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REPORT

On Transparency of Tariff Information

March 2009

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REPORT

On Transparency of Tariff Information

Executive summary

It is sometimes difficult for consumers to find, understand and use the information available on the market in order to make decisions on the choice of service provider and/or tariff packages that best meet their needs. Regulatory intervention may therefore be appropriate to address the issue of deficient consumer information in its various forms including lack of information, unclear or hard to find information, misleading information or the bounded rationality of consumer decision-making.

The objectives of this report are to analyse the end-user information transparency problem and draw an inventory of the practices used to inform end-users by service providers, NRAs and third parties. In line with its terms of reference, this report focuses in particular on the transparency of tariff information.

The report uses three types of sources: a questionnaire addressed to the NRAs, case studies and various academic works, studies and reports. While reflecting the positions expressed by NRAs in their answers to the questionnaire, the report is not intended to make a qualitative assessment of the methods used and the particular set of methods employed need to be considered in relation to national market characteristics.

1. Lack of transparency (the end-user transparency problem) may mean that end-users do not find it easy to make informed decisions and compare services. This may be because the information does not exist or is deceptive. It might also be because the information consumers are presented with is complex, not easy to interpret and/or set out in a number of different places, which makes it difficult to interpret and/or compare. Transparency problems can be generated and amplified by a variety of factors, including the increasing number and diversity of offers, the complexity of tariff plans, the bundling of services and the deficient presentation of information by service providers.

Tariff transparency is mentioned as an area of concern by NRAs in a significant number of countries. In particular, the difficulties experienced by end-users in comparing tariffs seem to be a matter of concern shared by most of the responding NRAs and also highlighted by surveys carried out at EU and national level.

An information transparency deficit may affect end-users' interests in a number of ways, irrespective of the manner in which this deficit is manifest (e.g. lack of information, misleading information, unclear or hard to find information, or information which is difficult

to assess and compare). End-users could face negative consequences if they may pay more than they would need to, they may buy a service which does not satisfy their needs and/or, at the most extreme, they may be excluded from participating in the market and consequently from the associated rights and benefits.

2. Such negative consequences can be prevented by giving consumers access to information which is relevant to their needs. Information practices can be divided into three categories, according to the party who is providing the information to end-users:

- Information methods/tools employed by service providers,
- Information methods/tools implemented by NRAs
- Information methods/tools made available by third parties.

As for the first category, a wide range of methods and tools are used by providers of electronic communications services to inform end-users, on an either mandatory or voluntary basis. There is also a mix of static and interactive instruments. Measures considered by some NRAs to be particularly effective in the first category include publication on providers' websites, bills and in particular itemised bills with a regulated minimum content or leaflets sent along with them. The instruments in the second category are generally targeting individual consumers, offering online and/or personalised assistance; some NRAs have rated as particularly effective the customer care service, the instant billing control applications, the voice announcements/acoustic signals when calling a ported/off-net/special tariff number or the information sent via SMS or e-mail directly to the user.

Tools providing direct information to consumers in a targeted and personalised way (via phone, letters, e-mails, SMS, interactive web applications etc.) can complement the general information requirements to be met by providers, in particular in relation with changes occurring after the entry in to the contract and controlling the expenditure with electronic communications services.

Web-based methods can be complemented by 'off-line' methods able to reach a wide audience especially where a material share of this audience may not have access to the Internet.

Implementation of such methods either compulsorily (by laws or regulations) or voluntarily (via encouraging and guiding industry self-regulation) can empower end-users, helping them make informed choices which best serve their needs.

NRAs have put in place a variety of methods and tools to inform end-users. The approaches include static and unidirectional (such as publication of general information on websites maintained by NRAs), dynamic and unidirectional (e.g. through media campaigns) and dynamic and bi-directional or interactive (offer comparison websites, consumer assistance via telephone, mail or e-mail etc.).

NRAs' websites are regarded by many regulators as effective information tools. Most NRAs publish general end-user information on their websites, including the possibility of switching between providers, end-users' rights in dealing with service providers, complaint and dispute settlement procedures, advice on choosing an offer, generalities on tariffs and billing and special charging rules.

Other tools considered to be effective by responding NRAs are interactive web-based price guides ('price calculators'), which can perform calculations based on preferred consumption volumes and rank subscription packages from different providers according to their price, are

considered to be effective information tools. Overall, half of the NRAs have introduced or consider it appropriate to introduce such tools, directly or via the accreditation of third-party initiatives. Successful price calculators cover the full range of electronic communications services, are rich in features but at the same time display a particularly user friendly interface and attach significant value to the simplicity and ease of the user experience.

An alternative to an NRA running an interactive price calculator website is where the NRA establishes a system for the accreditation of such websites maintained by third parties. An accreditation scheme can provide quality assurance, for example by certifying that the price calculations offered by accredited websites are accessible, accurate, transparent and comprehensive.

Other information methods rated as effective by NRAs include the use of media channels (radio, TV, newspapers), the distribution of leaflets or the use of individual communication channels with the end-users seeking for assistance. These tools may have a particular relevance for those who do not have access to the Internet and can complement the use of web-based information instruments.

National and international third parties may also be useful in developing complementary initiatives to those deployed by service providers and NRAs in their effort to inform end-users. Positive experiences as far as third-party action is concerned were reported in some ERG countries, including the provision of reliable information and advice on consumer issues by associations which are widely known and trusted by the public. It is noted however that third parties do not generally provide tailored comprehensive information targeted particularly at the end-users of electronic communications services. The experience recorded by some NRAs shows that third-party initiatives to inform these end-users can be sporadic and rarely have a wide reach. Also, the experiences with comparison websites developed by third parties appear to be very different, the perception of responding NRAs as to the degree of effectiveness and trustworthiness of such initiatives varying to a significant extent.

The report also contains case studies from five countries, which display a variety of valuable experiences in providing information to end-users. Norway, Hungary, UK, Slovenia and Portugal use diverse instruments to ensure that consumers have access to information: price calculators, accreditation schemes, comparison website with no price calculator and detailed information requirements imposed on providers.

Introduction

The regulatory focus in the electronic communications sector has traditionally been on technical and economic aspects of suppliers' conduct in the market. The regulators' efforts have been largely devoted to an array of topics which span from devising rules for market entry and awarding rights of use to regulating access and interconnection and establishing price control mechanisms. As a result, the electronic communications markets have grown and competition has developed, but, at the same time, the need to directly protect and empower end-users of electronic communications services has been increasingly perceived and recognised. The obstacles to switching between providers and the end-user information deficit have become new areas of concern for regulators. Apart from the immediate disadvantages, these problems also have far-reaching consequences for end-users, due to the two-way relation which exists between consumer information and ability to switch between providers, on the one hand, and competition, on the other. A recent OECD report¹ draws attention to this relation, showing that:

*... informed consumers who are prepared to exert an ability to choose between competing suppliers are necessary to stimulate firms to innovate, improve quality and compete in terms of price. In making well-informed choices between suppliers, consumers not only benefit from competition, but they initiate and sustain it. Conversely, where consumers have too little information, poor quality information, or mis-information, they may end up misled and confused by the choices on offer, may pay too much or buy the wrong service. This may, in turn, inhibit and dampen the competitive process. For consumers to engage effectively in the market and use their ability to vote with their wallet, they need to be able to move quickly and with the minimum constraint between service providers.*²

Regulators around the world have become more and more concerned with the issue of deficient consumer information under its various aspects: lack of information, unclear or hard to find information, misleading information or what has been called the 'bounded rationality' of consumer decision-making³. Behavioural economics recognises that actual consumer behaviour may in fact often be different from the rational behaviour assumed by the conventional economic thinking. Indeed, for a variety of reasons – which include the diversity and complexity of the offers available on the market or the way in which marketing strategists choose to promote a certain product, or simply well-established user perceptions – consumers are not always able to understand and use the information which is available on the market in order to make consumption decisions that would optimally satisfy their needs and, thus, put an effective pressure on service providers.

¹ OECD (Organisation for Economic Co-operation & Development) (2008), *Enhancing competition in telecommunications: protecting and empowering consumers*, DSTI-ICCP-CISP(2007)1/FINAL, May, 2008, p.4. Available at: [http://www.oilis.oecd.org/oilis/2007doc.nsf/LinkTo/NT00005FB2/\\$FILE/JT03246386.PDF](http://www.oilis.oecd.org/oilis/2007doc.nsf/LinkTo/NT00005FB2/$FILE/JT03246386.PDF).

² See also Ofcom (2006), *Ofcom's Consumer Policy – A Consultation* (2006), available at: http://www.ofcom.org.uk/consult/condocs/ocp/ocp_web.pdf, pp. 1.25-1.26: 'Ofcom believes that consumer interests can in general best be furthered through the promotion of active and effective competition between service providers. In isolation, however, this may not be enough. Consumers also need to be empowered to get the best possible outcome from their dealings in the market, and to secure the benefits of competition. To this end, consumers need to have the confidence, information and understanding required to enable them to make rational, informed choices. [] We recognise that in some cases, the market may not deliver to consumers the information they want.'

³ OECD (2008), p.4.

Informing and educating consumers are key ways to further participation in the electronic communications market and help consumers make decisions in their best interest. Information encompasses a wide range of topics, from the availability of alternative services and suppliers to the comparable benefits of different offers available on the market. Together with policies and instruments which seek to ease the switching process, such as number portability or limitation of contracts' duration, end-user information is part of a wider policy to stimulate fluidity and transparency of the electronic communications markets. Ultimately, the aim of this policy is to ensure that, on the one hand, consumers have easy access to the information they need in order to make best possible choices, and, on the other hand, that they may change their service provider without having to deal with excessive obstacles. While it does not envisage the direct intervention in the retail markets, it aims at ensuring that providers' conduct in the market is not detrimental to competition and consumers and may be complemented by measures to educate consumers in order to make them aware of their biases (e.g. in heavily discounting costs).

The European Commission has identified a number of problems in relation to the transparency and publication of consumer information in its 2006 Framework Review proposals and proposed a series of measures to address these issues⁴. According to Commission's analysis, consumers are often unable to find out, or are not aware of, which tariff applies to their services. For example, when calling a premium rate number, consumers are not always adequately informed of the price involved or even of the type of service behind the number. Another example is that a mobile call to a number advertised as 'freephone' may not be free. The Commission also recognised that making price comparisons can be difficult for consumers, particularly in cases of service bundling. The changes proposed by the Commission seek, on the one hand, to give NRAs powers to require from operators better tariff transparency with the aim to ensure that consumers are fully informed of the price before they purchase the service, and, on the other hand, to strengthen the provisions concerning price comparison instruments. This second objective is pursued through giving third parties the right to use without charge or hindrance publicly available tariffs published by service providers for the purpose of selling or making available comparative price guides, and by empowering NRAs to make price guides available where the market has not provided them.

⁴ EC (2006), *Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on the Review of the EU Regulatory Framework for electronic communication networks and services* [COM(2006)334 final] *ó Proposed Changes, Staff Working Document*, Brussels, 28 June, SEC(2006) 816, p.24-25. Available at: http://ec.europa.eu/information_society/policy/ecomm/doc/library/public_consult/review/staffworkingdocument_final.pdf.

1. Objective of the report

The report has the following objectives:

A. Analyse the end-user transparency problem

Under this objective, the report intends to:

- Define what is understood by the end-user transparency problem in the electronic communications market and determine potential causes of this problem;
- Present some considerations pertaining to the economic background of the transparency problem; and
- Assess the magnitude of this problem, based in particular on data from the ERG countries.

B. Draw an inventory of the practices used to inform end-users

Under this objective, the report intends to:

- Identify the methods used by providers of electronic communication services to inform end-users in particular about tariffs for access and use of their services;
- Identify the measures taken by the NRAs or by other entities to give end-users access to comparable, adequate and up-to-date information especially on applicable tariffs in respect of access to and use of the electronic communication services. In particular, the report looks at the actions NRAs have taken to enable end-users to make an independent evaluation of the cost of alternative usage patterns (e.g. interactive price guides or similar techniques); and
- Provide indications as to the impact of the methods and measures referred to in the bullets above.

In line with its terms of reference as set out in the relevant Project Requirements Document, this report focuses in particular on the **transparency of tariff information**. Other areas for which transparency issues may be identified, e.g. other service terms and conditions or quality of service, are not within the primary focus of this report, although information has also been collected in connection with these areas and included in the report.

2. Methodological remarks regarding the preparation of the report

This report has been prepared based on information and data collected from the following sources:

- A questionnaire addressed to the NRAs from all the ERG countries, prepared by the ERG End User Project Team;
- Case studies prepared by NPT (Norway), NHH (Hungary), Ofcom (UK), APEK (Slovenia) and ANACOM (Portugal);
- Various academic works, studies and reports.

The NRA questionnaire

The questionnaire for the NRAs was prepared by the End User PT during June 1st ó July 31st and the answers were collected during August 1st ó September 30th.

The questionnaire was structured as follows:

- **Part I** (answers due by September 30th):
 - **Introduction:** Overview of the end-user transparency problems;
 - **Section 1:** Provision of information by **service providers**.
- **Part II** (answers due by September 5th):
 - **Section 2:** Methods/tools used by **NRAs**⁵ to improve end-user information;
 - **Section 3:** Methods/tools made available by **3rd parties** to improve end-user information.

The following categories of data were requested:

- **Introduction:**
 - Extent to which end-user transparency problems exist;
 - Supporting facts & figures.
- **Section 1: Provision of information by service providers:**
 - Mandatory/voluntary provision of information;
 - Information methods/tools used;
 - Requirements as to the form in which information must be provided;
 - Legal basis and penalties for non-compliance;
 - Specific methods/tools to inform end-users about tariffs/billing/charging;
 - Impact information;
 - Effectiveness rating;
 - Transparency requirements appropriate to be imposed in the future.

⁵ Including any relevant administrative body dealing with end-users issues, not only the National Regulatory Authority in charge of market analysis and regulation.

