



Report for Rogers Communications

Talk is cheap in Canada: an
inter-country comparison of
mobile wireless prices

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0 Who we are, what we were asked to do, and what we found

Analysys Consulting is the largest telecoms specialist consultancy in the world. With offices in Europe, North America and Asia, Analysys advises a wide range of clients, including mobile and other telecoms operators, equipment suppliers, banks and other financial institutions, and governments in over 100 countries. Our service portfolio combines on-demand strategic advice with continuous market research.

Analysys Consulting was asked by Rogers Communications to analyze a range of wireless phone plans to determine how its pricing compares with operators in other countries (the USA and comparable countries in Europe in particular). Rogers posed to us the question: “How much would the typical Rogers customer have to pay to get the same service elsewhere?”

As a starting point, we used the standard basket price methodology commonly used by analysts and regulators. This methodology is appropriate for pricing comparisons within North America or within Europe, but not between North America and Europe for reasons explained below. We therefore started by comparing pricing in Canada and the US using the standard basket price methodology. Here is what we found for four typical types of Canadian mobile subscribers:

- **Low usage** subscribers (370 minutes per month) would pay CAD48 per month in Canada. In the US the same subscriber would pay CAD71 – 47% more than in Canada.
- **Medium usage** subscribers (744 minutes per month) would pay CAD54 per month in Canada. In the US the same subscriber would pay CAD76 – 40% more than in Canada.
- **High usage** subscribers (1050 minutes per month) would pay CAD81 per month in Canada. In the US the same subscriber would pay CAD70 – 14% less than in Canada.
- **Family plan** subscribers, on a package containing two lines and a typical usage split evenly between those two lines (344 minutes per month per line) would pay CAD33 per month. In the US the same subscriber would pay CAD51 – 55% higher than in Canada.

In conclusion, we find that Canadian subscribers are generally significantly better off in Canada than in the US. If a Canadian subscriber were to try to buy the same service in the

US, they would find themselves paying between 40% to 55% more than in Canada, with the exception of high usage customers who would make a relatively slight saving of 14%.

However, our comparisons did not stop there. The standard basket price methodology fails to take into account adequately a fundamental difference between the mobile markets in Europe and Canada that affects any comparison of the efficiency of those markets. In North America, mobile subscribers pay for all calls—both incoming and outgoing. The costs of calling to other mobile subscribers (whether on-net or not) and to fixed lines are covered by the retail price that mobile subscribers pay. This is known as the mobile party pays (MPP).

By contrast, in Europe, the person making a call bears the entire cost. Instead of getting retail revenue for incoming calls from its own subscriber, the European mobile operator charges a significant ‘mobile termination rate’ (typically in the range CAD0.10 to CAD0.20 per minute) to the operator whose customer places the call. This is then passed on to that calling customer. So the European mobile operator is collecting revenue for those incoming calls—it is just not labelled as *retail* revenue—and European consumers are paying for those calls—even though the charge will not appear on the bill of the mobile subscriber receiving the call.

We must therefore include these termination revenues (i.e., the price of incoming calls in Europe) in any true price comparison between Canada and Europe. This enables us to determine how much ‘bang for buck’ Canadian operators deliver relative to international benchmarks, or put another way, how efficient the Canadian wireless market is. Here is what we found:

- **Low usage** subscribers: Canada sits in fifth place out of nine countries, and is very close behind the UK. The two largest US operators finish in joint last place.
- **Medium usage** subscribers: Canada wins second place and at CAD54 per month is not far behind the leader Sweden (CAD47) – one of the most competitive mobile markets in the world. The US operators occupy fifth and sixth place.
- **High usage** subscribers: Canada occupies fifth place, just behind the Netherlands. The two largest US operators secure second and third place.
- **Family plan** subscribers: Canada sits in fifth place. The US however languishes at the bottom of the rankings.

In conclusion, Canadian mobile pricing compares quite favourably with pricing in Europe, particularly for medium usage subscribers. Canada's average ranking among the survey group is fourth out of nine countries, while the average ranking of the two US operators is seventh. Sweden leads for all these usage levels, but Canada is not far behind for the medium usage subscriber.

Compared to the US, Canadian wireless subscribers fare significantly better for all except the high usage basket. When it comes to low usage, medium usage and family-plan baskets – representing the majority of Canadians – then Canadians do far better at home.

The evidence suggests that US tariff plans are more geared towards high usage subscribers – for example, heavy corporate users. Overall, the two largest US mobile operators are competitive on price against one another, but clearly not against the international community.

The bottom line is clear. Canada compares very respectably on the international stage when we look at what the typical Rogers customer would have to pay to get the same service elsewhere. Canada bears the hallmarks of an efficient and competitive mobile services market.

1 The wireless market in Canada

In its latest *Telecommunications Monitoring Report on the Status of Competition in Canadian Telecommunications Markets (July 2006)*, the Canadian Radio-television and Telecommunications Commission (CRTC) summarized the status of the Canadian wireless market:

The wireless market continued to display strong growth and remained competitive in 2005. Wireless revenues increased from \$9.5 billion in 2004 to \$11.0 billion in 2005, a \$1.5 billion or 16.2% increase. This strong growth made the wireless market the largest sector in the telecommunications market, accounting for 32% of the industry's revenues. The number of wireless subscribers increased from 15.0 million subscribers in 2004 to 17.0 million in 2005, an increase of 2.0 million subscribers or 13.3%. Three major wireless service providers accounted for over 90% of

the wireless market, with no provider dominating in terms of either revenues or subscribers. The average monthly revenues per subscriber increased from \$48 in 2001 to \$53 in 2005.¹

In contrast to the all-GSM markets in Europe, Canada's wireless market is a mixture of CDMA and GSM networks. Unlike operators in Europe, Canadian mobile operators must cover a vast geographical area with a population divided between cities and sparsely populated rural areas. However, as the CRTC noted: "The wireless footprint ... encompasses approximately 97% of Canadians."²

The Canadian wireless market is extremely competitive, with three nationwide competitors — Bell Mobility, TELUS Mobility and Rogers Wireless — and two large regional players — SaskTel and Manitoba Telecom Services (MTS). 2005 saw the first commercial 3G launches in Canada (not including EDGE which launched earlier), and in 2006 the major players focused on expanding the technology nationwide.

