

EUROPEAN COMMISSION
Information Society and Media Directorate-General



BROADBAND INTERNET
ACCESS COST (BIAC)

*First half of 2008
Prices as at 1-15 April 2008*

Contract n° 30-CE-0068969/00-12

FINAL REPORT

December, 2008

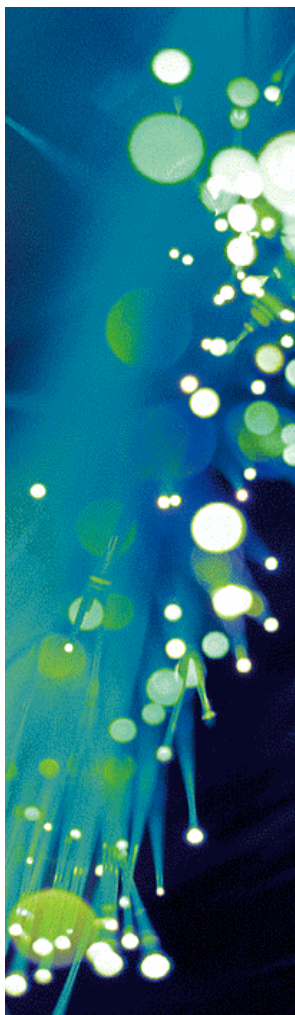


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Disclaimer: This report has been commissioned as an independent study to examine tariff developments in the European Community. The Commission does not accept any responsibility for the accuracy or completeness of the information contained herein.

The tariff information is collected by VAN DIJK MANAGEMENT CONSULTANTS from the individual operators, and is believed to be correct as for the period between **April 1st – 15th, 2008**. VAN DIJK MANAGEMENT CONSULTANTS will not accept responsibility for any decisions made on the basis of information in this report.

The opinions expressed in this Study are those of the authors and do not necessarily reflect the views of the European Commission.

1. INTRODUCTION

This is the first part of the 2008 comparative study on the Broadband Internet Access Costs in 27 Member States of the European Union and some other countries of reference. It is based mainly on information collected in the period between April 1st and 15th, 2008. Where appropriate, the information for this period has been compared with the similar information that was previously collected by VAN DIJK MANAGEMENT CONSULTANTS in April and October 2007.

1.1 CONTEXT OF THE STUDY

In June 2005, the European Commission (Directorate General for Information Society and Media) launched the "i2010 – A European Information Society for growth and employment" initiative. i2010 is a policy framework laying out policy guidelines for the information society and media up to 2010.

The three main priorities of the initiative are:

- 1) to create a Single European Information Space, which promotes an open and competitive internal market for information society and media services.
- 2) to strengthen investment in innovation and research in ICT.
- 3) to foster inclusion, better public services and quality of life through the use of ICT.

Under this initiative, the Commission will in particular promote high-speed and secure broadband networks.

As data available to the Commission indicate that pricing strategies have a direct impact on the take-up of broadband, the Commission has launched a study to provide price data on Broadband Internet Access Costs (BIAC).

1.2 SCOPE AND LIMITS OF THE STUDY

1.2.1 SCOPE OF THE STUDY

"Broadband Internet Access" is defined as *an access assuring an always-on service with speeds in excess of 144 kbps¹*. This speed is measured in download terms.

¹ This definition of "Broadband Internet Access" is consistent with the definition used in the 13th Implementation Report of the European Commission (cf. http://ec.europa.eu/information_society/policy/ecomms/library/communications_reports/annualreports/13th/index_en.htm, Volume 2, p. 92). It should be noted, however, that it was observed that most often the lowest broadband access speed equalled 256kbps. Exceptions to this rule are speeds equal to 150 kbps (2 offers in Bulgaria, compared to none in October 2007), speeds equal to 160kbps (2 offers in Denmark compared to 4 offers in October 2007), speeds equal to 192 kbps (3 offers in sample for Bulgaria, 1 offer for Latvia and 4 offers for Lithuania, compared to none, 1 offer and 2 offers respectively in October 2007), speeds equal to 200 kbps (1 offer in Estonia, compared to none in October 2007), speeds equal to 210 kbps (2 offers in Estonia compared to none in October 2007) and speeds equal to 240 (1 offer in Bulgaria, compared to none in October 2007).

The identification of the different broadband offers is limited to those intended for *residential* subscribers. Business packages or offers for professional users only are not taken into account. Note however that *residential* packages are also available to and used by small and medium enterprises (SMEs) as the speeds are also satisfying the needs of these customers. Furthermore, the study only deals with supplies at retail level, and not at wholesale level.

The study covers 33 countries: the 27 Member States of the EU, Norway, Iceland, Japan, South Korea, Canada and the USA. For the USA, three different States have been selected based on their population density: New York, California and Colorado. The two first States have a highly developed broadband access supply, whereas Colorado's is less developed.

1.2.2. LIMITS OF THE STUDY

It should be noted that the comparison of Broadband Internet Access Cost as presented in this report is characterised by a number of limitations. The main limitations can be summarised as follows:

1. The basis for the comparison is limited to a number of parameters and characteristics.

It was observed that the cost structures for broadband access services can be very complex² which means that costs as well as the service itself can vary depending on a broad set of parameters (e.g. location of the client in terms of a specific city or even street, time of day for the consumption of additional downloadable volume, distinct prices for local or international content, usage of the ISP of its own network or not, etc.). Furthermore, it is difficult to include the value of qualitative characteristics (e.g. level of protection, available webspace, etc.) in a quantitative comparison exercise (i.e. based on the cost of the service).

2. The study is limited to a targeted coverage of 80%³ of the market.

Given the often very high number of ISPs representing the remaining 20% of the market, it was deemed not to be feasible to cover the market fully.

3. The study presents an overview of what offers are available, not of what is actually consumed by the customers.

As no information is available on the volumes of each offer actually sold in the sample, no weight could be attributed to the different offers for which data is collected for the same country. Furthermore and as a consequence, no weight other than the number of offers available could be given to the baskets defined in paragraph 3.2.1.a.

4. The study excludes discounts based on promotions.

² Some ISPs provide offers for which the costs are 'to be negotiated' or 'subject to deal'. As this study relies on price information that is publicly available and confirmed by ISPs, such offers have not been taken into account. No evidence could be found of the prices obtained in such negotiations.

³ For some countries (the Czech Republic, Lithuania and Romania), due to a significant fragmentation of the market, it was observed that the number of ISPs globally representing at least 80% of the overall market was extremely high. In those cases, a few small market players were included in the sample of ISPs to ensure that it would be as representative as possible.

Since promotions are considered to be – by definition⁴ – limited to specific circumstances (e.g. limited in time), it was held that these do not provide a good indication of the actual cost for broadband Internet access. Please note however that some ISPs offer consecutive and repeated promotions, making these offers quasi permanent, so it could be argued that the cost of promotions do correctly reflect the cost of the broadband Internet access offer.

5. The normalisation of metered offers (cf. paragraph 3.2.1.b.) is based on theoretical parameters.

As for the metered offers, no information is available on the actual consumption (especially in terms of downloaded volumes and the average number of hours that the Internet was accessed), theoretical normalisation parameters have been defined. These parameters can be considered to be best estimates for the average metered offer in a specific basket, but could not be checked against actual consumption statistics.

This theoretical normalisation cannot always be attained because of constraints that occur in reality; e.g. the theoretical parameters cannot be reached because of restrictions in the form of a maximum usage (i.e. a strict maximum) in terms of downloadable volume (e.g. in Ireland and Lithuania), and the 'fair use principle'.

As the minimum service level, imposed by our normalisation parameters cannot be reached in such cases, the offers concerned have not been included in the sample and will therefore not be taken into account when determining the least expensive or median offer per country.

These limitations should not be confused with maximum invoice (strict maximum amount on the monthly invoice, e.g. in Belgium, Denmark and Iceland): in this case the invoice limit does not prevent the user from obtaining the minimum service level as defined for each basket.

6. The 7 baskets to which the offers are allocated for the comparison of the broadband access costs group offers with considerable technical differences.

A trade-off had to be made between limiting the number of baskets to a reasonable number and defining baskets that are suitable for all of the countries included in the study, independent of the degree to which the broadband Internet service market is already developed in these countries. Consequently, it can be observed that within one basket, the cost of offers with relatively divergent speeds is compared.

7. The packages included in the study are limited to the 'pre-defined' packages (in contrast to the 'à la carte' packages).

Several ISPs offer bundled offers 'à la carte', i.e. the customer can define a level of consumption for each individual service included in the package (e.g. combination of a volume of mobile call minutes, fixed call minutes, download speed for broadband Internet access, number of TV-channels). Including a cost for all of these packages would require defining multiple profiles for the additional services, which would then need to be combined in different ways with the baskets defined for the broadband Internet access service. This exercise is considered to be outside the scope of this

⁴ As a general rule in this study, an offer is considered as a promotion when the time to subscribe to the offer under the specific conditions mentioned, is less than 12 months or when it is aimed at a specific group of consumers (e.g. students).

study. However, whenever pre-defined packages with different levels of service were available, they were all considered (e.g. packages with limited or unlimited telephony service included, with analogue or digital television service, etc.). Finally, the possibility of obtaining simultaneously multiple single services at one ISP has not been considered in case this was not presented as a package. This implies that possible (negotiated) reductions that could be obtained in this case were not considered.

8. As the cost of the broadband Internet access service cannot be isolated in case of a bundled offer, the cost of bundled offers are analysed globally.

The 'pre-defined' packages represent nearly half of the total number of offers for which data was collected for the first semester of 2008, compared to one-third in 2007. As the packages seem to be a market segment that is currently growing strongly, it cannot be excluded that the volume of packages might increase further over time.

The case of France is particular, as in this country no Internet access-only offers were available in 2007. This changed for April 2008, as some ISPs offer both Internet access only products and pre-defined bundles.⁵

In conclusion, it should be stressed that this study is not exhaustive. Consequently, it is possible that offers less expensive than those presented in this study are available on the market.

Also, in such a dynamic market, it is possible that some prices are out-of-date from the day the report is published. It is therefore important to keep the date of the data collection in mind when making use of the data.

⁵ The offers in the BIAC study include both "Internet Access only offers" (or "non-bundled offers") and "bundled offers" (i.e. including services other than Internet Access). The name "unbundled offers" will not be used as this refers to broadband access provided by alternative operators by means of (wholesale) LLU access. The wholesale products based on which the retail broadband internet access service is offered are not relevant for the BIAC study.

2. METHODOLOGY FOR THE DATA COLLECTION

The data collection for the Broadband Internet Access Costs comparison exercise requires first a selection of ISPs per country. After that, detailed information can be collected for each of the individual relevant offers of the selected ISPs.

The following sections present the approach for the selection of the ISPs and the offers. Furthermore, an overview of the selected ISPs and the technologies offered by these ISPs are presented, as well as an indication of the high level composition of the offers in our sample.

This report, which handles mainly data collected in April 2008, related in fact to the third data collection exercise. Comparable data as presented below had previously been collected in April and October 2007. These two databases have also been taken into account while carrying out the Broadband Internet Access Cost study for April 2008.

2.1. SELECTION OF ISPs

2.1.1. CRITERIA APPLIED FOR THE SELECTION OF THE ISPs

For each of the 33 countries, the top Broadband Internet Services Providers, ranked by number of subscribers, have been identified, and the largest ISPs representing globally at least 80% of the overall national market were selected. These ISPs are presented in section 2.4. In case a new ISP has appeared in the list of April 2008 (compared with the database for October 2007), this one is indicated with an asterisk. Even though the ISPs in the sample are dynamic in terms of offered services and prices, we could observe that out of the 166 ISPs that make up the sample in 2008 only 18 are new. Furthermore, 9 ISPs included in the sample of October 2007 are not longer considered.

For some countries, due to a significant fragmentation of the market, it was observed that the number of ISPs globally representing at least 80% of the overall market was extremely high (e.g. The Czech Republic, Lithuania and Romania). In those cases, a few small market players were included in the sample of ISPs to ensure that it would be as representative as possible.

2.1.2. INFORMATION SOURCES

Information coming from a number of sources has been analysed and cross-checked for defining the sample of ISPs per country. For most of the countries, information on the market shares per ISP, or on the list of ISPs representing globally over 80% of the total market, was obtained directly from the National Regulatory Authority (NRA). For other countries, information was found and cross-checked in various publications and databases regarding broadband statistics.

The Excel tool accompanying this report and provided to the Commission contains for each country detailed information on the sources used for the selection of the ISPs. Given the fact that the use of more general publications or databases indicates that not all required

information could be obtained from a number of NRAs, it was decided more appropriate to consider the individual sources per country as confidential for this report.

2.1.3. PERIOD UNDER CONSIDERATION

The most recent information on the market shares per ISP has been requested and searched for systematically. In practice, all data concerning the market shares essentially relates to the second semester of 2007, and very often figures representing the situation end of December 2007 were used.

2.2. SELECTION OF THE BROADBAND OFFERS OF THE ISPs

2.2.1. CRITERIA APPLIED WHEN COLLECTING AND SELECTING THE BROADBAND OFFERS

For all ISPs selected and presented in section 2.4, information was collected for all their broadband offers available to residential subscribers, independent of whether they are:

- Non-bundled or bundled with other services (the categories of bundles considered are: Internet Access + Fixed Telephony; Internet Access + Television; Internet Access + Fixed Telephony + Television);
- Unmetered or time-metered / volume-metered (cf. subsection 2.5.4);
- Based on xDSL, Cable or any other technology (cf. section 2.3).

It was observed that ISPs in some countries also consider a connection with a speed of 128 kbps as a broadband offer. Information on these offers was also collected, but is excluded from the baskets used for the comparison analysis (cf. paragraph 3.2.1.a). A brief analysis of these offers is presented in section 4.1.

Furthermore some countries (e.g. Lithuania, State of California) have offers of which the prices are based on negotiations. These offers have not been taken into account as these negotiations are not a good basis for cost comparison.

In total, data on 1830 offers was collected for April 2008 (i.e. 264 more offers than in October 2007, and 600 more than in April 2007) which shows that the market is dynamic. 22 of all collected offers have speeds up to 144 kbps (cf. paragraph 3.2.1.a.). 11 of all collected offers could not offer the assumed minimum service level because of the system of maximum invoice or maximum usage (cf. page 7). 7 offers were negotiable on the price. Consequently, the comparison analysis relates to 1790 offers.

2.2.2. DEFINITION OF BUNDLED OFFERS

A bundled offer was previously defined by the European Commission as '*a product where operators offer a variety of services for a single overall price, provided through different platforms for the benefit of consumers*'.⁶ The following paragraphs comment on how this definition has been narrowed or broadened to determine the bundled offers that fall within the scope of the BIAC study.

Criterion 1: The offer contains a variety of services

Regarding the variety of services included in the bundled offer, three categories of bundles are distinguished in the BIAC study. These are:

- Internet Access + Fixed Telephony;
- Internet Access + Television;
- Internet Access + Fixed Telephony + Television.

These three categories are the only ones that include Internet Services and are bought by more than 2% of all households of the EU27.⁷ Consequently, no other categories of bundles – especially those that include mobile telephone services – were included (e.g. Internet Access + Mobile Telephony or Internet Access + Fixed Telephony + Television + Mobile Telephony).

Two additional arguments for not including bundles with Mobile Telephony are:

- * the observation that Mobile Telephony is most often offered as an additional option in a bundle that is also offered without this Mobile Telephony service;
- * the tariff structures of this option are very comparable with the 'stand alone' rates for Mobile Telephony services, which implies that they distinguish between e.g. calls during different time periods, on-net calls, off-net calls, SMS tariffs, etc. and makes it very difficult to derive a normalised total charge per month.

In conclusion, the categories of bundles were limited to the three most important ones and no specific costs were collected for bundles including mobile services. In the data collected for the retained categories of bundles, a parameter was nonetheless included to indicate those bundles for which it is possible to add Mobile Telephony as an option.

Criterion 2: The cost of the offer equals a single overall price

It was observed that the tariff structures of packages containing multiple services can be very complex and are not necessary 'flat'.⁸ So even if the consumer is receiving one single invoice at the end of a period (e.g. per month), the amount due will not necessarily always be the same.

For the BIAC 2008 study, the approach was taken that packages containing multiple

⁶ Cf. 12th Implementation Report of the European Commission (cf. http://ec.europa.eu/information_society/policy/ecommm/implementation_enforcement/annualreports/12threport/index_en.htm).

⁷ Cf. E-communications Household Survey Special Eurobarometer, European Commission. http://ec.europa.eu/information_society/policy/ecommm/doc/library/ext_studies/household_07/eb68_2infoecommm_full.pdf (June 2008)

⁸ 'Flat costs' are not in function to a specific volume of a service.

services – even if some of the services have ‘metered’ charging – are perceived as a bundle by the consumer and therefore need to be included in the sample of the selected offers. This implies that a rather large interpretation is given to the above-mentioned definition in the Implementation Report. More precisely, all packages of multiple services grouped into one invoice are considered bundled offers, independent of whether they are fully or partially metered (for the Internet Service included) or limited (for the other services included in the bundle). The only exceptions are the offers that are fully ‘à la carte’; i.e. an offer that enables the customer to define the level of consumption of the individual services included in the package.

Criterion 3: The services are provided through different platforms

Depending on what is exactly meant by ‘a platform’, it was assumed for the BIAC 2008 study that different services in one bundle could be offered by the same platform. An example is the combination of an xDSL Internet Access with VoIP Fixed Telephony services. Again, this implies that the definition previously given ‘bundled offers’ by the European Commission was interpreted broadly.

2.2.3. INFORMATION SOURCES

The data required for the BIAC comparison have been collected from primary sources (i.e. the ISPs), mainly via the information that is published on their websites. In addition, ISPs were contacted directly by telephone or e-mail in cases where further clarification regarding the published information was needed.

2.2.4. PERIOD UNDER CONSIDERATION

The financial and technical parameters for all of the selected broadband offers in this second part of the report were collected in the period between April 1st and April 15th, 2008 and compared with the information in the 2007 database (data collected in the period between April 1st and April 15th 2007 and between October 1st and October 15th 2007).

2.3. OVERVIEW OF THE TECHNOLOGIES INCLUDED IN THE SELECTED OFFERS

In the sample of selected offers several technologies for Internet data transmission can be observed.

‘xDSL’ stands for digital subscriber line and represents a family of technologies that provide digital data transmission over the wires of a local telephone network (e.g. ADSL, ADSL2+, SHDSL, VDSL, ...).

‘Cable Internet’ works by using TV channel space for data transmission, with certain channels used for downstream transmission, and other channels for upstream transmission.

‘Satellite Internet’ uses a satellite in geostationary orbit to relay data from the ISP to its customers.

'FTTH', Fiber to the Home, is defined as a telecommunications architecture in which data transmission is provided over optical fibre cables extending from the telecommunications operator's switching equipment to (at least) the boundary of the home living space or business office space. Some of the FTTH offers in the sample are based on an architecture using LAN techniques.

'Plug & Play' can be used with technologies like WiMAX and 3G. With the exception of 'WiMAX at home'⁹ these technologies are characterised by the fact that the broadband Internet access is not limited to a specific location, as opposed to where the Internet access is provided through a telephone line, cable or fibre. The name of the category 'Plug & Play' refers to the ability of a computer system to configure automatically expansion boards and other devices. You should be able to plug in a device and run it. As it was observed that the Mobile Broadband Internet Access (MBIAC) offers have technical characteristics that are quite different from the other technologies,¹⁰ a sub-category '(Mobile) Plug & Play' was created. In the April 2008 database, the MBIAC offers have been identified and isolated. **They will not be taken into account in the comparison of the Broadband Internet Access Cost based on the 7 baskets** (cf. paragraph 3.2.1.a). The relevance of a further analysis of the '(Mobile) Plug & Play' offers will be further evaluated based on the evolutions observed in the October 2007 database compared to the April 2008 database.

It can also be noted that the same ISP sometimes offers broadband based on different technologies. A detailed overview of what technologies are offered by which ISPs can be found below in section 2.4.

⁹ A specific offer, whereby a modem is fixed at the outside of the customer's premises.

¹⁰ It was mainly observed that the downloadable volume is lower and not related to the download speeds as presented in the definition of the baskets in paragraph 3.2.1.a.

2.4. OVERVIEW OF THE ISPs SELECTED FOR EACH COUNTRY, INCL. THE TECHNOLOGIES USED

The selected ISPs have been sorted alphabetically and according to their status on the market, i.e. incumbent¹¹ or new entrant.

Country	ISP	Status	Technology
Austria	Telecom Austria	Incumbent	xDSL
	Tele2UTA	New Entrant	xDSL
	UPC	New Entrant	xDSL and Cable
Belgium	Belgacom	Incumbent	xDSL
	KPN Tele2 (previously Tele2)	New Entrant	xDSL
	Telenet	New Entrant	Cable
Bulgaria	BTC Net	Incumbent	xDSL
	Cable Tel	New Entrant	Cable and FTTH
	Eurocom *	New Entrant	Cable
	Internet Group *	New Entrant	Cable and FTTH
	Net is Sat *	New Entrant	FTTH
	Powernet *	New Entrant	Cable and FTTH
	Spectrum Net	New Entrant	xDSL
Canada	Bell Canada	Incumbent	xDSL and Plug & Play
	Shaw	Incumbent	Cable
	Videotron	Incumbent	Cable
	Rogers	New Entrant	Cable and Plug & Play
	Telus	New Entrant	xDSL
Cyprus	Cytanet	Incumbent	xDSL
Czech Republic	Telefónica O2	Incumbent	xDSL
	GTS Novera	New Entrant	xDSL
	Radiokomunikace	New Entrant	xDSL and Satellite
	T-mobile *	New Entrant	xDSL
	UPC	New Entrant	Cable
Denmark	TDC	Incumbent	xDSL
	Cybercity	New Entrant	xDSL
	Dansk Kabel TV * (part of TDC)	New Entrant	Cable
	Telia-Stofa	New Entrant	xDSL
Estonia	Elion	Incumbent	xDSL, Cable and Plug & Play

¹¹ Incumbents are defined as the organisations enjoying special and exclusive rights or de facto monopoly for provision of voice telephony services before liberalisation, regardless of the role played in the provision of access by means of technologies alternative to the PSTN.

Country	ISP	Status	Technology
	Starman	New Entrant	Cable
	STV	New Entrant	Cable and FTTH
Finland	Elisa	Incumbent	Cable, xDSL and Plug & Play
	Sonera	Incumbent	xDSL, Cable and FTTH
	DNA group	New Entrant	xDSL, Cable
	Finnnet group	New Entrant	xDSL, Cable
France	Orange	Incumbent	xDSL
	Free	New Entrant	xDSL
	Neuf Telecom	New Entrant	xDSL and FTTH
Germany	Deutsche Telecom	Incumbent	xDSL and Satellite
	Alice	New Entrant	xDSL
	Arcor	New Entrant	xDSL
	Freenet	New Entrant	xDSL
	United Internet	New Entrant	xDSL
	Versatel	New Entrant	xDSL
Greece	OTE	Incumbent	xDSL
	HOL *	New Entrant	xDSL
Hungary	T-Com	Incumbent	xDSL
	T-Online	Incumbent	xDSL, Cable and Plug & Play
	EnterNet	New Entrant	xDSL
	Externet	New Entrant	xDSL
	GTS-Datanet	New Entrant	xDSL
	Invitel	New Entrant	xDSL and Plug & Play
	UPC	New Entrant	Cable
Iceland	Siminn	Incumbent	xDSL
	OG Vodafone	New Entrant	xDSL
Ireland	Eircom	Incumbent	xDSL
	BT Ireland	New Entrant	xDSL
	Digiweb	New Entrant	xDSL, Cable, Satellite and Plug & Play
	Irish Broadband	New Entrant	xDSL and Plug & Play
	UPC	New Entrant	Cable
Italy	Telecom Italia	Incumbent	xDSL and Satellite
	Fastweb	New Entrant	xDSL
	Libero *	New Entrant	xDSL
	Tiscali *	New Entrant	xDSL
Japan	NTT East Japan	Incumbent	xDSL and FTTH

Japan

Country	ISP	Status	Technology
	NTT West Japan	Incumbent	xDSL and FTTH
	Jupiter Telecommunications	New Entrant	Cable
	Yahoo Japan	New Entrant	xDSL and FTTH
Korea	Korea Telecom	Incumbent	xDSL, Cable, FTTH and Satellite
	Hanaro Telecom	New Entrant	xDSL, Cable and FTTH
	Powercomm (Xspeed)	New Entrant	Cable
Latvia	Lattelecom	Incumbent	xDSL and Plug & Play
	Balticom	New Entrant	FTTH
	Baltinet Data	New Entrant	xDSL
	Baltkom TV	New Entrant	Cable
	Dautkom TV	New Entrant	Cable, FTTH
	Izzi	New Entrant	Cable and Plug & Play
	Livas Net	New Entrant	Cable
	MPE NET	New Entrant	Cable
	PRONETS	New Entrant	xDSL and FTTH
Lithuania	Teo	Incumbent	xDSL and FTTH
	Balticum TV *	New Entrant	xDSL, Cable and FTTH
	Dokeda	New Entrant	FTTH
	Lietuvos radijo ir televizijos centras	New Entrant	Plug & Play
	Omnitel	New Entrant	Plug & Play
	Penki! Kont. komun. centras	New Entrant	FTTH
	Telerena	New Entrant	FTTH
Luxembourg	P&T Lux	Incumbent	xDSL and Cable
	Cegecom	New Entrant	xDSL and Cable
Malta	Go (Maltacom)	Incumbent	xDSL
	Onvol	New Entrant	Cable
The Netherlands	KPN	Incumbent	xDSL
	Casema	New Entrant	Cable
	Essent @home	New Entrant	xDSL
	Het Net	New Entrant	xDSL
	Orange	New Entrant	xDSL
	Planet Internet	New Entrant	xDSL
	Tele2	New Entrant	xDSL
	UPC	New Entrant	Cable
	XL4ALL	New Entrant	xDSL
	Telenor	Incumbent	xDSL and Cable

Norway

Country	ISP	Status	Technology
	Get	New Entrant	xDSL
	Nextgentel	New Entrant	xDSL
	Tele2	New Entrant	xDSL
	Ventelo	New Entrant	xDSL
Poland	TP	Incumbent	xDSL
	Aster Group	New Entrant	Cable
	Multimedia Polska	New Entrant	Cable
	UPC Polska	New Entrant	Cable
	Vectra	New Entrant	Cable
Portugal	PT.COM	Incumbent	xDSL
	Cabovisao	New Entrant	xDSL and Cable
	Novis	New Entrant	xDSL
	ZON (TV Cabo) ¹²	New Entrant	xDSL and Cable
Romania	Romtelecom	Incumbent	xDSL
	Air Bites	New Entrant	Plug & Play
	Digitec	New Entrant	Cable
	RCS & RDS	New Entrant	Cable and FTTH
	UPC Romania	New Entrant	Cable
Slovakia	T-COM (Slovak Telekom)	Incumbent	xDSL
	Orange	New Entrant	Plug & Play and FTTH
	T-mobile	New Entrant	Plug & Play
	UPC	New Entrant	Cable
Slovenia	Telekom Slovenije	Incumbent	xDSL
	UPC Telemach	Incumbent	Cable
	Amis	New Entrant	xDSL
	T-2	New Entrant	xDSL and FTTH
Spain	Telefonica	Incumbent	xDSL
	ONO	New Entrant	Cable
	Orange	New Entrant	xDSL and Plug & Play
Sweden	Telia Sonera	Incumbent	xDSL, LAN and Plug & Play
	Brebandsbolaget	New Entrant	xDSL, LAN and Plug & Play
	ComHem	New Entrant	Cable
	Glocalnet	New Entrant	xDSL
The United Kingdom	BT	Incumbent	xDSL

¹² The ZON Multimedia brand replaced PT Multimédia in January 2008. PT Multimédia was part of the Portugal Telecom group. It split from its parent company in November 2007 as a result of a spin-off.

Country	ISP	Status	Technology
	BSkyB *	New Entrant	xDSL
	TalkTalk/AOL	New Entrant	xDSL
	Tiscali UK	New Entrant	xDSL
	Virgin Media *	New Entrant	xDSL and Cable
USA			
State of California	AT&T	Incumbent	xDSL
	Verizon	Incumbent	xDSL and FTTH
	Charter Communications *	New Entrant	xDSL
	Comcast *	New Entrant	Cable
	Cox Communications *	New Entrant	xDSL
	Earthlink	New Entrant	xDSL, Cable and Satellite
	Time Warner Cable	New Entrant	Cable
State of Colorado	AT&T	Incumbent	xDSL
	Verizon	Incumbent	xDSL and FTTH
	Charter Communications *	New Entrant	xDSL
	Comcast	New Entrant	Cable
	Earthlink	New Entrant	xDSL, Cable and Satellite
	Time Warner Cable	New Entrant	Cable
State of New York	AT&T	Incumbent	xDSL
	Verizon	Incumbent	xDSL and FTTH
	Charter Communications *	New Entrant	xDSL
	Comcast *	New Entrant	Cable
	Earthlink	New Entrant	xDSL, Cable and Satellite
	Time Warner Cable	New Entrant	Cable

Table 1: Overview of the ISPs selected for each country

Compared to the sample of ISPs analysed in the second half of 2007, there are eighteen new ISPs (indicated with asterisk) in this report (April 2008), while nine ISPs of the sample of October 2007 have been excluded from the current comparison. There is still one country (Cyprus) that has only one ISP in the sample.

2.5. OVERVIEW OF THE COMPOSITION OF THE SAMPLE OF BROADBAND INTERNET ACCESS OFFERS

The following subsections present some general comments on the composition of the global sample of broadband Internet access offers as selected based on the criteria outlined in section 2.2. Please note that the percentage of offers in the sample is based on the number of offers available to the general public, but that neither the actual uptake of the offers nor the individual market shares of the ISPs are accounted for.

The breakdowns of offers of this study (April 1st-15th 2008) have been placed next to the percentages based on the information from the 2007 database for April 1st-15th 2007 and October 1st-15th 2007. This way some trends can be distilled.

2.5.1. BREAKDOWN OF THE OFFERS IN THE SAMPLE BETWEEN INCUMBENT OPERATORS AND NEW ENTRANTS

The first table outlines the proportion of offers that are presented by the incumbents as against the percentage of offers from new entrants.

Status of the ISP	Number of Offers in sample (all countries)	% of Offers in sample (all countries)	Number of Offers in sample (all countries)	% of Offers in sample (all countries)	Number of Offers in sample (all countries)	% of Offers in sample (all countries)	Increase of number of Offers in sample of April 2008 compared to the sample of April 2007	Increase of number of Offers in sample of April 2008 compared to the sample of October 2007
Period	April 1st - 15th, 2007		October 1st - 15th, 2007		April 1st - 15th, 2008			
(Affiliated to) incumbent operator	442	36,1%	567	37,3%	547	30,6%	23,8%	-3,5%
New entrant	784	63,9%	955	62,7%	1243	69,4%	58,5%	30,2%
TOTAL	1226	100,0%	1522	100,0%	1790	100,0%	46,0%	17,6%

Table 2: Overview of the proportion of broadband offers provided by the Incumbent operators compared to those provided by New entrants

It can be noted that the proportion of incumbent offers in the whole sample decreased significantly in April 2008, compared to October 2007. Indeed, the number of incumbent offers decreased slightly (-3.5%), whereas a very significant *rise* in the number of offers of the new entrants could be observed (+30.2%). This strong increase for the new entrants is partly a result of the inclusion of additional new entrants in the sample (increase by 9.26% of the number of new entrants, i.e. 118 instead of 108 new entrants, representing in April 2008 71.95% of all ISPs, compared to 70.13% in October 2007). Furthermore, new entrants previously selected for 2007 also offered a wider selection of offers in 2008. This reverses the trend observed between April and October 2007, where offers from incumbents had represented a stronger growth than offers from new entrants.

Overall, the number of offers has increased by 17.6%. This represents a weaker growth than between the first and second semesters of 2007.

This list of incumbent operators and new entrants selected for each country can be found in section 2.4.

2.5.2. BREAKDOWN OF THE OFFERS IN THE SAMPLE IN TERMS OF DIFFERENT TECHNOLOGIES

The table below presents a breakdown of the offers in terms of different technologies:

Technology	Number of Offers in sample (all countries)	% of Offers in sample (all countries)	Number of Offers in sample (all countries)	% of Offers in sample (all countries)	Number of Offers in sample (all countries)	% of Offers in sample (all countries)	Increase of number of Offers in sample of April 2008 compared to the sample of April 2007	Increase of number of Offers in sample of April 2008 compared to the sample of October 2007
Period	April 1st - 15th, 2007		October 1st - 15th, 2007		April 1st - 15th, 2008			
xDSL	849	69,2%	970	63,7%	931	52,0%	9,7%	-4,0%
Cable	270	22,0%	332	21,8%	540	30,2%	100,0%	62,7%
FTTH (incl. LAN)	61	5,0%	134	8,8%	227	12,7%	272,1%	69,4%
Plug & Play	42	3,4%	71	4,7%	33	1,8%	61,9%	-4,2%
Plug & Play (mobile)					35	2,0%		
Satellite	4	0,3%	15	1,0%	24	1,3%	500,0%	60,0%
TOTAL	1226	100,0%	1522	100,0%	1790	100,0%	46,0%	17,6%

Table 3: Overview of the proportion of the different technologies in the sample of Broadband Internet Access offers

The decline in the proportion of xDSL offers, already observed between April and October 2007, is accentuated in the current sample. This evolution favours the proportion of offers using Cable technology and FTTH. A small decrease can also be seen in the proportion the Plug & Play offers that make up the whole sample.

In total and for every technology, there are more offers in absolute terms in the sample of April 2008 than in the previous samples. The increase between October 2007 and April 2008 in the number of offers of FTTH (+69.4%), Satellite (+60.0%) and Cable (+62.7%) are the most important, while the increase between April 2007 and April 2008 is the largest for both FTTH (+272.1%) and Satellite (+500.0%).

A description of the different technologies included in the sample can be found in section 2.3.

2.5.3. BREAKDOWN OF THE OFFERS IN THE SAMPLE IN CATEGORIES OF BUNDLED OFFERS

Finally, the following proportions of bundled and non-bundled offers were observed in the sample:

Services included in the offer	Number of Offers in sample (all countries)	% of Offers in sample (all countries)	Number of Offers in sample (all countries)	% of Offers in sample (all countries)	Number of Offers in sample (all countries)	% of Offers in sample (all countries)	Increase of number of Offers in sample of April 2008 compared to the sample of April 2007	Increase of number of Offers in sample of April 2008 compared to the sample of October 2007
Period	April 1st - 15th, 2007		October 1st - 15th, 2007		April 1st - 15th, 2008			
Internet Access	790	64,4%	978	64,3%	914	51,1%	20,1%	-3,0%
Internet Access - Plug & Play (mobile)					35	2,0%		
Internet Access + Telephone					431	24,1%		
Internet Access + TV					121	6,8%		
Internet Access + Telephone + TV	75	6,1%	125	8,2%	289	16,1%	285,3%	131,2%
TOTAL	1226	100,0%	1522	100,0%	1790	100,0%	46,0%	17,6%

Table 4: Overview of the proportion of the different bundles of services

There are significant changes in the proportions of the services included in the offers between April 2008 and the previous two periods. Though it can be observed that the number of internet access only offers is still the highest (53.1%), the proportion of bundled offers increased. The number of offers of Internet access only even decreased (-3.0%). Within the bundle market, Internet Access + Telephone offers are still predominant (24.1%) and experienced a slight increase (+39.0% since October 2007 and +60.8% since April 2007). Bundles comprising Internet Access and Television represent the smallest share (6.8%), with moreover the smallest increase over time (+11.0% since October 2007 and +30.1% since April 2007). The trend towards triple play (Internet Access + Telephone + TV, 16.1%) can be observed (+131.2% since October 2007 and +285.3% since April 2007) to the detriment of double play (packages with two services).

Nearly half of all broadband Internet access packages in the sample contain multiple services. Therefore, it was deemed appropriate to include them in a specific cost comparison exercise (cf. Chapter 5).

2.5.4. BREAKDOWN OF THE OFFERS IN THE SAMPLE BETWEEN METERED AND UNMETERED OFFERS

Metered offers are those with limited use in terms of the number of hours per month during which access to the Internet is provided (i.e. time-metered) or of downloadable volume (i.e. volume-metered). Unmetered offers are those without usage limits. The unmetered offers represent the large majority of offers selected in the sample.

Metered or unmetered offers	Number of Offers in sample (all countries)	% of Offers in sample (all countries)	Number of Offers in sample (all countries)	% of Offers in sample (all countries)	Number of Offers in sample (all countries)	% of Offers in sample (all countries)	Increase of number of Offers in sample of April 2008 compared to the sample of April 2007	Increase of number of Offers in sample of April 2008 compared to the sample of October 2007
Period	April 1st - 15th, 2007		October 1st - 15th, 2007		April 1st - 15th, 2008			
Unmetered offers	968	79,0%	1129	74,2%	1448	80,9%	49,6%	28,1%
Metered offers	258	21,0%	393	25,8%	342	19,1%	32,6%	-12,8%
TOTAL	1226	100,0%	1522	100,0%	1790	100,0%	46,0%	17,6%

Table 5: Overview of the proportions of metered and unmetered offers

Proportionally there are fewer metered offers in the selected sample of April 2008 than in the samples of April and October 2007. Though the total number of metered offers in the sample decreased by 12.8% between October 2007 and April 2008, it has increased by 32.6% since April 2007. The number of unmetered offers increased by 28.1% since October 2007, and by 49.6% since April 2007.

Compared to the sample of October 2007, three countries (Greece, Poland and Sweden) do not have any metered offers anymore. A downward trend in the number of metered offers can also be observed in Denmark and Estonia. In contrast, Korea now has metered offers which it did not in October 2007, and Portugal has increased its number of metered offers.

3. METHODOLOGY FOR DETERMINING AND COMPARING THE BROADBAND INTERNET ACCESS COST

The following sections outline the methodology that has been applied for determining and comparing the Broadband Internet Access Cost of the selected offers.

3.1. DEFINITION OF THE BROADBAND INTERNET ACCESS COST (BIAC)

The Broadband Internet Access Cost has been defined as the total monthly charges of the broadband offer, composed of:

- one-time non-recurring charges;
- monthly recurring charges.

This definition applies to both bundled and non-bundled offers.

3.1.1. NON RECURRING CHARGES

The non-recurring charges can include the following initial cost elements:

- installation;
- modem or router;¹³
- software driver;
- activation;
- additional administrative charges;
- television decoder;
- other charges.

In order to obtain a cost on a monthly basis, the one-time non-recurring charges are divided over an assumed standard contract duration of 12 months. This period was selected after analysis of the contract durations for broadband services that are currently most common.

If however, for a specific offer, it is not possible to end the contract after 12 months without a penalty, the actual contract duration is taken into account, in order to avoid overestimating the actual importance of the non-recurring charges per month.

Some ISPs present multiple options in terms of contract duration for the same broadband offer. This has been dealt with as follows:

- If a 12-month option is available, this one is selected for the Broadband Internet Access Costs comparisons.

¹³ The less expensive option of renting or buying a modem is chosen. If different types of modems are offered, again the least expensive option is chosen.

- If the longest option still implies a period shorter than 12 months, then the longest period is taken into account.
- If the shortest option is a contract duration of a period longer than 12 months, then the shortest period is selected.

Offers with very short contract durations (and no options over a longer period) have been observed in the following countries:

- Contract duration of 1 month: Sweden (3);
- Contract duration of 3 months: Malta (6);
- Contract duration of 6 months: Denmark (32), Iceland (11), Ireland (18), Latvia (8), State of California (2), State of Colorado (2), State of New York (2).

The numbers between the brackets indicate the number of offers per country, present in the sample. In the April 2008 sample, short contract durations appeared in the same number of countries as in October 2007, which was nearly twice that of April 2007. However, the number of offers in April 2008 with short contract duration, after a short increase in October 2007, decreased to approximately the same level as April 2007.

The installation and activation charges for non-bundled as well as bundled broadband services will most often depend on the 'status' of the customer (i.e. what services was the customer already subscribed to or what networks is the customer already connected to when determining the additional cost for activating broadband Internet access services). Therefore, it was decided to assume that access to the required *physical infrastructure* is already available to the customer, i.e. that he is indeed already connected to e.g. a copper telephone line, cable or optical fibre. Therefore, non-recurring charges for the installation of this infrastructure were not taken into account.

The installation and/or activation charges for a *specific service* that is part of the offer (bundled or not) will be considered as relevant non-recurring charges for the BIAC study. This implies that the non-recurring cost of an offer that contains solely Internet Access services will not e.g. include the non-recurring cost of the installation and/or activation of the fixed telephone or television service that one is obliged to subscribe to obtain the broadband access service.

Finally, in the case of 'Plug & Play' and Satellite enabled broadband access services, no installation of a physical connection is required, and hence the installation and activation charges included in the Broadband Internet Access Cost will automatically correspond to those of a customer with the status assumed above.

3.1.2. MONTHLY RECURRING CHARGES

The monthly recurring charges correspond, in the case of a non-bundled offer, to the charges for the broadband access service only (as opposed to e.g. the PSTN rental line fee), and in the case of a bundled offer, to the total charge for both the broadband access service as well as for the additional service (i.e. Fixed Telephone and/or Television).

The possibility of isolating the cost of the broadband access service in bundled offers (corresponding to nearly half of the offers in the sample – cf. subsection 2.5.3) was analysed, too, but it was concluded that it required too many assumptions to lead to a monthly charge for broadband services only than could be considered as being reliable.

Therefore, given that ISPs very often offer bundled packages to their customers, it was deemed appropriate to devote a specific chapter to the comparison of bundled offers.

In addition to the fact that an important part of the offers are bundled, it was also observed that a very wide variety of tariff structures is applied by the different ISPs and in the different countries. In some cases, these structures require additional decisions regarding which charges of a specific offer will be considered for the purpose of the study on the Broadband Internet Access Costs.

As stated in subsection 1.2.2. in some offers no exact prices are reflected as these are considered subject to negotiation. These offers were left out of the sample as they did not represent a good basis for comparison.

The following examples illustrate some of the tariff structures encountered and the way they have been dealt with:

- In some offers the tariff only includes unlimited access to national internet content (e.g. Iceland – O2 Vodafone – ‘unlimited domestic download’). To have access to international content one needs to pay per time unit. In these cases only the tariff structure of the international download content was taken into account and the offer is considered volume-metered.
- In some countries basic recurring charges differ according to the region or the city you live in (e.g. Finland– Sonera). In these cases we considered the tariffs of the bigger cities and regions.

3.1.3. DISCOUNTS AND EXTRA CHARGES

Finally, the assumption was made that discounts based on limited time¹⁴ and/or limited geographical promotions or discounts for ‘grouped’ subscriptions (e.g. for an apartment building or houses from the same neighbourhood) were not to be taken into account. The offers of Dansk Kabel TV, which are only available to the members of certain organisations, have however been considered as representative given the significant market share of this ISP.

Also, if it is indicated that e.g. an extra fee will be charged when a specific form of payment (e.g. direct debit) is not respected, these extra charges are not taken into account. Conversely, when a discount can be obtained when accepting e.g. direct debit for payments, this discount is not taken into account either.

¹⁴ An offer is considered a promotion when the time to subscribe to the offer under the specific conditions mentioned is less than 12 months or when it is aimed at a specific group of consumers (e.g. students).

3.2. COMPARISON OF THE BROADBAND INTERNET ACCESS COST

In order to make comparisons between offers as relevant as possible, it is necessary to do so on the basis of similarities. To get such a uniform basis of comparison, a threefold methodology is applied. Firstly, 7 representative user baskets have been defined, and each offer (excl. the '(Mobile) Plug & Play' offers)¹⁵ is placed in one of these baskets; secondly, a total normalised monthly cost is calculated, composed of recurring and non-recurring cost elements for all of the services included in the offer; and finally, the total monthly costs in the different countries are compared by not only using nominal exchange rates, but also by using purchasing power parities. This approach ensures both:

- Uniformity in technical terms and
- Uniformity in financial terms

3.2.1. UNIFORMITY IN TECHNICAL TERMS

The sample of broadband offers consists of offers that are characterised by different speeds and by different degrees of limitation on access to the internet (both in terms of downloadable volume or number of hours provided for access to the Internet).

Therefore, for comparison, different approaches can be taken, e.g.:

1. Comparison of the cost of each of the offers with the same download speed, regardless of whether access to the Internet is limited;
2. Comparison of the cost of all offers with unlimited access to the Internet, regardless of the download speed;
3. Comparison of the cost of all offers, regardless of download speed or the extent to which access to the Internet is limited.

The first approach was assessed as providing the most worthwhile results. Therefore, in a next step, the offers were first classified according to representative user profiles (called baskets) according to the download speed. Offers with different speeds, but falling between the same lower and upper limits (excluding the lower and including the upper limit¹⁶) are placed in the same basket. In the chart representing the least expensive charges per country, the nominal download limit is indicated.

Second, within the same basket, the cost of offers with limited access to the Internet (= metered offers) will be normalised to a reasonable access level (both in terms of downloadable volumes and number of hours) by adding a cost for additional downloadable volume or additional hours to access the Internet. In such a way, the normalisation improves the comparability of metered and unmetered offers in the same basket (cf. paragraph 3.2.1.b.).

Third, it is presented how a broad range of additional characteristics (e.g. differentiated speeds depending on the hour of the day or the origin of the content,..) were taken into account.

Finally, for all three services that can be part of the offers in our sample, a list of additional technical parameters were selected, enabling a further and more qualitative comparison.

¹⁵ As stated above, the relevance of a further analysis of the '(mobile) Plug & Play' offers will be further evaluated based on the evolutions observed in the October 2008 database compared to the April 2008 database.

¹⁶ Cf. Paragraph 3.2.1.a Definition of baskets

3.2.1.a. DEFINITION OF BASKETS

Based on an analysis of all of the 1790 broadband offers making up the total sample and after isolating the mobile plug & play offers (cf. section 2.3), 7 representative baskets were defined. More precisely, in order to increase coherence between different studies commissioned by DG INFSO, the same definitions for the baskets have been used as earlier applied by iDATE.¹⁷

Please note that the percentage of the total number of offers available in the sample does not take into account the number of subscribers for each of these offers.

Breakdown of offers in sample	Download speed	Upper limit (Kbps)	Number of Offers in sample (all countries)	% of Offers in sample (all countries)	Number of Offers in sample (all countries)	% of Offers in sample (all countries)	Number of Offers in sample (all countries)	% of Offers in sample (all countries)	Increase of number of Offers in sample of April 2008 compared to the sample of April 2007	Increase of number of Offers in sample of April 2008 compared to the sample of April 2008
Period	Period		April 1st - 15th, 2007		October 1st - 15th, 2007		April 1st - 15th, 2008			
Basket 1: 144-512 (included)	144	512	127	10,36%	145	9,53%	190	10,61%	49,6%	31,0%
Basket 2: 512-1024 (included)	512	1024	180	14,68%	238	15,64%	234	13,07%	30,0%	-1,7%
Basket 3: 1024-2048 (included)	1024	2048	244	19,90%	316	20,76%	277	15,47%	13,5%	-12,3%
Basket 4: 2048-4096 (included)	2048	4096	181	14,76%	224	14,72%	236	13,18%	30,4%	5,4%
Basket 5: 4096-8192 (included)	4096	8192	267	21,78%	284	18,66%	333	18,60%	24,7%	17,3%
Basket 6: 8192-20Mbps (included)	8192	20Mbps	154	12,56%	213	13,99%	316	17,65%	105,2%	48,4%
Basket 7: 20+Mbps	20Mbps		73	5,95%	102	6,70%	169	9,44%	131,5%	65,7%
Plug & Play (mobile)	no limit	no limit					35	1,96%		
TOTAL	Total amount of offers		1226	100,00%	1522	100,00%	1790	100,00%	46,0%	17,6%

Table 6: Definition and total portion of each basket in the total sample

Based on the table above, it can be concluded that both the number of offers with the lowest download speed (i.e. Basket 1) and the number of offers with the highest download speeds (i.e. Basket 6 and Basket 7) have increased more than average. In 2008, the number of offers with low to average speeds (i.e. Baskets 2 and 3) has even slightly decreased compared to the number in October 2007.

3.2.1.b. NORMALISATION OF OFFERS

It will be observed that both metered and unmetered offers are available in the same basket. As defined in subsection 2.5.4, metered offers are those with a limited number of hours per month during which access to the Internet is provided (i.e. time-metered) or of downloadable volume (i.e. volume-metered). Unmetered offers are those without usage limits.

In some cases, the costs of offers with limited access to the Internet (i.e. metered offers) provide only a very limited access and need to be normalised to a reasonable access level (both in terms of downloadable volumes and a number of hours). These reasonable levels are referred to as normalisation parameters and have been applied to approximately one fourth of all metered offers.

As the study of the comparison of the Broadband Internet Access Cost also includes the bundled offers, an analysis was performed to discover whether the other services included in the offers (i.e. Fixed Telephony and Television Services) also needed normalisation in order to ensure sufficient uniformity in technical terms. The outcome of this analysis is also presented below.

¹⁷ Cf. http://ec.europa.eu/information_society/eeurope/i2010/docs/future_internet/method_2008_survey_idate.pdf

Normalisation of the Internet Access Service

Based on an analysis of all of the selected broadband offers, the following normalisation parameters have been defined for each basket:

Basket	Normalisation parameters for the Internet Access Service	
	Volume of data (GB)	Hours per month
144-512	1	20
512-1024	1	20
1024-2048	2	20
2048-4096	10	20
4096-8192	30	20
8192-20Mbps	30	20
20+Mbps	30	20

Table 7: Overview of the normalisation parameters for the Internet Access Service

The normalisation parameters above represent the estimated average downloadable volumes or number of hours per month for each type of basket. For a particular basket, if the volume or number of hours of access to the Internet per month exceeds the levels provided for in the basic metered offer, additional charges per gigabyte downloaded or per hour will be added to the basic monthly charges. The sum of the cost of the basic metered offer and the additional charges will be used for comparison with the unmetered offers.

The inclusion of additional charges to obtain the reasonable level of service presented in Table 7 sometimes results in very high total monthly costs. It was observed that these total monthly costs in some cases comprised:

- a very low basic monthly charge (sometimes even equal to 0) and very high additional charges ("pay per use" offers);
- a basic monthly charge that is quasi comparable with an unmetered offer, combined with significant additional charges.

It can be assumed that these offers target users with limited service requirements (i.e. lower than the reasonable level of service indicated in Table 7). It can thus be assumed that the very high total monthly costs, calculated based on the reasonable levels of service, will most often not be paid by e.g. customers who only use the Internet for services that do not demand high volumes of data exchange such as web browsing or sending and receiving emails.

In other words, it is quite probable that in reality, customers will be paying a lower total monthly cost than that determined based on the normalisation parameters. However, as these low-usage costs are not considered to be comparable with the cost of an unmetered offer, abstraction was made of this probability in the comparison analysis. This means that the same normalisation parameters were applied to all metered offers of the same basket.

It should be noted that the normalisation parameters comprise best estimates (based on e.g. the average downloadable volume or hours included per category that are observed in the sample). The following table presents an overview of the weight of metered offers in each of the 7 baskets and for the MBIAC:

Breakdown of all offers (April 2008)	Total number of Offers in sample (all countries)	Total number of Metered Offers in sample (all countries)		Total number of Unmetered Offers in sample (all countries)	
			%		%
Basket 1: 144-512 (included)	190	12	6%	178	94%
Basket 2: 512-1024 (included)	234	51	22%	183	78%
Basket 3: 1024-2048 (included)	277	55	20%	222	80%
Basket 4: 2048-4096 (included)	236	58	25%	178	75%
Basket 5: 4096-8192 (included)	333	54	16%	279	84%
Basket 6: 8192-20Mbps (included)	316	64	20%	252	80%
Basket 7: 20+Mbps	169	22	13%	147	87%
Plug & Play (mobile)	35	26	74%	9	26%
TOTAL	1790	342		1448	

Table 8: Percentage of metered and unmetered offers in each basket

As no further accurate information could be obtained on the actual average downloaded volumes and hours spent on the Internet, the impact of the normalisation on the results of the study was evaluated. In other words, by using simulations and sensitivity analysis, the extent of the impact of leaving out the normalisation step on the offers that were selected as being the least expensive ones was checked (cf. comparisons presented in Chapters 4 and 5).

It was concluded from the analysis that the normalisation impact was rather limited. In some countries (like Denmark, Lithuania, Slovakia etc) where volume-based offers are widespread the normalisation had an influence on the selection of the least-expensive offer. In these cases the normalised charge was a more realistic representation of the cost as the basic recurring charges were very low and the extra costs per GB and per hour were rather significant.

The additional cost per gigabyte downloaded (for the volume-metered offers) or the 'cost per hour' (for time-metered offers) is most often indicated in the offer. If this is not the case, these parameters are estimated by dividing the recurring charges of the offer by the volume of data (or hours) that is included in the basic offer.

Some ISPs differentiate the additional charges as a function of the hours of the day. For these cases, the charges for the daytime were taken into account, similar to the decision on the different tariff structures in subsection 3.2.1.

Metered offers are either time-metered or volume-metered. In the April 2008 sample, there were no offers with both limitations.

As the normalisation is related to the volume of the service (in terms of Gbytes for the volume-metered offers and in terms of hours for time-metered offers), it has no impact on the non-recurring charges.

Finally, in order to provide a transparent overview of the impact of the normalisation, detailed calculations for the offers selected as being the least expensive will be presented on a case-by-case basis in Chapters 4 and 5.

Normalisation of the other services included in the bundled offers

The Fixed Telephone Services included in the bundled offers are often limited which implies that a comparison on a like-to-like basis requires normalisation. Information on the average volumes of Fixed Telephony Services has been found in the reports from

European NRAs,¹⁸ indicating an average consumption of approximately 160-180 minutes per month. To split this volume of traffic between daytime and night & weekend, a ratio of 60% / 40% has been taken into account. This has led to a total volume of traffic of approximately 100 minutes during the daytime. This volume has been divided equally between calls to fixed and calls to mobile networks in order to determine the normalisation parameters for the Fixed Telephony Service.

Basket	Normalisation parameters for the Fixed Telephone Service		
	minutes towards fixed network	minutes towards mobile network	average connection time (minutes)
144-512	50	50	5
512-1024	50	50	5
1024-2048	50	50	5
2048-4096	50	50	5
4096-8192	50	50	5
8192-20Mbps	50	50	5
20+Mbps	50	50	5

Table 9: Overview of the normalisation parameters for the Fixed Telephone Service

The additional cost per minute was always indicated in the offers of the EU ISPs.¹⁹ In contrast to the cost per gigabyte downloaded (for the volume-metered offers) or the 'cost per hour' (for time-metered offers), the cost per minute can vary significantly depending on the hour of the day and the destination of the calls (e.g. what fixed or mobile networks and what distance).

As for the normalisation of the Internet Access service, the normalisation is first of all been based on the daytime additional costs per minute. When different costs apply for different destinations, the arithmetic average of the different options has been taken into account. Finally, the normalisation has been limited to national calls.

No normalisation was applied to the Television service. This implies that the Television service included in the package includes the standard number of channels (and not additional channels offered via premium packages).

3.2.1.c. DIFFERENTIATION OF OFFERS

In addition to the download speed and the total volume of data and/or hours per month included in the Internet Access Service and the volume of minutes included in the Fixed Telephony service, a number of additional parameters can have further impact on the charges set for the service.

The main additional differentiation parameters for Broadband Internet Access, Fixed Telephony and Television service are discussed below.

¹⁸ NRA = National Regulatory Authority

¹⁹ For certain offers in the USA, insufficient information was available on the number of minutes included or the cost per additional minute. The impact of this on the selection of the offers that are the least expensive can be found in the list with the detailed characteristics of the selected offers (cf. Chapter 5).

Internet Access Service

Referring to the wide variety of tariff structures, it was observed that some ISPs distinguish the speed or the downloadable volume based on a number of criteria. The categorisation of these offers has been dealt with as follows:

- Distinction between national and international download speeds and volumes: the categorisation is based on the international download speeds and volumes provided the strongly international nature of the Internet's content and services;
- Distinction based on the hour of the day: the technical characteristics of the offer during the daytime have been taken into account.
- Distinction based on location: the focus is on ISPs active in larger regions. In cases where ISPs are only active on a regional basis, important regional cities have been taken into account. This explains that it is possible to find cheaper prices for some baskets with higher speeds that are only available in a number of regions or cities.

Fixed Telephone Service

Within the bundles including Fixed Telephony services, several options can be distinguished leading to different tariff structures. For example: the Fixed Telephony service includes national as well as international calls, rates are different for calls to mobile or fixed networks and for calls during daytime or during night and weekend hours, etc. This has been dealt with as follows:

- Distinction between national and international calls: the cost for the fixed telephony service has been limited to national calls only. Because the tariff structure for the international calls is extremely complex and because the BIAC study focuses on residential customers, the cost of international calls was excluded from the comparison, due to the limited added value of adding these.
- Distinction between calls to mobile and to fixed networks: In the cases where a distinction is made between e.g. local, regional, interregional calls, etc. and between on-net and off-net calls; the cost per minute that was included in the database is the mathematical average of all possibilities.²⁰
- Distinction between the daytime tariffs and night and weekend tariffs: focus was on daytime period. However, as it has been observed that most often unlimited calls are allowed at night and during the weekend, qualitative information was collected on this last possibility.

Television Service

With respect to the Television service, information related to a basic package of the channels was considered. This means that special theme packages (e.g. sports, cartoons...) were not taken into account.

²⁰ No weighting of the different options was introduced as these vary strongly between countries, according to e.g. the demographic spread, definition of the tariff zones of each ISP, etc.

3.2.1.d. ANALYSIS OF ADDITIONAL TECHNICAL PARAMETERS

In addition to the pricing parameters and the technical parameters presented above, information was also gathered on additional technical parameters which enable a further – more qualitative – comparison of the offers. A distinction is made between the parameters related to the Internet Access Services and relevant for all Internet access only and bundled offers and the parameters that have been identified for those bundled offers containing Fixed Telephony and/or Telephony Services.

The cost of these elements is included in the global recurring fees of the offers and can hardly be isolated for quantitative analysis purposes. Therefore, it was decided that details on these additional technical parameters would be provided in the overview of the offers that are selected in the distinct Broadband Internet Access Cost comparison exercises (e.g. Chapters 4 and 5).

Additional technical parameters related to the Internet Access Service

Additional technical parameters that were collected for the Internet Services are:

- Types of services included (e.g. Television);
- Volume of these services (e.g. number of e-mailboxes, number of addresses per e-mailbox,...);
- Availability of webspace;
- Level of protection (e.g. antivirus, antispam,...).

Additional technical parameters related to the Fixed Telephony Service

Additional technical parameters that were collected for the Fixed Telephony Services are:

- Technology used: switched Telephone Service or VoIP;
- Indication of the period during which calls are unlimited;
- Number of minutes included in the offer during daytime (limited/unlimited).

Additional technical parameters related to the Television Service

Additional technical parameters that were collected for the Television Services are:

- Technology used: analog or digital;
- Number of channels included.

3.2.1.e. TECHNOLOGICAL NEUTRALITY

Finally, for the comparison of the cost of the Broadband Internet Access Service in the 2007 database, the principle of 'technological neutrality' is applied for the 'Internet only' costs, which implies that the information that was collected and compared related to different technologies (Cable, xDSL, FTTH, etc.).

Also for the Fixed Telephone and Television Service included in the bundled offers, it has

been assumed that technological neutrality corresponds to the customer's point of view when choosing to subscribe to a service or bundled offer.

More precisely, for Fixed Telephony services, the cost comparison will not distinguish between:

- **Switched voice services:** these are services offered over circuit-switched telephone networks (these can be the Public Switched Telephone Network (PSTN) or the Integrated Services Digital Network (ISDN));
- **VoIP services (or 'IP telephony'):** these services use the Internet or another packet-switched network for the transmission of voice; the generic name 'VoIP' is also used in this report to refer to e.g. VoB (Voice over Broadband).

Neither will the cost comparison of bundles including Television distinguish between analog and digital television.

- **Analog television:** this service refers to the non-interactive television broadcast through the cable distribution network;
- **Digital television:** this service can be offered via different platforms (cable, xDSL, FTTH...) and can include interactive television services.

Note however that, at the qualitative level, it will be indicated whenever possible what kind of Fixed Telephony or Television Service is offered (cf. parameters indicated in paragraph 3.2.1.d).

3.2.2 UNIFORMITY IN FINANCIAL TERMS

In order to make the offers uniform in financial terms, appropriate exchange rates and Euro Purchasing Power Parities (Euro PPP) have been applied. Also, the effect of different levels of VAT percentages has been analysed.

The table below lists the parameters that have been used in order to make the data more uniform in financial terms²¹:

Country	VAT percentage	Local Currency (LC)	1 EURO in LC	EURO PPP
Austria	20%	EUR	1,00	1,06
Belgium	21%	EUR	1,00	1,08
Bulgaria	20%	BGN	1,96	0,84
Canada	6%	CAD	1,60	1,92
Cyprus	15%	EUR	1,00	0,89
Czech Republic	19%	CZK	25,02	17,62
Denmark	25%	DKK	7,46	10,33
Estonia	18%	EEK	15,65	11,11
Finland	22%	EUR	1,00	1,18
France	19,60%	EUR	1,00	1,10

²¹ Sources: Exchange rate: online European Central Bank, foreign exchange rates (average rate of period 01/04/2008 -15/04/2008). EURO PPP: Eurostat database (07/05/2008). Except for Canada and Korea for which PPP is based on the latest online OECD figures (2007 figures collected on 07/05/2008)

Country	VAT percentage	Local Currency (LC)	1 EURO in LC	EURO PPP
Germany	19%	EUR	1,00	1,05
Greece	19%	EUR	1,00	0,87
Hungary	20%	HUF	254,74	164,76
Iceland	24,50%	ISK	116,26	128,70
Ireland	21%	EUR	1,00	1,19
Italy	20%	EUR	1,00	1,05
Japan	5%	JPY	159,92	141,75
Korea	10%	KRW	1.539,92	1175,93
Latvia	18%	LVL	0,70	0,49
Lithuania	18%	LTL	3,45	2,11
Luxembourg	15%	EUR	1,00	1,07
Malta	18%	EUR	1,00	0,70
Norway	25%	NOK	7,98	10,95
The Netherlands	19%	EUR	1,00	1,07
Poland	22%	PLN	3,46	2,36
Portugal	21%	EUR	1,00	0,85
Romania	19%	RON	3,68	2,05
Slovakia	19%	SKK	32,39	20,58
Slovenia	20%	EUR	1,00	0,77
Spain	16%	EUR	1,00	0,92
State of California	8,25%	USD	1,57	1,20
State of Colorado	7,72%	USD	1,57	1,20
State of New York	8,38%	USD	1,57	1,20
Sweden	25%	SEK	9,38	11,01
The UK	17,50%	GBP	0,79	0,79

Table 10: Exchange rates, Euro PPP and VAT percentages

The results in this report are expressed in EURO/PPP, VAT included.

4. RESULTS OF THE BROADBAND INTERNET ACCESS COST COMPARISON FOR NON-BUNDLED OFFERS

The results of the Broadband Internet Access Cost study for April 2008 are presented in the chapter below. These are based on the following selection of offers:

- Least expensive offers per country and per basket incl. indication of the median (cf. paragraph 4.2);
- Least expensive offer per country for each of the 7 baskets (cf. paragraph 4.3);
- Median offer per technology for each of the 7 baskets (cf. paragraph 4.4).

The median is the value separating the upper half of a sample from the lower half. If there is an even number of observations, the median is not unique. In these cases, the mean of the two middle values is taken.

The *median* will be presented in this report for comparison with the least expensive offer per basket as well as for the comparison of the broadband Internet access cost based on different technologies. It is considered to be a more appropriate basis for comparison than e.g. the *mean* (or 'average') as the offers in the same basket often have varying characteristics (e.g. different speeds). A comparison based on the median value – provided that there are a sufficiently large number of offers in the sample – does not give a weight to the (extreme) values so that it is not influenced by e.g. a few very expensive offers with the highest bandwidths observed for just one ISP or country.

As the cost of the broadband Internet access service could not be isolated in case of a bundled offer (cf. paragraph 3.1.2), the analyses presented below are based only on the non-bundled offers which represent 51.1% of the total number of offers in the sample. Results for bundled offers are presented in Chapter 5.

4.1. OFFERS WITH SPEED LOWER THAN OR EQUAL TO 144 Kbps

As already pointed out in paragraph 2.2.1, in some countries some ISPs in the sample also consider a connection with a speed of 128 kbps as a broadband connection. These countries are Estonia (2), Finland (2), Germany (2), Latvia (1), Lithuania (33), Malta (1), Poland (2) and Slovenia (1). The numbers between the brackets indicate the number of 128 kbps offers per country, present in the sample.

It was observed that incumbent operators as well as new entrants offer this type of connection, based on diverse technologies (xDSL, Cable, FTTH and Plug & Play).

4.2. LEAST EXPENSIVE OFFERS PER COUNTRY AND PER BASKET

The outcome of this analysis is presented by means of:

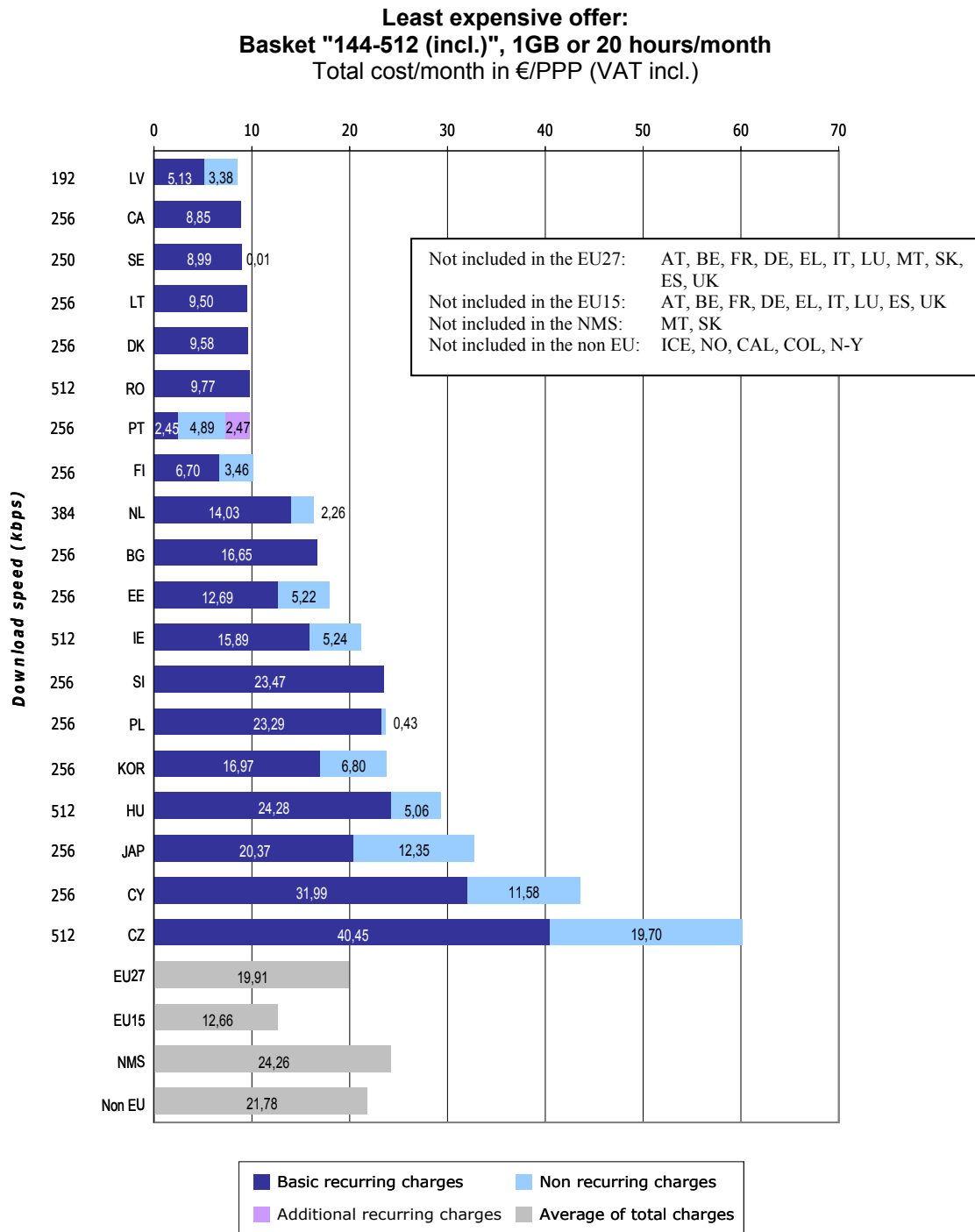
- A first graph that presents the Broadband Internet Access Cost results in EUR/PPP VAT incl. (total Broadband Internet Access Cost and breakdown in a recurring and non-recurring fee, as well as the additional cost that is added when normalisation took place). The focus is on the least expensive offers. The average of the selected least expensive offers is represented as well. As indicated in paragraph 3.2.1, baskets contain offers for products with different download speeds. The speed of every offer is indicated alongside each chart.
- A second graph that presents the least expensive Broadband Internet Access Cost results in EUR/PPP VAT incl. in comparison with the median values. Note that for countries for which only one offer is available in the sample for a specific basket, the median is not presented. The median per basket refers to the median value of the charges of all offers in the sample belonging to a certain basket e.g. Median 27 is the median of all offers in the sample presented in countries of the EU27;
- A third graph that indicates the relative weight of the elements that are composing the least expensive Broadband Internet Access Cost (expressed in %);
- A list with the detailed characteristics of the offers that are selected. This table also includes an indexed ranking²² compared to the median of the offers selected incl. remarks on the results of the comparison;
- A fourth graph that presents the Broadband Internet Access Cost results (in EUR/PPP VAT incl.) of the April 2007, October 2007 and April 2008 cost comparison exercise. The least expensive offers as well as the median offers are represented;
- Finally, remarks and conclusions on the data in the graphs are presented for each basket in paragraph f.

²² The indexed ranking expresses the ranking of the offer compared to the median. If e.g. an offer has a ranking equal to 1, this implies that the cost of the offer equals the value of the median. If the value of the indexed ranking of an offer is 1.22, this implies that the cost of the offer is equal to 122% of the value of the median.

