy, a form of high commitment internationalisation. Then we outline how Iliad Italia followed a more gradual approach when extending its scope of activities.

Figure 1: Major events in the Italian telecommunications market, 2011-2021



Source: Compiled from multiple sources: media reports, companies' press releases and annual reports, and Agcom's reports

Table 1: Timeline for Italian mobile telecommunication from 2010 to 2021 (December)

| Year | Date | Event |
|------|-------|---|
| 2010 | Oct | VimpelCom (now VEON) buy Wind Italy |
| 2011 | Oct | LTE(4G) spectrum auction |
| 2013 | Dec | Rumour about Wind & 3 merger |
| 2015 | Aug | Hutchison, VimpelCom agree to merge 3 Italia, Wind Italy in 50/50 JV |
| | Oct | Xavier Niel (CEO of Iliad) has become TI's second-largest shareholder |
| 2016 | Jan | TI unify its brand as TIM |
| | March | European Commission investigates into Wind & 3 merger |
| | June | Remedies for Wind&3 merger: divestment of sufficient assets to allow a new entrant. Fastweb, Iliad & Digicel interested |
| | July | Xavier Niel exits TI, sell his vote rights |
| | Sept | European Commission approves Wind&3 merger, Iliad gain the chance |
| 2017 | Jan | Wind Tre officially birth |
| | March | TIM introduce a low-cost sub-brand: Kena Mobile |
| 2018 | May | Iliad Italia officially launch in Italy as the fourth Italian MNO |
| | June | Vodafone Italia introduces a low-cost sub-brand: ho. Mobile |
| | July | Iliad Italia attract 1 million users in 50 days |
| | Sept | Iliad Italia hits 2 million users |
| | Oct | 5G spectrum auction in Italy ends with €6.55bn |
| 2020 | July | Iliad Italia and Open Fiber confirm the deal in the fixed market |
| 2021 | Nov | KKR makes a bid for TIM |

Source: Compiled from multiple sources: media reports, companies' press releases and annual reports, and Agcom's reports

3.2. Trends and changes in the Italian mobile telecommunication market, 2011 to 2016

Since the LTE (4G) spectrum auction was undertaken in 2011, MNOs have sought to offer new services. During this period, the Italian mobile telecommunication market consisted of four main MNOs: TIM, Vodafone Italia, Wind Italia, and H3G. TIM was the market leader with the largest market share, followed by Vodafone Italia, Wind, and H3G. Moreover, the market share among the players appears to be stable. Two merger rumours circulated, with one - Wind and H3G - occurring. This merger was approved by European Commission in 2016, creating the opportunity for Iliad to become the fourth Italian MNO (European Commission, 2016b). Tables 2, 3 and 4 respectively introduce the general market situation, market revenue, and SIM cards within this period.