MVNOs and resellers are also quite active in the Canadian wireless market. MVNOs, in particular, have targeted the prepaid market in Canada. For example, Virgin Mobile Canada (a joint venture with Bell Mobility) offers basic prepaid calling plans predominantly aimed at the youth market. The service had an estimated 400 000 subscribers at the end of 2006, and is aiming for a million subscribers in 2008.³ A number of resellers offer services on Rogers' GSM network including Primus, Sears Connect, 7-11 and Speak Out. Quebec-based cable operator Vidéotron launched an MVNO service over Rogers' infrastructure, which allows it to offer users a 'quadruple play' with a discounted bundle of cable TV, broadband Internet access, VoIP and mobile services.

The number of wireless subscribers nationwide in Canada has continued to grow (see Exhibit 1).

¹ At iv

² At 85.

³ Source: GlobalComms profile of Canadian telecoms market, PriMetrica 2007

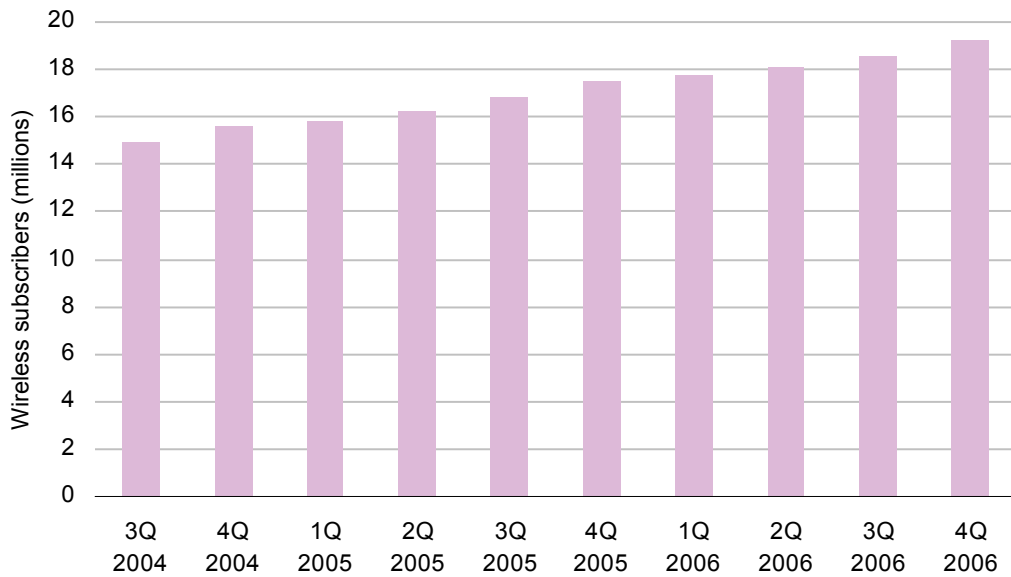


Exhibit 1: Number of wireless subscribers in Canada, 3Q 2004 to 4Q 2006 [Source: Telegeography]

The Canadian telecoms regulator, the CRTC, has essentially taken a ‘hands off’ approach to regulating the mobile industry. In 1996 it decided, subject to certain conditions, not to exercise many of its regulatory powers, including rate setting, with respect to mobile wireless voice services. Forbearance was extended to the incumbent local exchange carriers’ (ILECs’) mobile operations in 1998 after competitive safeguards were implemented. The CRTC decided to refrain from regulating because it found that the market was sufficiently competitive to protect the interests of users. As noted previously, the CRTC confirmed its view that the market was competitive in 2006.⁴

Industry Canada is the ministry responsible for establishing telecoms policy, spectrum management and the licensing of wireless communications services. Expanding on the regional duopolies that marked the roll-out of cellular mobile radio in the mid-1980s, in December 1995 Industry Canada issued licenses to provide PCS services. Two national

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In a July 2006 report, the CRTC summarized the Canadian wireless market as follows: “The wireless market continued to display strong growth and remained competitive in 2005.” Status of Competition in Canadian Telecommunications Markets can be found on the CRTC Web site at: <http://www.crtc.gc.ca/Eng/publications/reports/PolicyMonitoring/2006/tmr2006.pdf>.

30MHz licenses and one national 10MHz PCS license were awarded, along with eleven regional 10MHz licenses. In January 2001 Industry Canada held an auction for additional PCS spectrum in the 2GHz range.

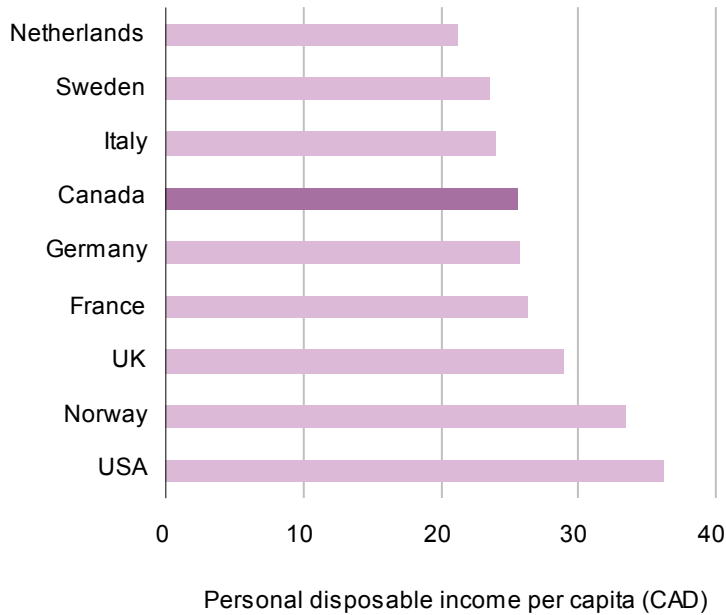
As part of the PCS licensing policy established in 1995, any one licensee and its affiliates were permitted to hold no more than 40MHz of mobile spectrum in a specific geographic area. In 1999 the cap was raised to 55MHz and in August 2004 the limit was removed altogether. The elimination of the cap allowed the cellular carriers to expand their networks and introduce new services.