- **Section 2: Methods/tools used by NRAs to improve end-user information:**
 - Administrative bodies dealing with end-user protection (in particular transparency);
 - Inventory of methods/tools used by NRAs to inform end-users;
 - Effectiveness rating;
 - Method/tools appropriate to be imposed in the future;
 - Detailed information on offer comparison websites (interactive price guides): services for which comparisons are provided, search/calculation criteria, categories of information accessible, inclusion of discounted/promotional offers, model/default assumptions, Terms & Conditions, usage statistics, impact information, general information, related obligations imposed on providers.
- **Section 3: Methods/tools made available by third parties to improve end-user information:**
 - Inventory of methods/tools used by third parties to inform end-users;
 - Comments on effectiveness, efficiency and capabilities of third party methods/tools.

The questionnaire is annexed to this report (**Annex 1**).

24 NRAs have responded to Part I of the questionnaire, while 25 NRAs have responded to Part II⁶.

⁶ However, the respondents have not always answered all of the questions or have indicated that information is not available.

3. Analysis of the transparency problem

3.1. Definition and causes

Lack of transparency (the 'end-user transparency problem') may mean that end-users cannot easily make informed decisions and compare services⁷. This may be because the information does not exist or is deceptive. It might also be because the information they are presented with is complex, not easy to interpret and in a number of different places, i.e. it is difficult to interpret and/or compare.

Absent or deceptive information

The basic form in which lack of transparency may manifest itself is the absence of information. This lack of information might be about a variety of elements that end-users might want to know about to make informed decisions: existence of alternative suppliers of a given service, the possibility to switch between providers, details of commercial offers such as terms and conditions for the provision of services, tariffs and billing, quality of service, repair times etc.

The provision of deceptive information encompasses a wide array of practices including misleading advertising, 'pressurizing', small print conditions/exemptions, etc. As far as communication services are concerned, examples of such practices include:

- **Provision of false and/or misleading information** (e.g. about potential savings);
- **Applying unacceptable pressure to change providers;**
- **'Slamming'**, where consumers are switched from one company to another without their knowledge and consent; and
- **'Cramming'**, where consumers are subject to unauthorised or deceptive charges.

Information which is difficult to interpret and/or compare

As noted earlier, constraints on the ability of consumers to process information can lead to non-optimal, welfare-reducing decisions, even when the information available to them is not deceptive. Transparency problems can be generated and amplified by a variety of factors, including:

- **Increasing number and diversity of offers** ó Increased competition and innovation in the electronic communications sector is delivering considerable benefits to consumers but is also bringing more service offers into the market, with new and diverse features. This

⁷ Xavier, P. (2008), 'Transparency and information: more power to end-users of electronic communications services', paper presented at the international conference 'Regulating Electronic Communications ó Putting the End-User First', Bucharest, October 21st, 2008, p.3. Available at: <http://www.anrcti.ro/DesktopDefault.aspx?tabid=3372>.

increases the complexity of the marketplace for consumers and makes it difficult for them to compare and decide.

- **Complexity of tariff plans** ó The comparison of prices for electronic communications services offered by different providers is complicated by the wide range of possible consumer usage patterns and the detailed variations in price levels and price structures (e.g. tariffs for on-net/off-net calls, calls to mobile/fixed networks, depending on destination, during peak/off-peak hours, towards favourite numbers, family options etc.), amplified by the large number of possible discount and bundled schemes available. Tariff plans usually have a variety of structures and discount schemes⁸. Moreover, operators and service providers regularly adjust their pricing strategies either through changes in components of their tariff structure, or the introduction/withdrawal of various discount schemes and service packages. In short, the wide range of tariffs and discount schemes available makes it difficult for consumers to calculate which tariff, from which supplier, offers the best deal or an improvement on their existing service. To make a fully informed decision, consumers would need to study a detailed breakdown of their call profile (the number, type, duration and timing of calls made).

- **Bundling of services** ó The provision of bundled services ó combining telephony/Internet/TV ó offer lower prices, a single bill and new innovative services that are more tailor-made. But it also means that consumers face increasing complexity ó not just in the number of communications services they buy but also in the complexity of each individual service. And, because each bundle has a different set of characteristics, this may make it difficult to compare offers. This is likely to increase with the development of next generation networks, which support the delivery of multiple services over the same technological platform and thus are likely to boost the take up of bundles.

- **Deficient presentation of information by service providers** ó This could take many forms, including lack of/inadequate publication of information on tariffs and on other terms and conditions by service providers; lack of billing control tools; inadequate information on post-contract tariff changes; and many others.

3.2. Economic background

Conventional economic analysis recognises that information asymmetry and information failure may lead to sub-optimal consumer outcomes (see also the analysis of consequences of information deficit on consumers in section 1.3 below). It recognises that consumers face a bounded rationality (e.g. in processing information) and, as a result, rely on heuristics (such as reliance on a firm's reputation and other price and quality signals) in decision-making. But such demand-side analysis indicates improved insights into actual consumer behaviour that may exhibit systematic departures from the rational behaviour assumed by conventional (neoclassical) economics. That is, even when presented with full information, consumers may not always be in a position to understand and/or use that information to their advantage. This raises questions about whether, and if so, what different policy or regulatory intervention may be necessary to help consumers adopt decisions in their best interests.

⁸ For an assessment of the complications in comparing pricing offers resulting from the widening use of price discount schemes, see Xavier, P., 1998, 'Price discount schemes for telecommunications and international price comparisons', *Telecommunications Policy* (May).

Behavioural economics challenges some of the presumptions of conventional economics that consumers make their choices coherently and rationally given their preferences and the constraints upon them. Behavioural economics involves the study of *actual* consumer behaviour (by contrast with how consumers *should* behave). It argues that consumers can fail to act in their own best interests due to behavioural traits such as failure to process information objectively or misvaluations about the costs and benefits of prospective decisions.

Among the biases identified by behavioural economics, the following may be particularly relevant to the electronic communications market and may help to explain how, even where there is adequate information, consumers may be making seemingly irrational decisions in choosing an operator or service package⁹:

- **Choice overload** ó Consumers who have too many products or features to compare may experience increased anxiety about the possibility of making a bad choice. This can lead to random choice, or failure to make any choice, resulting in missed opportunities for buyers and sellers. A type of ðanalysis paralysisö can take hold when information and choice becomes very complex.

- **Endowment** ó Consumers may be reluctant to give up what they have, even though they would not buy such goods or services if they did not already have them (e.g. consumers may stay with the incumbent fixed line provider because of misplaced loyalty, a failure to acknowledge poor choices in the past, or an irrational consideration of sunk costs).

- **Defaults** ó The ordering of options, particularly in markets where a choice must be made, influences choice. A ðdefault biasö could be identified, that is, the decision to opt-in or opt-out (for example, when extending a mobile phone contract) is not the same decision for people. Also, consumers may tend to take the path of least resistance, particularly if they feel that there is a ðnormalö option (e.g. people may buy ðstandardö bundles offered by service providers, even if they do not want the whole service bundle).

- **ðHyperbolic discountingö** ó Consumers tend to be short-sighted when making decisions with immediate costs or benefits to be weighed against future costs or benefits. For example, consumers may enter long-term contracts because they place more value on the immediate benefits of the offer, such as a free or heavily subsidised handset or a reduced first month rate, rather than on the long term costs of a contract, such as high price for calls exceeding the usage limit of the subscription package (the ðincluded minutesö), the inability to switch to lower priced alternatives, and the inability to take advantage of latest technology. The apparent acceptance of the high prices set for calls made beyond the usage limit may be one illustration of ðhyperbolic discountingö by consumers who heavily discount the prospect of such costs in the future¹⁰. Providers can exploit consumers' underestimation of their future telecommunications usage by bundling airtime, handsets, and other services such as voice mail. The high long-term prices that consumers end up paying subsidise the free or heavily subsidised handsets, free calls and voicemail, etc.

- **Framing biases** ó Consumer choice is influenced by the ðframeö in which information is presented. Presentation of the same information in a different ðframeö, may lead to a different decision. For instance, cash back offers can be much more attractive to

⁹ OECD (2008), p.9-10.

¹⁰ OECD (2008), p.14.

customers than a similar or even greater discount. For most consumers, only 3% fat is likely to be less appealing than 97% fat free.

- **Loss aversion** – The preference for avoiding loss is widely considered to be greater than the preference for gain.

- **Heuristics** – Consumers often take short cuts (e.g. by following rules of thumb) when the decision environment is too complex for their mental and computational capabilities. These rules of thumb are called “heuristics” and are often accurate enough to be useful, but may sometimes lead to sub-optimal decisions.

3.3. Magnitude of the transparency problem

3.3.1. The results of the questionnaire – focus on the difficulty to compare tariffs

In the data collection exercise carried out with the ERG End User PT questionnaire, eighteen NRAs responded to the question asking them to provide information on the extent to which there are end-user transparency problems in their countries. Fourteen of them indicated that such problems exist in their jurisdiction. Out of these, eleven pointed out to some form of transparency concern related to tariffs.

Among the eleven NRAs expressing tariff transparency-related concerns, six mentioned the difficulty of comparing tariffs, three named the issue of transparency of post-contract tariff changes, and two explicitly referred to incomplete/misleading tariff information, while other two mentioned billing issues which might point out to a deficit of tariff transparency (e.g. cases where consumers receive a disproportionate bill or become aware that they are subject to higher tariffs than expected). Finally, one NRA considers that more could be done in the area of billing control tools.

In addition, the transparency of quality of service was mentioned by three NRAs, while transparency of various other contractual issues was a matter of concern for four NRAs.

Table 1 below summarises the results of the questionnaire.

Table 1: End-user transparency problems in the ERG countries

	Tariff transparency					QoS transparency	Transparency of other contractual issues
	Difficulty of comparing tariffs	Transparency of post-contract tariff changes	Incomplete/misleading tariff information	Billing issues which might indicate tariff transparency problems	Other issues		
Countries where the problem is manifest	6	3	2	2	1	3	4

These results must be interpreted in conjunction with the answers given to other sections of the questionnaire, e.g. those concerning information methods/tools used by service providers and NRAs to improve end-user information. For instance, public entities in ten countries have

put in place websites providing tariff comparisons in various forms, while NRAs in six other countries consider that the introduction of such tools would be appropriate in the future.

To summarise, tariff transparency is mentioned as an area of concern in a significant number of countries. In particular, the difficulties experienced by end-users in comparing tariffs seem to be a matter of concern shared by most of the responding NRAs. This conclusion is also supported by the fact that NRAs or other public entities in a relatively high number of countries have put in place websites providing tariff comparisons in various forms, or consider that the introduction of such tools would be appropriate in the future.

The following sections will focus on end-users' ability to interpret and compare tariffs for each of the three major service categories – fixed telephony, mobile telephony and broadband.

3.3.2. Fixed telephony tariff comparisons

In the fixed line market, many operators bundle local and long distance calls with line rental (or 'access') and have introduced various pricing scheme combinations that allow consumers to choose between higher line rental and associated lower local and long distance call prices or lower access and higher call charges. In many cases the bundled offers come with a certain number of local or long distance calls being included without additional charge as part of the package.

A variety of bundles, including other fixed-line services such as broadband and transmission of TV programmes, are also available. Although such pricing plans offer benefits to consumers and can provide the convenience of 'one bill', they may also increase the complexity of choice faced by consumers especially when competitors respond with their own bundled offerings that provide alternative pricing and usage combinations. Consumers have to consider a wide range of variables with a diversity of fixed-line pricing packages offered by various providers. This wide choice can create information overload and confusion and can prevent consumers from making optimal choices about the most appropriate fixed-line option for their usage patterns and budget constraints.

Table 2 below shows the results of a survey on ease of comparing offers from fixed line telecommunications providers carried out in 2007 in the EU25 countries.

About 35% of EU25 consumers surveyed found it difficult to compare offers from fixed line telephone providers. The level of 'don't know' responses increases this proportion of those finding it difficult to compare fixed line offers. For some countries, there were very high 'don't know' figures involving around a third of those polled e.g. 40% in Hungary, 37% in Latvia, 35% in Cyprus, 34% in Finland, and 34% in Lithuania.

However, the figures vary widely from country to country. The extent of the prevalence of strong competition (giving rise to a wide choice of pricing packages) in various countries probably accounts for some of the differences. This may explain why, for instance, 53% of respondents in Sweden and 47% in Belgium said that comparing offers was difficult.

Table 2. Results of Survey on Ease of Comparing Offers from Fixed Line Providers

In general, how easy do you find it to compare offers from different fixed line providers?

	Very difficult	Fairly difficult	Don't know
EU25	11%	24%	13%
New MS	8%	19%	18%
EU15	11%	25%	12%
IT	17%	25%	9%
SE	16%	37%	11%
DK	16%	27%	21%
FR	14%	31%	10%
NL	14%	27%	17%
BE	13%	34%	7%
DE	13%	31%	5%
SI	12%	21%	14%
LT	12%	15%	34%
FI	10%	23%	34%
HU	10%	19%	21%
CZ	11%	19%	18%
AT	9%	20%	13%
HU	9%	17%	40%
SK	9%	20%	11%
EL	8%	17%	2%
PL	7%	18%	16%
LU	7%	16%	17%
ES	6%	21%	18%
LV	6%	14%	37%
CY	6%	7%	35%
PT	5%	14%	19%
IE	5%	13%	22%
UK	4%	13%	20%
EE	3%	11%	32%
MT	3%	9%	26%

Source: EC, Special Eurobarometer 260 - Services of General Interest, July 2007.

Available at http://ec.europa.eu/consumers/cons_int/serv_gen/cons_satisf/eb260_report_en.pdf

3.3.3. Mobile telephony tariff comparisons

Competition in the mobile market offers potentially significant benefits to end-users who have a wide range of different plans from which to choose. However, this diversity may also put end-users in a difficult position when it comes to making comparisons between the various offers available. Surveys carried out across a number of countries have revealed that consumers find it difficult to compare mobile tariff plans offered by different operators because of the wide variety of plans with complex rate structures¹¹. In many countries end-users pay different amounts for calls depending on whether the called party is on the same network as the caller. In addition, call tariffs may depend on the time the call is made, how many calls the calling party has already made in the relevant billing period or even the specific numbers called (family or friends groups).

