



**Submission by 2degrees in response to the  
Commerce Commission  
Letter of Unresolved Issues**

**VODAFONE EUROPE B.V. AND SKY NETWORK TELEVISION LIMITED**

**11 November 2016**

## 1. Background

1.1 In this submission 2degrees responds to the Commerce Commission's Letter of Unresolved Issues (LOUI) dated 31 October 2016 to Vodafone Europe B.V. (**Vodafone**) and Sky Network Television Limited (**Sky**) in relation to their proposed merger.

1.2 The LOUI states that at this stage, the Commission is not satisfied that the proposed merger would not substantially lessen competition in one or more relevant market because:

- (a) the merged entity would have substantial market power by virtue of its portfolio of content, including premium content such as live rugby;
- (b) the merged entity would have an increased incentive and ability to make buying Sky on a standalone basis relatively less attractive than buying it in a bundle (with mobile and/or broadband) offered by the merged entity, resulting in customers switching to the merged entity;
- (c) the merged entity would have less incentive to enter into reselling arrangements than Sky would in the counterfactual, meaning rivals would be unable to offer bundles with Sky and mobile/broadband services or offer bundles as attractive as those offered by the merged entity; and
- (d) as a result of the above, one or more rivals may lose customers to such an extent that they no longer provide an effective constraint in a telecommunications market, allowing the merged entity to profitably raise prices of a telecommunications service above levels that would prevail in the counterfactual.

1.3 2degrees agrees with these conclusions, and that the Commission cannot be satisfied that the proposed merger would not give rise to a substantial lessening of competition in telecommunications markets.

1.4 The Commission's current view is consistent with the information that 2degrees has provided in its previous submissions, and the conclusions reached in the expert reports prepared by Plum Consulting and Covec for 2degrees. Further, the competition concerns the Commission has identified are consistent with the Explanatory Memorandum to Sky shareholders which emphasised the **strong lock** that the merged entity will have on key sporting rights and the **critical competitive advantage** this lock will provide.

1.5 In this submission 2degrees provides further comment and information on:

- (a) the competition issues identified in the LOUI;
- (b) the Commission's counterfactual analysis; and
- (c) the take up of triple-play and quad-play content bundles internationally.

1.6 We also refer to our previous submissions, and the Plum and Covec reports, which we rely on, but do not repeat, in this submission.

## 2. The merged entity would have substantial market power for content

2.1 The Commission has stated, "*we consider that Sky has substantial market power by virtue of its ownership of key content.*"

2.2 2degrees agrees for the reasons outlined in previous submissions and the Covec and Plum reports. In summary:

- (a) Sky in New Zealand has a market share in the traditional pay TV market (by revenues) of over 90% – a position which is largely based on its control of premium content, and especially premium sports content;

- (b) Premium live sport content is the key differentiator of telecommunications bundled offerings, providing a differentiated retail offering leading to higher average revenue per user (**ARPU**) and greater customer loyalty. It is for this reason that competition for live sporting content rights has intensified and prices increased as telecommunications companies compete with traditional pay TV companies for these “must have” rights;
- (c) The merged entity will have both the incentive and the ability to leverage its substantial market power in content markets to lock-up premium content for exclusive delivery over its own platforms, foreclosing competition in fixed and mobile telecommunications markets.

2.3 While the Applicants claim that “*SKY services are not ‘must have’ inputs for telecommunications retailers in New Zealand*”<sup>1</sup> this is contradicted by the development of triple play and quad play offerings overseas.<sup>2</sup> Moreover, SKY’s communications to its shareholders provide clear evidence of the “must have” nature of its premium content:

- (a) “*SKY continues to see its **premium content portfolio as a key differentiating factor for the consumer, supporting its business model in the medium and longer-term***”;<sup>3</sup>
- (b) The Combined Group will hold “*the leading portfolio of video content (including **rights to all the most popular New Zealand sports**)*”;<sup>4</sup>
- (c) “*SKY TV has a number of highly attractive characteristics [including] there are no anti-siphoning laws in New Zealand and SKY TV has a **strong lock on the key sporting rights** that are significant drivers of subscriber attraction and retention*”;<sup>5</sup>

<b>Sky TV – Key Sports Rights</b>	
<b>Sport</b>	<b>Rights Expiry Date</b>
<i>Rugby Union</i>	2021
<i>Rugby League</i>	2022
<i>Cricket</i>	2020
<i>Netball</i>	2021

- (d) “*SKY TV’s sports rights holdings provide a critical competitive advantage both in terms of its core subscription service and its OTT offerings*.”<sup>6</sup>

2.4 As noted in our submission of 12 August 2016, the OECD Global Forum on Competition in 2013 recognised that while convergence had had a major impact on distribution platforms, content remained a bottleneck:<sup>7</sup>

*Whereas technological convergence, and digitisation in particular, have gradually resolved the problem of spectrum and channel scarcity, convergence has not, as a matter of fact, had any direct impact on the provision of content. As there are only a few blockbusters and a limited number of premium sport events every year, content has consequently become scarcer, and has effectively become a new bottleneck in the broadcasting market. Within premium content one should distinguish in particular sport events and blockbuster Hollywood movies. While both types of content are traditionally considered to be a key element driving the demand for pay-TV subscription, they tend to*

<sup>1</sup> Sky Network Television Ltd and Vodafone Europe B.V., Application for Clearance (29 June 2016) at 11.11.

<sup>2</sup> See for example Plum Consulting, Assessing the proposed merger between SKY and Vodafone NZ, A report for 2degrees and TVNZ (August 2016).