Table 2: Italian mobile telecommunication market 2010 - 2016

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|--------|--------|--------|-------|-------|-------|-------|
| Mobile revenue (billion €) | 17,18 | 16,81 | 16,87 | 15,11 | 13,66 | 13,51 | 13,94 |
| voice service | 10,47 | 9,95 | 9,22 | 7,59 | 6,41 | 5,94 | 5,67 |
| data service | 4,53 | 4,65 | 4,92 | 4,85 | 4,81 | 5,03 | 5,20 |
| terminal and other services | 2,18 | 2,21 | 2,73 | 2,67 | 2,44 | 2,54 | 3,07 |
| investment in mobile fixed assets (billion €) | 2,50 | 2,46 | 3,25 | 2,85 | 2,77 | 3,11 | 2,47 |
| SMS sent (billion) | 86,16 | 90,27 | 97,50 | 77,78 | 46,56 | 33,67 | 25,04 |
| Mobile data usage (Gigabytes/month/per SIM) | 0,60 | 0,64 | 0,77 | 0,86 | 1,06 | 1,41 | 1,87 |
| Total lines | 97,93 | 100,86 | 98,60 | 98,81 | 97,52 | 96,89 | 98,18 |
| SIM card (exc M2M) | 93,70 | 96,06 | 93,53 | 92,85 | 89,91 | 87,69 | 85,96 |
| voice only | 70,80 | 69,06 | 63,14 | 55,96 | 46,36 | 39,77 | 35,34 |
| voice+data | 22,90 | 27,00 | 30,39 | 36,89 | 43,55 | 47,92 | 50,62 |
| M2M | 4,23 | 4,80 | 5,07 | 5,97 | 7,60 | 9,20 | 12,23 |
| Mobile Month ARPU(SIM) € /month | 15,55 | 14,89 | 14,55 | 12,87 | 11,92 | 12,12 | 13,38 |
| Mobile Month ARPU(User) € /month | 29,75 | 29,25 | 29,50 | 26,16 | 22,22 | 22,08 | 22,74 |
| Terminal price index (2010=100) | 100,00 | 76,70 | 72,40 | 60,30 | 52,30 | 53,50 | 50,40 |
| Service price index (2010=100) | 100,00 | 101,70 | 100,80 | 84,50 | 82,20 | 81,60 | 78,50 |
| Voice (cent€/minutes) | 8,32 | 7,03 | 6,47 | 4,87 | 3,85 | 3,45 | 3,32 |
| SMS (cent€/message) | 2,71 | 2,62 | 2,21 | 2,09 | 2,50 | 2,83 | 3,16 |
| Data (€/GB) | 18,01 | 13,65 | 14,52 | 12,25 | 7,45 | 5,85 | 6,05 |

Source: compiled by the authors from a variety of Agcom publications

Table 3: Italian mobile market revenue segmentation 2010 – 2016

| Mobile Market revenue | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|
| TIM | 6426 | 5844 | 5484 | 4977 | 4423 | 4375 | 4466 |
| Vodafone | 6234 | 6115 | 5616 | 4797 | 4116 | 4208 | 4301 |
| Wind | 3187 | 3252 | 3169 | 3118 | 2796 | 2806 | 4625* |
| H3G | 1383 | 1287 | 1658 | 1619 | 1559 | 1633 | |
| MVNOs | 280 | 440 | 493 | 480 | 547 | 554 | 514 |
| Total volume (mln €) | 17510 | 16940 | 16420 | 14990 | 13442 | 13576 | 13905 |

Source: compiled by the authors from a variety of Agcom publications

Table 4: Italian SIM card lines segmentation 2010 - 2016

| SIM card lines ¹ | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| TIM | 31,0 | 32,3 | 32,1 | 31,2 | 30,4 | 30,0 | 29,6 |
| Vodafone Italia | 30,6 | 30,0 | 29,4 | 28,5 | 25,5 | 24,4 | 28,9 |
| Wind | 19,9 | 20,9 | 21,7 | 22,3 | 21,6 | 21,1 | 32,5 |
| H3G | 9,1 | 9,2 | 9,5 | 9,7 | 10,0 | 10,1 | |
| Poste Mobile (MVNO) | 1,5 | 1,8 | 2,5 | 2,8 | 3,3 | 3,6 | 3,7 |
| Other MVNOs | 1,6 | 1,8 | 2,0 | 2,4 | 3,4 | 3,3 | 3,6 |
| Total (in a million) | 93,7 | 96,0 | 97,2 | 96,9 | 94,2 | 92,5 | 98,2 |

Source: compiled by the authors from a variety of Agcom publications

¹ Agcom started to cover the Human and M2M lines segmentation detail for each MNOs since 2014

One of the main events during this period was the launch of auctions for the new 4G mobile generation licences. The result of the Italian 4G auction was described as an “amazing achievement” and “beyond expectations” by Paolo Romani, the Italian Industry Minister, considering the difficult market situation within Italy (Commsupdate, 2011a). The auction closed on 29 September, taking 22 days with 469 rounds of bidding, costing MNOs more than €3.9 billion to acquire the spectrum which had initially been valued at €2.4 billion (Frankrayal, 2011).

TIM, Vodafone Italia, Wind, and 3 were the main participants for this auction; 3 paid around €300 million, with the other three operators all spending more than €1 billion for their spectrum. As for the availability of the frequency, the 1800 MHz spectrum was the first to be made available followed by 2600 MHz by the end of 2012. The 800 MHz spectrum would be available in January 2013 after it was released by broadcasters. The licences will expire on 3 December 2029. The result was summarized below in Table 5.