Comparison of mobile tariff plans can also be difficult because of the bundling of calls and access charges. For example, plans with higher monthly access charges usually come with a

¹¹ The experience recorded in some jurisdictions shows that in many cases consumers have even expressed difficulty in choosing between mobile tariff plans offered by the same operator – see ACMA (Australian Communications and Media Authority) (2006), *Telecommunications Performance Report 2005-2006*, October 2006.

larger number of unmetered (included) call minutes. In addition to this, the range of mobile packages offering different combinations of monthly charges, free calling minutes, and peak and off-peak calling rates adds further complexity.

There have also been complaints from consumers that services included and excluded in a capped plan were not clearly explained to them¹². For instance, services such as SMS, MMS and Internet access might fall outside a capped plan, being billed on top of the flat monthly fee. Consumers have also complained that they have been unaware that they have breached a cap since there were no tools enabling them to monitor their consumption, hence it is all too easy to exceed the limit and be subjected to high excess charges.

There is also evidence that many consumers do not effectively use the included minutes available in many mobile packages. A UK survey carried out in 2006¹³ found that one-third of consumers did not use all the included minutes available to them. Notably, almost 20% of those on monthly contracts claimed that they usually use less than half of their included minutes. By contrast, 40% of consumers declared that they usually use more minutes than those included in their package. This suggests that many consumers may either systematically overestimate usage levels (and choose plans with higher rental charges and more available minutes than they actually require) or underestimate usage (and end up paying significantly higher prices for additional minutes above those provided as part of the package they subscribe to).

Table 3 below shows the results of a survey on the difficulty of comparing offers from mobile telecommunications providers in EU25 countries. 38% of EU mobile phone consumers surveyed said that it was difficult to compare offers from different mobile phone operators. This includes figures of 58% for Denmark and 63% for Sweden. It is interesting that price comparisons seem more difficult in these well-developed and competitive markets. This is probably because as competition intensifies and providers and tariff offers increase, it can become more difficult to compare offers. This interpretation is supported by the fact that the highest proportion of those surveyed who said that the comparison of offers was 'very difficult' were again in Denmark (30%) and Sweden (27%), compared with an EU25 average of 14%. The percentage of respondents who said that comparing offers is difficult increases significantly if those replying 'don't know' are included. 13% of all those surveyed fall in this category.

Table 3. Results of Survey on Difficulty of Comparing Offers from Mobile Providers

In general, how easy do you find it to compare offers from different mobile providers?			
	Very difficult	Fairly difficult	Don't know
EU25	14%	24%	13%
New MS	8%	17%	12%
EU15	15%	25%	13%
DK	30%	28%	11%
SE	27%	36%	11%
DE	21%	32%	8%

¹² See also ACMA (2006).

¹³ NCC (UK National Consumers Council), *Switched on to switching? A survey of consumer behaviour and attitudes, 2000-2005*, April 2006.

NL	21%	26%	14%
FR	20%	34%	12%
BE	18%	36%	6%
IT	17%	24%	7%
FI	16%	29%	8%
AT	10%	24%	11%
LT	10%	18%	12%
LU	9%	22%	16%
HU	9%	21%	14%
EL	9%	14%	3%
PL	8%	17%	13%
ES	7%	19%	18%
CZ	7%	18%	6%
SK	7%	17%	4%
UK	7%	14%	24%
LV	5%	18%	18%
IE	4%	10%	17%
SI	8%	16%	11%
EE	2%	13%	18%
PT	2%	12%	15%
CY	2%	7%	25%
MT	1%	5%	21%

Source: EC, "Special Eurobarometer 260 - Services of General Interest", July 2007.

Available at http://ec.europa.eu/consumers/cons_int/serv_gen/cons_satisf/eb260_report_en.pdf

3.3.4. Broadband tariff comparisons

Tariff complexity is also a key characteristic of broadband service packages. Tariff plans may differ in regard to the monthly fee charged, the upload and download speeds offered, the degree to which the speeds are "shaped" above a certain level, the amount of prepaid data provided as part of the plan, the tariff charged for excess data above the maximum allowance and the set-up fee involved.

Table 4 below shows the results of a survey of EU25 consumers about the ease of comparing offers from Internet service providers. About 30% of consumers found it difficult to compare offers from different Internet service providers. There were also a high proportion of "don't know" answers (27%) from EU25 respondents. If these are added, the proportion of those experiencing difficulty increases sharply to 57%.

The number of respondents who found the process difficult was relatively high in Slovakia (44%), Germany (44%) and Denmark (43%). This might be explained in part by the complexity prevailing in developed markets with a diversity of pricing packages available which may complicate/confuse choice.

Table 4. Results of Survey on Difficulty of Comparing Offers from Internet Service Providers

In general, how easy do you find it to compare offers from different internet service providers?			
	Very difficult	Fairly difficult	Don't know
EU25	11%	19%	27%
New MS	11%	15%	31%
EU15	11%	20%	26%

SK	19%	25%	19%
DE	16%	28%	18%
DK	16%	27%	24%
EL	15%	21%	15%
NL	14%	24%	19%
IT	14%	19%	25%
LT	14%	14%	30%
FR	13%	23%	29%
BE	12%	26%	21%
PL	12%	12%	33%
SE	11%	28%	27%
CZ	11%	19%	18%
AT	9%	21%	28%
HU	9%	17%	40%
FI	7%	21%	25%
ES	7%	15%	30%
SI	6%	17%	21%
LU	5%	17%	31%
LV	5%	13%	42%
PT	5%	11%	41%
UK	4%	8%	33%
CY	4%	5%	53%
IE	3%	10%	42%
EE	3%	9%	36%
MT	2%	6%	46%

Source: EC, Special Eurobarometer 260 - Services of General Interest, July 2007.

Available at http://ec.europa.eu/consumers/cons_int/serv_gen/cons_satisf/eb260_report_en.pdf

3.3.5. Additional country statistics on transparency

Denmark

In the Consumer matters index (*Forbrugerforholdsindekse*), a comparison of 51 sectors of industry and trade in Denmark published by the Consumer Agency¹⁴, the telecom sector (telephony subscriptions, telephony tariffs and internet) ranked 50th in 2008 on the parameter consumer trust, 40th on the transparency parameter, and 4th on the complaint possibilities parameter. Based on the 3 parameters combined, the telecom sector ranked 38th in this top in 2008. Low ranks have been consistent over several years. The telecom sector ranked 47th in 2007, 45th in 2006, and 49th in 2005.

Also, the number of complaints filed with the *Teleankenævnet* was 391 in 2007 compared with 525 in 2006. One half of the complaints referred to the interpretation of terms and conditions and on billing matters, which might also point out to related transparency issues.

Germany

According to the information in the possession of BNetzA's Section Combating the Misuse of Value Added Services and Spam, there are many complaints from consumers stating that provisions of the national law ensuring transparency in the field of telephony¹⁵ have been breached, but no statistics are available. According to BNetzA's Consumer Protection

¹⁴ Latest publication (2008): <http://www.forbrug.dk/fs/omfs/00/fr08/ffi2008/>

¹⁵ In particular §§ 66a - 66c Telecommunications Act.

Section, 16.77 % of all complaints and requests directed to BNetzA's consumer service are about end-user transparency problems. These problems are divided into: 51 % unclear claims (e.g. Internet, directory assistance, international roaming), 35.16 % prices/tariffs (e.g. prices/tariffs in general: payment by instalment, invoice-related credit memos, supplementary payments, telecommunication service providers, Internet/online, changing provider etc.), 5.97 % prices generally ó bills, 1.92 % prices for services not performed ó bills, as well as contractual affairs generally concerning contract violation, terms and conditions, and publication of customer information, accounting for 1.46 % each.

Norway

A survey done by a Norwegian consultancy firm (Teleplan) in May 2008 revealed that 50 % of the respondents found it difficult to get an overview and compare mobile offers.

Portugal

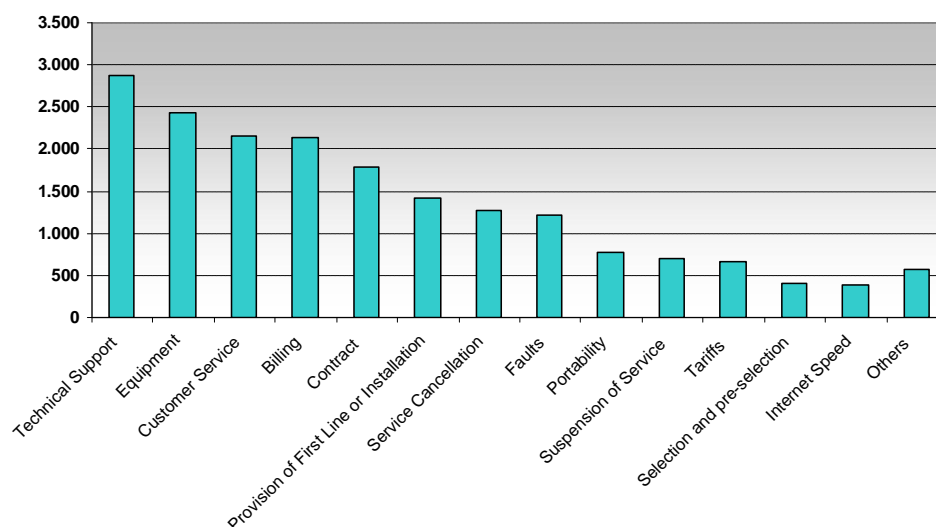
In 2007, ANACOM received 24,745 written complaints, 575 requests for information, 79 petitions, 16 suggestions and 59 requests of other types. During the first semester of 2008, it received 15,649 written requests, of which 15,257 are complaints, 229 requests for information, 55 petitions, 18 suggestions and 90 "other" requests.

ANACOM anticipates receiving 30,000 to 35,000 requests at the end of 2008, the majority of as a result of Decree-Law no.156/2005 which made mandatory, since January 1st, 2006, the availability of the Complaint Book in the electronic communications service providers' stores.

Chart 1 below indicates the number of complaints about the electronic communications sector received during the 1st semester of 2008. According to the chart, tariffs are 11th on the list of the most complained about issues. However, a considerable number of complaints were about contracts and billing, which may reflect tariff transparency problems.

Chart 1. Total complaints about electronic communications sector in Portugal (1st half 2008)

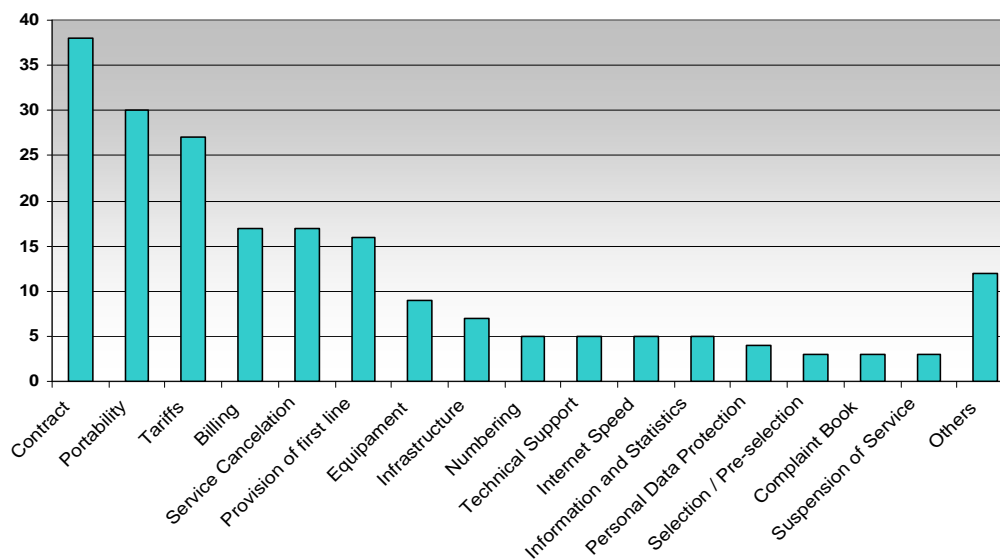
Total complaints about electronic communications sector (by issue) – 1st semester 2008



As to the issues on which end-users have been requesting more information, Chart 2 below shows the number of requests regarding the electronic communications sector received during the 1st semester of 2008, showing that tariffs are one of the issues on which end-users request more information, along with contracts and billing.

Chart 2. Number of requests regarding the electronic communications sector in Portugal (1st half 2008)

Requests for information about electronic communication services (by issue) - 1st Sem. 2008



United Kingdom

Ofcom research carried out in 2007¹⁶ suggests that consumer opinion appears to be polarised about how easy it is to make cost comparisons. 50% of fixed line consumers thought it was easy to make cost comparisons, while 50% thought it was difficult or they didn't know. Among mobile, Internet and multichannel TV consumers over half believed it was easy to make cost comparisons; however, a significant minority (44%, 36% and 43% respectively) believed it was difficult or they didn't know.

Over 2006-2007, there was a significant decrease in the proportion of consumers who think it is easy to make cost comparisons between mobile suppliers, and a corresponding increase in the proportion of those who don't know whether it is easy or difficult. Another significant conclusion is that consumers are more likely to say that it is difficult to make cost comparisons in the fixed-line and mobile markets, compared with the Internet and multichannel TV markets, although one in five also believe that making cost comparisons in these markets is difficult. Those aged between 25 and 64 years are more likely than others to state that it is difficult to make cost comparisons. In general, consumers aged 45-64 years are most likely to state it is difficult, across all services, but especially fixed-line and mobile. The Ofcom research also concluded that across each of the communications markets, a lower proportion of consumers say it is easy to make QoS comparisons, compared with those who say it is easy to make cost comparisons. Consumers are more likely to say it is easy to make QoS comparisons in the Internet market than any of the other markets. Over 2006-2007, in the mobile market there has been a decrease in the proportion who say making QoS comparisons is easy and an increase in those who don't know.