Industry Canada is currently considering the framework for auctions of additional wireless spectrum.

2 Selection of countries for comparison to Canada

For quantitative comparisons with Canada, we selected the USA (as the most obviously comparable market, and Canada's neighbour) along with seven European countries, on the basis of their similarities to Canada and the USA along the following dimensions:

- high personal disposable income per capita (see Exhibit 2 below)
- well-established and stable regulatory regimes
- mature wireline and wireless telecoms industry.

**Exhibit 2:**

Disposable income per capita (2006) in study countries

[Source: EIU country data]

To provide a representative cross-section of European countries, we chose four major Western European countries – **France, Germany, Italy, and UK** – two Scandinavian countries – **Sweden and Norway** – and one of the Benelux countries – **the Netherlands**. These countries were also preferred due to the ready availability of reliable quantitative data needed to make the necessary comparisons in this report. They are all part of the OECD and EU15.

Recent studies analysing Canada’s wireless industry have also focused on European price comparisons with a subset of these countries.⁵

3 Price comparisons using a standard basket price methodology

In Section 3, we set out to answer the question “How much would the typical Rogers customer have to pay to get the same service elsewhere?”. Let us start with the standard basket price methodology commonly used by analysts and regulators.

⁵ For example, “Lament for a Wireless Nation – A Cross-National Survey of Wireless Service Prices: Canada, the United States and Europe”, Seaboard Group, March 2007.

3.1 Overview of the standard basket price methodology

The standard basket price methodology compares pricing for telecommunications services across different operators, in a two-step process.

First, a range of ‘typical’ usage baskets are built up which are meant to be representative of the wider subscriber base. Each usage basket defines the number of call minutes and text messages (SMS) used per month, along with the split by time of day (usually peak/off-peak/weekends) and call (or message) destination (on-net calls and messages, calls to a local fixed line, national long-distance calls, calls and messages to an off-net mobile line and voicemail). Note that increasingly the cost of voicemail is typically the same as an on-net call, so on-net usage can be defined to include voicemail usage.

Second, these usage baskets are put side-by-side against a selection of tariff plans offered by the largest service providers, in order to calculate the price that would be paid by a subscriber with that usage basket. To reduce the number of tariff plans under consideration, basket price analysis often looks only at the tariffs of the largest mobile operators, taking a sufficient number (usually two) to ensure that together the operators under consideration represent a large proportion (for example, over 50%) of subscribers in a particular country. In this way, an indication of the lowest overall basket price for each usage basket is obtained.

There is a major limitation inherent in the standard basket price methodology. It excludes the price of incoming calls in European countries. This arises because in Europe mobile subscribers receive incoming calls for free, and to compensate the mobile operator the person making the call (often a fixed line subscriber) pays a higher price for that call to a mobile phone than the price for calling to a fixed line. The standard basket price analysis does not take into account such charges which are levied by the mobile operator but do not appear on the monthly bill of the mobile subscriber. In contrast, North American mobile subscribers pay to receive incoming calls and this appear on their bills.

Therefore the standard basket price *cannot* be used to give a fair comparison of pricing in Canada or the US to pricing in European countries – that would not be an apples-with-apples comparison. This method *can* however be used to compare Canada and the US, and it is this comparison that we focus on in the remainder of this Section. In Section 4 we will

set about adjusting the standard basket price methodology in order to enable valid comparisons between Canada and Europe.

3.2 Choice of usage baskets

An appropriate choice for the ‘typical’ usage baskets is central to getting useful and relevant results. To understand what Canadian customers would pay to get the same service in other countries, we select usage baskets that are typical of Canadian users. Taking the usage basket for a typical European subscriber might be interesting from an academic point of view, but it would not tell us much about Canadian consumers or the price they pay for services.

Rogers provided us with average usage baskets on four of its most popular packages, which were cited as representative of its subscriber base as a whole. Clearly it would be ideal to compare these to usage data from other Canadian operators, but such data is not publicly available, and we were only able to get these level of detail because this report was commissioned by Rogers. That said, it seems reasonable to us to assume that the subscribers of the other Canadian mobile operators do not have wildly different usage patterns.

Exhibit 3 below summarises some of the key parameters that define the four usage baskets. We have provided a full and comprehensive specification of each usage basket in Annex A.

	<i>Low usage basket</i>	<i>Medium usage basket</i>	<i>High usage basket</i>	<i>Family plan usage basket²</i>
Total minutes ¹	370	744	1050	344
% outgoing	[<]%	[<]%	[<]%	[<]%
% peak	[<]%	[<]%	[<]%	[<]%
Total text messages ¹	36	60	33	39

¹Sum of incoming and outgoing minutes

²Total usage for two lines on the family plan

Exhibit 3: *Key parameters of usage baskets used in the basket price analysis [Source: Rogers Communications]*

We include call minutes and text messages (SMS) but exclude other types of messaging such as multimedia messaging (MMS), instant messaging (IM) and other data services. This simplification makes sense for two reasons. Firstly, it makes the analysis more transparent, not least because the way in which data services are priced and bundled varies widely between operators within the same country, let alone between countries. Secondly, usage of mobile data services is highly discretionary and individualised (depending on type of content being downloaded) and tends to be associated with additional out-of-bundle ‘add-on’ packages that come in many varieties at many price points. This makes identifying a ‘typical’ data usage basket difficult.