4.2.1 BASKET "144KBPS-512KBPS (incl.)", IN €/PPP (VAT INCL.)

4.2.1.a LEAST EXPENSIVE OFFER

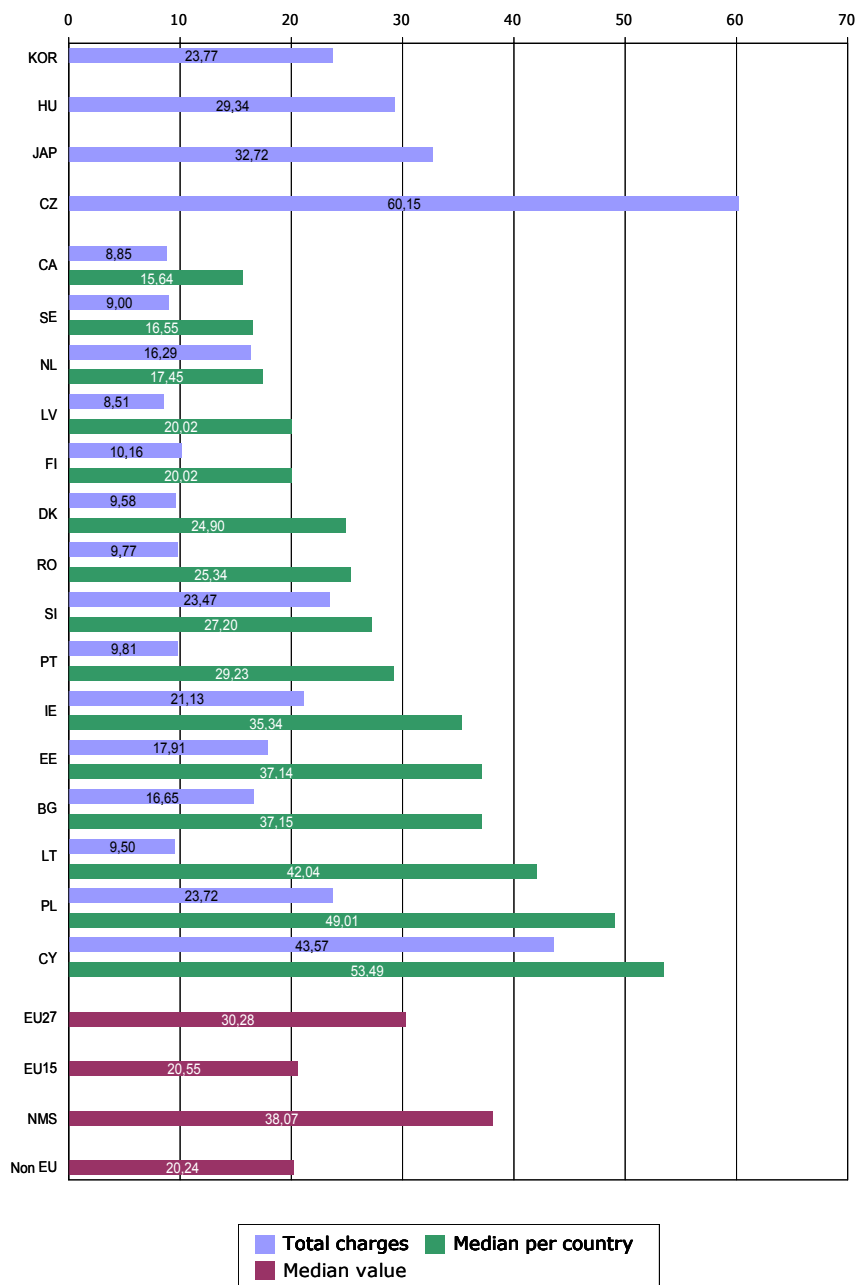
From the ISPs selected for some countries, no offer was available in this basket; these countries include *Austria, Belgium, France, Germany, Greece, Iceland, Italy, Luxembourg, Malta, Norway, Slovakia, Spain, State of California, State of Colorado, State of New York and the United Kingdom.*



4.2.1.b BASKET "144KBPS -512KBPS (incl.)", LEAST EXPENSIVE AND MEDIAN OFFERS

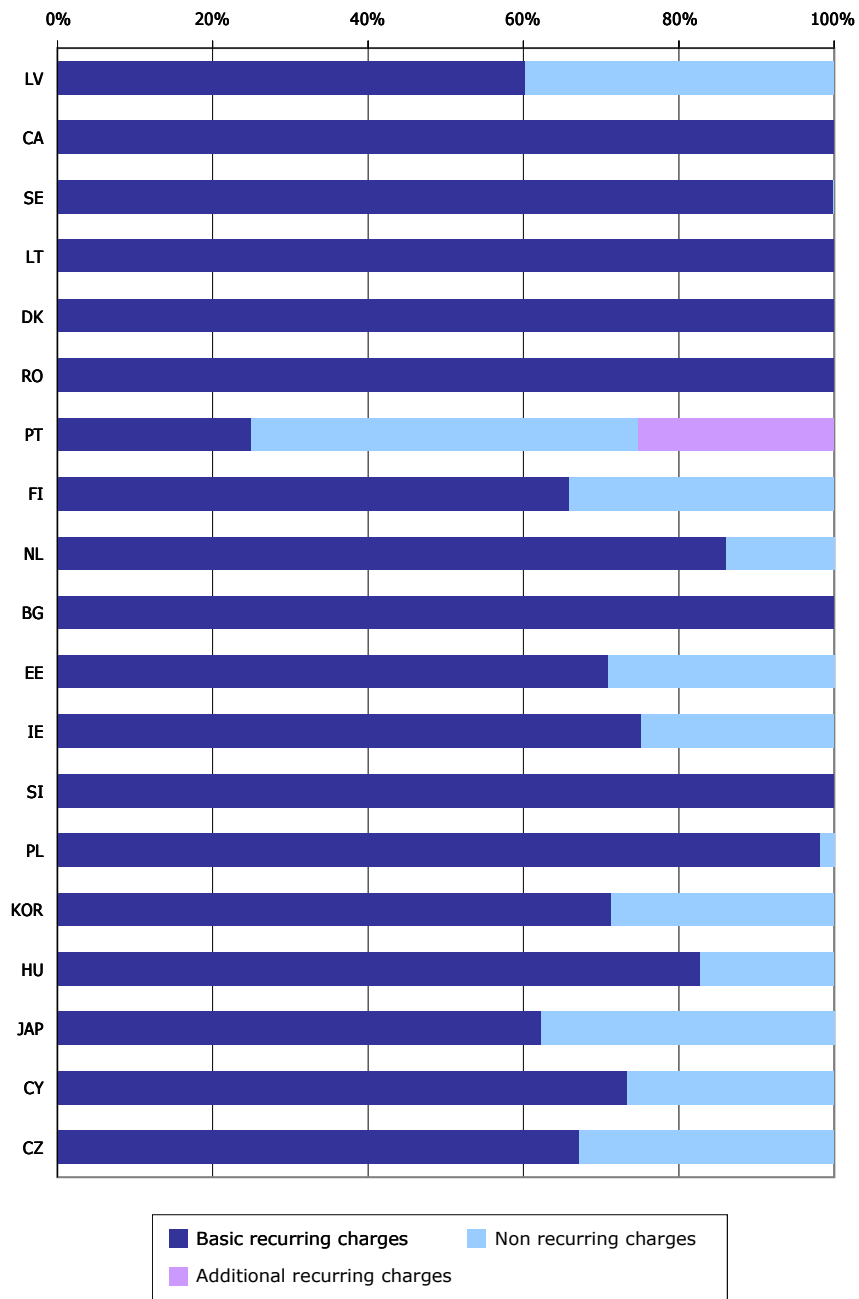
For the following countries, only one offer was available for this basket: *Czech Republic, Hungary, Japan and Korea*. The charge for this offer equals the least expensive and no median value was determined for these countries.

**Least expensive and median offers:
Basket "144-512 (incl.)", 1GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)**



4.2.1.c BASKET "144KBPS -512KBPS (incl.)", COMPOSITION IN %

Least expensive offer: Charges breakdown
Basket "144-512 (incl.)", 1GB or 20 hours/month
 Total cost/month in €/PPP (VAT incl.)



4.2.1.d BASKET "144KBPS -512KBPS (incl.)", LIST OF SELECTED OFFERS

Comparison		S1 2008	144-512	Internet only										
Country	ISP	Offer	Technology	Contract duration (*)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (**)	Adresses per mailbox (**)	Webspace (**)	Level of protection (***)	Total cost/month VAT incl.	Total cost/month VAT incl.	Indexed ranking (****)
				Months	Kbps					MB		Euro	EUR/PPP	
Bulgaria	Cable Tel	Lan Internet Mini	FTTH	-	256	unlimited	unlimited	1	1	20	-	7,16	16,65	0,82
Canada	Telus	High Speed Lite	xDSL	-	256	10	-	1	N.D.	100	AV+AS+FW	10,60	8,85	0,44
Cyprus	Cytanet	NetRunner 256	xDSL	-	256	unlimited	unlimited	4	N.D.	20	AV+AS+PC	38,82	43,57	2,16
Czech Republic	Radiokomunikace	Premium Sky	Satellite	12	512	unlimited	unlimited	N.D.	N.D.	N.D.	-	42,36	60,15	2,98
Denmark	Dansk Kabel TV	Lav hastighet 256 kbit/ 128 kbit	Cable	-	256	unlimited	unlimited	1	5	N.D.	-	13,27	9,58	0,47
Estonia	STV	STV Micro	Cable	-	256	unlimited	unlimited	1	1	N.D.	-	12,72	17,91	0,89
Finland	Elisa	Elisa Kotiportti Maxi	xDSL	-	256	unlimited	unlimited	N.D.	N.D.	N.D.	-	11,98	10,16	0,50
Hungary	UPC Hungary	Chello start	Cable	12	512	unlimited	unlimited	1	1	10	-	18,97	29,34	1,45
Ireland	Irish broadband	Ripwave (WiMax)	Plug & Play	6	512	unlimited	unlimited	1	N.D.	N.D.	-	25,20	21,13	1,05
Japan	Jupiter Telecommunications	J.COM LITE NET	Cable	-	256	unlimited	unlimited	N.D.	N.D.	N.D.	AV+AS	29,00	32,72	1,62
Korea	Korea Telecom	Megapass Checkline	xDSL	12	256	unlimited	unlimited	N.D.	N.D.	N.D.	-	18,15	23,77	1,18
Latvia	Baltkom TV	Local tarif	Cable	24	192	unlimited	unlimited	3	N.D.	20	-	5,95	8,51	0,42
Lithuania	Telerena	Siauliai P1 - 256***	xDSL	12	256	unlimited	unlimited	2	N.D.	N.D.	FW	5,79	9,50	0,47
The Netherlands	UPC Netherlands	Internet Starter	Cable	-	384	unlimited	unlimited	3	12	25	-	17,42	16,29	0,81
Poland	TP	Neostrada 256	xDSL	12	256	unlimited	unlimited	1	unlimited	20	-	16,17	23,72	1,17
Portugal	PT.Com (Sapo)	Free	xDSL	12	256	0	-	5	5	250	-	8,35	9,81	0,49
Romania	Air Bites	Speedway Select	FTTH	12	512	unlimited	unlimited	0	0	0	-	5,44	9,77	0,48
Slovenia	Telekom Slovenije	SIOL internet 256/128	xDSL	-	256	unlimited	unlimited	4	2	10	AV+AS+FW	18,00	23,47	1,16
Sweden	ComHem	Small 250 kbit	Cable	12	250	unlimited	unlimited	1	5	50	-	10,56	9,00	0,45
(*) Duration = '-' indicates that 12 months was assumed														
(**) N.D. indicates information is not provided by ISP														
(***) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line														
(****) Indexed ranking: ranking of offers based on the median value of this set of results														
ISPs in <i>italic & bold</i> are Incumbent operators														

Table 11: Detailed information on least expensive offer per country (144kbps-512kbps (incl.))

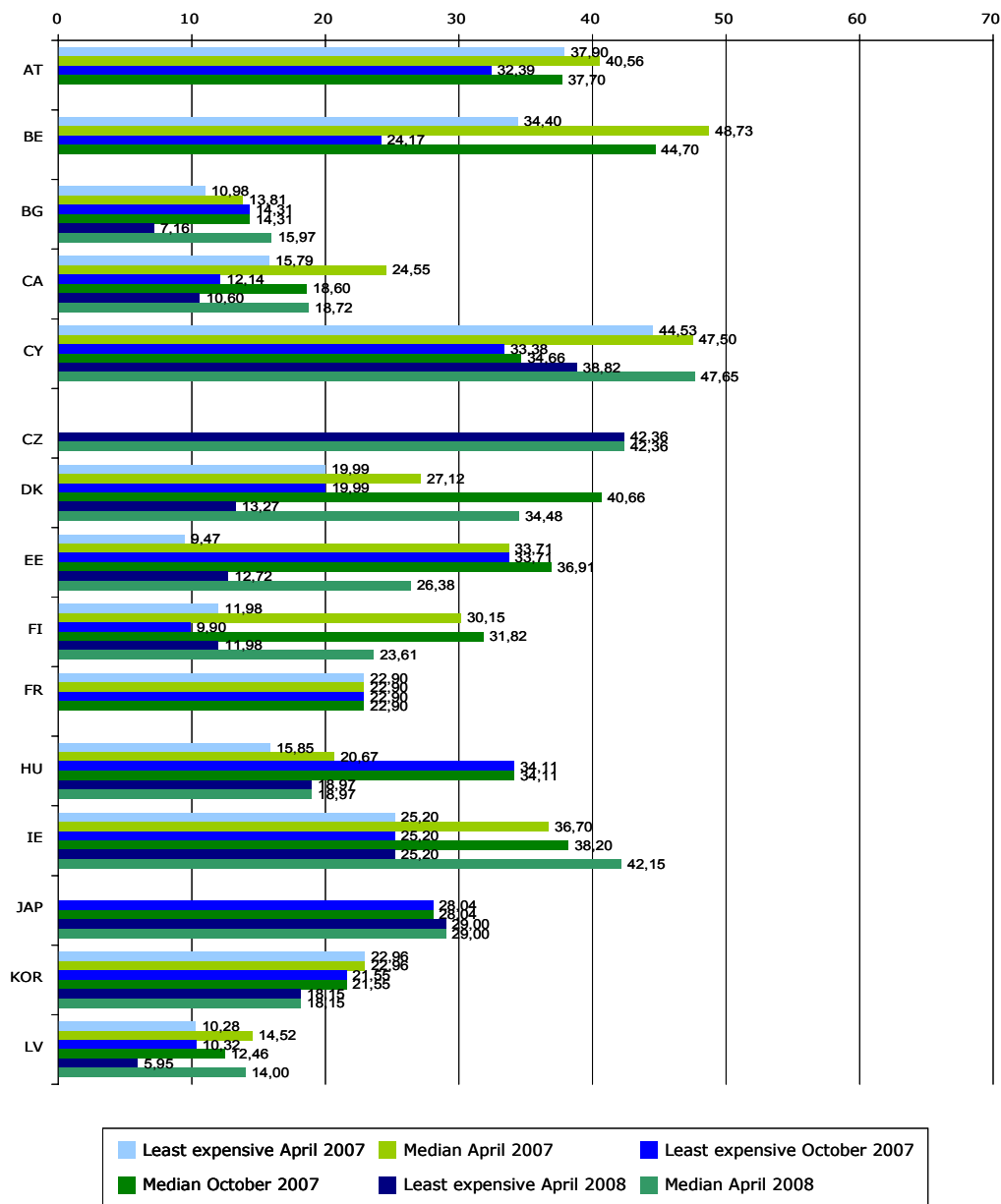
4.2.1.e BASKET "144KBPS-512KBPS (incl.)", COMPARISON OF LEAST EXPENSIVE AND MEDIAN OFFERS IN 2007 AND 2008

Comparison April 2007 – October 2007 – April 2008

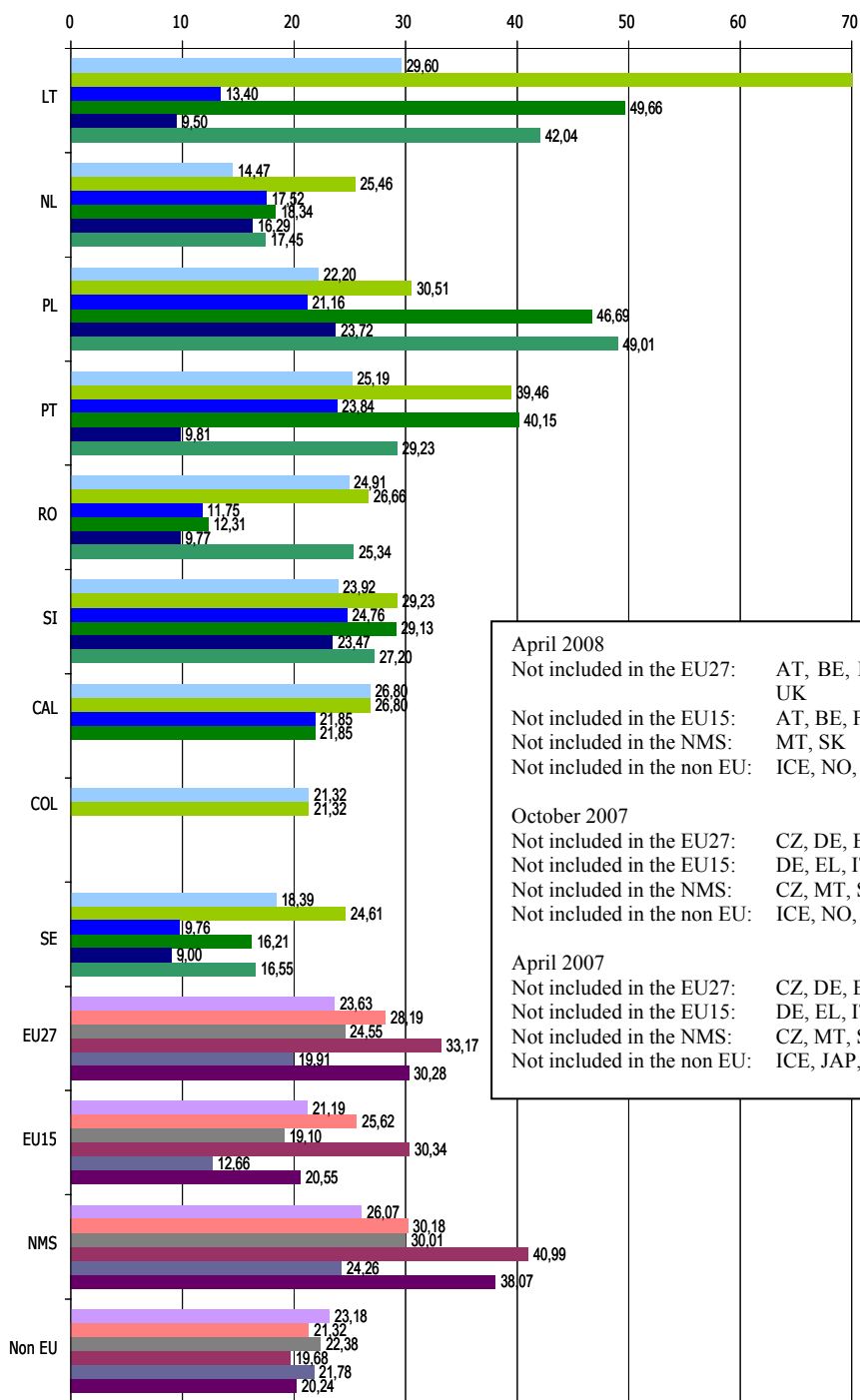
Least expensive and median offers:

Basket "144-512 (incl.)" 1GB or 20 hours/month

Total cost/month in €/PPP (VAT incl.)



Comparison April 2007 – October 2007 – April 2008
Least expensive and median offers:
Basket "144-512 (incl.)", 1GB or 20 hours/month (followed)
Total cost/month in €/PPP (VAT incl.)



April 2008

Not included in the EU27: AT, BE, FR, DE, EL, IT, LU, MT, SK, ES, UK

Not included in the EU15: AT, BE, FR, DE, EL, IT, LU, ES, UK

Not included in the NMS: MT, SK

Not included in the non EU: ICE, NO, CAL, COL, N-Y

October 2007

Not included in the EU27: CZ, DE, EL, IT, LU, MT, SK, ES, UK

Not included in the EU15: DE, EL, IT, LU, ES, UK

Not included in the NMS: CZ, MT, SK

Not included in the non EU: ICE, NO, COL, N-Y

April 2007

Not included in the EU27: CZ, DE, EL, IT, LU, MT, SK, ES, UK

Not included in the EU15: DE, EL, IT, LU, ES, UK

Not included in the NMS: CZ, MT, SK

Not included in the non EU: ICE, JAP, NO, N-Y



4.2.1.f CONCLUSIONS ON BASKET 144KBPS-512KBPS (incl.):

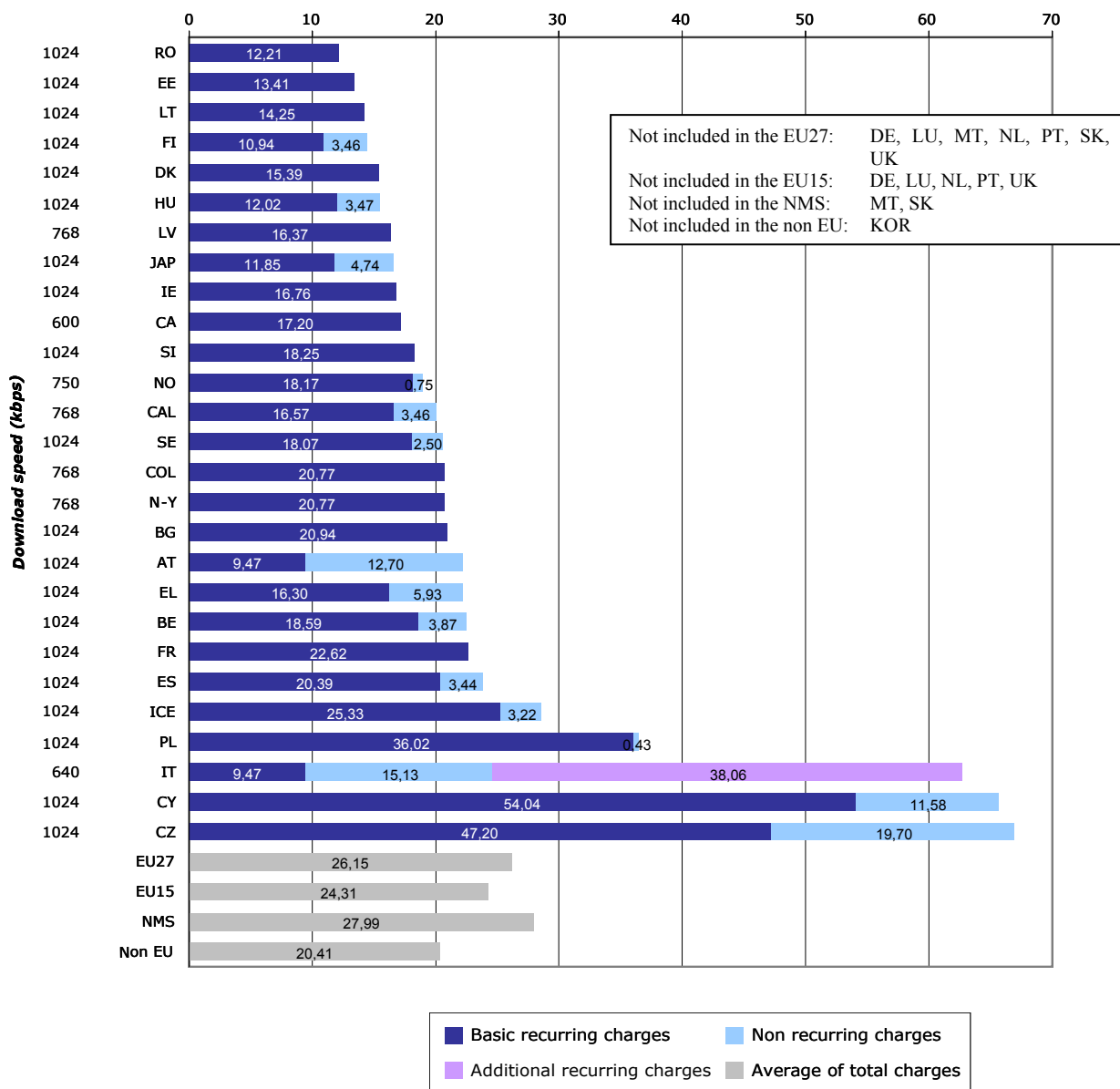
- In *Austria, Belgium, France, Greece, Germany, Iceland, Italy, Luxembourg, Malta, Norway, Slovakia, Spain, State of California, State of Colorado, State of New York and the UK* no offer of the selected ISPs was available for this basket in April 2008. Five of these countries still had offers in the sample for the 144kbps-512kbps (incl.) basket in 2007: *Austria, Belgium, France, State of California and State of Colorado*. Only one country had offers included in this basket in April 2008 but not in 2007.
- From the ISPs of *Czech Republic, Hungary, Japan and Korea* only one offer was available for this basket. The charge for this offer equals the least expensive and no median value was determined for these countries.
- The offer for *Denmark* might not be representative, as the ISP focuses on members of certain organisations. It has however been kept in the sample, due to the significant market share of the ISP. The second least expensive offer available for this basket is provided by Cybercity (xDSL – 256 kbps – 11.91 EUR/PPP).
- Of the two metered offers selected in this basket, only one needs a normalisation process.
 - The *Portuguese* offer is volume-metered and includes 0 Gb. As the charge is 2.47 EUR/PPP per Gb during daytime and working days, the total charge of 9.81 EUR/PPP was calculated as follows: 2.45 EUR/PPP basic recurring charges + 4.89 EUR/PPP non-recurring charges + 2.47 EUR/PPP for one Gb.
- For some countries a major difference can be noted between the least expensive and the median offer.
 - *Lithuania* has 31 offers in the basket. Of these, 13 have charges above 50 EUR/PPP and 2 of these have charges even higher than 100 EUR/PPP. This explains the high median of 42.04 EUR/PPP.
- The omission of non-recurring charges in the following countries influences the place they take in the overall ranking of the least expensive offers: *Bulgaria, Canada, Denmark, Lithuania, Romania, Slovenia and Sweden*. Non-recurring charges are significant in *Latvia, Portugal, Cyprus, Czech Republic, Estonia, Ireland, Hungary, Japan and Korea*.
- In five countries, the charges of the least expensive offer in the sample have decreased significantly compared to the charges in 2007. These countries are *Bulgaria, Denmark, Estonia, Hungary and Latvia*. In two of these countries, *Estonia and Hungary*, the median charges also decreased significantly.
- In five other countries, *Cyprus, Finland, Ireland, Japan and Poland*, the charge for the least expensive offers increased slightly compared to October 2007.
- Overall, it could be observed that the average cost of the least expensive offers in the EU 27 countries has slightly decreased. This decrease is the result of significantly lower charges in both the EU15 and the NMS countries. Finally, charges in the non-EU countries decreased slightly in 2008 compared to 2007.

4.2.2 BASKET "512KBPS-1024KBPS (incl.)", IN €/PPP (VAT INCL.)

4.2.2.a LEAST EXPENSIVE OFFER

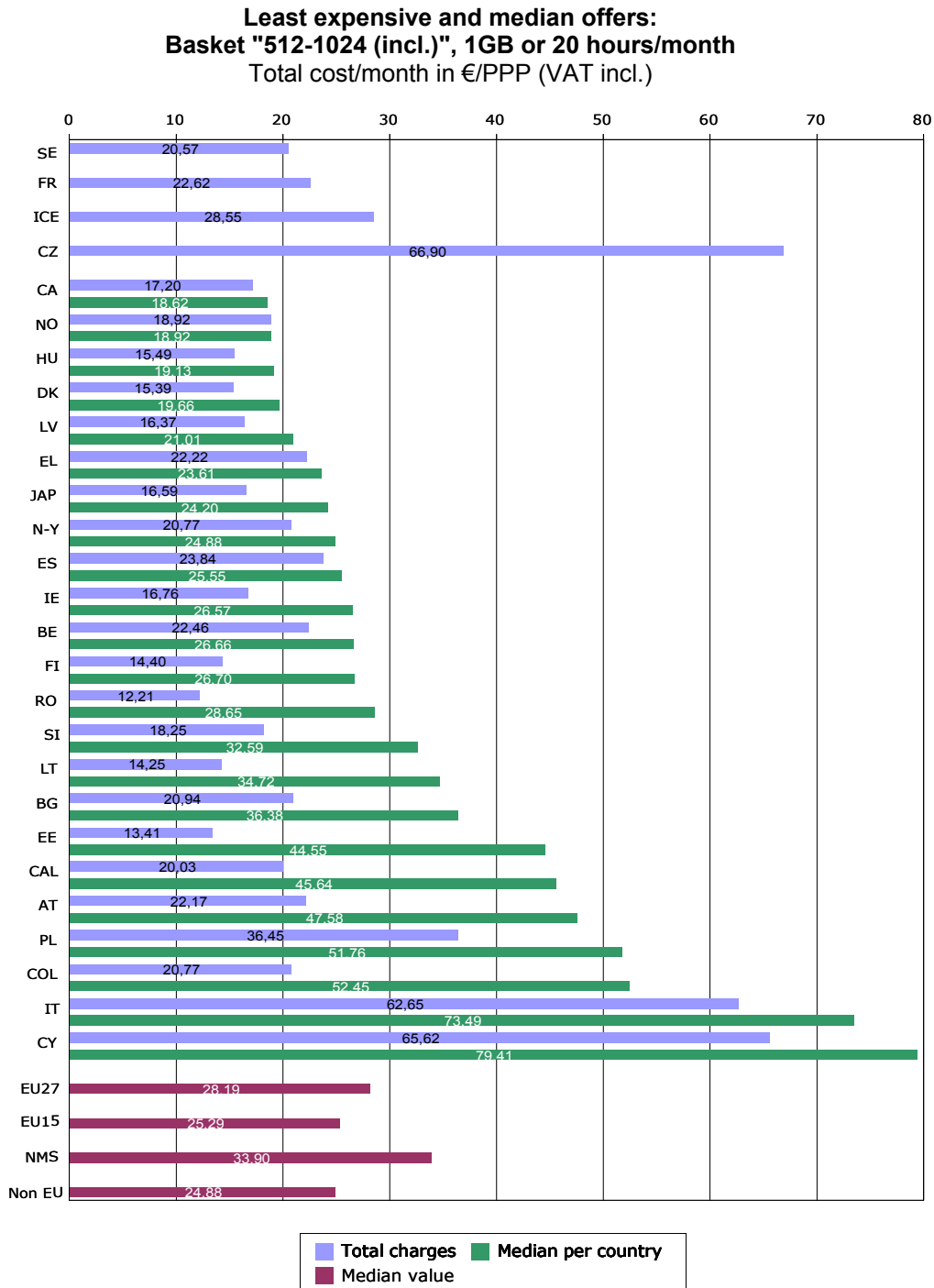
From the ISPs selected for some countries, no offer was available in this basket; these countries include *Germany, Korea, Luxembourg, Malta, the Netherlands, Portugal, Slovakia and the United Kingdom*.

Least expensive offer:
Basket "512-1024 (incl.)", 1GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



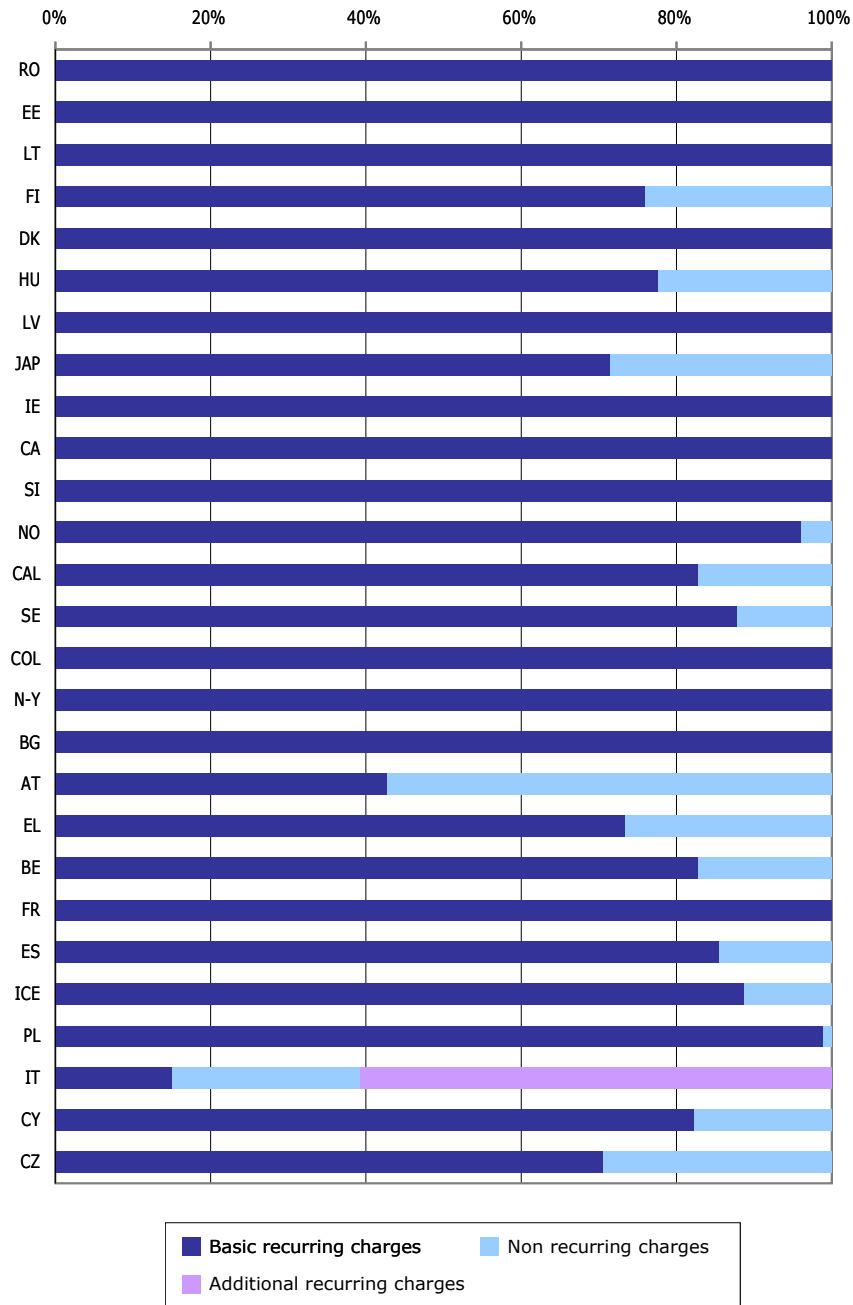
4.2.2.b BASKET "512KBPS -1024KBPS (incl.)", LEAST EXPENSIVE AND MEDIAN OFFERS

In the *Czech Republic, France, Iceland* and *Sweden* only one offer was available for this basket. The charge for this offer equals the least expensive and no median value was determined for these countries.



4.2.2.c BASKET "512KBPS -1024KBPS (incl.)", COMPOSITION IN %

Least expensive offer: Charges breakdown
Basket "512-1024 (incl.)", 1GB or 20 hours/month
 Total cost/month in €/PPP (VAT incl.)



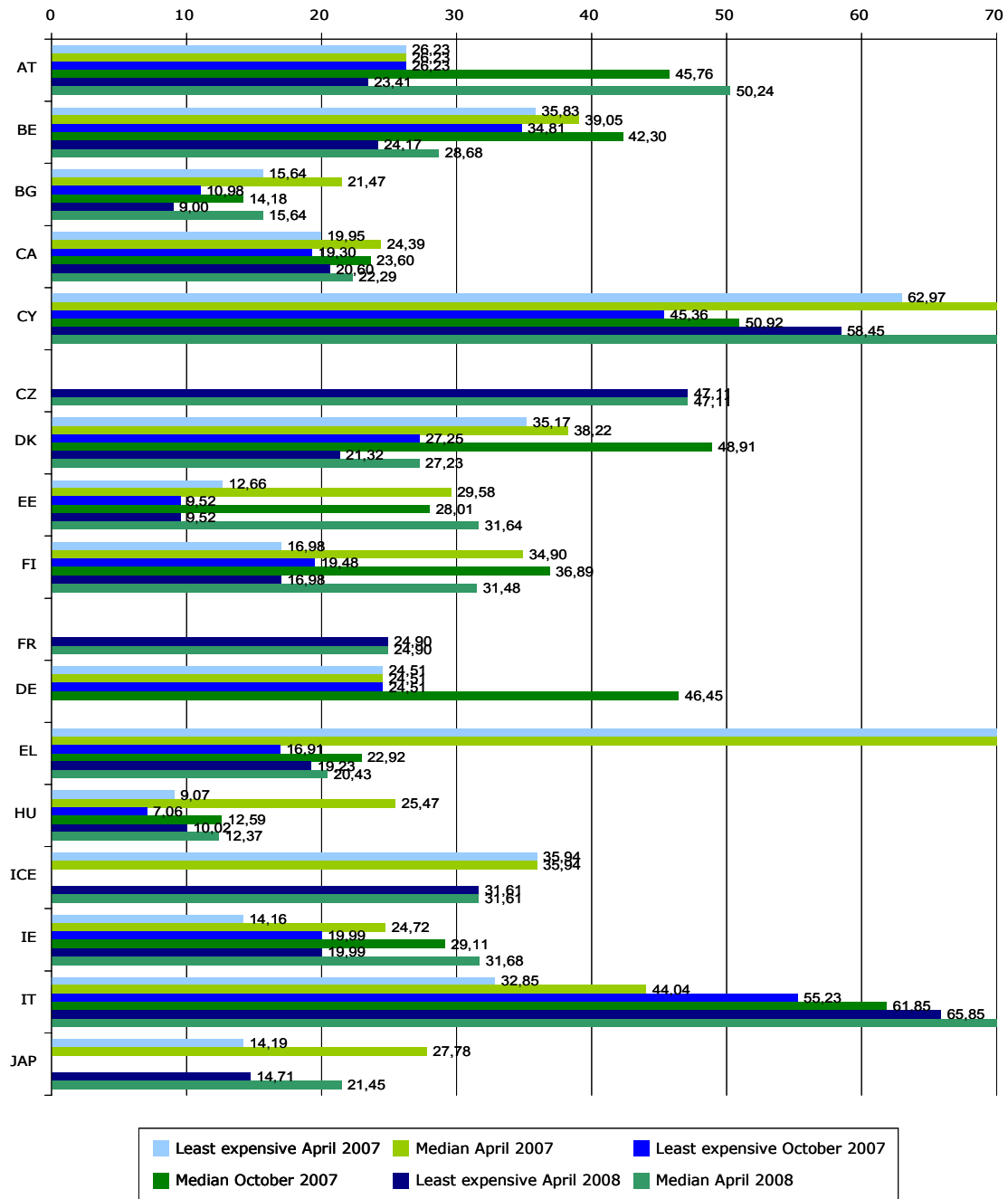
4.2.2.d BASKET "512KBPS -1024KBPS (incl.)", LIST OF SELECTED OFFERS

Comparison	S1 2008	512-1024	Internet only											
Country	ISP	Offer	Technology	Contract duration (*)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (**)	Adresses per mailbox (**)	Webspace (**)	Level of protection (***)	Total cost/month VAT incl.	Total cost/month VAT incl.	Indexed ranking (****)
				Months	Kbps					MB		Euro	EUR/PPP	
Austria	Telekom Austria	aon speed easy	xDSL	12	1024	unlimited	unlimited	5	25	10	AV+AS	23,41	22,17	0,90
Belgium	Telenet	BasicNet	Cable	-	1024	1	-	1	N.D.	0	AV+AS	24,17	22,46	0,91
Bulgaria	Eurocom	1 Mbps	Cable	12	1024	unlimited	unlimited	1	1	N.D.	-	9,00	20,94	0,85
Canada	Videotron	Internet Intermédiaire	Cable	-	600	2	-	6	N.D.	5	AV+AS	20,60	17,20	0,70
Cyprus	Cytanet	NetRunner 1000	xDSL	-	1024	unlimited	unlimited	4	N.D.	20	AV+AS+PC	58,45	65,62	2,66
Czech Republic	Radiokomunikace	Premium Sky	Satellite	12	1024	unlimited	unlimited	N.D.	N.D.	N.D.	-	47,11	66,90	2,71
Denmark	Dansk Kabel TV	Lav hastighet 1 Mbit/ 512 kbit	Cable	-	1024	unlimited	unlimited	1	5	N.D.	-	21,32	15,39	0,62
Estonia	STV	Saturn Kodu	FTTH	-	1024	unlimited	unlimited	1	1	N.D.	-	9,52	13,41	0,54
Finland	Elisa	Elisa Kotiportti Maxi	xDSL	-	1024	unlimited	unlimited	N.D.	N.D.	N.D.	-	16,98	14,40	0,58
France	Orange France	Internet à la carte 1 mégamax	xDSL	-	1024	unlimited	unlimited	5	N.D.	100	AS	24,90	22,62	0,92
Greece	OTE	ADSL 1024/256	xDSL	-	1024	unlimited	unlimited	N.D.	N.D.	N.D.	-	19,23	22,22	0,90
Hungary	Externet	ADSL otthoni traffic Prepaid Alfa	xDSL	12	1024	unlimited	unlimited	3	1	50	AV+AS	10,02	15,49	0,63
Iceland	Og Vodafone	ADSL plus 1 Mb/s	xDSL	6	1024	1	-	5	N.D.	20	AV+AS	31,61	28,55	1,16
Ireland	Eircom	Broadband time	xDSL	6	1024	-	20	1	1	50	FW	19,99	16,76	0,68
Italy	Telecom Italia	Alice Night & Weekend	xDSL	-	640	-	0	N.D.	N.D.	0	-	65,85	62,65	2,54
Japan	NTT EAST Japan	Entry type	xDSL	-	1024	unlimited	unlimited	N.D.	N.D.	2000	-	14,71	16,59	0,67
Latvia	PRONETS	For Children	FTTH	6	768	unlimited	unlimited	1	N.D.	N.D.	-	11,45	16,37	0,66
Lithuania	Dokeda	Kaunas AO+	FTTH	12	1024	unlimited	unlimited	1	N.D.	N.D.	-	8,69	14,25	0,58
Lithuania	Dokeda	Vilnius AO+	FTTH	12	1024	unlimited	unlimited	1	N.D.	N.D.	-	8,69	14,25	0,58
Norway	Tele2 Norway	Mini	xDSL	-	550	unlimited	unlimited	N.D.	N.D.	N.D.	-	25,99	18,92	0,77
Norway	NextGenTel	ADSL 750	xDSL	12	750	unlimited	unlimited	50	N.D.	5000	AV+AS	25,99	18,92	0,77
Poland	TP	Neostrada 1024	xDSL	12	1024	unlimited	unlimited	N.D.	unlimited	50	-	24,85	36,45	1,48
Romania	UPC Romania	UPC Internet Small	Cable	12	1024	unlimited	unlimited	1	1	0	-	6,80	12,21	0,50
Slovenia	T-2	VDSL 1Mb/256kb	xDSL	-	1024	unlimited	unlimited	1	N.D.	N.D.	AV+AS+FW	14,00	18,25	0,74
Spain	Telefonica Spain	ADSL Mini	xDSL	12	1024	2	-	5	N.D.	25	-	21,98	23,84	0,97
State of California	AT&T	Basic DSL	xDSL	12	768	unlimited	unlimited	11	N.D.	N.D.	AV+AS+FW+PC+PU	15,33	20,03	0,81
State of Colorado	AT&T	Express DSL	xDSL	12	768	unlimited	unlimited	11	N.D.	150	AV+AS+ASW	15,89	20,77	0,84
State of New York	AT&T	Express DSL	xDSL	12	768	unlimited	unlimited	11	N.D.	150	AV+AS+ASW	15,89	20,77	0,84
Sweden	Bredbandsbolaget	Bredband 1	xDSL	18	1024	unlimited	unlimited	1	5	N.D.	-	24,14	20,57	0,83
(*) Duration = '-' indicates that 12 months was assumed														
(**) N.D. indicates information is not provided by ISP														
(***) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line														
(****) Indexed ranking: ranking of offers based on the median value of this set of results														
ISPs in <i>italic & bold</i> are incumbent operators														

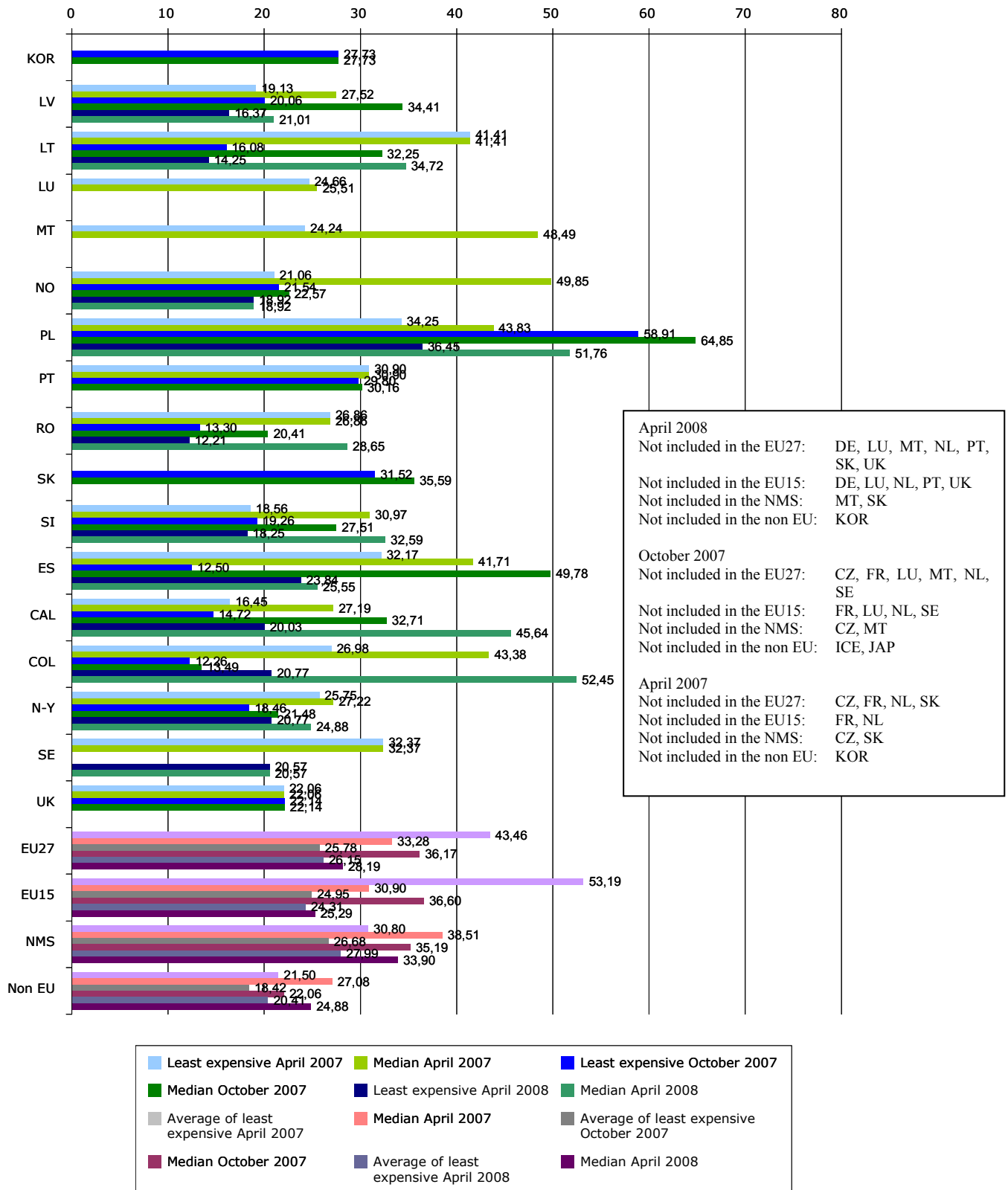
Table 12: Detailed information on least expensive offer per country (512kbps-1024kbps (incl.))

4.2.2.e BASKET "512KBPS-1024KBPS (incl.)", COMPARISON OF LEAST EXPENSIVE AND MEDIAN OFFERS IN 2007 AND 2008

Comparison April 2007 – October 2007 – April 2008
Least expensive and median offers:
Basket "512-1024 (incl.)", 1GB or 20 hours/month
 Total cost/month in €/PPP (VAT incl.)



Comparison April 2007 – October 2007 – April 2008
Least expensive and median offers:
Basket "512-1024 (incl.)", 1GB or 20 hours/month (followed)
Total cost/month in €/PPP (VAT incl.)



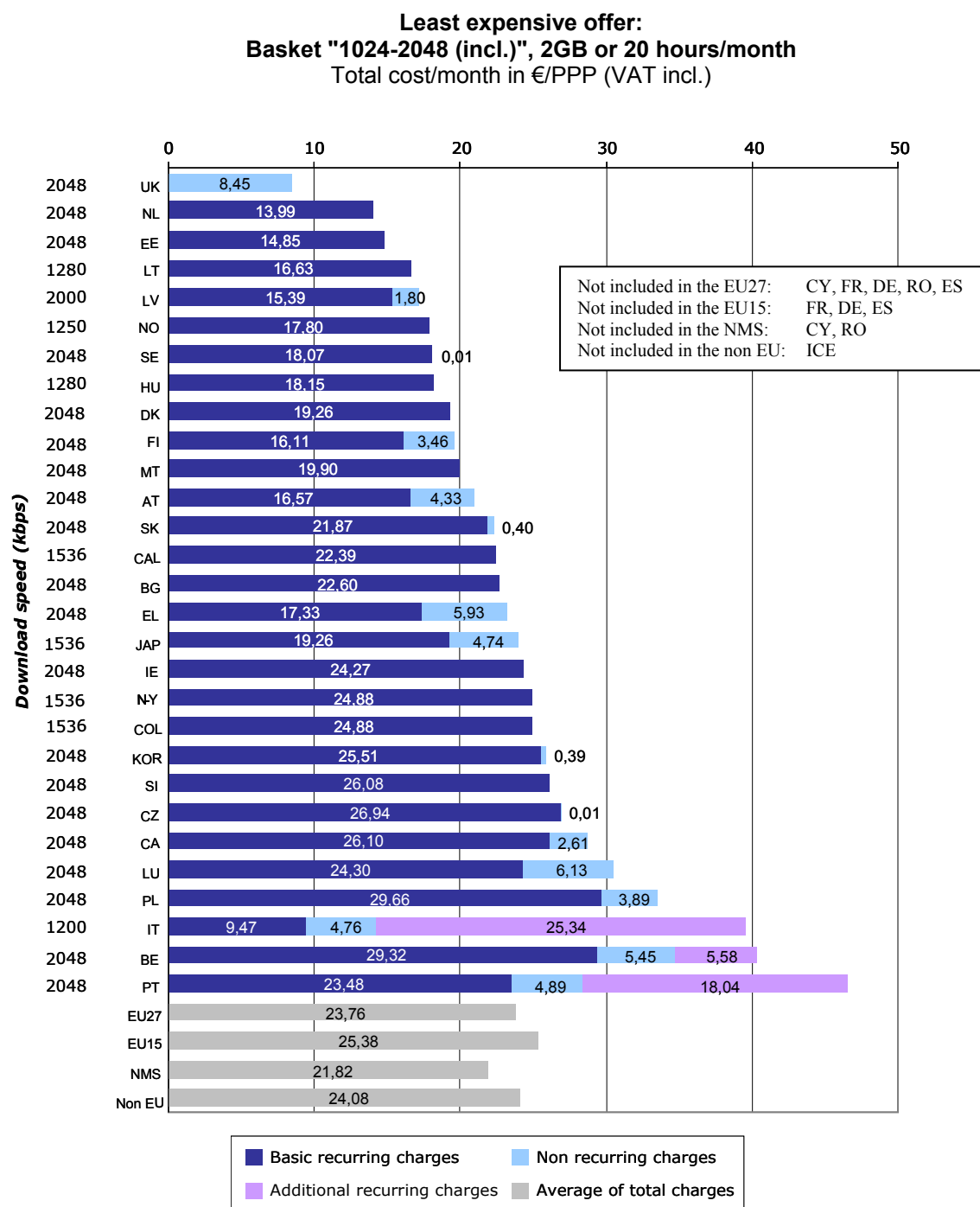
4.2.2.f CONCLUSIONS ON BASKET 512KBPS-1024KBPS (incl.):

- In *Germany, Korea, Luxembourg, Malta, the Netherlands, Portugal, Slovakia and the United Kingdom* no offer of the selected ISPs was available for this basket in April 2008. All of these countries, with the exception of *Korea and the Netherlands*, still had offers in this basket in 2007. Furthermore, the Czech Republic and France had no offers in the sample for this basket in 2007, but they did in April 2008.
- ISPs of the *Czech Republic, France, Iceland and Sweden* only had one offer available for this basket. The charge for this offer equals the least expensive and no median value was determined for these countries.
- In *Lithuania and Norway*, two offers are presented as both have the same price.
- The offer for *Denmark* might not be representative, as the ISP focuses on members of certain organisations. It has however been kept in the sample, due to the significant market share of the ISP. The second least expensive offer available for this basket is provided by Cybercity (xDSL – 1024 kbps – 17.72 EUR/PPP).
- Of the six metered offers selected in this basket, the one for *Italy* needed a normalisation process.
 - *Italy*: the offer was time-metered and did not include any hour in the recurring charges. The additional charge per hour is 1.9 EUR/PPP.
- For some countries a major difference can be noted between the least expensive and the median offer.
 - For the *State of Colorado* this can be explained by the fact that 2 of the 4 offers in this basket represent a charge higher than 90 EUR/PPP.
- No relation could be observed between the omission of non-recurring charges in some countries (*Bulgaria, Canada, Denmark, Estonia, France, Ireland, Latvia, Lithuania, Romania, Slovenia, State of Colorado and State of New York*) and the place they take in the overall ranking of the least expensive offers. Non-recurring charges clearly influenced the ranking of *Austria*.
- In three countries, *Cyprus, Hungary and Italy*, the charges of the least expensive offer in the sample increased significantly compared to the charges in 2007.
- In six other countries, *Bulgaria, Denmark, Poland, Spain, State of California and State of Colorado*, the charge of the least expensive offers decreased significantly compared to October 2007.
- Overall, it could be observed that the average cost of the least expensive offers in the EU 27 countries slightly decreased. As for the first basket, this results from lower average least expensive and median charges in the EU15 and the NMS. Finally, charges in the non-EU countries have remained relatively stable in 2008 compared to October 2007. This is explained by significant changes in the exchange rates for Canada and the USA, while in both countries charges in EUR increased.

4.2.3 BASKET "1024KBPS -2048KBPS (incl.)", IN €/PPP (VAT INCL.)

4.2.3.a LEAST EXPENSIVE OFFER²³

There were no offers in the sample for *Cyprus, France, Germany, Iceland, Romania* and *Spain*.

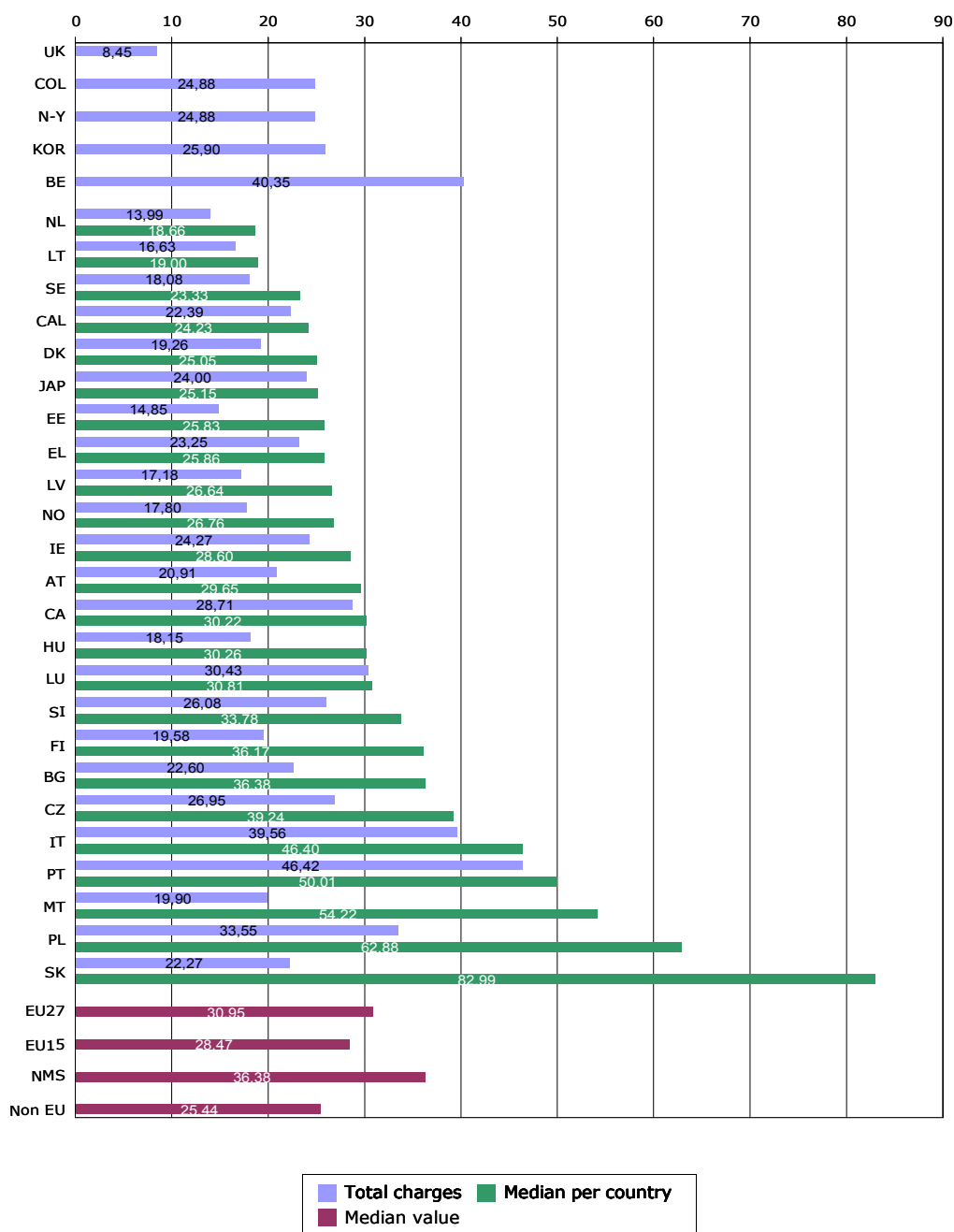


²³ The offer for the UK might not be representative, as the broadband offers of this ISP only addresses sky TV customers. It has however been kept in the sample, due to the significant market share of the ISP. This is the only offer available for this basket.

4.2.3.b BASKET "1024KBPS -2048KBPS (incl.)", LEAST EXPENSIVE AND MEDIAN OFFERS

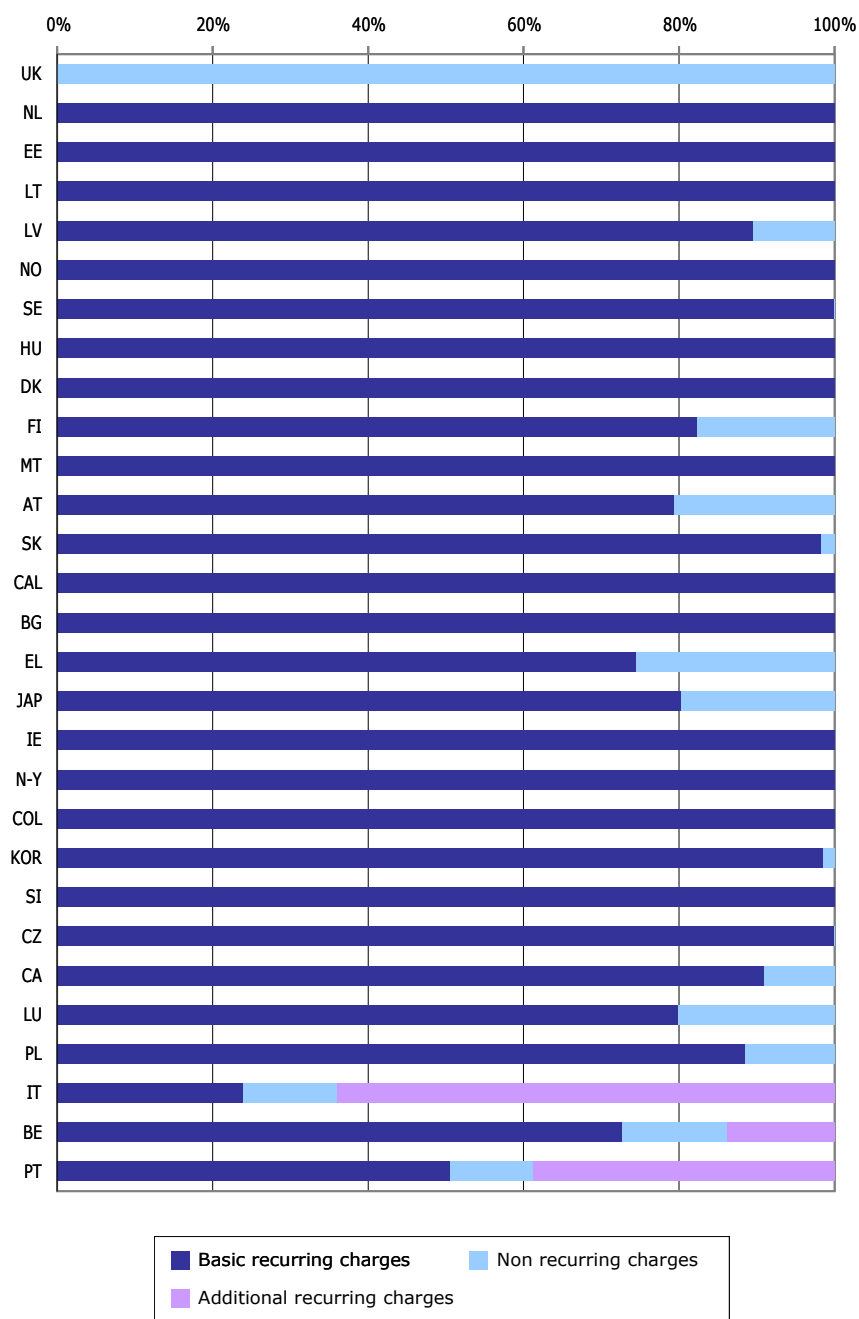
For Belgium, Korea, State of Colorado, State of New York and the United Kingdom the median value is equal to the charge of the least expensive offer and was therefore not represented.

Least expensive and median offers:
Basket "1024-2048 (incl.)", 2GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



4.2.3.c BASKET "1024KBPS -2048KBPS (incl.)", COMPOSITION IN %

Least expensive offer: Charges breakdown
Basket "1024-2048 (incl.)", 2GB or 20 hours/month
 Total cost/month in €/PPP (VAT incl.)



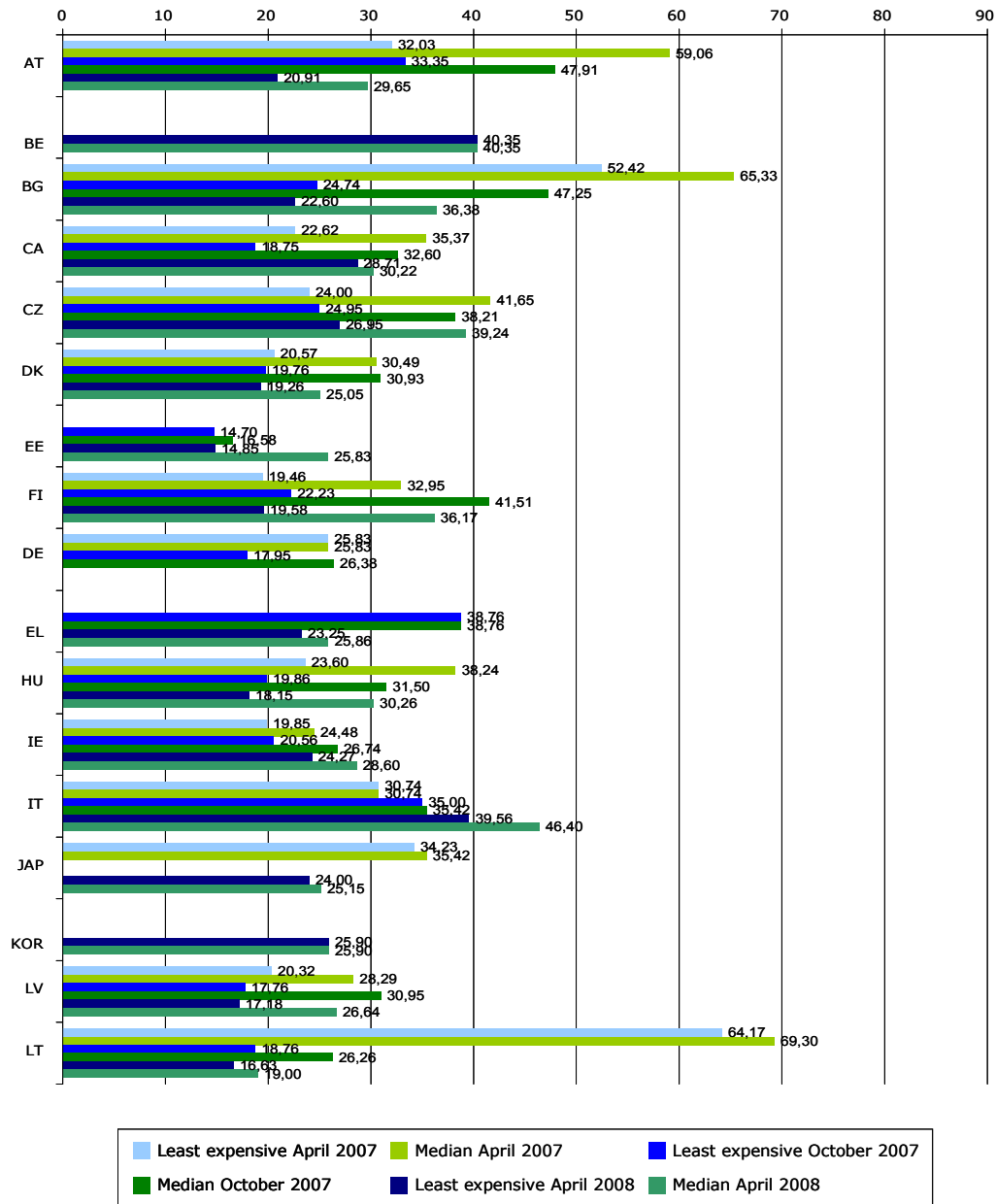
4.2.3.d BASKET "1024KBPS -2048KBPS (incl.)", LIST OF THE SELECTED OFFERS

Comparison	S1 2008	1024-2048	Internet only												
Country	ISP	Offer	Technology	Contract duration (*)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (**)	Adresses per mailbox (**)	Webpace (**)	Level of protection (***)	Total cost/month VAT incl.	Total cost/month VAT incl.	Indexed ranking (****)	
				Months	Kbps					MB		Euro	EUR/PPP		
Austria	TELE2UTA	ADSL 3GB	xDSL	12	2048	3	-	5	N.D.	10	AV+AS	22,08	20,91	0,88	
Belgium	Belgacom	ADSL Light	xDSL	-	2048	1	-	1	5	50	AV+AS	43,41	40,35	1,69	
Bulgaria	Spectrum Net	Start	xDSL	12	2048	unlimited	unlimited	1	1	N.D.	-	9,71	22,60	0,95	
Canada	Bell Canada	Bell WiMax fixe 2 Mbps	Plug & Play	-	2048	10	-	1	11	5	AV+AS+PU	34,39	28,71	1,20	
Czech Republic	elefónica O2 Czech Republ	O2 Internet ADSL 2048	xDSL	12	2048	unlimited	unlimited	1	5	30	-	18,98	26,95	1,13	
Denmark	Dansk Kabel TV	Mellem Hastighet 2 Mbit/512 kbit	Cable	-	2048	unlimited	unlimited	1	5	N.D.	-	26,68	19,26	0,81	
Estonia	Elion	Korrumaja internet	Cable	-	2048	unlimited	unlimited	1	1	N.D.	-	10,55	14,85	0,62	
Finland	Elisa	Elisa Kotiportti Maxi	xDSL	-	2048	unlimited	unlimited	N.D.	N.D.	N.D.	-	23,08	19,58	0,82	
Greece	OTE	ADSL 2048/256	xDSL	-	2048	unlimited	unlimited	N.D.	N.D.	N.D.	-	20,12	23,25	0,98	
Hungary	GTS-Datanet	easy_C - region of T-Com	xDSL	12	1280	unlimited	unlimited	1	1	0	AV+AS	11,74	18,15	0,76	
Ireland	Irish broadband	Home plus	xDSL	6	2048	unlimited	unlimited	1	N.D.	N.D.	-	28,95	24,27	1,02	
Italy	Liberio	ADSL Light	xDSL	-	1200	-	6	1	N.D.	150	AV+AS	41,58	39,56	1,66	
Japan	NTT EAST Japan	1,5mbps type	xDSL	-	1536	unlimited	unlimited	N.D.	N.D.	2000	-	21,27	24,00	1,01	
Korea	Korea Telecom	Megapass Lite	Satellite	12	2048	40	-	N.D.	N.D.	N.D.	-	19,78	25,90	1,09	
Latvia	MPE NET	Learning	FTTH	24	2000	unlimited	unlimited	3	N.D.	N.D.	-	12,01	17,18	0,72	
Lithuania	Dokeda	Vilnius D0	FTTH	12	1280	unlimited	unlimited	1	N.D.	N.D.	-	10,14	16,63	0,70	
Luxembourg	Cegecom	DSL Basic	xDSL	12	2048	15	-	3	N.D.	10	-	32,68	30,43	1,28	
Malta	Onvol	2 Mbps	Cable	15	2048	10	-	3	N.D.	25	AV	13,85	19,90	0,83	
Norway	Get	S	xDSL	12	1250	unlimited	unlimited	1	N.D.	5	AV+AS+FW	24,45	17,80	0,75	
The Netherlands	Tele2 Netherlands	Basis	xDSL	12	2048	unlimited	unlimited	1	N.D.	20	AV+AS	14,95	13,99	0,59	
Poland	UPC Polska	internet sprint	Cable	-	2048	unlimited	unlimited	1	N.D.	10	-	22,87	33,55	1,41	
Portugal	PT.Com (Sapo)	2Mb	xDSL	-	2048	1	-	5	N.D.	25	AV+BU	39,52	46,42	1,95	
Slovakia	UPC Slovakia	Chello Small	Cable	12	2048	unlimited	unlimited	1	5	25	AV+AS	14,15	22,27	0,93	
Slovenia	T-2	VDSL 2Mb/2Mb	xDSL	-	2048	unlimited	unlimited	unlimited	N.D.	N.D.	AV+AS+FW	20,00	26,08	1,09	
State of California	Cox Communications	1,5 mb	xDSL	-	1536	unlimited	unlimited	N.D.	N.D.	N.D.	-	17,13	22,39	0,94	
State of Colorado	Earthlink	1,5Mbps service	xDSL	12	1536	unlimited	unlimited	N.D.	N.D.	N.D.	AV+AS+PC	19,04	24,88	1,04	
State of New York	Earthlink	1,5Mbps service	xDSL	12	1536	unlimited	unlimited	N.D.	N.D.	N.D.	AV+AS+PC	19,04	24,88	1,04	
Sweden	ComHem	Small 2 Mbit	Cable	12	2048	unlimited	unlimited	1	5	125	-	21,22	18,08	0,76	
The UK	BSkyB	Sky Base	xDSL	12	2048	2	-	10	N.D.	N.D.	-	8,39	8,45	0,35	
(*) Duration = '-' indicates that 12 months was assumed															
(**) N.D. indicates information is not provided by ISP															
(***) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line															
(****) Indexed ranking: ranking of offers based on the median value of this set of results															
ISPs in italic & bold are Incumbent operators															

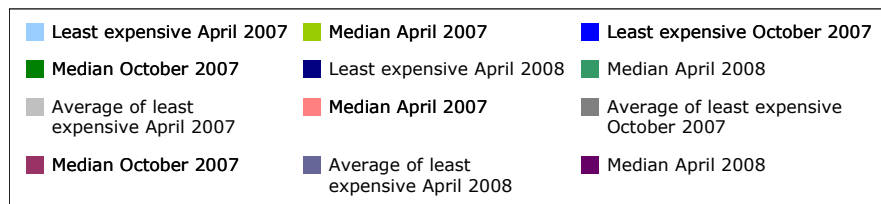
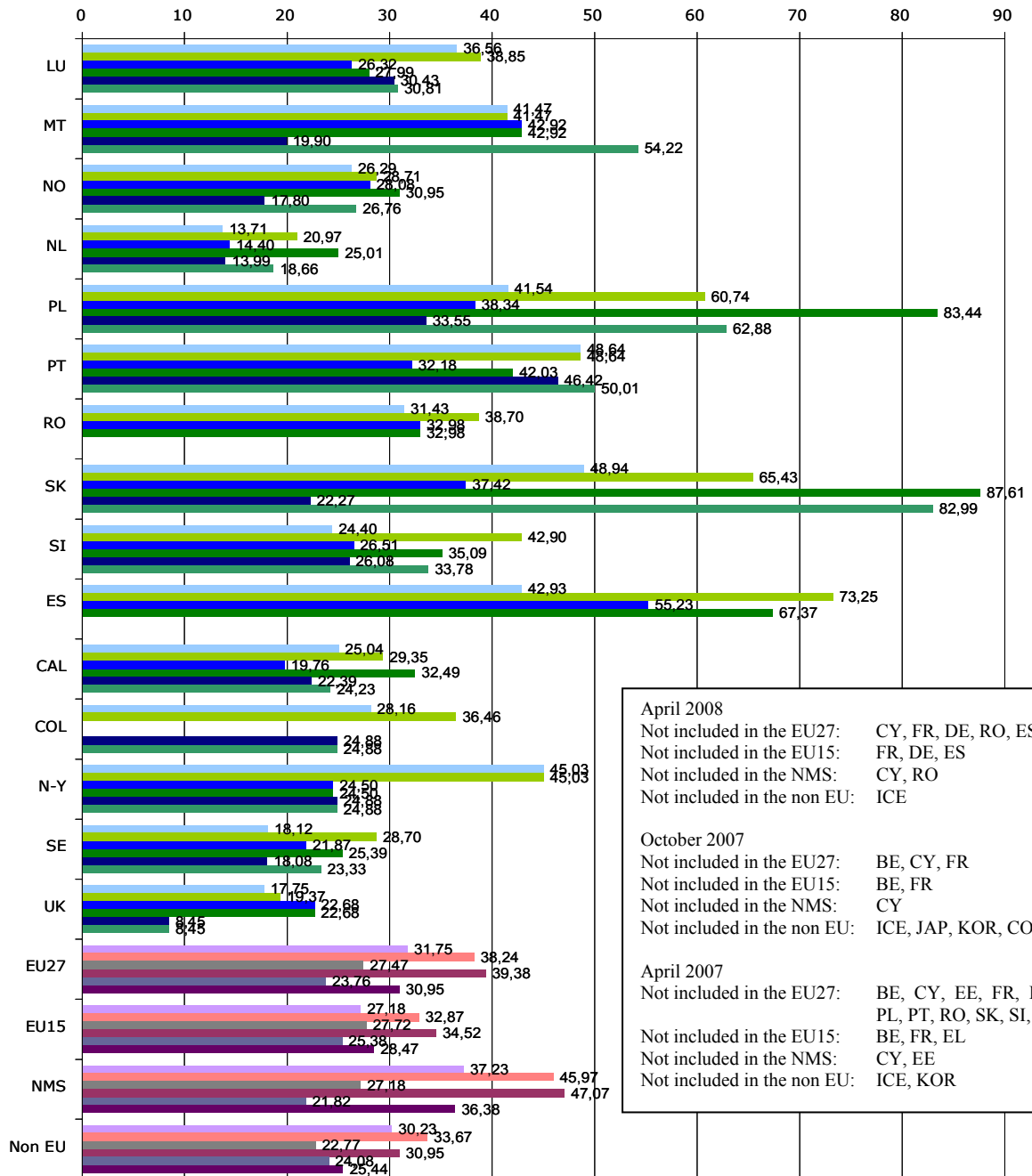
Table 13: Detailed information on least expensive offer per country (1024kbps-2048kbps incl.)