Table 5: Result of LET(4G) auction

| Operator | Band: 800 MHz | | Band: 1800 MHz | | Band: 2600 MHz FDD | | Band: 2600 MHz TDD | | Total |
|---------------------|---------------|--------------------|----------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | Quantity | Total prize (EURm) | Quantity | Total prize (EURm) | Quantity | Total prize (EURm) | Quantity | Total prize (EURm) | Total prize (EURm) |
| Telecom Italia(TIM) | 2×10 MHz | 992,2 | 2×5 MHz | 159 | 2×15 MHz | 109,12 | - | - | 1260,32 |
| Vodafone Italia | 2×10 MHz | 992,4 | 2×5 MHz | 159,1 | 2×15 MHz | 108,18 | - | - | 1259,68 |
| Wind | 2×10 MHz | 977,9 | - | - | 2×20 MHz | 142,22 | - | - | 1120,12 |
| 3(H3G) | - | - | 2×5 MHz | 158,9 | 2×10 MHz | 72,44 | 30 MHz | 74,04 | 305,38 |
| Total | 60 MHz | 2962,5 | 30 MHz | 477 | 120 MHz | 431,96 | 30 MHz | 74,04 | 3945,50 |

Source: Commsupdate (2011a), Frankrayal (2011)

In 2015, the government sold L-Band spectrum, which was allocated to digital radio broadcasts in Italy but largely idle. TIM won 20MHz (1452MHz-1472MHz) paying €230.3 million, while Vodafone paid €231.9 million for 20MHz between 1472MHz and 1492MHz (Commsupdate, 2015d).

However, after spending an exorbitant amount of money on acquiring 4G spectrum, what was waiting for MNOs was not increasing revenues but intense competition between them. The regulator Agcom sought to cut mobile termination rates (MTRs) by 40% to € 0.0098 in July 2013, which was considered to be a critical source of revenues for voice services (Commsupdate, 2011b).

It was widely thought that TIM would be the first operator to launch 4G services in Milan, Turin, Rome and Naples on 7 November 2012 (Commsupdate, 2012b) but on 30 October

2012 Vodafone Italia inaugurated its 4G network in Rome and Milan. Vodafone planned to launch in another 20 cities by March 2013, whereas TIM intended to offer 4G services in 20 cities by the end of 2013 (Commsupdate, 2012c). H3G announced launched its LTE network in the village of Acuto on 6 November 2012, just a day before TIM's official launch in a larger geographical area (Commsupdate, 2012c, 2012d). Wind seemed to be behind its rivals even though it had paid more than € 1 billion for its spectrum. In April 2013, Wind announced it would invest €1 billion in its 4G rollout (Commsupdate, 2013a).

In late November 2014, TIM upgraded its network to LTE-A with peak download rates of 180 Mbps in 60 cities and highlighted it was offering the first commercial services of this technology (Telecompaper, 2014). Just three days later, on 1 December 2014, Vodafone Italia inaugurated its LTE-A with peak download speeds of up to 225Mbps (Commsupdate, 2014c). Vodafone Italia also launched Italy's first commercial voice-over-Long Term Evolution (VoLTE²) service in July 2015. At this point, its 4G service covered 88% of Italy's population (Commsupdate, 2015c). It was not until the end of December 2015 that another operator, TIM, launched its VoLTE services. When this occurred, TIM's 4G services covered around 85% of the country's population (Commsupdate, 2015g).

3.3. It's merger time

Confronted with high investment in networks and licences, combined with increasing competition and decreasing prices, MNOs were looking for ways to improve their profitability. One way was dispose of or to share their tower networks. The other way was to merge with another operator in order to benefit from higher economies of scale and other size-related advantages.

There were several rumours of mergers between MNO in Italy. One of these rumours centred on 3 and TIM, the smallest of the country's MNO whose size placed it at a disadvantage. Table 6 details the operational performance of 3 between 2010 and 2016.