We do not include any international call minutes for similar reasons. International call pricing varies significantly by destination, and a subscriber’s total use of international calls, and distribution between countries, is highly individualised, making it difficult to identify a ‘typical’ usage basket. In any case, average international usage is very small compared to domestic usage.

In essence then, these four usage baskets represent typical domestic usage of basic services.

3.3 Details of methodology used in this study

The standard basket price approach requires that a number of more detailed but nevertheless important points of methodology needs to be defined before we can elicit a true apples-with-apples price comparison. We lay out our approach to each point below in turn, and explain why we think this is the appropriate approach.

It is important to be clear which operators’ tariff plans we are examining, and which of their tariff plans we include in our analysis. We focus on postpaid tariffs since these account for the majority of Canadian users. In Canada, given that we are using typical usage baskets for Rogers customers, we also use Rogers tariff plans. For the US, we focus on the two largest operators as counted by number of subscribers – AT&T (formerly Cingular Wireless) and Verizon, and select the plans which will give the lowest price for a given usage basket. In Europe, we used Analysys’s long-established ‘Cutting the Cost’ database to automatically select the operator and tariff plan, from among all the major

operators (MNOs and MVNOs), which would give the lowest cost for a given usage basket in each country.⁶

We must also ensure like-for-like comparisons when it comes to the myriad of options, features and small print associated with different tariff plans. All plans include basic features such as caller ID, call-waiting and voicemail. Where these features were not included in the base price (as in Canada for example), we added the price of the appropriate option. Some less common features, such as three-way calling or detailed billing, were not available on all plans. Where these were included as part of the base plan and could not be excluded, we did not attempt to arbitrarily adjust the package price. However, where they were not included in the base plan we did not add them. Clearly this is imperfect, but a reasonable approximation given that these are not core features used by a majority of users.

We exclude sales taxes or value-added taxes, along with any surcharges such as emergency service fees, which operators are required to collect from their customers. This is because we want to compare underlying pricing of operators in different countries, rather than tax and regulatory regimes which are out of the operators' control.

The US operators collect some surcharges which are named in such a way that they may appear to be government taxes or regulatory surcharges that the operators are obliged to pass on to end users. For example, AT&T customers will see tucked away at the bottom of their monthly bill, a 'federal universal service' charge of 3.1% of the pre-tax bill and 'other government surcharges' at 11%. However, AT&T is not obliged to split these out like this, nor necessarily to pass these charges on to customers. In other countries such charges might already be included in the headline retail price, therefore in the US we must add them to the basket price (although we still exclude sales taxes). For the same reason, we include the 'system access fee' charged by Canadian operators in the basket price calculation.

⁶ "Cutting the Cost" has been in use since 1990 (when it was developed in conjunction with Oftel/Ofcom the UK regulator). It covers 25 mobile operators in seven European countries, and examines up to 350 tariff plans in each time period. Data is updated bi-annually and it currently has over 1400 registered users, many of which are regulators. Essentially, reference to this database does the same job that an analyst would do, collating and analysing hundreds of tariff plans from tens of operators – but it does so in seconds rather than days.

We exclude limited-time promotions and rebates that lead only to temporary price reductions, or are targeted at a particular segment or for sales through a particular channel (for example, Internet-only sales, as opposed to purchases through brick-and-mortar retail outlets).

To the monthly fee for each tariff, we add any out-of-bundle usage charges – for example, for excess minutes or text messages – taking care to ensure that different types of call minutes (for example local off-peak minutes, or domestic peak minutes) have been removed from the bundle allowance in the way that would be done by the operator's billing system, before applying any excess charges.

Any activation fees are amortised over the minimum contract period of the plan under examination, and this amortised amount is added to the monthly fee.

Finally all local currency amounts are converted to Canadian dollars at purchasing power parity (PPP). In this way, we adjust not only for underlying exchange rates, but also the relative cost of goods in each country, so that the comparison best reflects how much mobile service costs in each country relative to the price of other goods in the same country. The PPP conversion factors were sourced from a standard benchmark – the Economist Intelligence Unit (EIU).

3.4 Results

The basket prices for each of the four typical Canadian usage baskets, calculated using the standard basket price methodology, are shown in Exhibit 4 below for Canada and the US. In the case of the US we show the results for both the largest mobile operators – AT&T and Verizon – since the US is of particular interest in comparison to Canada.

Family plans allow a household to purchase multiple lines under the same subscription, and at preferential prices. These are widely available in North America but not so common in Europe. The price shown in Exhibit 4 below for Canada and the US is half the price of a two-line family plan (i.e. the cost per line).