Romania

A market research carried out in 2007 under a project commissioned by ANC (then ANRCTI) showed that consumers found it difficult to compare available offers. The research revealed that around 40% of the respondents did not know that one minute of local call within the same fixed telephony network was less expensive than one minute of fixed-to-mobile call. Also, around 60% of respondents did not know that one minute of long-distance call within the same fixed network was less expensive than one minute of fixed-to-mobile call. 35% of the actual users interviewed did not know whether one minute of fixed-to-mobile call was cheaper or more expensive than one minute of mobile-to-mobile (off-net) call. Strikingly, around 40-50% of the respondents who often make international calls did not know whether one minute of international call was cheaper or more expensive than one minute of domestic call.

3.4. Consequences for the end-users

The transparency deficit as described and explained in the previous sections may affect end-users' interests in a number of ways, irrespective of the way in which this deficit is manifest (e.g. lack of information, misleading information, unclear or hard to find information, or information which is difficult to assess and compare) and, consequently, on whether the problem is scarce information or having information which is abundant but at the same time misleading or non-comparable. It is noted that consumer welfare may be reduced even where there is plenty of information available which is not deceptive, but because of its lack of clarity and comparability it cannot be properly assessed by the end-users.

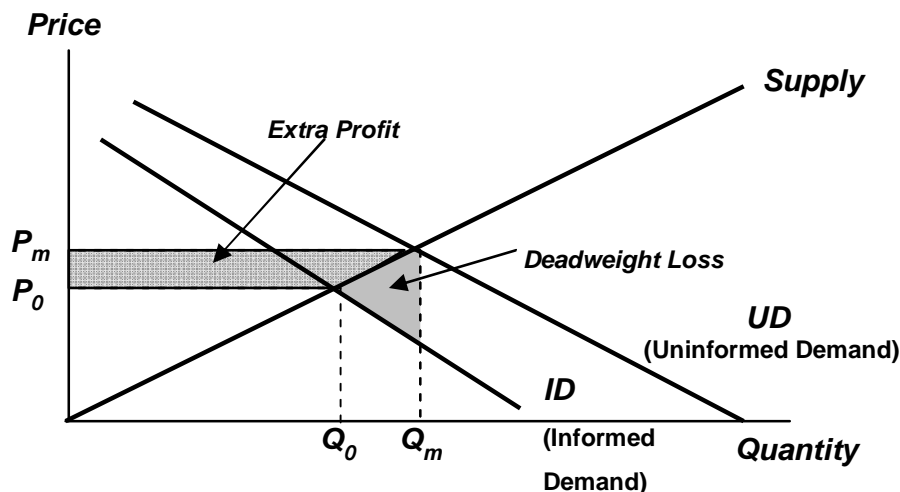
¹⁶ Ofcom (2007), *The Consumer Experience ó Research Reportö*, November 20, 2007, p.103-107. Available at: <http://www.ofcom.org.uk/research/tce/ce07/research07.pdf>.

The negative consequences for end-users can be categorised as follows¹⁷:

- **End-users are *de facto* excluded from participating in the market and consequently from the rights and benefits associated with it.** This typically results from end-users not being aware of the range of providers and offers available on the market (e.g. they do not know that there are alternative providers in the area), or, at the other extreme, being overwhelmed by the amount of information targeted at them (also known as information overload) and thus unable to decide.

- **End-users are buying services at a loss, i.e. are paying more than they need to.** This effect is explained by economic theory, which generally considers that information asymmetry (i.e. different parties in an economic relationship having different amounts of price or other information) leads to market inefficiencies or failures. The problem created by information deficit is illustrated in Figure 1 and described below¹⁸.

Figure 1. Impact of information deficit¹⁹



The information deficit generates a discrepancy between the optimal level of demand, corresponding to the real needs of end-users, and the actual level, shown in the graph by the presence of two demand curves, *DInformed* and *DUninformed*. An information deficit leads to end-users over-estimating the value of the service and, as a consequence, *DUninformed* is to the right of *DInformed*. The end-user demands more than if he/she was properly informed, with the result that both price and quantity when uninformed (i.e. P_m and Q_m) are higher than they would be if the end-user was appropriately informed (i.e. P_0 and Q_0).

In this case a deadweight loss results equal to the triangular shaded area represented on the figure. If the end-user was fully informed, he/she would have paid P_0 for the initial Q_0 units. Instead the information shortfall leads to the end-user paying P_m . For the extra Q_0Q_m units,

¹⁷ See also Ofcom (2006).

¹⁸ Office of Fair Trading, Queensland, *Scoping Study into the Restrictions on Competition of Trade Measurement Legislation*, Final Report, 17 May 2000, p.67-68.

¹⁹ Adapted from Vining, A.R. & Weimer, D.L., 1988, *Information Asymmetry Favouring Sellers: A Policy Framework*, Policy Sciences, No. 21, pp.282-284, and Peltzman, S., 1973, *An Evaluation of Consumer Protection Legislation: The 1962 Drug Amendments*, Journal of Political Economy, Vol. 81, Issue 5, pp. 1059-1060.

the end-user also pays P_m , but this is more than the service is truly worth to the user (as shown by the demand curve). The total loss incurred by the end-user is equal to the area P_mBCAP_0 . The area P_mBAP_0 is captured by the provider as extra producer surplus, with the result that the deadweight loss equals the triangular shaded area. This deadweight loss is in addition to the transfer from the end-user to the provider.

The opposite case could also apply when an information deficit would result in end-users underestimating the value of a service. In such a case, the usage would tend to be too low, but, in contrast with the first situation, this problem could be handled by the market forces, as suppliers do have an incentive to overcome the information deficit by supplying additional information to end-users in order to increase demand to the optimal level.

- **End-users are buying a service which does not satisfy their needs** (i.e. eventually proven not to have the expected technical functionality, quality or price), with negative consequences for their level of satisfaction, and to the detriment of services which would meet their real needs.

4. Information methods and tools

4.1. Information methods/tools employed by service providers

4.1.1. Information about tariffs and other terms and conditions applicable to electronic communications services

Mobile/fixed telephony

As shown in Table 5 below, most of the ERG countries who responded to this part of the questionnaire (24) impose mandatory transparency requirements on the providers of mobile/fixed telephony covering various elements of relevance for tariff transparency: **standard tariffs, changes occurring after the signature of contract, description of tariff elements** and **standard discounts**. Also, the majority of countries have imposed on telephony providers information obligations related to the **minimum contract period**.

Fewer countries have however imposed transparency requirements with regard to the **quality of service** and the number of countries where this information is not made available is almost the same as the number of countries where it is made available on a voluntary basis. **Coverage** information is only mandatory in 4 countries, however in 16 countries providers make this information available on a voluntary basis.

Overall, providers of mobile/fixed telephony in the majority of ERG countries make available all categories of information listed in the table, on an either mandatory or voluntary basis.

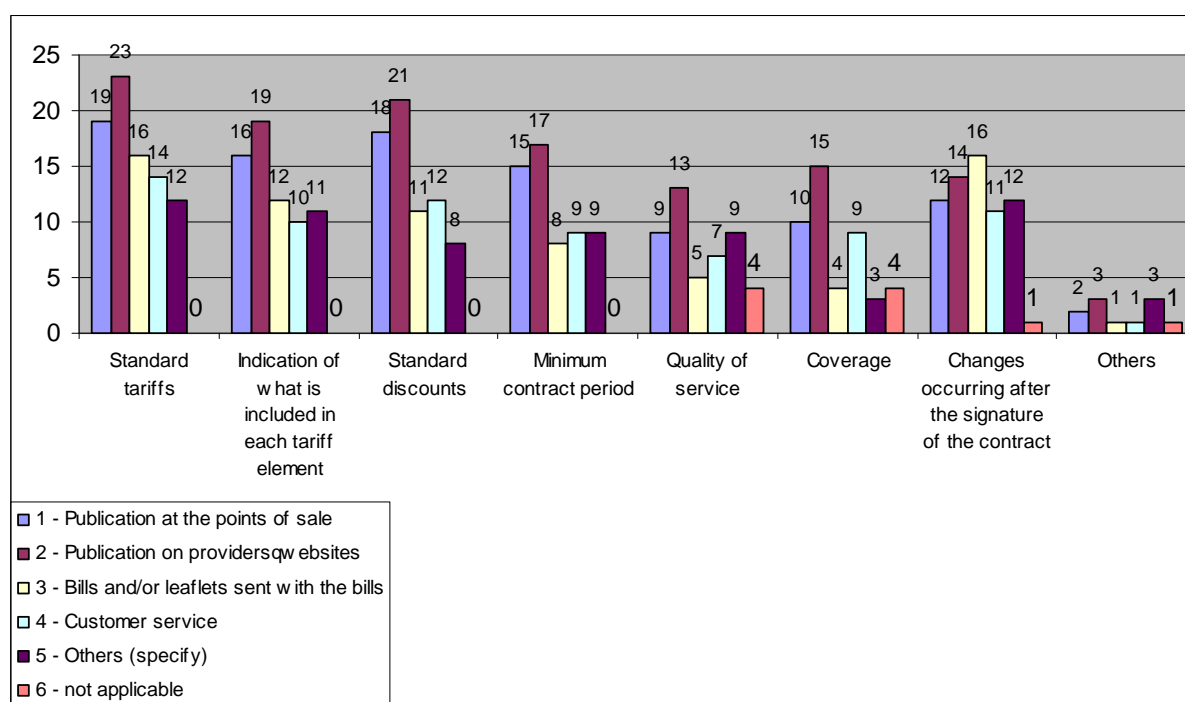
Table 5. Categories of information offered by mobile/fixed telephony providers and applicable requirements, per number of ERG countries

Categories of information Requirements	Standard tariffs	Indication of what is included in each tariff element	Standard discounts	Minimum contract period	Quality of service	Coverage	Changes occurring after the signature of the contract	Others
M - mandatory	23	21	20	19	17	4	23	3
V - voluntary	1	0	2	4	5	16	1	0
N - not made available	1	0	2	0	4	4	1	2
No answer	2	5	4	3	2	3	2	22
1 - Publication at the points of sale	19	16	18	15	9	10	12	2
2 - Publication on providers' websites	23	19	21	17	13	15	14	3
3 - Bills and/or leaflets sent with bills	16	12	11	8	5	4	16	1
4 - Customer service	14	10	12	9	7	9	11	1
5 - Others (specify)	12	11	8	9	9	3	12	3
6 - not applicable	0	0	0	0	4	4	1	1
C - comparable	5	6	5	5	9	4	4	2

U - up-to-date	22	20	18	17	14	7	15	2
EA - easily accessible	16	15	14	12	12	5	14	3
O - other requirements	9	9	9	11	2	5	5	2
N - not obliged	0	0	1	1	6	8	4	1

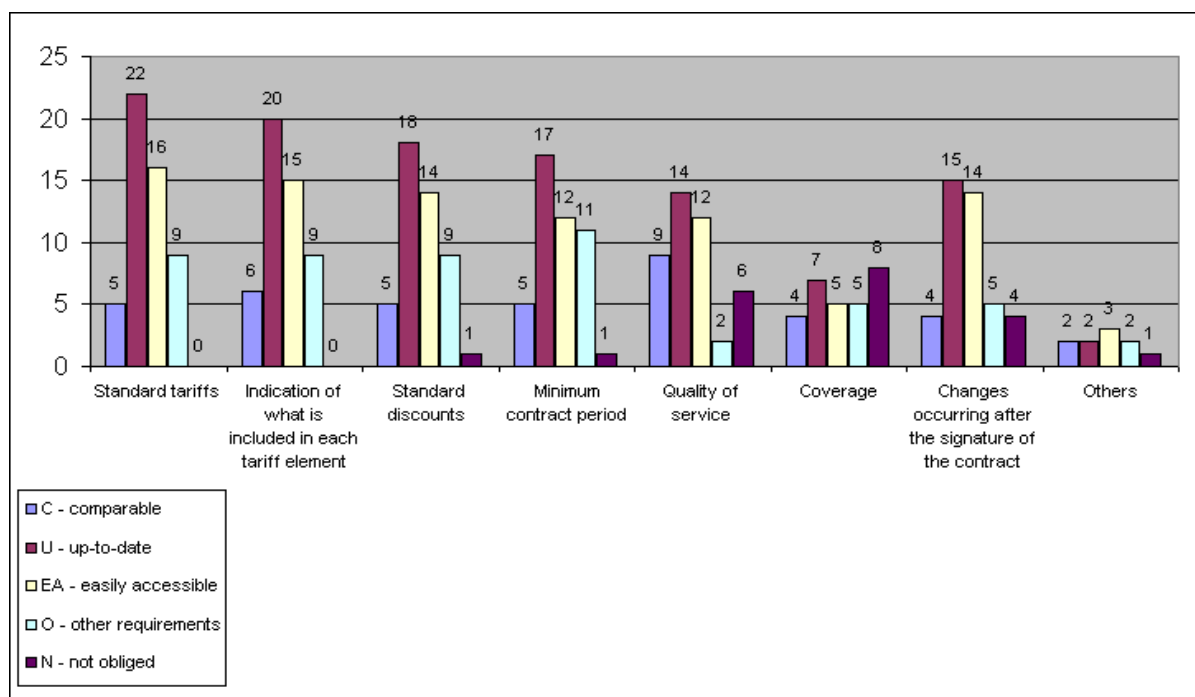
Publication on providers' website seems to be the most used method for informing end-users, followed by **publication at the points of sale** and **bills and/or leaflets sent with bills** as shown in Chart 3 below. The information which is provided on websites and at the points of sale covers in most of the cases **standard tariffs**, **standard discounts** and **description of tariffs elements**. Bills and leaflets are most frequently used for **changes occurring after the entry into the contract**, but also for various tariff-related issues.