² Using the LTE network to improve the quality of voice call

Table 6: H3G market performance 2010 - 2016

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016* |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Mobile Revenues (mln €) | 1738 | 1782 | 1965 | 1746 | 1739 | 1825 | 2042 |
| Net customer service revenue | - | 1512 | 1457 | 1352 | 1376 | 1478 | 1742 |
| Handset revenue | - | 204 | 406 | 341 | 308 | 297 | 261 |
| Other revenue | - | 66 | 102 | 53 | 55 | 50 | 39 |
| Operating Expenses | - | - | (515) | (596) | (614) | (662) | (696) |
| SIM card total('000) | 9000 | 9100 | 9530 | 9689 | 10040 | 10082 | 31343 |
| Total EBITDA | 263 | 257 | 264 | 279 | 248 | 276 | 488 |
| Depreciation & Amortisation | - | - | (263) | (279) | (294) | (119) | (165) |
| EBIT | 96 | 6 | 0,5 | 0,3 | (46) | 157 | 323 |
| Capex (excluding license) | - | (320) | (562) | (344) | (404) | (446) | - |
| License cost | - | (186) | (169) | (21) | (2) | - | - |
| APRU average, € | 23,6 | 19,86 | 18,44 | 14,71 | 13,62 | 13,89 | 13,24 |
| Contract | 35,76 | 31,25 | 27,49 | 20,83 | 18,23 | 17,87 | 16,92 |
| Prepaid | 10,04 | 8,22 | 7,31 | 6,69 | 7,83 | 8,47 | 10,08 |

Source: Compiled from the annual reports of CK Hutchison.

Notes: the result of 2016 is calculated based on approximately ten months, as Wind&3 merger. "()" denotes a negative number.

Rumours started to emerge in April 2013. The board of TIM and 3 explored the potential of the market, with TIM being keen to remove a disruptive rival from the market (Bloomberg, 2013). However, Naguib Sawiris, the former owner of Wind and an Egyptian telecoms tycoon, said that, in his opinion, the merger between TIM and 3 would not be successful as the two companies had different cultures and operated different business models (Commsupdate, 2013b). TIM officially ended the merger discussions in July 2013. It noted that “none the elements necessary to start negotiations are present” (Commsupdate, 2013c).

Another merger rumour was about 3 and Wind. In contrast to the previous merger rumour, which was relatively short-lived, this one, between 3 and Wind, was more long lasting. Due to the large debts incurred by Wind, the financial pressures faced by Wind were strong – see Table 7.

Table 7: Wind market performance 2010 - 2016

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016* |
|-------------------------------|-------|--------|--------|--------|--------|--------|-------|
| Total Revenues (mln €) | 5514 | 5570 | 5427 | 4983 | 4633 | 4428 | 6491 |
| Mobile Revenues | 4042 | 4073 | 3958 | 3648 | 3328 | 3278 | 5362 |
| Fixed Revenues | 1472 | 1497 | 1469 | 1 335 | 1305 | 1150 | 1129 |
| SIM card (000) | 19933 | 21014 | 21650 | 22292 | 21607 | 21100 | 31343 |
| Data customer | - | - | 5800 | 8776 | 10158 | 11600 | 19200 |
| Total EBITDA | 2130 | 2120 | 2062 | 1943 | 1804 | 1671 | 2124 |
| Mobile EBITDA | 1834 | 1817 | - | - | - | - | - |
| Depreciation and amortization | - | (1056) | (1146) | (1264) | (1214) | (1177) | - |
| Net finance expense | - | (933) | (875) | (993) | (1347) | (510) | - |
| Net Debts | - | - | 9151 | 9145 | 9654 | 8777 | - |
| Mobile ARPU | 16,6 | 15,6 | 14,4 | 12,3 | 11,2 | 11,3 | 11,5 |
| ARPU voice | 13,4 | 12,1 | 10,4 | 8,0 | 6,8 | 6,5 | 6,2 |
| ARPU data | 3,2 | 3,5 | 3,9 | 4,3 | 4,4 | 4,7 | 5,2 |
| Total assets | - | - | 14523 | 13956 | 14758 | 14887 | - |
| Equity | - | - | 1184 | 782 | 547 | 111 | - |
| Total liabilities | - | - | 13284 | 13200 | 14647 | 14340 | - |

Source: Compiled from the annual reports of VEON.