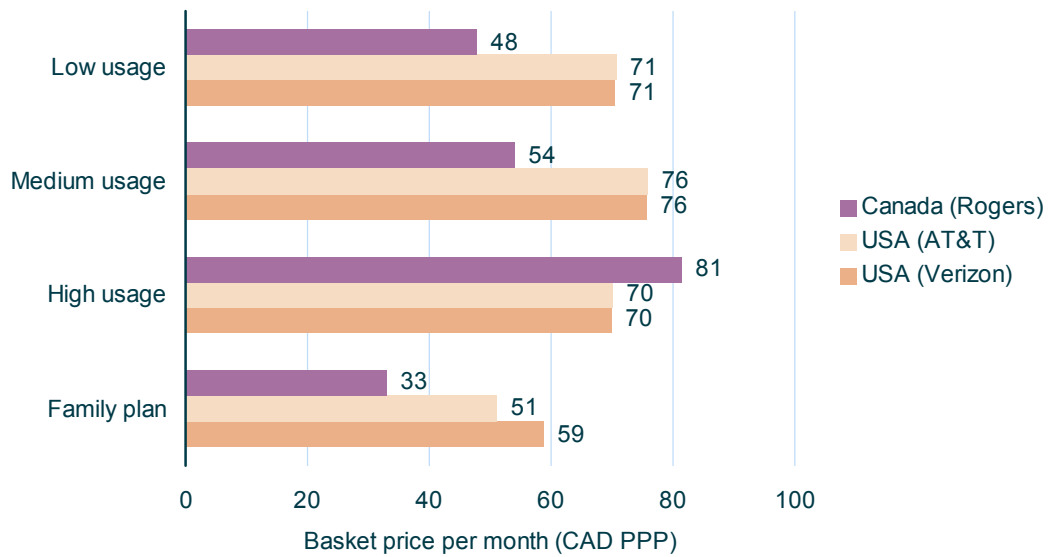


Exhibit 4: Monthly price for 'low usage' basket using standard basket price methodology
 [Source: Analysys, using data from Rogers and operators' Web sites]

Prices in Canada are considerably lower than in the US for typical subscribers with low usage, medium usage, or on a family plan. If a Canadian user with usage equal to the family plan usage basket tried to buy the same service in the US, they would pay 55% more on the less expensive of the two US operators. A low usage subscriber – for example someone on low income and unable to afford heavy phone usage – would pay 47% more in the US, and a medium usage subscriber 40% more. Only high usage subscribers – for example, corporate customers – would pay less in the US (CAD70 per month⁷) than in Canada (CAD81).

⁷

Note that the price of the high usage basket in the US is lower than the price of the low usage and medium usage baskets. This is because for each of the two largest US operators, the lowest-priced postpaid tariff plan happens to be the most effective across all three usage baskets (US plans are geared towards higher usage). The only difference in pricing thus comes from SMS usage. US tariff plans effectively penalise higher users of SMS, and since the low usage and medium usage baskets have a higher usage of SMS than the high usage basket (see Annex A) they have a higher total price, even though fewer minutes are used.

3.5 Conclusions

Using the standard basket price methodology we can compare prices in Canada and the US. We find that Canadian subscribers are generally better off in Canada. If a Canadian subscriber were to try to buy the same service in the US, they would find themselves paying between 40% to 55% more than in Canada, with the exception of high usage customers who would enjoy prices CAD10 per month lower in the US than in Canada.

4 Price comparisons including the cost of incoming calls

The standard basket price methodology we applied in the previous Section, has one major flaw when it comes to making comparisons that involve North American pricing. It fails to account for properly the structural difference between pricing in European and North American markets—that is, what mobile subscribers pay is not the sum of what mobile operators charge to provide service. Therefore to allow an apples-with-apples comparison between Canada and Europe, we must an adjustment for ‘termination charges’. This is explained and implemented in the remainder of this Section.

4.1 Calling party pays (CPP) versus mobile party pays (MPP)

There is a structural difference between costs—and thus prices—in European and North American wireless markets. In Canada and the USA, calls to fixed and mobile lines are not accounted for in different fashions. This means that the price of calling to a mobile subscriber is no different to that of calling to a fixed line subscriber. The mobile network recovers the cost of terminating the call from its own subscriber (whether directly by charging per minute for incoming calls, or more commonly in the price of a monthly bundle). This is referred to as ‘mobile party pays,’ or MPP.

In Europe, in contrast, the calling party pays for all calls he/she initiates, and so mobile subscribers pay nothing for incoming calls. This is referred to as ‘calling party pays’ or CPP. European mobile operators can set a relatively high mobile termination rate (typically in the range CAD0.10 to CAD0.20 per minute) that must be paid by all off-net callers,

including callers from fixed networks and from other mobile networks, on all calls to subscribers of the terminating mobile operator.

These termination charges account for on the order of 20–25% of European mobile operators' voice service revenues. So by looking only at what mobile subscribers pay (the standard basket price method), we do not get a true picture of the efficiency of mobile operators in different countries. To compare efficiency we must look at how much mobile operators are charging consumers overall – both their own subscribers and other consumers of telecoms services. Or put another way, how much 'bang for buck' do Canadian mobile operators deliver compared to other countries.

However, we must also be careful not to overstate the adjustment. In Europe the termination charges for mobile–mobile calls are already accounted for in the retail revenues for mobile–mobile calls – each mobile operator recovers the termination charges it pays to other mobile operators through retail charges to its own subscribers. The large termination payments between mobile operators largely net out, since traffic is usually close to balanced in each direction.

We only want to include the *net* termination revenue, in order to avoid double counting. Most of the net termination revenue accruing to mobile operators, comes from fixed–mobile calls – i.e. the form of mobile termination payments received from fixed operators which are in turn passed on to fixed retail customers in the retail prices they pay. Fixed termination rates are much lower, so the termination payments between operators do not net out.

In effect, the mobile operators have a second revenue stream in addition to their own subscriber – the subscribers of the fixed line operators. That is what we want to include here: the hidden price of incoming calls from the fixed network.

4.2 Adjustment to the methodology

Thankfully, only a minor—but important—adjustment to the standard basket price methodology is required to account for the termination charges levied by European

operators. We simply count up the number of incoming minutes from fixed networks for each usage basket, and multiply by the average termination rate.⁸

4.3 Results

The basket prices for each of the four typical usage baskets, following the standard basket price methodology but with the hidden cost of incoming calls (termination charges) added in, are shown below. Note that charts show both the countries and the names of the operators in each country whose tariff was found to be the most competitive among the operators examined.

'Low usage' basket

For 'low usage' subscribers, Canada comes out in fifth place. At CAD48 per month, Canada is just behind the UK, and by a very small margin. The Nordics are the cheapest of the survey countries for 'low usage' subscribers, and the US is to be the most expensive.