4.2.3.e BASKET "1024KBPS-2048KBPS(incl.)", COMPARISON OF LEAST EXPENSIVE AND MEDIAN OFFERS IN 2007 AND 2008

Comparison April 2007 – October 2007 – April 2008
Least expensive and median offers
Basket "1024-2048 (incl.)", 2GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



Comparison April 2007 – October 2007 – April 2008
Least expensive and median offers
Basket "1024-2048 (incl.)", 2GB or 20 hours/month (followed)
Total cost/month in €/PPP (VAT incl.)



4.2.3.f CONCLUSIONS ON BASKET 1024KBPS-2048KBPS (incl.):

- In *Cyprus, France, Germany, Iceland, Romania and Spain* no offer of the selected ISPs was available for this basket. Three of these countries, *Germany, Romania and Spain*, still had offers in this sample in 2007. Moreover, two countries that had no offer in 2007 did in April 2008. These are *Belgium and Korea*.
- From the ISPs in *Belgium, Korea, State of Colorado, State of New York and the United Kingdom*, only one offer was available for this basket. This shows that the charge for this offer equals the least expensive and no median value was determined for these countries.
- The *Finnish* offer focuses only on customers living in apartment buildings. It has however been kept in the sample, due to the fact that offers per building are very common in Finland and thus considered representative. The second least expensive offer available for this basket is also provided by Elisa (cable – 1224 kbps – 25.50 EUR/PPP).
- The offer for *Denmark* might not be representative, as the ISP focuses on members of certain organisations. It has however been kept in the sample, due to the significant market share of the ISP. The second least expensive offer available for this basket is provided by Cybercity (xDSL – 256 kbps – 19.33 EUR/PPP).
- The offer for *the UK* might not be representative, as the broadband offers of this ISP only addresses sky TV customers. It has however been kept in the sample, due to the significant market share of the ISP. This is the only offer available for this basket.
- Of the nine metered offers selected as the least expensive in this basket, only those in *Belgium, Italy and Portugal* needed a normalisation process.
 - *Belgium*: 1 Gb is included in the offer and the charge for an extra Gb is 5.58 EUR/PPP. The additional recurring charge is therefore 5.58 EUR/PPP.
 - *Italy*: 6 hours during daytime are included in the offer and the charge per additional hour is 1.81 EUR/PPP. 14 hours need to be added, which totals 25.34 EUR/PPP for additional recurring Internet access charges.
 - *Portugal*: 1 Gb is included in the offer and the charge for an extra Gb is 18.04 EUR/PPP. The additional recurring charge is therefore 18.04 EUR/PPP. Please note however that an additional 4 Gb is offered for free in case of electronic invoicing.
- For some countries a major difference can be noted between the least expensive and the median offer.
 - There are 19 *Slovakian* offers in the basket, of which 18 have a charge higher than 50 EUR/PPP, and 7 have a charge even higher than 100 EUR/PPP. This explains the gap between the least expensive offer (22.27 EUR/PPP) and the median offer (82.99 EUR/PPP).
- No relationship could be observed between the omission of non-recurring charges in some countries (*Bulgaria, Denmark, Estonia, Hungary, Ireland, Lithuania, Malta, The Netherlands, Norway, Slovenia, State of California, State*

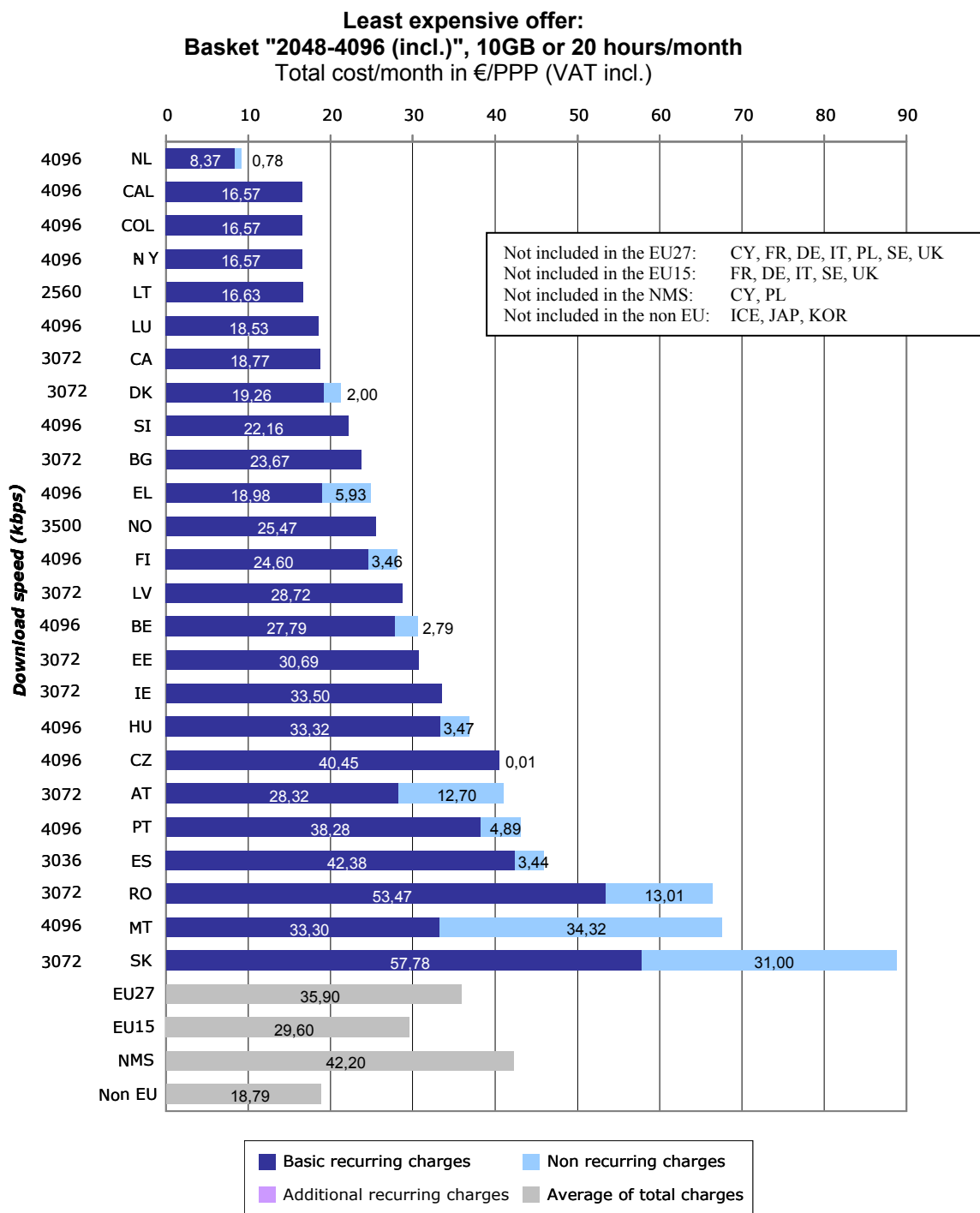
of Colorado and State of New York) and the place they take in the overall ranking of the least expensive offers.

- In seven countries, *Austria, Greece, Japan, Malta, Norway, Slovakia and the UK. Bulgaria, Denmark, Estonia, Hungary and Latvia*, the charges of the least expensive offer in the sample of April 2008 decreased significantly compared to the charges in October 2007.
- In four other countries, *Canada, Czech Republic, Denmark and Portugal*, the charge of the least expensive offers increased strongly compared to October 2007. In both the *Czech Republic* and *Portugal*, the charges of the median offers also increased.
- Overall, it could be observed that the average cost of the least expensive offers in the EU 27 countries has decreased. This decrease represents the net result of a slight decrease in the charges of the least expensive offers in the EU 15 and a greater decrease in these charges in the NMS. The average least expensive offers in the non EU countries were rather stable, whereas the median value strongly decreased.

4.2.4. **BASKET "2048KBPS-4096KBPS (incl.)", IN €/PPP (VAT INCL.)**

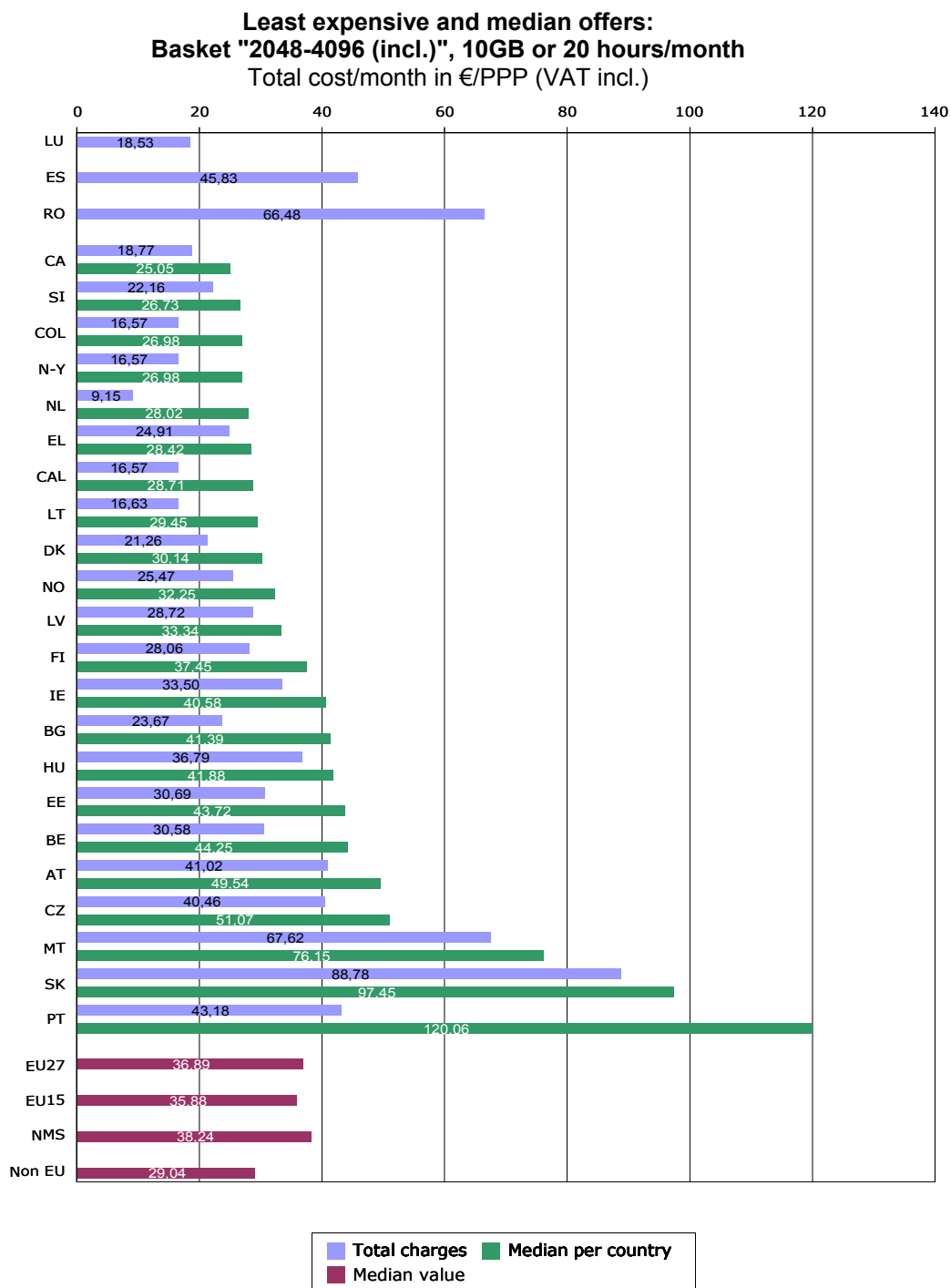
4.2.4.a **LEAST EXPENSIVE OFFERS**

For Cyprus, France, Germany, Iceland, Italy, Japan, Korea, Poland, Sweden and the United Kingdom there were no offers in the sample for this basket in our selection.



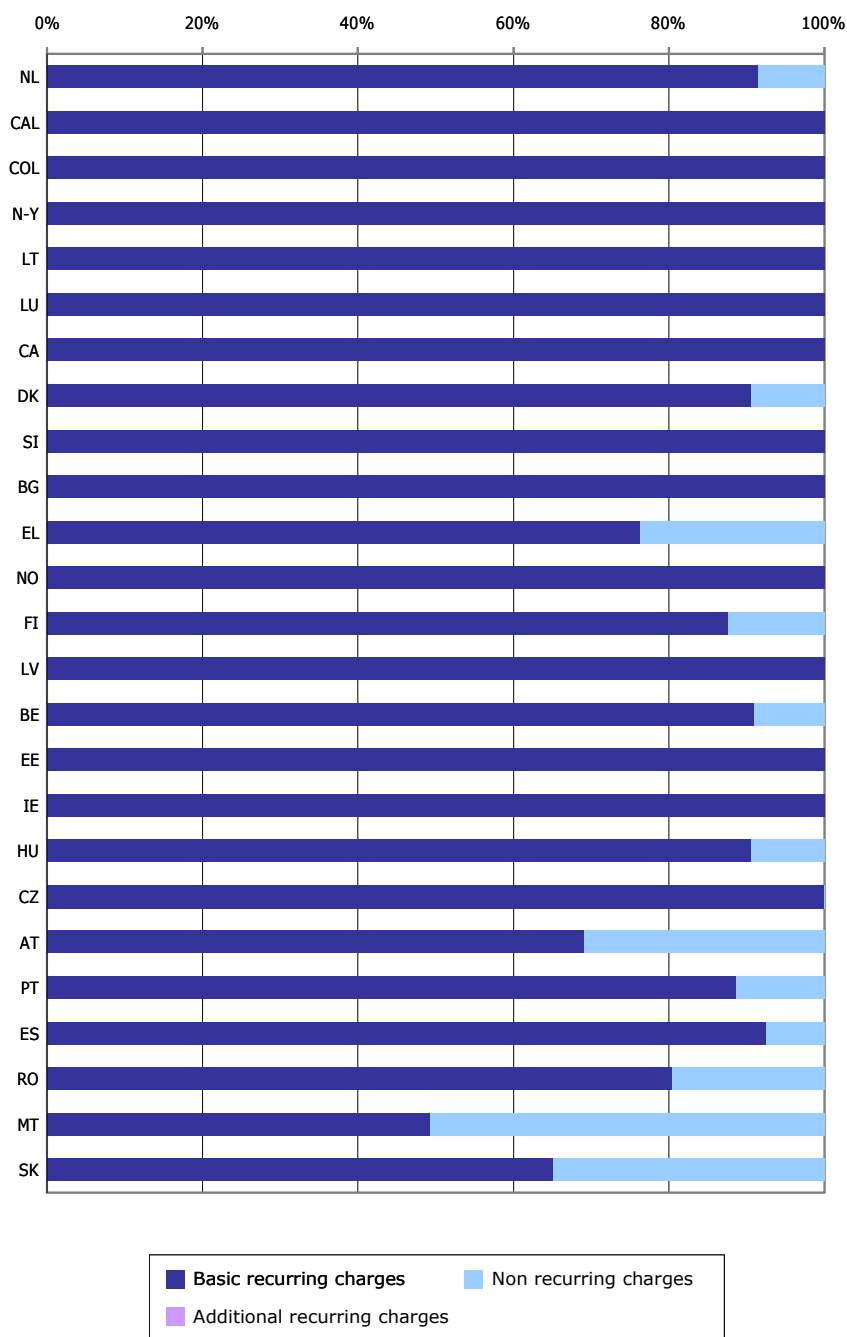
4.2.4.b BASKET "2048KBPS-4096KBPS (incl.)", LEAST EXPENSIVE AND MEDIAN OFFERS

For the following countries, only one offer was available for this basket: *Luxemburg, Spain and Romania*. Consequently, no median value could be determined.



4.2.4.c BASKET "2048KBPS-4096KBPS (incl.)", COMPOSITION IN %

Least expensive offer: Charges breakdown
Basket "2048-4096 (incl.)", 10GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



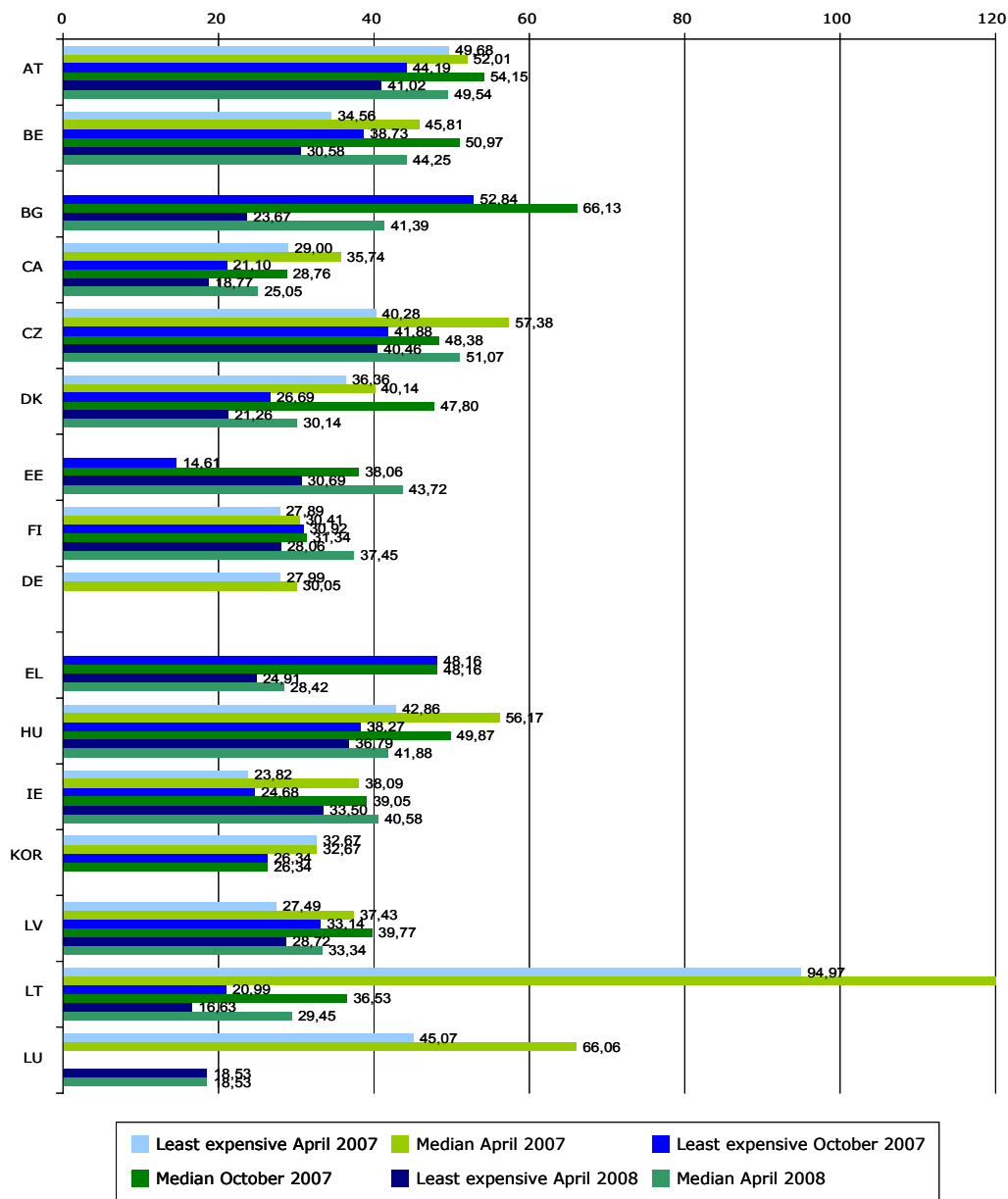
4.2.4.d BASKET "2048KBPS-4096KBPS (incl.)", LIST OF THE SELECTED OFFERS

Comparison	S1 2008	2048-4096	Internet only											
Country	ISP	Offer	Technology	Contract duration (*)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (**)	Adresses per mailbox (**)	Webpace (**)	Level of protection (***)	Total cost/month VAT incl.	Total cost/month VAT incl.	Indexed ranking (****)
				Months	Kbps					MB		Euro	PPP	
Austria	UPC Austria	inode aDSL privat medium 3072/512	xDSL	12	3072	unlimited	unlimited	N.D.	10	20	-	43,31	41,02	1,26
Belgium	KPN Tele2	ADSL 4Mb	xDSL	12	4096	15	-	5	5	50	AV+AS	32,90	30,58	0,94
Bulgaria	Cable Tel	Lan Internet Alfa	FTTH	-	3072	unlimited	unlimited	1	1	20	-	10,17	23,67	0,73
Canada	Telus	High Speed Enhanced	xDSL	-	3072	60	-	5	N.D.	100	AV+AS+FW	22,48	18,77	0,58
Czech Republic	Telefónica O2 Czech Republic	O2 Internet ADSL 4096	xDSL	12	4096	unlimited	unlimited	1	5	30	-	28,49	40,46	1,25
Denmark	Cybercity	Solo 3 Mbit/512 kbit	xDSL	-	3072	unlimited	unlimited	1	5	10	-	29,45	21,26	0,65
Estonia	STV	Saturn Kodu +	FTTH	-	3072	unlimited	unlimited	1	1	N.D.	-	21,79	30,69	0,94
Finland	Elisa	Elisa Kotiportti Maxi	xDSL	-	4096	unlimited	unlimited	N.D.	N.D.	N.D.	-	33,08	28,06	0,86
Greece	OTE	ADSL 4096/256	xDSL	-	4096	unlimited	unlimited	N.D.	N.D.	N.D.	-	21,55	24,91	0,77
Hungary	Externet	Othoni PrePaid Bravo	xDSL	12	4096	unlimited	unlimited	3	1	50	AV+AS	23,80	36,79	1,13
Ireland	Irish broadband	Home pro 3mbps	xDSL	6	3072	unlimited	unlimited	1	N.D.	N.D.	-	39,95	33,50	1,03
Latvia	PRONETS	Universal	FTTH	6	3000	unlimited	unlimited	3	N.D.	N.D.	-	20,08	28,72	0,88
Latvia	Baltinet data	Active	xDSL	12	3072	unlimited	unlimited	3	N.D.	N.D.	-	20,08	28,72	0,88
Lithuania	Telerena	Siauliai A1***	xDSL	12	2560	30	-	2	N.D.	N.D.	FW	10,14	16,63	0,51
Luxembourg	Cegecom	CATV-IP Easy	Cable	12	4096	unlimited	unlimited	5	N.D.	10	-	19,90	18,53	0,57
Malta	Maltacom	12 Gigabyte Usage 4 Mbps	xDSL	3	4096	12	-	3	N.D.	100	AV+AS	47,07	67,62	2,08
Norway	Get	M	xDSL	12	3500	unlimited	unlimited	3	N.D.	10	AV+AS+FW	34,98	25,47	0,78
The Netherlands	Orange Netherlands	ADSL	xDSL	12	4096	unlimited	unlimited	4	N.D.	20	-	9,78	9,15	0,28
Portugal	PT.Com (Sapo)	4Mb illimited	xDSL	-	4096	unlimited	unlimited	5	N.D.	25	AV+BU	36,76	43,18	1,33
Romania	Romtelecom	ClickNet Broadband 3Mbps	xDSL	12	3072	unlimited	unlimited	N.D.	N.D.	30	-	37,03	66,48	2,05
Slovakia	T-COM	4G Turbo 3	xDSL	-	3072	unlimited	unlimited	1	5	N.D.	-	56,39	88,78	2,73
Slovenia	T-2	VDSL 4Mb/512kb	xDSL	-	4096	unlimited	unlimited	1	N.D.	N.D.	AV+AS+FW	17,00	22,16	0,68
Spain	Telefonica Spain	ADSL 3 Mb	xDSL	12	3036	unlimited	unlimited	5	N.D.	25	-	42,25	45,83	1,41
State of California	Time Warner Cable	Road Runner Lite High Speed Online	Cable	-	4096	unlimited	unlimited	N	N.D.	N.D.	AV+AS+FW+PC	12,68	16,57	0,51
State of Colorado	Time Warner Cable	Road Runner Lite High Speed Online	Cable	12	4096	unlimited	unlimited	0	N.D.	N.D.	-	12,68	16,57	0,51
State of New York	Time Warner Cable	Road Runner Lite High Speed Online	Cable	12	4096	unlimited	unlimited	0	N.D.	N.D.	-	12,68	16,57	0,51
(*) Duration = '-' indicates that 12 months was assumed														
(**) N.D. indicates information is not provided by ISP														
(***) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line														
(****) Indexed ranking: ranking of offers based on the median value of this set of results														
ISPs in <i>italic & bold</i> are Incumbent operators														

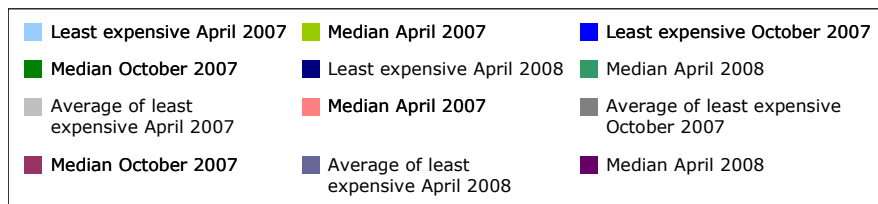
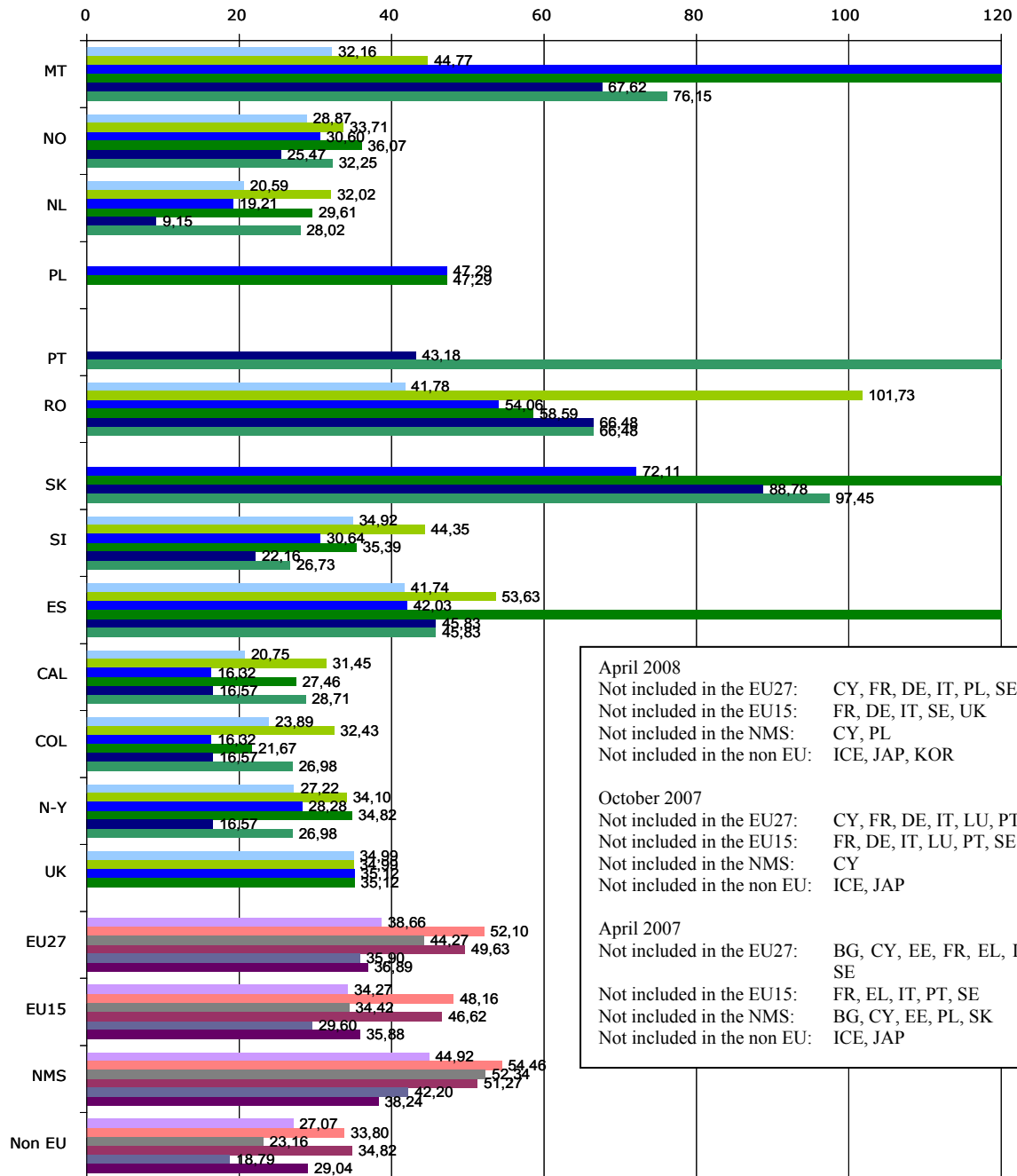
Table 14: Detailed information on least expensive offer per country (2048kbps-4096kbps (incl.))

4.2.4.e BASKET "2048KBPS-4096KBPS (incl.)", COMPARISON OF LEAST EXPENSIVE AND MEDIAN OFFERS IN 2007 AND 2008

Comparison April 2007 – October 2007 – April 2008
Least expensive and median offers
Basket "2048-4096 (incl.)", 10GB or 20 hours/month
 Total cost/month in €/PPP (VAT incl.)



Comparison April 2007 – October 2007 – April 2008
Least expensive and median offers
Basket "2048-4096 (incl.)", 10GB or 20 hours/month (followed)
Total cost/month in €/PPP (VAT incl.)



4.2.4.f CONCLUSIONS ON BASKET 2048KBPS-4096KBPS (incl.)

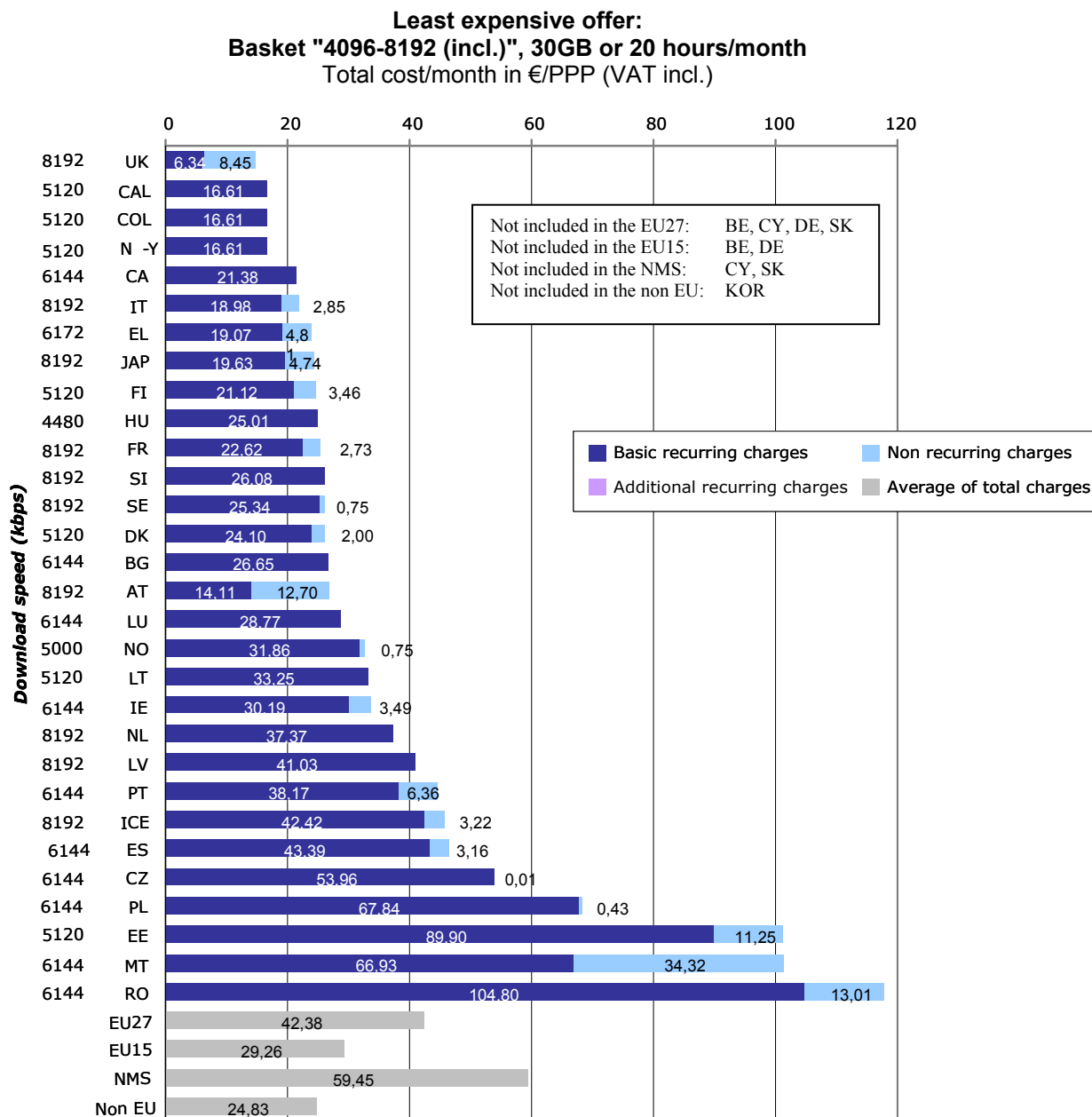
- In *Cyprus, France, Germany, Iceland, Italy, Japan, Korea, Poland, Sweden and the United Kingdom* no offer of the selected ISPs was available for this basket. Four of these countries, *Germany, Korea, Poland and the UK*, still had offers in the sample for this basket in 2007. Furthermore, Portugal, which had no offers in 2007, offered Internet at speeds between 2048 and 4096 kbps (incl.) in April 2008.
- In *Iceland, Romania and Spain* only one offer was available for this basket. This means that the charge for this offer equals the least expensive and no median value was determined for these countries.
- In *Latvia and Slovakia*, two offers are presented as both have the same price.
- The selected offer for *Denmark* can only be ordered on-line and no assistance is provided for installation.
- The *Finnish* offer focuses only on customers living in apartment buildings. It has however been kept in the sample, due to the fact that offers per building are very common in Finland and thus considered representative. The second least expensive offer available for this basket is also provided by Elisa (cable – 3072 kbps – 30.59 EUR/PPP).
- In the selection of the least expensive offers of this basket there are four metered offers. None of these needed normalisation.
- For some countries a major difference can be noted between the least expensive and the median offer:
 - *The Netherlands* has 10 offers in the basket. Seven of these have a charge above 25.00 EUR/PPP. This explains the high median charge.
- No relationship could be observed between the omission of non-recurring charges in some countries (*Bulgaria, Canada, Czech Republic, Estonia, Ireland, Latvia, Lithuania, Luxembourg, Norway, Slovenia, State of California, State of Colorado, State of New York*) and the place they take in the overall ranking of the least expensive offers. Non-recurring charges influenced most clearly the ranking of *Austria* and *Malta*.
- In six countries, the charges for the least expensive offer in the sample of April 2008 decreased significantly compared to the charges in 2007. These countries are *Bulgaria, Greece, Luxembourg, Malta, the Netherlands and State of New York*. In *Malta* however, the decrease is mainly explained by the fact that the least expensive offer now has a contract duration of 3 months instead of 1 month which allows a better spread of the non-recurring charges.
- The greatest increase in the charges for the least expensive offers was observed in *Denmark, Estonia, Romania, Slovakia and Spain*. The charges for the median offers of these countries however only increased slightly or even decreased in the case of *Denmark*.
- Overall, it could be observed that the average cost of the least expensive offers in the EU 27 countries decreased slightly. This decrease is the net result of a slight decrease of the charges of the least expensive offers in the EU 15 and a greater decrease in these charges in the NMS. Median charges decreased significantly in

EU27, resulting from a decrease in the median charges both in the EU15 and in the NMS countries. Both the average least expensive offers and the median charges in the non EU countries clearly decreased in April 2008 compared to April and October 2007.

4.2.5 BASKET "4096KBPS-8192KBPS (incl.)", IN €/PPP (VAT INCL.)

4.2.5.a LEAST EXPENSIVE OFFER

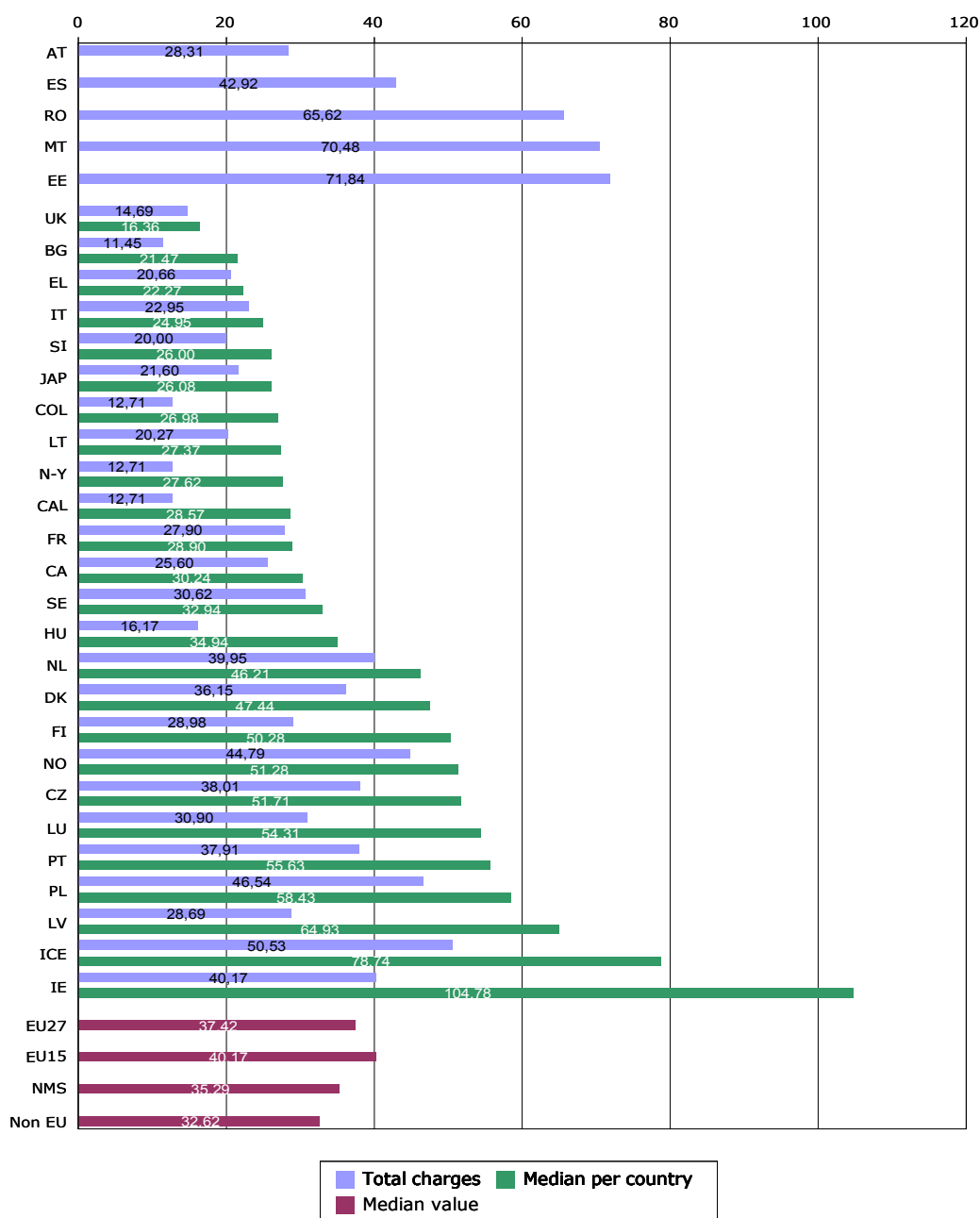
The ISPs selected for *Belgium, Cyprus, Germany, Slovakia* and *Korea* do not offer any broadband access services for this basket.



4.2.5.b BASKET "4096KBPS-8192KBPS (incl.)", LEAST EXPENSIVE AND MEDIAN OFFERS

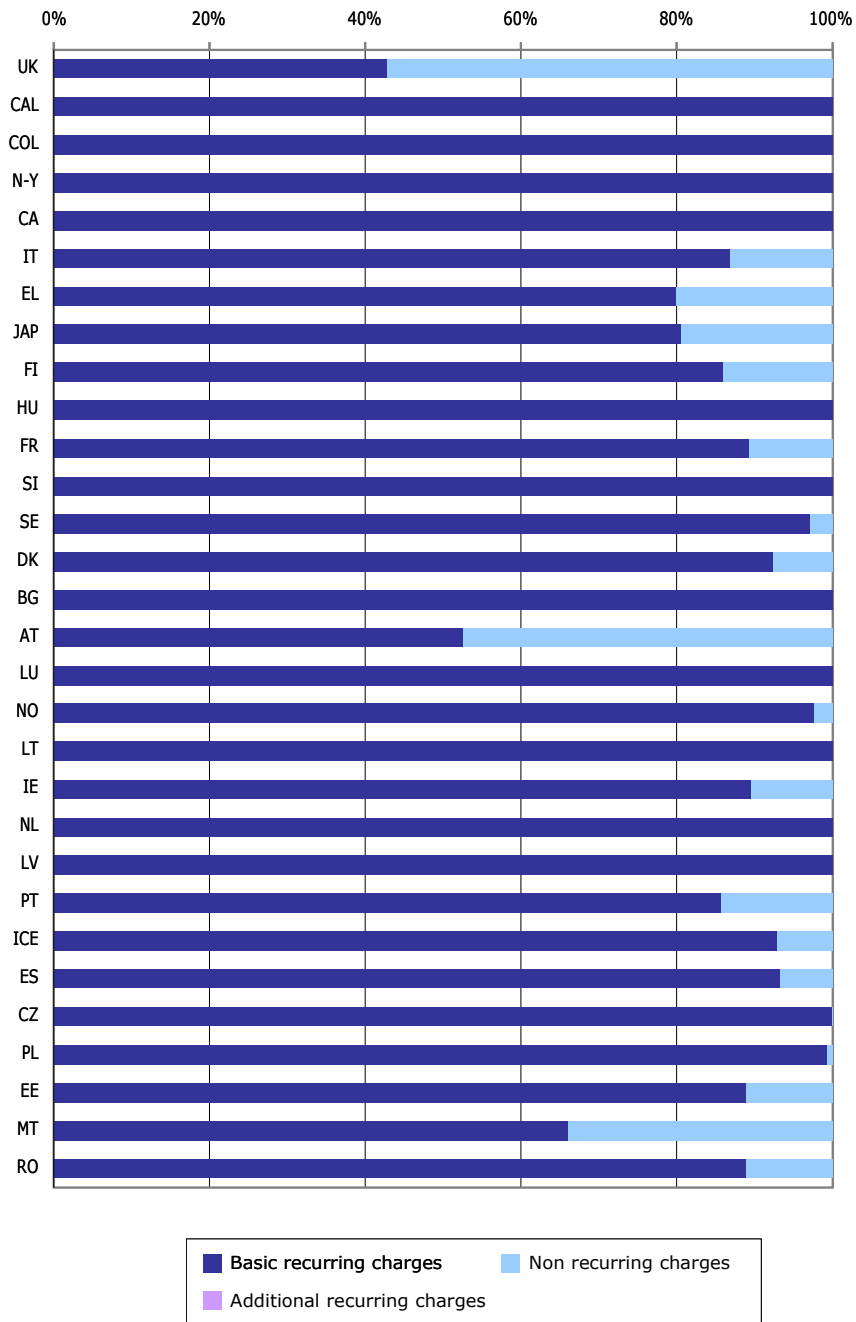
In *Austria, Estonia, Malta, Romania* and *Spain* only one offer was available in the sample for this basket. By consequence, no median value could be determined.

Least expensive and median offers:
Basket "4096-8192 (incl.)", 30GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



4.2.5.c BASKET "4096KBPS-8192KBPS (incl.)", COMPOSITION IN %

Least expensive offer: Charges breakdown
Basket "4096-8192 (incl.)", 30GB or 20 hours/month
 Total cost/month in €/PPP (VAT incl.)



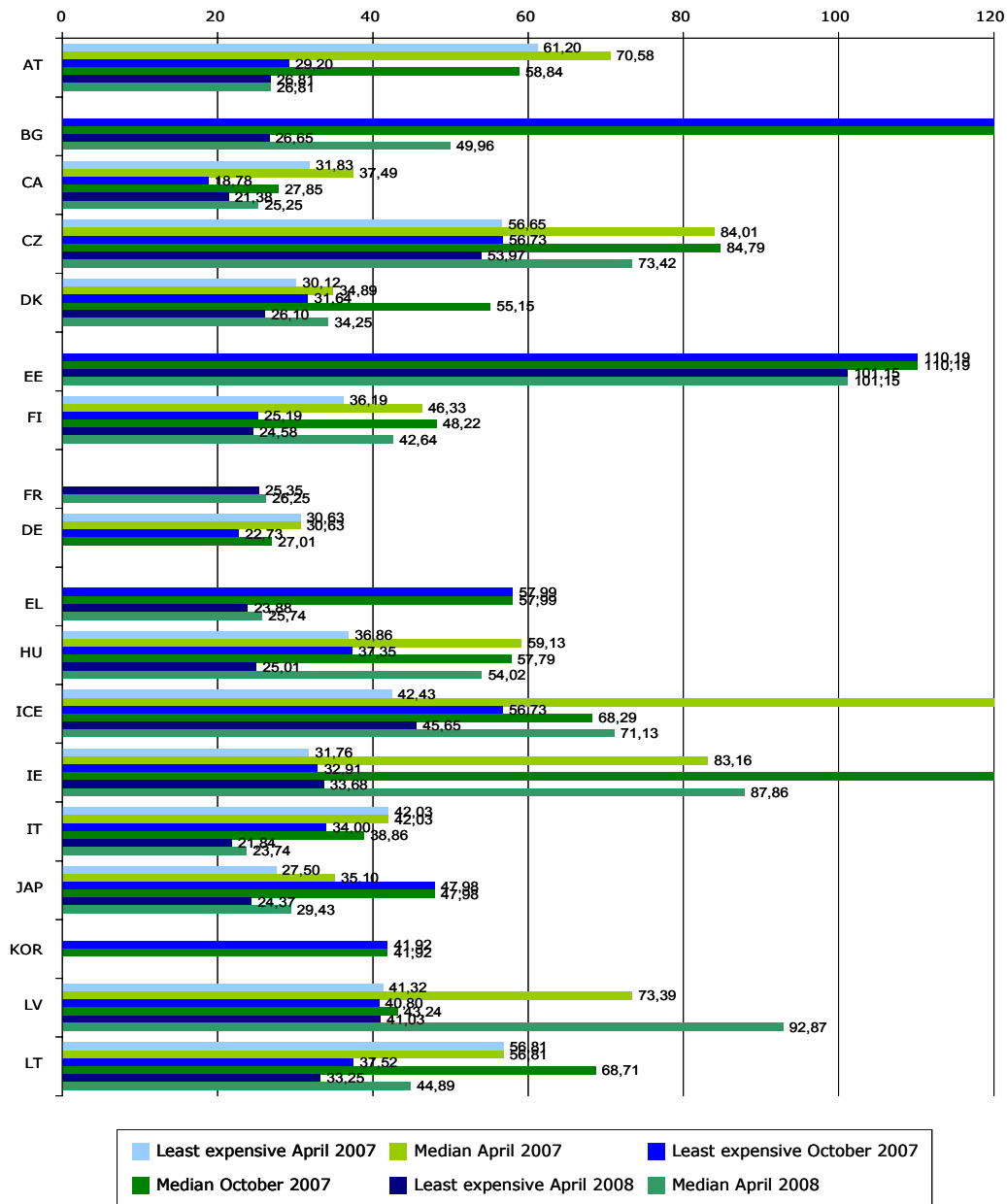
4.2.5.d BASKET "4096KBPS-8192KBPS (incl.)", LIST OF THE SELECTED OFFERS

Comparison	S1 2008	4096-8192	Internet only												
Country	ISP	Offer	Technology	Contract duration (*)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (**)	Addreses per mailbox (**)	Webspace (**)	Level of protection (***)	Total cost/month VAT incl.	Total cost/month VAT incl.	Indexed ranking (****)	
				Months	Kbps					MB		Euro	EUR/PPP		
Austria	UPC Austria	inode aDSL privat max	xDSL	12	8192	unlimited	unlimited	N.D.	10	20	-	28,31	26,81	0,70	
Bulgaria	Eurocom	6 Mbps	Cable	12	6144	unlimited	unlimited	1	1	N.D.	-	11,45	26,65	0,70	
Canada	Telus	High Speed Extreme	xDSL	-	6144	60	-	10	N.D.	100	AV+AS+FW	25,60	21,38	0,56	
Canada	Shaw	High Speed	Cable	-	5120	60	-	1	10	N.D.	AV+AS	25,60	21,38	0,56	
Czech Republic	Telefónica O2 Czech Republic	O2 Internet ADSL 6144	xDSL	12	6144	unlimited	unlimited	1	5	30	-	38,01	53,97	1,41	
Denmark	Cybercity	Solo 5 Mbit/1 Mbit	xDSL	-	5120	unlimited	unlimited	1	5	10	-	36,15	26,10	0,68	
Estonia	STV	Saturn Pro	FTTH	-	5120	unlimited	unlimited	1	1	N.D.	-	71,84	101,15	2,64	
Finland	Elisa	Elisa laajakaista Super	xDSL	-	5120	unlimited	unlimited	5	1	500	-	28,98	24,58	0,64	
Finland	Elisa	Elisa laajakaista Super	Cable	-	5120	unlimited	unlimited	5	1	500	-	28,98	24,58	0,64	
France	NeufCegetel	ADSL jusqu'à 8 Méga	xDSL	-	8192	unlimited	unlimited	N.D.	N.D.	100	-	27,90	25,35	0,66	
Greece	HOL	HOL Hibox 6MBps	xDSL	-	6172	unlimited	unlimited	1	N.D.	N.D.	-	20,66	23,88	0,62	
Hungary	GTS-Datanet	fair_C - region of T-Com	xDSL	12	4480	unlimited	unlimited	1	1	0	AV+AS	16,17	25,01	0,65	
Iceland	Og Vodafone	ADSL plus 8 Mb/s	xDSL	6	8192	unlimited	unlimited	5	N.D.	20	AV+AS	50,53	45,65	1,19	
Ireland	UPC Ireland	Broadband Express	Cable	12	6144	60	-	N.D.	15	300	-	40,17	33,68	0,88	
Italy	Tiscali Italy	ADSL 8 Mega	xDSL	-	8192	unlimited	unlimited	1	N.D.	100	AS	22,95	21,84	0,57	
Japan	NTT EAST Japan	8 mbps type	xDSL	-	8192	unlimited	unlimited	N.D.	N.D.	2000	-	21,60	24,37	0,64	
Latvia	PRONETS	Business	FTTH	6	8192	unlimited	unlimited	5	N.D.	N.D.	-	28,69	41,03	1,07	
Lithuania	Dokeda	Kaunas D2+	FTTH	12	5120	unlimited	unlimited	2	N.D.	N.D.	-	20,27	33,25	0,87	
Lithuania	Dokeda	Vilnius D2+	FTTH	12	5120	unlimited	unlimited	2	N.D.	N.D.	-	20,27	33,25	0,87	
Luxembourg	Cegecom	CATV-IP Standard	Cable	-	6144	unlimited	unlimited	5	N.D.	10	-	30,90	28,77	0,75	
Malta	Maltacom	40 Gigabyte Usage 6 Mbps	xDSL	3	6144	40	-	3	N.D.	100	AV+AS	70,48	101,25	2,64	
Norway	NextGenTel	ADSL Mega 4100	xDSL	12	4100	unlimited	unlimited	50	N.D.	5000	AV+AS	44,79	32,62	0,85	
Norway	NextGenTel	ADSL 5000	xDSL	12	5000	unlimited	unlimited	50	N.D.	5000	AV+AS	44,79	32,62	0,85	
The Netherlands	XS4ALL	Lite	xDSL	12	8192	unlimited	unlimited	5	N.D.	200	AV+AS	39,95	37,37	0,98	
Poland	TP	Neostrada 6144	xDSL	12	6144	unlimited	unlimited	N.D.	unlimited	50	-	46,54	68,27	1,78	
Portugal	ZON	Mega Illimited	Cable	12	6144	unlimited	unlimited	30	N.D.	30	-	37,91	44,53	1,16	
Romania	Romtelecom	ClickNet Broadband 6Mbps	xDSL	12	6144	unlimited	unlimited	N.D.	N.D.	100	-	65,62	117,81	3,08	
Slovenia	T-2	VDSL 8 Mbps / 1 Mbps	xDSL	-	8192	unlimited	unlimited	1	N.D.	N.D.	AV+AS+FW	20,00	26,08	0,68	
Spain	Ono	Banda Ancha ONO 6	Cable	12	6144	unlimited	unlimited	N.D.	N.D.	N.D.	-	42,92	46,56	1,22	
State of California	Charter Communications	Charter high speed internet up to 5 Mbps	xDSL	6	5120	unlimited	unlimited	10	N.D.	N.D.	-	12,71	16,61	0,43	
State of Colorado	Charter Communications	Charter high speed internet up to 5 Mbps	xDSL	6	5120	unlimited	unlimited	10	N.D.	N.D.	-	12,71	16,61	0,43	
State of New York	Charter Communications	Charter high speed internet up to 5 Mbps	xDSL	6	5120	unlimited	unlimited	10	N.D.	N.D.	-	12,71	16,61	0,43	
Sweden	Glocalnet	Bredband 8	xDSL	12	8192	unlimited	unlimited	1	5	50	-	30,62	26,09	0,68	
The UK	BSkyB	Sky Mid	xDSL	12	8192	40	-	10	N.D.	N.D.	-	14,69	14,79	0,39	
(*) Duration = '-' indicates that 12 months was assumed															
(**) N.D. indicates information is not provided by ISP															
(***) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line															
(****) Indexed ranking: ranking of offers based on the median value of this set of results															
ISPs in <i>italic</i> & bold are Incumbent operators															

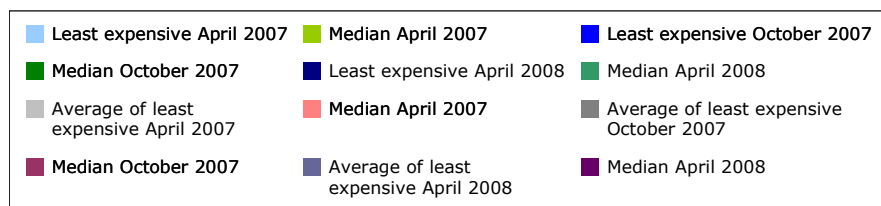
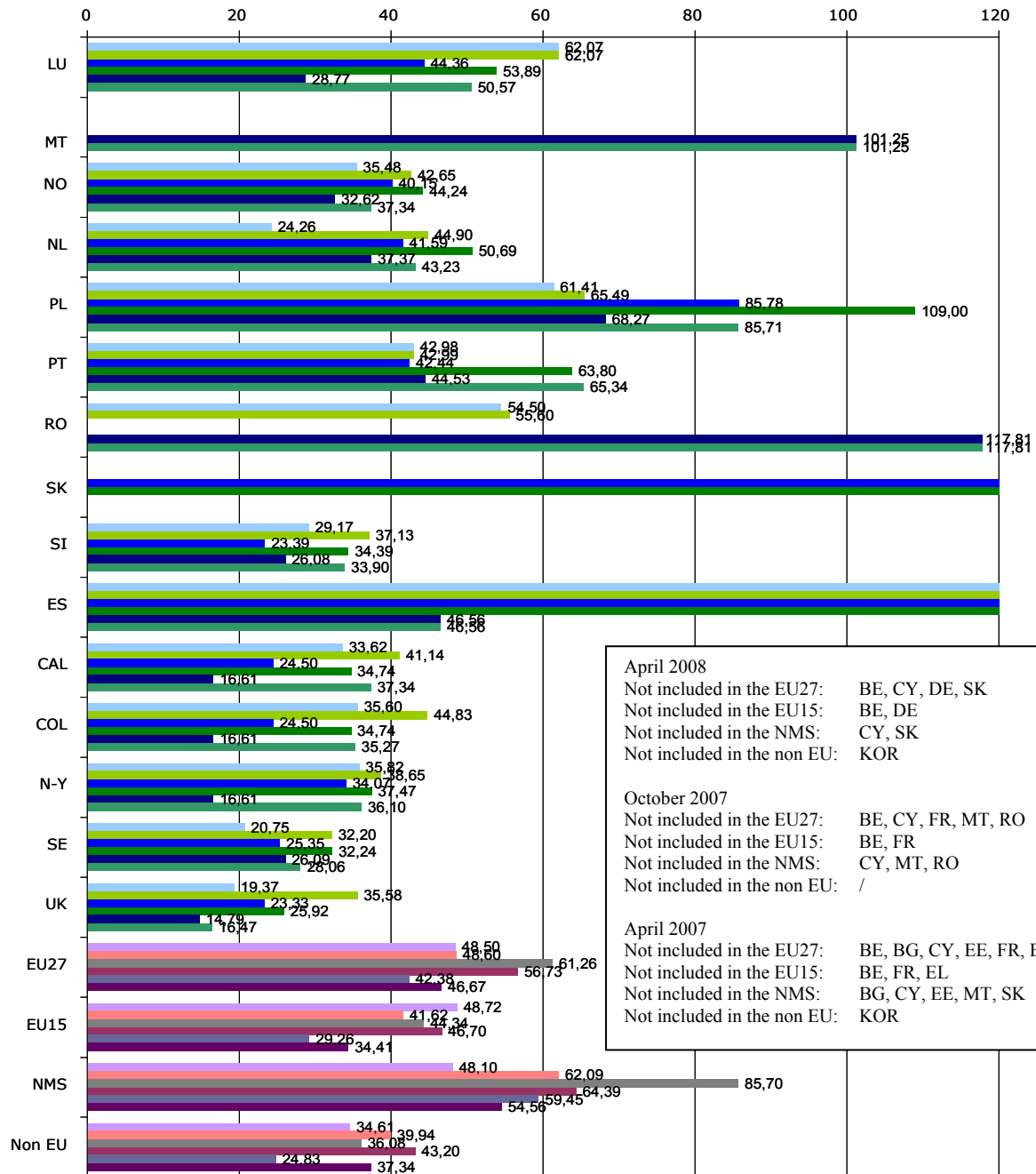
Table 15: Detailed information on least expensive offer per country (4096kbps-8192kbps incl.)

4.2.5.e BASKET "4096KBPS – 8192KBPS (incl.)", COMPARISON OF LEAST EXPENSIVE AND MEDIAN OFFERS IN 2007 AND 2008

Comparison April 2007 – October 2007 – April 2008
Least expensive and median offers:
Basket "4096-8192 (incl.)", 30GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



Comparison April 2007 – October 2007 – April 2008
Least expensive and median offers:
Basket "4096-8192 (incl.)", 30GB or 20 hours/month (followed)
Total cost/month in €/PPP (VAT incl.)



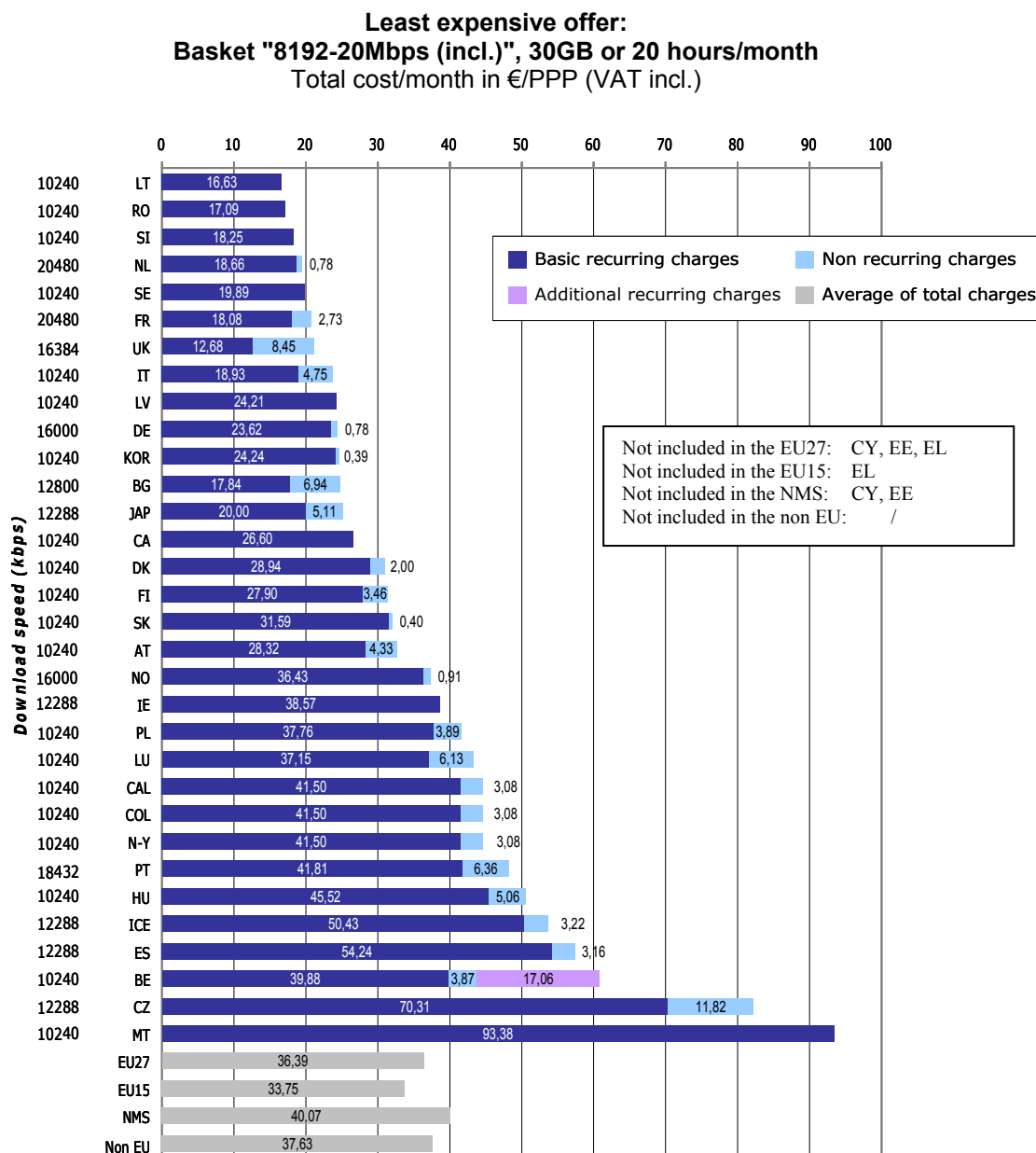
4.2.5.f CONCLUSIONS ON BASKET 4096KBPS-8192KBPS (incl.)

- In *Belgium, Cyprus, Germany, Slovakia* and *Korea* no offer of the selected ISPs was available for this basket in April 2008. Three of these still had offers in this basket in 2007: *Germany, Korea* and *Slovakia*. The sample for *France* and *Malta* now contains offers for the 4096kbps – 8192kbps (incl.) sample; this was not the case in 2007.
- In this basket only one offer was available in *Austria, Estonia, Malta, Romania* and *Spain*. This means that the charge for this offer equals the least expensive and no median value was determined for these countries.
- In *Canada, Finland, Lithuania* and *Norway* two offers are presented as both have the same price.
- The offer selected for *Estonia* is the broadband Internet access offer with the highest speed available for this country.
- The offer for *the UK* might not be representative, as the broadband offers of this ISP only address sky TV customers. It has however been kept in the sample, due to the significant market share of the ISP. The second least expensive offer available for this basket is provided by Tiscali UK (xDSL – 8192 kbps – 16.47 EUR/PPP).
- In the selection of the least expensive offers of this basket there are five metered offers. All of these offers did however meet our predefined normalisation parameters.
- For some countries a major difference can be noted between the least expensive and the median offers.
 - *Hungary* has 24 offers in the basket. The difference between the least expensive offer (25.01 EUR/PPP) and the median offer (54.02 EUR/PPP) can be explained by the 16 offers with a charge higher than 50 EUR/PPP.
 - *Ireland* has only 2 offers: the least expensive offer is at 33.68 EUR/PPP and a second one which is provided by Irish Broadband (xDSL – 6144 kbps – 142.04 EUR/PPP).
- No relationship could be observed between the omission of non-recurring charges in some countries (*Bulgaria, Canada, Czech Republic, Hungary, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Slovenia, State of California, State of Colorado* and *State of New York*) and the place they take in the overall ranking of the least expensive offers. Non-recurring charges influenced however clearly the ranking of *Malta*.
- In most of the countries, the charges of the least expensive offer in the sample of April 2008 decreased compared to the charges in 2007. Even though the very high charges for the only *Maltese* and *Romanian* offers in this basket, both the least expensive and the median offer for the New Member States decreased. The values for the EU15 and non EU countries have decreased significantly since October 2007.