Notes: the result of 2016 is calculated based on approximately ten months due to Wind & 3 merger.

Around December 2013, just several months after the collapse of the 3 and TIM talks, it emerged that Wind's parent company, VEON, was considering selling, merging or refinancing it. VEON had discussed a possible deal with CK Hutchison, which could have created a company with 31 million subscribers. Such a merger would have made it the largest company within the market (Thomas, 2013). However, the negotiation did not go smoothly: on 29 October 2014, after around a year of discussions, the talks failed to reach an agreement to merge the two firms. The critical issue was ownership: VEON wanted 50/50 while CK Hutchison sought to control of joint venture (Commsupdate, 2014b).

However, this rumour became later a reality. On 6 August 2015, CK Hutchison and VEON announced the merger of Wind and 3 in Italy as a 50/50 joint venture. When announcing the merger, they emphasised their desire to optimize operating costs and expand their network coverage (Windregroup, 2020). Of course, announcing the merger did not necessarily mean it would go ahead. On the positive side, the Italian government stated that it would not intervene, resulting in the key regulatory decision maker being the European Commission (Commsupdate, 2015f).

3.4. Regulators create an opportunity for Iliad.

Interestingly enough, a French investor had entered the Italian telecommunications market. Xavier Niel, the owner of Iliad, had become the second largest shareholder in TIM (Reuters, 2015). Later on, Niel's voting rights were confirmed at being over 15%. The largest investor in TIM was another French company, Vivendi, which owned a stake of more than 20%, so there was some rivalry between the two main shareholders.

On 30 March 2016, the European Commission started an in-depth investigation into the merger. The European Commission was concerned that the merger would reduce the competitiveness of the market (European Commission, 2016a), with its concerns being threefold: (1) a less innovative market due to the market shares after the merger being similar; (2) it would result in a weaker negotiating positions of virtual mobile network operators (MVNO); and (3) less choice and a decrease in quality of services for consumers, as well as higher retail mobile prices for subscribers.

Commissioner Margrethe Vestager, in charge of competition policy, stated "We need to make sure that the proposed transaction will not lead to higher prices or less choice in mobile services for Italian consumers" (European Commission, 2016a). The investigation would run until mid-August 2016. Just a month after the Italian merger was announced, a similar one in the UK, between 3 UK and O2, was blocked by the European Commission (European Commission, 2016c). To avoid a similar fate, CK Hutchison and VEON agreed to spin-off selected assets (towers and spectrum) and help with the launch of a new MNO so that the number in the market remains at four. According to Commsupdate (2016a), several companies were interested in these assets. After Sky decided not to pursue its interest, there were three bidders for the assets: Fastweb, Iliad and Digicel.

On 10 June 2016, the European Commission postponed its decision on the merger to 8 September 2016 (Commsupdate, 2016b). In the meantime, CK Hutchison and VEON are made further concessions to persuade the regulatory authorities to approve the merger. It was also reported that Iliad interest in the assets was more attractive to the European Commission than Fastweb's due to its aggressive network roll-out hits (Commsupdate, 2016c). According to Reuters (2016a), CK Hutchison and VEON were said to be conducting exclusive negotiations with Iliad. Just several days later, Iliad announced an agreement with CK Hutchison and VEON to acquire their assets. Furthermore, Iliad announced that Niel would also dispose of his stake in TIM (Commsupdate, 2016d).

However, Fastweb immediately made clear its unhappiness at this deal. It called on the European Commission to investigate Iliad's purchase of the assets, stating: "We hope that

Iliad's proposal can guarantee the same level of investment and development and we ask that it is submitted to consultation of the market by the Commission" (Commsupdate, 2016e). On 28 July 2016, it emerged that Niel had sold his stake in TIM, thereby clearing the way for Iliad to enter the Italian telecommunications market (Commsupdate, 2016f). On the 1 September 2016, the European Commission officially approved the merger of Wind and 3 in Italy, subject to remedies, creating a 50/50 joint venture (European Commission, 2016b).

