

SUMMARY OF FEASEY REPORT ON DEVELOPMENTS IN THE REGULATION OF WHOLESALE SERVICES FOR MVNOS IN THE REST OF THE WORLD

February 2020

1. I was asked by Rogers Communications Canada to contribute an independent report on how wholesale services for MVNOs have been regulated in the rest of the world as part of the inquiry being conducted by the Canadian Radio-television and Communications Commission (CRTC) into the mobile wireless services market in Canada. My report was submitted to the CRTC on 15 May 2019 as an appendix to Rogers submission. An oral hearing will be held February 18 to 28, 2020, and this note provides a summary of my findings.
2. I have been involved in the telecommunications industry since the early 1990s and was the Director of Policy at Vodafone plc, then the world's largest wireless carrier, for over 10 years until 2013. I was involved both in the development of the regulatory framework in Europe which I describe in my reports and in most of the instances in which regulators have attempted to regulate wholesale services for MVNOs or to require them in mergers. I also have significant experience of the application of telecommunications regulation outside Europe. I am currently a member of the UK competition authority, the Competition and Markets Authority.

Main findings

3. My main findings are:
 - a. Regulation of wholesale services for MVNOs of the kind that the CRTC is proposing (to address a 'market failure') has been very rare in the past and is done in only one country today, Norway, in which one carrier has almost 60% market share. Countries with wireless markets that are similar to those found in Canada, such as we find in the United States, Australia, New Zealand or those in Europe, do not regulate wholesale services for MVNOs.
 - b. The vast majority of reduction in consumer prices in European wireless markets over the previous decade should be attributed to reductions in costs that have been enabled by investments in new network technologies, not to changes in the degree of retail competition, such as might arise from MVNOs. This has led European regulators to conclude that the risks to investment from regulating for MVNOs outweigh any benefits that might arise.

- c. Where regulation has been attempted in the past, there is no good evidence that having more MVNOs in a wireless market has led to lower prices, either for consumers in general or for those on low incomes. European competition authorities have stopped relying on MVNOs to preserve competition following wireless mergers as a result. Commercial opportunities for MVNOs, and their impact, also appear to be diminishing compared to a decade ago as wireless markets have matured and growth has slowed.
- d. Evidence from the rest of the world suggests that regulation of wholesale services for MVNOs would do little to benefit Canadian consumers, including those on low incomes but would risk the network investment which is responsible for most of the improvements in wireless services that consumers experience. Most regulators in the rest of the world would endorse the CRTC's efforts to promote competition between facilities-based carriers, since this drives investment and allows MVNOs to obtain wholesale services for themselves on proper commercial terms. The CRTC might consider whether more can be done in this regard, including removing restrictions to wholesale competition which may arise from the Bell/Telus network sharing arrangements.
- e. In contrast, by proposing to now change direction and focus its efforts on regulating to promote entry by MVNOs, the CRTC appears to be both out of step with the rest of the world and willing to disregard the lessons other regulators have learned over the past 20 years.

Why international experience is relevant

- 4. Experience of regulating wireless markets elsewhere in the world can be useful in several ways. First, it may tell us something about the likely consequences of any decision which the CRTC may take if we can observe similar decisions having been taken elsewhere in the world. Second, it can help us to understand how regulators and competition authorities in other countries have approached some of the questions which the CRTC is itself considering in this enquiry, including other or better measures which the CRTC might take.

There are broadly two approaches to regulating wholesale services for MVNOs elsewhere in the world

- 5. I have found regulation of wholesale services for MVNOs to arise elsewhere in the world for, broadly, two different reasons. In some countries, most often in Asia, Latin America and the Middle East, wireless carriers are subject to a general obligation to support MVNOs as a condition of spectrum or other licences. This 'prophylactic' approach to regulation regards

MVNOs as being a useful feature of wireless markets rather than their being required to solve any particular problem or ‘market failure’ which the regulator has identified. The purpose of this kind of regulation is often not very clear and the obligations often do not appear to be enforced very vigorously by the regulators themselves. Entry by MVNOs tends to be rather limited as a result, and their impact on the market difficult to discern. Israel is sometimes cited as an example of country where MVNOs have had a major impact on prices since 2012. However, in my view the most significant feature of the Israeli market is not MVNOs but the extraordinary number of major facilities-based wireless carriers – up to six and currently five - in a country with a population of only nine million.

6. What might be described as a more sophisticated approach to regulation is taken in other countries such as the United States, Europe, Australia and New Zealand, and is the approach which the CRTC is required by law to adopt in Canada. Under this approach, the regulation of wholesale services for MVNOs is not taken for granted but is required to be justified as being the appropriate remedy for whatever ‘market failure’ the regulator has first identified. I consider that it is the experience of regulation in those countries adopting this approach which is relevant for the CRTC in its enquiry.