⁸ The average termination is obtained from the European Regulatory Group (ERG) – the umbrella organisation for European telecoms regulators established by the European Commission.

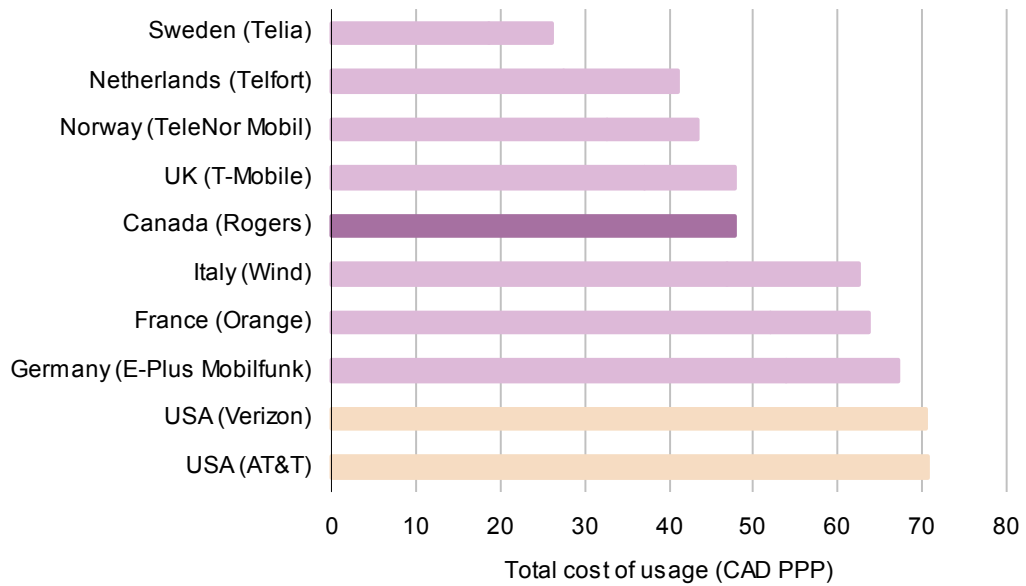


Exhibit 5: *Monthly price for 'low usage' basket using standard basket price methodology but including the cost of incoming calls [Source: Analysys, using data from Rogers and operators' Web sites]*

'Medium usage' basket

For the medium usage basket, Canada sits in second place at CAD54 per month – a close second to Sweden at CAD47. Next in line are the Netherlands and UK, which at CAD67 and CAD68 respectively are approximately 25% more expensive than Canada. The US operators occupy fifth and sixth positions respectively. Italy and Germany occupy ninth and tenth positions respectively with monthly prices well over double those enjoyed by Canadian subscribers.

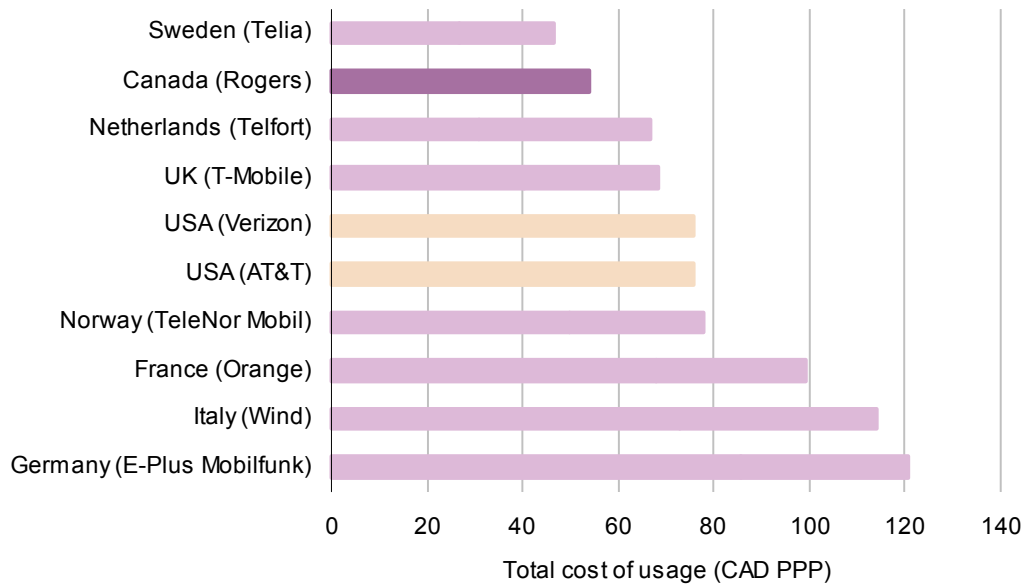


Exhibit 6: *Monthly price for 'medium usage' basket using standard basket price methodology but including the cost of incoming calls [Source: Analysys, using data from Rogers and operators' Web sites]*

'High usage' basket

For 'high usage' customers Canada is in fifth place at CAD81 per month, but very close behind Netherlands at CAD79. The US is in second place at CAD70, and only Sweden remains ahead at CAD62. As with the medium usage basket, France, Germany and Italy are again trailing far behind, at almost twice the price of Canada.