The remedies proposed by CK Hutchison and VEON can be described as the divestment of sufficient assets to create a new Italian MNO. This divestment provides Iliad with a "unique and good" opportunity to enter the Italian telecommunications market.

As outlined by the European Commission (2016b), there has been three types of remedies in order to allow the new entrant to be sustainable. Firstly, the divestment of spectrum: Wind and 3 will transfer 3G and 4G frequencies to Iliad totalling 2 x 35 MHz, with Iliad paying €350 million. Iliad will make the first payment of €50 million in 2017, with the remainder due in the following two years (Iliad Group, 2018). Secondly, the sharing or acquisition of infrastructure in order to allow the new entrant. Iliad could thus adopt different approaches in urban and rural areas. Thirdly, a roaming agreement with the merged network for access to current and future mobile technologies. Thanks to these two last remedies, Iliad would be able to offer country-wide service faster than would otherwise be the case. If necessary, the initial five-year agreement can be extended for a similar period (Iliad Group, 2018), at the request of Iliad.

Margrethe Vestager, the relevant commissioner, stated: "This case shows that telecom companies in Europe can grow by consolidation within the same country, provided effective competition is preserved. It also shows they can grow by cross-border expansion, such as Iliad in this case" (European Commission, 2016b). Iliad stated that would achieve a break-even EBITDA with less than a 10% market share due to the application of its 'know-how' and an efficient business model that combined a roaming agreement and the rollout of mobile services (Iliad Group, 2018).

3.5. Following its initial entry, Iliad has adopted a gradual approach to its expansion

After an aggressive entry into the Italian Market, Iliad Italia confirmed its commitment by investing a significant amount (€1.19 billion) in 5G frequencies. However, its lack of complementary assets was increasingly problematic. Unlike in France, Iliad was only a mobile operator without the benefit of also being also a fixed broadband Internet operator. The drawbacks were twofold. Firstly, the general trend in telecommunications market is to be able

to offer converged fixed-mobile services. Secondly, there are economies of scope when providing both types of services, as they can share the same core network as well as other activities. However, because of the burden of significant past investments, Iliad Italy has considered lower commitment modes such as partnerships or shared investments

Thus, in mid-2020, Iliad Italia signed a deal with Open Fiber, a supplier of broadband infrastructure across Italy (Commsupdate, 2020). This deal enabled Iliad Italia to provide fiber-to-the-home based broadband services to 271 cities across Italy, with Iliad stating at the time that the time hasten its entry into this market. This was then followed by Iliad Italia agreeing, in August 2021, to participate in Open Fiber's 'co-investment' scheme (Commsupdate, 2021). While financials details were missing, it is clear from the announcement that the investment will enable Open Fiber to further expand its FTTH across Italy. This, in turn, would facilitate Iliad Italia's provision of fixed connectivity across the country, enabling converged services (fixed and mobile) to be offered.

4. Conclusion

In this article, we have described and analysed how an opportunity arose and how Iliad has been able to seize it. We first addressed the market and competitive situation that led two incumbents, 3 Italia and WIND, to merge. Then we showed how the perceived risk of insufficient competition resulting from this merger led regulatory authorities to mandate the merged company to shed network assets and frequencies. We also explain how Iliad came able to be selected and entered the Italian market.

This case study supports our claim that internationalisation of telecommunications operators, and in particular of mobile operators does not conform to a usual pattern. It does not follow a gradual path of increasing commitment in a target country, according to the experience accumulated, as formalised in the Upsala model (Johanson & Vahlne, 1977, 1990). In contrast, in the telecommunications industry, entry starts directly with a high commitment, by investing in a licence and a network, or, alternatively, by acquiring an incumbent mobile operator. Our example of Iliad's entry into the Italian market shows how an initial large investment has been followed by an incremental process of leveraging complementary assets through engaging in a number of partnerships. These partnerships have enabled Iliad Italia to expand its operations within Italy, both geographically as well as in terms of the range of services that it offers.