<sup>3</sup> Sky Network Television Limited, *Notice of Meeting and Explanatory Memorandum* (June 2016) at page 30.

<sup>4</sup> Explanatory Memorandum, above n 3, Appendix 1 at page 5 (emphasis added).

<sup>5</sup> Explanatory Memorandum, above n 3, at page 10 (emphasis added).

<sup>6</sup> Explanatory Memorandum, above n 3, Appendix 1 at page 10 (emphasis added).

<sup>7</sup> OECD, Policy Roundtables, Competition Issues in Television and Broadcasting (2013) at 22, available at <http://www.oecd.org/daf/competition/TV-and-broadcasting2013.pdf> (emphasis added).

*display different features. The problem of bottleneck is most acute for content that is time critical, and therefore for which broadcasting has no adequate substitutes, and also content demanded by a mass audience, for which traditional broadcasting technologies have a competitive advantage. Major professional sporting events fit all these criteria.*

- 2.5 The Applicants claim the merger will have no conglomerate effects because premium sports content is not a “must have” as described by the Commission in *Bluescope Steel/Pacific Steel*,<sup>8</sup> and the bundling of that content with a second product (in this case telecommunications services) will not render competitors in telecommunications markets less competitively effective.
- 2.6 However, the SKY Explanatory Memorandum recognises that its exclusive rights to all key NZ sporting events for the next 4+ years are a “*key differentiating factor*” which provides it with “*a critical competitive advantage*”.
- 2.7 Accordingly, both criteria set out in *Bluescope Steel/Pacific Steel* are met in this case:
- (a) Exclusive rights for 4+ years to all the most popular New Zealand sports is undoubtedly a “*product for which there are few good, cost-effective alternatives*”;<sup>9</sup> and
  - (b) Competitors in telecommunications markets would be “*rendered less competitively effective*” by being, in the Applicants’ words, unable to unlock access to any of these key sports rights for many years (well beyond the period in which the Commission assesses competitive effects of a merger).<sup>10</sup>
- 2.8 This is in contrast to the factual situation in *Bluescope*, where the Commission concluded that “*imports of all products are readily available such that BlueScope is not likely to have a ‘must-have’ product post-merger.*”<sup>11</sup>

### **3. The merged entity could make buying Sky standalone relatively less attractive, leading to customers switching to a Sky/Vodafone bundle**

- 3.1 The Commission has stated:

*We are concerned that the merged entity could make buying Sky on a standalone basis relatively less attractive than purchasing it in a bundle, leading to current Sky customers that are not also Vodafone customers switching to a Sky/Vodafone bundle....*

*If viewing content on mobile devices and the data consumption associated with it becomes an important revenue stream for TSPs in the future, then this would increase the potential for the merged entity to foreclose competitors through bundling content with its mobile services in a way that rivals cannot match.*

- 3.2 2degrees agrees that the merged entity would have the ability to make standalone Sky relatively less attractive and rival bundles relatively less attractive, leading to a substantial lessening of competition in telecommunications markets. Given the lack of a behavioural undertakings regime in the New Zealand merger clearance context, if the merger is cleared there will be no constraint on the conduct of the merged entity in terms of the inducements it may offer potential customers to switch networks.
- 3.3 The incentive for the merged entity to make its own bundled offers more attractive than the terms on which it resells SKY services to its downstream competitors is self-evident. While bundled telecommunications and content offerings are currently not a major feature in New Zealand telecommunications markets, this situation is rapidly changing. As set out in section 7 of this submission, triple-play and quad-play bundles are the “new normal”. New Zealand is a leader in high speed internet availability. 4G is available to more than 90% of the mobile footprint, fibre to

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<sup>8</sup> Bluescope Steel (NZ) Limited and Pacific Steel Group [2014] NZCC 8.

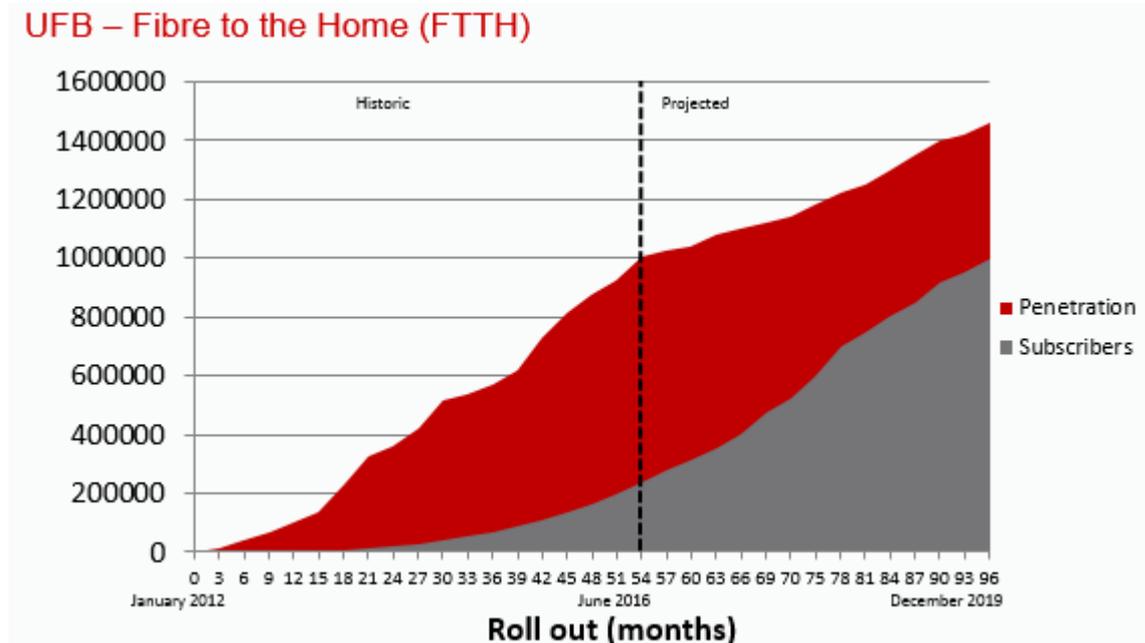
<sup>9</sup> As above 90.1.