Chart 3. Information methods/tools used by mobile/fixed telephony providers



As shown by Chart 4 below, the information which must be published by providers must be **up-to-date** and **easily accessible**. Also a number of respondents mentioned other obligations imposed on providers in their countries in respect of the form in which information must be made available, e.g. to be transparent, clearly understandable, well arranged, detailed, extensive or provided in a sufficient manner. Notably, a requirement that the information published is **comparable** is present in only five to six countries with regard to tariffs and in nine countries in relation with the quality of service. Also, there are special requirements concerning the form in which information about changes in tariffs or in other contractual terms and conditions occurring after the entry into the contract has to be made available to end-users. In a significant number of cases, service providers must send an **individual notification** to subscribers via e.g. letter, SMS or e-mail with minimum 30 days in advance of the changes. In addition, some countries require that a notice on the changes is published in nationwide newspapers.

Chart 4. Requirements concerning the form in which the information must be made available by mobile/fixed telephony providers



Internet/broadband

Regarding the information made available by the **Internet/broadband providers**, the situation is almost the same as for mobile/fixed telephony. As shown in Table 6 below, making information available about **changes occurring after the signature of the contract**, **standard tariffs**, **description of tariff elements** and **standard discounts** is mandatory in most of the 24 countries whose NRAs responded to this part of the questionnaire.

In a lower number of countries the Internet/broadband service providers are obliged to make available information on the **minimum contract period** and **quality of service**. The ERG survey showed that this latter category of information is the one which is not available at all in the highest number of countries.

In 13 countries providers of Internet/broadband services publish information about **coverage** on a voluntary basis.

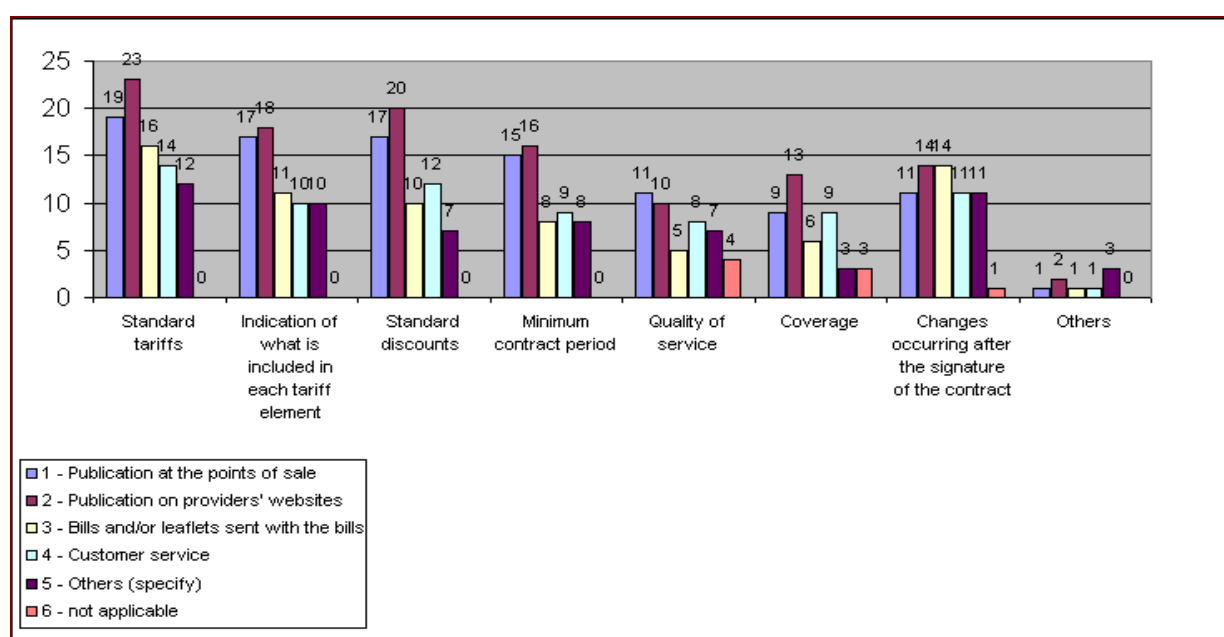
Table 6. Categories of information offered by Internet/broadband providers and applicable requirements, per number of ERG countries

Categories of information / Requirements	Standard tariffs	Indication of what is included in each tariff element	Standard discounts	Minimum contract period	Quality of service	Coverage	Changes occurring after the signature of the contract	Others
M - mandatory	22	19	18	17	15	4	23	3
V - voluntary	2	2	3	3	4	13	2	0
N - not made available	1	0	0	0	6	3	0	1
No answer	2	5	5	6	3	6	2	22
1 - Publication at the points of sale	19	17	17	15	11	9	11	1
2 - Publication on providers' website	23	18	20	16	10	13	14	2

websites								
3 - Bills and/or leaflets sent with bills	16	11	10	8	5	6	14	1
4 - Customer service	14	10	12	9	8	9	11	1
5 - Others (specify)	12	10	7	8	7	3	11	3
6 - not applicable	0	0	0	0	4	3	1	0
C - comparable	5	6	4	5	7	4	4	2
U - up-to-date	21	18	16	13	11	7	15	2
EA - easily accessible	16	15	13	12	9	6	14	3
O - other requirements	6	7	6	7	3	3	6	2
N - not obliged	2	1	3	4	6	8	4	0

Publication on providers' websites and **publication at the points of sale** are the most used methods of information for **standard tariffs**, **standard discounts** and **description of tariff elements**. Chart 5 shows the information methods/tools used by providers of Internet/broadband services to make the different categories of information available to end-users.

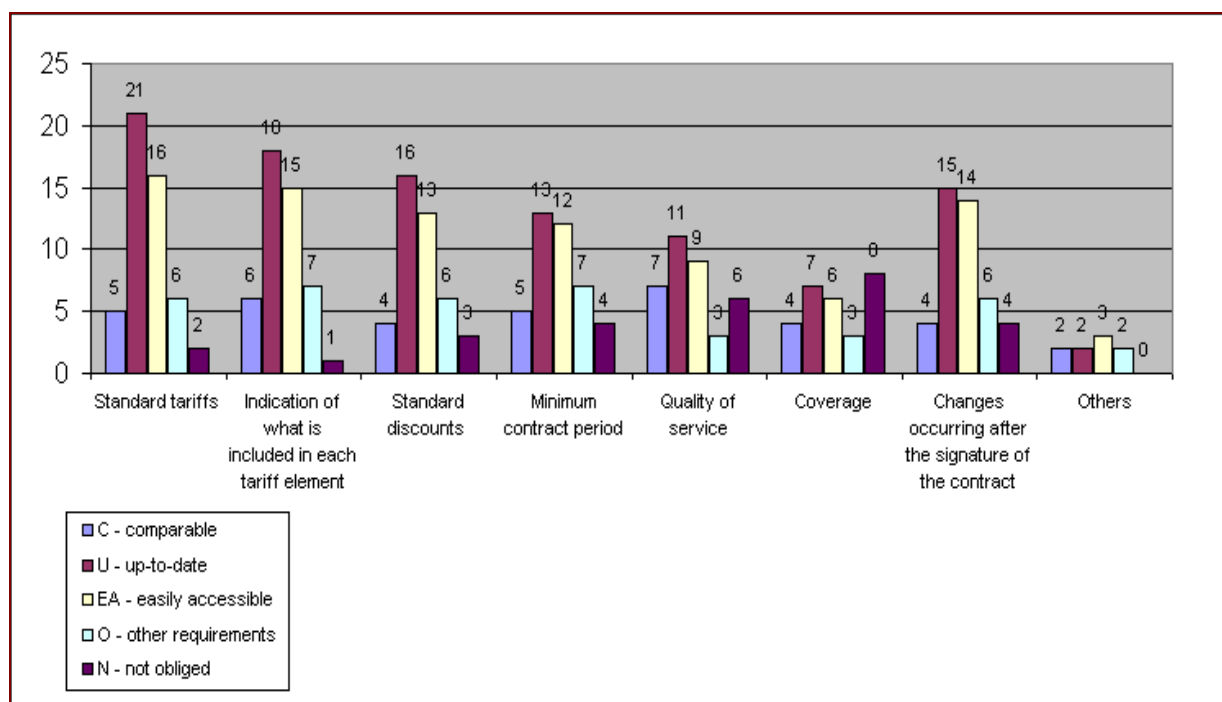
Chart 5. Information methods/tools used by Internet/broadband providers



As shown by Chart 6, the information which must be published by Internet/broadband providers is in most cases required to be **up-to-date** and **easily accessible**, particularly when it refers to tariffs. However, only a minority of countries require that information is **comparable**. Special requirements about the form in which information about changes in contracts must be made available to end-users also apply here, with **individual notification**

being necessary in a significant number of cases; in some countries, publication in nationwide newspapers is required.

Chart 6. Requirements concerning form in which information must be made available by Internet/broadband providers

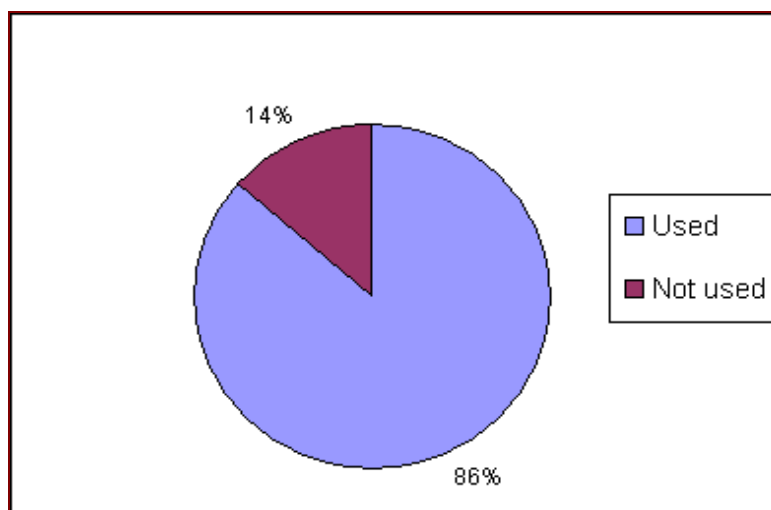


An analysis of the answers to the questionnaire shows that legislation in most of the ERG countries covered by the report obliges providers of electronic communications services to publish on their websites or at the points of sale at least a minimum set of information (standard tariffs, description of tariff elements and changes occurring after the signature of the contract). It appears that information about coverage is made available by service providers on a voluntary basis in a significant number of countries. Also, according to the answers, the information has to be up-to-date and easily accessible in most of the countries and for most of the categories. However, only one in five countries imposes an obligation to make comparable information on tariffs available.

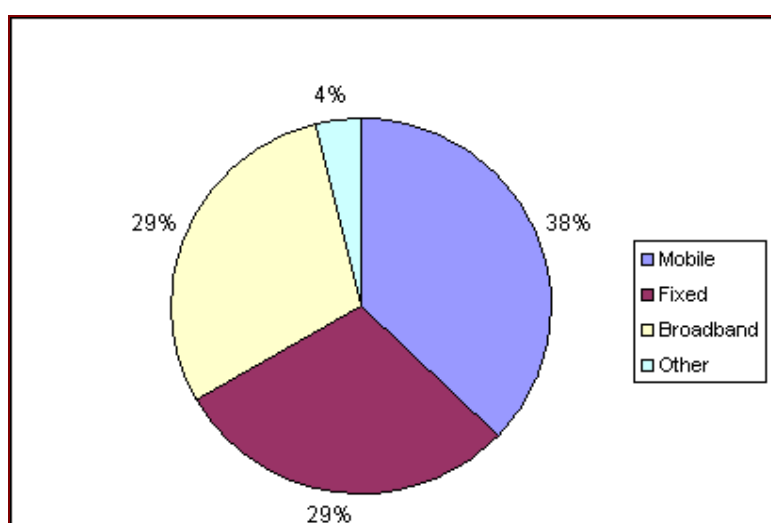
4.1.2. Specific methods/tools used by providers to inform end-users about tariffs/billing/charging

Controlling costs represents one of the most powerful tools end-users can have in relation to their providers of electronic communication services. **Instant billing control tools** allow end-users to monitor their expenditure on a permanent basis rather than at the end of the billing period. The importance of billing control applications is widely recognised inside the ERG countries, more than 85% of the answers²⁰ indicating that such a method is made available by providers on either a mandatory or voluntary basis (Chart 7).

²⁰ 22 öYesö or öNoö answers have been received for this question (öDon't knowö/öNot availableö not counted).

Chart 7. Breakdown of countries where instant billing control applications are used

According to Chart 8, billing control applications are quite uniformly made available by providers of mobile telephony, fixed telephony and Internet/broadband. Such an application allows customers to instantly view what services they have used and the consumption volumes and calculate their expenses at any moment during the billing period.