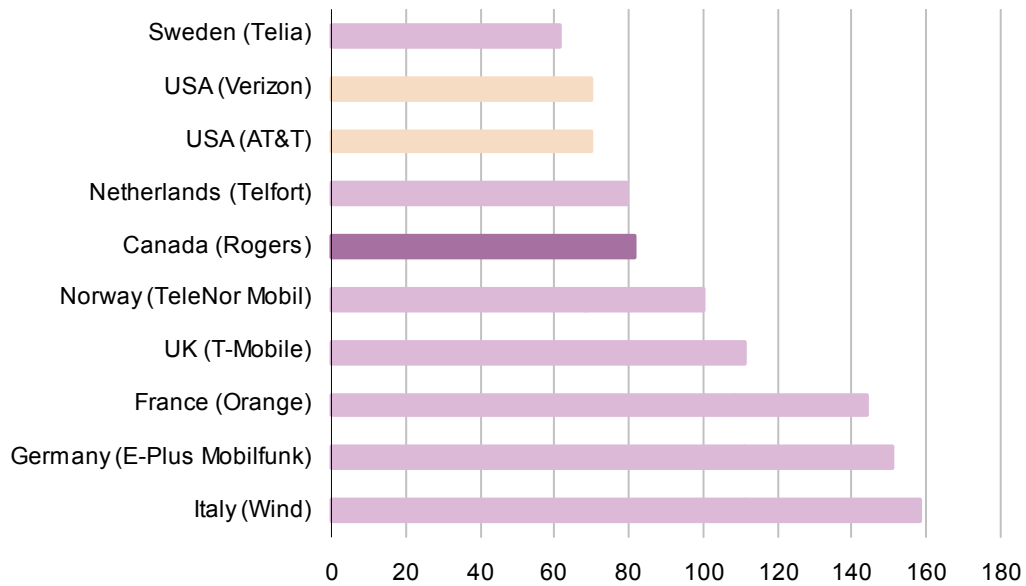


Exhibit 7: *Monthly price for 'high usage' basket using standard basket price methodology but including the cost of incoming calls [Source: Analysys, using data from Rogers and operators' Web sites]*

'Family usage' basket

Family plans allow a household to purchase multiple lines under the same subscription, and at preferential prices. These are widely available in North America but not so common in Europe. The price shown in Exhibit 8 below for Canada and the US is half the price of a two-line family plan (i.e. the cost per line). Where no family plan was offered in a particular European country, the most cost-effective plan for a usage basket equivalent to half the family plan usage, was taken.

Canada – at CAD33 per month – is in fifth position, ahead of France, Germany the UK and the US. The US is far behind everyone else –its price plans are geared to high usage baskets rather than the relatively modest usage per line typical of family plan subscribers.

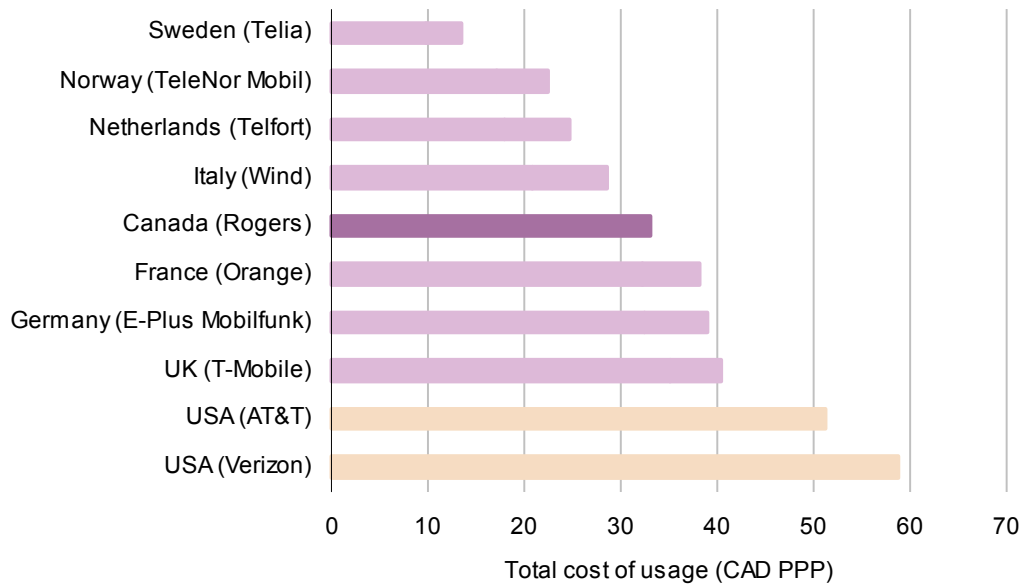


Exhibit 8: *Monthly price for ‘family plan usage’ basket using standard basket price methodology but including the cost of incoming calls [Source: Analysys, using data from Rogers and operators’ Web sites]*

4.4 Conclusions

By including the hidden price of incoming calls in Europe, we are able to conduct an apples-with-apples comparison between Canada and Europe. We find that Canada’s average ranking among the survey group is fourth out of nine countries, while the average ranking of the two US operators is seventh.

Considering the individual baskets in more detail, Canada sits in second position in the ‘medium usage’ basket category. At CAD54 per month it is not far behind leader Sweden (CAD47). For the low usage basket, Canada sits in a respectable fifth position (CAD48) out of the nine countries surveyed, ahead of Italy and almost neck-and-neck with the UK. Relative to Europe, Canada also does respectably for the high usage basket, coming just behind the Netherlands at CAD81. Better deals can be had in certain European countries such as Sweden but Canadian consumers fare similarly well or better in Canada than in most other major European economies.

The adjustment for termination rates in Canada and the US does not change the results from those presented in Section 3.4. We still see that compared to the US, Canadian wireless subscribers fare significantly better than their North American neighbours for all except the high usage basket. The evidence suggests that US tariff plans are more geared towards high usage subscribers – for example, heavy corporate users. When it comes to low usage, medium usage and family-plan baskets – representing the majority of Canadians – then Canadians do far better at home.

In short, Canada compares very respectably on the international stage when we look at what the typical Rogers customer would have to pay to get the same service elsewhere.⁹

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Canada's performance is even more impressive when we recognise that it has the world's second lowest population density. This means that the cost of covering a particular area has to be recouped over fewer potential subscribers. Consider, for example an operator that covers 2 million km² – approximately the coverage area of Canadian wireless networks. In the US, the operator in question would have a population of 261 million people to sell to; in Canada only 31 million. It is perhaps surprising therefore, that Canadian wireless prices compare as favourably as they do—an outcome probably attributable to the vibrant competition identified by CRTC.