<sup>10</sup> As above 90.2.

<sup>11</sup> As above 92.

the home is available to more than a million households, and a consumer 1Gbps service has recently been launched. Based on international experience, there can be no doubt that this will lead to a rapid increase in the uptake of content bundles.

- 3.4 For instance, fibre take up doubled in the last year, and as the table below shows, is expected to continue to accelerate at an ever increasing rate.<sup>12</sup>



- 3.5 The proposed acquisition of Sky in New Zealand is a continuation of Vodafone Group Plc’s strategy as outlined in its 2016 annual report:<sup>13</sup>

*We’re aiming to expand our TV services, to support the take up of broadband. We already have TV services in seven markets...Television and content are becoming increasingly important parts of our offering, with customers often looking to buy as part of a bundle with broadband.*

- 3.6 451 Research describes the proposed Sky/Vodafone merger as follows:<sup>14</sup>

*The overall context for this acquisition is the migration toward multi-play telecom/media that is a feature of a growing number of advanced markets. For New Zealand specifically, Sky and Vodafone believe triple-play is underpenetrated compared with other regions.*

- 3.7 This convergence strategy is clearly laid out for Sky shareholders in the Explanatory Memorandum and associated Independent Report:

- (a) Vodafone Plc “believe that merging the complementary capabilities of each company will be a winning strategy to meet customers’ **converging communications and viewing preferences**”,<sup>15</sup>
- (b) Vodafone Plc will “leverage its global scale and know-how, including operating in markets with **increasing convergence between mobile, fixed broadband, fixed telephony and pay television services**”,<sup>16</sup>

<sup>12</sup> MERW, based on CFH and network operator figures.

<sup>13</sup> Vodafone, 2016 Annual Report, at 12.

<sup>14</sup> Declan Lonergan, and Mark Fontecchio “SKY scoops up Vodafone New Zealand in integrated telecom/media play” 451 research (June 9 2016).

<sup>15</sup> Explanatory Memorandum, above n 3, at page 5.

<sup>16</sup> As above.

- (c) *“The Combined Group will have the opportunity to optimise the packaging and cross marketing of media and entertainment, and telecommunications services to create attractive packages for consumers. This potential includes **multi-play offerings** combining mobile, fixed (including voice and broadband), traditional pay television and other digital content offerings (including OTT content services)”*<sup>17</sup>
- (d) *“The Combined Group will be able to cross-sell a much broader range of services across the SKY TV and Vodafone NZ subscriber bases, reduce subscriber churn through **bundled service offerings**, and deliver incremental revenue through new offerings”*<sup>18</sup>
- (e) *“Telecommunications companies have been **increasingly seeking to bundle services in a single package** (and, ideally, through a single interface with the customer to cover all services on an integrated basis). Bundles are generally either ‘triple play’ or ‘quad play’ offerings combining some or all of fixed voice, fixed broadband, mobile (voice and data) and pay television. The objective of bundling is to enhance the overall value and attraction of the package and protect revenue (in part by making direct comparisons more difficult). From a marketing **perspective these bundled offerings have become a key plank in the strategies of both telecommunications companies and pay television operators**”*<sup>19</sup>
- (f) *“The transaction will allow the Combined group to provide fully integrated **bundled quad play and multi play services**...”*<sup>20</sup>
- (g) *“The key strategic issue for SKY TV is that it is a ‘pure play’ pay television operator in a world in which **convergence** is increasingly demanding of participants the ability to deliver comprehensive and integrated telecommunications and entertainment solutions”*<sup>21</sup>

3.8 In this converged environment the acquisition by a telecommunications company of a pay TV business is not unusual, and for Vodafone follows similar acquisitions in Germany and Spain, and a joint venture in the Netherlands.

3.9 There are however two significant differences between the current proposed transaction, and those of Vodafone in Germany, Spain and the Netherlands:

- (a) the substantially greater market shares of the New Zealand participants - the number one pay television operator combining with the number one in mobile and number two in fixed broadband and telephony services; and
- (b) the pay TV operator has exclusive rights to *“**all the most popular premium sports**”* for a period of 4+ years, and this monopoly will be extended into telecommunications markets as a result of the merger.

#### 4. The merged entity may have less incentive to enter into reselling agreements

4.1 We agree with the Commission that SKY’s incentives to negotiate attractive content packages with TSP’s will lessen post-merger. As we have already submitted, it is inconceivable that the negotiations referred to in Confidential Annexure 2 to our submission of 12 August 2016 would have taken place had Vodafone owned SKY at that point in time.

4.2 Indeed, SKY has made its post-merger intentions in relation to reselling SKY services to downstream competitors quite clear.<sup>22</sup>

*SKY will continue to offer wholesale access to its pay-TV services at SKY’s retail price, minus avoided cost, including restrictions on bundling SKY’s pay-TV service with any*

<sup>17</sup> At 20.