References

- Antonelli, C. (1995). Technological Change and Multinational Growth in International Telecommunications Services. *Review of Industrial Organization*, 10 (2), 161–180
- Berne, M., Vialle, P., and Whalley, J. (2019) An analysis of the disruptive impact of the entry of Free Mobile into the French mobile telecommunications market. *Telecommunications Policy*, 43 (3), 262-277
- Bloomberg (2013) Telecom Italia considers merger with Hutchison unit, April 2013. <https://www.bloomberg.com>. Accessed 3 July 2021
- Chidlow, A., Ghauri, P.N. and Hadjikhani, A. (2019) Internationalization of Service Firms and Their Interactions with Socio-Political Actors. *Management International Review*, 59, 499–514
- Collis, D. J. (1991) A resource—Based analysis of global competition: The case of the bearings industry. *Strategic Management Journal*, 12, 49–68
- Commsupdate (2011a), LTE auction closes after 22 days; bids exceed expectations, October 2011. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2011b), AGCOM demands 40% MTR cut by 2013, November 2011. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2012a), Free Mobile is too cheap say resellers, February 2012. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2012b), TIM to launch LTE on 7 November, October 2012. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2012c), Vodafone launches LTE in Rome, Milan today, June 2012. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2012d), 3 pips TIM with small-scale LTE launch in Acuto, November 2012. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2013a), Wind taps Huawei, Sirti for EUR1bn LTE rollout, April 2013. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2013b), Sawiris yearns to feel Wind beneath his wings once more, May 2013. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2013c), TI calls time on Hutch merger discussions, July 2013. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2014a), VimpelCom considering sale of Wind Italy towers, February 2014. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2014b), VimpelCom and Hutchison in Italian stalemate, October 2014. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2014c), Vodafone Italy unveils LTE-A services, December 2014. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2015a), Wind sells 90% of mobile tower unit to Abertis for EUR693m, March 2015. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2015b), Italian firms move ahead with tower sales, March 2015. <https://www.commsupdate.com>. Accessed 3 July 2021

- Commsupdate (2015c), Vodafone Italy to launch VoLTE this month, July 2015. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2015d), Italy raises EUR462m selling L-Band spectrum, September 2015. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2015f), Italian government will not block merger of Wind and 3, September 2015. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2015g), TIM launches VoLTE, upgrades backbone network, December 2015. <https://www.commsupdate.com/articles/2015/12/22/tim-launches-volte-upgrades-backbone-network/>. Accessed 3 July 2021
- Commsupdate (2016a), Fastweb, Iliad and Digicel interested in Italian assets, June 2016. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2016b), EU probe into Wind-3 Italia deal extended to September, June 2016. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2016c), 3 and Wind to offer new concessions for Italian merger, July 2016. <https://www.commsupdate.com>. Accessed 3 July 2021.
- Commsupdate (2016d), Iliad agrees to acquire Italian assets, July 2016. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2016e), Fastweb calls on EC to investigate Iliad offer, July 2016. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2016f), Italy: Niel exits TI, Fastweb to exit Metroweb, Enel partners with GO Internet, July 2016. <https://www.commsupdate.com>. Accessed 3 July 2021
- Commsupdate (2020) Iliad and Open Fiber confirm FTTH deal, 7 July. <https://www.commsupdate.com>. Accessed 16 December 2021
- Commsupdate (2021) TIM's FiberCop and Iliad sign co-investment agreement to speed up fibre rollout, 9 August. <https://www.commsupdate.com>. Accessed 16 December 2021.
- Curwen, P. and Whalley. J. (2006) Measuring internationalisation in the mobile communications industry. *International Business Review*, 15 (6), 660-681
- Curwen, P. and Whalley. J. (2008) *The Internationalisation of Mobile Telecommunications: Strategic Challenges in a Global Market*, Edward Elgar: Chichester, UK
- Curwen, P. and Whalley. J. (2010) *Mobile Telecommunications in a High-speed World: Industry Structure, Strategic Behaviour and Socio-economic Impact*, Gower: Aldershot, UK
- Curwen, P., Whalley, J. and Vialle, P. (2019) *Disruptive Activity in a Regulated Industry – The Case of Telecommunications*, Emerald: Bradford, UK
- Deighton, N. (2000) German auction of 3G mobile phone licenses raises 50.5bn euros, Gartner, 1 September, available at www.gartner.com
- Dike, M.C. and Rose, E.L. (2017) Internationalization of mobile telecommunications: a systematic literature review. *Review of International Business and Strategy*, 27 (3), 308-321
- Dunning, J. H. (1979) Explaining Changing Patterns of International Production: In Defence of the Eclectic Theory. *Oxford Bulletin of Economics and Statistics*, 41, 269–295