Annexes to Report for Rogers
Communications

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mobile wireless prices

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Annex A: Specification of usage baskets

The usage baskets used in this report are defined in this Annex.

The reader should note the following points common to all baskets:

- no international calls are included
- no data services other than text messages (SMS) are included.

'Low usage' basket

Call minutes per month to/from	Outgoing ([<]%)			Incoming ([<]%)		
	Total ([<]%)	Of which peak ([<]%)	Of which off-peak ([<]%)	Total (100%)	Of which peak ([<]%)	Of which off-peak ([<]%)
Local call minutes	[<]	[<]	[<]	[<]	[<]	[<]
Of which on-net	[<]	[<]	[<]	[<]	[<]	[<]
Of which off-net fixed	[<]	[<]	[<]	[<]	[<]	[<]
Of which off-net fixed	[<]	[<]	[<]	[<]	[<]	[<]
Domestic long-distance call minutes	[<]	[<]	[<]	[<]	[<]	[<]
Of which on-net	[<]	[<]	[<]	[<]	[<]	[<]
Of which off-net fixed	[<]	[<]	[<]	[<]	[<]	[<]
Of which off-net fixed	[<]	[<]	[<]	[<]	[<]	[<]
Total MoU	[<]	[<]	[<]	[<]	[<]	[<]

Text messages per month	Outgoing ([<]%)	Incoming ([<]%)
On-net	[<]	[<]
Off-net	[<]	[<]
Total SMS/month	[<]	[<]

Note: row and column totals may not add precisely due to rounding

Exhibit 9: Usage basket for low usage basket [Source: Rogers Communications]

'Medium usage' basket

Call minutes per month to/from	Outgoing ([x]%)			Incoming ([x]%)		
	Total ([x]%)	Of which peak ([x]%)	Of which off-peak ([x]%)	Total ([x]%)	Of which peak ([x]%)	Of which off-peak ([x]%)
Local call minutes	[x]	[x]	[x]	[x]	[x]	[x]
Of which on-net	[x]	[x]	[x]	[x]	[x]	[x]
Of which off-net fixed	[x]	[x]	[x]	[x]	[x]	[x]
Of which off-net fixed	[x]	[x]	[x]	[x]	[x]	[x]
Domestic long-distance call minutes	[x]	[x]	[x]	[x]	[x]	[x]
Of which on-net	[x]	[x]	[x]	[x]	[x]	[x]
Of which off-net fixed	[x]	[x]	[x]	[x]	[x]	[x]
Of which off-net fixed	[x]	[x]	[x]	[x]	[x]	[x]
Total MoU	[x]	[x]	[x]	[x]	[x]	[x]

Text messages per month	Outgoing ([x]%)	Incoming ([x]%)
On-net	[x]	[x]
Off-net	[x]	[x]
Total SMS/month	[x]	[x]

Note: row and column totals may not add precisely due to rounding

Exhibit 10: Usage basket for medium usage basket [Source: Rogers Communications]

'High usage' basket

Call minutes per month to/from	Outgoing ([X]%)			Incoming ([X]%)		
	Total ([X]%)	Of which peak ([X]%)	Of which off-peak ([X]%)	Total ([X]%)	Of which peak ([X]%)	Of which off-peak ([X]%)
Local call minutes	[X]	[X]	[X]	[X]	[X]	[X]
Of which on-net	[X]	[X]	[X]	[X]	[X]	[X]
Of which off-net fixed	[X]	[X]	[X]	[X]	[X]	[X]
Of which off-net fixed	[X]	[X]	[X]	[X]	[X]	[X]
Domestic long-distance call minutes	[X]	[X]	[X]	[X]	[X]	[X]
Of which on-net	[X]	[X]	[X]	[X]	[X]	[X]
Of which off-net fixed	[X]	[X]	[X]	[X]	[X]	[X]
Of which off-net fixed	[X]	[X]	[X]	[X]	[X]	[X]
Total MoU	[X]	[X]	[X]	[X]	[X]	[X]

Text messages per month	Outgoing ([X]%)	Incoming ([X]%)
On-net	[X]	[X]
Off-net	[X]	[X]
Total SMS/month	[X]	[X]

Note: row and column totals may not add precisely due to rounding

Exhibit 11: Usage basket for high usage basket [Source: Rogers Communications]

'Family usage' basket (total usage for two lines)

Call minutes per month to/from	Outgoing ([X]%)			Incoming ([X]%)		
	Total ([X]%)	Of which peak ([X]%)	Of which off-peak ([X]%)	Total ([X]%)	Of which peak ([X]%)	Of which off-peak ([X]%)
Local call minutes	[X]	[X]	[X]	[X]	[X]	[X]
Of which on-net	[X]	[X]	[X]	[X]	[X]	[X]
Of which off-net fixed	[X]	[X]	[X]	[X]	[X]	[X]
Of which off-net fixed	[X]	[X]	[X]	[X]	[X]	[X]
Domestic long-distance call minutes	[X]	[X]	[X]	[X]	[X]	[X]
Of which on-net	[X]	[X]	[X]	[X]	[X]	[X]
Of which off-net fixed	[X]	[X]	[X]	[X]	[X]	[X]
Of which off-net fixed	[X]	[X]	[X]	[X]	[X]	[X]
Total MoU	[X]	[X]	[X]	[X]	[X]	[X]

Text messages per month	Outgoing ([X]%)	Incoming ([X]%)
On-net	[X]	[X]
Off-net	[X]	[X]
Total SMS/month	[X]	[X]

Note: row and column totals may not add precisely due to rounding

Exhibit 12: Usage basket for family usage basket [Source: Rogers Communications]