Chart 8. Breakdown of countries according to services for which instant billing control applications are used**Figure 2. Screenshot from a cost control application**

Bill and services	Current Calls Details	
My account	Phone number: Client code:	
Bills and payments	Select the information you want to view: Calls details Show calls: All calls	
Bill payment		
Bill summary		
Billed calls details		
Current Calls Details		
Payments history		
Recharge prepaid card		
Online recharge		
My services		
Account details		
Settings		

Current calls							
Date and time	Destination	Type of call	Duration	U.M.	Type of service	Offer details	Costs
Vi 17/10/2008 14:37:59		National -	00:01:36	Sec	On-net call	Bonus minute loialitate (00:01:36Sec)	0.176
Du 19/10/2008 19:29:12		National -	00:01:13	Sec	On-net call	Bonus minute loialitate (00:02:49Sec)	0.134
Du 19/10/2008 19:39:18		National -	00:01:12	Sec	On-net call	Bonus minute loialitate (00:04:01Sec)	0.132
Lu 20/10/2008 20:11:41		International -	00:00:42	Sec	International call	None (0)	0.45
Lu 20/10/2008 20:10:22		International -	00:00:02	Sec	International call	None (0)	0.45
Ma 21/10/2008 22:35:02		National -	00:03:36	Sec	On-net call	Bonus minute loialitate (00:07:37Sec)	0.396
Ma 21/10/2008 23:56:21		National -	00:03:52	Sec	On-net call	Bonus minute loialitate (00:11:29Sec)	0.425

Many countries recognise the need to grant specific protection via appropriate information to end-users when making certain calls whose cost might be higher than they would normally expect. Various examples of such situations may be provided: high tariffs for calls to specific categories of numbers (e.g. premium rate services), high tariffs for off-net calls and sometimes very significant differentials between tariffs for on-net and off-net calls. The introduction of number portability raised concerns related to the protection of end-users who make calls to ported numbers due to a combination of reasons: first, the associations previously established by end-users between numbering ranges and providers who have been allocated these ranges are losing their relevance in the number portability context; second, the variety of tariffing rules applied for calls to ported numbers (number oriented pricing, network oriented pricing, no common practices) and the calling charges differentials depending on the terminating network²¹. Decisions aiming at increasing transparency in respect to calls to ported numbers or off-net calls were highly relevant in those countries where the differences between off-net and on-net calls were significant and, therefore, consumers could have faced larger bills than they would have expected. Also, it is important to note that in some countries providers make available, on an either mandatory or voluntary basis, information on ported numbers (network and, in some cases, applicable tariffs), via phone, SMS or Internet²².

To deal with these issues, a number of countries have introduced **voice announcements** or **acoustic signals** to notify the caller that he/she is calling a ported/off-net/special tariff number. In the ERG countries, over 60% of the respondents²³ mentioned that voice

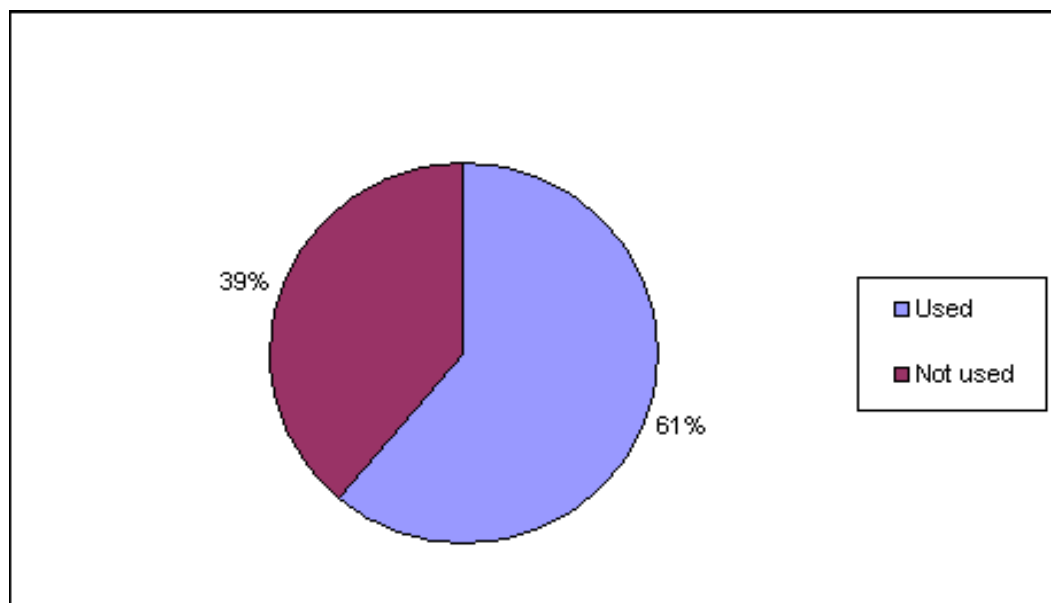
²¹ For a detailed analysis of the measures implemented in the ERG countries to promote tariff transparency in the context of number portability for end-users who port their numbers and for those who call to ported numbers, see ERG (05)52 Report on Transparency of retail prices (with implementation of Number Portability), at: http://www.erg.eu.int/doc/publications/retail_prices/erg_05_52_transp_retail_prices_report.pdf

²² Also, in some countries, NRAs provide themselves this information via their own/dedicated websites, e.g. in the Netherlands there is a registry of ported numbers on OPTA's website where users may verify whether a number has been ported (<http://www.opta.nl/asp/nummers/nummerporteringen/>), in Slovenia information on ported numbers can be obtained also on NRA's comparison website (www.komuniciraj.eu/uporabniki) and on the web page <http://www.npch.si/>, in Romania users may find out whether a number has been ported and what its current network is on www.portabilitate.ro, a dedicated website for number portability. For more information on measures put in place by providers or NRAs to facilitate end-users' awareness of the prices of calls to ported numbers, see ERG (05)52, section 5.2.2.2.

²³ 23 Yes or No answers have been received for this question (Don't know/Not available not counted).

announcements or acoustic signals are used in their countries to notify the end-user for certain categories of calls (Chart 8).

Chart 9. Breakdown of countries where online voice announcements or acoustic signals are used



Billing and bills are the source of a large number of complaints by end-users. Along with making general tariff and billing information available, providers of electronic communication services could be encouraged or obliged to use online, interactive and personalised tools for ensuring transparency and awareness of tariffs, billing and expenditure. Examples include instant billing control tools which enable consumers to permanently monitor their expenditure and online voice announcements or acoustic signals that warn the caller that he/she is about to make a call that could cost more than expected.

4.1.3. Legal basis for use of the different information methods/tools

As shown above, providers of electronic communications services in the ERG countries are generally subject to transparency obligations, in particular with regard to tariffs, but also in respect of other categories of information. Also, in a number of countries, providers are making publicly available various categories of information on a voluntary basis.

The transparency obligations are imposed at national level either directly by the primary law or through decisions of the NRAs (secondary legislation), which set out more or less detailed conditions under which information is to be made available by service providers²⁴. The national legal basis is supported by or results from transposition of relevant Community law provisions. Article 8.4 (d) Framework Directive²⁵ establishes that a general objective for

²⁴ For a detailed example of secondary legislation regarding transparency obligations imposed on service providers, please refer to case study under section 5.5, in particular p.103-111.

²⁵ Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive), OJ L 108, 24.4.2002, p.33-50.

NRA's is to promote the interests of the end-users which is in most cases implemented as such in the national legislation:

“The national regulatory authorities shall promote the interests of the citizens of the European Union by [í] promoting the provision of clear information, in particular requiring transparency of tariffs and conditions for using publicly available electronic communications services.”

Many NRAs have referred to this general objective (as transposed in the national legislation) as the basis for the imposition of transparency obligations on providers of telephony or Internet/broadband services.

Article 21 (1) of the Universal Service Directive²⁶ requires Member States to ensure that

“transparent and up-to-date information on applicable prices and tariffs, and on standard terms and conditions in respect of access to and use of publicly available telephone services is available to end-users and consumers [í].”

A description of the information to be made available under the abovementioned Article is provided in Annex II of the Universal Service Directive:

*“1. Name(s) and address(es) of undertaking(s)
I.e. names and head office addresses of undertakings providing public telephone networks and/or publicly available telephone services.*

2. Publicly available telephone services offered

2.1. Scope of the publicly available telephone service

Description of the publicly available telephone services offered, indicating what is included in the subscription charge and the periodic rental charge (e.g. operator services, directories, directory enquiry services, selective call barring, itemised billing, maintenance, etc.).

2.2. Standard tariffs covering access, all types of usage charges, maintenance, and including details of standard discounts applied and special and targeted tariff schemes.

2.3. Compensation/refund policy, including specific details of any compensation/refund schemes offered.

2.4. Types of maintenance service offered.

2.5. Standard contract conditions, including any minimum contractual period, if relevant.

3. Dispute settlement mechanisms including those developed by the undertaking.

4. Information about rights as regards universal service, including the facilities and services mentioned in Annex I.”

The NRA has a responsibility to ensure that the information items included in the Annex II list is published. To this end, the NRA may decide which information is to be published by the providers and which information is to be published by the NRA itself.

²⁶ Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive), OJ L 108, 24.4.2002, p.51-77.

It is interesting to note that while Article 21 (1) of the Universal Service Directive refers only to publicly available *telephone* services, the national legislation in most of the countries does not differentiate between this category and other categories of publicly available electronic communications services. Therefore, same transparency requirements usually apply to both telephony and Internet/broadband services.

Also, Article 20 (4) of the Universal Service Directive contains a special transparency requirement concerning changes in contractual conditions occurring after subscribers' entry into the contract:

“Subscribers shall have a right to withdraw from their contracts without penalty upon notice of proposed modifications in the contractual conditions. Subscribers shall be given adequate notice, not shorter than one month, ahead of any such modifications and shall be informed at the same time of their right to withdraw, without penalty, from such contracts, if they do not accept the new conditions.”

In addition there are detailed transparency requirements imposed on mobile telephony services by Article 6 of the Roaming Regulation²⁷, with the aim to improve the transparency of retail tariffs for making and receiving regulated roaming calls within the Community and to help roaming customers make decisions on the use of their mobile telephones while abroad:

“1. To alert a roaming customer to the fact that he will be subject to roaming charges when making or receiving a call, each home provider shall, except when the customer has notified his home provider that he does not require this service, provide the customer, automatically by means of a Message Service, without undue delay and free of charge, when he enters a Member State other than that of his home network, with basic personalised pricing information on the roaming charges (including VAT) that apply to the making and receiving of calls by that customer in the visited Member State. This basic personalised pricing information shall include the maximum charges the customer may be subject to under his tariff scheme for making calls within the visited country and back to the Member State of his home network, as well as for calls received. It shall also include the free of charge number referred to in paragraph 2 for obtaining more detailed information. A customer who has given notice that he does not require the automatic Message Service shall have the right at any time and free of charge to require the home provider to provide the service again. Home providers shall provide blind or partially-sighted customers with this basic personalised pricing information automatically, by voice call, free-of-charge, if they so request.

2. In addition to paragraph 1, customers shall have the right to request and receive, free of charge, more detailed personalised pricing information on the roaming charges that apply to voice calls, SMS, MMS and other data communication services, by means of a mobile voice call or by SMS. Such a request shall be to a free of charge number designated for this purpose by the home provider.

3. Home providers shall provide all users with full information on applicable roaming charges, in particular on the Eurotariff, when subscriptions are taken out. They shall also provide their roaming customers with updates on applicable roaming charges without undue delay each time there is a change in these charges. Home providers shall take the necessary steps to secure awareness by all their roaming customers of

²⁷ Art. 7 of Regulation (EC) No 717/2007 of the European Parliament and of the Council of 27 June 2007 on roaming on public mobile telephone networks within the Community and amending Directive 2002/21/EC, OJ L 171, 29.6.2007, p.32-40.

the availability of the Eurotariff. They shall in particular communicate to all roaming customers by 30 July 2007 the conditions relating to the Eurotariff in a clear and unbiased manner. They shall send a reminder at reasonable intervals thereafter to all customers who have opted for another tariff.ö

4.1.4. Effectiveness of various information methods/tools and other transparency requirements

There are two broad categories of information methods/tools according to the degree of interaction with the end-users: unidirectional (static) and bi-directional (dynamic or interactive). In the first category, publication on **providers' websites** was identified by the majority of the respondents as being one of the most (or even the most) effective method(s) to inform end-users which can be employed by service providers. The growing number of Internet connections has transformed websites into an accessible means of information. Along with this method, **bills**, particularly **itemised bills** specifying a defined (minimum) set of information **and leaflets sent along with them** are viewed by some NRAs as being efficient channels to give information to end-users. They can ensure the wide distribution of information to end-users while taking into account that a material share of the target audience may not have access to a computer connected to the Internet.

In the second category, **customer care services** maintained by service providers and **instant billing control tools** were rated by some respondents as highly effective. Customer care allows conversational contact between consumer and the authorised personnel of the provider and can identify in the most accurate way particular consumer needs which can be addressed in real time. Instant billing control applications (accessible via e.g. website, SMS or phone) are simple and transparent means which allow the user to control in real time expenditure levels for electronic communications services.

Other information methods considered to be effective by some respondents include announcements for off-net calls, direct information via SMS/e-mails or publication at the points of sale.

4.1.5. Information methods/tools that NRAs consider may be appropriate to introduce in the future

The need to improve and refine the transparency requirements imposed on providers of electronic communications services especially in relation with quality of service and tariffs is recognised by many NRAs. Transparency of quality service is deemed to be closely linked to transparency of tariff information, since a fall in the quality of service, with the price remaining the same, is, in effect, an increase in price²⁸. In particular, the inconsistency between the advertised and the actual data speeds offered by the Internet service providers seem to be an increasing source of concern among regulators in the light of the increasing number of user complaints. Therefore, an important transparency measure that may need to be introduced in the near future refers to **the provision of direct and accurate information, before the signature of the contract, regarding the real or 'guaranteed' speed of the**

²⁸ Xavier, P. (2008), p.4 and 15.

Internet connection, as opposed to the *best effort* language commonly used when advertising the services.

Many respondents considered that there may be a need for tools able to provide **direct information to consumers in a targeted and personalised way** (via phone, letters, e-mails, SMS, interactive web applications etc.), as a complement to the obligations already imposed on providers to make available general information on tariffs and terms and conditions applicable to their services via websites or at the points of sale. This was mentioned in particular in relation with **changes occurring after the entry in to the contract** (one respondent mentioned the need for NRAs to issue guidelines/recommendation on how providers need to inform end-users), but also as far as **control of expenditure** is concerned (instant billing control applications, itemised bills).

Also, one NRA mentioned the need to **improve consumers' knowledge about their own consumption profile**, e.g. by a report that can be provided once a year (in the bill or in a leaflet sent with the bill) on the average monthly consumption of different services during the previous year. This could help making comparisons between various offers more easily, including via the use of interactive price guides made available by NRAs or third parties.