<sup>18</sup> Explanatory Memorandum, above n 3, Appendix 1, at page 2.

<sup>19</sup> Sky Network Television Limited, *Independent Advisor’s Report and Appraisal Report in relation to the Proposed Acquisition of Vodafone New Zealand Limited* (June 2016) at page 20.

<sup>20</sup> At 90.

<sup>21</sup> At page 25.

<sup>22</sup> Buddle Findlay, Letter to Commerce Commission on behalf of SKY (9 September 2016) at 25.

*other pay-TV services with other pay-TV services, and restrictions on the acquisition of content exclusive from SKY.*

- 4.3 According to Buddle Findlay, SKY services are currently provided to Vodafone on the same wholesale terms that are available to any other TSP.<sup>23</sup> This seems to be contradicted by the NERA Report, which describes reciprocal arrangements between the two companies: *“the upshot is a bundle discount for consumers, funded by both companies”*.<sup>24</sup>
- 4.4 In any event, however, it is clear that the existing terms will no longer apply to Vodafone post-merger. The Combined Group will *“optimise the packaging and cross-marketing of media and entertainment, and telecommunications services to create attractive packages for customers”*<sup>25</sup>, and seek to *“generate additional revenue through the development of new products focussed on mobile content”*<sup>26</sup>, while its resale customers would be required to comply with onerous restrictions on bundling and content acquisition.
- 4.5 The merged entity will have no incentive to improve its resale offering in relation to price or non-price terms, to enable its resale customers to compete effectively with its own *“attractive packages”*, or *“new products”* – to the contrary, a major source of the revenue synergies flowing from the transaction is the cross-selling of telecommunications services, to SKY customers, as *“a relatively low proportion of SKY TV subscribers are also Vodafone NZ customers.”*<sup>27</sup>
- 4.6 As the Independent Report observes, *“access to exclusive quality video content has now become a fundamental strategy for, and differentiator between, telecommunications companies”*.<sup>28</sup> The incentives of the merged entity are to use its “lock” on premium content to differentiate its retail packages from those of its competitors, not to provide wholesale access to those competitors to allow them to compete effectively.
- 4.7 In its letter of 9 September responding to submissions on the Statement of Preliminary Issues, Buddle Findlay (on behalf of Sky) asserts that *“SKY’s incentives to provide wholesale access to SKY’s services are the same under the factual as under the status quo, and under the counterfactual”*.<sup>29</sup> This proposition does not withstand scrutiny:
- (a) The very fact that SKY is pursuing a transaction with Vodafone indicates that its incentives are changing in response to changing market dynamics;
  - (b) It is elementary in competition law analysis and basic economic theory that the incentives of a vertically integrated operator (i.e. to favour its own downstream operations) are different to those of a non-vertically integrated operator; and
  - (c) The assertion that SKY would continue to wholesale its services on an ECPR basis (plus various restrictions) in both the factual and counterfactual is inconsistent with the commercial negotiations discussed in Confidential Annexure 2 to 2degrees submission of 12 August.

## 5. The likely counterfactual scenario(s)

- 5.1 The Commission describes the likely counterfactual scenario as *“a continuation or modification of the status quo”*.
- 5.2 The Commission’s approach to counterfactual analysis is well established (based on the approach of the Court of Appeal in the Warehouse decision) and is set out in detail in its Merger Guidelines. The Commission is bound to identify **all** likely counterfactuals; as the High Court in Woolworths noted, where there is more than one real and substantial without-the-acquisition scenario, all must be considered, not simply the one the Commission thinks is most likely.

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<sup>23</sup> Above, at 25.

<sup>24</sup> NERA, *Sky/Vodafone review of economics reports* (11 September 2016) at footnote 5.

<sup>25</sup> Explanatory Memorandum, above n 3, at 3(d), page 20.

<sup>26</sup> Explanatory Memorandum, above n 3, Appendix 1, at page 5.

<sup>27</sup> Independent Advisor’s Report, above, n 19 at page 90.

<sup>28</sup> Independent Advisor’s Report, above, n 19 at page 20.

<sup>29</sup> Buddle Findlay Letter, above n 22 at 28.

5.3 The following extracts from the Merger Guidelines are particularly relevant:<sup>30</sup>

- (a) *As something can be likely even when the chance of it occurring is less than 50%, there may be multiple scenarios that are likely without the merger (and with the merger);*
- (b) *We first assess the possible scenarios that might arise without the merger and discard those that are unlikely. We then compare the state of competition in each likely scenario without the merger, to the likely state of competition with the merger;*
- (c) *If competition would be substantially lessened in the scenario with the merger compared to any one of those likely states of competition without the merger, then the merger will have a likely effect of substantially lessening competition;*
- (d) *As a practical matter we usually focus our analysis on the likely without the merger scenario we consider the most competitive. Doing so means our analysis is based on a worst case scenario, in that it is the scenario that would give rise to the greatest competition concerns. We do this because if the merger is unlikely to substantially lessen competition compared to this worst case scenario, then it is unlikely to substantially lessen competition when compared to any other likely scenario;*
- (e) *We make a pragmatic and commercial assessment of what is likely to occur in the future with and without the merger. This is based on the information we obtain through our investigation and takes into account factors including market growth and technological changes;*
- (f) *Often the best guide of what would happen without the merger is what is currently happening (i.e. the status quo). However, where a market is likely to undergo changes that will affect competition in the without the merger scenario, we take these changes into account.*

5.4 It is not disputed that pay-TV and telecommunications markets are undergoing a period of major transformation, driven by changes in technology, and wide-spread availability of fast broadband services over fixed and mobile networks. The Independent Report explains how these developments have “*fundamentally changed the competitive position of pay TV television operators around the world*”<sup>31</sup>, and that “*the proposed transaction is a response to a fundamental deterioration in Sky TV’s strategic position*”.<sup>32</sup> In this context, a continuation of the status quo is a most unlikely counter-factual.