Regulation of wholesale services for MVNOs to address a ‘market failure’ has been very rare in the past and is limited to one country - Norway - today

7. When considering the experience of regulation for MVNOs in these countries, several points are immediately clear. The first is that any form of regulation of wholesale services for MVNOs is a very rare step and there are only a handful of instances where regulators elsewhere in the world have considered wholesale regulation for MVNOs to be an appropriate remedy to the problems they have identified. Regulators in Australia and New Zealand - both of which also have three national wireless carriers and similar concerns about pricing that I see in Canada - have explicitly considered and rejected wholesale regulation for MVNOs within the past three years. Regulators in Europe effectively abandoned MVNOs as a remedy back in 2007 and wholesale regulations were only applied in one country which might be considered at all comparable to Canada, namely Spain. The MVNO regulations in Spain have been inoperative for at least 10 years and were withdrawn altogether in 2017. Wholesale regulations in other European countries applied when there were only one or two wireless carriers, not three as in Canada. All these regulations have since been withdrawn: in Slovenia and Malta in 2012 and in Cyprus in 2019. This leaves the only active case of wholesale regulation for MVNOs today to be that in Norway, where MVNO obligations were applied to a wireless carrier (Telenor) with a market share of around 60% or double that of any of the three national wireless carriers in Canada.

Regulators have avoided the risks associated with setting the wholesale prices charged by wireless carriers to MVNOs

8. My second main conclusion is that there are no examples of regulators elsewhere in the world intervening in markets to set the wholesale prices that might be charged by wireless carriers to MVNOs. There are several reasons for this. One is that the ‘market failure’ identified by the few European regulators who did impose wholesale MVNO access obligations was a failure by the wireless carriers to allow MVNOs to enter the market and not a failure to offer them a reasonable price. These regulators relied on competition between the carriers to produce a reasonable price once regulation required all of the carriers to make offers. Second, regulators around the world want to avoid putting themselves in the position where they are adjudicating between the different claims of various parties to what is essentially a commercial agreement. The job of regulators is not to resolve ongoing commercial disputes but to enable the competitive process to work. Proceedings about wholesale regulation of services for MVNOs invariably involve claims about the impact MVNOs could make on the market if only wholesale prices were lower. Experience suggests that most of these claims subsequently prove to be unfounded. The risk that regulators find themselves being drawn into micromanaging the market is very real, and something the Norwegian regulator has found itself doing since 2006 and the European competition authorities found themselves doing in Germany. Finally, there is also the risk to investment in new infrastructure if regulators get the price wrong or if there is uncertainty as to what that price may be in future. Since few if any regulators have taken the risk of trying to set a wholesale price for services to MVNOs in wireless markets, we do not have much evidence about what the impact on wireless investment of regulating those prices might be. However, I quote in my report the results of extensive studies of the impact of this kind of regulation on investment in wireline technologies (referred to as ‘NGA’ or next generation access):

“empirical literature tends to find that service-based competition which relies on broadband access regulation is negatively associated with investment and NGA coverage, while evidence concerning the impact of access-based competition on basic broadband adoption seems to be mixed.... The findings of the literature more consistently suggest a negative link between access based competition and NGA [fibre] adoption.”

9. There is in my view no reason to expect the risks of a negative impact on infrastructure investment to be any less in wireless markets, particularly at a time when investors around the world face the uncertainty and the cost of moving to 5G.

Using MVNOs to remedy competition concerns in wireless mergers has also been abandoned by competition authorities

10. Although telecommunications regulators have shown little appetite for MVNO regulation in the past decade, there are other developments in Europe during this period that are relevant to the CRTC's enquiry. For example, competition authorities in Europe did initially regard MVNOs as a potential remedy to address concerns about competition resulting from mergers between facilities-based wireless carriers, as has happened in Austria, Ireland, Germany, Italy and the Netherlands between 2013 and 2019. In my view, the proper conclusion to draw from this experience is that the European competition authorities became increasingly sceptical about the value of MVNOs as a remedy to competition concerns, to the point where, like their regulatory colleagues, they have now abandoned it altogether. The evidence shows that the MVNO remedies adopted in the Austrian, Irish and German mergers were not effective in constraining prices, as the European competition authorities had hoped. As a result, MVNOs did not feature as a remedy in the most recent merger decision by the European competition authority in Italy. It should be noted that in the United States the Department of Justice has also not relied upon MVNOs to remedy its concerns about the proposed merger between T-Mobile and Sprint.

The benefits of wireless carrier investment in new technology and infrastructure, compared to any benefits which MVNOs might provide, are now better understood. The evidence shows that the benefits from carrier investment are much larger.