4.1.6. Conclusions on the information methods/tools used by providers

A wide range of methods and tools are used by providers of electronic communications services to inform end-users, on an either mandatory or voluntary basis. There is also a mix of static and interactive instruments. Measures considered by some NRAs to be particularly effective in the first category include publication on providers' websites, bills and in particular itemised bills with a regulated minimum content and leaflets sent along with them. The instruments in the second category are generally targeting individual consumers, offering online and/or personalised assistance, NRAs rating as particularly effective the customer care service, the instant billing control applications, the voice announcements/acoustic signals when calling a ported/off-net/special tariff number or the information sent via SMS or e-mail directly to the user.

Tools providing direct information to consumers in a targeted and personalised way (via phone, letters, e-mails, SMS, interactive web applications etc.) can complement the general information requirements to be met by providers, in particular in relation with changes occurring after the entry in to the contract and controlling the expenditure with electronic communications services.

Web based methods can be complemented by *off-line* methods able to reach a wide audience, especially where a material share of this audience may not have access to the Internet.

Implementation of such methods either compulsorily (by laws or regulations) or voluntarily (via encouraging and guiding industry self-regulation) can empower end-users, helping them make informed choices which best serve their needs.

4.2. Information methods/tools implemented by NRAs

4.2.1. General end-user information on NRA website

In most countries the NRAs have some kind of general information dedicated to end-users on their own website or on another website that they maintain. The information normally covers mobile telephony, fixed telephony and Internet/broadband.

However, there are differences when it comes to how the websites are organised. Most NRAs have a dedicated end-users information section on their website. Information targeted at end-users might also be published under thematic areas for electronic communications services.

Most NRAs publish information about **possibility of switching between providers, end-users' rights** in dealing with service providers, **how to complain and dispute settlement mechanisms** available, what to look at when choosing a certain offer, **generalities on tariffs and billing and special charging rules** (Chart 10, Table 7).

Chart 10. General end-user information categories on NRA-maintained websites

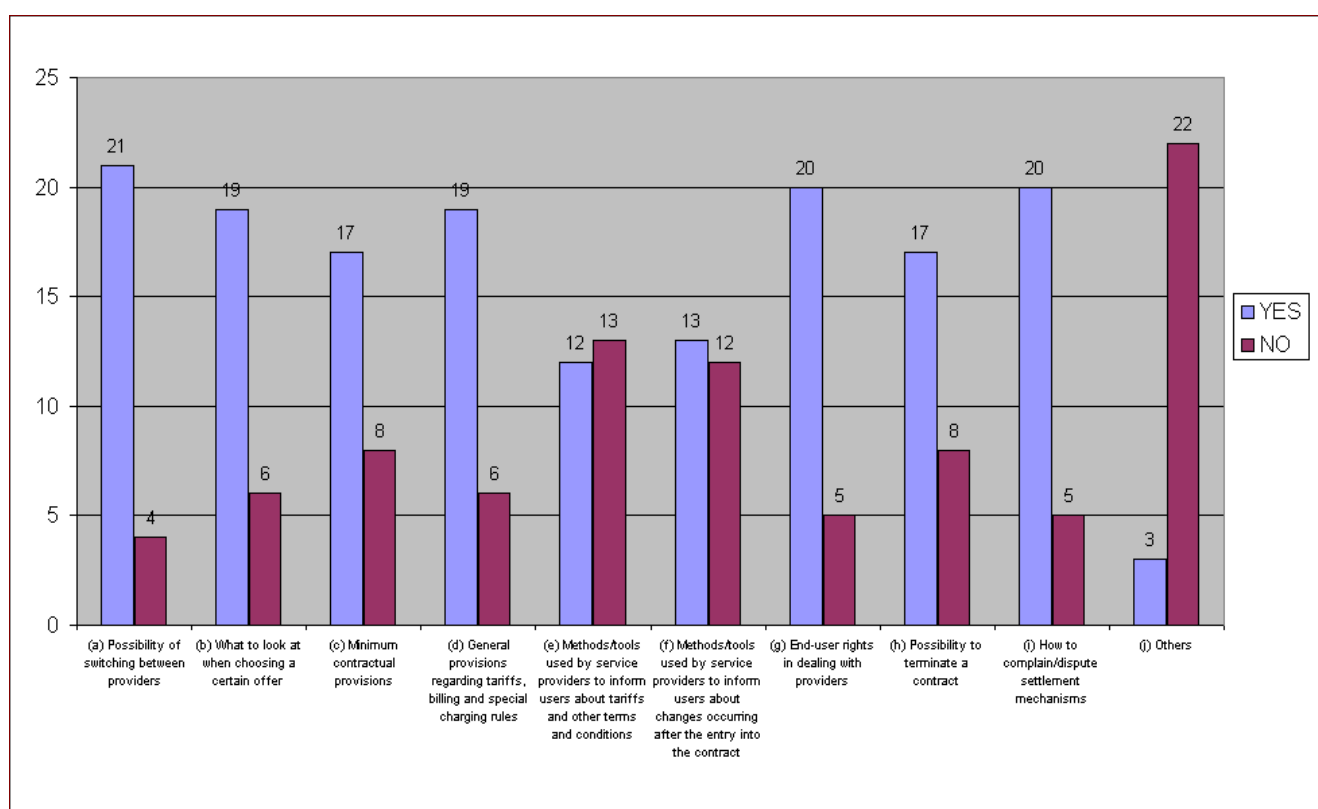


Table 7. General end-user information categories on NRA-maintained websites

Countries		(a) Possibility of switching between providers	(b) What to look at when choosing a certain offer	(c) Minimum contractual provisions	(d) General provisions regarding tariffs, billing and special charging rules (e.g. different charges for calls to ported numbers, calls in roaming)	(e) Methods/tools used by service providers to inform users about tariffs and other terms and conditions	(f) Methods/tools used by service providers to inform users about changes occurring after the entry into the contract	(g) End-user rights in dealing with providers	(h) Possibility to terminate a contract	(i) How to complain/ dispute settlement mechanisms	(j) Others
1	Austria	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
2	Bulgaria	Y	N	Y	Y	Y	Y	N	N	N	N
3	Cyprus	Y	N	Y	N	N	N	Y	Y	Y	N
4	Czech Rep.	N	N	N	N	N	N	N	N	Y	N
5	Denmark	Y	Y	N	Y	Y	Y	Y	N	Y	N
6	Estonia	N	Y	N	Y	N	N	N	N	N	N
7	Finland	Y	Y	Y	Y	N	N	Y	Y	Y	N
8	France	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
9	Germany	Y	Y	Y	Y	N	N	Y	N	Y	N
10	Hungary	Y	Y	Y	Y	N	N	N	Y	N	N
11	Ireland	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
12	Italy	Y	Y	N	Y	N	N	Y	Y	Y	N
13	Latvia	Y	Y	Y	Y	N	Y	N	Y	N	N
14	Lithuania	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
15	Malta	Y	Y	N	Y	Y	Y	Y	N	Y	Y
16	Netherlands	Y	N	N	N	N	N	Y	Y	Y	N
17	Norway	Y	Y	Y	N	Y	N	Y	Y	N	N
18	Poland	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
19	Portugal	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
20	Romania	N	Y	Y	N	N	N	Y	N	Y	Y
21	Slovenia	Y	N	Y	Y	Y	Y	Y	N	Y	N
22	Sweden	Y	Y	Y	Y	N	N	Y	Y	Y	N
23	Switzerland	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
24	Turkey	N	N	N	N	N	N	Y	Y	Y	N
25	UK	Y	Y	N	Y	N	Y	Y	Y	Y	N

4.2.2. Offer comparison websites

4.2.2.1. Overview of the comparison websites

Ten of the 25 respondents to the relevant part of the questionnaire have a form of interactive offer comparison website maintained by a public body, which in 9 cases is the telecom NRA; in just one case (Austria), the website is run by another public entity (*Arbeiterkammer Wien*). Additionally, some NRAs offer on their websites non-interactive offer comparisons, such as the telecom NRA in Finland (non-interactive quarterly price comparisons for fixed and mobile broadband services, mobile telephone subscriptions and mobile data services) and Czech Republic (fixed and mobile voice calls/SMS/MMS, domestic/international/roaming).

The interactive offer comparison websites differ in respect of both their complexity and the services which they include. In 9 out of the 10 cases, the website is able to perform calculations, based on the consumption volumes indicated by the user, and deliver a list of the available subscription packages matching the user indications, arranged in the ascending order of their price. These websites are also called *price calculators*. In one case (Slovenia), the website currently allows only *per item* comparisons, but not calculations; the user can choose to compare several subscription packages as far as the price of a minute of call or of an individual SMS or MMS for several subscription packages. However, Slovenia will introduce a *price calculator* as well by the end of 2008.

Table 8 below shows the services for which interactive websites maintained by public bodies in the ERG countries can provide comparisons between different offers.

Table 8. Services covered by the interactive offer comparison websites in the ERG countries

Parameters Country	Mobile	Fixed	Internet/ broadband	Television transmissions	Bundles
Austria www.mobilfunkrechner.de/akwien/	Y	-	-	-	-
Denmark www.it-borger.dk/verktøjer/teleguide	Y (incl. roaming)	Y	Y	-	Y
Estonia www.sa.ee/pk/index.php	Y (incl. roaming)	Y	Y (incl. roaming)	Y	Y
Hungary www.tantusz.nhh.hu	Y (incl. roaming)	Y	Y	Y	Y
Ireland www.callcosts.ie	Y (incl. roaming)	Y	Y	Y (only as part of a bundle)	Y
Lithuania www.skaiciuok.lt	Y (incl. roaming)	Y	-	-	-
Norway www.telepriser.no	Y	Y	Y	-	-
Portugal www.anacom.pt/template30.jsp?categoryId=60307	Y	-	-	-	-

Slovenia www.komuniciraj.eu	Y (incl. roaming)	Y	Y	Y (only where part of a bundle)	Y
Sweden www.telepriskollen.se	Y	Y	Y	-	Y
Total	10	8	7	4	6

All 10 websites developed by public bodies (mostly NRAs, as shown above) offer comparison services for mobile subscriptions. 8 offer comparison websites cover fixed subscriptions and 7 cover Internet/broadband. 4 websites cover television offers, while 6 can handle bundles.

4.2.2.2. Features included in the comparison websites

Table 9 shows what parameters are included in the offer comparison websites for **mobile telephony subscriptions**. The features most often included are domestic voice calls and SMS. Some websites have also included MMS, international and roaming services. Data traffic, voice mail and costs for paper bills are also included in some cases.

Table 9. Features included in offer comparison websites ó Mobile subscriptions

Feature Country	Voice calls	SMS	MMS	Inter-national	Roaming	Other
Austria	Y	Y	-	-	-	-
Denmark	Y	Y	Y	Y	Y	Data (GPRS), videophone, home area, 13 other services & conditions, use of mobile phone as substitute/supplement to a fixed subscription etc.
Estonia	Y	Y	Y	Y	Y	-
Hungary	Y	Y	Y	Y	Y	Data (GPRS), videophone
Ireland	Y	Y	-	Y	Y	-
Lithuania	Y	Y	Y	Y	Y	Data (GPRS)
Norway	Y	Y	Y	-	-	Data (GPRS), paper bill, voice mail
Portugal	Y	Y	Y	-	-	-
Slovenia	Y	Y	Y	Y	Y	-
Sweden	Y	Y	Y	Y	-	Data (GPRS), paper bill
Total	10	10	8	7	6	5

The features included in offer comparison websites for **fixed telephony subscriptions** are shown in Table 10. All of the eight websites which offer comparisons between fixed telephony packages include domestic voice calls and calls to international destinations.

Table 10. Features included in offer comparison websites ó Fixed subscriptions

Country \ Features	Domestic voice calls	International calls	Other
Austria	Not applicable	Not applicable	Not applicable
Denmark	Y	Y	11 different services & conditions
Estonia	Y	Y	-
Hungary	Y	Y	-
Ireland	Y	Y	-
Lithuania	Y	Y	-
Norway	Y	Y	-
Portugal	Not applicable	Not applicable	Not applicable
Slovenia	Y	Y	-
Sweden	Y	Y	-
Total	8	8	1

All offer comparison websites which include **Internet access subscriptions** (7 out of the total 10) cover broadband services. Three of them also include narrowband offers and five include mobile broadband (Table 11).

Table 11. Features included in offer comparison websites ó Internet access subscriptions

Country \ Features	Broadband	Narrowband	Mobile broadband	Other
Austria	Not applicable	Not applicable	Not applicable	Not applicable
Denmark	Y	Y	Y	11 different services & conditions
Estonia	Y	-	Y	Roaming
Hungary	Y	-	Y	-
Ireland	Y	-	-	-
Lithuania	Not applicable	Not applicable	Not applicable	Not applicable
Norway	Y	-	-	-
Portugal	Not applicable	Not applicable	Not applicable	Not applicable
Slovenia	Y	Y	Y	-
Sweden	Y	Y	Y	-
Total	7	3	5	2

Few offer comparison websites (4) cover **television transmission services**, and half of them include such services only as part of a bundle with other services (Table 12).

Table 12. Features included in offer comparison websites ó TV transmission subscriptions

Country \ Features	Cable	Terrestrial	Satellite	IPTV	Only as part of a bundle
Austria	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Denmark	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Estonia	Y	Y	-	Y	-
Hungary	Y	Y	Y	Y	-
Ireland	-	-	-	-	Y
Lithuania	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Norway	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Portugal	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Slovenia	-	-	-	-	Y
Sweden	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Total	2	2	1	2	2

A little more than half of the offer comparison websites include **bundles**. Most often, these combine fixed telephony and Internet access (Table 13).