- Eisenhardt, K.M. (1989) Building theories from case study research. *Academy of Management Review*, 14 (4), 532-550
- Eisenhardt, K.M. and Graebner, M.E. (2007) Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50 (1), 25-32
- European Commission (2016a), Mergers: Commission opens in-depth investigation into proposed Hutchison/VimpelCom joint venture in Italy, March 2016. <https://ec.europa.eu>. Accessed 3 July 2021.
- European Commission (2016b), Mergers: Commission approves Hutchison/VimpelCom joint venture in Italy, subject to conditions, September 2016. <https://ec.europa.eu>. Accessed 3 July 2021.
- European Commission (2016c) Commission prohibits Hutchison's proposed acquisition of Telefónica UK, 16 May. <https://ec.europa.eu>. Accessed 16 December 2021.
- Frankrayeral (2011), The Italian 4G Spectrum Auction: An Analysis, October 2011. <https://frankrayeral.com>. Accessed 3 July 2021
- Iliad Group (2018) FY 2017 Management Report & Analysis, March 2018. <https://www.iliad.fr>. Accessed 1 July 2021
- Jakopin, N.M. (2008) International in the telecommunications services industry: Literature review and research agenda. *Telecommunications Policy*, 32 (8), 531-544
- Johanson, J. and Vahlne, J.E. (1977) The internationalisation process of the firm – A module of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8 (March), 23-32
- Johanson, J. and Vahlne, J.E. (1990) The mechanism of internationalisation. *International Marketing Review*, 7 (4), 11-24
- Klemperer, P. (2002) How (not) to run auctions: The European 3G telecom auctions. *European Economic Review*, 46, 829 – 845
- Kogut, B. and Zander, U. (1993) Knowledge of the Firm and the Evolutionary Theory of the Multinational Corporation. *Journal of International Business Studies*, 24, 625–645
- Mathews, J. A. (2002) Dragon Multinationals New players in 21st century globalization. *Asia Pacific Journal of Management*, 23, 5–27
- Park, E. (2009) Explicating barriers to entry in the telecommunications industry, *info*, 11 (1), 34-51
- Peng, M. (2001). The resource-based view and international business. *Journal of Management*, 6, 803–829
- Reuters (2015) Iliad founder Xavier Niel buys Telecom Italia stake, October 2015. <https://www.reuters.com>. Accessed 3 July 2021
- Telecompaper (2014) TIM ups LTE-A coverage to 120 cities, November 2014. <https://www.telecompaper.com>. Accessed 3 July 2021
- Thomas, D. (2013) Wind of change? VimpelCom eyes sale, merger, refinancing for Italian cellco, *Financial Times*, 22 December 2013. <https://www.ft.com/>. Accessed 3 July 2021
- Vialle, P. (1998), *Stratégies des opérateurs de télécoms*. Paris: Editions Hermès
- Whalley, J. and Curwen, P. (2003) Licence acquisition strategy in the European mobile communications industry. *info*, 5 (6), 45-57

- Whalley, J. and Curwen, P. (2005) An investigation into internationalisation among mobile telecommunication companies. *European Business Review*, 7 (4), 21-29
- Whalley, J. and Curwen, P. (2020) A tale of two continents: The internationalisation of Millicom in Africa and Latin America. *Digital Policy, Regulation & Governance*, 22 (3), 177-199
- Yin, R.K. (2014) *Case study research: Design and methods*. SAGE Publications: Thousand Oaks, California