4.2.6. **BASKET "8192KBPS-20MBPS (incl.)", IN €/PPP (VAT INCL.)**

4.2.6.a **LEAST EXPENSIVE OFFER**

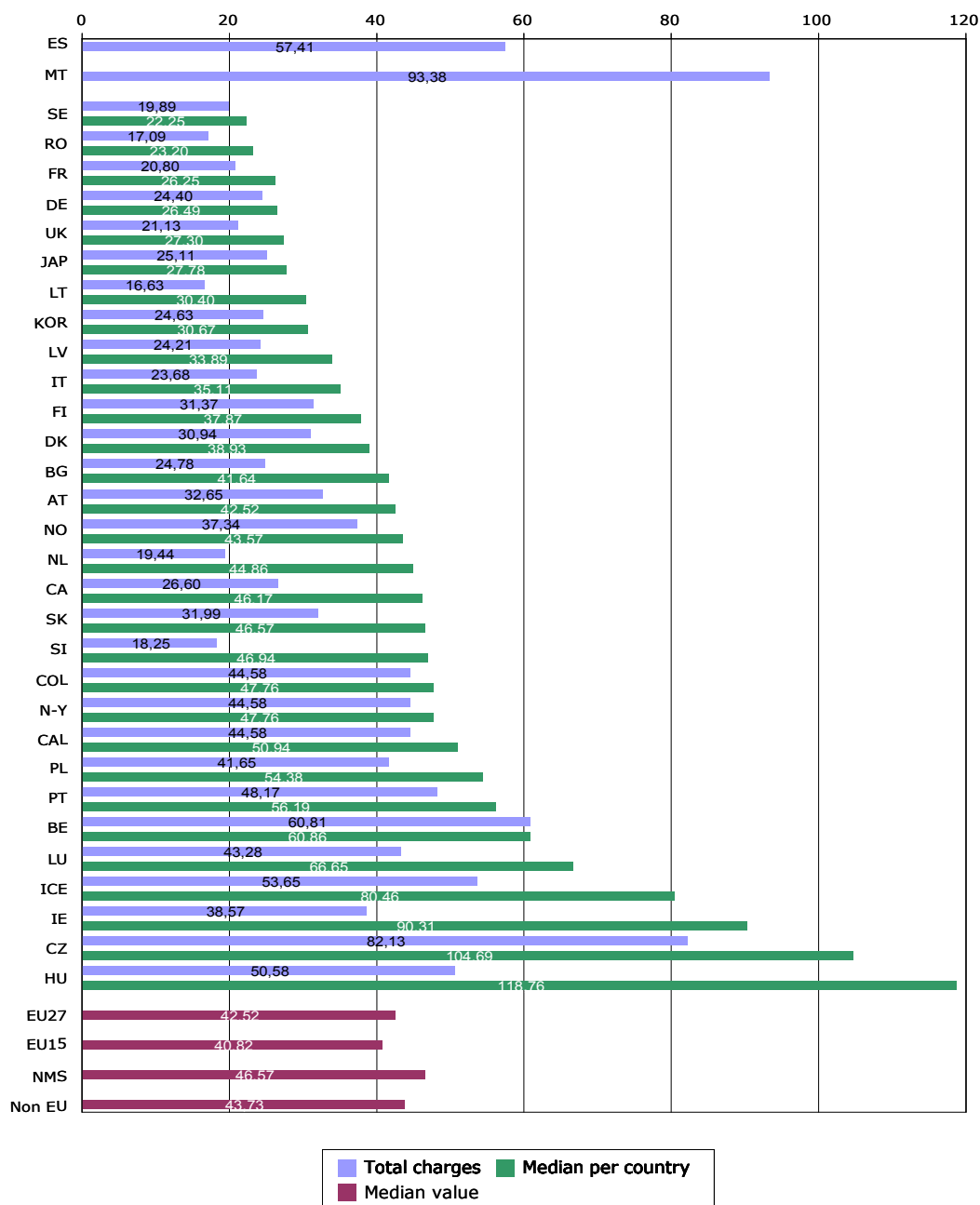
In Cyprus, Estonia and Greece there are no offers in the sample corresponding to this basket.



4.2.6.b BASKET "8192KBPS - 20MBPS (incl.)", LEAST EXPENSIVE AND MEDIAN OFFERS

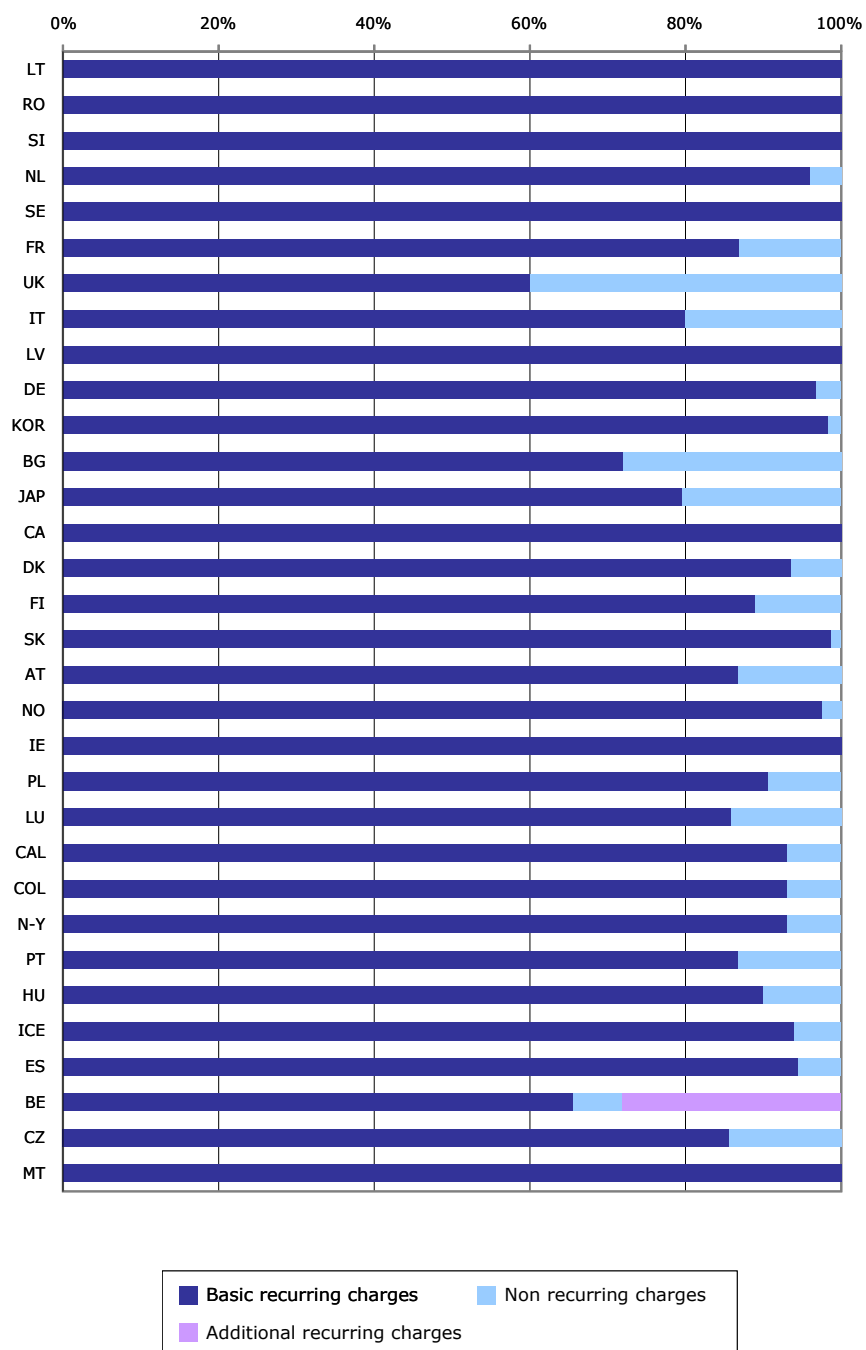
In *Spain* and *Malta* only one offer was available in the sample for this basket. Consequently, no median value could be determined.

Least expensive and median offers:
Basket "8192-20Mbps (incl.)", 30GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



4.2.6.c BASKET "8192KBPS-20MBPS (incl.)", COMPOSITION IN %

Least expensive offer: Charges breakdown
Basket "8192-20Mbps (incl.)", 30GB or 20 hours/month
 Total cost/month in €/PPP (VAT incl.)



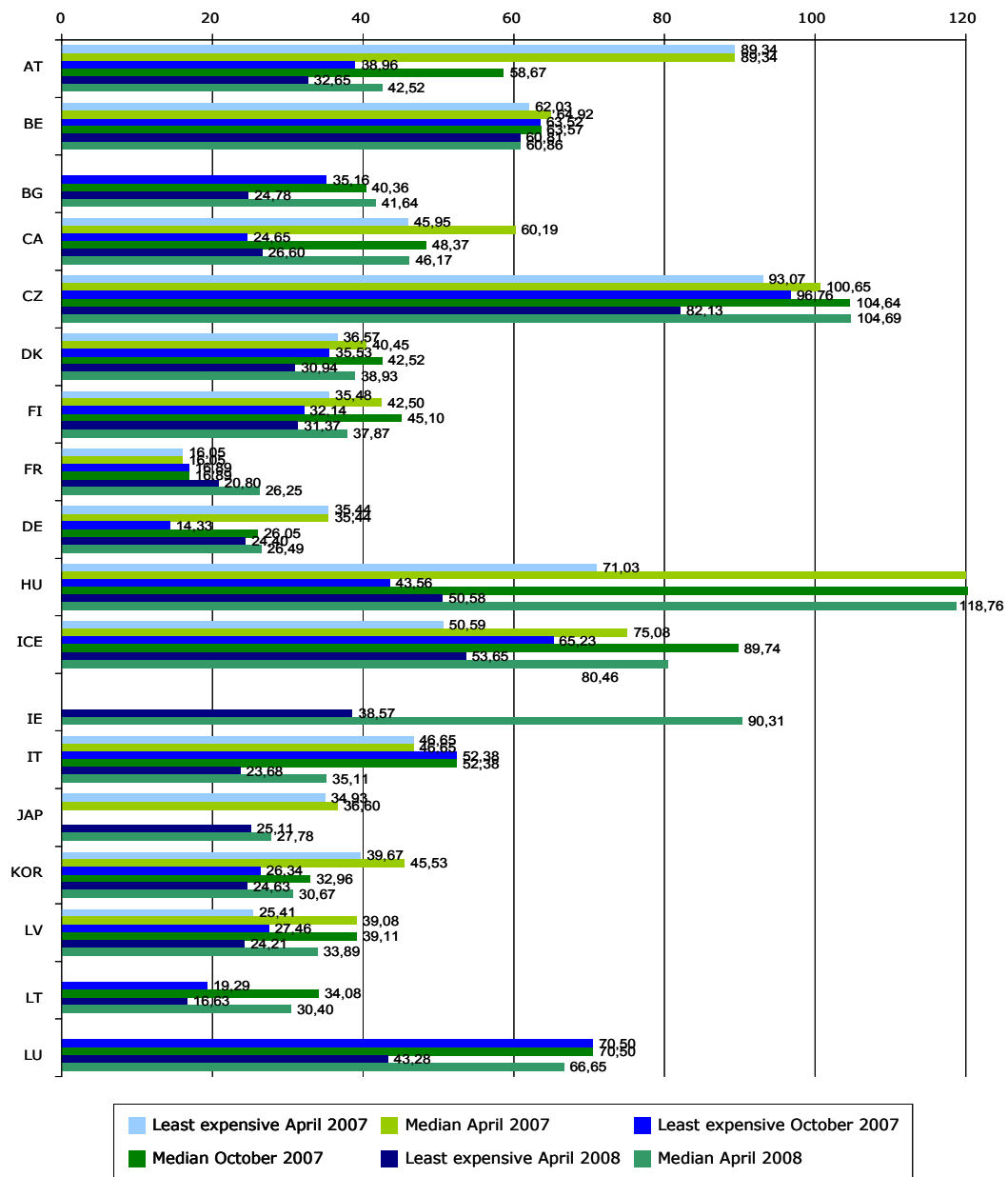
4.2.6.d BASKET "8192KBPS-20MBPS (incl.)", LIST OF THE SELECTED OFFERS

Comparison	S1 2008	8192-20Mbps	Internet only												
Country	ISP	Offer	Technology	Contract duration (*)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (**)	Adresses per mailbox (**)	Webspace (**)	Level of protection (***)	Total cost/month VAT incl.	Total cost/month VAT incl.	Indexed ranking (****)	
				Months	Kbps					MB		Euro	EUR/PPP		
Austria	TELE2UTA	DSL Fun	xDSL	12	10240	unlimited	unlimited	5	N.D.	10	AV+AS	34.48	32.65	0.89	
Belgium	Telenet	ExpressNet	Cable	-	10240	12	-	1	N.D.	50	AV+AS	65.44	60.81	1.66	
Bulgaria	Powernet	Traffic Mania R	FTTH	-	12800	unlimited	unlimited	1	1	N.D.	-	10.65	24.78	0.68	
Canada	Shaw	Xtreme-I	Cable	-	10240	100	-	1	10	N.D.	AV+AS	31.85	26.60	0.72	
Czech Republic	UPC Czech Republic	UPC Classic	Cable	12	12288	unlimited	unlimited	5	25	50	-	57.84	82.13	2.24	
Denmark	Cybercity	Solo 10 Mbit/1 Mbit	xDSL	-	10240	unlimited	unlimited	1	5	10	-	42.86	30.94	0.84	
Finland	Elisa	Elisa laajakaista Super	xDSL	-	10240	unlimited	unlimited	5	1	500	-	36.98	31.37	0.85	
France	NeufCegetel	ADSL 20 Mega	xDSL	-	20480	unlimited	unlimited	N.D.	N.D.	100	-	22.90	20.80	0.57	
Germany	Alice	Alice light mit Internetflat	xDSL	-	16000	unlimited	unlimited	5	N.D.	10240	-	25.73	24.40	0.66	
Hungary	UPC Hungary	Chello silver	Cable	12	10240	unlimited	unlimited	3	1	10	-	32.71	50.58	1.38	
Iceland	Og Vodafone	ADSL plus 12 Mb/s	xDSL	6	12288	unlimited	unlimited	5	N.D.	20	AV+AS	59.39	53.65	1.46	
Ireland	UPC Ireland	Broadband Ultra	Cable	12	12288	unlimited	unlimited	N.D.	15	300	-	46.00	38.57	1.05	
Italy	Fastweb	Naviga 30 Ore	xDSL	-	10240	-	30	4	N.D.	0	-	24.89	23.68	0.65	
Japan	NTT EAST Japan	MORE(12Mbps type)	xDSL	-	12288	unlimited	unlimited	N.D.	N.D.	2000	-	22.26	25.11	0.68	
Korea	Korea Telecom	Megapass Lite	FTTH	12	10240	40	-	N.D.	N.D.	N.D.	-	18.81	24.63	0.67	
Korea	Korea Telecom	Megapass Lite	xDSL	12	10240	40	-	N.D.	N.D.	N.D.	-	18.81	24.63	0.67	
Latvia	Balticom	Home package. Basic.	FTTH	12	10240	unlimited	unlimited	3	5	5	-	16.93	24.21	0.66	
Lithuania	Telerena	Siauliai OA1	FTTH	12	10240	30	-	2	N.D.	N.D.	FW	10.14	16.63	0.45	
Luxembourg	Cegecom	CATV-IP Advanced	Cable	-	10240	unlimited	unlimited	5	N.D.	10	-	46.48	43.28	1.18	
Malta	Onvol	10 Mbps	Cable	15	10240	unlimited	unlimited	7	N.D.	10	AV	65.00	93.38	2.54	
Norway	Ventelo	16000/700	xDSL	12	16000	unlimited	unlimited	5	N.D.	30	AV+AS+FW+PC	51.28	37.34	1.02	
The Netherlands	Orange Netherlands	ADSL Extra	xDSL	12	20480	unlimited	unlimited	4	N.D.	20	-	20.78	19.44	0.53	
Poland	UPC Polska	internet turbo	Cable	-	10240	unlimited	unlimited	3	N.D.	25	-	28.39	41.65	1.13	
Portugal	ZON	Plus	Cable	12	18432	30	-	30	N.D.	30	-	41.01	48.17	1.31	
Romania	UPC Romania	UPC Internet Medium	Cable	12	10240	unlimited	unlimited	2	1	0	-	9.52	17.09	0.47	
Slovakia	UPC Slovakia	Chello Medium	Cable	12	10240	unlimited	unlimited	3	5	25	AV+AS	20.32	31.99	0.87	
Slovenia	T-2	FTTH 10 Mega	FTTH	-	10240	unlimited	unlimited	unlimited	N.D.	N.D.	AV+AS+FW	14.00	18.25	0.50	
Spain	Ono	Banda Ancha ONO 12	Cable	12	12288	unlimited	unlimited	N.D.	N.D.	N.D.	-	52.92	57.41	1.56	
State of California	Time Warner Cable	Road Runner Turbo	Cable	12	10240	unlimited	unlimited	5	5	N.D.	AV+AS+FW+PC	34.11	44.58	1.21	
State of Colorado	Time Warner Cable	Road Runner Turbo	Cable	-	10240	unlimited	unlimited	N.D.	N.D.	N.D.	-	34.11	44.58	1.21	
State of New York	Time Warner Cable	Road Runner Turbo	Cable	-	10240	unlimited	unlimited	N.D.	N.D.	N.D.	-	34.11	44.58	1.21	
Sweden	TeliaSonera	Stadsnat Openet Stockholm	FTTH	1	10240	unlimited	unlimited	1	5	N.D.	AV+FW	23.35	19.89	0.54	
The UK	BSkyB	Sky Max	xDSL	12	16384	unlimited	unlimited	10	N.D.	N.D.	-	20.98	21.13	0.58	
(*) Duration = '-' indicates that 12 months was assumed															
(**) N.D. indicates information is not provided by ISP															
(***) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line															
(****) Indexed ranking: ranking of offers based on the median value of this set of results															
ISPs in <i>italic & bold</i> are Incumbent operators															

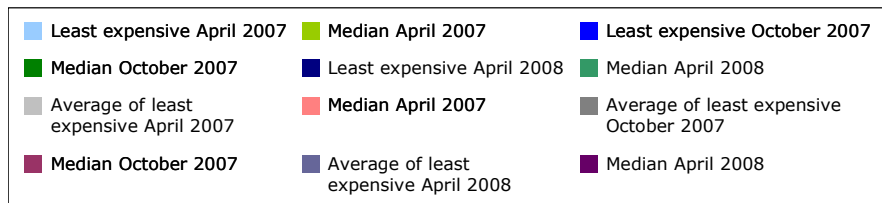
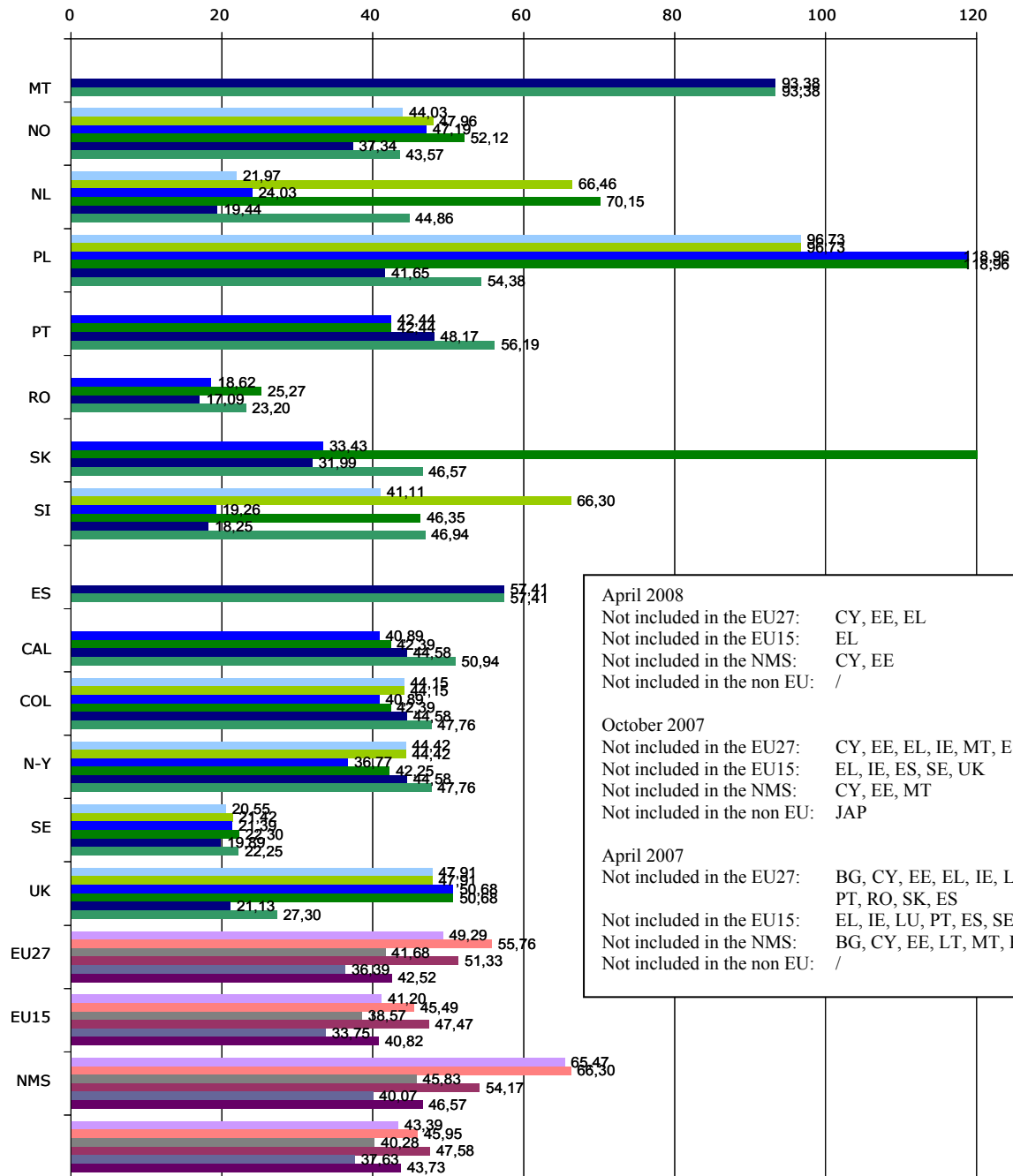
Table 16: Detailed information on least expensive offer per country (8192kbps-20Mbps incl.)

4.2.6.e BASKET "8192KBPS-20MBPS (incl.)", COMPARISON OF LEAST EXPENSIVE AND MEDIAN OFFERS IN 2007 AND 2008

Comparison April 2007 – October 2007 – April 2008
Least expensive and median offers:
Basket "8192-20Mbps (incl.)", 30GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



Comparison April 2007 – October 2007 – April 2008
Least expensive and median offers:
Basket "8192-20Mbps (incl.)", 30GB or 20 hours/month (followed)
Total cost/month in €/PPP (VAT incl.)



4.2.6.f CONCLUSIONS ON BASKET 8192KBPS-20MBPS (incl.)

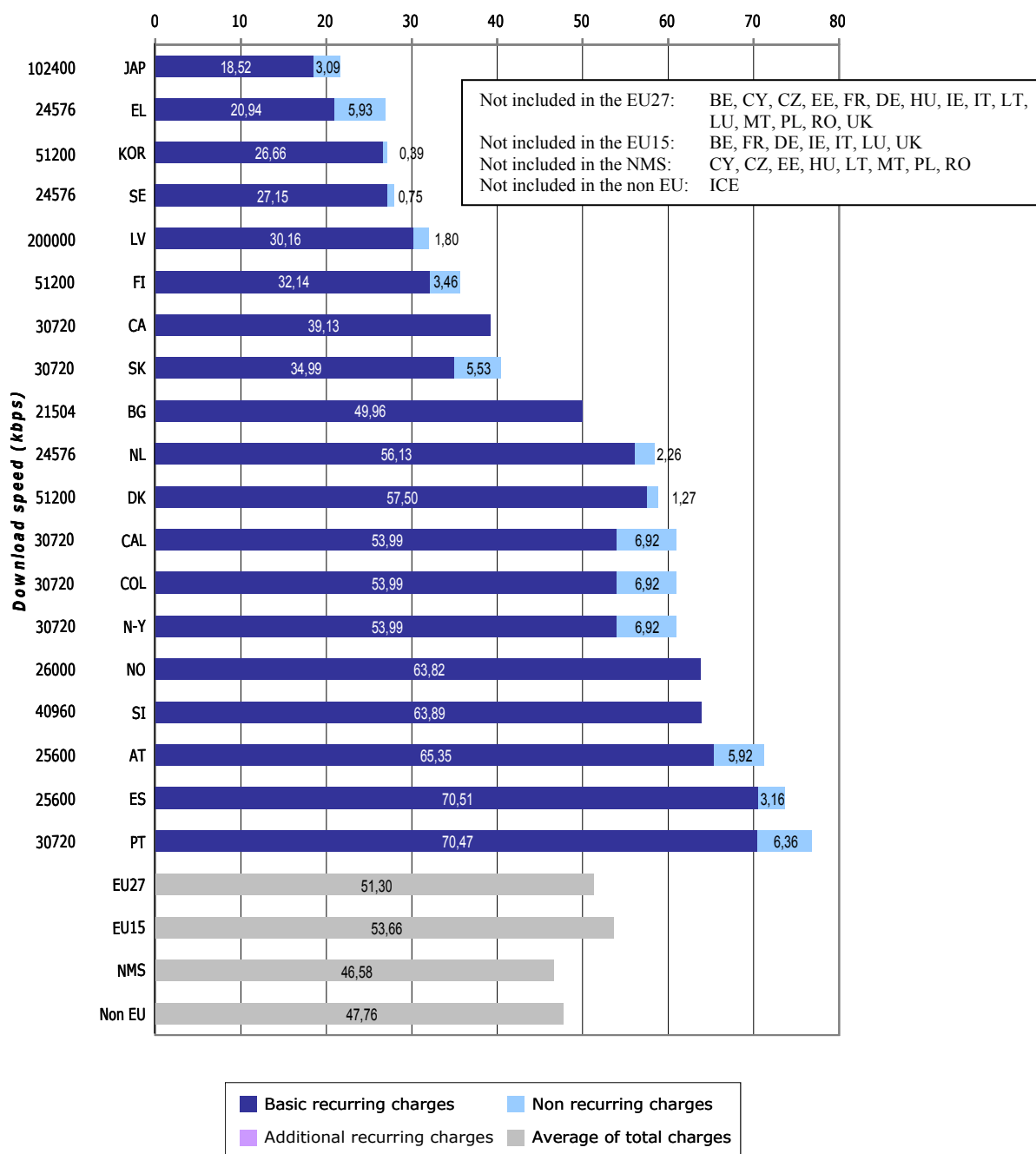
- In *Cyprus, Estonia* and *Greece* no offer of the selected ISPs was available for this basket.
- *Ireland, Malta* and *Spain* offered broadband with speeds between 8192kbps-20Mbps (incl.) in April 2008 and did not do so in 2007.
- In this basket only one offer was available for the following countries: *Malta* and *Spain*. This means that the charge for this offer equals the least expensive and no median value was determined for these countries.
- For *Korea*, two offers are presented as both have the same price.
- The offer for *the Netherlands* has a recurring charge of 19.95 EUR for the first year of subscription only. After this, the charges amount to 23.95 EUR. However, this was not considered as a promotional offer, as the minimum contract duration is of twelve months.
- The offer for *the UK* might not be representative, as the broadband offers of this ISP only address sky TV customers. It has however been kept in the sample, due to the significant market share of the ISP. The second least expensive offer available for this basket is provided by Virgin Media (Cable – 10240 kbps – 33.46 EUR/PPP).
- In the selection of the least expensive offers of this basket there are seven metered offers. Only the *Belgian* offer did not meet the requirements set out by our normalisation parameters.
 - The *Belgian* offer included 12Gb and following our parameters a charge for 18 additional Gb should be added. As 1 extra Gb costs 0.95 EUR/PPP, the additional monthly price amounts to 17.06 EUR/PPP.
- For some countries a major difference can be noted between the least expensive and the median offer.
 - The *Netherlands* has 9 offers in the basket, of which 7 are charged higher than 40 EUR/PPP.
 - 5 of the 10 *Slovenian* offers have a total charge higher than 55 EUR/PPP. This explains the difference between the least expensive and the median offer.
- Most countries for which the selected offer omits non-recurring charges (*Canada, Ireland, Latvia, Lithuania, Romania, Slovenia* and *Sweden*) are better placed in the overall ranking of the least expensive offers. The only exception to this rule is *Malta*.
- As was observed for the previous basket, in most of the countries, the charges of the least expensive offer in the sample of April 2008 decreased compared to the charges in 2007. The decrease is significant for the NMS countries, while lower in the EU15 and the non EU.

4.2.7 BASKET "20+Mbps", IN €/PPP (VAT INCL.)

4.2.7.a LEAST EXPENSIVE OFFER

In fifteen countries there are no offers in the sample corresponding to this basket: *Belgium, Cyprus, Czech Republic, Estonia, France, Germany, Hungary, Iceland, Ireland, Italy, Lithuania, Luxemburg, Malta, Poland, Romania and the United Kingdom.*

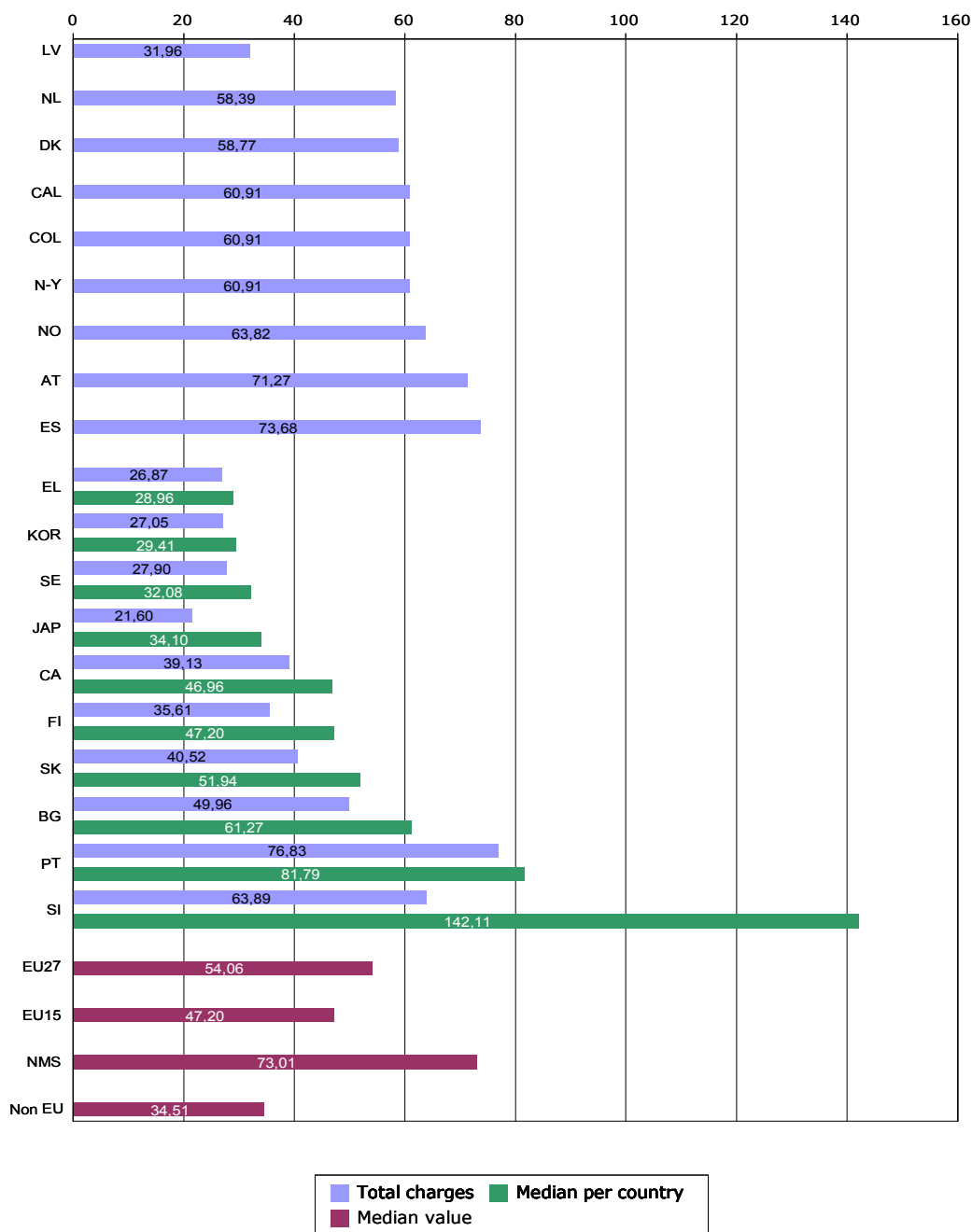
Least expensive offer:
Basket "20+Mbps", 30GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



4.2.7.b BASKET "20+Mbps", LEAST EXPENSIVE AND MEDIAN OFFERS

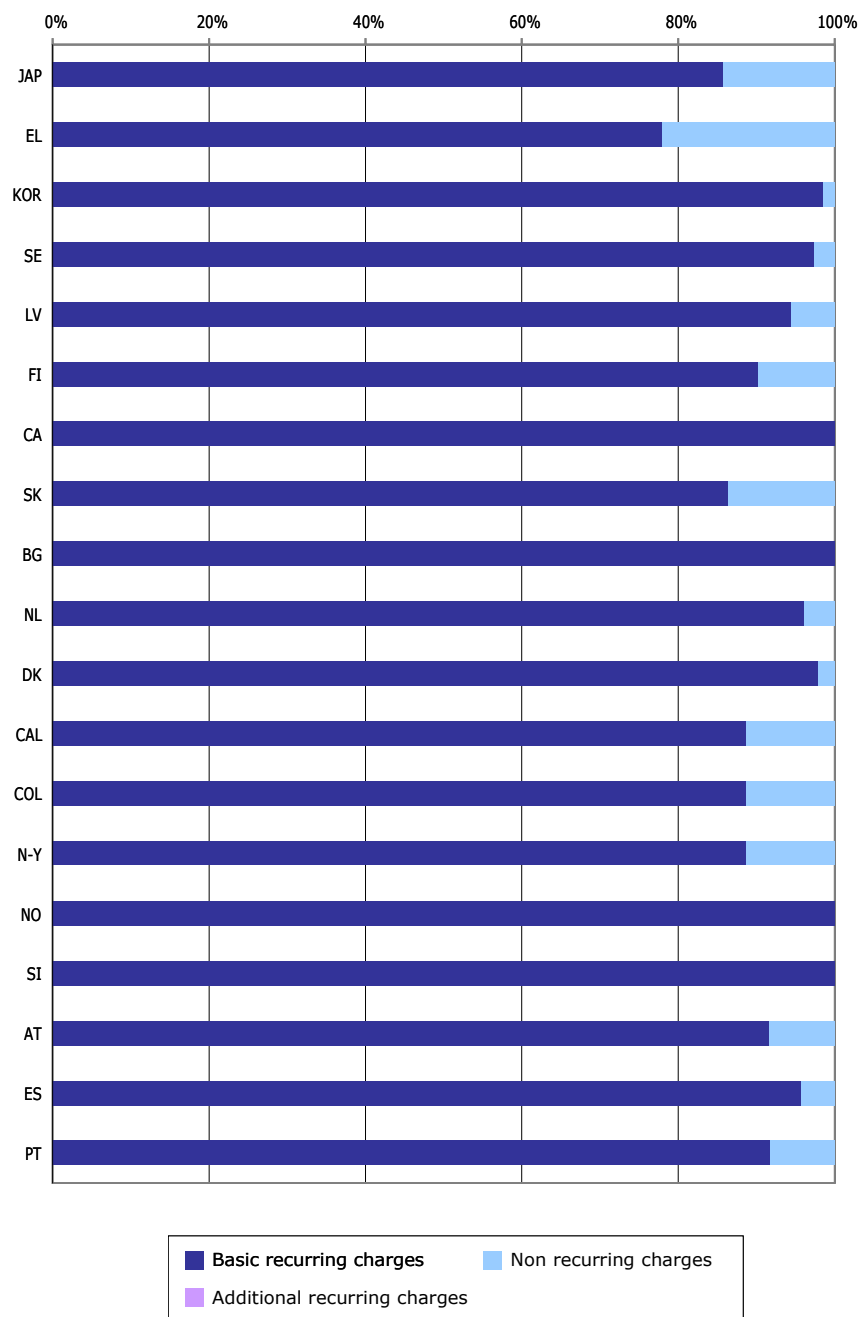
In Austria, Denmark, Latvia, Norway, the Netherlands, Spain, the State of California, the State of Colorado and the State of New York only one offer was available for this basket. Consequently, no median value could be determined.

Least expensive and median offers:
Basket "20+Mbps", 30GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



4.2.7.c BASKET "20+MBPS", COMPOSITION IN %

Least expensive offer: Charges breakdown
Basket "20+Mbps", 30GB or 20 hours/month
 Total cost/month in €/PPP (VAT incl.)



4.2.7.d BASKET "20+Mbps", LIST OF THE SELECTED OFFERS

Comparison	S1 2008	20+Mbps	Internet only											
Country	ISP	Offer	Technology	Contract duration (*)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (**)	Adresses per mailbox (**)	Webspace (**)	Level of protection (***)	Total cost/month VAT incl.	Total cost/month VAT incl.	Indexed ranking (****)
				Months	Kbps					MB		Euro	EUR/PPP	
Austria	UPC Austria	chello plus	Cable	12	25600	unlimited	unlimited	5	25	90	AV+AS	75,25	71,27	1,43
Bulgaria	Powernet	Traffic Mania 42	Cable	-	21504	unlimited	unlimited	1	1	N.D.	-	21,47	49,96	1,00
Canada	Videotron	Internet TGV 30	Cable	-	30720	30	-	6	N.D.	5	AV+AS	46,86	39,13	0,78
Denmark	TDC	Mere end bredband 50 Mbit/2 Mbit	xDSL	6	51200	unlimited	unlimited	1	5	1000	-	81,40	58,77	1,18
Finland	Elisa	Elisa laajakaista Super	xDSL	-	24576	unlimited	unlimited	5	1	500	-	41,98	35,61	0,71
Finland	Elisa	Elisa laajakaista Super	Cable	-	51200	unlimited	unlimited	5	1	500	-	41,98	35,61	0,71
Greece	OTE	ADSL 24576/1024	xDSL	-	24576	unlimited	unlimited	N.D.	N.D.	N.D.	-	23,25	26,87	0,54
Japan	NTT EAST Japan	Bflets mansion type2hyper	FTTH	-	102400	unlimited	unlimited	N.D.	N.D.	N.D.	AV+AS	19,15	21,60	0,43
Japan	NTT EAST Japan	Bflets mansion type plan2	FTTH	-	102400	unlimited	unlimited	N.D.	N.D.	N.D.	AV+AS	19,15	21,60	0,43
Korea	Korea Telecom	Megapass Premium	xDSL	12	51200	80	-	N.D.	N.D.	N.D.	-	20,66	27,05	0,54
Latvia	MPE NET	Luksuss	FTTH	24	200000	unlimited	unlimited	3	N.D.	N.D.	-	22,34	31,96	0,64
Norway	Get	Xtreme	xDSL	12	26000	unlimited	unlimited	10	N.D.	50	AV+AS+FW	87,65	63,82	1,28
The Netherlands	UPC Netherlands	Internet Extreme	Cable	-	24576	unlimited	unlimited	10	12	50	-	62,42	58,39	1,17
Portugal	ZON	Max	Cable	12	30720	60	-	30	N.D.	30	-	65,41	76,83	1,54
Slovakia	Orange Slovakia	Balik Klasik Fibernet	FTTH	24	30720	unlimited	unlimited	1	N.D.	N.D.	-	25,74	40,52	0,81
Slovenia	T-2	VDSL 40 Mbps / 8 Mbps	xDSL	-	40960	unlimited	unlimited	1	N.D.	N.D.	AV+AS+FW	49,00	63,89	1,28
Spain	Ono	Banda Ancha ONO 25	Cable	12	25600	unlimited	unlimited	N.D.	N.D.	N.D.	-	67,92	73,68	1,47
State of California	Verizon	FIOS Faster plus	FTTH	12	30720	unlimited	unlimited	9	N.D.	N.D.	-	46,61	60,91	1,22
State of Colorado	Verizon	FIOS Faster plus	FTTH	12	30720	unlimited	unlimited	9	N.D.	N.D.	-	46,61	60,91	1,22
State of New York	Verizon	FIOS Faster plus	FTTH	12	30720	unlimited	unlimited	9	N.D.	N.D.	-	46,61	60,91	1,22
Sweden	Glocalnet	Bredband 24	xDSL	12	24576	unlimited	unlimited	1	5	50	-	32,75	27,90	0,56
(*) Duration = '-' indicates that 12 months was assumed														
(**) N.D. indicates information is not provided by ISP														
(***) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line														
(****) Indexed ranking: ranking of offers based on the median value of this set of results														
ISPs in italic & bold are Incumbent operators														

Table 17: Detailed information on least expensive offer per country (20+Mbps)

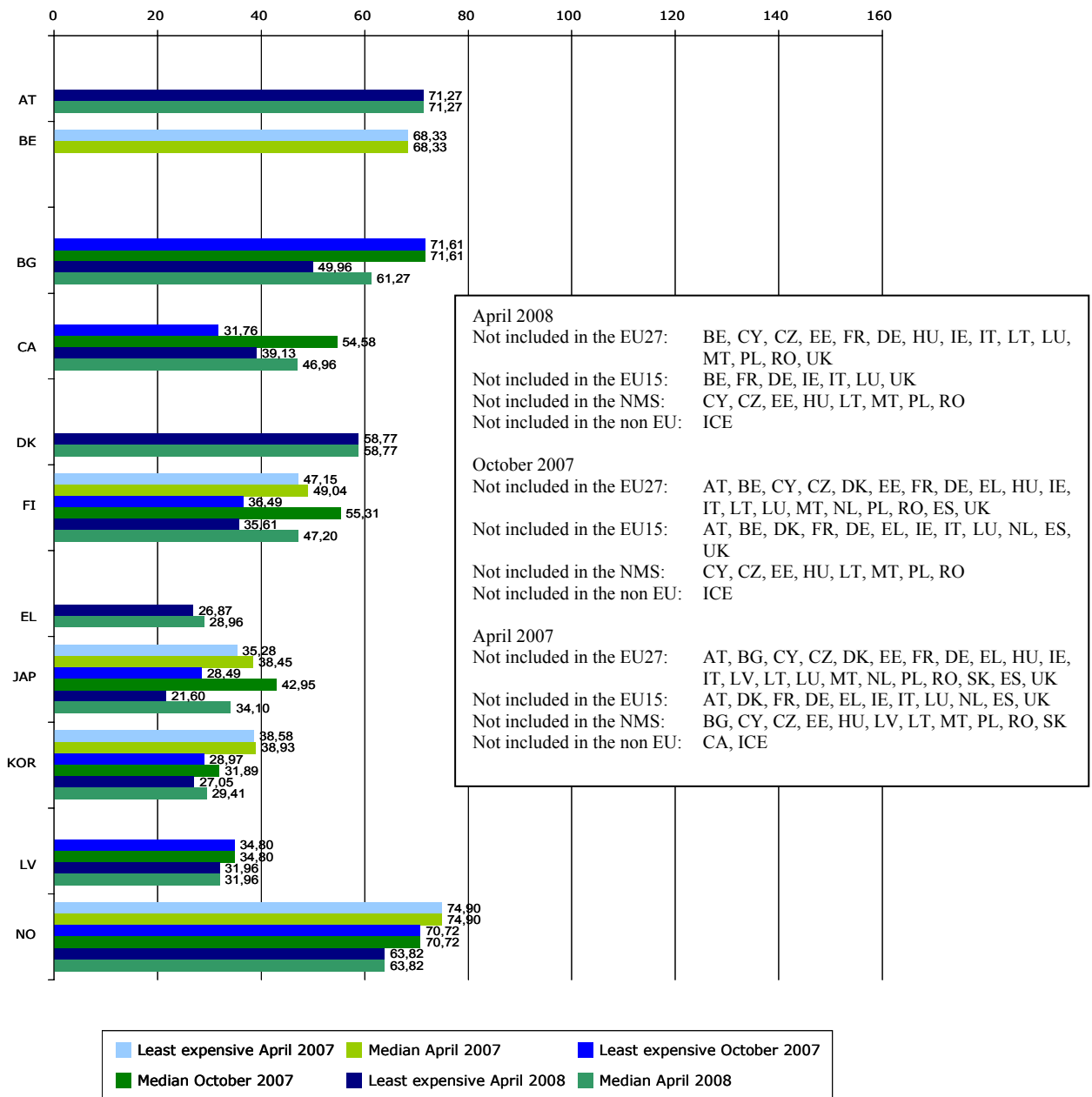
4.2.7.e BASKET "20+ MBPS", COMPARISON OF LEAST EXPENSIVE AND MEDIAN OFFERS IN 2007 AND 2008

Comparison April 2007 – October 2007 – April 2008

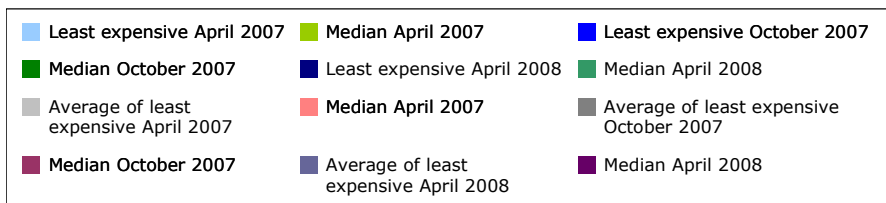
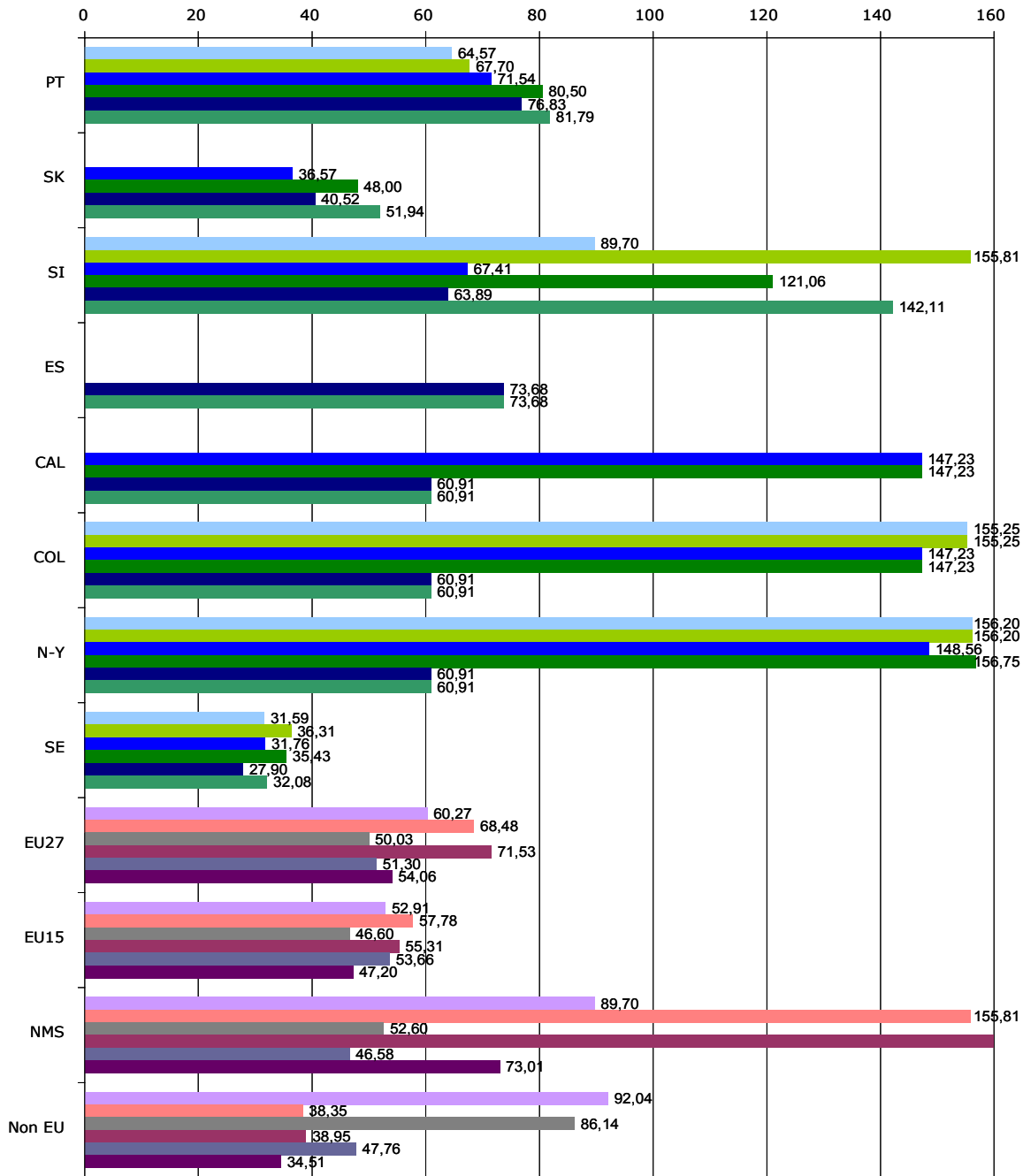
Least expensive and median offers:

Basket "20+Mbps", 30GB or 20 hours/month

Total cost/month in €/PPP (VAT incl.)



Comparison April 2007 – October 2007 – April 2008
Least expensive and median offers:
Basket "20+Mbps", 30GB or 20 hours/month (followed)
Total cost/month in €/PPP (VAT incl.)

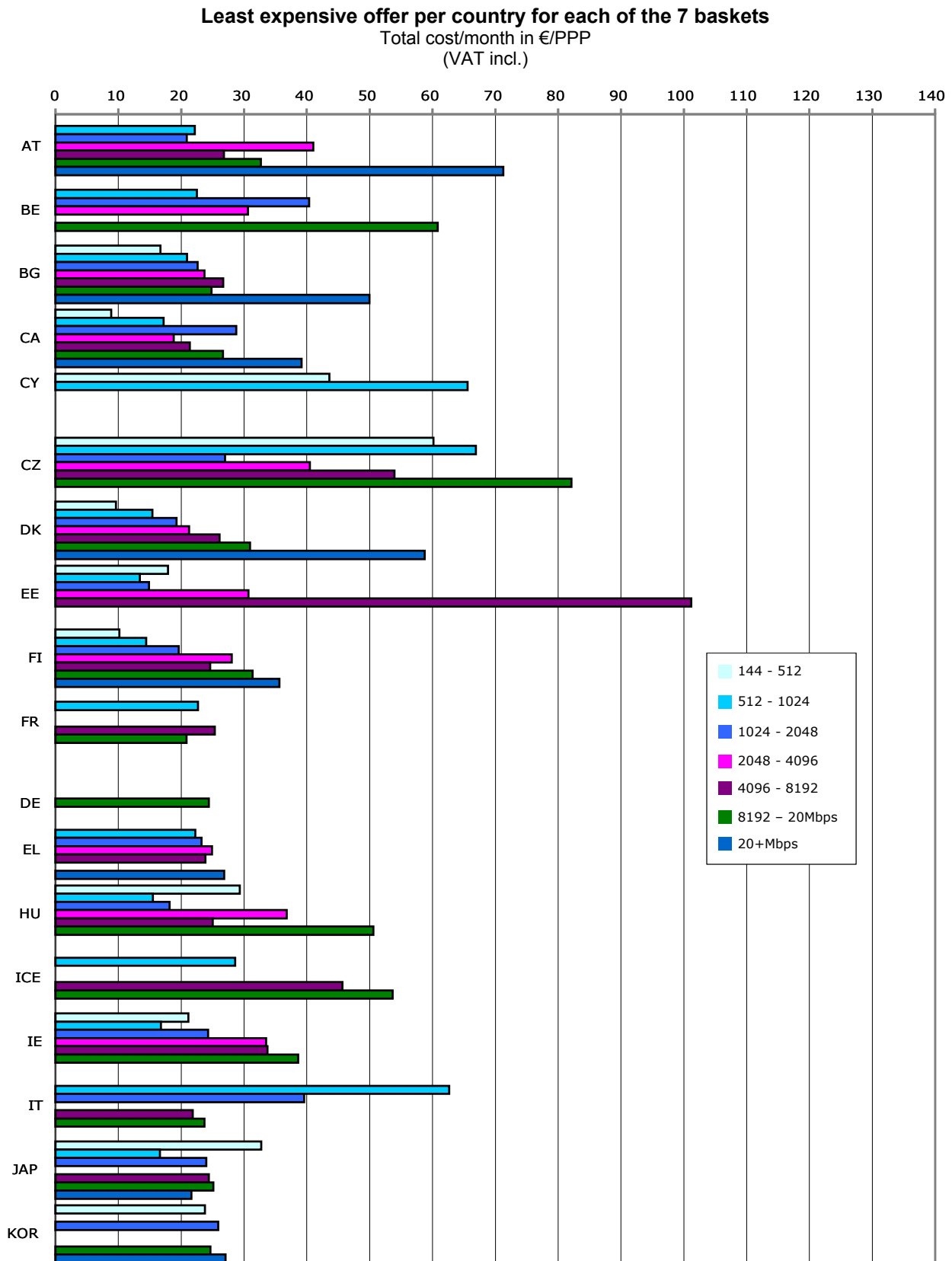


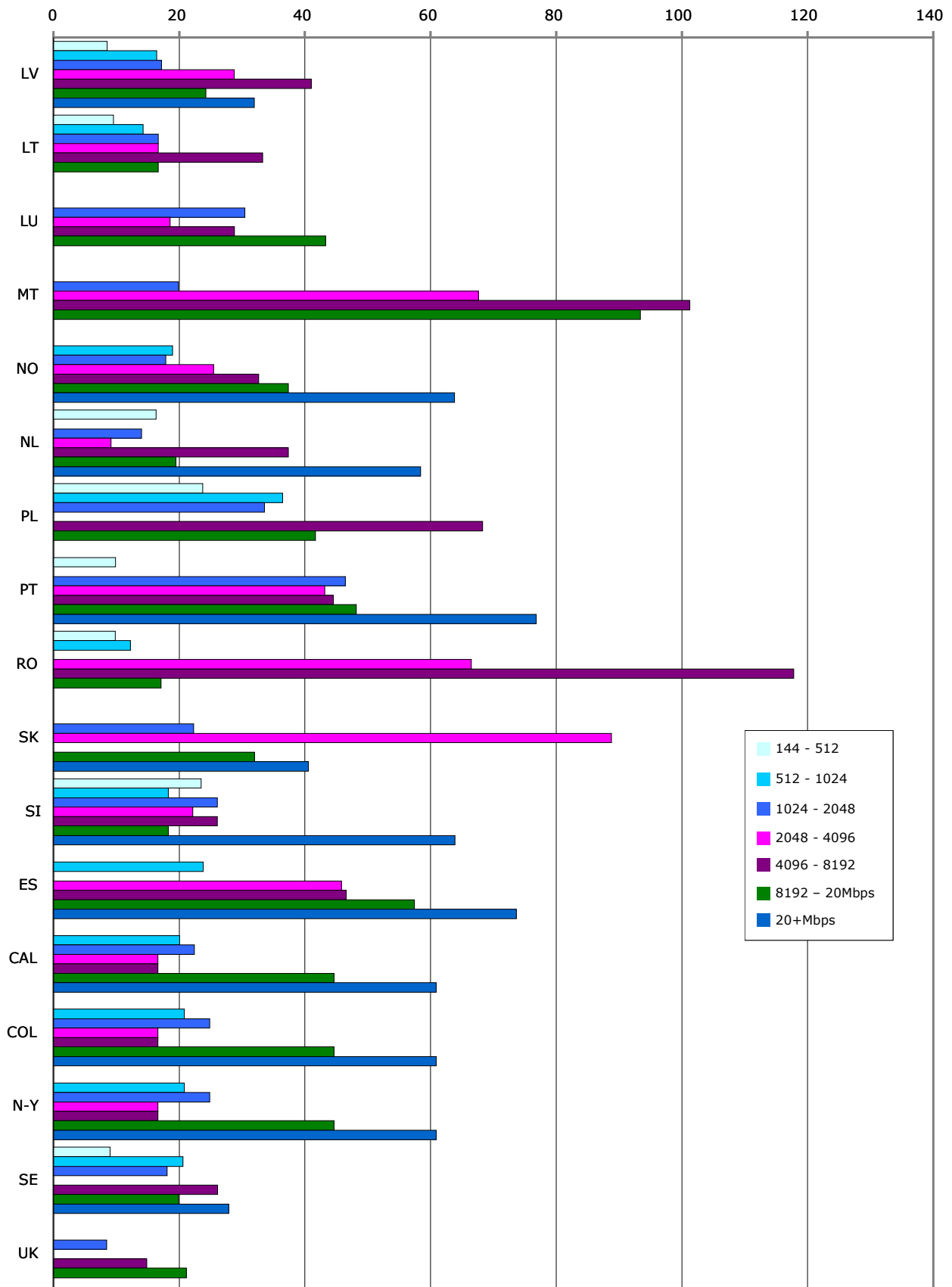
4.2.7.f CONCLUSIONS ON BASKET 20+MBPS

- For fifteen countries, no offer of the selected ISPs was available for this basket. These countries include *Belgium, Cyprus, Czech Republic, Estonia, France, Germany, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Poland, Romania* and *the UK*. Of these countries, *Belgium* is the only one that had an offer in 2007 but no longer in 2008.
- In this basket only one offer was available for the following countries: *Austria, Denmark, Latvia, the Netherlands, Norway, Spain, State of California, State of Colorado* and *State of New York*. The charge for this offer equals the least expensive and no median value was determined for these countries.
- In *Japan* and *Finland*, two offers are presented as both have the same price.
- The least expensive offer for Japan is for apartment buildings. It has however been kept in the sample, due to the fact that offers per building are common in Japan and thus considered representative. The second least expensive offer available for this basket is also provided by NTT East Japan (FTTH – 102,400 kbps – 24.57 EUR/PPP).
- In the selection of the least expensive offers of this basket there are four metered offers. For these offers no normalisation step was needed as the volumes included exceeded our normalisation parameters.
- For some countries a major difference can be noted between the least expensive and the median offers.
 - For *Slovenia* a major difference can be noted between the least expensive and the median offer. In total there are 10 offers in the basket, 6 of which have total charges higher than 130 EUR/PPP. The most expensive offer even has a total charge of 1303.78 EUR/PPP, which corresponds however to a 1 Gb/month symmetric access.
- No relationship could be observed between the omission of non-recurring charges in some countries (*Bulgaria, Canada, Norway* and *Slovenia*) and the place they take in the overall ranking of the least expensive offers.
- As was observed in the two previous baskets, there is a tendency of a decrease in charges in the NMS. This decrease of charges remains however very limited. In the EU15 the average of the least expensive charges increased, while median charges decreased. In the non EU countries, charges show a significant decrease.

4.3. LEAST EXPENSIVE OFFER PER COUNTRY FOR EACH OF THE 7 BASKETS

Based on the analysis in the previous paragraphs, a summary for all baskets per country can be presented.





Conclusions on the least expensive offer per country for each of the 7 baskets

Within one country, the offers with higher bit-rates tend to be more expensive offers. This however is not always the case.

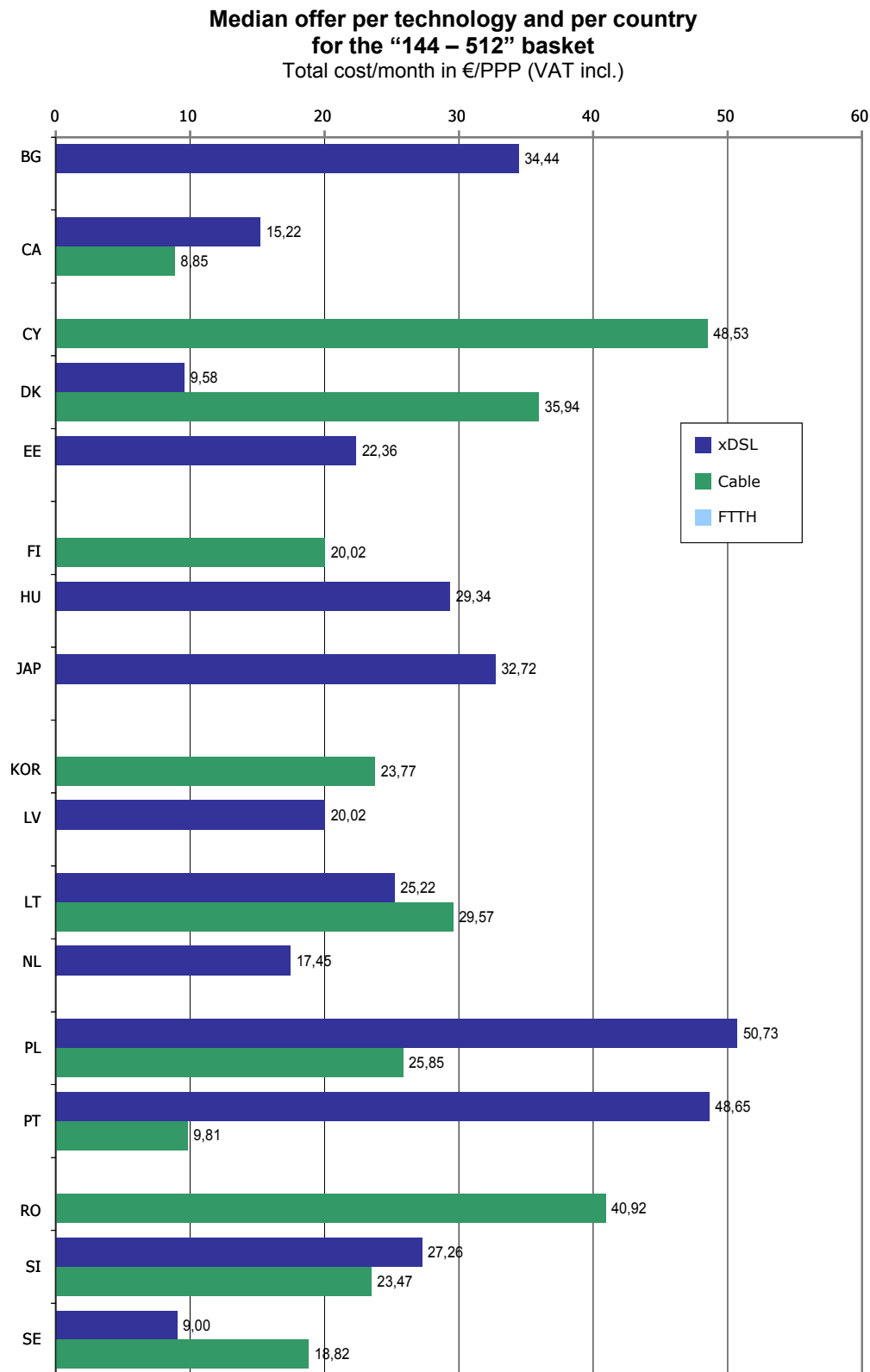
- In only one country, *Denmark*, all baskets are offered and offers with higher download speeds are systematically more expensive;
- *Iceland, Spain and the United Kingdom* follow the above mentioned pattern (higher speeds lead to higher charges) but that do not have offers in all baskets;
- In some countries charges tend to follow the above-mentioned pattern with exception of one basket. This is the case in *Bulgaria, Canada, Estonia, Finland, Greece, Ireland, Lithuania, Latvia, Malta, Norway and Portugal*;
- The least expensive offers of many of the countries in the sample demonstrate that higher download speeds do not necessarily lead to more expensive offers;
- *Cyprus and Germany* have a very limited offer of Broadband Internet Access only Services. Therefore no conclusion could be drawn as to the relationship between the speed and the level of the charges for these countries;
- Finally, in countries such as *Bulgaria, Greece, Latvia, Lithuania and Slovenia*, charges for Broadband Internet Access with very high speeds do not necessarily differ significantly from the charges of offers with lower speeds.

4.4. MEDIAN OFFER PER TECHNOLOGY FOR EACH OF THE 7 BASKETS

In addition to the analyses of the least expensive offers and their relationship to the median, a comparison was made between the median rates of offers based on xDSL and Cable technology (for all baskets) and between the median rates of offers based on FTTH (for basket 20+Mbps).

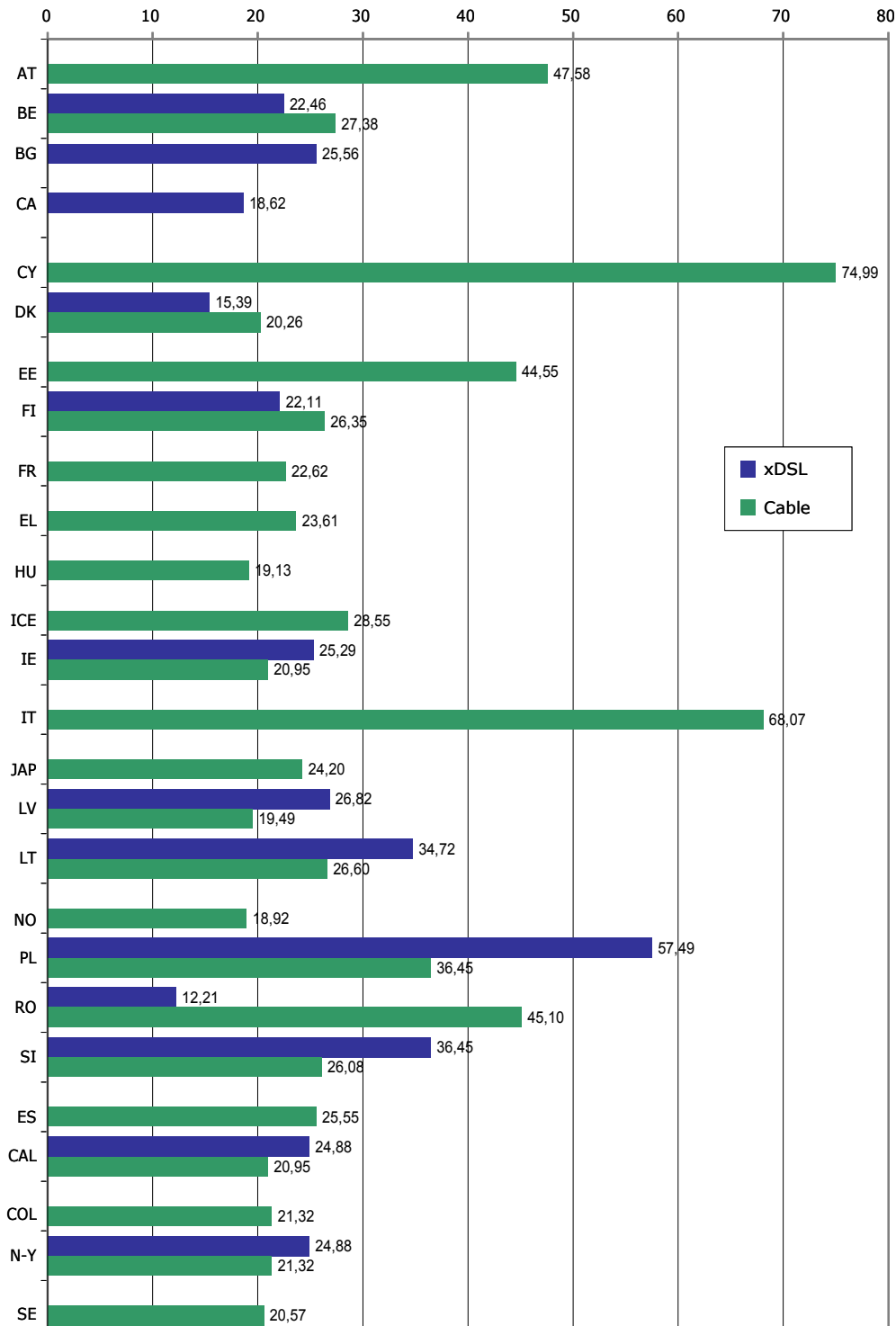
The selection of technologies per basket is based on the number of offers per technology, compared to the total number of offers in the basket. Account has now been taken of technologies that represent over 5% of the total number of offers in the sample as well as over 10% of the total number of offers in a specific basket. The outcome of this comparison is presented below and shown for each basket separately.

4.4.1. BASKET "144KBPS-512KBPS (incl.)", IN €/PPP (VAT INCL.)



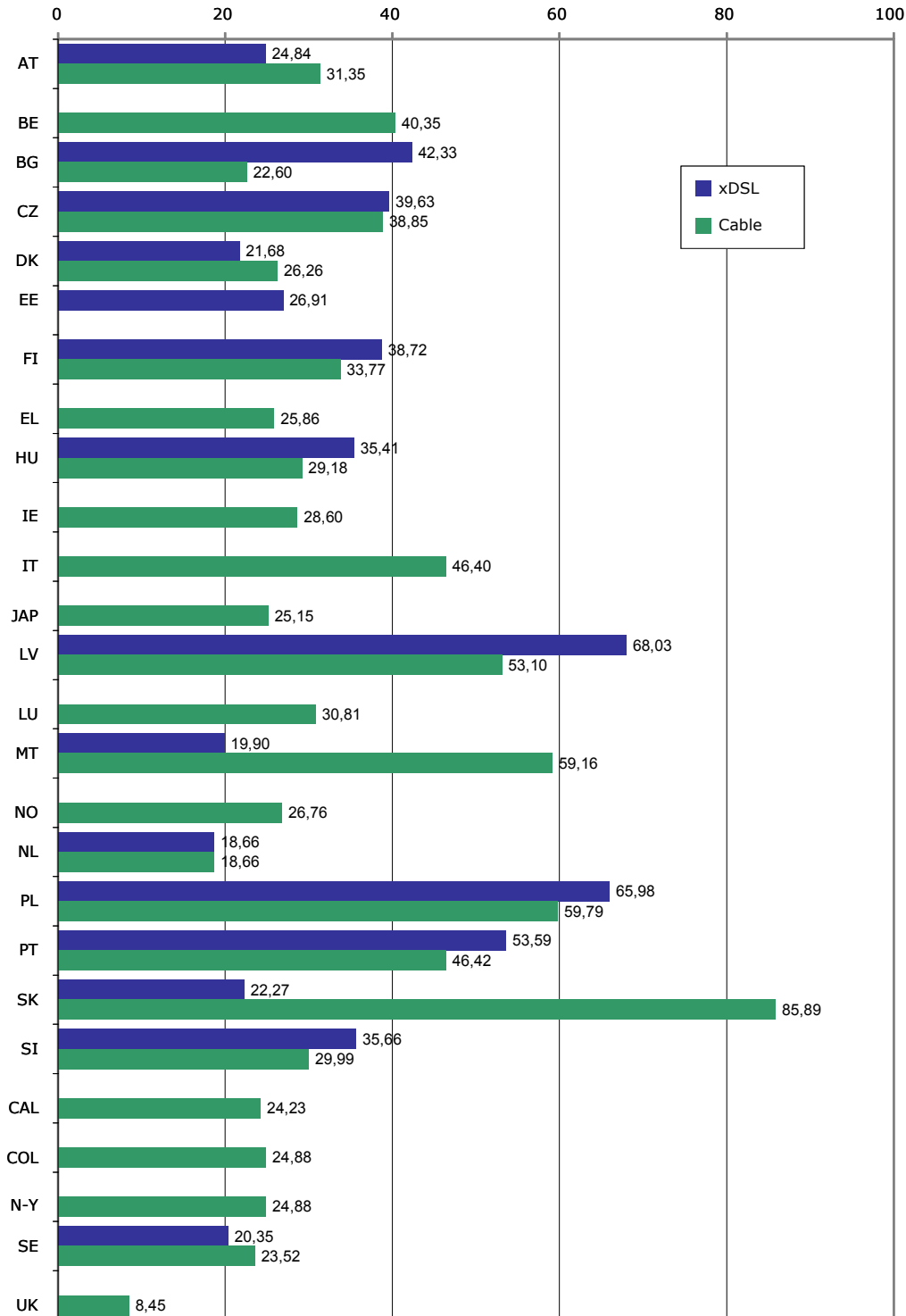
4.4.2 BASKET "512KBPS-1024KBPS (incl.)", " , IN €/PPP (VAT INCL.)