5.5 The Independent Report also indicates there are a number of potential counterfactuals – “*it is possible to construct a variety of hypothetical but plausible outcomes for the long term future of a standalone SKY TV. The range of outcomes is potentially very wide.*”

5.6 While each Applicant’s view of the likely counterfactual is contained in a Confidential Annexure to its Application, Buddle Findlay and NERA have each put forward the “status quo” counterfactual on behalf of SKY. Neither of them explain how a “status quo” scenario is consistent with the stated need to address the “*fundamental deterioration in SKY TV’s strategic position*” that can only worsen as time passes.

5.7 Buddle Findlay’s assertion that it would be irrational for SKY to depart from its “*retail price, minus avoided cost, including restrictions*” model, and that SKY will continue inflexibly to apply that approach into the future, is also inconsistent with the fact that SKY is facing a fundamental deterioration in its strategic position to which it must respond.

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<sup>30</sup> Commerce Commission, *Mergers and Acquisitions Guidelines* (July 2013).

<sup>31</sup> Independent Advisor’s Report, above, n 19 at 2.

<sup>32</sup> Independent Advisor’s Report, above, n 19 at 4.

## 6. The “genuine wholesaler” counterfactual is a likely counterfactual

- 6.1 We have submitted previously that the most likely counterfactual is that SKY would adjust its business model in response to its deteriorating strategic position, and engage more actively in negotiations of the sort described in Confidential Annexure 2 to our submission of 12 August.
- 6.2 The Commission has stated that it does not consider the “genuine wholesaler” counterfactual to be a likely scenario without the merger. A more likely without the merger scenario is one where Sky resells or wholesales its services to third parties on a basis that may not be dissimilar to the status quo.<sup>33</sup>
- 6.3 In our view, taking into account the dynamic nature and rapid technological changes occurring in the relevant markets, a conclusion that the status quo is the only likely counterfactual against which to assess the proposed transaction cannot be sustained.
- 6.4 Applying the proper framework for analysis, the “genuine wholesaler” counterfactual is one of a range of possible likely counterfactuals that the Commission is required to consider as part of its competition assessment of the proposed transaction.
- 6.5 The point may be academic, as in our view (and the preliminary view of the Commission as set out in the LOUI), the transaction would be likely to have the effect of substantially lessening competition in telecommunications markets compared with a status quo counterfactual, because the merged Sky/Vodafone would have preferential access to premium content and cross-selling opportunities which its rivals would be unable to match.
- 6.6 However, if the current view of the likely competitive effects of the proposed merged compared to the status quo counterfactual were to change, the Commission would be required to also assess the competition effects of the proposed merger against other likely counterfactuals, including the “genuine wholesaler” counterfactual.

## 7. The take up of triple-play and quad-play content bundles internationally

- 7.1 According to the GSMA<sup>34</sup>, convergence, in the form of triple-play (voice, fixed broadband and video content) and quad-play (voice, fixed and mobile broadband and video content) bundles will accelerate in 2016, and “*a converged playing field will become the new normal for competition*”.<sup>35</sup>
- 7.2 The term convergence describes “*the common delivery of discrete service functions such as broadcasting and telecommunications over shared digital infrastructure*”, which is made possible by technology improvements, and widespread availability of high speed fixed and wireless broadband.<sup>36</sup>
- 7.3 Prior to these technological developments, the GSMA Report observed that in 2015 there was “*little evidence of consumer demand for quad-play bundles*”; “*only Belgium (27%), France (24%) and Spain (21%) have any appreciable penetration of true quad play*”.<sup>37</sup>

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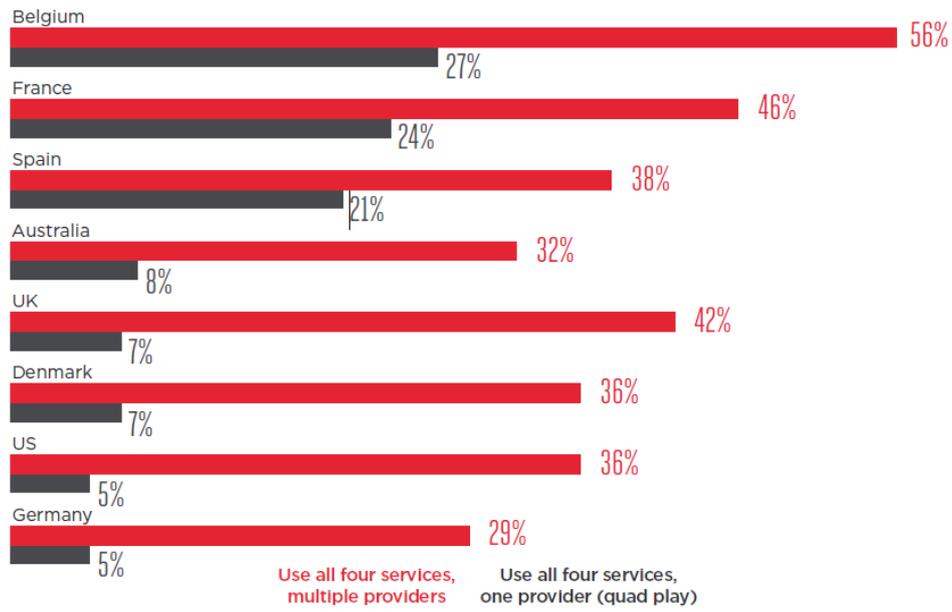
<sup>33</sup> Commerce Commission, Email to 2degrees (21 September 2016).