11. European regulators and policymakers have been reconsidering the aims of telecommunications regulation over the past five years in the light of concerns that Europe's performance was falling behind the rest of the world. The key conclusion to emerge from this debate was that long-term investments in new technology and new infrastructure, both wireline (fibre to the home) and wireless (5G), were required if Europe's performance was to improve. The evidence showed that the vast majority of the reductions in consumer prices in European telecoms markets that had been achieved in the previous decade were attributable to reductions in unit costs that had been enabled by investments in new technologies, rather than being attributable to changes in the degree of retail competition, such as might be associated with the entry of MVNOs. One study found that although average unit prices for wireless services in Europe had fallen by 63% between 2004 and 2014, increases in competition in European retail wireless markets had only reduced profits by only 11%. Similarly, a French study for 2011-14 found that 56% of the fall in unit prices during that period could be attributed to investment in 4G technology and only 23% to an increase in competition in the retail market. The changes which were made to the European

telecommunications regulatory framework in late 2018 were therefore intended to improve conditions for investment in wireless and wireline infrastructure. In doing so, they make the prospect of wholesale regulation of services for MVNOs in Europe even less likely in the future.

Wholesale regulation of services for MVNOs in other countries has not delivered lower prices for either consumers as a whole or those on low incomes

12. Since wholesale regulation for MVNOs has been so rare in the rest of the world over the past 20 years, we have limited evidence about its impact on the prices consumers pay for wireless services or upon other aspects of the wireless market, such as levels of investment in infrastructure. The evidence that does exist does not support the CRTC's suggestion that more entry by MVNOs would be of particular benefit low-income wireless consumers.
13. In Spain the revenues of 'discount' MVNOs, of the kind that might appeal to low income wireless consumers, represent only 8% of the total revenues earned by MVNOs in that market and less than 1% of all wireless revenues. In Norway, the main MVNOs serve business customers rather than consumers and those 'service providers' who do offer low cost options account for less than 2% of all wireless revenues. Other studies find that most MVNOs do not focus on the needs of low-income customers and that only about a quarter of all MVNOs could be said to offer 'discount' services. The European competition authorities abandoned MVNOs as a remedy for the merger of wireless carriers in Italy because they had had no impact on prices when used as a remedy in the mergers in Ireland and Germany and because they did not prevent prices of cheaper offers rising in Austria. Prospective MVNOs often make bold promises about what they will do during regulatory enquiries but the actual evidence from around the world suggests that most of these claims should be disregarded.

There is no evidence that having more MVNOs in a wireless market leads to lower prices, either for consumers as a whole or those on low incomes

14. Evidence on the impact of wholesale regulation for MVNOs is consistent with other evidence of the impact of MVNOs on prices when they rely upon commercial arrangements with wireless carriers. A study of 27 European markets found no empirical evidence that prices are lower as the number of MVNOs increases. A study of OECD countries came to the same conclusion in relation to prices and both the number of MVNOs and their combined market share. My own analysis shows that European countries with the most MVNOs, such as the Netherlands (which has over 70 with a combined market share of around 20%), often have high prices, including for low-income consumers, whilst countries like Sweden, which has comparatively low prices for low income consumers, has only a limited MVNO presence. There is, in other words, no evidence

from the rest of the world to suggest that measures which the CRTC might take to promote MVNO entry in Canada would benefit either consumers in general or those on low incomes. Other features of the market have a much greater impact on prices.

The impact of MVNOs on wireless markets around the world appears to be less significant today than it might have been 10-15 years ago

15. I do not consider these findings to be particularly surprising. I recall when MVNOs emerged in Europe and the US in the late 1990s and 2000s as wireless services became a mass market phenomenon. At that time, wireless carriers around the world lacked the retailing capacity, including brand appeal, that would be required to fulfil all of the demand for wireless services, including the particular needs of particular groups (such as those wishing to make cheap international calls via wireless devices). MVNOs, service providers and other kinds of intermediaries filled this gap by focussing on those segments of the population whose needs would otherwise have been unmet by the carriers. But that is no longer the case in most parts of the world today now that wireless markets are mature. Today ‘flanker brands’ are used by the wireless carriers themselves to offer low cost services to groups which they would previously left to MVNOs. Twenty years of competition between carriers has reduced prices in wireless markets around the world, leaving less room for the ‘discount’ MVNOs who have a limited ability to differentiate themselves on anything other than price. Many such MVNOs have sought to merge or exit the market as a result, sometimes by selling themselves to a wireless carrier. It is not surprising that the impact of MVNOs on wireless markets around the world should have diminished as a result.

If the CRTC were to adopt wholesale regulation of services for MVNOs it would be out of step with the rest of the world.

16. The CRTC would be out of step with international regulatory practice if it were to embark on regulating wholesale services for MVNOs. The evidence from around the world suggests that such measures would have little or no impact on the functioning of Canada’s relatively mature wireless market and would offer no specific benefits to low-income consumers. Other regulators and competition authorities have avoided MVNO remedies because they have found them difficult to implement and ineffective in terms of outcomes. They have also come to understand the overriding importance of investment in new network technologies to drive improvements in wireless market performance and have concluded that the risk of jeopardising this with wholesale regulation for MVNOs is not one that is worth taking.