Median offer per technology and per country
for the "512 – 1024" basket
 Total cost/month in €/PPP (VAT incl.)



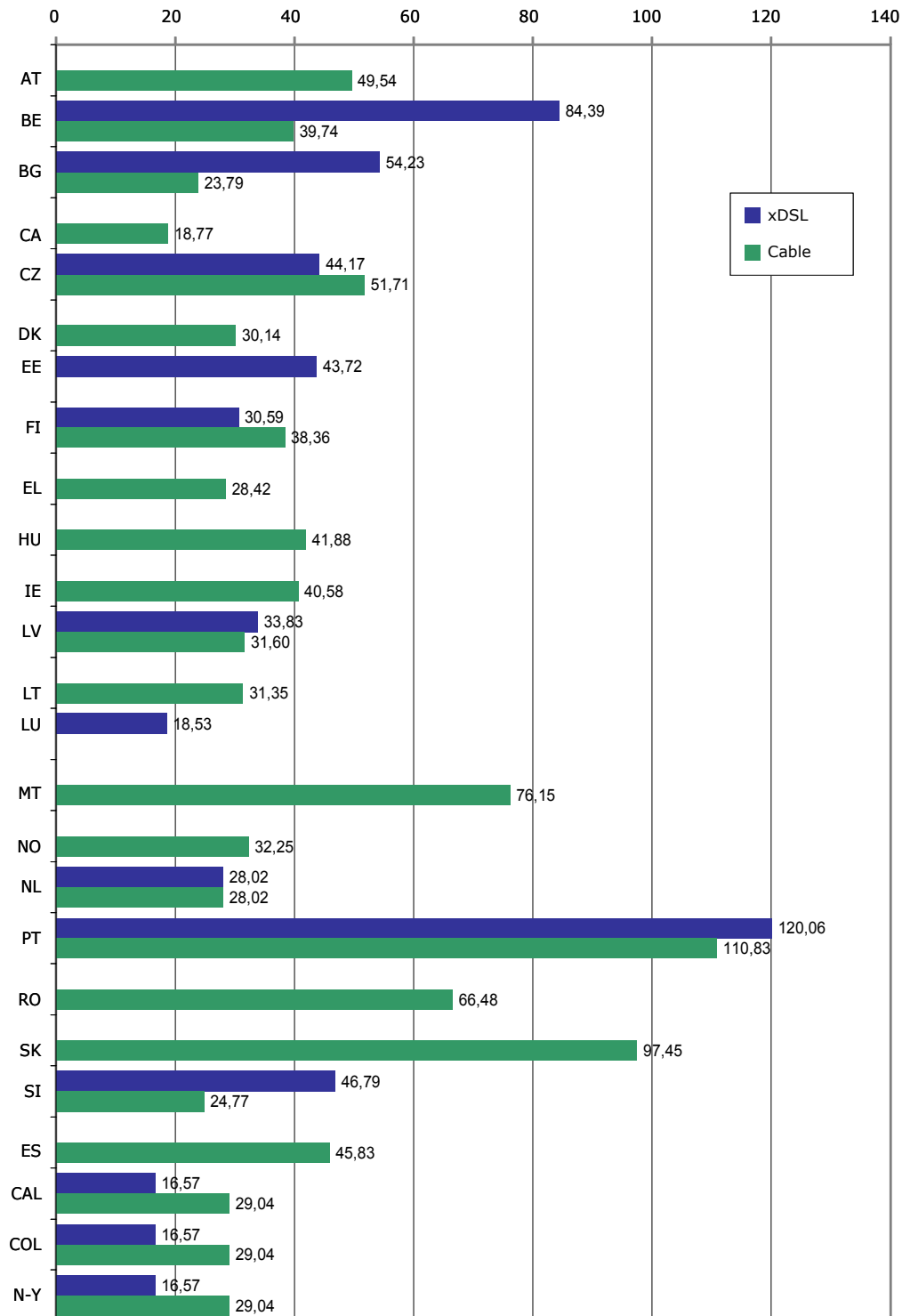
4.4.3 BASKET "1024KBPS-2048KBPS (incl.)", " , IN €/PPP (VAT INCL.)

Median offer per technology and per country
for the "1024 – 2048" basket
 Total cost/month in €/PPP (VAT incl.)



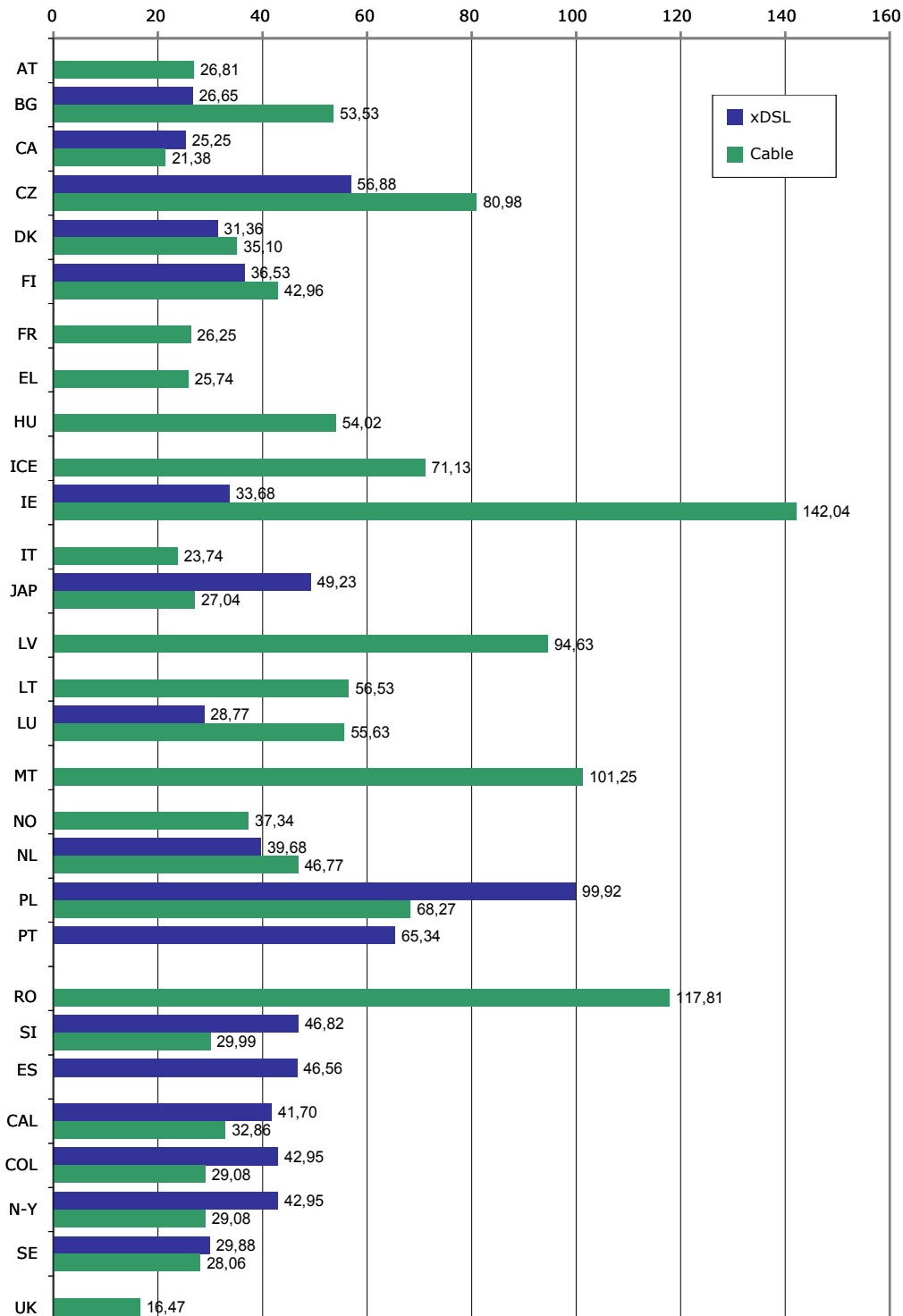
4.4.4 BASKET "2048KBPS-4096KBPS -(incl.)", IN €/PPP (VAT INCL.)

Median offer per technology and per country
for the "2048 – 4096" basket
 Total cost/month in €/PPP (VAT incl.)



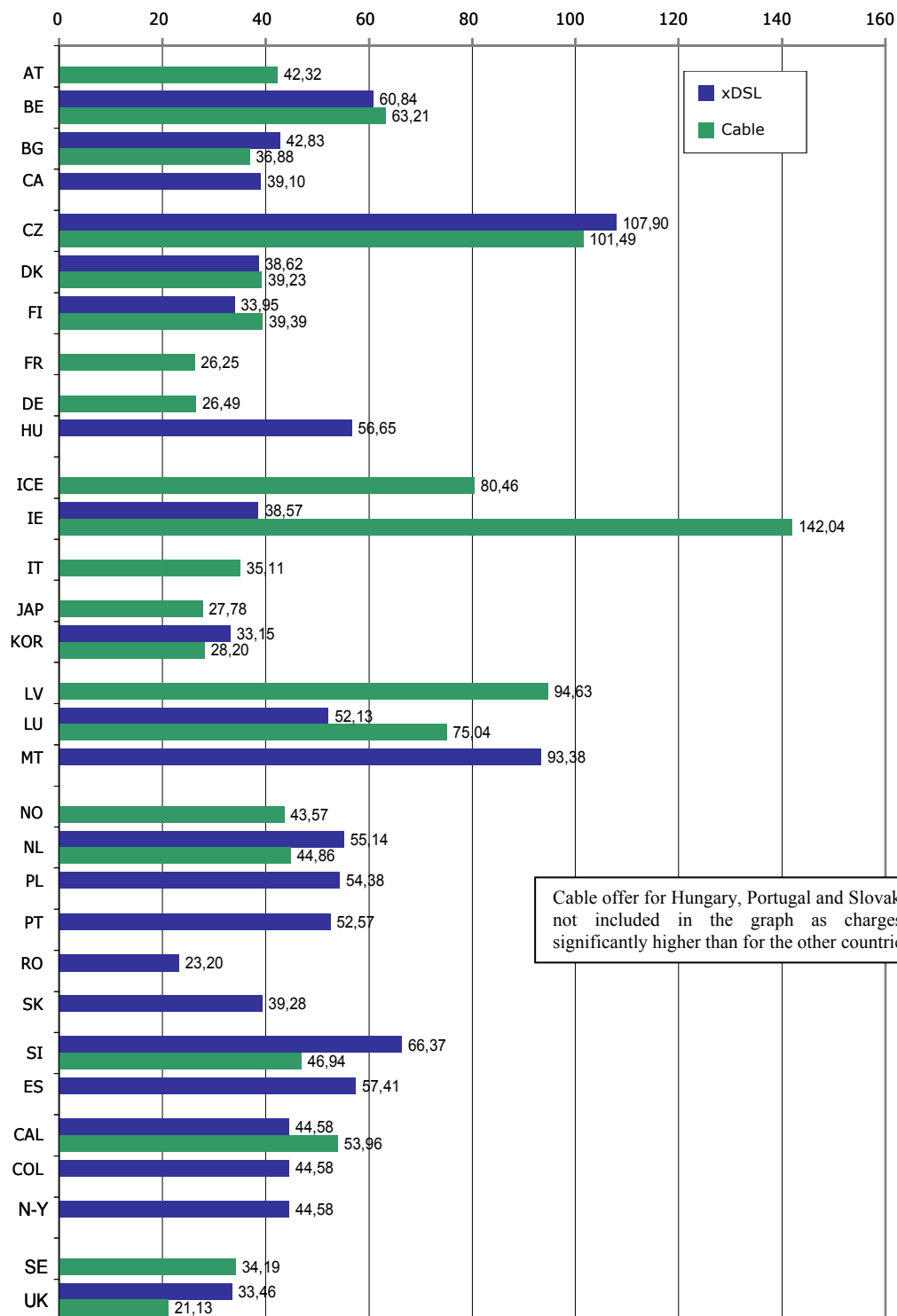
4.4.5 **BASKET "4096KBPS-8192KBPS (incl.)", IN €/PPP (VAT INCL.)**

Median offer per technology and per country
for the "4096 – 8192" basket
 Total cost/month in €/PPP (VAT incl.)

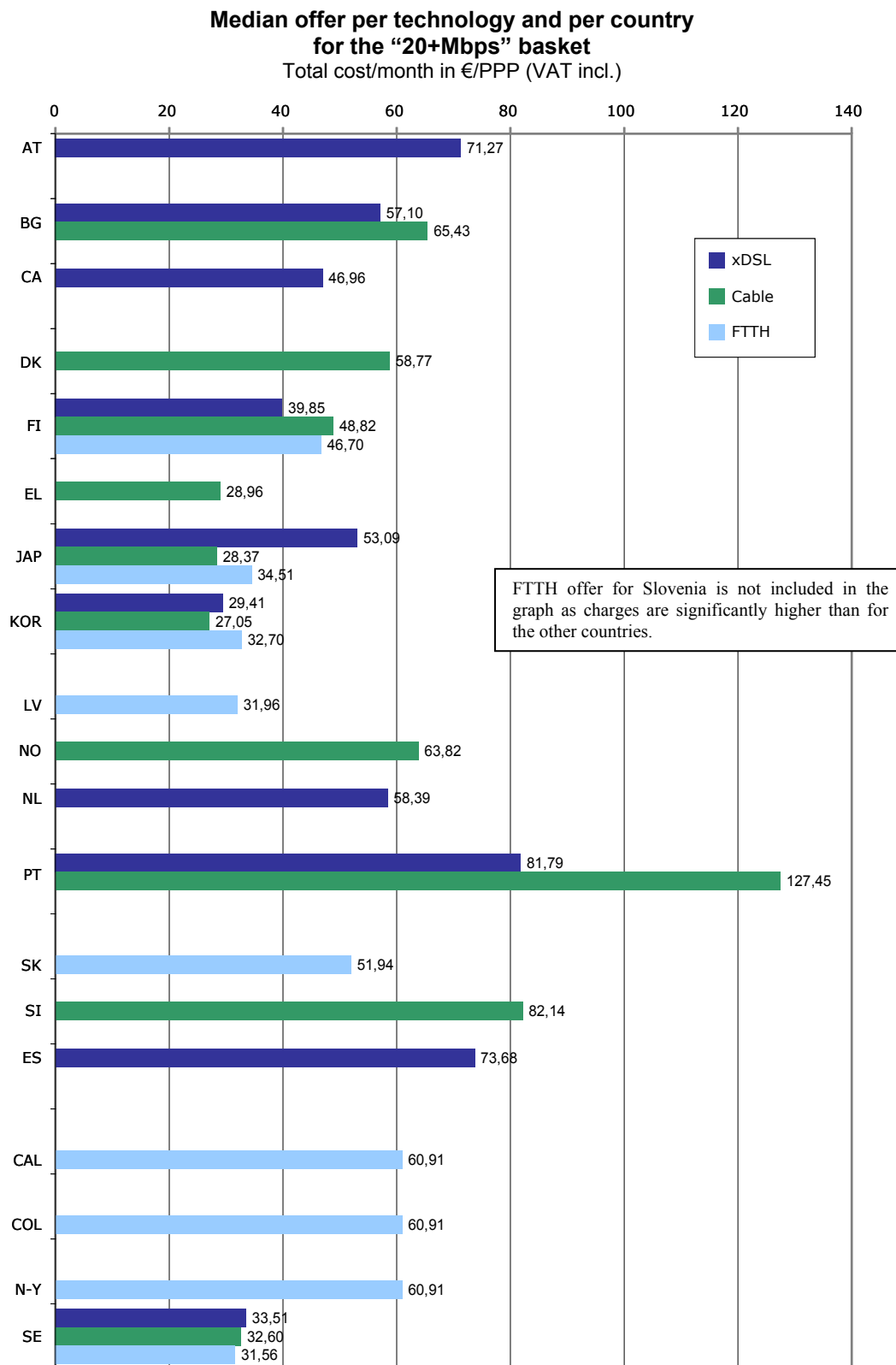


4.4.6. **BASKET "8192KBPS-20MBPS (incl.)", IN €/PPP (VAT INCL.)**

Median offer per technology and per country
for the "8192 – 20Mbps" basket
 Total cost/month in €/PPP (VAT incl.)



4.4.7 BASKET "20+Mbps", IN €/PPP (VAT INCL.)



5. RESULTS OF THE BROADBAND INTERNET ACCESS COST COMPARISON FOR BUNDLED OFFERS

The results of the Broadband Internet Access Cost study for bundled offers are presented in this chapter. They are based on the following selection of offers:

- Least expensive offers per country and per basket for each bundle type (cf. section 5.1 to 5.3);
 - Bundles including Internet Access and Fixed Telephone Service (cf. section 5.1)
 - Bundles including Internet Access and Television Service (cf. section 5.2);
 - Bundled including Internet Access and Fixed Telephone Services and Television Service (cf. section 5.3).
- Summary of the least expensive offer per country and per bundle type for all baskets (cf. section 5.4);
- The least expensive offer per country and per basket for all bundles types (including internet access outside a bundle) for each of the seven baskets (cf. section 5.5).

5.1. LEAST EXPENSIVE OFFER PER COUNTRY AND PER BASKET FOR BUNDLES INCLUDING INTERNET ACCESS AND FIXED TELEPHONE SERVICE

The outcome of this analysis is presented by means of:

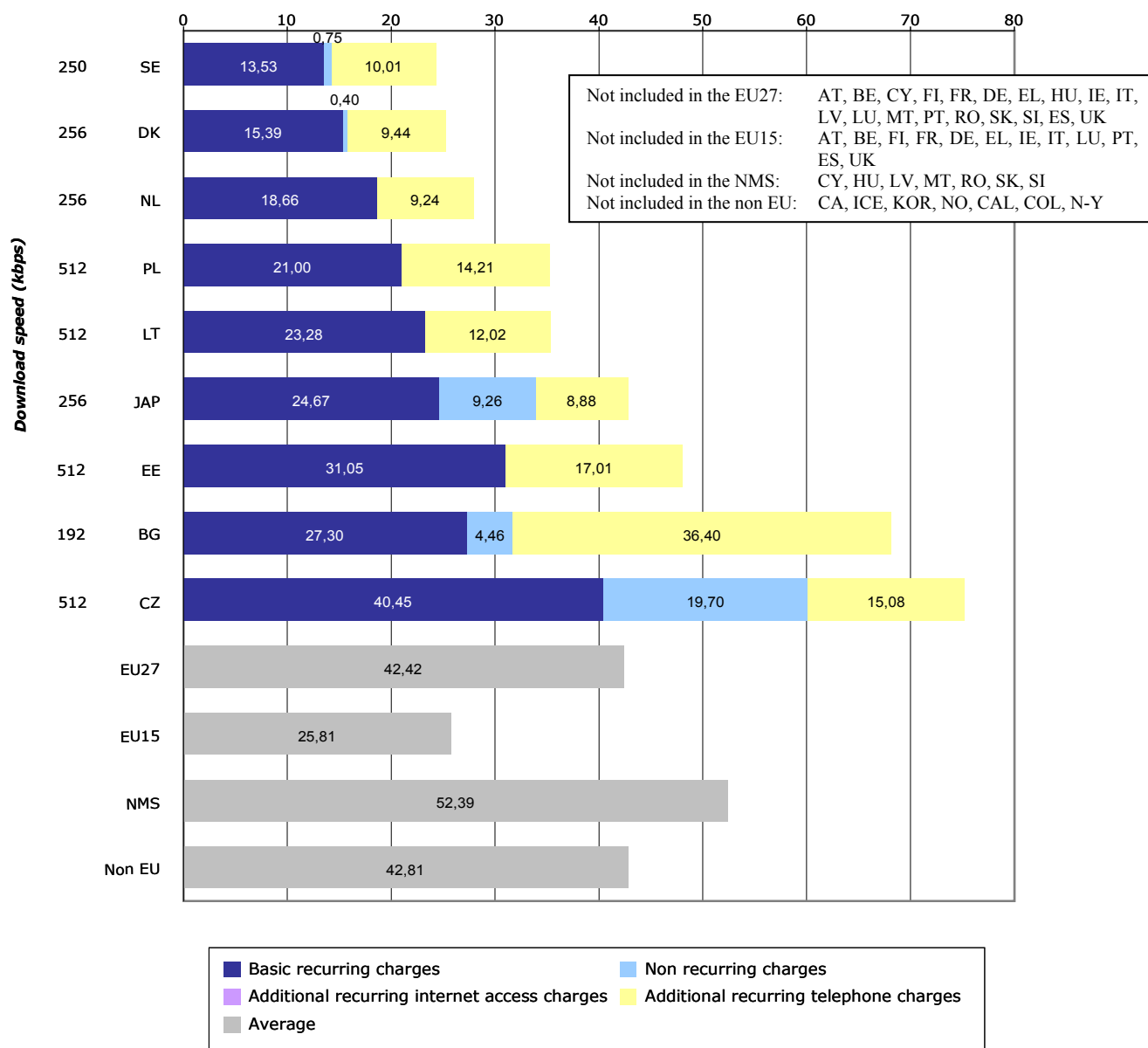
- A graph that presents the cost results for the "Internet access+Tel" bundles in EUR/PPP VAT incl. (total cost and breakdown in a recurring and non-recurring fee, as well as the additional cost that is added when normalisation took place). The focus is on the least expensive offers. The average of the selected least expensive offers is represented as well.
- A list with the detailed characteristics of the offers that are selected. Characteristics of the fixed telephone service include telephone technology, unlimited night and weekend calls (yes/no), number of minutes to fixed and mobile lines included, and option for mobile telephone (yes/no).
- Remarks and conclusions on the data in the graphs are presented for each basket in paragraph c.

5.1.1 BASKET "144KBPS-512KBPS (INCL.)", IN €/PPP (VAT INCL.)

5.1.1.a LEAST EXPENSIVE OFFER

The "Internet+Tel" bundle with a download speed corresponding to this basket was offered in nine countries. In the following countries, no offer was available: *Austria, Belgium, Canada, Cyprus, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Korea, Latvia, Luxembourg, Malta, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, State of California, State of Colorado, State of New York and the United Kingdom.*

Least expensive offer:
Bundle "Internet access+Tel"
Basket "144-512 (incl.)", 1GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



5.1.1.b BASKET "144KBPS-512KBPS (INCL.)", LIST OF SELECTED OFFERS

Comparison		April 2008	Basket "144-512"	Bundle "Internet access+Tel"														
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webspace (***)	Level of protection (*)	Telephone technology	Unlimited nights and weekends	Minutes to fixed line included	Minutes to mobile included	Option for mobile	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB							Euro	EUR/PPP
Bulgaria	Internet Group	Economic	Cable	12	192	unlimited	unlimited	N.D.	N.D.	N.D.	-	VoIP	yes	0	0	no	29,30	68,17
Czech Republic	Radiokomunikace	Premium Sky/Voice	Satellite	12	512	unlimited	unlimited	N.D.	N.D.	N.D.	-	VoIP	no	0	0	no	52,98	75,23
Denmark	Cybercity	Cybercity Bredband 256/256kbit + Telefoni Forbrugsafregnet	xDSL	-	256	unlimited	unlimited	1	5	10	-	VoIP	no	0	0	no	34,94	25,22
Estonia	Elion	Kodu-ADSL	xDSL	-	512	unlimited	unlimited	1	1	10	-	VoIP	yes	0	0	no	34,13	48,06
Japan	Jupiter Telecommunications	J-COM LITE NET + phone	Cable	-	256	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	no	0	0	yes	37,95	42,81
Lithuania	Teo	bazinis Plius	FTTH	24	512	unlimited	unlimited	1	N.D.	N.D.	-	switched	no	0	0	no	21,52	35,30
The Netherlands	Essent @home	Combibudget	xDSL	-	256	unlimited	unlimited	2	N.D.	25	AV+AS	switched	no	0	0	no	29,83	27,90
Poland	TP	telefonía internetowa tp	xDSL	-	512	unlimited	unlimited	1	unlimited	50	-	VoIP	no	0	0	no	24,01	35,22
Sweden	Glocalnet	Bredband 0.25 + Telefoni	xDSL	12	250	unlimited	unlimited	1	5	50	-	VoIP	no	0	0	no	28,52	24,29
(*) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line																		
(**) Duration = 12 Indicates that 12 months was assumed																		
(***) N.D. Indicates information is not provided by ISP																		
ISPs in <i>italic & bold</i> are incumbent operators																		

Table 18: Detailed information on least expensive offer per country (144kbps-512kbps (incl.)) ; "Internet + Tel"

5.1.1.c Conclusions on bundle "Internet+Tel" for "basket 144kbps-512kbps (incl.)"

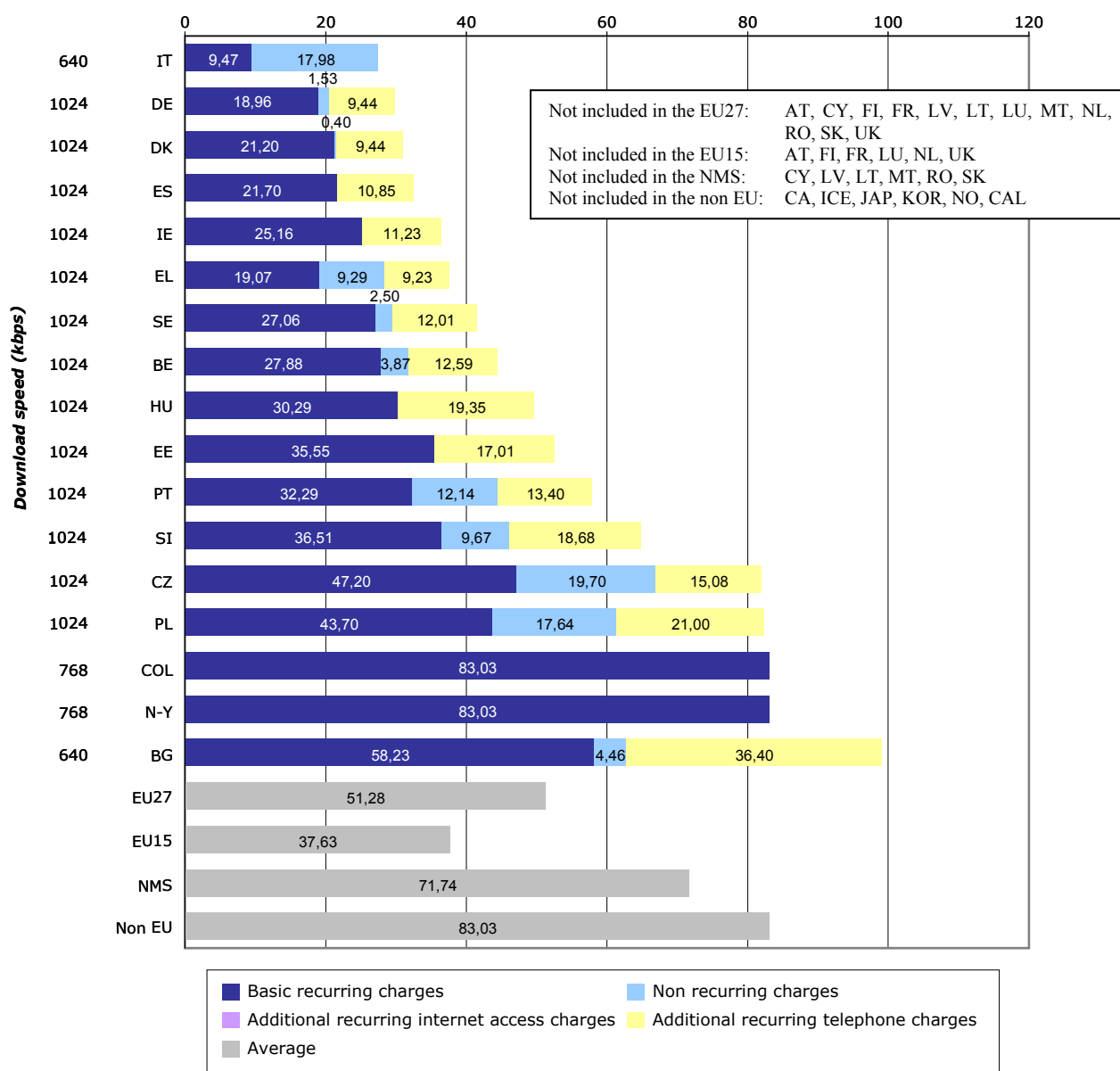
- In nine countries one or more ISPs had an offer corresponding to this basket. For the following countries, no offer was available: *Austria, Belgium, Canada, Cyprus, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Korea, Latvia, Luxembourg, Malta, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, State of California, State of Colorado, State of New York and the United Kingdom.*
- From the ISPs in the following countries, only one offer was available for this basket: *Estonia, Japan, Lithuania and Poland.*
- The offer selected for *Bulgaria* and for *Japan* was limited to certain regions.
- The offer selected for *Bulgaria* and for *Lithuania* had a higher bit-rate speed for national downloads (768 Kbps and 1024 Kbps respectively).
- There were no metered offers for this basket.
- No relationship could be observed between the omission of non-recurring charges in *Japan* and its place in the overall ranking. Non-recurring charges had an impact on the ranking of *Czech Republic, Denmark and Estonia.*
- Four offers needed normalisation of telephone charges. Additional recurring telephone charges had a major influence on the ranking of *Bulgaria*, and to a lesser extent *Czech Republic, Estonia and Sweden.*

5.1.2 **BASKET "512KBPS-1024KBPS (INCL.)", IN €/PPP (VAT INCL.)**

5.1.2.a **LEAST EXPENSIVE OFFER**

From the ISPs selected, no offer was available in the following countries: *Austria, Canada, Cyprus, Finland, France, Iceland, Japan, Korea, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Norway, Romania, Slovakia, State of California and the United Kingdom.*

Least expensive offer:
Bundle "Internet access+Tel"
Basket "512-1024 (incl.)", 1GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



5.1.2.b BASKET "512KBPS – 1024KBPS (INCL.)", LIST OF SELECTED OFFERS

Comparison	April 2008	Basket "512-1024"	Bundle "Internet access+Tel"															
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Addresses per mailbox (***)	Webpace (***)	Level of protection (*)	Telephone technology	Unlimited nights and weekends	Minutes to fixed line included	Minutes to mobile included	Option for mobile	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB							Euro	EUR/PPP
Belgium	Telenet	Basic Pack	Cable	-	1024	1	-	1	N.D.	0	AV+AS	switched	no	0	0	yes	47.72	44.35
Bulgaria	Internet Group	Economic	FTTH	12	640	unlimited	unlimited	N.D.	N.D.	N.D.	-	VoIP	yes	0	0	no	42.59	99.10
Czech Republic	Radiokomunikace	Premium Sky/Voice	Satellite	12	1024	unlimited	unlimited	N.D.	N.D.	N.D.	-	VoIP	no	0	0	no	57.73	81.98
Denmark	Cybercity	Cybercity Bredband 1Mbit/256kbit + Telefoni Forbrugsafregnet	xDSL	-	1024	unlimited	unlimited	1	5	10	-	VoIP	no	0	0	no	42.98	31.03
Estonia	Elion	Kodulahendus 3	xDSL	-	1024	unlimited	unlimited	1	1	10	-	VoIP	yes	0	0	no	37.32	52.56
Germany	United Internet	gmx Doppel-flat basic 1000	xDSL	24	1024	unlimited	unlimited	N.D.	N.D.	N.D.	-	VoIP	yes	unlimited	0	yes	31.55	29.93
Greece	OTE	Conn-x TALK 1024/256 unlimited	xDSL	-	1024	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	yes	unlimited	0	no	32.52	37.59
Hungary	T-Online	T-Home Dupla Light	xDSL	12	1024	1	-	1	1	10	-	switched	yes	0	0	no	32.10	49.63
Ireland	UPC Ireland	Broadband value & phone service	Cable	12	1024	20	-	N.D.	15	300	-	VoIP	no	0	0	no	43.39	36.38
Italy	Telecom Italia	Alice Voce Profilo Night & Weekend Mobile	xDSL	-	640	unlimited	unlimited	N.D.	N.D.	0	-	switched	no	unlimited	150	no	28.85	27.45
Poland	Multimedia Polska	internet 1024 + Tel	Cable	12	1024	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	no	100	0	no	56.14	82.35
Portugal	Novis	1Mb unlimited (+7,5€)	xDSL	-	1024	12	-	1	4	100	-	VoIP	no	unlimited	0	no	49.23	57.83
Slovenia	Telekom Slovenije	Paket Duo	xDSL	-	1024	unlimited	unlimited	4	2	10	AV+AS+FW	switched	no	0	0	no	49.74	64.86
Spain	Orange Spain	adsl 1 Mb + llamadas nacionales	xDSL	12	1024	unlimited	unlimited	10	N.D.	50	-	switched	yes	unlimited	0	no	30.00	32.55
State of Colorado	AT&T	Triple Pack	Cable	12	768	unlimited	unlimited	11	N.D.	150	AV+AS+ASW	switched	no	unlimited	0	no	63.52	83.03
State of New York	AT&T	Triple Pack	Cable	12	768	unlimited	unlimited	11	N.D.	150	AV+AS+ASW	switched	no	unlimited	unlimited	no	63.52	83.03
Sweden	Bredbandsbolaget	Bredband 1	xDSL	18	1024	unlimited	unlimited	1	5	N.D.	-	VoIP	no	0	0	no	48.80	41.57

(*) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line
(**) Duration = '-' indicates that 12 months was assumed
(***) N.D. Indicates information is not provided by ISP
ISPs in italic & bold are Incumbent operators

Table 19: Detailed information on least expensive offer per country (512kbps-1024kbps (incl.)) ; "Internet + Tel"

5.1.2.c Conclusions on bundle "Internet+Tel" for "basket 512kbps-1024kbps (incl.)"

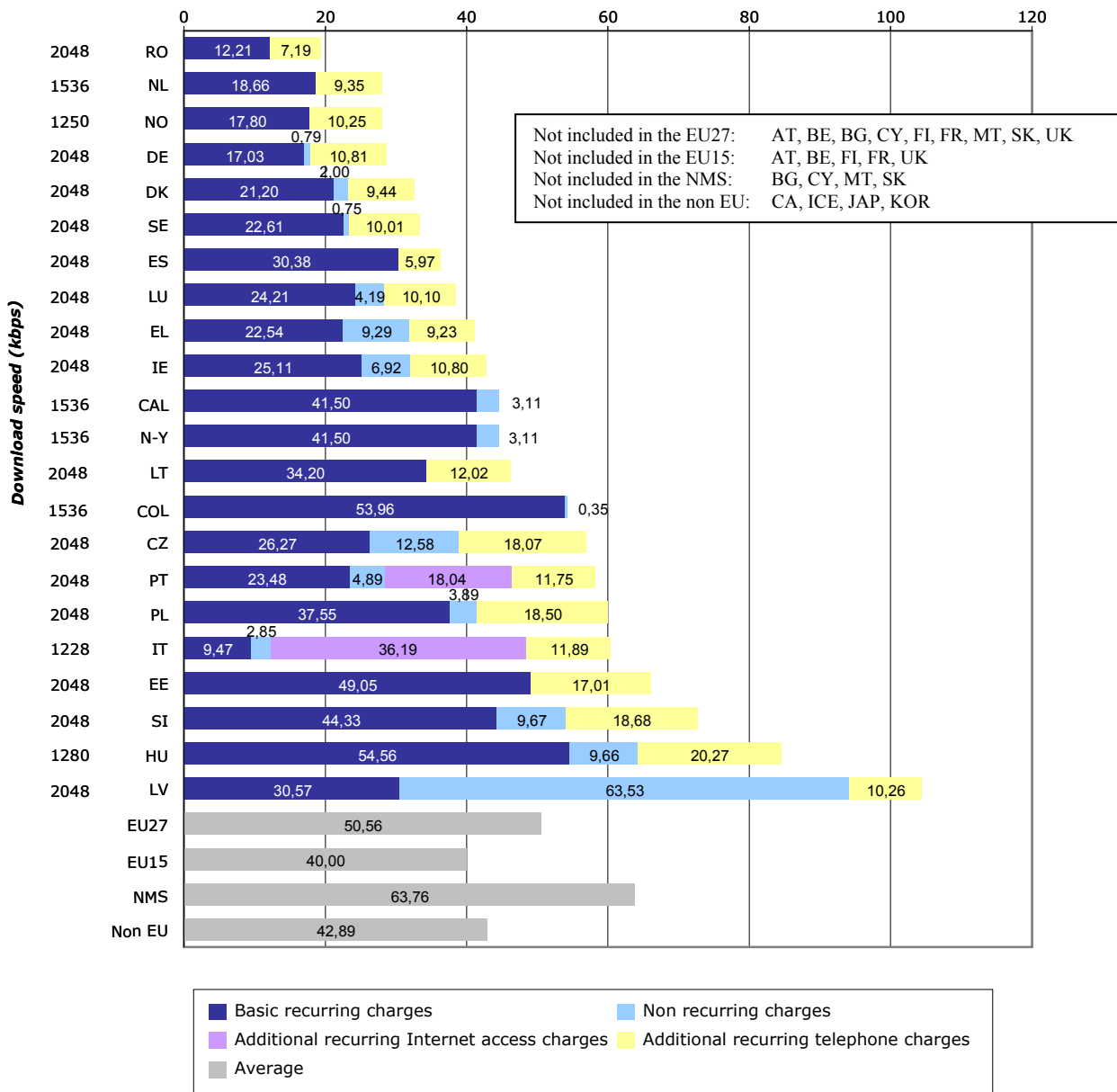
- In seventeen countries, one or more ISPs had an offer corresponding to this basket. For the following countries, no offer was available: *Austria, Canada, Cyprus, Finland, France, Iceland, Japan, Korea, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Norway, Romania, Slovakia, State of California and the United Kingdom.*
- From the ISPs in the following countries, only one offer was available for this basket: *Estonia, Poland, Slovenia, State of Colorado, State of New York and Sweden.*
- The offer selected for *Bulgaria* was limited to certain regions.
- The offer selected for *Bulgaria* had a higher bit-rate speed for national downloads (3072 Kbps).
- There were four metered Internet access offers for this basket (*Belgium, Hungary, Ireland and Portugal*), of which none needed normalisation.
- No relationship could be observed between the omission of non-recurring charges (*Ireland, Hungary, Spain, State of Colorado and State of New-York*) and their place in the overall ranking.
- Fourteen out of the seventeen offers needed normalisation of telephone charges. In *Italy, State of Colorado and State of New York*, required minutes were included in the offer.

5.1.3 **BASKET "1024KBPS-2048KBPS (INCL.)", IN €/PPP (VAT INCL.)**

5.1.3.a **LEAST EXPENSIVE OFFER**

No offer was available in the sample for *Austria, Belgium, Bulgaria, Canada, Cyprus, Finland, France, Iceland, Japan, Korea, Malta, Slovakia and the United Kingdom.*

Least expensive offer:
Bundle "Internet access+Tel"
Basket "1024-2048 (incl.)", 2GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



5.1.3.b BASKET "1024KBPS-2048KBPS (INCL.)", LIST OF SELECTED OFFERS

Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webspace (***)	Level of protection (*)	Telephone technology	Unlimited nights and weekends	Minutes to fixed line included	Minutes to mobile included	Option for mobile	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB								
Czech Republic	Radiokomunikace	Classic ADSL/Voice	xDSL	12	2048	12	-	N.D.	N.D.	N.D.	-	VoIP	no	0	0	no	40,09	56,93
Denmark	Cybercity	Solo 2 Mbit/128 kbit + Telefoni Forbrugsafregnet	xDSL	-	2048	unlimited	unlimited	1	5	10	-	VoIP	no	0	0	no	45,20	32,64
Estonia	Elion	Kodulahendus 2	xDSL	-	2048	unlimited	unlimited	1	1	10	-	VoIP	yes	0	0	no	46,91	66,05
Germany	freenet	freenet DSL 2000 flat paket ohne Telefonflat	xDSL	24	2048	unlimited	unlimited	N.D.	1	N.D.	-	switched	yes	0	0	no	30,18	28,63
Greece	OTE	Conn-x TALK 2048-256 unlimited	xDSL	-	2048	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	yes	unlimited	0	no	35,52	41,05
Hungary	T-Com	T-DSL Favorit	xDSL	12	1280	unlimited	unlimited	1	1	10	-	switched/VoIP	no	6000	0	no	54,65	84,50
Ireland	Digiweb	Metro Value	Cable	12	2048	20	-	10	N.D.	N.D.	-	switched	no	0	0	no	51,09	42,83
Italy	Liberio	Happy Italy	xDSL	-	1228,8	-	0	3	N.D.	150	AV+AS	switched	no	0	0	no	63,49	60,41
Latvia	Lattelecom	Home Package 1	xDSL	18	2048	unlimited	unlimited	5	N.D.	N.D.	-	switched	no	unlimited	0	no	72,97	104,35
Lithuania	Teo	Optimalus Plus	FTTH	24	2048	unlimited	unlimited	2	N.D.	N.D.	-	switched	no	0	0	no	28,18	46,22
Luxembourg	P&T Lux	INTEGRAL Junior	xDSL	-	2048	unlimited	unlimited	1	3	N.D.	-	switched	yes	0	0	no	41,35	38,50
Norway	Get	S	xDSL	12	1250	unlimited	unlimited	1	N.D.	5	AV+AS+FW	switched	no	0	0	no	38,53	28,06
The Netherlands	Het Net	Instap Surfen&Bellen	xDSL	-	1536	unlimited	unlimited	N.D.	N.D.	N.D.	-	VoIP	no	0	0	no	29,95	28,02
Poland	UPC Polska	internet sprint+тарыfa UPC standard 30 w mixpakiecie	Cable	12	2048	unlimited	unlimited	1	N.D.	10	-	switched	no	30	0	no	40,86	59,94
Portugal	PT.Com (Sapo)	2Mb	xDSL	-	2048	1	-	5	N.D.	25	AV+BU	VoIP	no	unlimited	0	no	49,52	58,17
Romania	RCS & RDS	Fiber Link (2Mb/s)	FTTH	12	2048	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	no	550	0	no	10,81	19,40
Slovenia	Telekom Slovenije	Paket Duo	xDSL	-	2048	unlimited	unlimited	4	2	10	AV+AS+FW	switched	no	0	0	no	55,74	72,68
Spain	Ono	Línea de Teléfono + Banda Ancha 2	Cable	12	2048	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	yes	unlimited	0	yes	33,50	36,34
State of California	Earthlink	DSL Home phone Service Basic Plan	xDSL	12	1536	unlimited	unlimited	N.D.	N.D.	N.D.	-	VoIP	yes	250	250	no	34,13	44,61
State of Colorado	Earthlink	DSL Home phone Service Unlimited Plan	xDSL	12	1536	unlimited	unlimited	N.D.	N.D.	N.D.	-	VoIP	yes	unlimited	unlimited	no	41,55	54,30
State of New York	Earthlink	DSL Home phone Service Basic Plan	xDSL	12	1536	unlimited	unlimited	N.D.	N.D.	N.D.	-	VoIP	yes	250	250	no	34,13	44,61
Sweden	Glocalnet	Bredband 2 + Telefoni	xDSL	12	2048	unlimited	unlimited	1	5	50	-	VoIP	no	0	0	no	39,18	33,37
(*) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line																		
(**) Duration = '-' indicates that 12 months was assumed																		
(***) N.D. Indicates information is not provided by ISP																		
ISPs in <i>italic & bold</i> are incumbent operators																		

Table 20: Detailed information on least expensive offer per country (1024kbps-2048kbps (incl.)) ; "Internet + Tel"

5.1.3.c Conclusions on bundle "Internet+Tel" for "basket 1024kbps-2048kbps (incl.)"

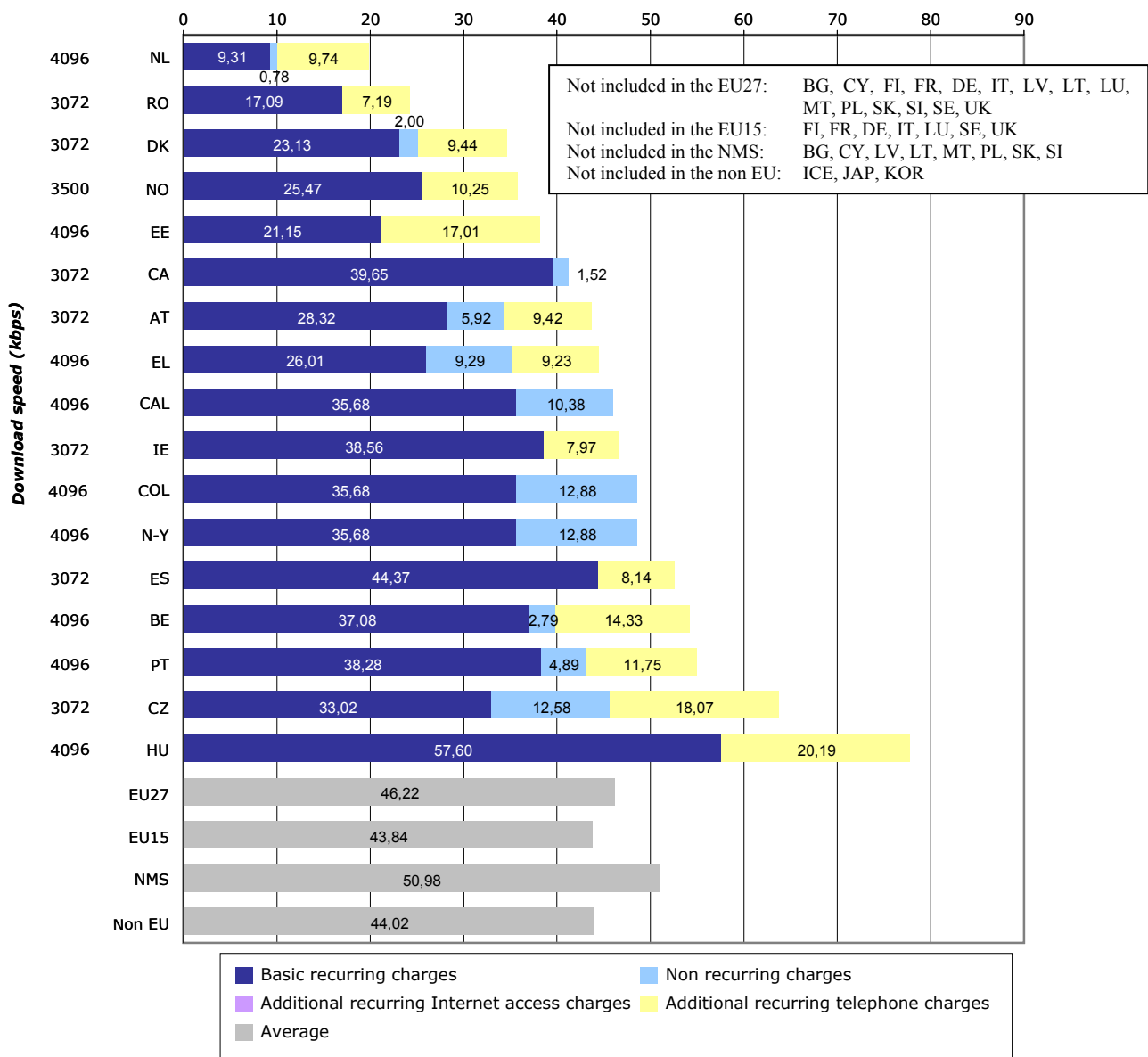
- In the following thirteen countries, no offer was available for this basket: *Austria, Belgium, Bulgaria, Canada, Cyprus, Finland, France, Iceland, Japan, Korea, Malta, Slovakia and the United Kingdom.*
- From the ISPs in the following ten countries, only one offer was available for this basket: *Estonia, Hungary, Italy, Latvia, Lithuania, Luxembourg, Poland, Portugal, Slovenia and Spain.*
- The offer selected for *Lithuania* had a higher bit-rate speed for national downloads (4096 Kbps).
- There were four metered Internet access offers for this basket (*Czech Republic, Ireland, Italy, Portugal*), of which two (Italy and Portugal) needed normalisation, which had a determining effect on their total charges and ranking.
- No relationship could be observed between the omission of non-recurring charges (Estonia, Latvia, The Netherlands, Norway, Romania, State of Colorado and Spain) and their place in the overall ranking.
- For all but three offers (State of California, State of Colorado and State of New York), normalisation of telephone charges was needed.

5.1.4 BASKET "2048KBPS-4096KBPS (INCL.)", IN €/PPP (VAT INCL.)

5.1.4.a LEAST EXPENSIVE OFFER

For the selected ISPs, no offer corresponding to this basket was available in the following countries: *Bulgaria, Cyprus, Finland, France, Germany, Iceland, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Malta, Poland, Slovakia, Slovenia, Sweden and the United Kingdom.*

Least expensive offer:
Bundle "Internet access+Tel"
Basket "2048-4096 (incl.)", 10GB or 20 hours/month
 Total cost/month in €/PPP (VAT incl.)



5.1.4.b BASKET "2048KBPS-4096KBPS (INCL.)", LIST OF SELECTED OFFERS

Comparison	April 2008	Basket "2048-4096"	Bundle "Internet access+Tel"															
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webspace (***)	Level of protection (*)	Telephone technology	Unlimited nights and weekends	Minutes to fixed line included	Minutes to mobile included	Option for mobile	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB							Euro	EUR/PPP
Austria	UPC Austria	inode Web and phone unlimited classic	xDSL	12	3072	unlimited	unlimited	N.D.	10	20	-	VoIP	no	unlimited	0	no	46,10	43,66
Belgium	KPN Tele2	All In Plus 4Mb	xDSL	12	4096	15	-	5	5	50	AV+AS	switched	no	0	0	yes	58,32	54,20
Canada	Telus	Telus home bundle 1	xDSL	-	3072	60	-	5	N.D.	100	AV+AS+FW	VoIP	no	100	100	no	49,31	41,18
Czech Republic	Radiokomunikace	Classic ADSL/Voice	xDSL	12	3072	17	-	N.D.	N.D.	N.D.	-	VoIP	no	0	0	no	44,85	63,68
		Solo 3 Mbit/512 kbit + Telefoni	xDSL	-	3072	unlimited	unlimited	1	5	10	-	VoIP	no	0	0	no	47,88	34,57
Denmark	Cybercity	Forbrugsafregnet	xDSL	-	3072	unlimited	unlimited	1	5	10	-	VoIP	no	0	0	no	47,88	34,57
Estonia	Elion	Korrumaja lahendus	Cable	-	4096	unlimited	unlimited	1	1	N.D.	-	VoIP	yes	0	0	no	27,10	38,16
Greece	OTE	Conn-x TALK 4096-256 unlimited	xDSL	-	4096	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	yes	unlimited	0	no	38,52	44,52
Hungary	Invitel	Komfort Plusz ADSL 4M	xDSL	12	4096	unlimited	unlimited	3	1	50	-	switched	no	0	0	no	50,31	77,79
Ireland	Irish broadband	Breeze 3MB & talk home	xDSL	12	3072	unlimited	unlimited	1	N.D.	N.D.	-	switched	no	unlimited	0	no	55,49	46,53
Norway	Get	M	xDSL	12	3500	unlimited	unlimited	3	N.D.	10	AV+AS+FW	switched	no	0	0	no	49,06	35,73
The Netherlands	Orange Netherlands	ADSL & Telefonie	xDSL	12	4096	unlimited	unlimited	4	N.D.	20	-	switched	yes	0	0	no	21,19	19,82
Portugal	PT.Com (Sapo)	4Mb illimited	xDSL	-	4096	unlimited	unlimited	5	N.D.	25	AV+BU	VoIP	no	unlimited	0	no	46,76	54,92
Romania	RCS & RDS	Fiber Link (3Mb/s)	FTTH	12	3072	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	no	1100	0	no	13,53	24,28
Spain	Telefonica Spain	Dúo ADSL 3 Mb + Llamadas + Antivirus	xDSL	12	3072	unlimited	unlimited	5	N.D.	25	AV	switched	yes	unlimited	0	yes	48,40	52,51
State of California	Comcast	Highspeed internet + Digital voice	Cable	12	4096	unlimited	unlimited	7	N.D.	25	AV+FW+PC	switched	no	0	0	no	35,24	46,07
State of Colorado	Comcast	Highspeed internet + Digital voice	Cable	12	4096	unlimited	unlimited	7	N.D.	25	AV+FW+PC	switched	no	0	0	no	37,15	48,56
State of New York	Comcast	Highspeed internet + Digital voice	Cable	12	4096	unlimited	unlimited	7	N.D.	25	AV+FW+PC	switched	no	0	0	no	37,15	48,56

(*) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line
(**) Duration = '-' indicates that 12 months was assumed
(***) N.D. Indicates information is not provided by ISP
*ISPs in **italic & bold** are Incumbent operators*

Table 21: Detailed information on least expensive offer per country (2048kbps-4096kbps (incl.)) ; "Internet + Tel"

5.1.4.c Conclusions on bundle "Internet+Tel" for "basket 2048kbps-4096kbps (incl.)"

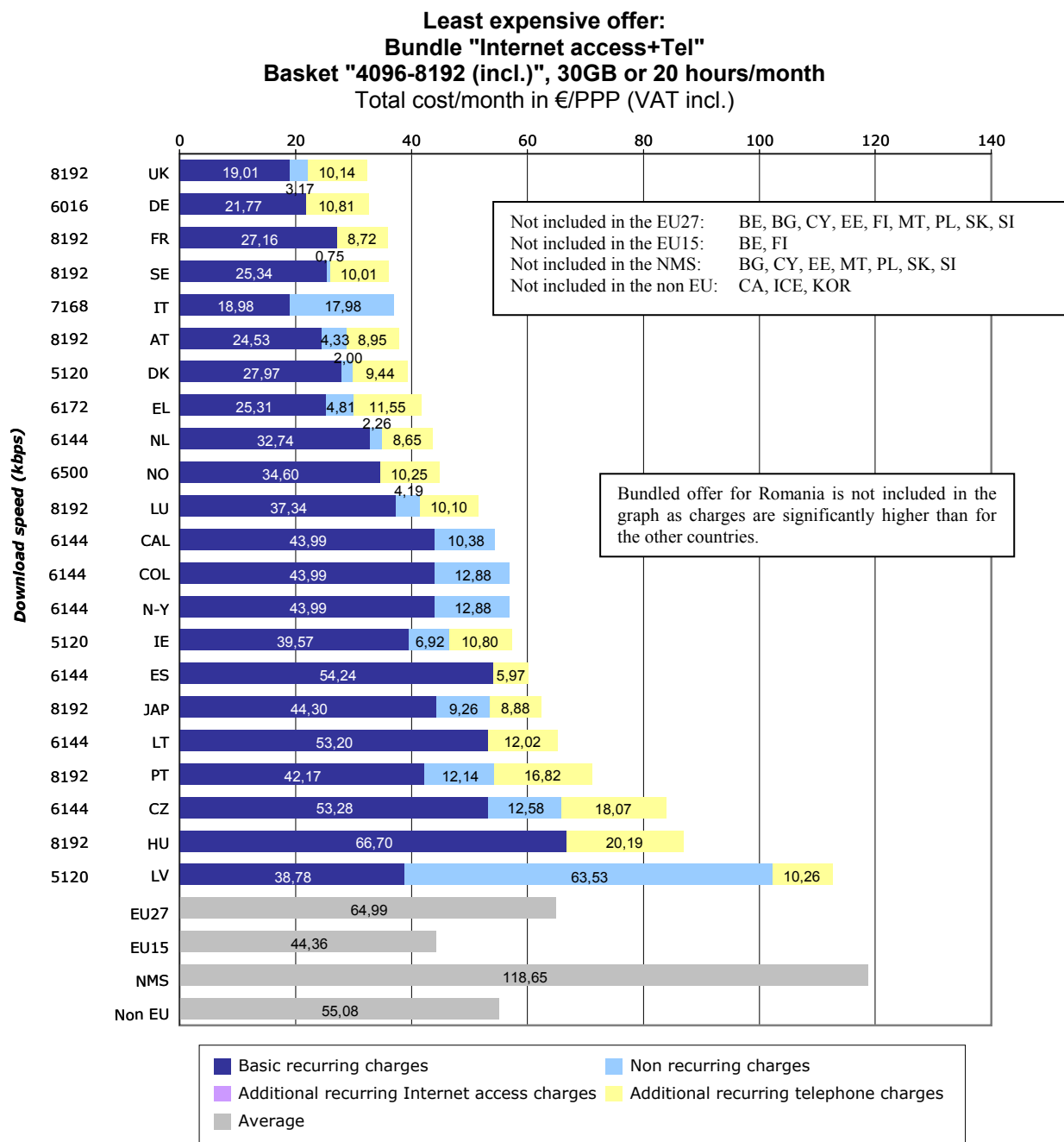
- In seventeen countries one or more ISPs had an offer corresponding to this basket. For the following countries, no offer was available: *Bulgaria, Cyprus, Finland, France, Germany, Iceland, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Malta, Poland, Slovakia, Slovenia, Sweden and the United Kingdom.*
- From the ISPs in the following countries, only one offer was available for this basket: *Estonia, Spain* and *State of California*.
- There were three metered offers for this basket (*Belgium, Canada* and *Czech Republic*), of which none needed normalisation.
- No clear relationship could be observed between the omission of non-recurring charges in *Estonia, Hungary, Ireland, Norway, Romania* and *Spain*, and their place in the overall ranking.
- Thirteen offers needed normalisation of telephone charges.

5.1.5 BASKET "4096KBPS-8192KBPS (INCL.)", IN €/PPP (VAT INCL.)

5.1.5.a LEAST EXPENSIVE OFFER

No offer was available in the sample for *Belgium, Bulgaria, Canada, Cyprus, Estonia, Finland, Iceland, Korea, Malta, Poland, Slovakia and Slovenia*.

The offer for *Romania* is not represented in the graph as the charge is significantly higher²⁴ (244.63 EUR/PPP) than for the other countries.



²⁴ The total charge for the Romanian offer (244.63 EUR/PPP) is composed of 218.16 EUR/PPP basic recurring charges, 15.69 EUR/PPP non-recurring charges and 10.78 EUR/PPP additional recurring telephone charges.

5.1.5.b BASKET "4096KBPS-8192KBPS (INCL.)", LIST OF SELECTED OFFERS

Comparison	April 2008	Basket "4096-8192"	Bundle "Internet access+Tel"															
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webspace (***)	Level of protection (*)	Telephone technology	Unlimited nights and weekends	Minutes to fixed line included	Minutes to mobile included	Option for mobile	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB							Euro	EUR/PPP
Austria	TELE2UTA	ADSL 8Mbit flat mit 500 Festnetzfreiminuten	xDSL	12	8192	unlimited	unlimited	5	N.D.	10	AV+AS	switched	no	500	0	no	39,93	37,81
Czech Republic	Radiokomunikace	Classic ADSL/Voice	xDSL	12	6144	36	-	N.D.	N.D.	N.D.	-	VoIP	no	0	0	no	59,11	83,94
Denmark	Cybercity	Solo 5 Mbit/1 Mbit + Telefoni Forbrugsafregnet	xDSL	-	5120	unlimited	unlimited	1	5	10	-	VoIP	no	0	0	no	54,59	39,41
France	Orange France	Formule 8 mégamax internet + tél	xDSL	12	8192	unlimited	unlimited	5	N.D.	100	AS	VoIP	no	unlimited	0	no	39,50	35,88
Germany	freenet	freenet DSL 6000 flat paket ohne telefonflat	xDSL	24	6016	unlimited	unlimited	N.D.	1	N.D.	-	switched	yes	0	0	no	34,35	32,58
Greece	HOL	HOL Hibox 6Mbps / cosmos	xDSL	-	6172	unlimited	unlimited	1	N.D.	N.D.	-	switched	no	0	0	no	36,05	41,66
Hungary	Invitel	Komfort Plusz ADSL 8M	xDSL	12	8192	unlimited	unlimited	3	1	50	-	switched	no	0	0	no	56,20	86,89
Ireland	Digiweb	Metro Xtra	Cable	12	5120	50	-	10	N.D.	N.D.	-	switched	no	0	0	no	68,33	57,29
Italy	Telecom Italia	Alice Voce Profilo 7 Mega Mobile	xDSL	-	7168	unlimited	unlimited	N.D.	N.D.	0	-	switched	no	unlimited	150	no	38,85	36,96
Japan	Jupiter Telecommunications	J.COM NET 8+phone	Cable	-	8192	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	no	0	0	yes	55,34	62,44
Latvia	Lattelecom	Home Package 2	xDSL	18	5120	unlimited	unlimited	5	N.D.	N.D.	-	switched	no	unlimited	0	no	78,70	112,56
Lithuania	Teo	Premium Plus	FTTH	24	6144	unlimited	unlimited	3	N.D.	N.D.	-	switched	no	0	0	no	39,76	65,22
Luxembourg	P&T Lux	INTEGRAL Run	xDSL	-	8192	unlimited	unlimited	1	3	N.D.	-	switched	yes	0	0	no	55,45	51,62
Norway	Get	L	xDSL	12	6500	unlimited	unlimited	10	N.D.	50	AV+AS+FW	switched	no	0	0	no	61,60	44,86
The Netherlands	UPC Netherlands	Internet + Bellen onbeperkt	Cable	-	6144	unlimited	unlimited	5	5	50	-	VoIP	yes	unlimited	0	no	46,67	43,65
Portugal	Novis	8Mb	xDSL	-	8192	50	-	1	4	100	-	VoIP	no	0	0	no	60,55	71,13
Romania	Romtelecom	ClickNet BizPack 3000	xDSL	12	6144	unlimited	unlimited	10	N.D.	50	-	VoIP	no	3000	0	no	136,26	244,63
Spain	Ono	Teléfono Todo Incluido + Banda Ancha 6	Cable	12	6144	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	yes	unlimited	0	yes	55,50	60,21
State of California	Comcast	Highspeed Internet + Digital voice	Cable	12	6144	unlimited	unlimited	7	N.D.	25	AV+FW+PC	switched	no	0	0	no	41,60	54,37
State of Colorado	Comcast	Highspeed internet + Digital voice	Cable	12	6144	unlimited	unlimited	7	N.D.	25	AV+FW+PC	switched	no	0	0	no	43,51	56,87
State of New York	Comcast	Highspeed internet + Digital voice	Cable	12	6144	unlimited	unlimited	7	N.D.	25	AV+FW+PC	switched	no	0	0	no	43,51	56,87
Sweden	Glocalnet	Bredband 8 + Telefoni	xDSL	12	8192	unlimited	unlimited	1	5	50	-	VoIP	no	0	0	no	42,37	36,10
The UK	Tiscali UK	Broadband & Talk - option 1	xDSL	12	8192	unlimited	unlimited	N.D.	N.D.	N.D.	-	VoIP	yes	0	0	no	32,09	32,32

(*) AV = antivirus, AS = antispyware, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line

(**) Duration = "-" indicates that 12 months was assumed

(***) N.D. Indicates information is not provided by ISP

ISPs in *italic & bold* are Incumbent operators

Table 22: Detailed information on least expensive offer per country (4096kbps-8192kbps (incl.)) ; "Internet + Tel"

5.1.5.c Conclusions on bundle "Internet+Tel" for "basket 4096kbps-8192kbps (incl.)"

- For twenty-three countries, an offer was available for this basket. For the following countries, no offer was available: *Belgium, Bulgaria, Canada, Cyprus, Estonia, Finland, Iceland, Korea, Malta, Poland, Slovakia and Slovenia.*
- The offer for *Romania* is not represented in the graph as the charges are significantly higher than for the other countries: the total charge of 244.63 EUR/PPP is composed of 218.16 EUR/PPP basic recurring charges, 15.69 EUR/PPP non-recurring charges and 10.78 EUR/PPP additional recurring telephone charges.
- From the ISPs in the following countries, only one offer was available for this basket: *Ireland, Japan, Latvia, Lithuania, Luxembourg and Spain.*
- The offer selected for *Japan* was limited to certain regions.
- The offer selected for *Lithuania* had a higher bit-rate speed for national downloads (1024 Kbps).
- The offer selected for the *United Kingdom* had no basic recurring charge.
- There were two metered offers for this basket (*Ireland* and *Portugal*), of which none needed normalisation.

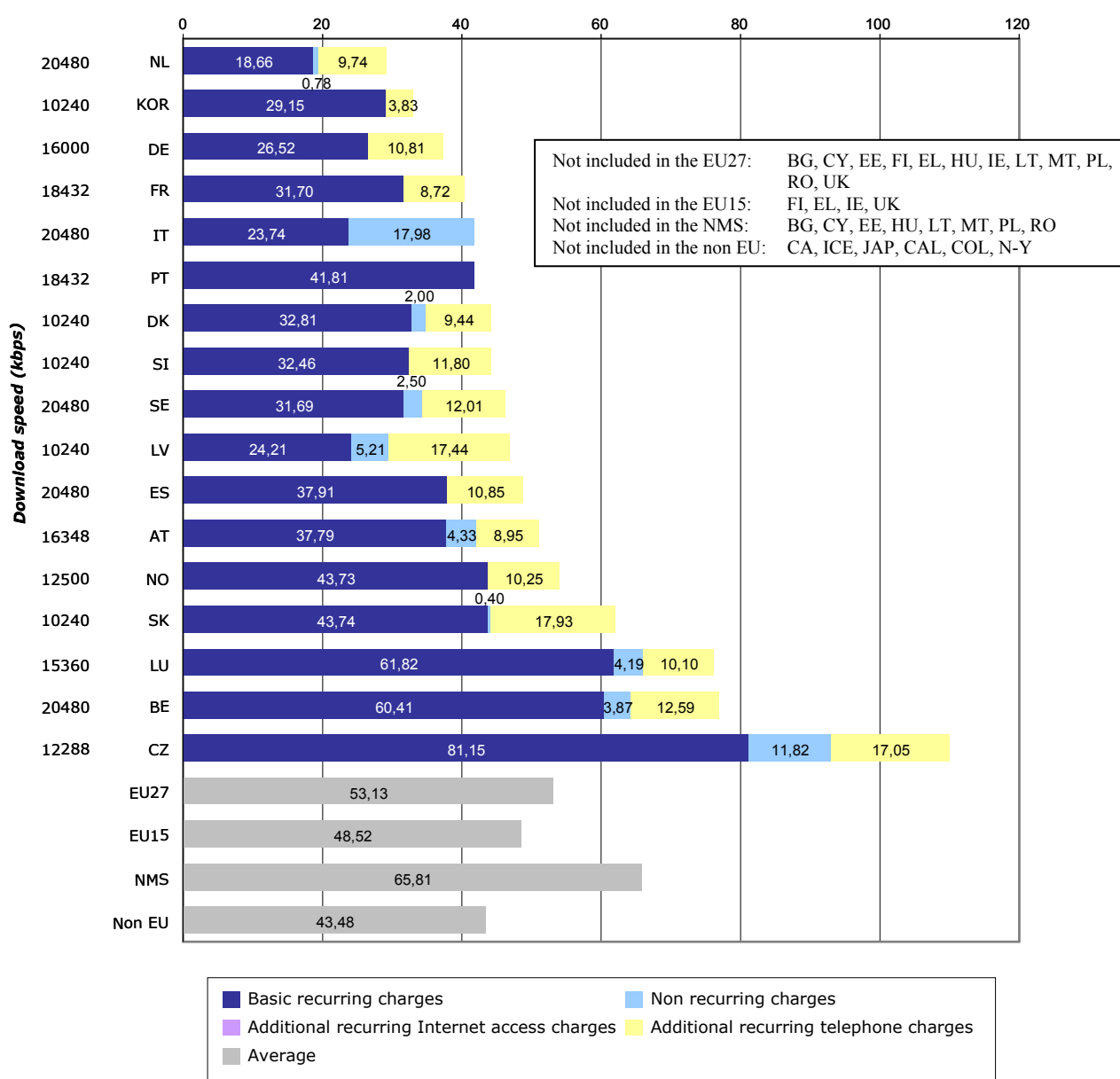
- No clear relationship could be observed between the omission of non-recurring charges in *France, Germany, Hungary, Lithuania, Norway* and *Spain* and their place in the overall ranking. Non-recurring charges had an impact on the ranking of *Italy*.
- All but four offers needed normalisation of telephone charges. No additional recurring telephone charges were needed for *Italy, State of California, State of Colorado* and *State of New York*.

5.1.6 BASKET "8192KBPS-20MBPS (INCL.)", IN €/PPP (VAT INCL.)

5.1.6.a LEAST EXPENSIVE OFFER

In the following countries, ISPs selected did not offer bundles for this basket: *Bulgaria, Canada, Cyprus, Estonia, Finland, Greece, Hungary, Iceland, Japan, Lithuania, Malta, Poland, Romania, State of California, State of Colorado, State of New York and United Kingdom.*

Least expensive offer:
Bundle "Internet access+Tel"
Basket "8192-20Mbps (incl.)", 30GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



5.1.6.b BASKET "8192KBPS-20MBPS (INCL.)", LIST OF SELECTED OFFERS

Comparison	April 2008	Basket "4096-20Mbps"	Bundle "Internet access+Tel"															
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webspace (***)	Level of protection (*)	Telephone technology	Unlimited nights and weekends	Minutes to fixed line included	Minutes to mobile included	Option for mobile	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB							Euro	EUR/PPP
Austria	TELE2UTA	Complete Max	xDSL	12	16348	unlimited	unlimited	5	N.D.	10	AV+AS	switched	no	unlimited	0	no	53,93	51,07
Belgium	Telenet	Turbo Pack	Cable	-	20480	35	-	1	N.D.	50	AV+AS	switched	no	0	0	yes	82,72	76,87
Czech Republic	UPC Czech Republic	UPC Classic+Freetime	Cable	12	12288	unlimited	unlimited	5	25	50	-	VoIP	yes	0	0	no	77,49	110,02
Denmark	Cybercity	Solo 10 Mbit/1 Mbit + Telefoni	xDSL	-	10240	unlimited	unlimited	1	5	10	-	VoIP	no	0	0	no	61,29	44,25
France	Orange France	Formule 18 mégamax internet + tél	xDSL	12	18432	unlimited	unlimited	5	N.D.	100	AS	VoIP	no	unlimited	0	no	44,50	40,43
Germany	freenet	freenet DSL 16000 flat paket ohne telefonflat	xDSL	24	16000	unlimited	unlimited	N.D.	1	N.D.	-	switched	yes	0	0	no	39,36	37,34
Italy	Telecom Italia	Alice Voce Profilo 20 Mega Mobile	xDSL	-	20480	unlimited	unlimited	N.D.	N.D.	0	-	switched	no	unlimited	150	no	43,85	41,72
Korea	Hanaro Telecom	Hanaset (Hanafos Speed + phone)	xDSL	12	10240	unlimited	unlimited	N.D.	N.D.	100	-	switched	yes	240	0	no	25,18	32,98
Latvia	PRONETS	DUAL 1	xDSL	6	10240	unlimited	unlimited	3	N.D.	N.D.	-	switched	no	420	0	no	32,77	46,86
Luxembourg	P&T Lux	INTEGRAL for Professionals	xDSL	-	15360	unlimited	unlimited	1	3	N.D.	-	switched	yes	0	0	no	81,75	76,11
Norway	Get	XL	xDSL	12	12500	unlimited	unlimited	10	N.D.	50	AV+AS+FW	switched	no	0	0	no	74,14	53,99
The Netherlands	Orange Netherlands	ADSL Extra & Telefonie	xDSL	12	20480	unlimited	unlimited	4	N.D.	20	-	switched	yes	0	0	no	31,19	29,18
Portugal	ZON	Plus - Chamadas ilimitadas	Cable	12	18432	30	-	30	N.D.	30	-	switched	yes	unlimited	unlimited	no	35,59	41,81
Slovakia	UPC Slovakia	Chello Medium+UPC Telefón anytime	Cable	12	10240	unlimited	unlimited	3	5	25	AV+AS	VoIP	yes	unlimited	0	no	39,43	62,08
Slovenia	Amis	paket Dvojka TEL	xDSL	-	10240	unlimited	unlimited	6	6	50	AV+AS+ASV+PC	switched	yes	700	0	no	33,95	44,26
Spain	Orange Spain	línea + adsl máxima velocidad + llamadas	xDSL	12	20480	unlimited	unlimited	15	N.D.	100	-	switched	yes	unlimited	0	no	44,95	48,76
Sweden	Bredbandsbolaget	Bredband 20	xDSL	18	20480	unlimited	unlimited	1	5	N.D.	-	VoIP	no	0	0	no	54,23	46,20

(*) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line
(**) Duration = '-' indicates that 12 months was assumed
(***) N.D. indicates information is not provided by ISP
ISPs in *italic & bold* are Incumbent operators

Table 23: Detailed information on least expensive offer per country (8192kbps-20Mbps (incl.)) ; "Internet + Tel"

5.1.6.c Conclusions on bundle "Internet+Tel" for "basket 8192kbps-20Mbps (incl.)"