<sup>34</sup> The GSMA represents the interests of mobile operators worldwide, uniting nearly 800 operators with almost 300 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and internet companies, as well as organisations in adjacent industry sectors.

<sup>35</sup> GSMA Intelligence Analysis, *Convergence: repositioning in an expanded mobile ecosystem* (November 2015) at 3, available at [www.gsmainelligence.com](http://www.gsmainelligence.com) (**GSMA Report**).

<sup>36</sup> MBIE, *Exploring Digital Convergence: Issues for Policy and Legislation* at 4.

<sup>37</sup> GSMA Report, above n 35 at 6.



**Figure 3:** Quad-play penetration by market (selected countries), 2015  
 Quad play defined as subscribing to mobile, home broadband, landline (line rental) and pay TV from one provider  
 Source: GSMA Intelligence SIM survey, 2015

- 7.4 However, the report concluded that the disparity in uptake of quad play bundles could be “*partially explained by the timing of convergence in different countries*”,<sup>38</sup> with Belgium, France and Spain having for several years had “*multiple converged operators offering quad play*”,<sup>39</sup> while in the rest of Europe such competition was relatively recent. Looking to the future, it predicted that “*a converged playing field will become the new normal for competition*”,<sup>40</sup> and it expects quad play “*penetration to accelerate in 2016*”.<sup>41</sup>
- 7.5 Driving this outcome is the rollout of high-speed 4G mobile networks, which, compared to 3G networks have increased data usage up to threefold.<sup>42</sup>

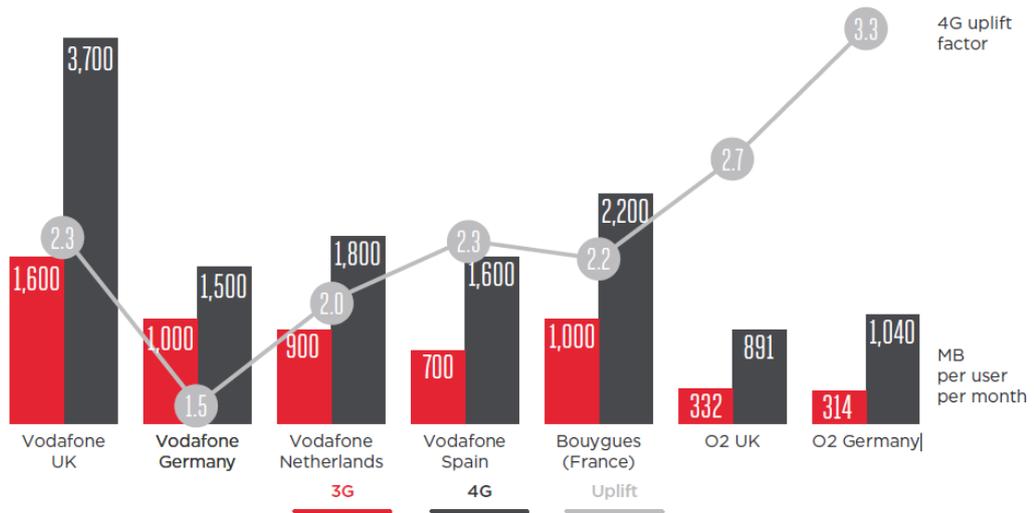
<sup>38</sup> At 7.

<sup>39</sup> At 7.

<sup>40</sup> At 3.

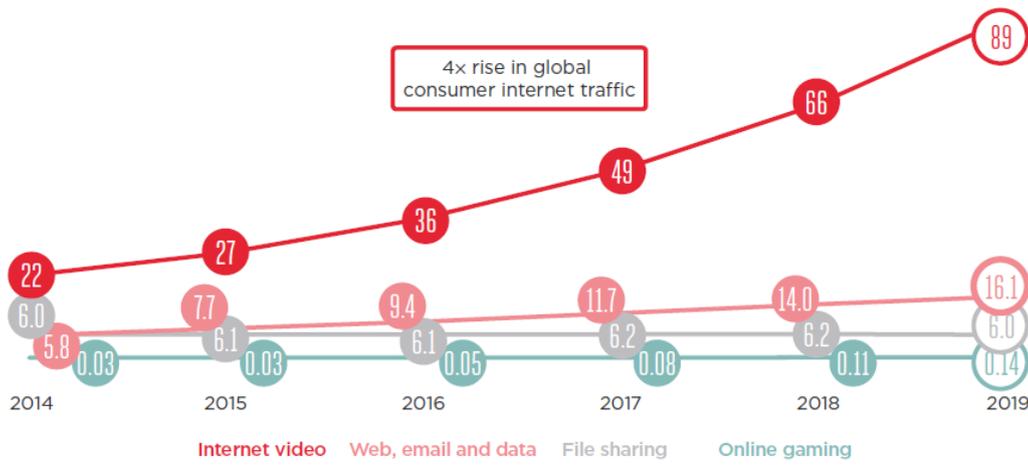
<sup>41</sup> At 2.

<sup>42</sup> At Figure 5.