The CRTC was more in step with international regulatory best practice when deciding not to adopt wholesale regulation for services for MVNOs in 2015

17. This does not mean that I argue that regulators elsewhere in the world would take no action in light of the concerns which the CRTC has presented in its enquiry and I consider in my report what else might be done.

18. The CRTC considered whether to adopt wholesale regulation for services for MVNOs in a previous enquiry which concluded in 2015 and to which I also submitted evidence on international practice. The CRTC concluded that the three national wireless carriers ought to supply domestic roaming services to the regional facilities-based carriers on regulated terms, including prices. This followed the CRTC's finding that the regional facilities-based carriers would be unable to provide adequate competition to the national carriers without access to such domestic roaming services and that the three national facilities-based carriers did not compete sufficiently with each other.

19. I consider that the CRTC's finding in 2015 that the three national wireless carriers enjoyed 'collective market power' and that there was a corresponding 'market failure' to be addressed was poorly reasoned and lacking evidence. But I also consider that, if it had been properly established, most other telecommunications regulators would have adopted the same domestic roaming regulation which the CRTC chose. Regulators around the world agree that interventions should, wherever possible, aim to promote competition between and investment by facilities-based carriers rather than competition from other firms, like MVNOs, that rely on the facilities of other carriers. A regulatory obligation to supply domestic roaming services to another facilities-based carrier, generally until they have built out their own facilities, is commonly used for this purpose around the world. Most regulators would consider further regulation specifically for MVNOs to be unnecessary because any remedy which ensures effective competition between existing facilities-based carriers will ensure that the needs of both retail consumers and wholesale customers, like MVNOs, are met. MVNOs may contribute to retail competition but they hardly ever contribute to facilities-based competition by transforming themselves into facilities-based carriers. I have found only two cases (out of thousands) where that might be said to have occurred.

The CRTC should have removed any restrictions on competition between Bell and TELUS in the commercial supply of wholesale services to MVNOs

20. There is one aspect of the Canadian wireless market which I highlighted in 2015 and which I think distinguishes it from other markets elsewhere in the world. This relates to the fact that Bell Canada and TELUS share a network for GSM-based services, rather than each having their own. Such network sharing is not unusual in itself, but it is unusual to find that it involves restrictions on the capacity of each of the partners to the agreement to compete with the other in the provision of wholesale services to MVNOs, as I understand to be the case for Bell and TELUS. This would effectively limit the number of potential suppliers of wholesale services for MVNOs to two (if the regional carriers are ignored) or three (if they are included). In my experience, other regulators and competition authorities would take a sceptical view of what appears to be a straightforward restriction on competition in the provision of wholesale services to MVNOs. The obvious solution is to remove the restriction and require Bell and TELUS to compete with each other in supplying MVNOs, as well as competing with Rogers and the regional carriers. I do not understand why the CRTC declined to do this in 2015 or why it would not do so now.

The CRTC could revisit how it already regulates domestic roaming before moving into new areas of regulation

21. The CRTC's provisional views in the current enquiry are arrived at on the basis that the domestic roaming remedy adopted in 2015 has not enabled MVNOs to obtain wholesale services on terms which enable them to compete effectively in the market. Even if this were the case, the obvious next question which most other regulators would ask is whether the remedies adopted in 2015 can be improved upon. It is clear, in my view, that they can. For example, the CRTC's approach of setting a single wholesale rate for both in-territory and out of territory roaming by regional carriers does little, in my view, to incentivise the regional carriers to build out their own networks. Nor does the absence of a sunset date for in-territory roaming. In my experience, a regulator would want to ensure that any domestic roaming obligations preserved incentives for the regional carriers to invest in their own infrastructure wherever they could, putting them in a better position to compete with the three national carriers. I think the CRTC erred by failing to do this properly in 2015. The obvious step is to correct this now and for the CRTC to better align the existing domestic roaming regime in Canada with what has been adopted successfully elsewhere in the world.

22. I do not understand why the CRTC seems reluctant to revisit its earlier decisions and instead prefers to focus on taking new and uncharted steps into the regulation of wholesale services for MVNOs. The CRTC seems to believe that the risks of regulating wholesale services for MVNOs are lower in 2020 than they were in 2015. I see no evidence to suggest this is the case in Canada

given the imminent investments required for 5G, and all the evidence from regulators and competition authorities elsewhere in the world is that the case for regulating MVNOs has grown weaker, not stronger, as the years have passed. Not only does the CRTC appear to be out of step with the rest of the world in this matter but it appears to want to go in the opposite direction to everyone else.

Richard Feasey

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