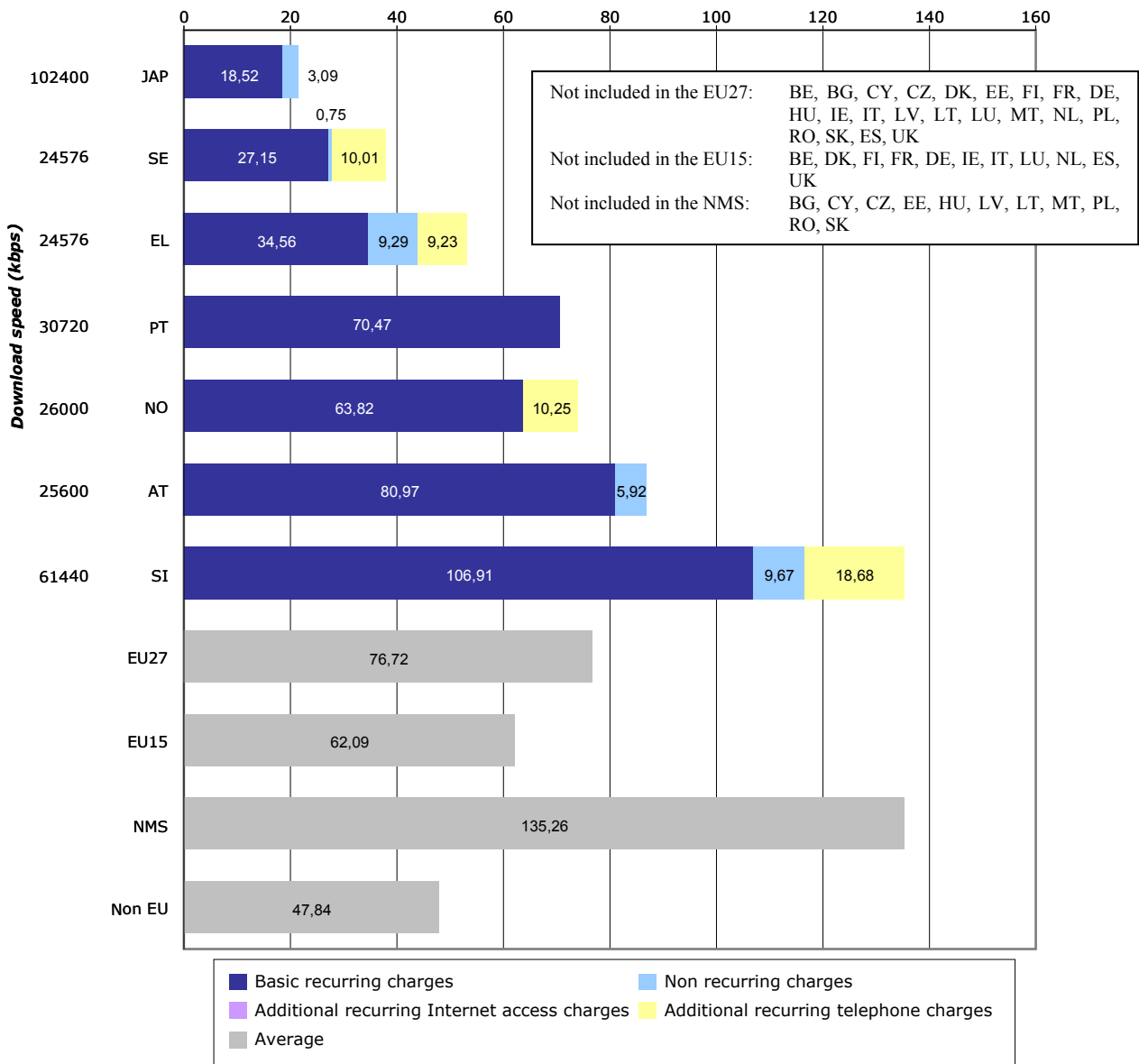
- For eighteen countries, an offer was available for this basket. For the following countries, no offer was available: *Bulgaria, Canada, Cyprus, Estonia, Finland, Greece, Hungary, Iceland, Japan, Lithuania, Malta, Poland, Romania, State of California, State of Colorado, State of New York and United Kingdom.*
- From the ISPs in the following countries, only one offer was available for this basket: *France, Korea, Latvia, Luxembourg and Sweden.*
- There were three metered offers for this basket (*Belgium, Ireland and Portugal*), of which only *Ireland* needed normalisation.
- No clear relationship could be observed between the omission of non-recurring charges in *France, Germany, Korea, Norway, Portugal, Slovenia and Spain* and their place in the overall ranking. Non-recurring charges had a significant impact on the ranking of *Italy*.
- All but two offers needed normalisation of telephone charges. No additional recurring telephone charges were needed for *Italy and Spain*, which had an impact on their overall ranking.

5.1.7 **BASKET "20+Mbps", IN €/PPP (VAT INCL.)**

5.1.7.a **LEAST EXPENSIVE OFFER**

No offer was available in the sample for the following countries: *Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Ireland, Italy, Korea, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Poland, Romania, Slovakia, Spain, State of California, State of Colorado, State of New York and the United Kingdom.*

Least expensive offer:
Bundle "Internet access+Tel"
Basket "20+Mbps", 30GB or 20 hours/month
 Total cost/month in €/PPP (VAT incl.)



5.1.7.b BASKET "20+Mbps", LIST OF SELECTED OFFERS

Comparison		April 2008	Basket "20+Mbps"	Bundle "Internet access+Tel"														
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webspace (***)	Level of protection (*)	Telephone technology	Unlimited nights and weekends	Minutes to fixed line included	Minutes to mobile included	Option for mobile	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB							Euro	EUR/PPP
Austria	UPC Austria	chello + one plus	Cable	12	25600	unlimited	unlimited	5	25	90	AV+AS	VoIP	no	500	500	no	91,75	86,89
Greece	OTE	Conn-x TALK 24576-1024 unlimited	xDSL	-	24576	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	yes	unlimited	0	no	45,92	53,07
Japan	NTT EAST Japan	Bflets mansion type2hyper + Anshin plan Hikari (VoIP)	FTTH	-	102400	unlimited	unlimited	N.D.	N.D.	N.D.	AV+AS	VoIP	no	66,84073107	66,84073107	no	19,15	21,60
Norway	Get	Xtreme	xDSL	12	26000	unlimited	unlimited	10	N.D.	50	AV+AS+FW	switched	no	0	0	no	101,73	74,07
Portugal	ZON	Max - Chamadas ilimitadas	Cable	12	30720	60	-	30	N.D.	30	-	switched	yes	unlimited	unlimited	no	59,99	70,47
Slovenia	Telekom Slovenije	Paket Duo	xDSL	-	61440	unlimited	unlimited	4	2	10	AV+AS+FW	switched	no	0	0	no	103,74	135,26
Sweden	Glocalnet	Bredband 24 + Telefoni	xDSL	12	24576	unlimited	unlimited	1	5	50	-	VoIP	no	0	0	no	44,51	37,91
(*) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line																		
(**) Duration = '-' indicates that 12 months was assumed																		
(***) N.D. Indicates information is not provided by ISP																		
ISPs in <i>italic & bold</i> are Incumbent operators																		

Table 24: Detailed information on least expensive offer per country (20+Mbps) ; "Internet + Tel"

5.1.7.c Conclusions on bundle "Internet+Tel" for "basket 20+Mbps"

- In seven countries one or more ISPs had an offer corresponding to this basket. For the following countries, no offer was available: *Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Ireland, Italy, Korea, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Poland, Romania, Slovakia, Spain, State of California, State of Colorado, State of New York and the United Kingdom.*
- From the ISPs in the following countries, only one offer was available for this basket: *Austria* and *Norway*.
- The offer for *Slovenia* was metered, though no normalisation was required.
- No relationship could be observed between the omission of non-recurring charges in *Portugal* and *Norway* and their place in the overall ranking. Non-recurring charges had no impact on the ranking of the other countries.
- Four offers needed normalisation of telephone charges. Additional recurring telephone charges had an impact on the ranking of *Norway*, though did not influence ranking for *Greece, Slovenia* and *Sweden*.

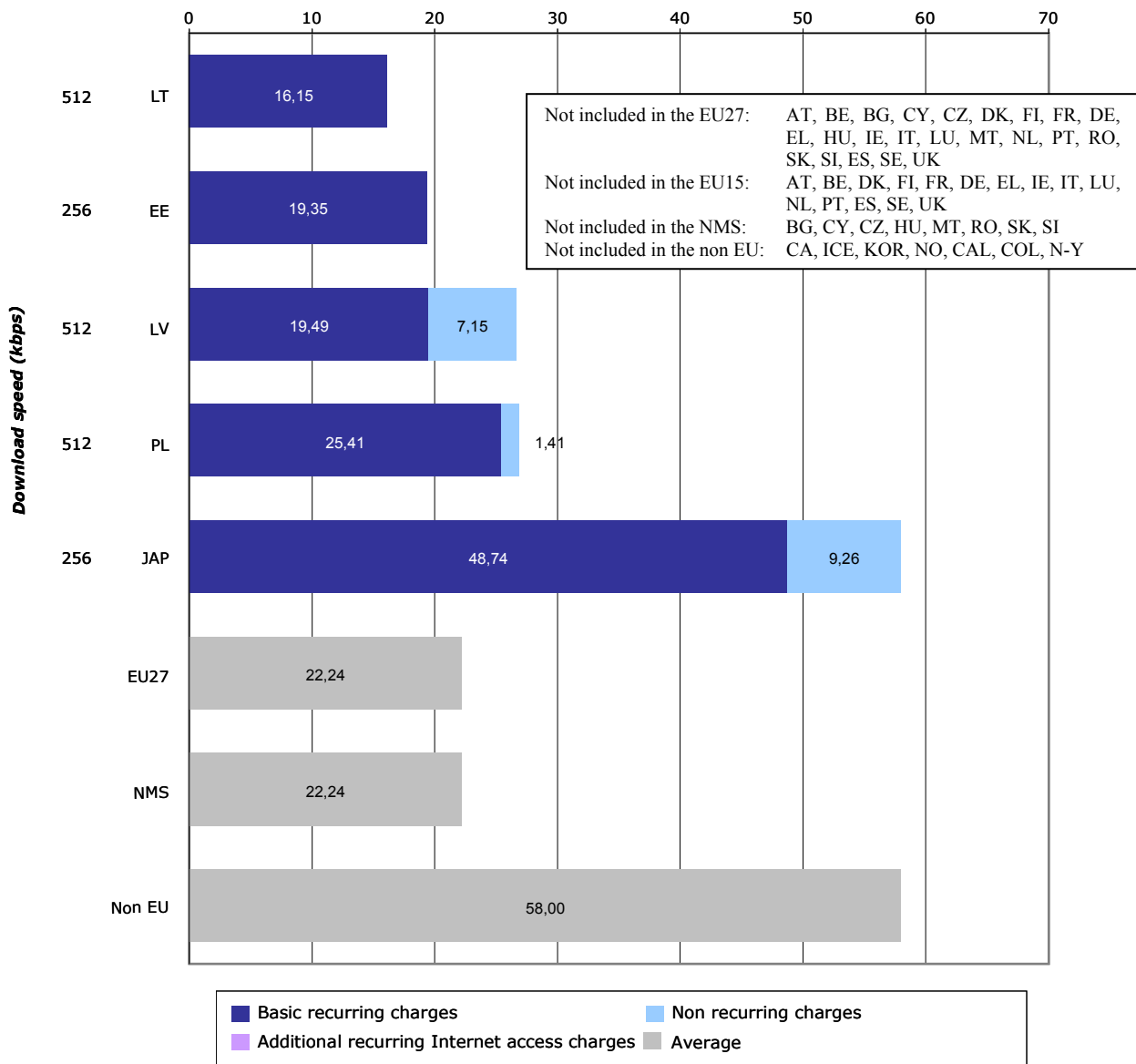
5.2. LEAST EXPENSIVE OFFER PER COUNTRY AND PER BASKET FOR BUNDLES INCLUDING INTERNET ACCESS AND TELEVISION SERVICE

5.2.1 BASKET "144KBPS-512KBPS (INCL.)", IN €/PPP (VAT INCL.)

5.2.1.a LEAST EXPENSIVE OFFER

For the following countries, no offer corresponding to this bundle was available: *Austria, Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Korea, Luxembourg, Malta, The Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*

Least expensive offer:
Bundle "Internet access+TV"
Basket "144-512 (incl.)", 1GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



5.2.1.b BASKET "144KBPS-512KBPS (INCL.)", LIST OF SELECTED OFFERS

Comparison		April 2008	Basket "144-512"	Bundle "Internet access+TV"											
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webspace (***)	Level of protection (*)	Television technology	Nb channels (***)	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB				Euro	EUR/PPP
Estonia	STV	Duo Saturn Mikro (Internet, KTV Kodu)	FTTH	-	256	unlimited	unlimited	1	1	N.D.	-	digital	N.D.	13,74	19,35
Japan	Jupiter Telecommunications	J:COM LITE NET +TVDigital	Cable	-	256	unlimited	unlimited	N.D.	N.D.	N.D.	-	digital	100	51,41	58,00
Latvia	Livas Net	e-meil + 72 channels	Cable	-	512	unlimited	unlimited	3	N.D.	N.D.	-	analog/digital	72	18,63	26,64
Lithuania	Penkiu kontinentu komunikacijos centras	Sky Eko + Penki TV TOD	FTTH	-	512	unlimited	unlimited	1	N.D.	0	AV	digital	11	9,85	16,15
Poland	Vectra	Pakiet dla Ciebie Polski	Cable	12	512	unlimited	unlimited	N.D.	N.D.	200	-	analog	15	18,29	26,83
(*) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line															
(**) Duration = '-' indicates that 12 months was assumed															
(***) N.D. Indicates information is not provided by ISP															
<i>ISPs in italic & bold</i> are Incumbent operators															

Table 25: Detailed information on least expensive offer per country (144kbps-512kbps (incl.)) ; "Internet + TV"

5.2.1.c Conclusions on bundle "Internet+TV" for "basket 144kbps-512kbps (incl.)"

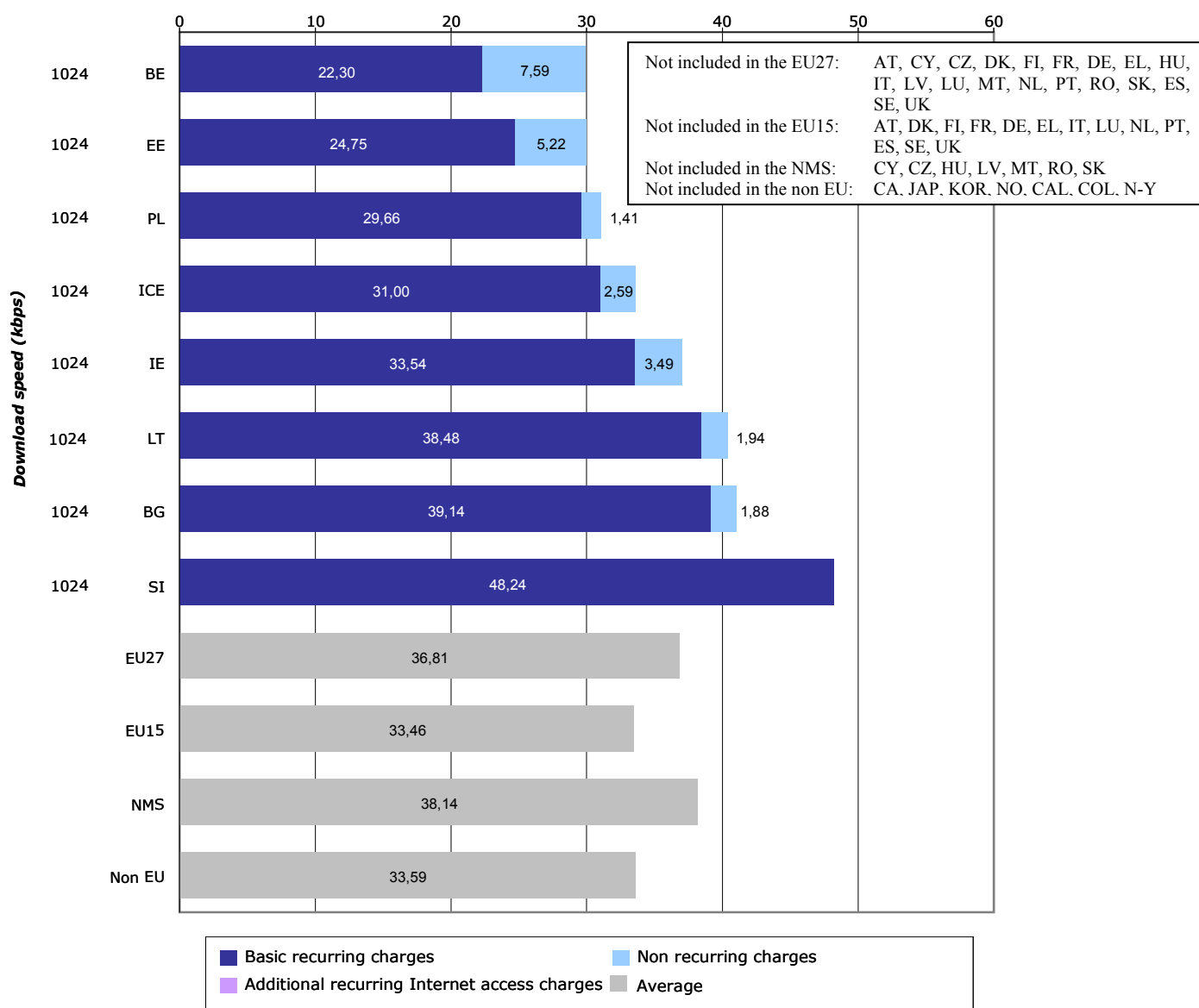
- For five countries an offer was available for this basket. For the following countries, no offer was available: *Austria, Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Korea, Luxembourg, Malta, The Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*
- The offer selected for *Japan* was limited to certain regions.
- The offer selected for *Lithuania* had a higher bit-rate speed for national downloads (10240 Kbps).
- There were no metered offers for this basket.
- The influence of non-recurring charges could be observed in the ranking of *Estonia*. No relationship could however be observed between the omission of non-recurring charges in *Lithuania* and its place in the overall ranking.

5.2.2 **BASKET "512KBPS-1024KBPS (INCL.)", IN €/PPP (VAT INCL.)**

5.2.2.a **LEAST EXPENSIVE OFFER**

From the selected ISPs, no offer was available in the following countries: *Austria, Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Japan, Korea, Latvia, Luxembourg, Malta, The Netherlands, Norway, Portugal, Romania, Slovakia, Spain, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*

Least expensive offer:
Bundle "Internet access+TV"
Basket "(512-1024 (incl.)", 1GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



5.2.2.b BASKET "512KBPS-1024KBPS (INCL.)", LIST OF SELECTED OFFERS

Comparison		April 2008	Basket "512-1024"	Bundle "Internet access+TV"											
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webspace (***)	Level of protection (*)	Television technology	Nb channels	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB				Euro	EUR/PPP
Belgium	Telenet	BasicNet DigiPack	Cable	-	1024	1	-	1	N.D.	0	AV+AS	digital	51	32,17	29,89
Bulgaria	Cable Tel	Double Play Home	Cable	12	1024	unlimited	unlimited	1	1	20	-	digital	90	17,63	41,02
Estonia	STV	Duo Mini (Internet, KTV Kodu)	Cable	-	1024	unlimited	unlimited	1	1	N.D.	-	analog	N.D.	21,28	29,97
Iceland	Siminn	Betri Leid - Godur (Good)	xDSL	6	1024	4	-	3	N.D.	50	AV+AS+ASW+FW	digital	60	37,19	33,59
Ireland	UPC Ireland	Broadband Value & TV Digital Value	Cable	12	1024	20	-	N.D.	15	300	-	digital	60	44,17	37,03
Lithuania	Balticum TV	Vilnius Pagrindinis	Cable	12	1024	unlimited	unlimited	1	N.D.	N.D.	-	analog	25	24,64	40,42
Poland	Vectra	Pakiet dla Rodziny Zloty	Cable	12	1024	unlimited	unlimited	N.D.	N.D.	200	-	analog	40	21,18	31,07
Slovenia	Telekom Slovenije	Paket Duo TV	xDSL	-	1024	unlimited	unlimited	4	2	10	AV+AS+FW	digital	100+	37,00	48,24
(*) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line															
(**) Duration = '-' indicates that 12 months was assumed															
(***) N.D. Indicates information is not provided by ISP															
ISPs in italic & bold are Incumbent operators															

Table 26: Detailed information on least expensive offer per country (512kbps-1024kbps (incl.)) ; "Internet + TV"

5.2.2.c Conclusions on bundle "Internet+TV" for "basket 512kbps-1024kbps (incl.)"

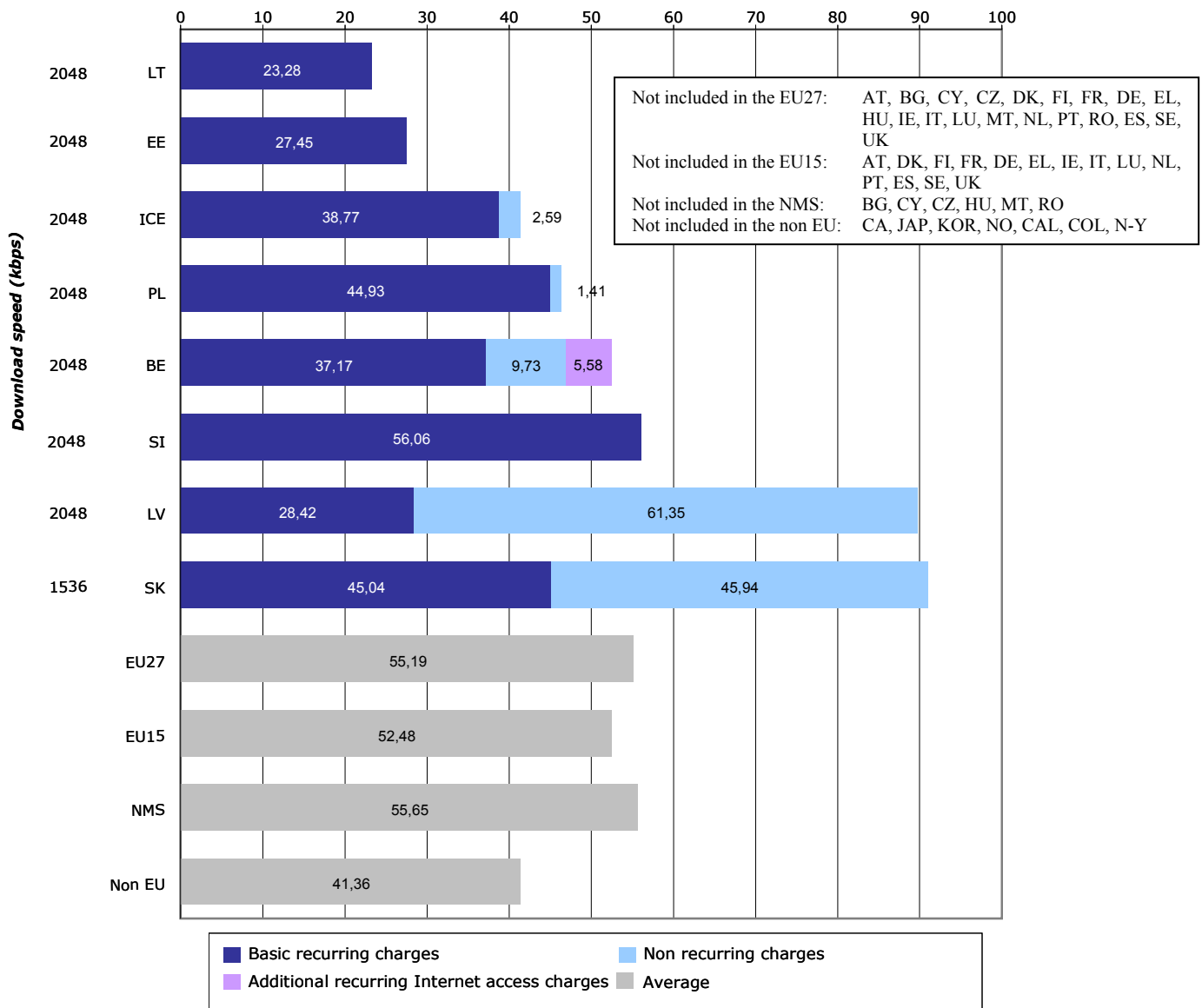
- For eight countries an offer was available for this basket. For the following countries, no offer was available: *Austria, Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Japan, Korea, Latvia, Luxembourg, Malta, The Netherlands, Norway, Portugal, Romania, Slovakia, Spain, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*
- From the ISPs in the following countries, only one offer was available for this basket: *Bulgaria, Estonia, Iceland and Slovenia.*
- The offer selected for *Bulgaria* was limited to certain regions.
- The offer selected for *Lithuania* had a higher bit-rate speed for national downloads (10240 Kbps).
- There were three metered Internet access offers for this basket (*Belgium, Iceland and Ireland*), of which none needed normalisation.
- No relationship could be observed between the omission of non-recurring charges in *Slovenia* and its place in the overall ranking.

5.2.3 **BASKET "1024KBPS-2048KBPS (INCL.)", IN €/PPP (VAT INCL.)**

5.2.3.a **LEAST EXPENSIVE OFFER**

In the following countries, no offer was available for this basket: *Austria, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Korea, Luxembourg, Malta, The Netherlands, Norway, Portugal, Romania, Spain, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*

Least expensive offer:
Bundle "Internet access+TV"
Basket "1024-2048 (incl.)", 1GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



5.2.3.b BASKET "1024KBPS-2048KBPS (INCL.)", LIST OF SELECTED OFFERS

Comparison	April 2008	Basket "1024-2048"	Bundle "Internet access+TV"												
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox	Adresses per mailbox (***)	Webspace (***)	Television technology	Nb channels	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps						MB			Euro	EUR/PPP
Belgium	Belgacom	ADSL Light + TV	xDSL	-	2048	1	-	1	5	50	AV+AS	digital	60	56,47	52,48
Estonia	STV	Duo Saturn Mini (Internet, KTV Kodu)	FTTH	-	2048	unlimited	unlimited	1	1	N.D.	-	digital	N.D.	19,49	27,45
Iceland	Siminn	Betri Leid - Betri (Better)	xDSL	6	2048	6	-	3	N.D.	50	V+AS+ASW+FW	digital	60	45,79	41,36
Latvia	IZZI	Cable C+ economy plus	Cable	24	2048	unlimited	unlimited	5	5	50	-	digital	13	62,76	89,76
Lithuania	kontinentu komunikacijos	Sky Silver + Penki TV TOD	FTTH	-	2048	unlimited	unlimited	3	N.D.	20	AV	digital	11	14,19	23,28
Poland	Vectra	Pakiet dla Aktywnych Polski	Cable	12	2048	unlimited	unlimited	N.D.	N.D.	200	-	analog	15	31,59	46,35
Slovakia	T-COM	Magio Start+internet	xDSL	12	1536	unlimited	unlimited	1	5	N.D.	-	digital	15	57,79	90,99
Slovenia	Telekom Slovenije	Paket Duo TV	xDSL	-	2048	unlimited	unlimited	4	2	10	AV+AS+FW	digital	100+	43,00	56,06

(*) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line
(**) Duration = '-' indicates that 12 months was assumed
(***) N.D. Indicates information is not provided by ISP
ISPs in italic & bold are Incumbent operators

Table 27: Detailed information on least expensive offer per country (1024kbps-2048kbps (incl.)) ; "Internet + TV"

5.2.3.c Conclusions on bundle "Internet+TV" for "basket 1024kbps-2048kbps (incl.)"

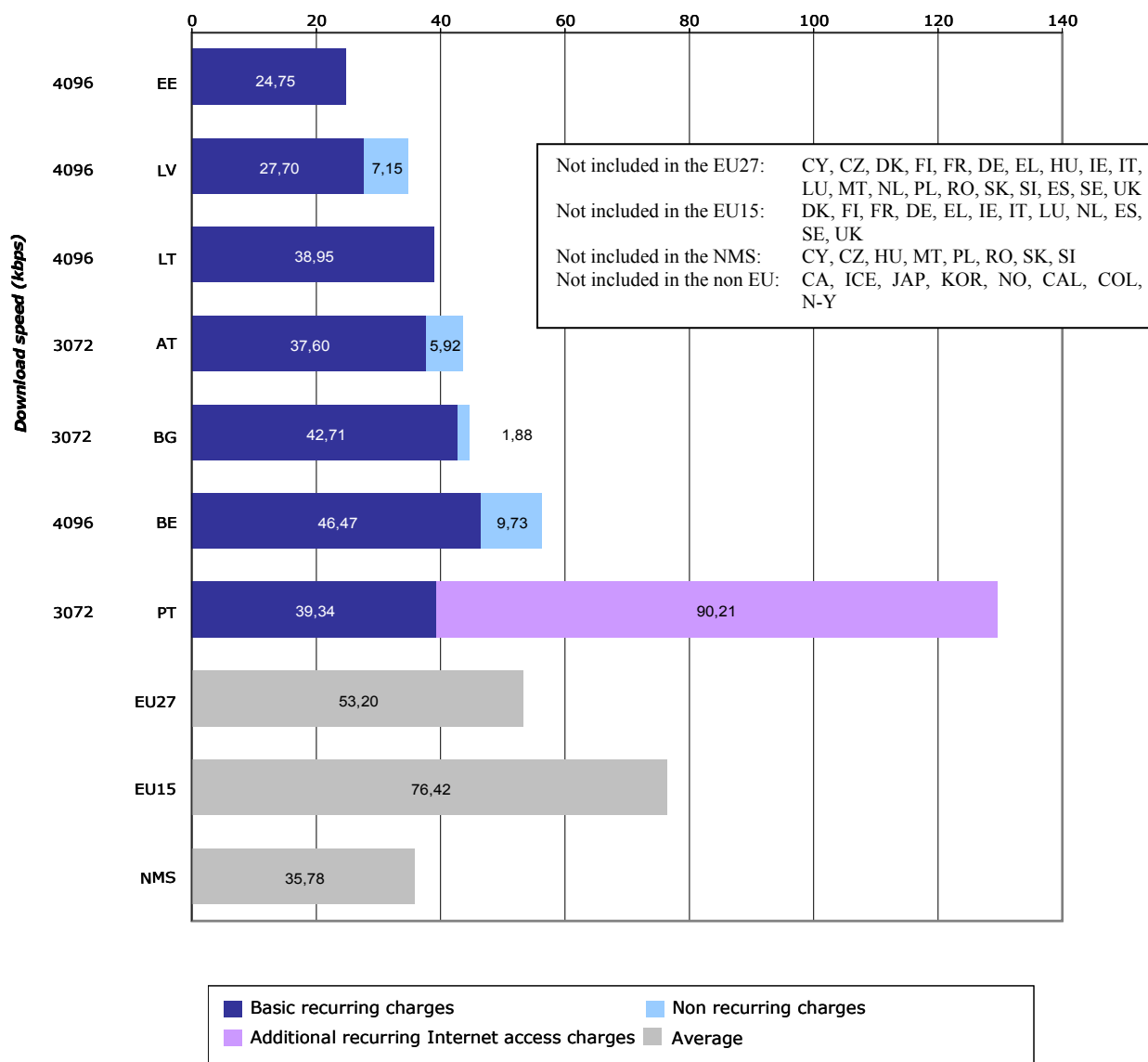
- For eight countries an offer was available for this basket. For the following countries, no offer was available: *Austria, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Korea, Luxembourg, Malta, The Netherlands, Norway, Portugal, Romania, Spain, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*
- From the ISPs in the following countries, only one offer was available for this basket: *Belgium, Iceland, Latvia and Slovenia.*
- The offer selected for *Lithuania* had a higher bit-rate speed for national downloads (10240 Kbps).
- There were two metered Internet access offers for this basket (*Belgium* and *Iceland*), of which the one for *Belgium* needed normalisation. Additional recurring Internet access charges did not have a major impact on its ranking.
- No relationship could be observed between the omission of non-recurring charges in *Estonia, Lithuania* and *Slovenia* and their place in the overall ranking. Non-recurring charges did however influence ranking for *Slovakia*.

5.2.4 BASKET "2048KBPS-4096KBPS (INCL.)", IN €/PPP (VAT INCL.)

5.2.4.a LEAST EXPENSIVE OFFER

No offer was available for this basket in the following countries: *Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Malta, The Netherlands, Norway, Poland, Romania, Slovakia, Slovenia, Spain, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*

Least expensive offer:
Bundle "Internet access+TV"
Basket "2048-4096 (incl.)", 10GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



5.2.4.b BASKET "2048KBPS-4096KBPS (INCL.)", LIST OF SELECTED OFFERS

Comparison		April 2008	Basket "2048-4096"	Bundle "Internet access+TV"											
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webspace (***)	Level of protection (*)	Television technology	Nb channels (***)	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB				Euro	EUR/PPP
Austria	UPC Austria	chello light + digital TV start	Cable	12	3072	unlimited	unlimited	3	15	10	AV+AS	digital	59	45,95	43,52
Belgium	Belgacom	ADSL Go + TV	xDSL	-	4096	12	-	4	5	50	AV+AS	digital	60	60,47	56,20
Bulgaria	Cable Tel	Double Play Home	Cable	12	3072	unlimited	unlimited	1	1	20	-	digital	90	19,17	44,59
Estonia	STV	Duo Saturn Kodu (Internet, KTV Kodu)	FTTH	-	4096	unlimited	unlimited	1	1	N.D.	-	digital	N.D.	17,58	24,75
Latvia	Livas Net	PRO + 72 channels	Cable	-	4096	unlimited	unlimited	3	N.D.	N.D.	-	analog/digital	72	24,36	34,84
Lithuania	Penkiu kontinentu komunikacijos centras	Sky Gold + Penki TV TOD	FTTH	-	4096	unlimited	unlimited	5	N.D.	40	AV	digital	11	23,75	38,95
Portugal	ZON	Light - Classico	Cable	12	3072	5	-	30	N.D.	30	-	digital	71	110,29	129,55
(*) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line															
(**) Duration = '-' indicates that 12 months was assumed															
(***) N.D. Indicates information is not provided by ISP															
ISPs in <i>italic & bold</i> are Incumbent operators															

Table 28: Detailed information on least expensive offer per country (2048kbps-4096kbps (incl.)) ; "Internet + TV"

5.2.4.c Conclusions on bundle "Internet+TV" for "basket 2048kbps-4096kbps (incl.)"

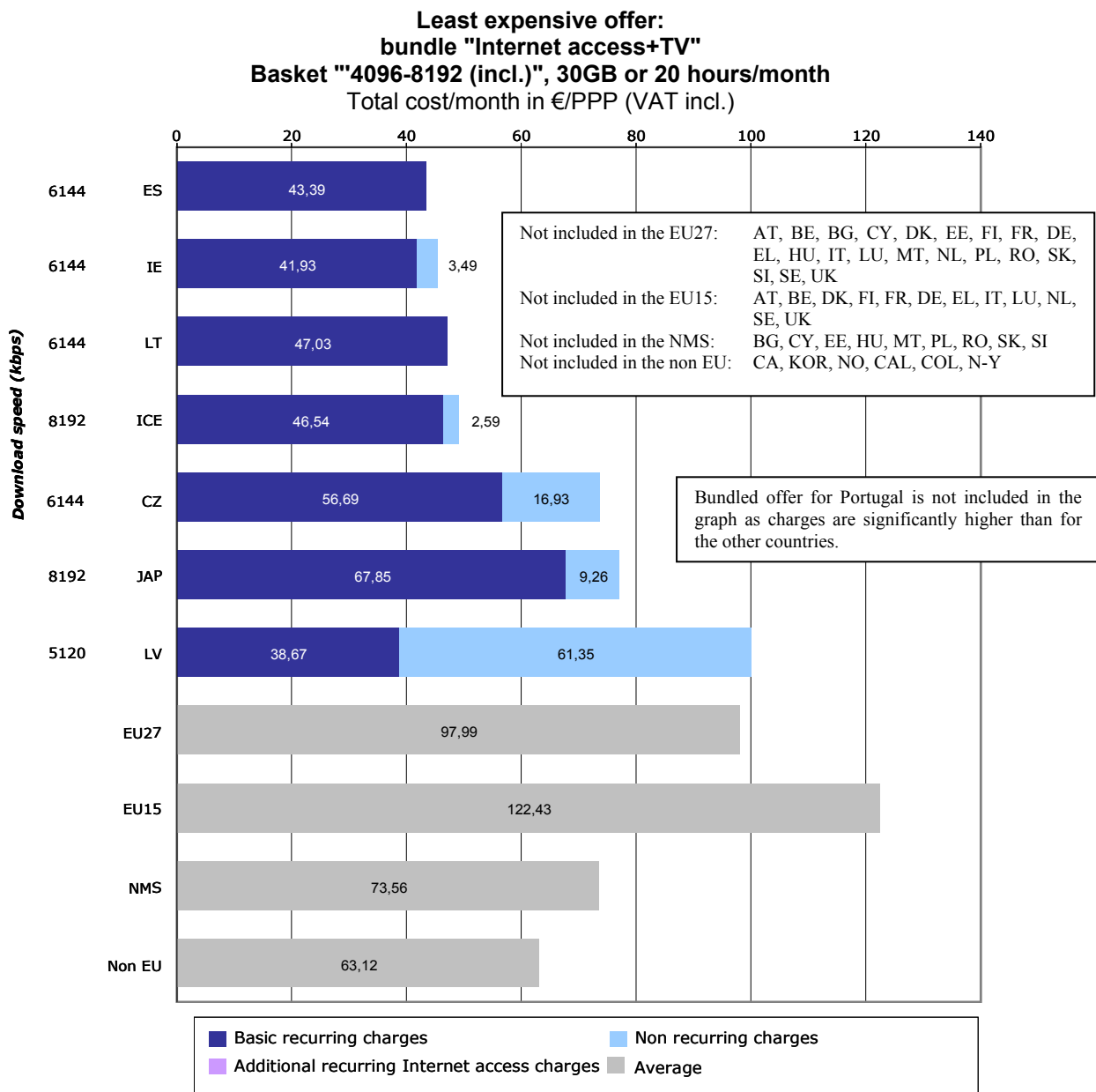
- In seven countries one or more ISPs had an offer corresponding to this basket. For the following countries, no offer was available: *Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Malta, The Netherlands, Norway, Poland, Romania, Slovakia, Slovenia, Spain, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*
- From the ISPs in the following countries, only one offer was available for this basket: *Austria, Bulgaria* and *Latvia*.
- The offer selected for *Bulgaria* is limited to certain regions.
- The offer selected for *Lithuania* has a higher bit-rate speed for national downloads (10240 Kbps).
- There were two metered Internet access offers for this basket (*Belgium* and *Portugal*), of which only *Portugal* needed normalisation. Additional recurring Internet access charges had a significant impact on its ranking.
- No relationship could be observed between the omission of non-recurring charges in *Estonia, Lithuania* and *Portugal* and their place in the overall ranking.

5.2.5 BASKET "4096KBPS-8192KBPS (INCL.)", IN €/PPP (VAT INCL.)

5.2.5.a LEAST EXPENSIVE OFFER

No offer corresponding to this basket were available from the ISPs of the following countries: *Austria, Belgium, Bulgaria, Canada, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Korea, Luxembourg, Malta, The Netherlands, Norway, Poland, Romania, Slovakia, Slovenia, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*

The offer for *Portugal* is not represented in the graph as the charge is significantly higher²⁵ (278.47 EUR/PPP) than for the other countries.



²⁵ The total charge for the Portuguese offer (278.47 EUR/PPP) is composed of 54.38 EUR/PPP basic recurring charges, 9.98 EUR/PPP non recurring charges and 214.11 EUR/PPP additional recurring Internet access charges.

5.2.5.b BASKET "4096KBPS-8192KBPS (INCL.)", LIST OF SELECTED OFFERS

Comparison		April 2008	Basket "4096-8192"	Bundle "Internet access+TV"											
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webspace (***)	Level of protection (*)	Television technology	Nb channels (***)	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB				Euro	EUR/PPP
Czech Republic	UPC Czech Republic	UPC Light+MINI (Starter)+HBO	Cable	12	6144	unlimited	unlimited	3	15	25	-	analog	16	51,85	73,62
Iceland	Siminn	Betri Leid - Bestur (Best)	xDSL	6	8192	unlimited	unlimited	5	N.D.	50	AV+AS+ASW+F	digital	60	54,39	49,13
Ireland	UPC Ireland	Broadband Express & TV Digital Value	Cable	12	6144	60	-	N.D.	15	300	-	IP-TV	60	54,17	45,42
Japan	Jupiter Telecommunications	J:COM NET 8+TVDigital Compact	Cable	-	8192	unlimited	unlimited	N.D.	N.D.	N.D.	-	digital	100	68,35	77,11
Latvia	IZZI	Cable D+ economy plus	FTTH	24	5120	unlimited	unlimited	5	5	50	-	digital	13	69,94	100,02
Lithuania	Penkiu kontinentu komunikacijos centras	Sky Platinum + Penki TV TOD	FTTH	-	6144	unlimited	unlimited	5	N.D.	60	AV	digital	11	28,67	47,03
Portugal	Cabovisão	Duplo 5Mb	Cable	-	5120	20	-	N.D.	N.D.	N.D.	AV+FW+BU	analog	46	237,06	278,47
Spain	Ono	Televisión Esencial + Banda Ancha 6	Cable	12	6144	unlimited	unlimited	N.D.	N.D.	N.D.	-	digital	49	40,00	43,39
(*) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line															
(**) Duration = '-' indicates that 12 months was assumed															
(***) N.D. Indicates information is not provided by ISP															
ISPs in <i>italic & bold</i> are Incumbent operators															

Table 29: Detailed information on least expensive offer per country (4096kbps-8192kbps (incl.)) ; "Internet + TV"

5.2.5.c Conclusions on bundle "Internet+TV" for "basket 4096kbps-8192kbps (incl.)"

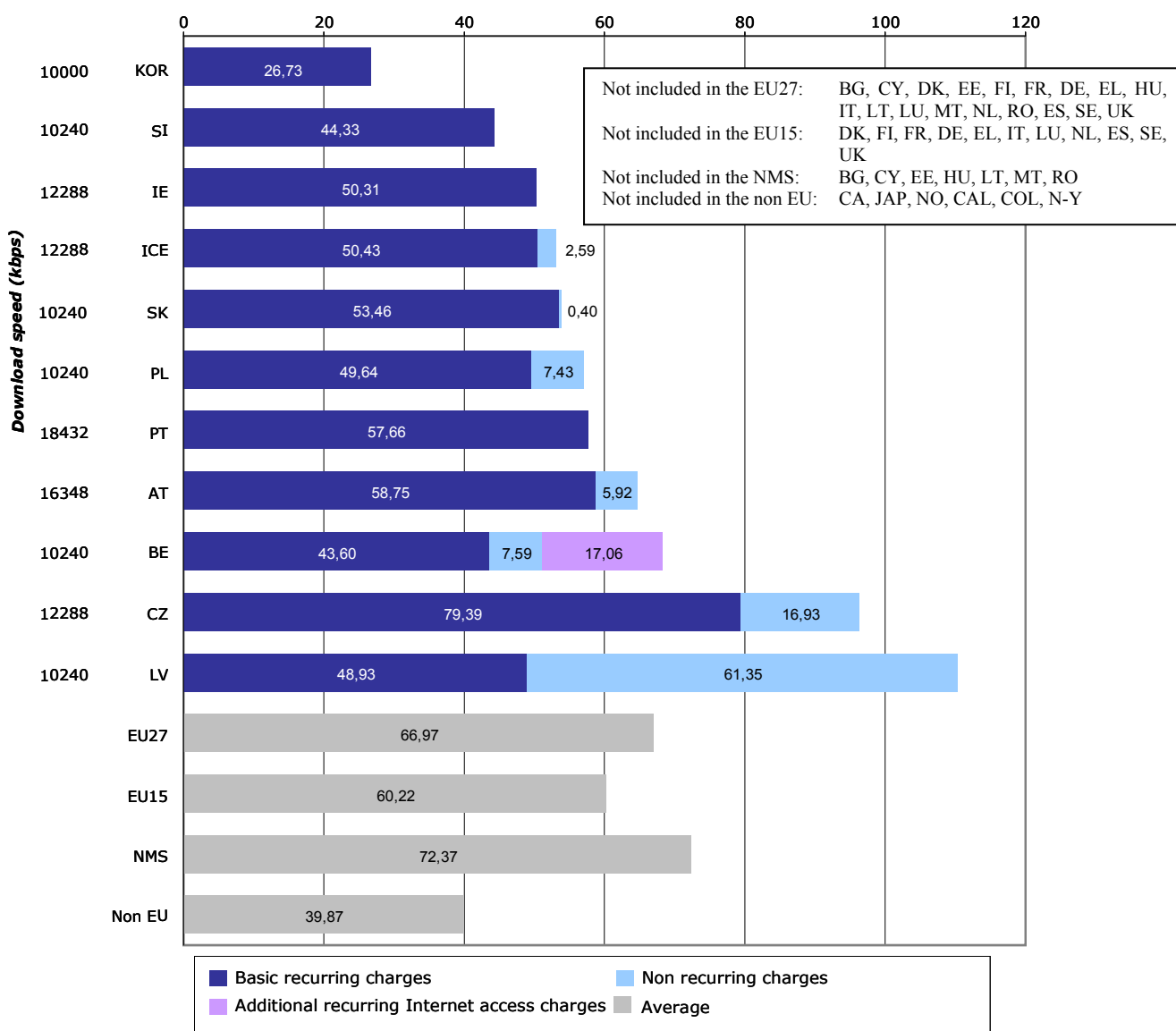
- In seven countries one or more ISPs had an offer corresponding to this basket. For the following countries, no offer was available: *Austria, Belgium, Bulgaria, Canada, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Korea, Luxembourg, Malta, The Netherlands, Norway, Poland, Romania, Slovakia, Slovenia, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*
- The offer for *Portugal* is not presented in the graph as the charge is significantly higher than that for the other countries: the total charge of 278.47 EUR/PPP is composed of 54.38 EUR/PPP basic recurring charges and 9.98 EUR/PPP non recurring charges and 214.11 EUR/PPP additional recurring Internet access charges.
- From the ISPs in the following countries, only one offer was available for this basket: *Austria, Bulgaria* and *Latvia*.
- The offer selected for *Japan* was limited to certain regions.
- The offer selected for *Lithuania* had a higher bit-rate speed for national downloads (10240 Kbps).
- No relationship could be observed between the omission of non-recurring charges in *Latvia, Lithuania* and *Spain* and their place in the overall ranking.

5.2.6 BASKET "8192KBPS-20MBPS (INCL.)", IN €/PPP (VAT INCL.)

5.2.6.a LEAST EXPENSIVE OFFER

No offer was available for this basket in the following countries: *Bulgaria, Canada, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Lithuania, Luxembourg, Malta, The Netherlands, Norway, Romania, Spain, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*

Least expensive offer:
Bundle "Internet access+TV"
Basket "'8192-20Mbps (incl.)", 30GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



5.2.6.b BASKET "8192KBPS-20MBPS (INCL.)", LIST OF SELECTED OFFERS

Comparison	April 2008	Basket "4096-20Mbps"	Bundle "Internet access+TV"												
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webspace (***)	Level of protection (*)	Television technology	Nb channels (***)	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB				Euro	EUR/PPP
Austria	UPC Austria	chello classic + digital TV start	Cable	12	16348	unlimited	unlimited	5	25	20	AV+AS	digital	59	68,28	64,67
Belgium	Telenet	ExpressNet DigiPack	Cable	-	10240	12	-	1	N.D.	50	AV+AS	digital	51	73,44	68,25
Czech Republic	UPC Czech Republic	UPC Classic+MINI (Starter) + HBO	Cable	12	12288	unlimited	unlimited	5	25	50	-	analog	16	67,83	96,32
Iceland	Siminn	Betri Leid - Langbestur (Unsurpassable)	xDSL	6	12288	unlimited	unlimited	5	N.D.	50	AV+AS+ASW+FW	digital	60	58,69	53,02
Ireland	UPC Ireland	Broadband Ultra & TV Digital Value	Cable	12	12288	unlimited	unlimited	N.D.	15	300	-	IP-TV	60	60,00	50,31
Korea	Korea Telecom	KT Wonder Pack (Megapass internet + Mega TV)	FTTH	36	10000	40	-	N.D.	N.D.	N.D.	-	digital	N.D.	20,41	26,73
Latvia	IZZI	Cable E+ economy plus	FTTH	24	10240	unlimited	unlimited	5	5	50	-	digital	13	77,11	110,28
Poland	UPC Polska	Pakiet pelny telewizji+internet turbo w mix pakiecie	Cable	12	10240	unlimited	unlimited	3	N.D.	25	-	digital	15	38,90	57,07
Portugal	ZON	Plus - Classico	Cable	12	18432	30	-	30	N.D.	30	-	digital	71	49,09	57,66
Slovakia	UPC Slovakia	Chello Medium+UPC Digital Basic	Cable	12	10240	unlimited	unlimited	3	5	25	AV+AS	digital	66	34,21	53,86
Slovenia	Amis	paket Dvojka TV90	xDSL	-	10240	unlimited	unlimited	6	6	50	AV+AS+ASV+PC	digital	90	34,00	44,33
(*) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line															
(**) Duration = '-' indicates that 12 months was assumed															
(***) N.D. Indicates information is not provided by ISP															
ISPs in italic & bold are Incumbent operators															

Table 30: Detailed information on least expensive offer per country (8192kbps-20Mbps (incl.) ; "Internet + TV"

5.2.6.c Conclusions on bundle "Internet+TV" for "basket 8192kbps-20Mbps (incl.)"

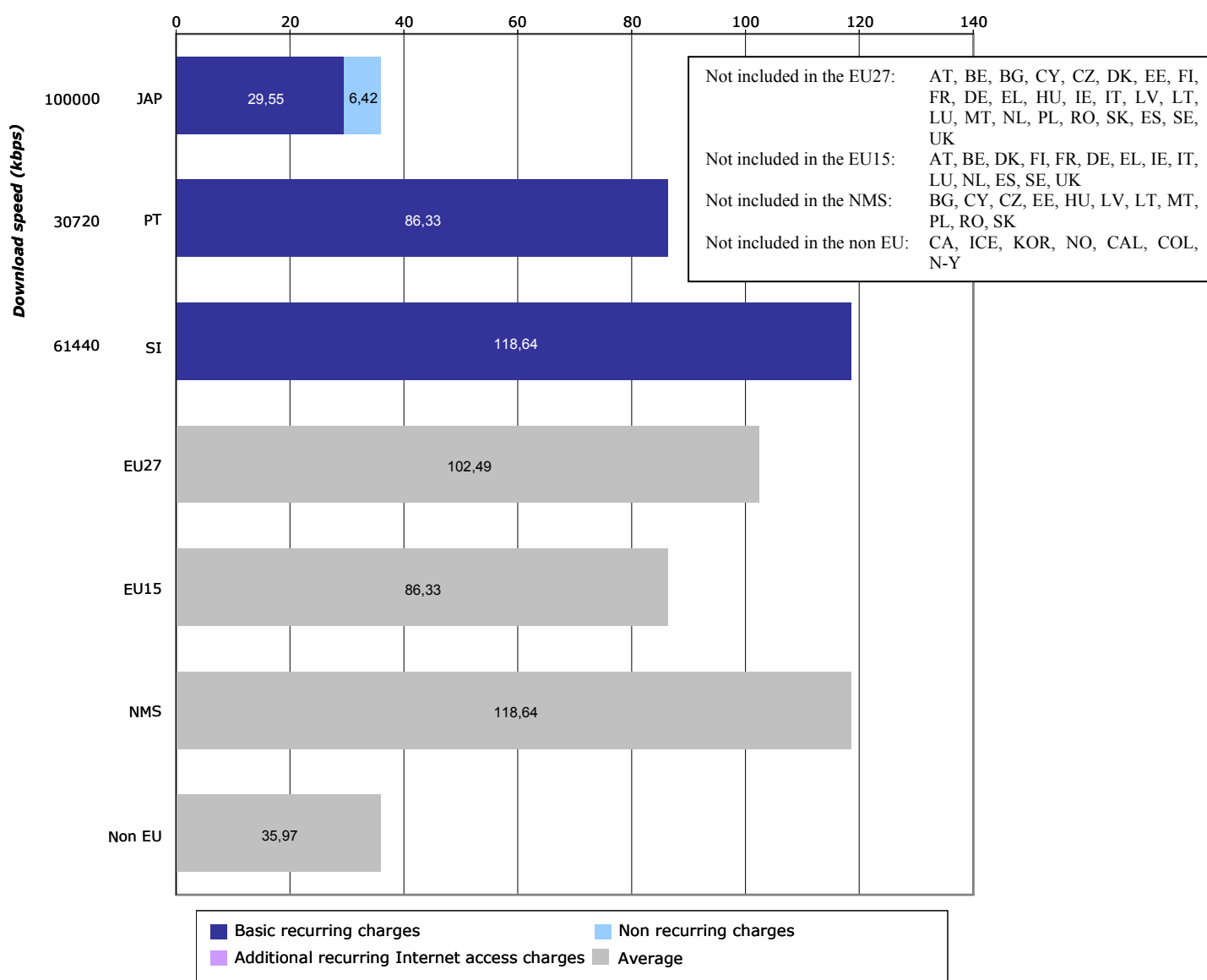
- For ten countries an offer was available for this basket. For the following countries, no offer was available: *Bulgaria, Canada, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Lithuania, Luxembourg, Malta, The Netherlands, Norway, Romania, Spain, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*
- From the ISPs in the following countries, only one offer was available for this basket: *Iceland, Latvia and Poland.*
- There were three metered *Internet* access offers for this basket (*Belgium, Korea and Portugal*), of which the Belgian offer needed normalisation. Additional recurring *Internet* access charges had some impact on its ranking.
- No relationship could be observed between the omission of non-recurring charges in *Korea, Portugal and Slovenia* and their place in the overall ranking. Non-recurring charges had a significant impact on the price level of the Slovakian offer, consequently of which it is not represented in the graph.

5.2.7 **BASKET "20+Mbps", IN €/PPP (VAT INCL.)**

5.2.7.a **LEAST EXPENSIVE OFFER**

There were no offers in the sample for the following countries: *Austria, Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Korea, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Norway, Poland, Romania, Slovakia, Spain, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*

Least expensive offer:
Bundle "Internet access+TV"
Basket "20+Mbps", 30GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



5.2.7.b BASKET "20+Mbps", LIST OF SELECTED OFFERS

Comparison	April 2008	Basket "20+Mbps"	Bundle "Internet access+TV"												
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webspace (***)	Level of protection (*)	Television technology	Nb channels	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB				Euro	EUR/PPP
Japan	YAHOO JAPAN	BB HIKARIPACKAGE MANSION	FTTH	-	100000	unlimited	unlimited	10	N.D.	300	-	digital	N.D.	31,89	35,97
Portugal	ZON	Max - Classico	Cable	12	30720	60	-	30	N.D.	30	-	digital	71	73,49	86,33
Slovenia	<i>Telekom Slovenije</i>	Paket Duo TV	xDSL	-	61440	unlimited	unlimited	4	2	10	AV+AS+FW	digital	100+	91,00	118,64
(*) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line															
(**) Duration = '-' indicates that 12 months was assumed															
(***) N.D. Indicates information is not provided by ISP															
<i>ISPs in italic & bold</i> are Incumbent operators															

Table 31: Detailed information on least expensive offer per country (20+Mbps) ; "Internet + TV"

5.2.7.c Conclusions on bundle "Internet+TV" for "basket 20+Mbps"

- For three countries an offer corresponded to this basket. For the following countries, no offer was available: *Austria, Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Korea, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Norway, Poland, Romania, Slovakia, Spain, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*
- For all countries, more than one offer was available for this basket.
- There was one metered *Internet* access offer for this basket (*Portugal*), which did not need normalisation.
- No relationship could be observed between the omission of non-recurring charges in *Portugal* and *Slovenia*, and their place in the overall ranking.

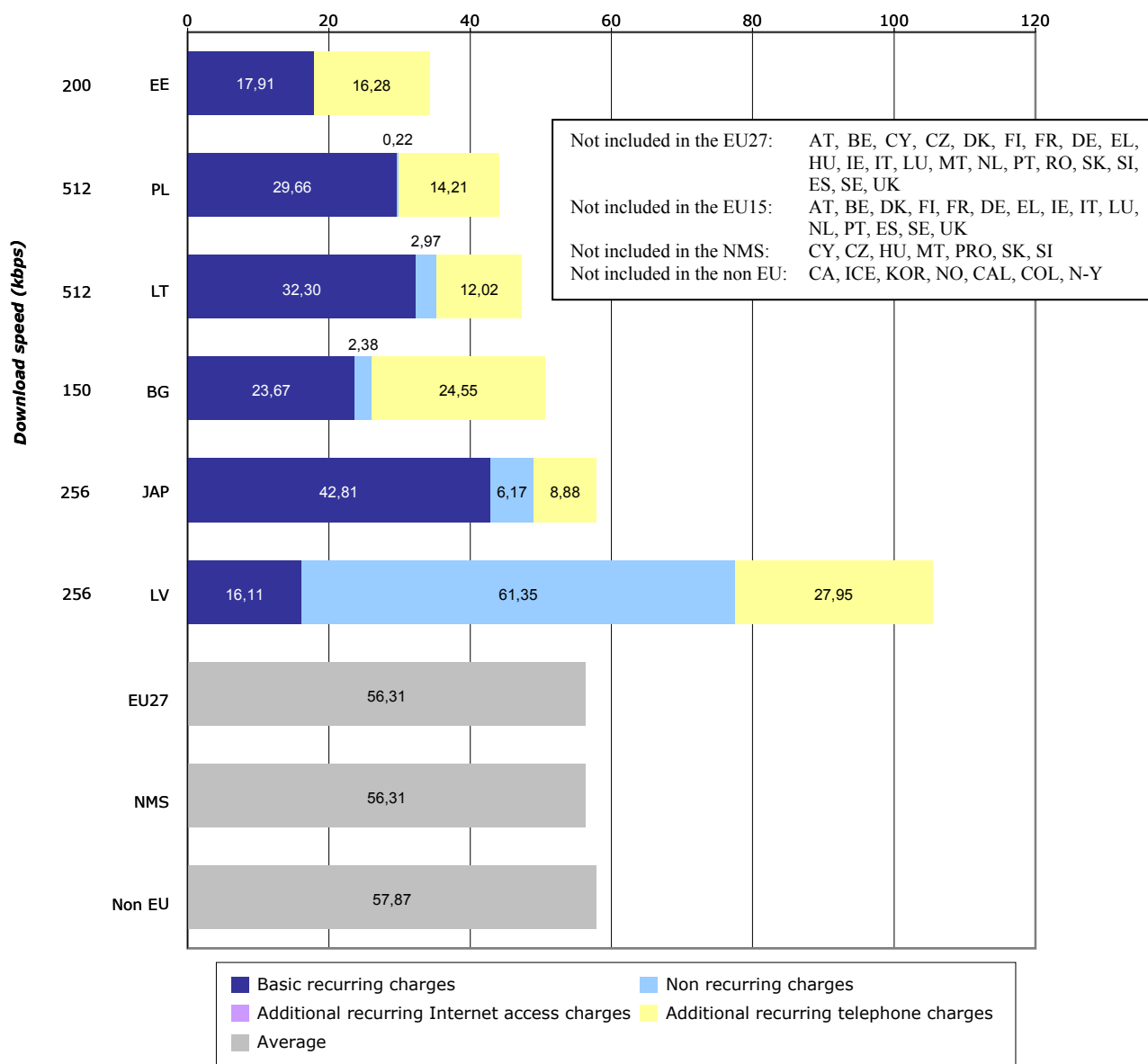
5.3. LEAST EXPENSIVE OFFER PER COUNTRY AND PER BASKET FOR BUNDLES INCLUDING INTERNET ACCESS, FIXED TELEPHONE AND TELEVISION SERVICE

5.3.1 BASKET "144KBPS-512KBPS (INCL.)", IN €/PPP (VAT INCL.)

5.3.1.a LEAST EXPENSIVE OFFER

In the following countries, no offer was available from the ISPs selected: *Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Korea, Luxembourg, Malta, The Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*

Least expensive offer:
Bundle "Internet access+Tel+TV"
Basket "'144-512 (incl.)", 1GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



5.3.1.b BASKET "144KBPS-512KBPS (INCL.)", LIST OF SELECTED OFFERS

Comparison		April 2008	Basket "144-512"	Bundle "Internet access+Tel+TV"																
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webpace (***)	Level of protection (*)	Telephone technology	Unlimited nights and weekends	Minutes to fixed line included	Minutes to mobile included	Option for mobile	Television technology	Nb channels (***)	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB									Euro	EUR/PPP
Bulgaria	Net Is Sat	Home	FTTH	-	150	unlimited	unlimited	N.D.	N.D.	N.D.	-	VoIP	yes	235	7	no	digital	30	21.75	50.61
Estonia	Starman	Mikro kolmikpakett	Cable	-	200	unlimited	unlimited	1	1	N.D.	-	VoIP	no	0	0	no	digital	77	24.28	34.18
Japan	Jupiter Telecommunications	J.COM LITE NET + phone + TVDigital	Cable	-	256	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	no	0	0	yes	digital	100	51.29	57.87
Latvia	IZZI	Cable A+ economy plus	Cable	24	256	unlimited	unlimited	5	5	50	-	switched	no	0	0	yes	digital	13	73.70	105.41
Lithuania	Teo	bazinis Plius	FTTH	24	512	unlimited	unlimited	1	N.D.	N.D.	-	switched	no	0	0	no	digital	30	28.83	47.29
Poland	TP	Multipakiet 512	xDSL	24	512	unlimited	unlimited	N.D.	unlimited	20	-	VoIP	no	0	0	no	digital	35	30.05	44.09
(*) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line																				
(**) Duration = '-' indicates that 12 months was assumed																				
(***) N.D. Indicates information is not provided by ISP																				
ISPs in <i>italic & bold</i> are Incumbent operators																				

Table 32: Detailed information on least expensive offer per country (144kbps-512kbps (incl.)) ; "Internet + Tel + TV"

5.3.1.c CONCLUSIONS ON BUNDLE "INTERNET+TEL+TV" FOR "BASKET 144KBPS-512KBPS (incl.)"

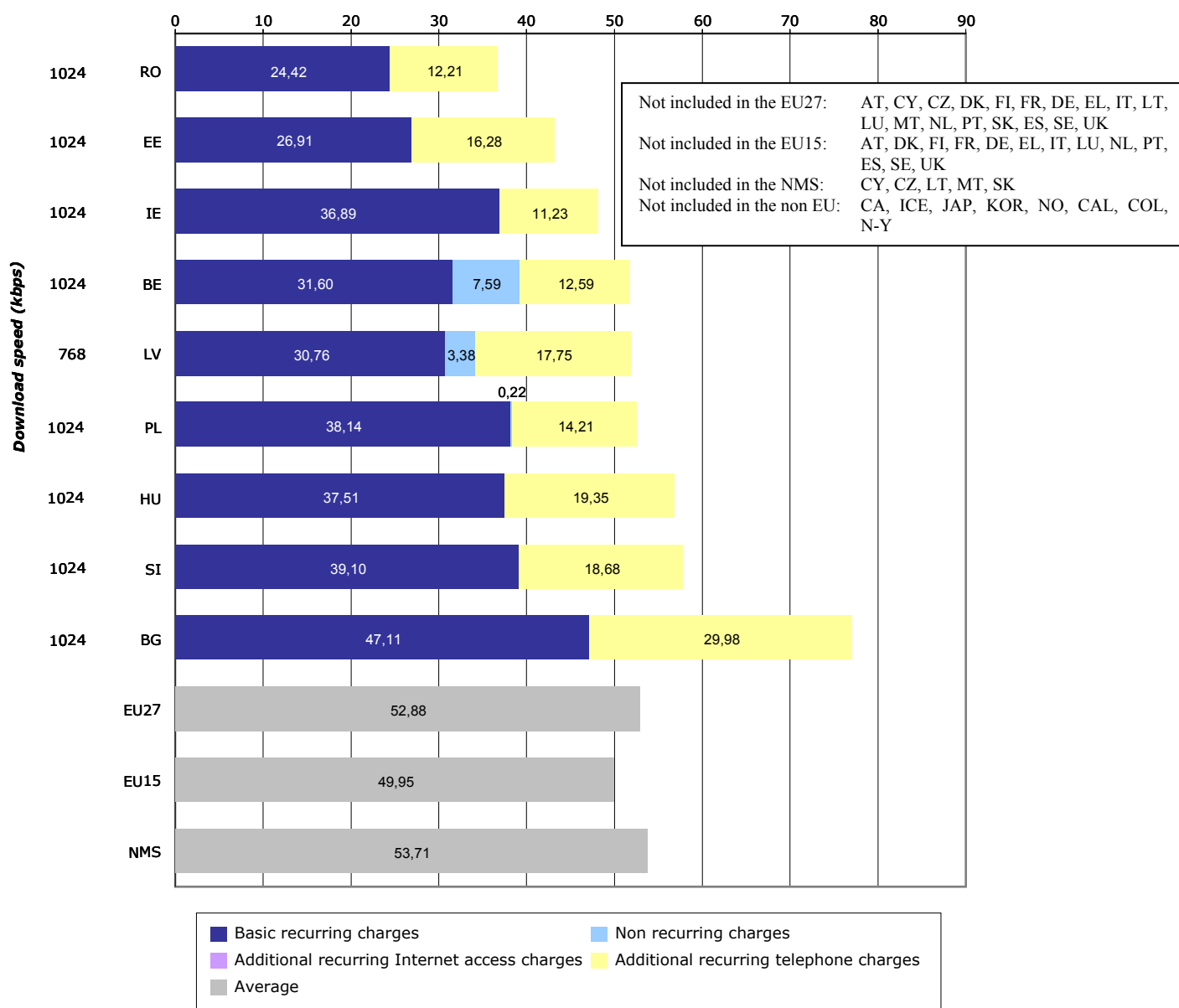
- In six countries, at least one offer was available for this basket. For the following countries, no offer was available: *Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Korea, Luxembourg, Malta, The Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*
- From the ISPs in *Lithuania*, only one offer was available for this basket.
- The offer selected for *Bulgaria* and for *Japan* was limited to certain regions.
- The offer selected for *Bulgaria* and for *Lithuania* has a higher bit-rate speed for national downloads (375 Kbps and 1024 Kbps respectively).
- There were no metered offers for this basket.
- No relationship could be observed between the omission of non-recurring charges in *Estonia* and its place in the overall ranking.
- All offers needed normalisation of telephone charges, and additional recurring telephone charges had a determining influence on the ranking.

5.3.2 **BASKET "512KBPS-1024KBPS (INCL.)", IN €/PPP (VAT INCL.)**

5.3.2.a **LEAST EXPENSIVE OFFER**

For the following countries, no offer of the selected ISPs was available in this basket: *Austria, Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Italy, Japan, Korea, Lithuania, Luxembourg, Malta, The Netherlands, Norway, Portugal, Slovakia, Spain, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*

Least expensive offer:
Bundle "Internet access+Tel+TV"
Basket "'512-1024 (incl.)", 1GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



5.3.2.b BASKET "512KBPS-1024KBPS (INCL.)", LIST OF SELECTED OFFERS

Comparison		April 2008	Basket "512-1024"	Bundle "Internet access+Tel+TV"																
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webspace (***)	Level of protection (*)	Telephone technology	Unlimited nights and weekends	Minutes to fixed line included	Minutes to mobile included	Option for mobile	Television technology	Nb channels (***)	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB									Euro	EUR/PPP
Belgium	Telenet	Basic DigiPack	Cable	-	1024	1	-	1	N.D.	0	AV+AS	switched	no	0	0	yes	digital	51	55,72	51,78
Bulgaria	Eurocom	Triple Offer 1 Mbps	Cable	12	1024	unlimited	unlimited	1	1	N.D.	-	switched	yes	575	0	no	digital	73	33,13	77,09
Estonia	Starman	Mini kolmikpakett	Cable	-	1024	unlimited	unlimited	1	1	N.D.	-	VoIP	no	0	0	no	digital	77	30,67	43,18
Hungary	T-Online	T-Home Tripla Koktél Light	xDSL	12	1024	1	-	1	1	10	-	switched	yes	0	0	no	digital	5	36,77	56,86
Ireland	UPC Ireland	Starter pack (TV Digital value, Broadband value, phone service)	Cable	12	1024	20	-	N.D.	15	300	-	VoIP	no	0	0	no	digital	60	57,39	48,12
Latvia	Baltkom TV	TRIO social+	Cable	24	768	unlimited	unlimited	3	N.D.	20	-	switched	no	0	0	no	analog/digital	100	36,28	51,88
Poland	TP	Multipakiet 1024	xDSL	24	1024	unlimited	unlimited	N.D.	unlimited	50	-	VoIP	no	0	0	no	digital	35	35,84	52,57
Romania	UPC Romania	UPC 3Play Small	Cable	12	1024	unlimited	unlimited	1	1	0	-	switched	no	0	0	no	digital	60	20,40	36,63
Slovenia	Telekom Slovenije	Paket Duo + Kabelska TV	xDSL	-	1024	unlimited	unlimited	4	2	10	AV+AS+FW	switched	no	0	0	no	digital	100+	44,32	57,78
(**) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line																				
(***) Duration = '-' indicates that 12 months was assumed																				
(***) N.D. Indicates information is not provided by ISP																				
ISPs in <i>italic & bold</i> are incumbent operators																				

Table 33: Detailed information on least expensive offer per country (512kbps-1024kbps (incl.)) ; "Internet + Tel + TV"

5.3.2.c CONCLUSIONS ON BUNDLE "INTERNET+TEL+TV" FOR "BASKET 512KBPS-1024KBPS (incl.)"