**Figure 5:** Positive – uplift in mobile data usage from 4G  
 Note: figures for Vodafone are for quarter ending March 2015; O2 and Bouygues figures are for December 2014.  
 Uplift = average data usage on 4G divided by average data usage on 3G  
 Source: company reports

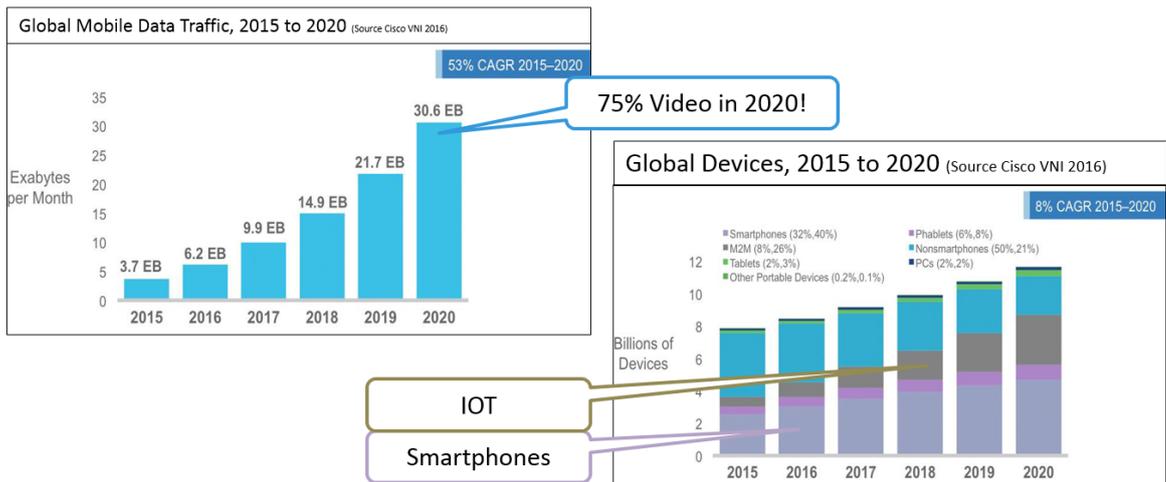
7.6 The vast majority of this data usage is a consequence of internet video:<sup>43</sup>



**Figure 6:** Negative – capacity stress on networks as video rises (thousands of petabytes per month)  
 Source: Cisco VNI, May 2015

7.7 Cisco predicts that data usage on mobile networks will increase from 6.2EB in 2016 to 30.6EB by 2020, by which time video will account for 75% of mobile data traffic.<sup>44</sup> It follows that video will be the most important component of quad-play bundles.

<sup>43</sup>At Figure 6.  
<sup>44</sup>Cisco, “Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2015–2020 White Paper” (3 February 2016), available at <http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/mobile-white-paper-c11-520862.html>.



7.8 In addition, and as a consequence of the growth of video traffic on mobile networks, the amount of time spent by users on mobile devices has increased five-fold over the last four years.<sup>45</sup>

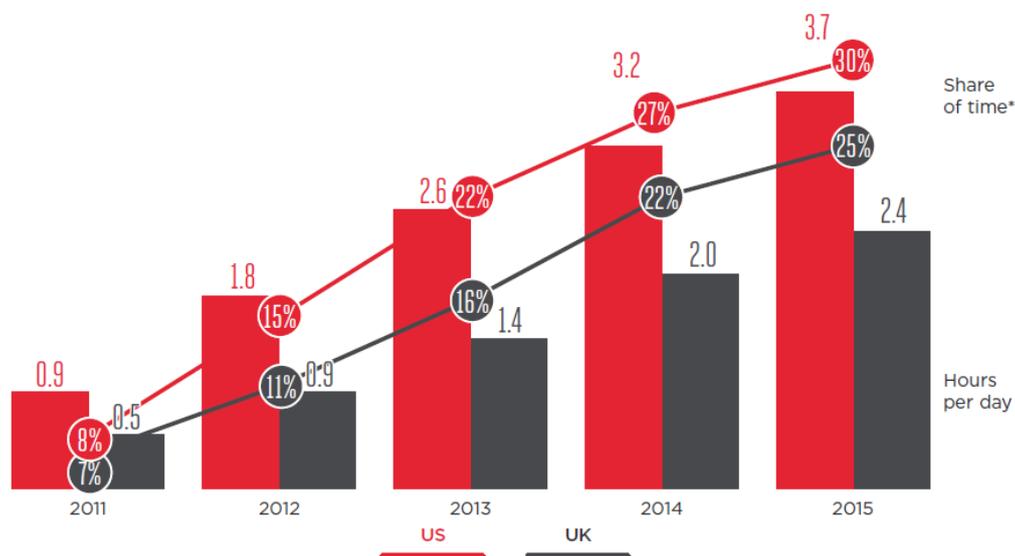


Figure 4: Share of media time spent on mobile (including tablets)  
\*Time with all media, including TV, PC, mobile, tablet, radio and print  
Source: eMarketer, GSMA Intelligence

7.9 These factors have major implications for mobile operators, who increasingly compete with fixed operators for the same consumers, and for whom a seamless handover between fixed and mobile networks becomes a competitive advantage. As Vodafone states in its 2016 Annual Report, seamless handover allows consumers to view television “on multiple devices as well as your big screen at home”<sup>46</sup> while at the same time allowing the high fixed network costs to be spread across a larger service portfolio, reducing customer churn, and enabling further investment in network coverage and quality:<sup>47</sup>

*For the provider there is an important network benefit from the combination of mobile and fibre infrastructure which is increasingly necessary as the volume of data continues to grow strongly. The bundling of services also increases customer loyalty and provides opportunities to sell additional services...*

<sup>45</sup> GSMA Report, above n 35 at Figure 4.