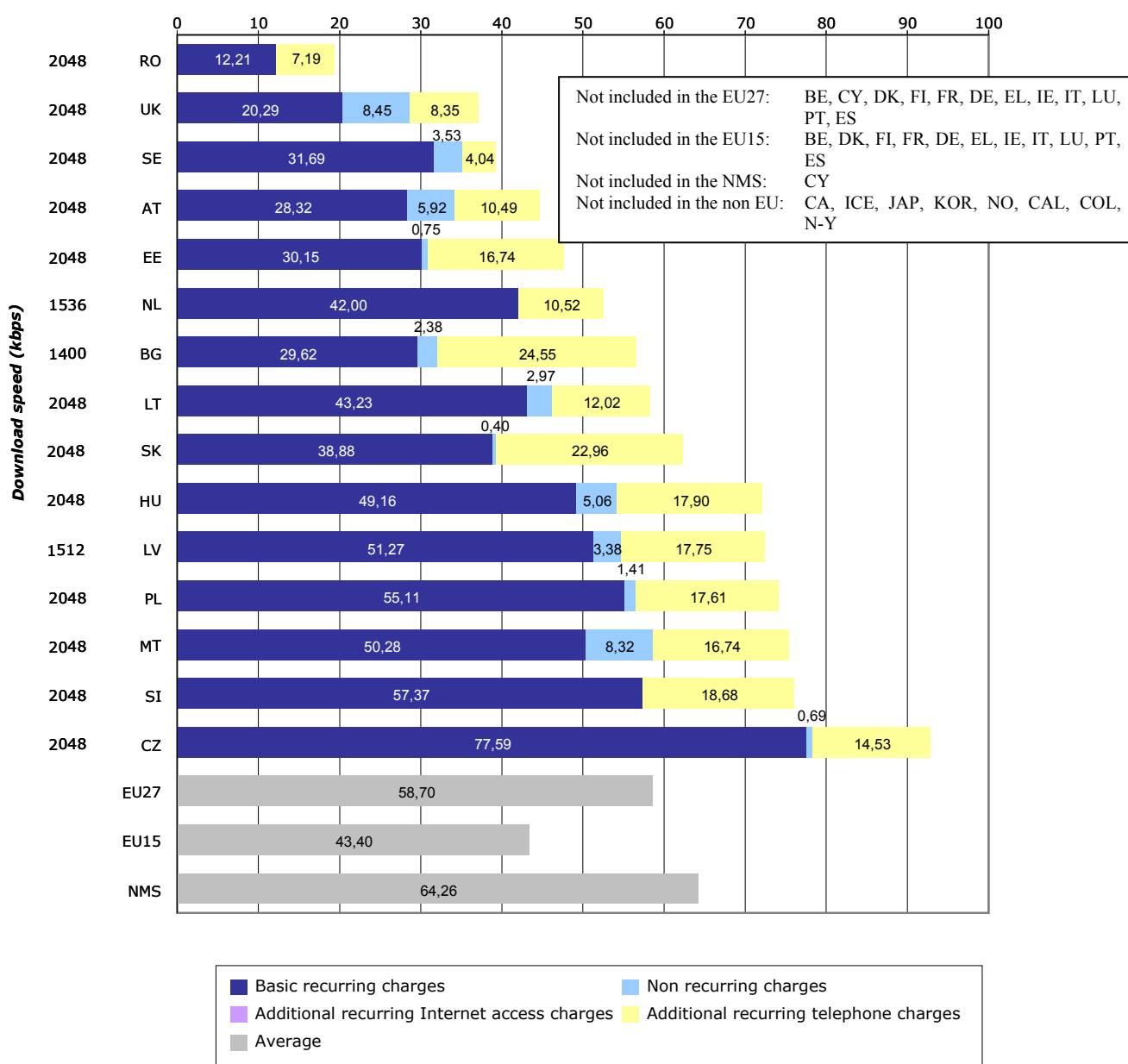
- In nine countries, at least one offer was available for this basket. For the following countries, no offer was available: *Austria, Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Italy, Japan, Korea, Lithuania, Luxembourg, Malta, The Netherlands, Norway, Portugal, Slovakia, Spain, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*
- From the ISPs in the following countries, only one offer was available for this basket: *Belgium, Ireland and Romania.*
- There were three metered *Internet* access offers for this basket, of which none needed normalisation.
- No relationship could be observed between the omission of non-recurring charges in *Belgium, Latvia* and *Poland* and their place in the overall ranking.
- All offers needed normalisation of telephone charges. Additional recurring telephone charges had however very little influence on the overall ranking.

5.3.3 **BASKET "1024KBPS-2048KBPS (INCL.)", IN €/PPP (VAT INCL.)**

5.3.3.a **LEAST EXPENSIVE OFFER**

No offer corresponding to this basket was available in the following countries: *Belgium, Canada, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Norway, Portugal, Spain, State of California, State of Colorado and State of New York.*

Least expensive offer:
Bundle "Internet access+Tel+TV"
Basket "'1024-2048 (incl.)", 1GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



5.3.3.b BASKET "1024KBPS-2048KBPS (INCL.)", LIST OF SELECTED OFFERS

Comparison	April 2008	Basket "1024-2048"	Bundle "Internet access+Tel+TV"																	
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webspace (***)	Level of protection (*)	Telephone technology	Unlimited nights and weekends	Minutes to fixed line included	Minutes to mobile included	Option for mobile	Television technology	Nb channels (***)	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB									Euro	EUR/PPP
Austria	UPC Austria	chello easy and phone start	Cable	12	2048	unlimited	unlimited	3	15	10	AV+AS	VoIP	no	0	0	no	digital	59	47,23	44,72
Bulgaria	Net Is Sat	Home	FTTH	-	1400	unlimited	unlimited	N.D.	N.D.	N.D.	-	VoIP	yes	235	7	no	digital	30	24,31	56,55
Czech Republic	Telefonica O2 Czech Republic	O2 Trio (ADSL 2048,Zabava,Volam)	xDSL	12	2048	unlimited	unlimited	5	N.D.	30	-	switched	no	800	0	no	digital	24	65,36	92,81
Estonia	STV	Trio Saturn Mini (Internet, KTV Kodu, Telefon Basic)	FTTH	-	2048	unlimited	unlimited	1	1	N.D.	-	VoIP	no	0	0	no	digital	23	33,83	47,64
Hungary	UPC Hungary	Csomagok bronze	Cable	12	2048	unlimited	unlimited	1	1	10	-	VoIP	no	0	0	no	analog	14	46,65	72,13
Latvia	Baltkom TV	TRIO start +	Cable	24	1512	unlimited	unlimited	3	N.D.	20	-	switched	no	0	0	no	analog/digital	160	50,62	72,40
Lithuania	Teo	Optimalus Plius	FTTH	24	2048	unlimited	unlimited	2	N.D.	N.D.	-	switched	no	0	0	no	digital	30	35,49	58,22
Malta	Onvol	Onvol lite internet me3	Cable	15	2048	20	-	3	N.D.	N.D.	AV	switched	no	100	0	yes	digital	55	52,44	75,34
The Netherlands	KPN Netherlands	Internet, bellen en tv GO	xDSL	12	1536	unlimited	unlimited	4	5	50	-	VoIP	yes	0	0	no	digital	23	56,15	52,53
Poland	Vectra	Pakiet dla Aktywnych Polski Umiarkowany	Cable	12	2048	unlimited	unlimited	N.D.	N.D.	200	-	switched	no	100	0	no	analog	15	50,54	74,14
Romania	RCS & RDS	Cable Link+	Cable	12	2048	unlimited	unlimited	2	N.D.	N.D.	-	switched	no	550	0	no	analog	N.D.	10,81	19,40
Slovakia	UPC Slovakia	UPC Triple play digital 1(Small/freetime/entry)	Cable	12	2048	unlimited	unlimited	1	5	25	AV+AS	VoIP	yes	0	0	no	digital	15	39,53	62,24
Slovenia	Telekom Slovenije	Paket Trio	xDSL	-	2048	unlimited	unlimited	4	2	10	AV+AS+FW	switched	no	0	0	no	digital	100+	58,33	76,05
Sweden	TeliaSonera	Alt i ett paket upp till 2Mbit	xDSL	18	2048	unlimited	unlimited	1	5	N.D.	AV+FW	switched	no	0	0	no	digital	8	46,09	39,26
The UK	BSkyB	Starter	xDSL	12	2048	unlimited	unlimited	10	N.D.	N.D.	-	VoIP	yes	0	0	no	digital	20	36,83	37,10
(*) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker, BU = Back-up on-line																				
(**) Duration = '-' indicates that 12 months was assumed																				
(***) N.D. Indicates information is not provided by ISP																				
ISPs in <i>italic & bold</i> are Incumbent operators																				

(*) AV = antivirus, AS = antispyware, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager, PU = Pop-Up Blocker; BU = Back-up on-line
 (**) Duration = '-' indicates that 12 months was assumed
 (***) N.D. Indicates information is not provided by ISP
 ISPs in *italic & bold* are Incumbent operators

Table 34: Detailed information on least expensive offer per country (1024kbps-2048kbps (incl.)) ; "Internet + Tel + TV"

5.3.3.c CONCLUSIONS ON BUNDLE "INTERNET+TEL+TV" FOR "BASKET 1024KBPS-2048KBPS (incl.)"

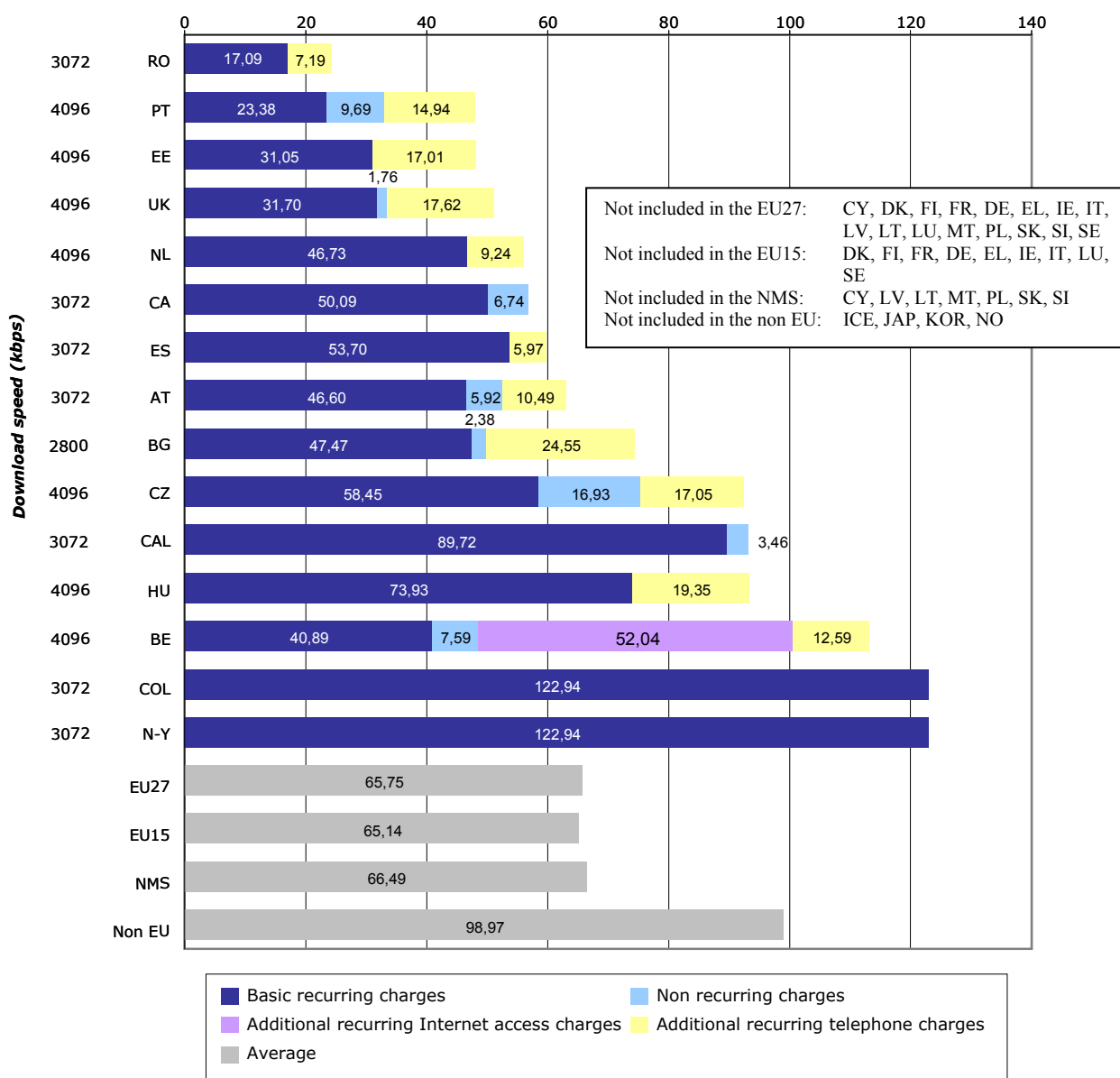
- In fifteen countries, at least one offer was available for this basket. For the following countries, no offer was available: *Belgium, Canada, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Norway, Portugal, Spain, State of California, State of Colorado and State of New York.*
- From the ISPs in the following countries, only one offer was available for this basket: *Czech Republic, Estonia, Hungary, Lithuania, The Netherlands, Romania, Slovenia and Sweden.*
- The offer selected for *Bulgaria* was limited to certain regions.
- The offer selected for *Bulgaria* and for *Lithuania* had a higher bit-rate speeds for national downloads (1500 Kbps and 4096 Kbps respectively).
- There was one metered offers for this basket (*Malta*), which did not require normalisation.
- No relationship could be observed between the omission of non-recurring charges in *The Netherlands, Romania and Slovenia* and their place in the overall ranking. Non-recurring charges had a significant impact on the ranking of *Slovakia*.
- All offers needed normalisation of telephone charges, though additional recurring telephone charges had little influence on the ranking.

5.3.4 BASKET "2048KBPS-4096KBPS (INCL.)", IN €/PPP (VAT INCL.)

5.3.4.a LEAST EXPENSIVE OFFER

No offer for this basket was available from selected ISPs in the following countries: *Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Malta, Norway, Poland, Slovakia, Slovenia and Sweden.*

Least expensive offer:
Bundle "Internet access+Tel+TV"
Basket "'2048-4096 (incl.)", 10GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



5.3.4.b BASKET "2048KBPS-4096KBPS (INCL.)", LIST OF SELECTED OFFERS

Comparison	April 2008	Basket "2048-4096"	Bundle "Internet access+Tel+TV"																	
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webspace (***)	Level of protection (*)	Telephone technology	Unlimited nights and weekends	Minutes to fixed line included	Minutes to mobile included	Option for mobile	Television technology	Nb channels	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB									Euro	EUR/PPP
Austria	UPC Austria	chello fun and phone + digital TV start	Cable	12	3072	unlimited	unlimited	3	15	10	AV+AS	0	no	0	0	no	digital	59	66.53	63.00
Belgium	Telenet	Comfort DigiPack	Cable	-	4096	2	-	1	N.D.	0	AV+AS	switched	no	0	0	yes	digital	51	121.72	113.12
Bulgaria	Net Is Sat	Home	FTTH	-	2800	unlimited	unlimited	N.D.	N.D.	N.D.	-	VoIP	yes	235	7	no	digital	30	31.98	74.40
Canada	Telus	Telus home bundle 1 + tv	xDSL	-	3072	60	-	5	N.D.	100	AV+AS+FW	VoIP	no	100	100	no	digital	47	68.06	56.84
Czech Republic	UPC Czech Republic	UPC Easy+Freetime+ MINI	Cable	12	4096	unlimited	unlimited	1	5	20	-	VoIP	yes	0	0	no	analog	9	65.10	92.43
Estonia	Elion	Korrumaja lahendus digiTV 2	Cable	-	4096	unlimited	unlimited	1	1	N.D.	-	VoIP	yes	0	0	no	digital	40	34.13	48.06
Hungary	T-Online	T-Home Tripla Kóktél Prémium	xDSL	12	4096	unlimited	unlimited	5	1	50	-	switched	yes	0	0	no	digital	5	60.33	93.27
The Netherlands	Essent @home	@home alles in één pakket	xDSL	-	4096	unlimited	unlimited	5	N.D.	N.D.	AV+AS	switched	no	0	0	no	digital	30	59.83	55.97
Portugal	Novis	4 Mb	xDSL	-	4096	12	-	100	N.D.	100	-	VoIP	no	0	0	no	digital	25	40.87	48.01
Romania	RCS & RDS	Cable Link+	Cable	12	3072	unlimited	unlimited	2	N.D.	N.D.	-	switched	no	1100	0	no	analog	N.D.	13.53	24.28
Spain	Ono	Teléfono Todo Incluido + Televisión Esencial + Banda Ancha 3	Cable	12	3072	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	yes	unlimited	0	yes	digital	49	55.00	59.67
State of California	AT&T	Triple Pack	Cable	-	3072	unlimited	unlimited	11	N.D.	N.D.	-	switched	yes	unlimited	unlimited	no	digital	100	71.29	93.18
State of Colorado	AT&T	Quad Pack	Cable	12	3072	unlimited	unlimited	11	N.D.	150	AV+AS+ASW	switched	no	unlimited	450	no	digital	100	94.06	122.94
State of New York	AT&T	Quad Pack	Cable	12	3072	unlimited	unlimited	11	N.D.	150	AV+AS+ASW	switched	no	unlimited	450	no	digital	100	94.06	122.94
The UK	Virgin Media	Size: L	Cable	18	4096	unlimited	unlimited	15	N.D.	20	-	switched	yes	0	0	no	digital	90	50.72	51.09
(*) AV = antivirus, AS = antispyware, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line																				
(**) Duration = "-" indicates that 12 months was assumed																				
(***) N.D. Indicates information is not provided by ISP																				
ISPs in <i>italic & bold</i> are incumbent operators																				

Table 35: Detailed information on least expensive offer per country (2048kbps-4096kbps (incl.)) ; "Internet + Tel + TV"

5.3.4.c CONCLUSIONS ON BUNDLE "INTERNET+TEL+TV" FOR "BASKET 2048KBPS-4096KBPS (incl.)"

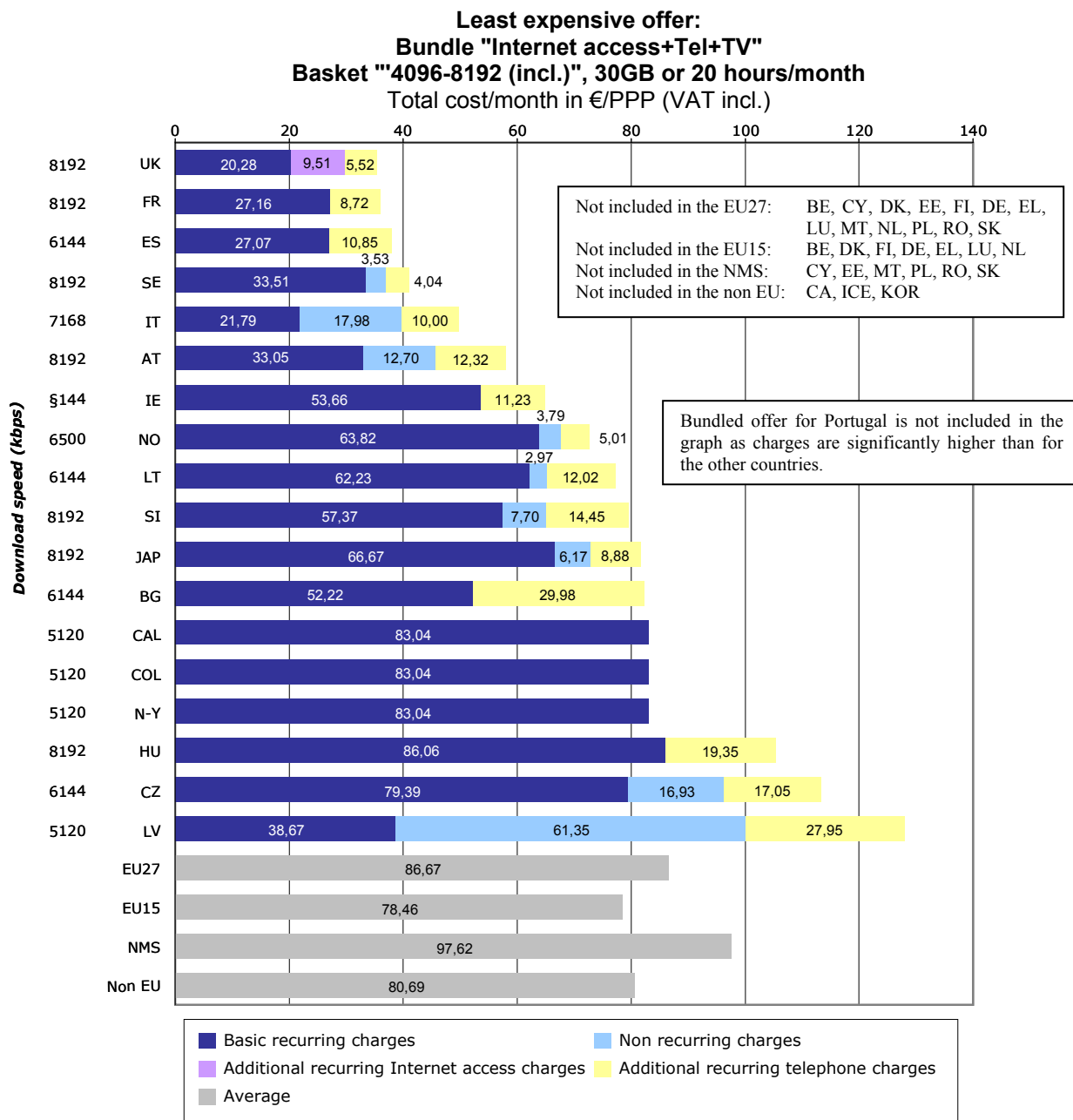
- For fifteen countries, an offer was available for this basket. For the following countries, no offer was available: *Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Malta, Norway, Poland, Slovakia, Slovenia and Sweden.*
- From the ISPs in the following countries, only one offer was available for this basket: *Austria, Belgium, State of Colorado, State of New York and the United Kingdom.*
- The offer selected for *Bulgaria* was limited to certain regions.
- There were three metered offers for this basket (*Belgium, Canada and Portugal*), of which only *Belgium* required normalisation. Additional recurring *Internet* access charges had a significant impact on its ranking.
- No clear relationship could be observed between the omission of non-recurring charges in *Estonia, Hungary, The Netherlands, Romania, State of Colorado* and *State of New-York*, and their place in the overall ranking.
- All but four offers needed normalisation of telephone charges. No additional recurring telephone charges were needed for *Canada, State of California, State of Colorado* and *State of New York*.

5.3.5 BASKET "4096KBPS-8192KBPS (INCL.)", IN €/PPP (VAT INCL.)

5.3.5.a LEAST EXPENSIVE OFFER

In the following countries, no offer in our sample was available for this basket: *Belgium, Canada, Cyprus, Denmark, Estonia, Finland, Germany, Greece, Iceland, Ireland, Korea, Luxembourg, Malta, The Netherlands, Poland, Romania and Slovakia.*

The offer for *Portugal* is not represented in the graph as the charge is significantly higher²⁶ (304.76 EUR/PPP) than for the other countries.



²⁶ The total charge for the Portuguese offer (304.76 EUR/PPP) is composed of 66.11 EUR/PPP basic recurring charges, 9.98 EUR/PPP non recurring charges, 214.11 EUR/PPP additional recurring Internet access charges and 14.55 EUR/PPP additional recurring telephone charges.

5.3.5.b BASKET "4096KBPS-8192KBPS (INCL.)", LIST OF SELECTED OFFERS

Comparison		April 2008	Basket "4096-8192"	Bundle "Internet access+Tel+TV"																
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webpace (***)	Level of protection (*)	Telephone technology	Unlimited nights and weekends	Minutes to fixed line included	Minutes to mobile included	Option for mobile	Television technology	Nb channels (***)	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB									Euro	EUR/PPP
Austria	Telekom Austria	aon super kombi	xDSL	12	8192	unlimited	unlimited	5	N.D.	20	AV+AS	switched	no	0	0	no	digital	86	61,32	58,07
Bulgaria	Eurocom	Triple Offer 6 Mbps	Cable	12	6144	unlimited	unlimited	1	1	N.D.	-	switched	yes	575	0	no	digital	73	35,33	82,20
Czech Republic	UPC Czech Republic	UPC Light+ Freetime+ KLASIK	Cable	12	6144	unlimited	unlimited	3	15	25	-	VoIP	yes	0	0	no	analog	37	79,84	113,37
France	Orange France	Formule 8 mégamax	xDSL	12	8192	unlimited	unlimited	5	N.D.	100	AS	VoIP	no	unlimited	0	no	digital	50	39,50	35,88
Hungary	T-Online	T-Home Tripla Koktél Maximum	xDSL	12	8192	unlimited	unlimited	5	1	50	-	switched	yes	0	0	no	digital	5	68,18	105,41
Ireland	UPC Ireland	Essential pack (TV Digital value, Broadband express, phone service)	Cable	12	6144	60	-	N.D.	15	300	-	N.D.	yes	0	0	no	IP-TV	60	77,39	64,89
Italy	Telecom Italia	Alice Home TV 7 Mega	xDSL	-	7168	unlimited	unlimited	N.D.	N.D.	0	-	switched	no	unlimited	0	no	digital	200	52,31	49,77
Japan	Jupiter Telecommunications	J.COM NET 8+phone+TVDigital Compact	Cable	-	8192	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	no	0	0	yes	digital	100	72,44	81,72
Latvia	IZZI	Cable D+ economy plus	FTTH	24	5120	unlimited	unlimited	5	5	50	-	switched	no	0	0	yes	digital	13	89,48	127,97
Lithuania	Teo	Premium Plus	FTTH	24	6144	unlimited	unlimited	3	N.D.	N.D.	-	switched	no	0	0	no	digital	30	47,08	77,22
Norway	Get	Get Trippel	xDSL	-	6500	unlimited	unlimited	10	N.D.	50	AV+AS+FW	switched	yes	unlimited	0	no	digital	56	99,73	72,62
Portugal	Cabovisão	Tripla 5Mto	Cable	-	5120	20	-	N.D.	N.D.	N.D.	AV+FW+BU	Switched	yes	unlimited	0	no	analog	46	259,44	304,76
Slovenia	UPC Telemach Slovenia	paket Trojček L	Cable	12	8192	unlimited	unlimited	3	10	10	-	VoIP	no	0	0	no	digital	N.D.	60,99	79,52
Spain	Orange Spain	adsl 6 Mb + Iamadas + TV	xDSL	12	6144	unlimited	unlimited	15	N.D.	100	-	switched	yes	unlimited	0	no	digital	25	34,95	37,91
State of California	Time Warner Cable	Road Runner Talk and view	Cable	12	5120	unlimited	unlimited	5	5	N.D.	-	VoIP	N.D.	N.D.	N.D.	no	digital	N.D.	63,53	83,04
State of Colorado	Time Warner Cable	Road Runner Talk and view	Cable	12	5120	unlimited	unlimited	5	5	N.D.	-	VoIP	N.D.	N.D.	N.D.	no	digital	N.D.	63,53	83,04
State of New York	Time Warner Cable	Road Runner Talk and view	Cable	12	5120	unlimited	unlimited	5	5	N.D.	-	VoIP	N.D.	N.D.	N.D.	no	digital	N.D.	63,53	83,04
Sweden	TeliaSonera	Alt i ett paket upp till 8Mbit	xDSL	18	8192	unlimited	unlimited	1	5	N.D.	AV+FW	switched	no	0	0	no	digital	8	48,22	41,08
The UK	BT UK	BT total broadband - option 1	xDSL	18	8192	5	-	N.D.	N.D.	N.D.	AV	VoIP	yes	unlimited	0	no	digital	30	35,05	35,30

(*) AV = antivirus, AS = antispyware, FW = firewall, PC = Parent Control, PM = Privacy Manager, PU = Pop-Up Blocker, BU = Back-up on-line
(**) Duration = '-' indicates that 12 months was assumed
(***) N.D. Indicates information is not provided by ISP
ISPs in *italics* & **bold** are incumbent operators

Table 36: Detailed information on least expensive offer per country (4096kbps-8192kbps (incl.)) ; "Internet + Tel + TV"

5.3.5.c CONCLUSIONS ON BUNDLE "INTERNET+TEL+TV" FOR "BASKET 4096KBPS-8192KBPS (incl.)"

- An offer corresponded to this basket for 17countries. For the following countries, no offer was available: *Belgium, Canada, Cyprus, Denmark, Estonia, Finland, Germany, Greece, Iceland, Ireland, Korea, Luxembourg, Malta, The Netherlands, Poland, Romania and Slovakia.*
- The offer for *Portugal* is not represented in the graph as the charge is significantly higher than for the other countries: the total charge of 304.76 EUR/PPP is composed of 66.11 EUR/PPP basic recurring charges, 9.98 EUR/PPP non recurring charges, 214.11 EUR/PPP additional recurring Internet access charges and 14.55 EUR/PPP additional recurring telephone charges.
- From the ISPs in the following countries, only one offer was available for this basket: *Austria, Bulgaria, France, Italy, Lithuania, Norway, Slovenia and Sweden.*
- The offer selected for Japan was limited to certain regions.
- The offer selected for *Lithuania* had a higher bit-rate speed for national downloads (10240 Kbps).
- There were two metered offers for this basket (*Portugal* and the *United Kingdom*), of which both required normalisation. Additional recurring *Internet* access charges had a significant impact on price level of Portugal, which is therefore not represented in the graph.

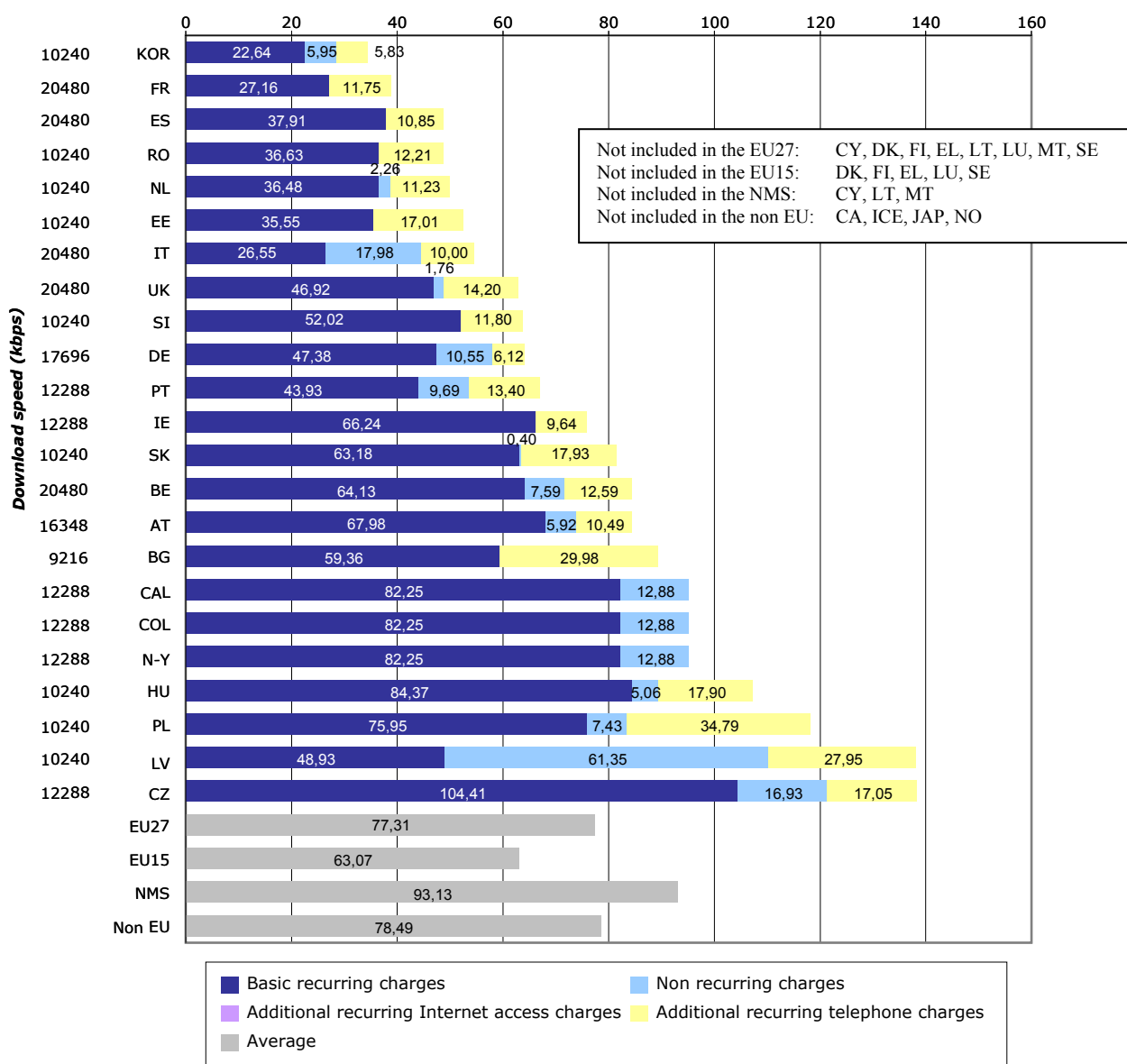
- No clear relationship could be observed between the omission of non-recurring charges in *Bulgaria, France, Hungary, Latvia, Spain, State of California, State of Colorado, State of New-York* and *the United Kingdom*, and their place in the overall ranking.
- All but three offers needed normalisation of telephone charges. No additional recurring telephone charges were needed for *State of California, State of Colorado* and *State of New York*. This did not influence their ranking.

5.3.6 **BASKET "8192KBPS-20MBPS (INCL.)", IN €/PPP (VAT INCL.)**

5.3.6.a **LEAST EXPENSIVE OFFER**

For the following countries, no offer was available from the ISPs selected: *Canada, Cyprus, Denmark, Finland, Greece, Iceland, Ireland, Japan, Lithuania, Luxembourg, Malta, Norway and Sweden.*

Least expensive offer:
Bundle "Internet access+Tel+TV"
Basket "'8192-20Mbps (incl.)", 30GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



5.3.6.b BASKET "8192KBPS-20MBPS (INCL.)", LIST OF SELECTED OFFERS

Comparison	April 2008		Basket "4096-20Mbps"	Bundle "Internet access+Tel+TV"																		
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webpace (***)	Level of protection (*)	Telephone technology	Unlimited nights and weekends	Minutes to fixed line included	Minutes to mobile included	Option for mobile	Television technology	Nb channels (***)	Total cost/month VAT incl.	Total cost/month VAT incl.		
				Months		Kbps														Euro		EUR/PPP
Austria	UPC Austria	chello classic + digital telefon + digital TV plus	Cable	12	16348	unlimited	unlimited	5	25	20	AV+AS	VoIP	no	0	0	no	digital	92	89,11	84,39		
Belgium	Telenet	Turbo DigiPack	Cable	-	20480	35	-	1	N.D.	50	AV+AS	switched	no	0	0	yes	digital	51	90,72	84,31		
Bulgaria	Eurocom	Triple Offer 9 Mbps	Cable	12	9216	unlimited	unlimited	1	1	N.D.	-	switched	yes	575	0	no	digital	73	38,40	89,34		
Czech Republic	UPC Czech Republic	UPC Classic+ Freetime+ KLASIK	Cable	12	12288	unlimited	unlimited	5	25	50	-	VoIP	yes	0	0	no	analog	37	97,47	138,40		
Estonia	Elion	Korussmaja lahendus digiTV 1	Cable	-	10240	unlimited	unlimited	1	1	0	-	VoIP	yes	0	0	no	digital	40	37,32	52,56		
France	NeufCegetel	100% Neuf Box	xDSL	-	20480	unlimited	unlimited	N.D.	N.D.	100	-	switched	no	unlimited	0	no	digital	76	42,83	38,91		
Germany	Deutsche Telecom	Entertain Comfort	xDSL	24	17696	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	yes	unlimited	0	yes	digital	70	67,52	64,05		
Hungary	UPC Hungary	Csomagok silver	Cable	12	10240	unlimited	unlimited	3	1	10	-	VoIP	no	0	0	no	analog	14	69,42	107,33		
Ireland	UPC Ireland	Starter pack (TV Digital value, Broadband ultra, phone service)	Cable	12	12288	unlimited	unlimited	N.D.	15	300	-	N.D.	yes	unlimited	0	no	IP-TV	60	90,50	75,88		
Italy	Telecom Italia	Alice Home TV 20 Mega	xDSL	-	20480	unlimited	unlimited	N.D.	N.D.	0	-	switched	no	unlimited	0	no	digital	200	57,31	54,53		
Korea	Powercomm (Xspeed)	Bundle (Xspeed Prime + internet home phone + TV)	Cable	12	10240	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	0	0	0	no	IP-TV	N.D.	21,84	28,59		
Latvia	IZZI	Cable E+ economy plus	FTTH	24	10240	unlimited	unlimited	5	10	5	-	switched	no	0	0	yes	digital	13	96,66	138,23		
The Netherlands	UPC Netherlands	Internet 10	Cable	-	10240	unlimited	unlimited	5	12	50	-	VoIP	no	0	0	no	digital	50	53,42	49,97		
Poland	UPC Polska	pakiet pełny telewizji+internet turbo+taryfa non-stop w mixpakiecie	Cable	12	10240	unlimited	unlimited	3	N.D.	25	-	VoIP	yes	0	0	no	digital	15	80,55	118,16		
Portugal	Novis	12Mb - unlimited 24h	xDSL	-	12288	unlimited	unlimited	150	N.D.	100	-	VoIP	yes	unlimited	0	no	digital	25	57,06	67,03		
Romania	UPC Romania	UPC 3Play Medium	Cable	12	10240	unlimited	unlimited	2	1	0	-	switched	yes	0	0	no	digital	60	27,20	48,84		
Slovakia	UPC Slovakia	UPC Triple play digital 4(Medium/anytime/basic)	Cable	12	10240	unlimited	unlimited	3	5	25	AV+AS	VoIP	yes	unlimited	0	no	digital	66	51,78	81,52		
Slovenia	Amis	paket Trojka	xDSL	-	10240	unlimited	unlimited	6	6	50	AV+AS+ASV+PC	switched	yes	700	0	no	digital	90	48,95	63,82		
Spain	Orange Spain	línea + adsl máxima velocidad + llamadas + TV	xDSL	12	20480	unlimited	unlimited	15	N.D.	100	-	switched	yes	unlimited	0	no	digital	25	44,95	48,76		
State of California	Comcast	The Comcast Triple Play	Cable	12	12288	unlimited	unlimited	7	N.D.	25	AV+FW+PC	switched	no	0	0	no	digital	100	72,78	95,12		
State of Colorado	Comcast	The Comcast Triple Play	Cable	12	12288	unlimited	unlimited	7	N.D.	25	AV+FW+PC	switched	no	0	0	no	digital	200	72,78	95,12		
State of New York	Comcast	The Comcast Triple Play	Cable	12	12288	unlimited	unlimited	7	N.D.	25	AV+FW+PC	switched	no	0	0	no	digital	200	72,78	95,12		
The UK	Virgin Media	Size: XL	Cable	18	20480	unlimited	unlimited	15	N.D.	20	-	switched	yes	unlimited	0	no	digital	145	62,43	62,88		
(**) AV = antivirus, AS = antispm, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line																						
(***) Duration = '-' indicates that 12 months was assumed																						
(***) N.D. Indicates information is not provided by ISP																						
ISPs in <i>italic & bold</i> are incumbent operators																						

(*) AV = antivirus, AS = antispam, ASW = anti-spyware, FW = firewall, PC = Parent Control, PM = Privacy Manager, PU = Pop-Up Blocker, BU = Back-up on-line

(**) Duration = '-' indicates that 12 months was assumed

(***) N.D. Indicates information is not provided by ISP

ISPs in *italic & bold* are incumbent operators

Table 37: Detailed information on least expensive offer per country (8192kbps-20Mbps (incl.)) ; "Internet + Tel + TV"

5.3.6.c CONCLUSIONS ON BUNDLE "INTERNET+TEL+TV" FOR "BASKET 8192KBPS-20MBPS (incl.)"

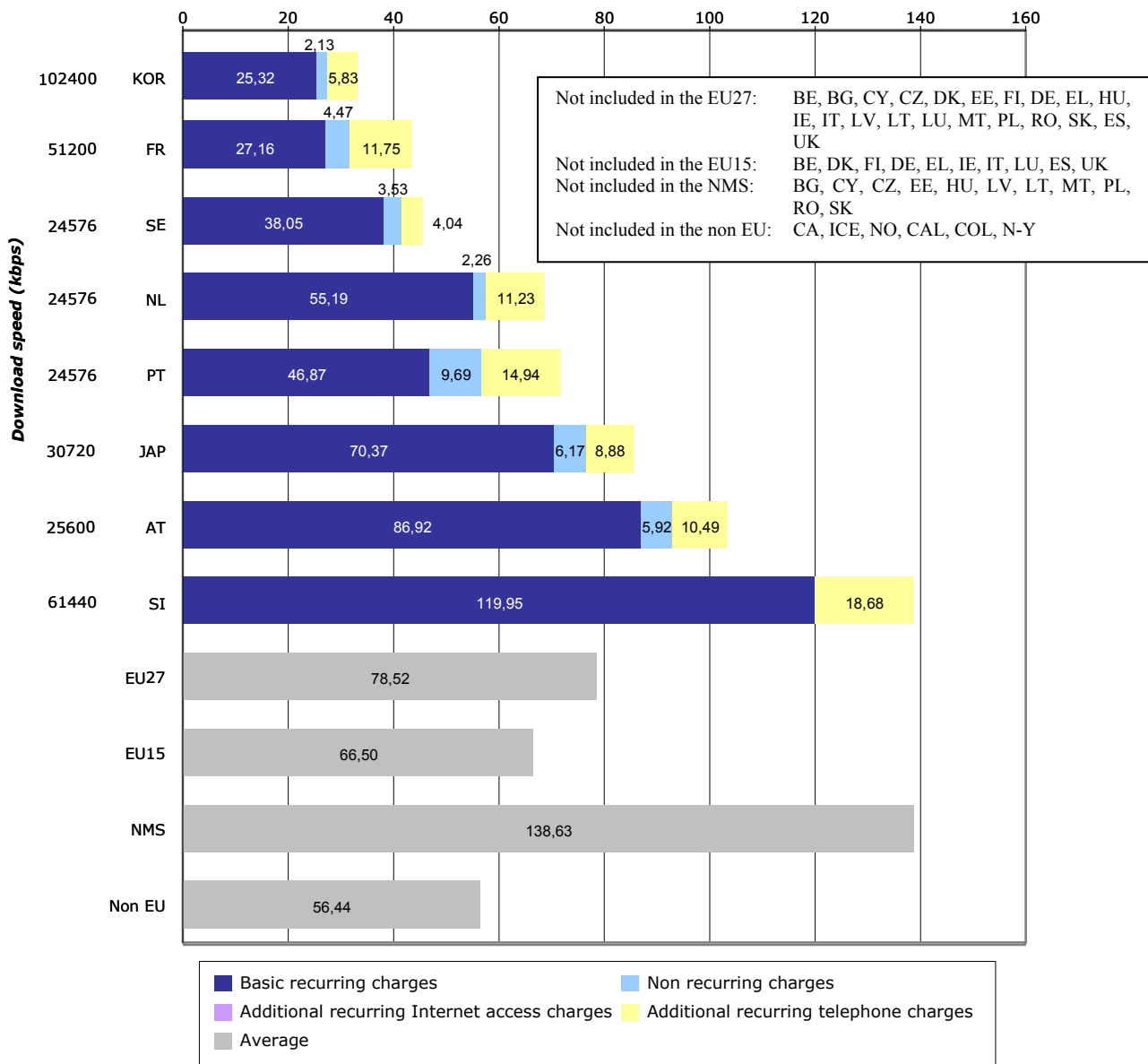
- For 22 countries an offer was available for this basket. For the following countries, no offer was available: *Canada, Cyprus, Denmark, Finland, Greece, Iceland, Ireland, Japan, Lithuania, Luxembourg, Malta, Norway and Sweden.*
- From the ISPs in the following countries, only one offer was available for this basket: *Austria, Poland, Spain, State of California, State of Colorado, State of New York and the United Kingdom.*
- There were two metered offers for this basket (*Belgium* and the *Korea*), of which none required normalisation.
- No clear relationship could be observed between the omission of non-recurring charges in *Bulgaria, Estonia, France, Korea, The Netherlands, Romania, Spain and Slovenia*, and their place in the overall ranking. Non-recurring charges did however have an impact on the ranking of *Italy* and *Slovakia*.
- All but three offers needed normalisation of telephone charges. No additional recurring telephone charges were needed for *State of California, State of Colorado and State of New York*. This had some influence on their ranking.

5.3.7 **BASKET "20+Mbps", IN €/PPP (VAT INCL.)**

5.3.7.a **LEAST EXPENSIVE OFFER**

No offer was available for this basket for the following countries: *Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, Germany, Greece, Hungary, Iceland, Ireland, Italy, Korea, Latvia, Lithuania, Luxembourg, Malta, Norway, Poland, Romania, Slovakia, Spain, State of California, State of Colorado, State of New York and the United Kingdom.*

Least expensive offer:
Bundle "Internet access+Tel+TV"
Basket "'20+Mbps (incl.)", 30GB or 20 hours/month
Total cost/month in €/PPP (VAT incl.)



5.3.7.b BASKET "20+Mbps", LIST OF SELECTED OFFERS

Comparison		April 2008	Basket "20+Mbps"	Bundle "Internet access+Tel"																
Country	ISP	Offer	Technology	Contract duration (**)	Bitrate down	GB included per month	Hours included per month	E-mail boxes (***)	Adresses per mailbox (***)	Webspace (***)	Level of protection (*)	Telephone technology	Unlimited nights and weekends	Minutes to fixed line included	Minutes to mobile included	Option for mobile	Television technology	Nb channels (***)	Total cost/month VAT incl.	Total cost/month VAT incl.
				Months	Kbps					MB									Euro	EUR/PPP
Austria	UPC Austria	chello plus + digital telefon+ digital TV	Cable	12	25600	unlimited	unlimited	5	25	90	AV+AS	VoIP	no	0	0	no	digital	92	109,11	103,33
France	Neuf/Cegetel	100% Neuf Box en fibre optique	FTTH	-	51200	unlimited	unlimited	N.D.	N.D.	100	AV+AS	switched	no	unlimited	0	no	digital	73	47,75	43,38
Japan	Jupiter	J.COM NET 30+phone+TVDigital Compact	Cable	-	30720	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	no	0	0	yes	digital	100	75,72	85,42
Korea	Telecommunications Powercomm (Xpeed)	Bundle (Xpeed Ethernet + internet home phone + TV)	Cable	12	102400	unlimited	unlimited	N.D.	N.D.	N.D.	-	switched	0	0	0	no	IP-TV	N.D.	20,96	27,45
The Netherlands	UPC Netherlands	Internet 24	Cable	-	24576	unlimited	unlimited	10	12	50	-	VoIP	no	0	0	no	digital	50	73,42	68,68
Portugal	Novis	24Mb	xDSL	-	24576	60	-	200	N.D.	100	-	VoIP	yes	0	0	no	digital	64	60,87	71,50
Slovenia	Telekom Slovenije	Paket Trio	xDSL	-	61440	unlimited	unlimited	4	2	10	AV+AS+FW	switched	no	0	0	no	digital	100+	106,33	138,63
Sweden	TeliaSonera	Alt i ett paket upp till 24Mbit	xDSL	18	24576	unlimited	unlimited	1	5	N.D.	AV+FW	switched	no	0	0	no	digital	8	53,55	45,62
(*) AV = antivirus, AS = antispam, ASW = anti-spyware; FW = firewall, PC = Parent Control, PM = Privacy Manager; PU = Pop-Up Blocker; BU = Back-up on-line																				
(**) Duration = '-' indicates that 12 months was assumed																				
(***) N.D. Indicates information is not provided by ISP																				
ISPs in <i>italic & bold</i> are Incumbent operators																				

Table 38: Detailed information on least expensive offer per country (20+Mbps) ; "Internet + Tel + TV"

5.3.7.c CONCLUSIONS ON BUNDLE "INTERNET+TEL+TV" FOR "BASKET 20+Mbps"

- For seven countries an offer corresponded to this basket. For the following countries, no offer was available: *Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, Germany, Greece, Hungary, Iceland, Ireland, Italy, Korea, Latvia, Lithuania, Luxembourg, Malta, Norway, Poland, Romania, Slovakia, Spain, State of California, State of Colorado, State of New York and the United Kingdom.*
- From the ISPs in the following countries, only one offer was available for this basket: *Austria and Sweden.*
- The offer selected for Japan was limited to certain regions.
- There was one metered offer for this basket (*Portugal*), which did not require normalisation.
- No clear relationship could be observed between the omission of non-recurring charges in *The Netherlands* and *Slovenia*, and their place in the overall ranking.
- All offers needed normalisation of telephone charges. This did not influence significantly their ranking.

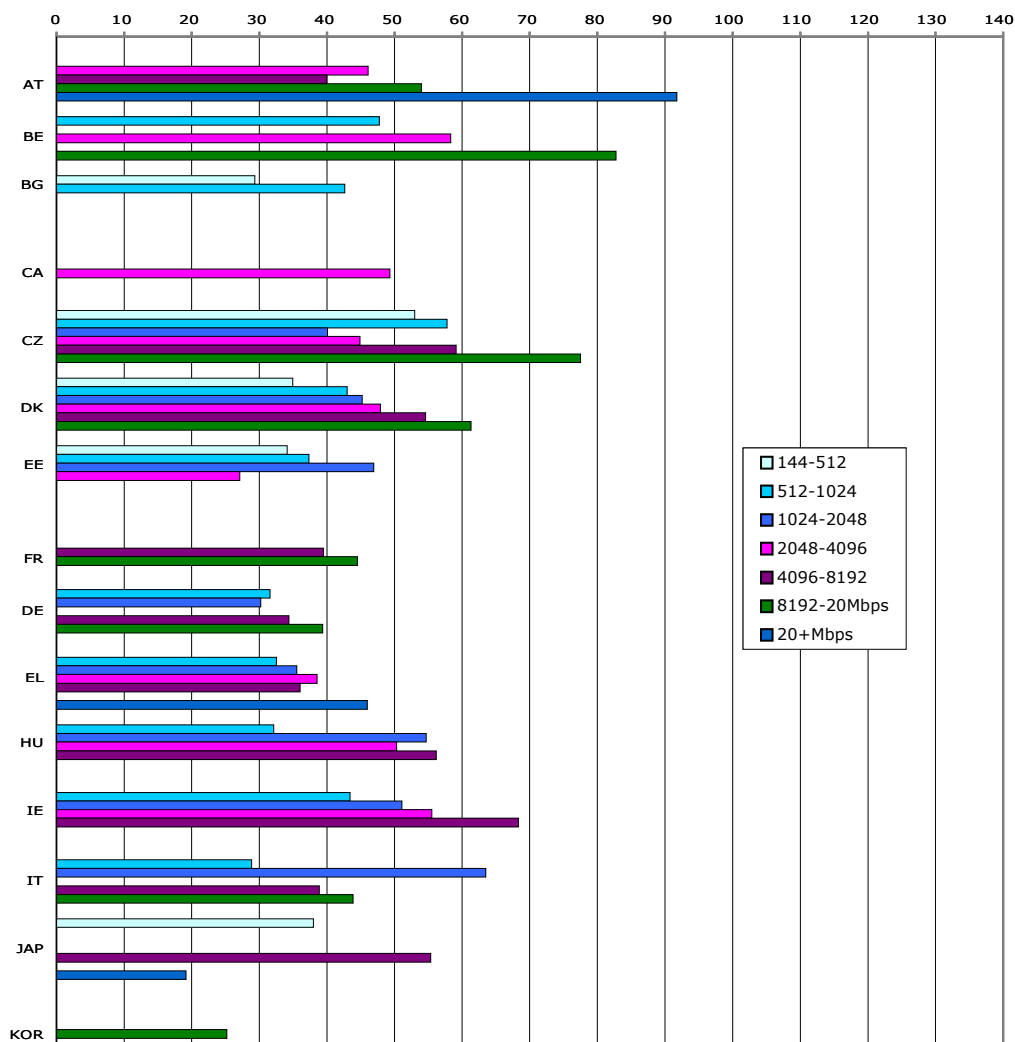
5.4. LEAST EXPENSIVE OFFER PER COUNTRY AND PER BUNDLE TYPE FOR EACH OF THE 7 BASKETS

Based on the analysis in the previous sections, a summary per bundle type for all baskets per country can be presented.

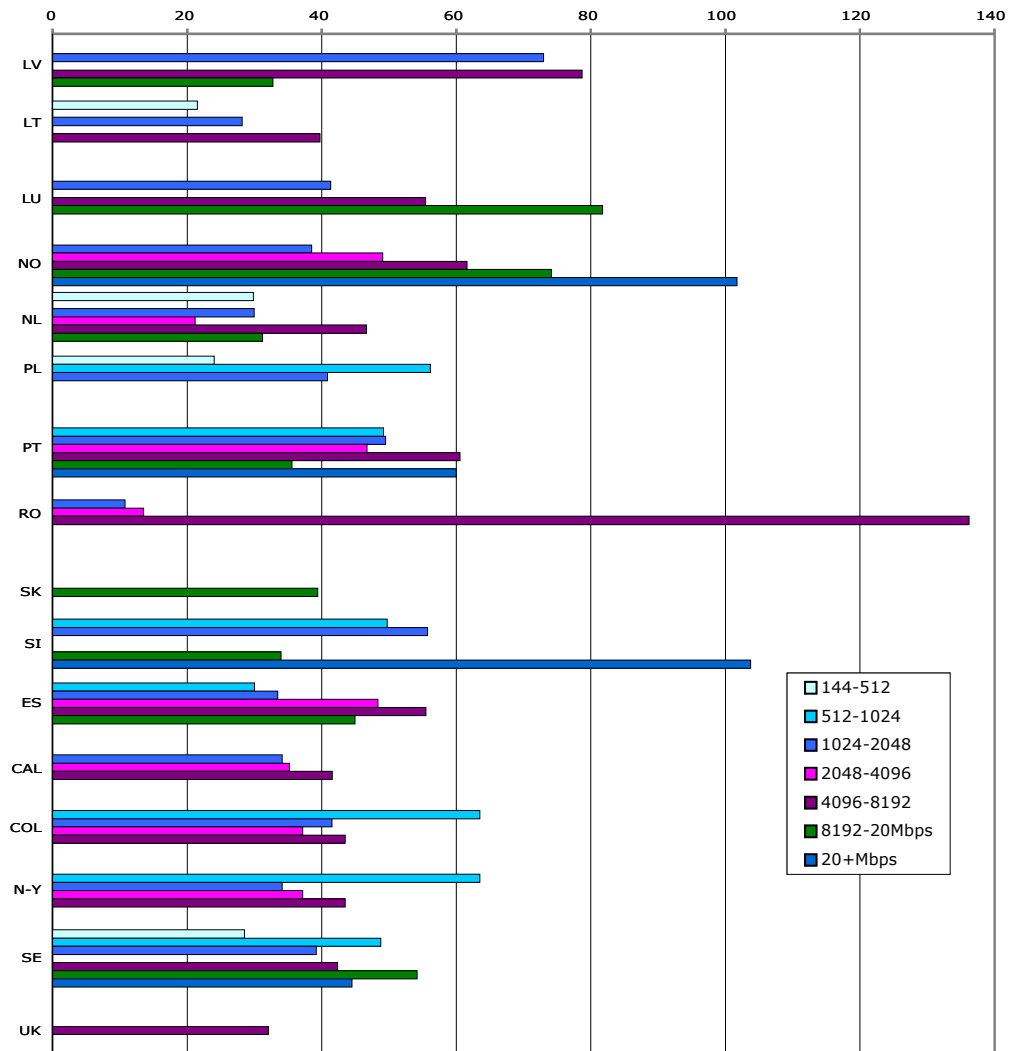
5.4.1 BUNDLE "INTERNET ACCESS+TEL", IN €/PPP (VAT INCL.)

For the following countries, no packages bundling Internet access and Fixed Telephony Services were available in the sample: *Cyprus, Finland, Iceland and Malta*.

Least expensive offer per country and per basket
Bundle "Internet access+Tel"
Total cost/month in €/PPP (VAT incl.)



Least expensive offer per country and per basket
Bundle "Internet access+Tel" (followed)
 Total cost/month in €/PPP (VAT incl.)



Conclusions on the least expensive offer per country for each of the seven baskets – bundle “Internet access+Tel”

In the following countries, no packages bundling Internet access and Fixed Telephony Services were available in the sample: *Cyprus, Finland, Iceland and Malta*.

Within a single country, the offers with higher bit-rates tend to be more expensive. This however was not always the case.

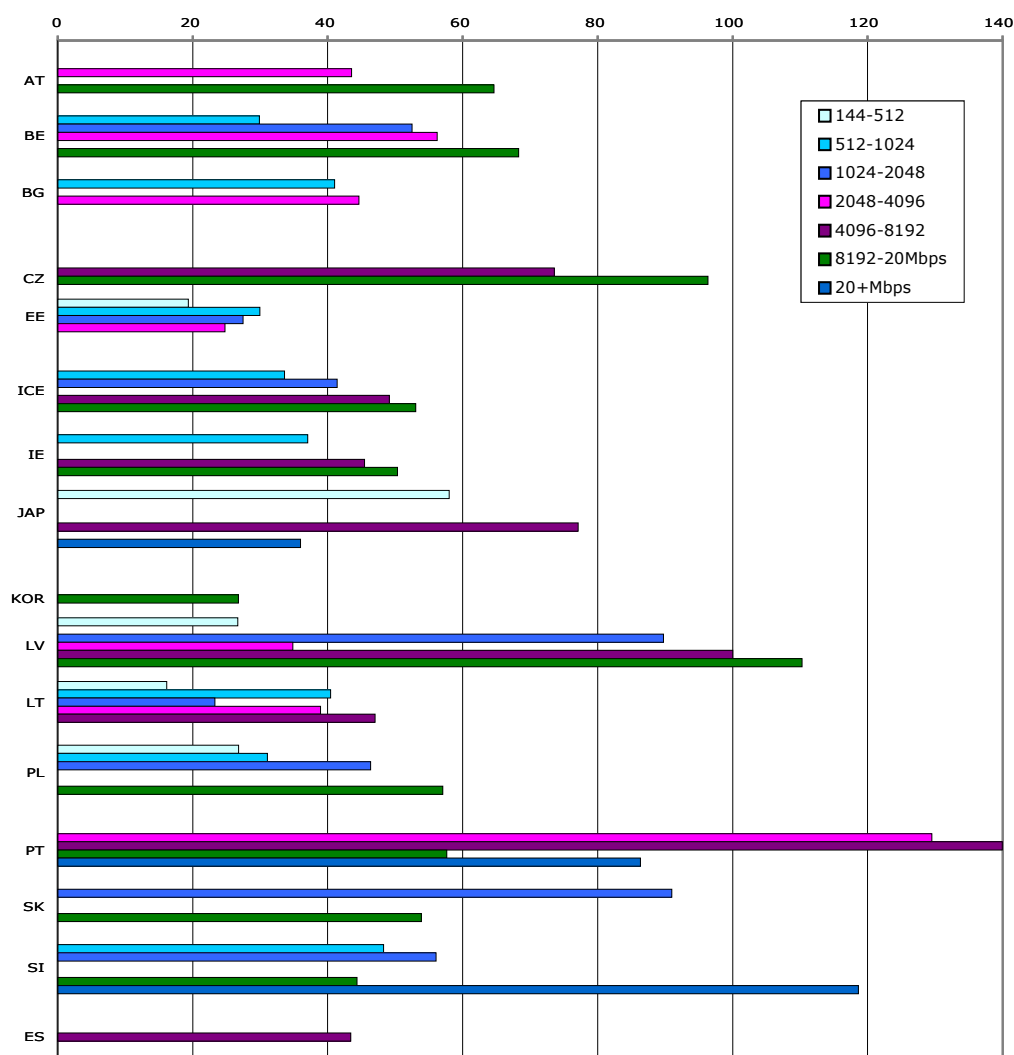
- In some countries, bundled offers with *Internet Access* and Fixed telephony Services were only available for a single basket. These countries were: *Canada, Korea, Slovakia and the United Kingdom*.
- In the following countries, offers with higher download speeds were systematically more expensive: *Belgium, Bulgaria, Denmark, France, Ireland, Lithuania, Luxembourg, Norway, Romania and State of California*.
- In some countries charges tended to follow the above-mentioned pattern with exception of one basket. This was the case for the following countries: *Austria, Estonia, Germany, Greece, Hungary, Italy and Poland*.
- In a certain number of countries, there did not seem to be a specific pattern and no conclusion could be drawn as to the relationship between the speed and the level of the charges for these countries. This was the case for *Czech Republic, Japan, Latvia, The Netherlands, Portugal, Slovenia, Spain, State of Colorado, State of New-York and Sweden*.

5.4.2 BUNDLE "INTERNET ACCESS+TV", IN €/PPP (VAT INCL.)

In the following countries, no packages bundling Internet Access and television were available in the sample: *Canada, Cyprus, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Luxembourg, Malta, The Netherlands, Norway, Romania, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*

Least expensive offer per country and per basket Bundle "Internet access+TV"

Total cost/month in €/PPP (VAT incl.)



Conclusions on the least expensive offer per country for each of the seven baskets – bundle “Internet access+TV”

In the following countries, no packages bundling Internet Access and television were available in the sample: *Canada, Cyprus, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Luxembourg, Malta, The Netherlands, Norway, Romania, State of California, State of Colorado, State of New York, Sweden and the United Kingdom.*

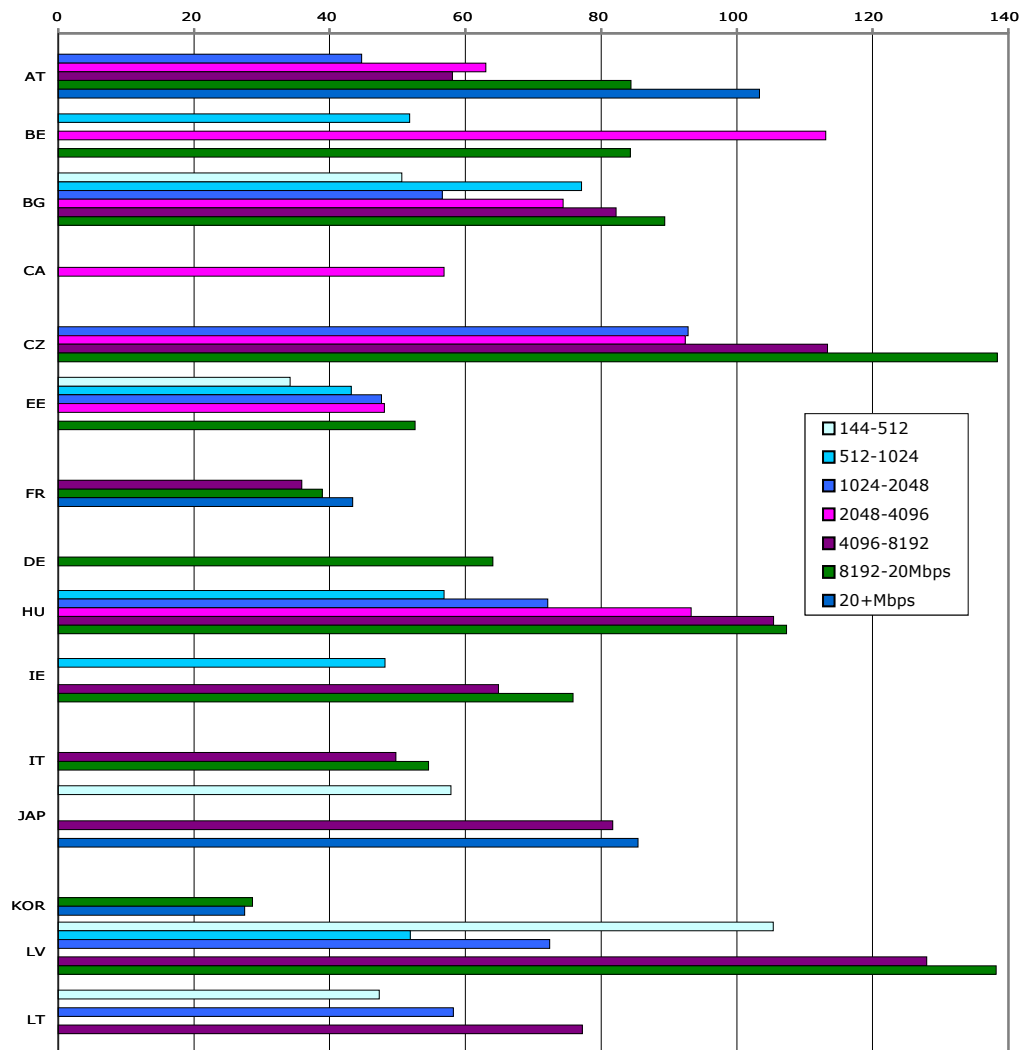
Within a single country, the offers with higher bit-rates tended to be more expensive offers. This however was not always the case.

- In some countries, bundled offers with *Internet* access, Fixed Telephony Services and television, were only available for a single basket. These countries are: *Korea* and *Spain*.
- In the following countries, offers with higher download speeds were systematically more expensive: *Austria, Belgium, Bulgaria, Czech Republic, Iceland, Ireland* and *Poland*.
- In some countries charges tended to follow the above-mentioned pattern with the exception of one basket. This was the case for countries like *Japan, Latvia* and *Lithuania*.
- In *Estonia, Portugal, Slovakia* and *Slovenia*, there did not seem to be a specific pattern and no conclusion could be drawn as to the relationship between the speed and the level of the charges for these countries.

5.4.3 **BUNDLE "INTERNET ACCESS+TEL+TV", IN €/PPP (VAT INCL.)**

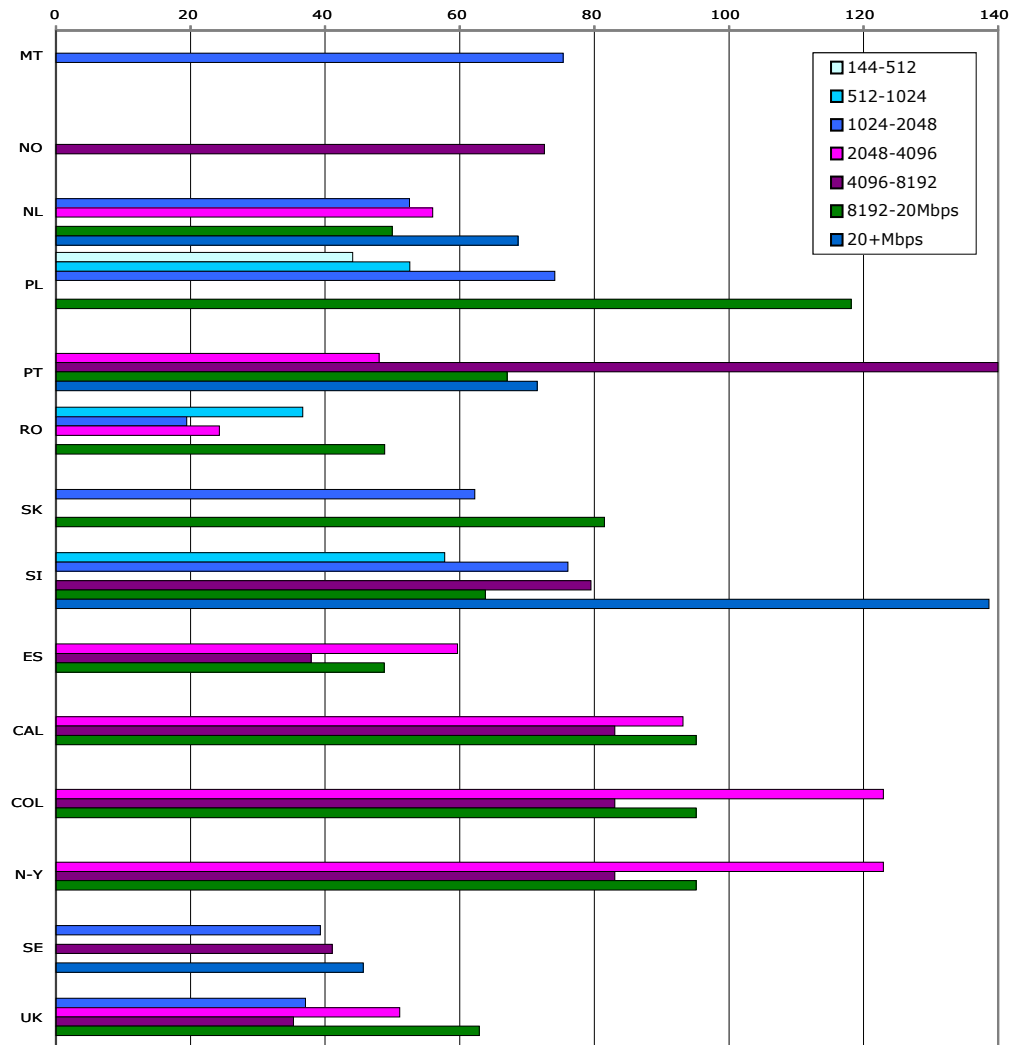
For the following five countries, no triple-play bundled offer was available in the sample: *Cyprus, Denmark, Finland, Greece, Iceland and Luxembourg*.

Least expensive offer per country and per basket
Bundle "Internet access+Tel+TV"
 Total cost/month in €/PPP (VAT incl.)



Least expensive offer per country and per basket
Bundle "Internet access+Tel+TV" (followed)

Total cost/month in €/PPP (VAT incl.)



Conclusions on the least expensive offer per country for each of the seven baskets – bundle “Internet access+Tel+TV”

In the following five countries, no triple-play bundled offer was available: *Cyprus, Denmark, Finland, Greece, Iceland and Luxembourg.*

Within a single country, the offers with higher bit-rates tended to be more expensive offers. This however was not always the case.