<sup>46</sup> Vodafone, 2016 Annual Report, at 12.

<sup>47</sup> As above.

7.10 In February 2016, rating agency Fitch reported:<sup>48</sup>

*Recent European telecom consolidation deals reflect the increasing need to better enable operators to provide triple play and quad play services...These bundles are becoming an increasing driver of adoption and pricing economics of telecommunications services in Europe.*

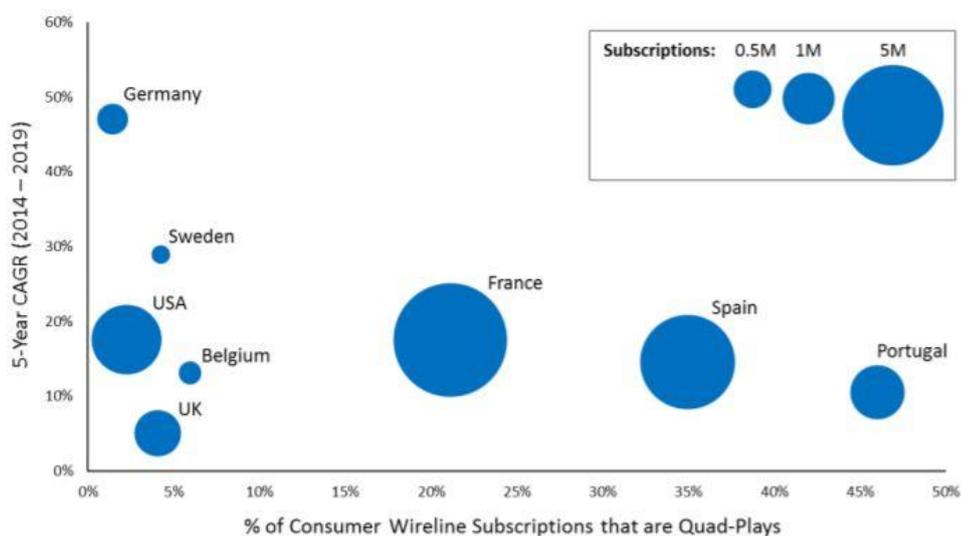
7.11 Vodafone Group Plc has been a leader in this strategy. One of its three strategic objectives is “Convergence – connectivity and content, wherever you are”. In its 2016 Annual Report it said:<sup>49</sup>

*We’re aiming to expand our TV services, to support the take up of broadband. We already have TV services in seven markets...Television and content are becoming increasingly important parts of our offering, with customers often looking to buy as part of a bundle with broadband.*

7.12 As part of that convergence strategy, Vodafone has acquired pay TV operators Ono in Spain and Kabel Deutschland in Germany, and entered into a 50/50 joint venture with Liberty Global in the Netherlands.

7.13 It is now well established that the roll-out of high-speed 4G mobile data networks has been a major factor in the development of converged communications (often referred to in Europe as unified communications). Quad play is becoming the major strategy for predominantly mobile operators, who increasingly have recognised that a mobile alone strategy is unlikely to be sustainable in a converged environment. While there is wide variation in the uptake of quad play bundles across jurisdictions as shown in the table below, they currently account for 30% in Portugal and Spain, and are projected to exceed 60% over the next five years:<sup>50</sup>

#### Quad Play Bundle Subscriptions



Sources: Ovum, Ofcom

7.14 The most recent developments in this area of convergence are the announcements last week:

- (a) by AT&T, of its bid for Time Warner; and
- (b) by Sky in the UK, of the launch of its Sky Mobile business to complement its well established pay TV and fixed line businesses.

<sup>48</sup> Fitch Ratings, “Quad Play driving recent European telecoms in market consolidation” (18 February 2016).

<sup>49</sup> Vodafone, 2016 Annual Report, at 11.

<sup>50</sup> Michael Dargue and Jennifer Lin, “The Quad Play Balancing Act: Understanding the Business Model!” (August 2015), Figure 1, available at [www.cartesian.com](http://www.cartesian.com).

- 7.15 The critical role of premium content in competition between triple play and quad play bundles was stressed by AT&T in its announcement; in addition to the memorable slogan “**the future of video is mobile and the future of mobile is video**”, AT&T chairman and CEO Randall Stephenson said:<sup>51</sup>

*Premium content always wins. It has been true for the big screen, the TV screen and now its proving true on the mobile screen...With great content, you can build truly differentiated video services, whether it is traditional TV, OTT or mobile.*

- 7.16 The launch of Sky Mobile will make SKY the fourth provider of quad play services in the UK market, with BT, TalkTalk and Virgin Media. Stephen van Rooyen, Sky’s CEO of UK and Ireland said on announcing the launch:<sup>52</sup>

*The broadcaster has a track record of cross-selling products to its customers: ten years ago, the average Sky customer had just over one service compared to more than three services today. And mobile represents SKY’s largest adjacent sector.*

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<sup>51</sup> AT&T, “AT&T to Acquire Time Warner” (press release, 22 October 2016).

<sup>52</sup> Richard Hanford, “Sky’s mobile service ups ante for UK operators”, *Mobile World Live* (online ed, 20 October 2016) available at <http://www.mobileworldlive.com/featured-content/home-banner/skys-mobile-service-ups-ante-for-uk-operators/>.