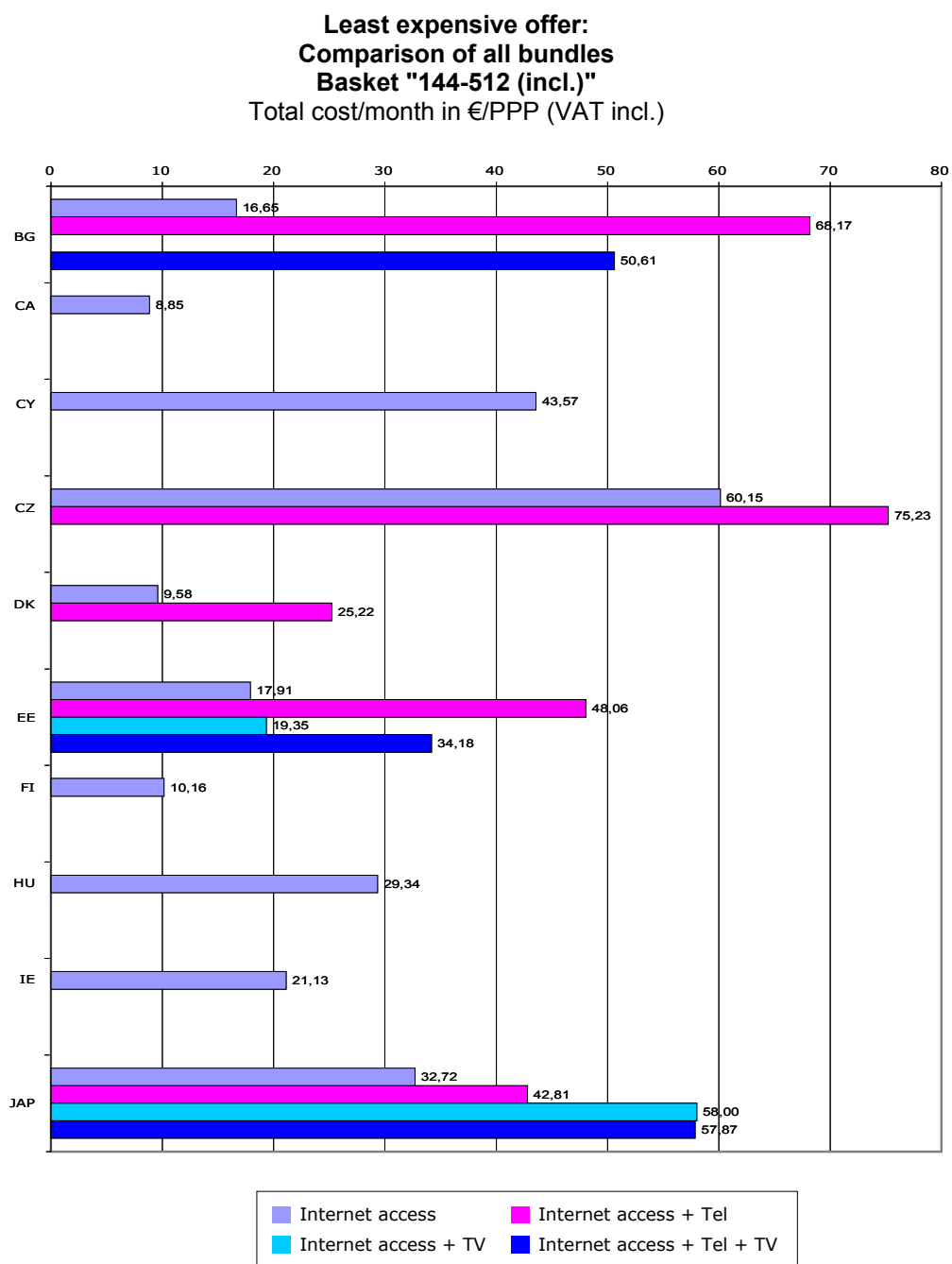
- In some countries, bundled offers with Internet Access, Fixed Telephony Services and television, were only available for a single basket. These countries were: *Canada, Germany, Malta and Norway.*
- In the following countries, offers with higher download speeds were systematically more expensive: *Estonia, France, Hungary, Ireland, Italy, Japan, Lithuania, Poland and Sweden.*
- In some countries charges tended to follow the above-mentioned pattern with the exception of one basket. This was the case for countries like *Austria, Belgium, Bulgaria, Czech Republic, Latvia, Portugal, Romania and Slovenia.*
- The least expensive offers of the following countries demonstrated that higher download speeds did not necessarily lead to more expensive offers: *Korea, the Netherlands, Slovakia, Spain, State of California, State of Colorado, State of New York and the United Kingdom*

5.5. LEAST EXPENSIVE OFFER PER COUNTRY AND PER BASKET FOR EACH BUNDLE TYPE

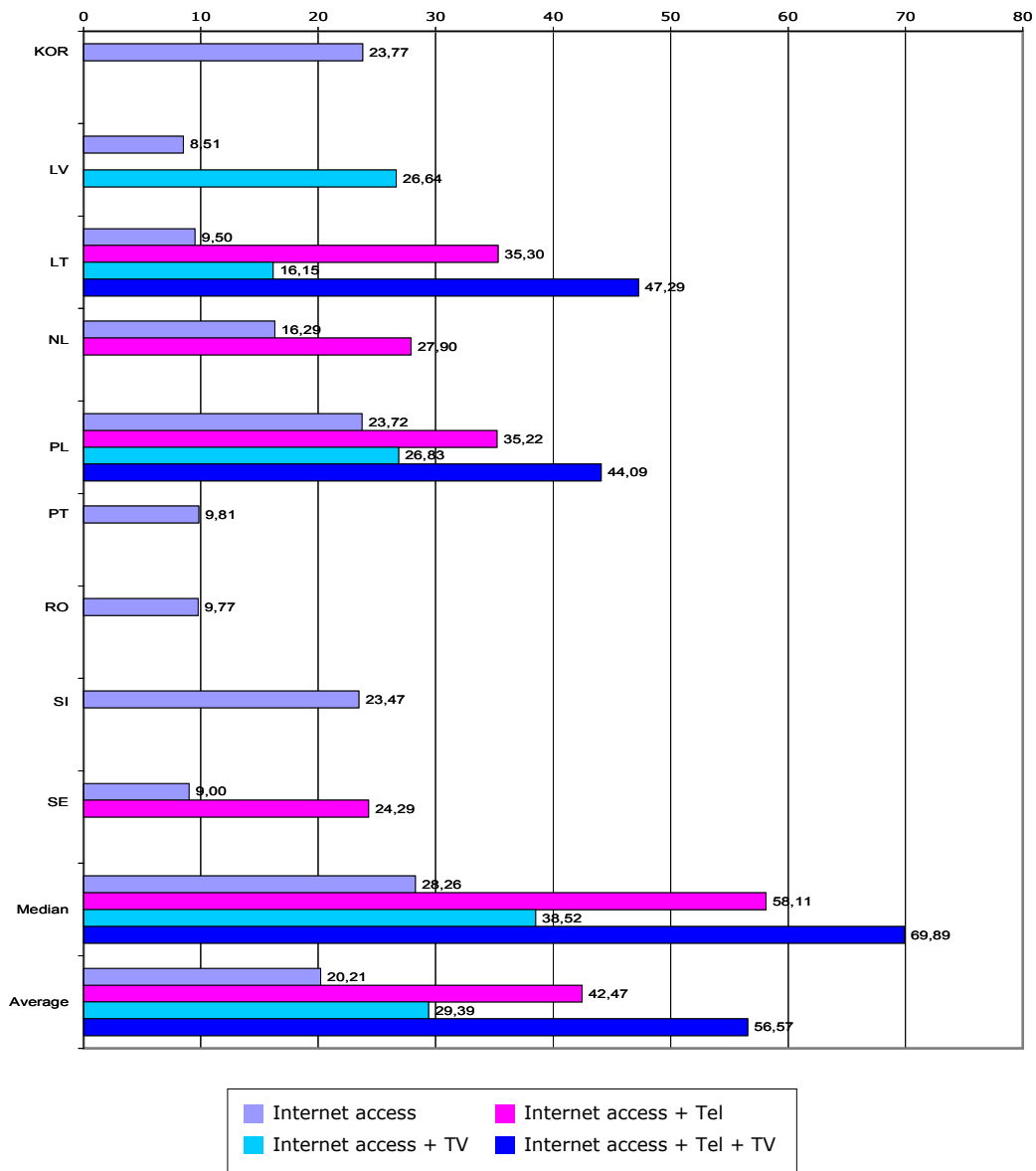
Based on the analysis in the previous paragraphs, a summary per basket for "Internet only" and all bundle types for each country can be presented.

5.5.1 BASKET "144KBPS-512KBPS (INCL.)", IN €/PPP (VAT INCL.)

For the following countries, no offer corresponding to this basket was available in the sample: Austria, Belgium, France, Germany, Greece, Iceland, Italy, Luxembourg, Malta, Norway, Slovakia, Spain, State of California, State of Colorado, State of New York and Sweden.



Least expensive offer:
Comparison of all bundles
Basket "'144-512 (incl.)" (followed)
Total cost/month in €/PPP (VAT incl.)



Conclusions on the least expensive offer per country for “Internet only” and all bundle types – basket “144-512”

For the following countries, no offer corresponding to this basket was available: Austria, Belgium, France, Germany, Greece, Iceland, Italy, Luxembourg, Malta, Norway, Slovakia, Spain, State of California, State of Colorado, State of New York and Sweden.

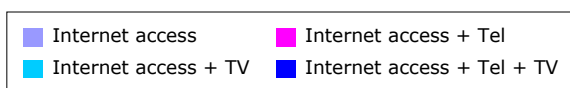
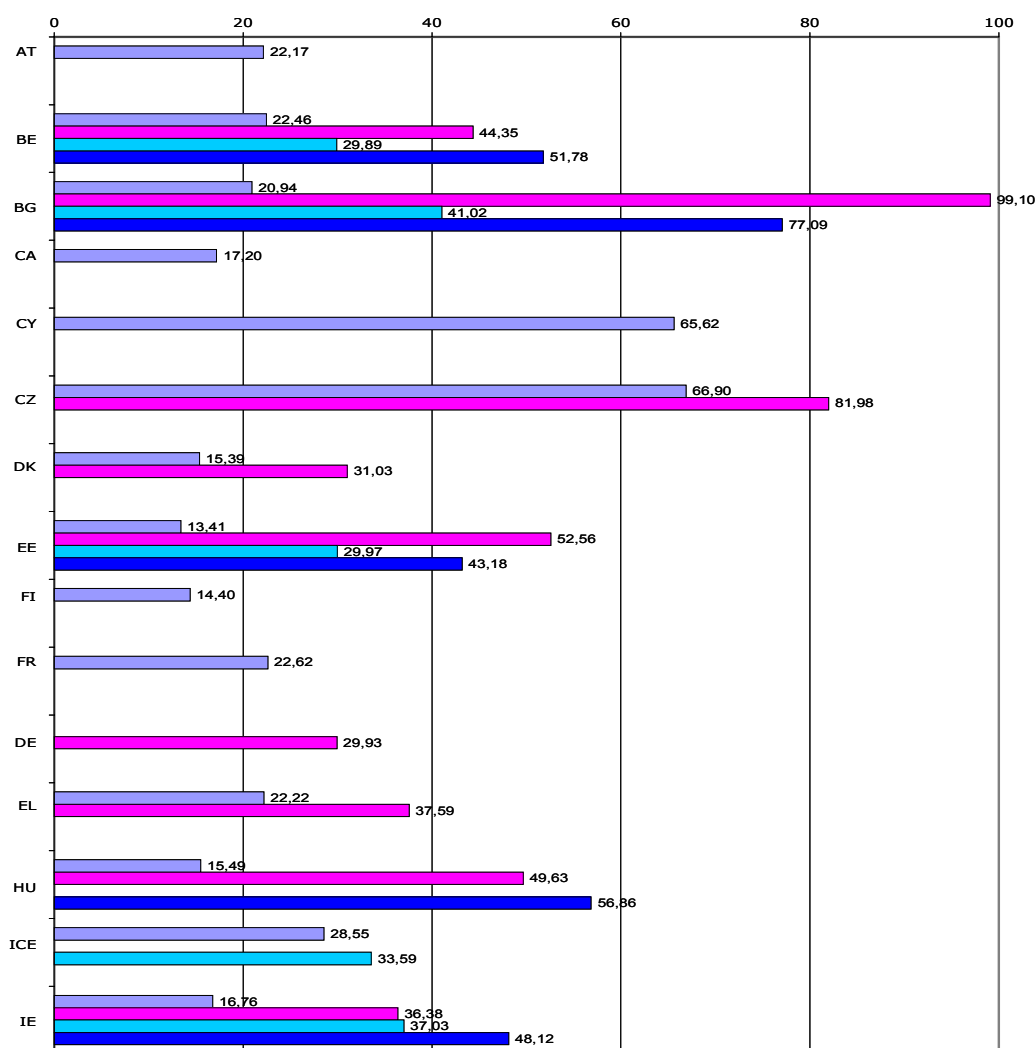
Within a single country, bundled offers were all more expensive than “Internet only” offers. Moreover, bundles including fixed telephony services tended to be more expensive than bundles including television, while triple play offers were usually the most expensive offers. Both the median and the average follow this pattern. This however was not always the case.

- In the following countries, only “Internet only” offers were available: *Canada, Cyprus, Finland, Hungary, Ireland, Korea, Portugal, Romania and Slovenia*.
- In two countries, *Lithuania* and *Poland*, all types of bundles were offered and followed the above pattern.
- The following countries did not offer all types of bundles, though the available offers followed the above pattern, i.e. triple play offers were more expensive than double play offers, which were more expensive than “Internet only” offers: *Czech Republic, Denmark, Latvia, The Netherlands* and *Sweden*.
- In *Japan*, where all types of bundles were available, charges did not follow the pattern as the least expensive offer including television was more expensive than the one that included fixed telephone services and the triple play offer was less expensive than the package that only includes Internet Access and Television.
- The least expensive offers for *Bulgaria* and *Estonia* demonstrated that offers that included more services did not necessarily lead to more expensive offers, since in these countries, triple play offers were cheaper than offers including Internet access and fixed telephone.

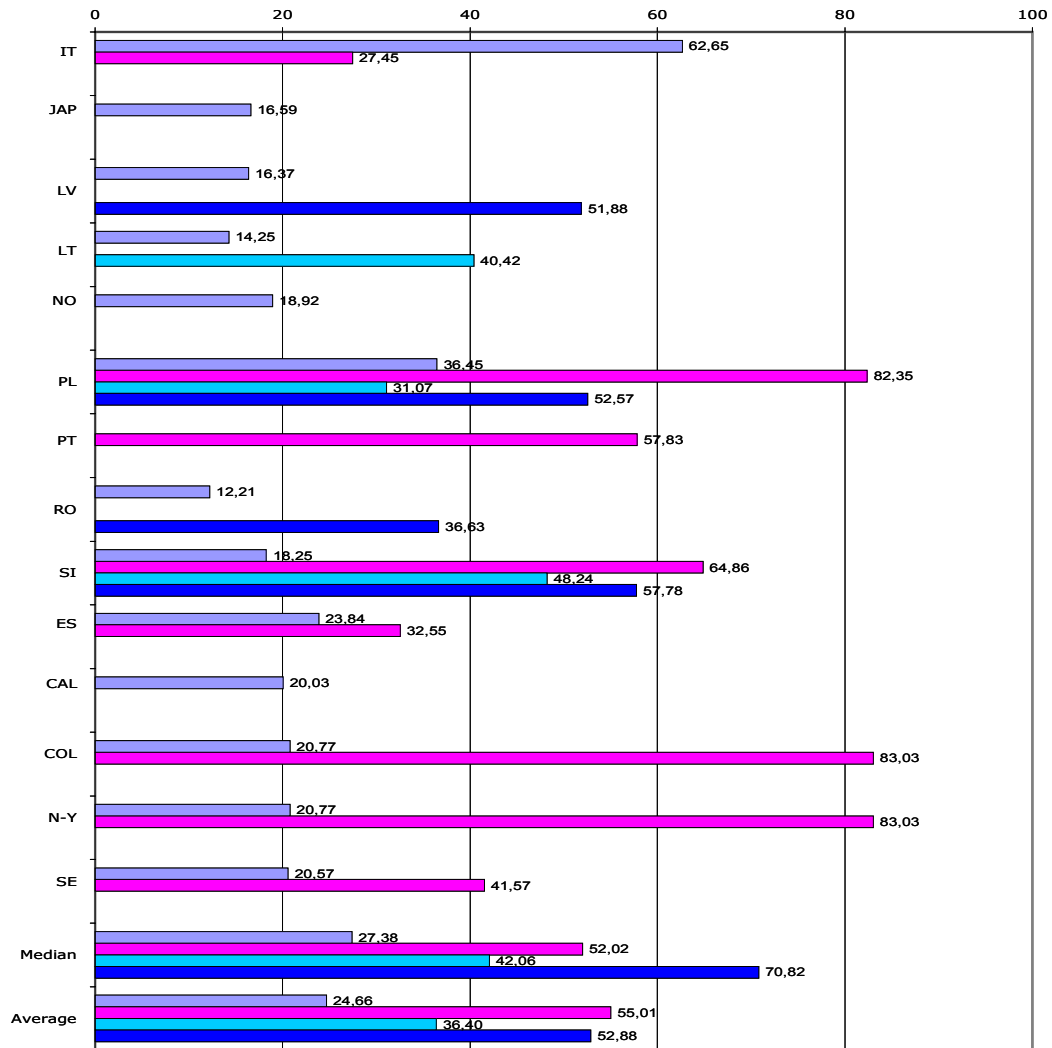
5.5.2 **BASKET "512KBPS-1024KBPS (INCL.)", IN €/PPP (VAT INCL.)**

For the following countries, no offer corresponding to this basket was available: Korea, Luxembourg, Malta, The Netherlands, Slovakia and the United Kingdom.

Least expensive offer:
Comparison of all bundles
Basket "512-1024 (incl.)"
 Total cost/month in €/PPP (VAT incl.)



Least expensive offer:
Comparison of all bundles
Basket "'512-1024 (incl.)" (followed)
Total cost/month in €/PPP (VAT incl.)



■ Internet access ■ Internet access + Tel
■ Internet access + TV ■ Internet access + Tel + TV

Conclusions on the least expensive offer per country for “Internet only” and all bundle types – basket “512-1024”

For the following countries, no offer corresponding to this basket was available: Korea, Luxembourg, Malta, The Netherlands, Slovakia and the United Kingdom.

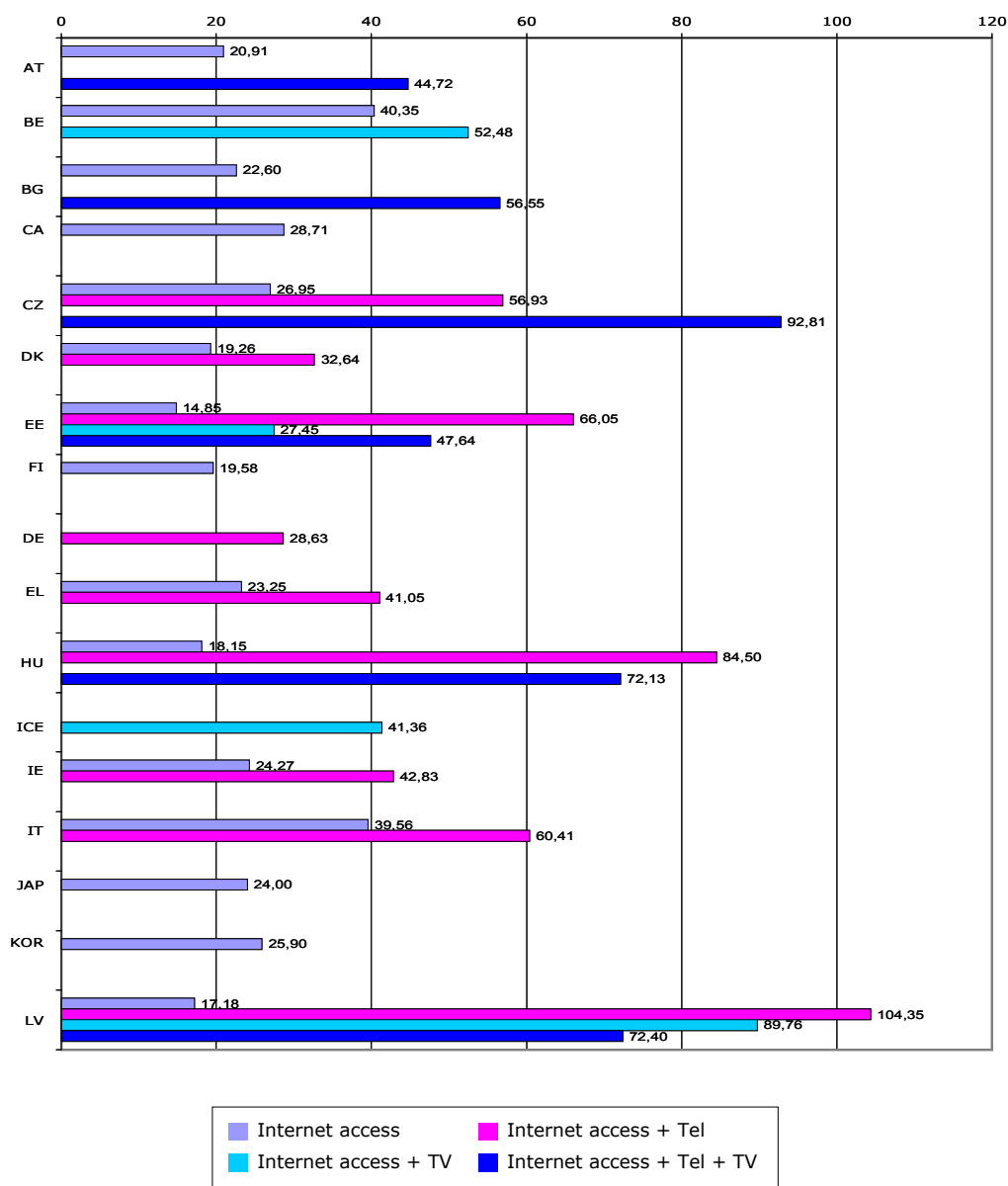
Within a single country, bundled offers were all more expensive than “Internet only” offers. Moreover, bundles including fixed telephone tended to be more expensive than bundles including television, while triple play offers were usually the most expensive offers. The median also followed this pattern, though the average of triple play offers was slightly below the average of Internet and fixed telephone bundles.

- In the following countries, only “Internet only” offers were available: *Austria, Canada, Cyprus, Finland, France, Japan, Norway and State of California.*
- In the following countries, only “Internet access+Tel” bundles were available: *Germany and Portugal.*
- In *Belgium*, all types of bundles were offered and followed the classical pattern of more services for a higher charge.
- The following countries did not offer all types of bundles, though the available offers follow the above pattern, i.e. triple play offers were more expensive than double play offers, which were more expensive than “Internet only” offers: *Czech Republic, Denmark, Greece, Hungary, Iceland, Latvia, Lithuania, Romania, Spain, State of Colorado, State of New York and Sweden.*
- In *Ireland*, where all types of bundles were available, charges followed the pattern with the exception of the least expensive offer including television, being slightly more expensive than the one that included fixed telephony services.
- The least expensive offers for some countries demonstrated that offers that included more services did not necessarily lead to more expensive offers. In the following countries, triple play offers were cheaper than offers that included Internet access and fixed telephone: *Bulgaria, Estonia and Slovenia.* There could not be found obvious technological elements or issues related to the geographical availability of the offers that explain this situation. In *Italy*, the least expensive offer including fixed telephony services was cheaper than the one that included Internet access only. *Poland* is a special case as a bundle with Internet access and television was cheaper than Internet access only, and the least expensive triple play offer was cheaper than the bundle that included Internet access and fixed telephone.

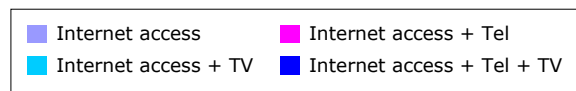
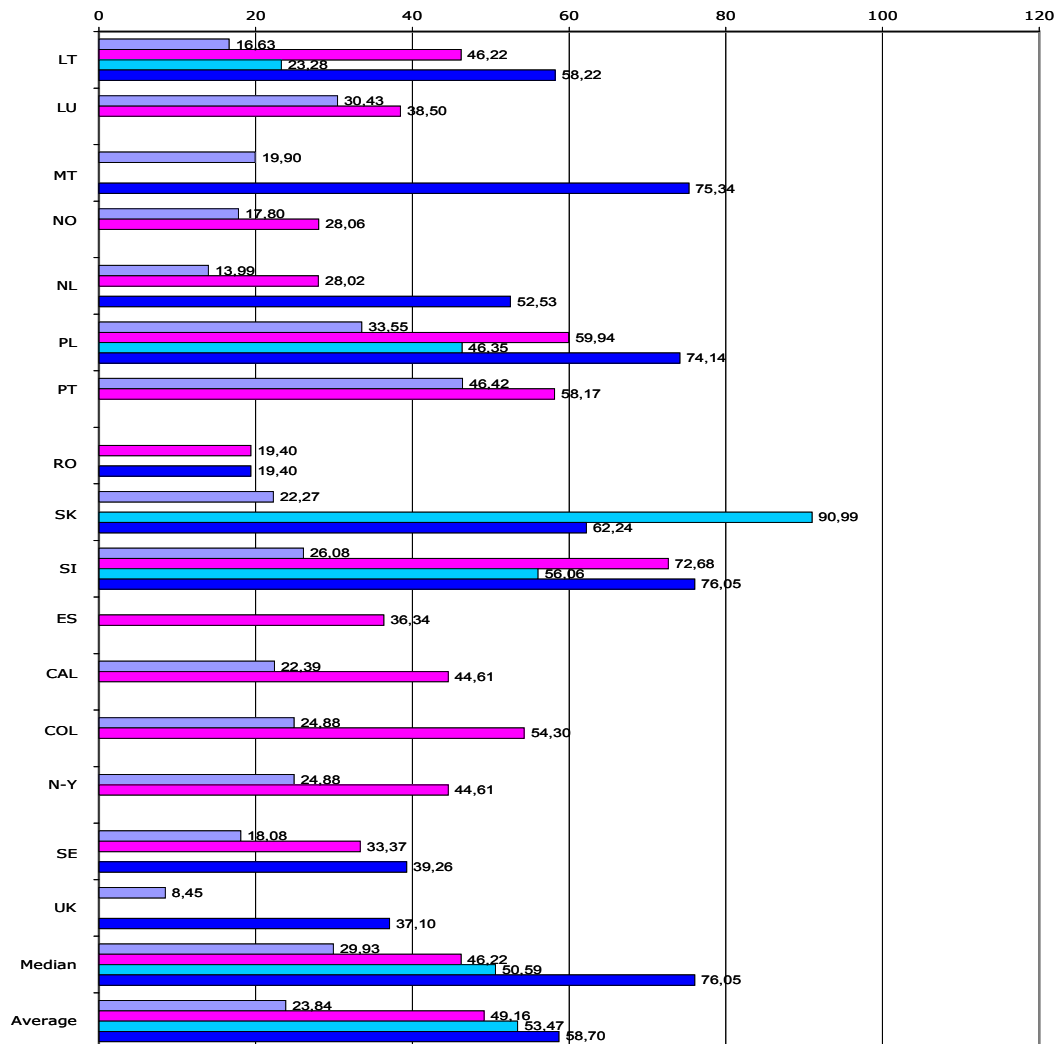
5.5.3 **BASKET "1024KBPS-2048KBPS (INCL.)", IN €/PPP (VAT INCL.)**

For Cyprus and France, no offer corresponding to this basket was available in the sample.

**Least expensive offer:
Comparison of all bundles
Basket "1024-2048 (incl.)"**
Total cost/month in €/PPP (VAT incl.)



Least expensive offer:
Comparison of all bundles
Basket ""1024-2048 (incl.)" (followed)
Total cost/month in €/PPP (VAT incl.)



Conclusions on the least expensive offer per country for “Internet only” and all bundle types – basket “1024-2048”

For *Cyprus* and *France*, no offer corresponding to this basket was available.

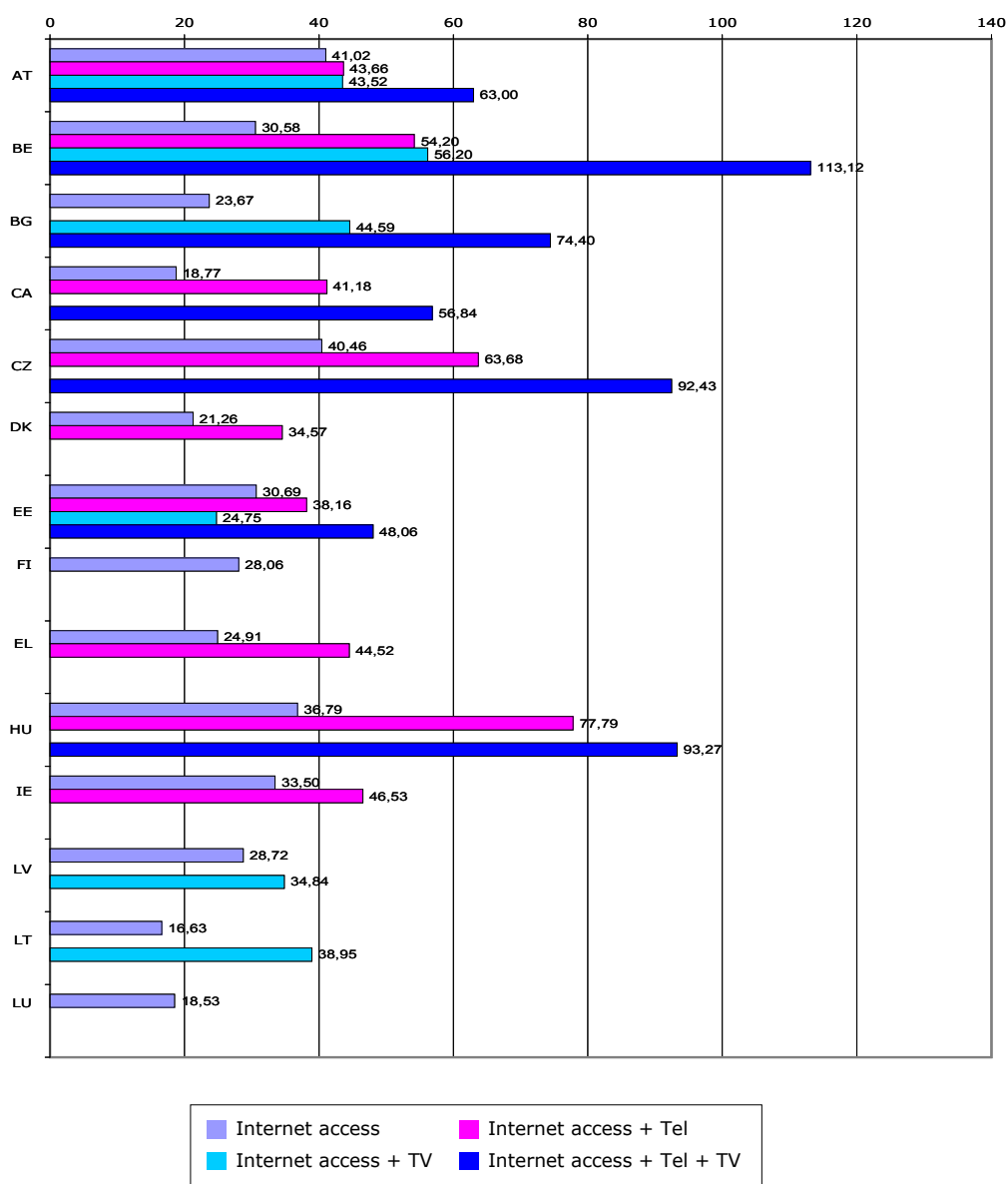
Within a single country, bundled offers were all more expensive than “Internet only” offers. Moreover, bundles that included Fixed Telephony Services tended to be more expensive than bundles that included television, while triple play offers were usually the most expensive offers. In contrast with what was observed in the two previous bundles, the median and the average did not follow this pattern as in both cases the bundle including television was more expensive than the one including Fixed Telephony Services.

- In the following countries, only “Internet only” offers were available: *Canada, Finland, Japan* and *Korea*.
- In *Germany* and *Spain*, only packages including Internet access and fixed telephone were available, while in *Iceland*, only the bundle “Internet access+TV” was available for this basket.
- In the following countries all types of bundles were offered and followed the above pattern: *Lithuania, Poland* and *Slovenia*.
- The following countries did not offer all types of bundles, though the available offers followed the above pattern, i.e. triple play offers were more expensive than double play offers, which were more expensive than “Internet only” offers: *Austria, Belgium, Bulgaria, Czech Republic, Denmark, Greece, Ireland, Italy, Luxembourg, Malta, The Netherlands, Norway, Portugal, Slovakia, State of California, State of Colorado, State of New York, Sweden* and *the United Kingdom*.
- In *Estonia*, where all types of bundles were available, charges followed the pattern with the exception of the triple play offer being less expensive than the one that included Fixed Telephony services.
- In *Latvia*, where all bundles were also available, the pattern was not followed at all since the bundle including television was more expensive than the one including Fixed Telephony Services and the triple play offer was less expensive than the bundles including two services.
- The least expensive offers for *Hungary* demonstrated that offers that included more services did not necessarily lead to more expensive offers. In *Hungary*, the least expensive triple play offer was cheaper than the offer including Internet access and Fixed Telephony Services.
- In *Romania*, the least expensive “Internet+Tel” bundle and the triple play bundle had the same total charges.

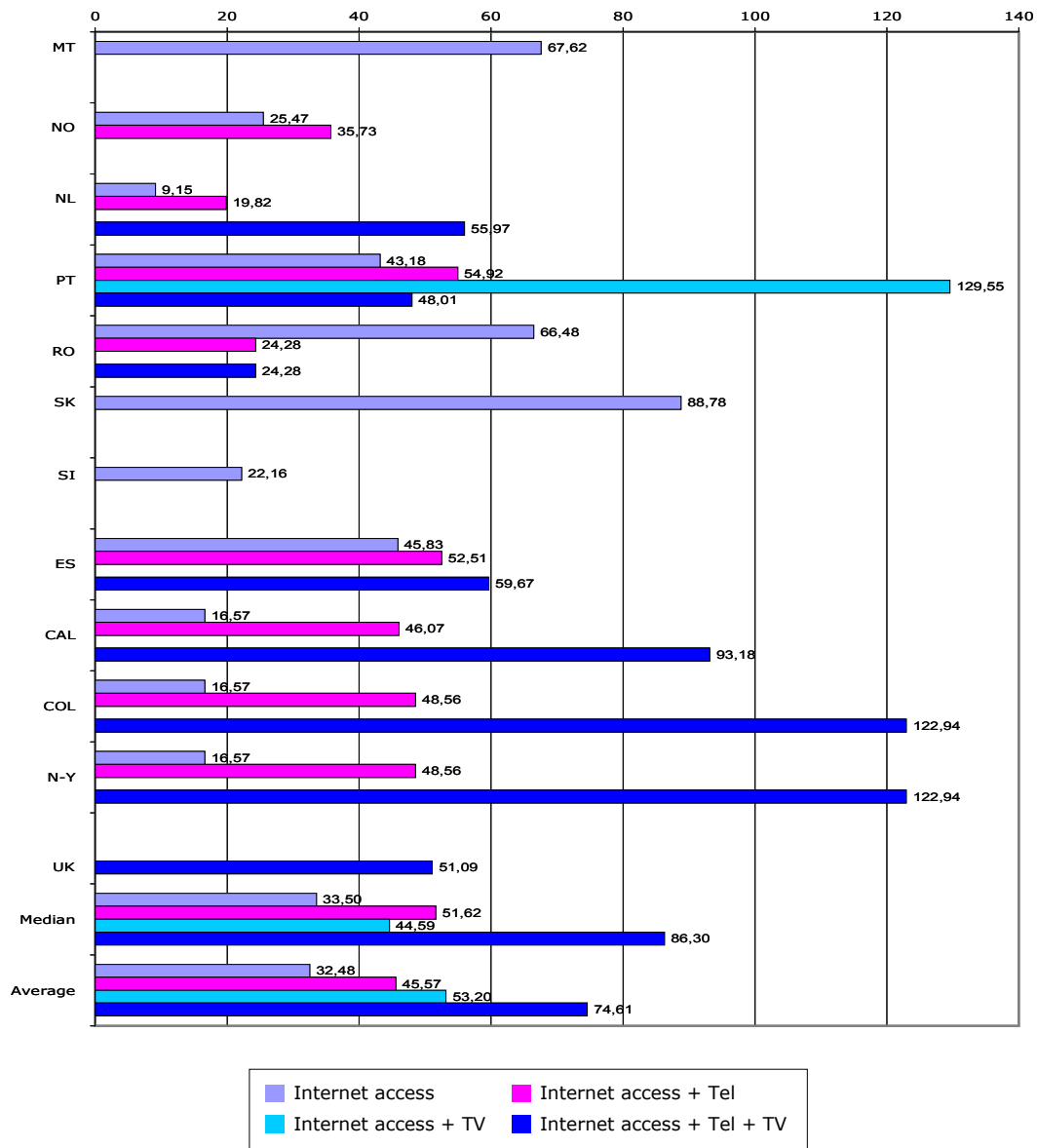
5.5.4 BASKET "2048KBPS-4096KBPS (INCL.)", IN €/PPP (VAT INCL.)

For the following countries, no offer corresponding to this basket was available in the sample:
Cyprus, France, Germany, Iceland, Italy, Japan, Korea, Poland and Sweden.

Least expensive offer:
Comparison of all bundles
Basket "'2048-4096 (incl.)"
Total cost/month in €/PPP (VAT incl.)



Least expensive offer:
Comparison of all bundles
Basket ""2048-4096 (incl.)" (followed)
 Total cost/month in €/PPP (VAT incl.)



Conclusions on the least expensive offer per country for “Internet only” and all bundle types – basket “2048-4096”

For the following countries, no offer corresponding to this basket was available: *Cyprus, France, Germany, Iceland, Italy, Japan, Korea, Poland and Sweden.*

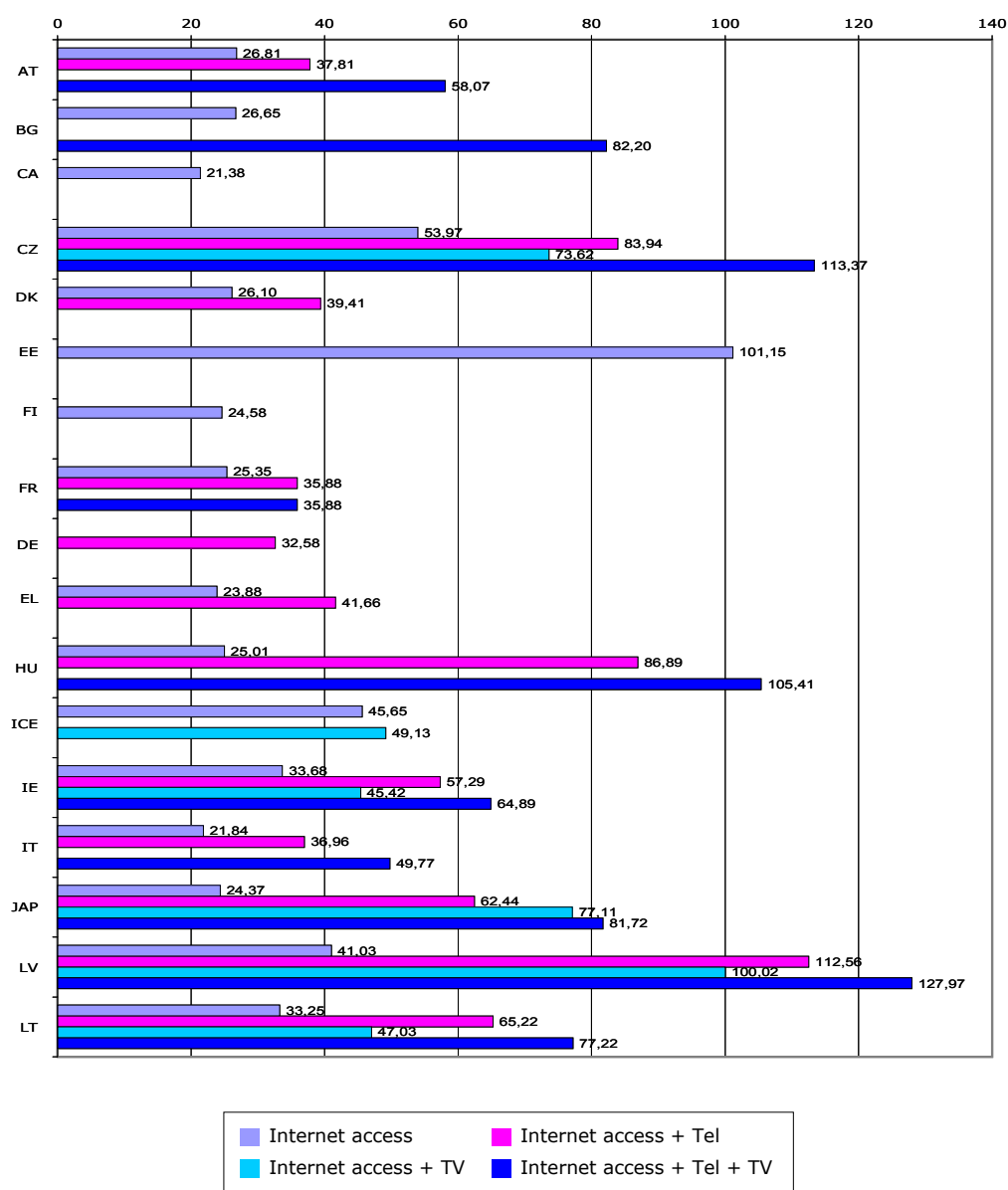
Within a single country and with the exception of Romania, bundled offers were all more expensive than “Internet only” offers. Moreover, bundles that included fixed telephone tended to be more expensive than bundles that included television, while triple play offers were usually the most expensive offers. The median also followed this pattern, though the average of the “Internet access+TV” offers were slightly higher than the average of Internet and fixed telephone bundles.

- In the following countries, only “Internet only” offers were available: *Finland, Luxembourg, Malta, Slovakia and Slovenia.*
- In *the United Kingdom*, only triple play offers were available for this basket.
- In *Austria and Belgium*, all types of bundles were offered. They followed the above pattern in Austria. In *Belgium* however, the bundle including television was slightly more expensive than the bundle including Fixed Telephony Services.
- The following countries did not offer all types of bundles, though the available offers followed the above pattern, i.e. triple play offers were more expensive than double play offers, which were more expensive than “Internet only” offers: *Canada, Bulgaria, Czech Republic, Denmark, Greece, Hungary, Ireland, Latvia, Lithuania, The Netherlands, Norway, Spain, State of California, State of Colorado, and State of New York.*
- In *Estonia*, where all types of bundles were available, charges followed the pattern with the exception of the least expensive offer that included television being cheaper than the “Internet only” offer.
- The least expensive offers for *Portugal and Romania* demonstrated that offers including more services did not necessarily lead to more expensive offers, as in both cases triple play offers were more expensive than “Internet only” offers.

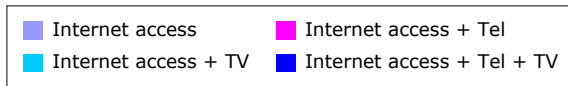
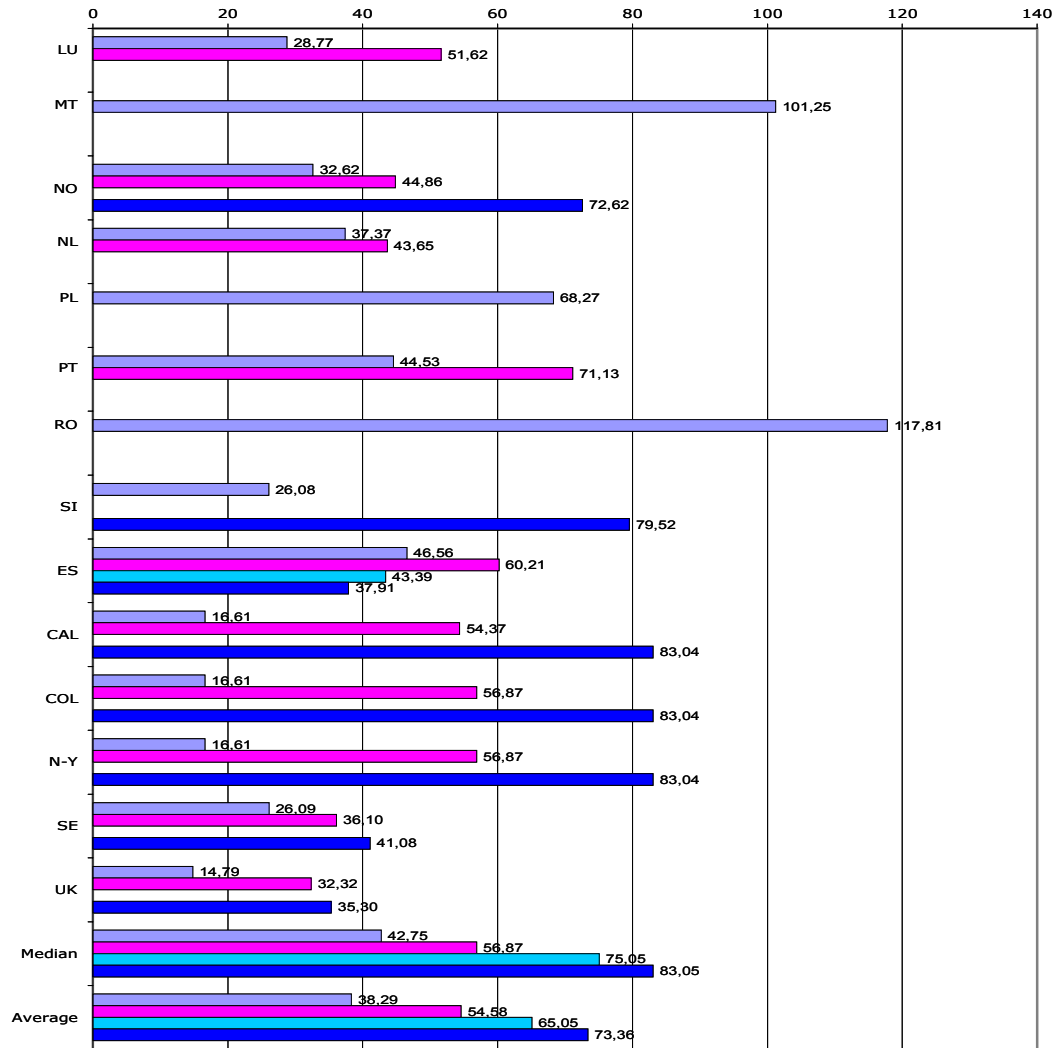
5.5.5 BASKET "4096KBPS-8192KBPS (INCL.)", IN €/PPP (VAT INCL.)

For the following countries, no offer corresponding to this basket was available: *Belgium, Cyprus, Korea and Slovakia.*

Least expensive offer:
Comparison of all bundles
Basket "4096-8192 (incl.)"
Total cost/month in €/PPP (VAT incl.)



Least expensive offer:
Comparison of all bundles
Basket ""4096-8192 (incl.)" (followed)
 Total cost/month in €/PPP (VAT incl.)



Conclusions on the least expensive offer per country for “Internet only” and all bundle types – basket “4096-8192”

For the following countries, no offer corresponding to this basket was available: *Belgium, Cyprus, Korea and Slovakia*.

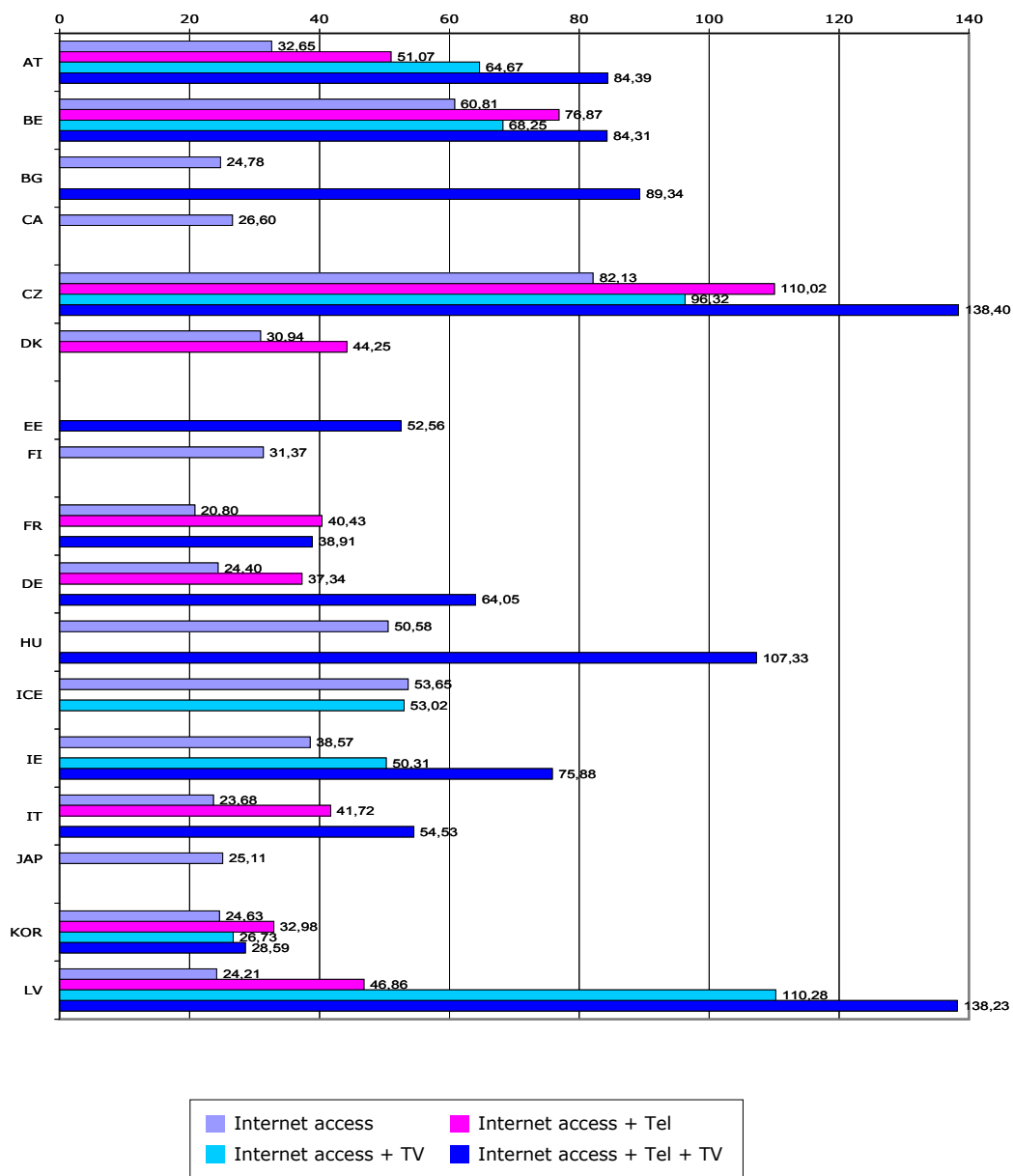
Within a single country, bundled offers were all more expensive than “Internet only” offers. Moreover, bundles that included fixed telephone tended to be more expensive than bundles that included television, while triple play offers were usually the most expensive offers. The median and average did not follow this pattern; the cost for the “Internet access+TV” offers was higher than Internet and Fixed Telephony Services bundles. No technological or qualitative elements could be found that explain the relatively higher charges for bundles including television than for bundles including Fixed Telephony Services compared to the previous baskets.

- In the following countries, only “Internet only” offers were available: *Canada, Estonia, Finland, Malta, Poland and Romania*.
- In *Germany*, only bundles including Internet access and Fixed Telephony Services were available.
- In the following countries, all types of bundles were offered and followed the above pattern: *Czech Republic, Ireland, Latvia and Lithuania*.
- The following countries did not offer all types of bundles, though the available offers followed the above pattern, i.e. triple play offers were more expensive than double play offers, which were more expensive than “Internet only” offers: *Austria, Bulgaria, Denmark, Greece, Hungary, Iceland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Slovenia, State of California, State of Colorado, State of New York, Sweden and the U.K.*
- In *Japan*, where all types of bundles were available, charges followed the pattern with the exception of the least expensive offer, which included television being more expensive than the bundle including Fixed Telephony Services.
- In *France*, the least expensive “Internet+Tel” bundle and the triple play bundle had the same total charges.
- The least expensive offers for *Spain* demonstrated that offers that included more services did not necessarily lead to more expensive offers, as in both cases, “Internet only” offers were not the least expensive.

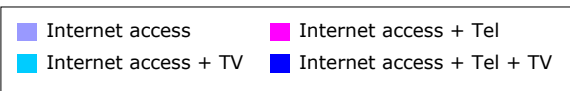
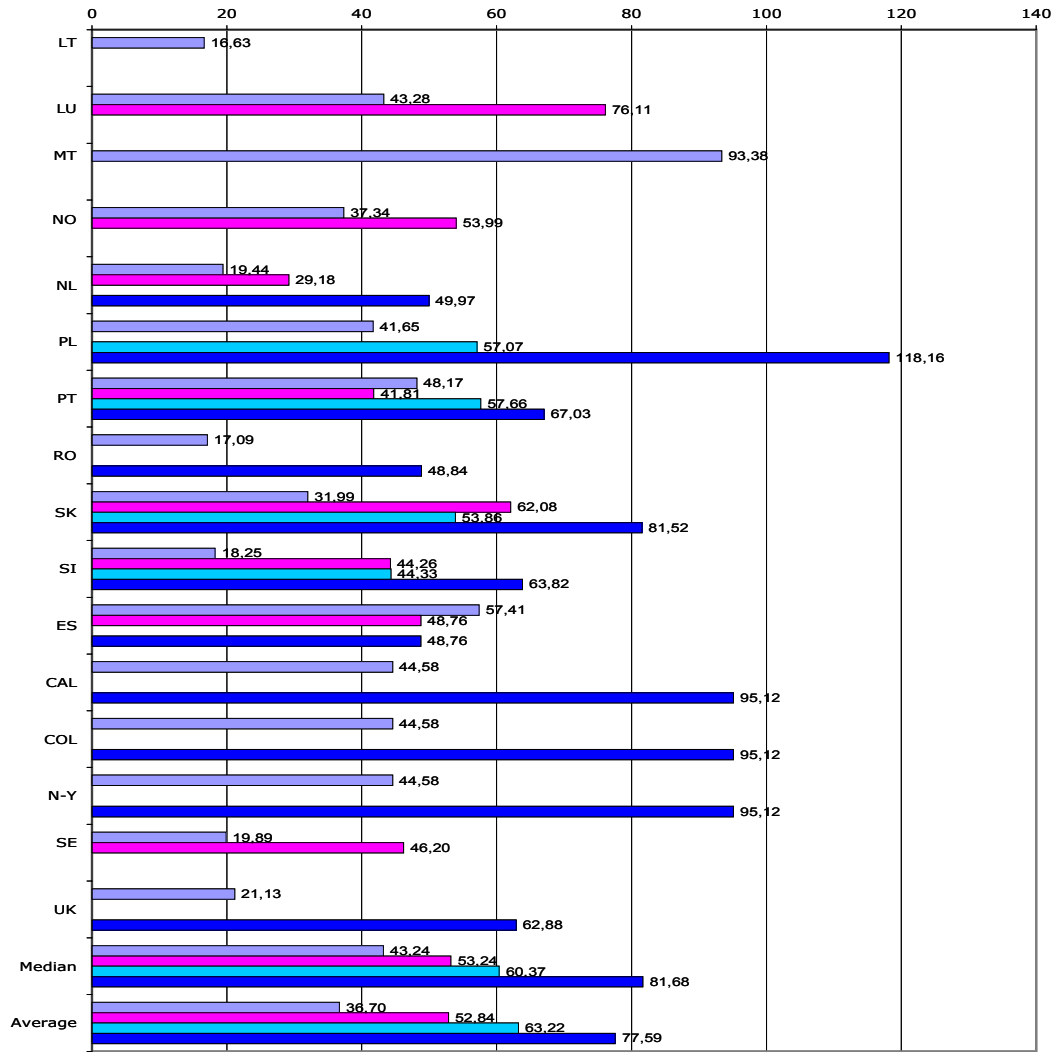
5.5.6 **BASKET "8192KBPS-20MBPS (INCL.)", IN €/PPP (VAT INCL.)**

For *Cyprus* and *Greece*, no offer corresponding to this basket was available in the sample.

**Least expensive offer:
Comparison of all bundles
Basket "8192-20Mbps (incl.)"**
Total cost/month in €/PPP (VAT incl.)



Least expensive offer:
Comparison of all bundles
Basket "'8192-20Mbps (incl.)" (followed)
Total cost/month in €/PPP (VAT incl.)



Conclusions on the least expensive offer per country for “Internet only” and all bundle types – basket “8192-20Mbps”

For *Cyprus* and *Greece*, no offer corresponding to this basket was available.

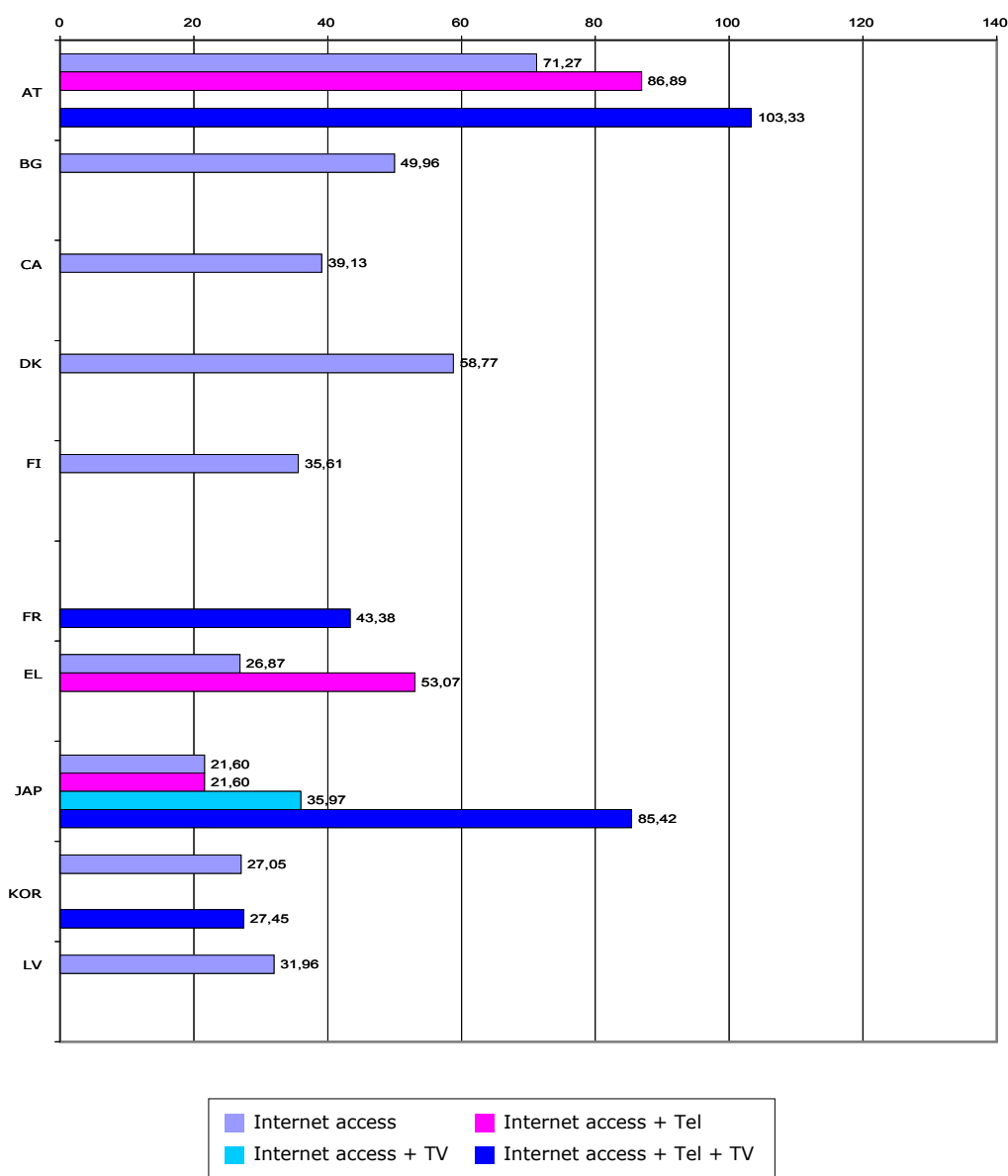
Within a single country, with the exception of *Iceland*, *Portugal* and *Spain*, bundled offers were all more expensive than “Internet only” offers. Moreover, bundles that included fixed telephone tend to be more expensive than bundles including television, while triple play offers were usually the most expensive offers. However, the median and average did not follow this pattern for this basket, as both the median and the average of the “Internet access+TV” offers were higher than the median and average of Internet and Fixed Telephony Services bundles. No technological or qualitative elements could be found that explain the relatively higher prices for bundles including television than for bundles including Fixed Telephony Services compared to the previous baskets.

- In the following countries, only “Internet only” offers were available: *Canada, Finland, Japan, Lithuania* and *Malta*.
- In *Estonia*, only triple play offers were available for this basket.
- In the following countries, all types of bundles were offered and followed the above pattern: *Belgium, Czech Republic, Korea, Slovakia* and *Slovenia*.
- The following countries did not offer all types of bundles, though the available offers followed the above pattern, i.e. triple play offers were more expensive than double play offers, which were more expensive than “Internet only” offers: *Bulgaria, Denmark, Germany, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Poland, Romania, State of California, State of Colorado, State of New-York, Sweden* and *the United Kingdom*.
- In *Austria* and *Latvia*, where all types of bundles were available, charges followed the pattern with the exception of the least expensive offer, which included television being more expensive than the bundle including Fixed Telephony Services.
- The least expensive offers for the following countries demonstrate that offers including more services did not necessarily lead to more expensive offers, as in both cases, “Internet only” offers were not the cheapest: *Iceland, Portugal* and *Spain*.
- In *France*, the cheapest triple play offer for this basket was cheaper than the “Internet access+Tel” bundle.

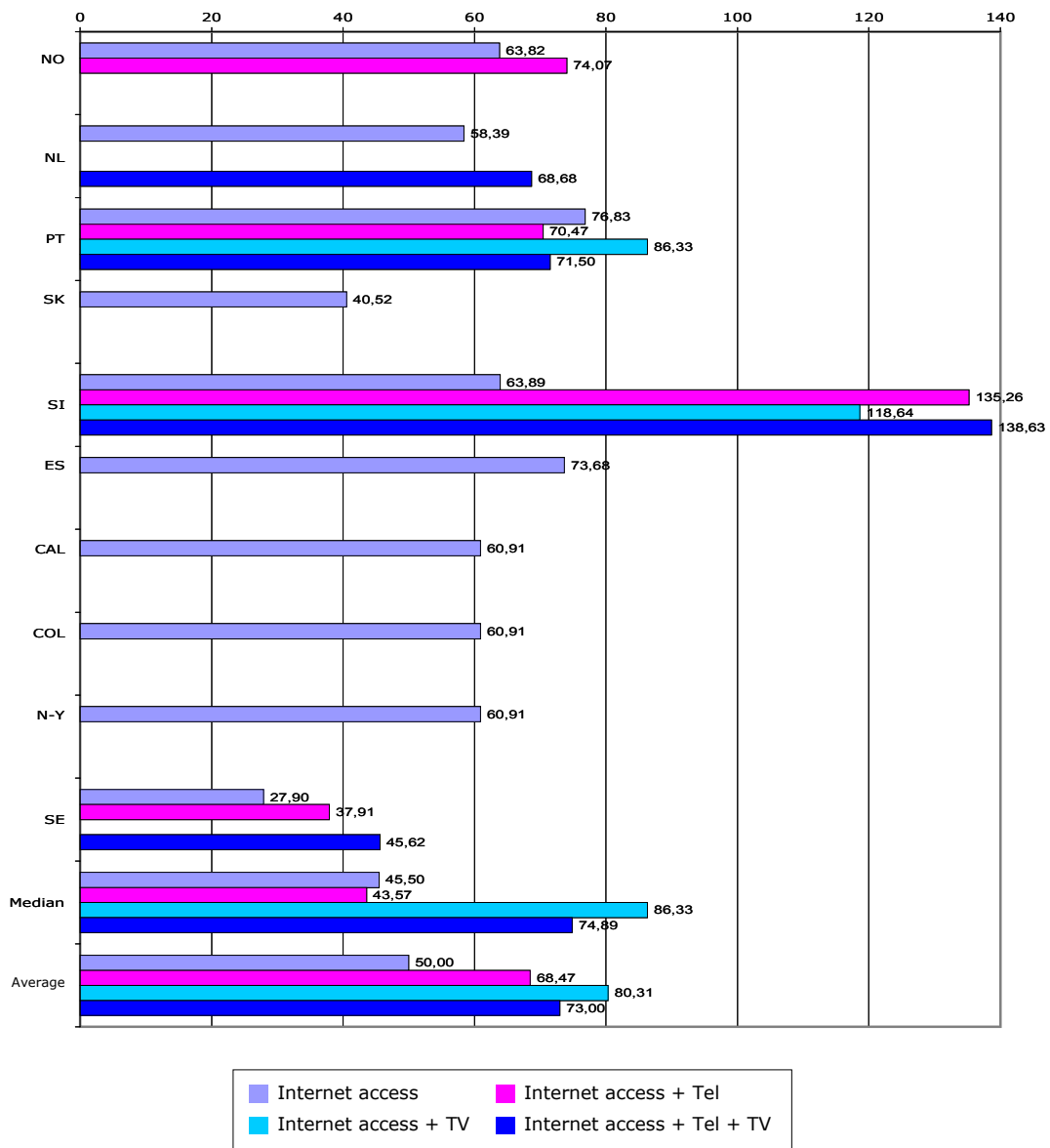
5.5.7 **BASKET "20+Mbps", IN €/PPP (VAT INCL.)**

For the following countries, no offer corresponding to this basket was available in the sample: *Belgium, Cyprus, Czech Republic, Estonia, Germany, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Poland, Romania and the United Kingdom.*

Least expensive offer:
Comparison of all bundles
Basket "20+Mbps (incl.)"
 Total cost/month in €/PPP (VAT incl.)



Least expensive offer:
Comparison of all bundles
Basket "'20+Mbps (incl.)" (followed)
Total cost/month in €/PPP (VAT incl.)



Conclusions on the least expensive offer per country for “Internet only” and all bundle types – basket “20+Mbps”

For the following countries, no offer corresponding to this basket was available: *Belgium, Cyprus, Czech Republic, Estonia, Germany, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Poland, Romania and the United Kingdom.*

Within a single country, bundled offers were all more expensive than “Internet only” offers. As very few countries are offering packages including Internet Access with a download speed of 20+Mbps, no conclusion could be drawn on the relative charges of different categories of bundles.

- In the following countries, only “Internet only” offers were available: *Bulgaria, Canada, Denmark, Finland, Latvia, Slovakia, Spain, State of California, State of Colorado and State of New York.*
- In *France*, only triple play offers were available for this basket.
- In *Japan, Portugal and Slovenia*, all types of bundles were offered, but followed a different pattern in each single country.

6. GENERAL FINDINGS

Based on the results of the comparisons above, the general findings can be summarised as follows:

1. When comparing the average Broadband Internet Access Cost (based on the least expensive offers per country and expressed in EUR/PPP) in the New Member States (NMS) with the average in the EU15, prices in the former are higher in most of the baskets. However, in the first semester of 2008, the average cost in the NMS is lower in the baskets 1024kbps-2048kbps incl. and + 20 Mbps.
2. The first basket is the only one for which the EU 15 average, based on the least expensive offers, is the lowest compared to the other groups of countries. For the baskets 512kbps-1024kbps incl.; 2048kbps-4096kbps incl. and 4096kbps-8192kbps incl.; the Non EU average is the lowest, followed by the averages for the EU15, the EU27 average and the NMS. Averages for the baskets 1024kbps-2048kbps, and 8192kbps-20Mbps incl. and + 20 Mbps are remarkably uniform for the different groups of countries studied (EU 27, EU 15, NMS and Non EU).
3. The difference between the least expensive offer in a given country and the median Broadband Internet Access Cost might shed some light on the transparency and thus the competitiveness of the market. It remains, however, hazardous to try to draw general conclusions on the basis of the observed values. For example, in the Czech Republic, the difference between the least expensive offer and the median is, for the basket 512kbps-1024kbps, relatively limited, which would mean that this market segment is transparent and thus competitive, but even the least expensive offer is about twice as expensive as the average for the NMS for this basket.
4. Most offers in the sample are of the 'unmetered' type; in cases where both metered and unmetered types are offered, no conclusion can be drawn as to which type of offers are less expensive.
5. In general it can be concluded that the charges depend on the download speed, but in only a very few countries (e.g. in Denmark), the cost of higher speeds are also systematically more expensive. In most cases and despite the global trend that charges depend on the download speed, offers with higher speeds can be less expensive than offers with lower speeds (e.g. in Belgium, Hungary, Luxembourg, the Netherlands,...). This could indicate a low transparency of the market or it could be caused by regional availability.
6. The analysis does not show unambiguously that where, in a given country, both xDSL and Cable (and FTTH) based access are offered (i.e. 'multi-platform countries'), generally the prices are lower compared to countries where only one technology is offered (i.e. mono-platform countries). In about half of the cases where both technologies were offered, the xDSL median offer was more expensive than the Cable median offer in a given country.
7. Depending on the basket, the number of cases in which incumbent operators emerge as the least expensive ones varies between 1 out of 4 countries to 1 out of 3 countries, but they never form the majority of the cases.

8. There is no general conclusion to be drawn on the way in which the total charges are split between recurring and non-recurring charges: in some countries, the least expensive offers do not explicitly charge for one-off expenses, whereas in some other countries, the least expensive offers for some baskets may comprise 50% or more (see e.g. Malta) of the non-recurring charges. In the latter case, the high monthly non-recurring charges are related to the short contract duration (3 months only).
9. Over 45% of the offers that were collected contain services in addition to the Internet access (telephone and/or television); this trend to bundle offers is to be observed for nearly all countries, with the exception of Cyprus and Finland. The first country is characterised by a limited offer (only offers in the first 2 baskets are available). The second country has very competitive prices for the Internet access only offers, despite the fact that no bundled offers are included in the sample.
10. For the bundled offers including Fixed Telephone Services, it could be observed that most often additional charges for the fixed telephone services are required. This implies that 'flat fees' are not at all common for these bundles. Only for the + 20 Mbps basket, most often no additional telephone charges are required.
11. The bundled including Internet Access and Television Services is the least popular one: it is only offered in 16 countries (of which 3 countries are non EU) and per country, there are on average only offers available in 3 out of the 7 baskets.
12. For the first 2 baskets, the bundled offers including Television Services were on average less expensive than the bundled offers including Fixed Telephony. For the baskets with higher speeds, the bundle including Television was on average more expensive than the bundle including Fixed Telephony. Finally, on average and for all baskets – with the exception of the 512kbps-1024kbps incl. and + 20 Mbps basket – triple play offers are the most expensive bundles.