Table 13. Features included in offer comparison websites ó Bundles

Country \ Feature	Bundles	Services included in the bundle
Austria	Not applicable	-
Denmark	Y	
Estonia	Y	Internet access/broadband, Television transmissions, Fixed telephony
Hungary	Y	Double/Triple Play
Ireland	Y	Fixed telephony, Broadband
Lithuania	Not applicable	-
Norway	Not applicable	-
Portugal	Not applicable	-
Slovenia	Y	Internet access, Television transmissions, Telephony
Sweden	Y	Fixed telephony, Internet access (under fixed telephony comparisons)
Total	6	

4.2.2.3. Calculation/search criteria used in the comparison websites

Table 14 below shows the calculation (or search) criteria used in the interactive offer comparison websites.

All of the websites can provide comparisons/calculations based on some **breakdown of traffic according to destinations** of calls (mobile/fixed/given networks) and **additional services** to telephony services, e.g. SMS, MMS, MB of data, in some cases voice mail or paper bill. All of them but one can perform calculations according to the data submitted by the user on the **monthly usage time** and on some **breakdown of traffic according to the time of day/week**. The **type of contract** (prepaid/post-paid) is used as a search criterion by seven out of the ten websites.

The search criteria can be used in various combinations.

As in general users may not be aware of every aspect of their usage pattern, and also considering the need to offer a simplified interface, the interactive comparison websites may use a number of assumptions in making a calculation. Four of the interactive comparison websites analysed (Denmark, Ireland, Norway and Sweden) use **model/default assumptions** in performing calculations/searches. Generally, these assumptions are based on providers' traffic data (e.g. time when most calls are made, calls distribution among different destinations).

Moreover, two of these four websites define three consumption categories for mobile telephony, fixed telephony and Internet access, 'Low', 'Medium' and 'High'. The lowest monthly price in each group (in Norway) *or* the top of the cheapest subscription packages in each group (in Sweden) are listed on the front page of the website (a sort of 'default search results'). One of the two NRAs using these three consumption categories reported that some of the usage patterns are based on public statistics from the NRA market data report, while others are based on discussions with operators/service providers, all of these patterns being updated once per year.

Table 14. Search criteria used in offer comparison websites

Criteria Country	(a) Monthly usage time	(b) Monthly spend	(c) Traffic on time of day/ week	(d) Traffic on destina- tions	(e) Coverage	(f) Type of contract	(g) Subsidised terminal	(h) Additional services (tele- phony)	(i) Data speed (Internet access)	(j) Techno- logy (Internet access, TV)	(k) Additional criteria/services
Austria	Y	-	Y	Y	-	-	-	SMS, voice mail	-	-	-
Denmark	Y	-	Y	Y	Y	Y	Y	SMS, MMS, data MB	Y	Y	e.g. min. period, fixed price, antivirus, firewall
Estonia	Y	Y	Y	Y	-	Y	-	SMS, MMS, data MB, voice mail	Y	-	-
Hungary	Y	Y	Y	Y	Y	Y	-	Videophone, SMS, MMS, data MB	Y	Y	e.g. price
Ireland	Y	Y	Y	Y	-	Y	-	SMS, MMS, single bill	Y	-	e.g. always on/time- based plan, other considerations
Lithuania	Y	-	Y	Y	-	-	-	SMS, MMS, data MB	-	-	-
Norway	Y	-	Y	Y	Y (for fixed telephony and broadband)	Y	-	SMS, MMS, data kB, voice mail, paper bill	Y	-	e.g. extra-costs included
Portugal	Y	Y	Y	Y	-	Y	-	SMS, MMS	-	-	-
Slovenia	-	Y	-	Y	Y	-	-	SMS, MMS	-	-	-
Sweden	Y	-	Y	Y	Y (for Internet access)	Y	-	SMS, MMS, data MB, paper bill	Y	Y	e.g. paper bill, antivirus, webmail, modem
Total	9	5	9	10	5	7	1	10	6	3	5

(a) (Average/maximum) monthly usage time

(b) (Average/maximum) monthly expenditure

(c) Breakdown of traffic according to time of day/week

(d) Breakdown of traffic according to destinations (mobile/fixed/given networks)

(e) Coverage in the end-user's residence area (for fixed telephony and Internet access)

(f) Preferred contractual arrangement (monthly subscription/prepaid arrangement)

(g) Subsidised terminal offered on subscription

(h) Services additional to voice

(i) Data speed (for Internet access)

(j) Technology (for Internet access, TV)

(k) Additional criteria/services (for other services than telephony)

4.2.2.4. Categories of information accessible in the comparison websites

The offer comparison websites analysed in this section provide access to a wide array of information categories (see below, Table 15). Many of these information categories become available on the screen as a result of a calculation or 'search' operation initiated by the user. The analysis revealed that the most common types of information provided by the interactive comparison websites are: **list of tariff schemes** (subscription packages); **subscription charge**; **call charges depending on time of day/week**; **call charges according to destination**; **subscription type** (prepaid/postpaid); **connection fee**; **data transmission charges**; **additional services**; **minimum contractual period**.

Less frequent on the comparison websites are information categories such as: coverage (mostly for broadband and fixed telephony); data speeds; billing options; subsidised terminal offered on subscription; discounted/promotional offers.

The discounted/promotional offers are as a general rule not included in the websites and are not taken into account when performing calculations. There are two exceptions (Hungary and Ireland), and a further case (Sweden) where there is limited space for operators/service providers to insert price comments, e.g. discounts and a free modem. If an operator/service provider has written a price comment for a certain product, this is presented as a 'Yes' on the pricelist and in the full version in the tariff scheme description (under 'Product data').

Table 15. Categories of information accessible in offer comparison websites

Criteria Country	(a) Tariff scheme	(b) Type of contract	(c) Sub- scription charge	(d) Con- nection fee	(e) Usage charges			(f) Billing options	(g) Discount/ promotio- nal offers	(h) Coverage	(i) Data speeds	(j) Sub- sidised terminal	(k) Addi- tional services	(l) Minimum con- tractual period	(m) Other
					(e.1) Call charges ó time of day/week	(e.2) Call charges ó destination	(e.3) Data charges								
Austria	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	-
Denmark	Y	Y	Y	Y	Y	Y	Y	Y	-	Y	Y	Y	Y	Y	-
Estonia	Y	Y	Y	Y	Y	Y	Y	Y	-	Y	Y	Y	Y	Y	-
Hungary	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	Y	Y	Y ó TV channels list
Ireland	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	Y ó Billing and Payment Options, Customer service hours	Y	-
Lithuania	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	-	Y ó info on free of charge minutes
Norway	Y	Y	Y	Y	Y	Y	Y	Y	-	Y (for fixed tel. and broadband)	Y	-	Y ó charges for voice mail	Y	-
Portugal	Y	Y	Y	-	Y	Y	-	-	-	-	-	-	-	-	-
Slovenia	Y	-	Y	Y	Y	Y	Y	-	-	Y	Y	-	Y	Y	-
Sweden	Y	Y	Y	Y	Y	Y	Y	Y	-	Y	Y	-	Y	Y	Y
Total	10	9	10	8	10	9	8	6	2	7	7	2	8	8	3

(a) Name of (and link to) the tariff scheme (subscription package)

(b) Contractual arrangement (prepaid/postpaid)

(c) Standard subscription charge/one-off charge

(d) Connection fee

(e) Usage charges: (e.1) Call charges depending on time of day/week (peak/off-peak); (e.2) Call charges depending on destination (on net/off-net); (e.3) Data transmission charges (price per MB/flat rate)

(f) Billing options (e.g. free/paid itemised billing, online billing)

(g) Discounted/promotional offers

(h) Coverage (i.e. geographical area where the service is available)

(i) Data transmission speeds

(j) Subsidised terminal offered on subscription

(k) Additional services available

(l) Minimum contractual period

(m) Others

4.2.2.5. General administrative information on the comparison websites

Table 16 summarizes the most important administrative data related to the development and maintenance of offer comparison websites.

Table 16. Administrative information about the offer comparison websites

Country	Data	Year when made available	Languages	Man-hours/week for IT maintenance	Man-hours/week for verifying information
Austria		NA	German	NA	NA
Denmark		2007 www.it-borger.dk Earlier www.teleprisguide.dk (1999-2007)	Danish	Outsourced	Insourced
Estonia		2005	Estonian	NA (outsourced)	NA (outsourced)
Hungary		2006	Hungarian	8 man-hours/week employed directly by NRA	16 man-hours/week employed directly by NRA
Ireland		Launched in two phases: - Mobile section launched first in 2005. - Fixed, broadband and bundles sections launched in 2006.	English	Negligible; however, new developments to the website are dependent on market developments and desire to keep the site in line with the offers available on market	5 man-hours/week by NRA but more resources required in view of forward-looking strategy
Lithuania		2007	Lithuanian, English	As necessary, NRA employees and outsourced	As necessary, approx. 1 man-hour/week, employed directly by NRA
Norway		2002	Norwegian, some general information in English	0.6-0.75 man-hours/week (12-15 man-hours/month) employed directly by NRA. Additional outsourced consultancy for maintenance of all NRA's websites.	4-8 man-hours/week (4 people covering daily work: verify prices, update general information, answer emails and phone calls from users and operators, discuss policy questions internally)
Portugal		2005	Portuguese	1 man-hour/week	6 man-hours/week, employed directly by NRA
Slovenia		2007	Slovenian	40 man-hours/week (outsourced)	40 man-hours/week (outsourced)
Sweden		2005 (1 st version 2000)	Swedish (information page in English available starting 21 st of October, 2008)	40 man-hours/week (30 employed directly by NRA and 10 outsourced) but resource needs increase when IT developments are necessary	14 man-hours/week (6 employed directly by NRA and 8 outsourced)

The first offer comparison website among the surveyed countries, the Danish Teleprisguide, dates from 1999, followed by the websites of the Swedish NRA (2000) and Norwegian NRA (2002). The most recent websites were launched in 2007 and belong to the Lithuanian and Slovenian NRAs; earlier in the same year the Danish NRA replaced its 1999 website with a new one. 2005-2007 was a particularly rich time for interactive comparison websites in

Europe, with not less than 8 such websites being launched (as completely new or as second versions).

The comparison websites are generally made available in the national language, although three of them also offer (some) information in English.

The amount of resources involved by the development, IT and content maintenance of the websites varies largely between countries. As far as the fixed costs for building the website are concerned, the figures vary from a multiple of EUR 1000 to multiples of EUR 10,000 and in some cases to multiples of EUR 100,000 (some of the figures are commercially sensitive therefore exact numbers are not indicated). The monthly maintenance costs for the website are also very different, from several hundreds to several thousands EUR.

The number of man-hours/week necessary for IT maintenance and content matters is very different from a country to another, but overall does not appear to put a material burden on the NRAs. IT maintenance needs appear to be commonly lower than those related to website content matters. However, if IT developments are to be considered, the resources needed may exceed those allocated to content.

4.2.2.6. Providers' cooperation related to the content of the comparison websites

Table 17 below displays the cooperation mechanisms between the telecom operators/service providers and the NRAs supported, where applicable, by legal and regulatory obligations to ensure that the offer comparison websites are provided with appropriate content, in particular with up-to-date information on the offers available on the market.

The questionnaire results show that in the vast majority of cases providers have direct access to the website in order to submit information on their offers. This is generally handled via a dedicated web interface with secure access. The NRA then acts as 'gatekeeper', by verifying the information and activating it on the public website.

Interestingly, in the majority of cases the information on the details of offers is provided/uploaded/updated on the website by providers on a voluntary basis. Legal or regulatory instruments on information provision, which include penalties for non-compliance, exist though in a number of countries, which might partially explain the willingness to cooperate. Some NRAs are able to apply fines, while in one country the NRA may issue orders and prohibitions as necessary for a rectification to take place, which may be combined with a fine. Notably, the same NRA mentioned that it has never used the tools provided by law, preferring instead to solve the problems via an open dialogue with the providers.

'Soft-law' enforcement mechanisms are also in place in some countries. Two NRAs mentioned that packages can be removed from the website in cases where operators fail to provide/upload/update the information.

Table 17. Providers' cooperation on the content of the comparison websites

Country	Access by providers	Legal obligation to provide to NRA detailed information on their offers	Legal obligation to upload on the website detailed information on their offers	Legal obligation to update the information provided
Austria	NA	<p>Y ó a general obligation on all providers:</p> <p>General terms and conditions as well as tariffs shall be notified to the NRA before provision of the service is started and shall be promulgated in an appropriate form. Changes in general terms and conditions as well as in tariffs shall be notified to the NRA before they take effect and shall be promulgated in an appropriate form.</p> <p>Fines may be applied for non-compliance.</p>	N	N
Denmark	Direct access (online) to the website. The providers have their own site, where to update subscriptions or to define new subscriptions. Any changes are verified by the NRA.	Y ó for mobile telephony, fixed telephony and Internet/broadband	N	<p>Y ó for mobile telephony, fixed telephony and Internet/broadband</p> <p>Promoted quarterly</p>
Estonia	Direct access for MNOs ó upgrade of prices of a specific MNO. Upgrade of offer (bundle) functionalities are made strictly by outsourced firm.	N	N	N
Hungary	Direct access ó with access to coverage data, providers' own data (bundles, tariffs).	<p>Y ó for mobile telephony, fixed telephony, Internet/broadband, radio/TV broadcasting/ transmission</p> <p>Providers must provide detailed information but the format is not regulated.</p>	<p>Y ó for mobile telephony, fixed telephony, Internet/broadband, radio/TV broadcasting/ transmission</p> <p>Providers must provide detailed information but the format is not regulated.</p>	<p>Y ó for mobile telephony, fixed telephony, Internet/broadband, radio/TV broadcasting/ transmission</p> <p>Providers must update information in case of a change, 30 days prior to the change becoming effective.</p>
Ireland	Direct access to all areas of providers' own plans ó they enter their own tariff information via their own extranet and submit it. NRA then activates the tariff information on the public site after verifying the information.	<p>N</p> <p>Information is provided on a voluntary basis. Removal of packages from the website can be applied in case of failure to do so.</p>	<p>N</p> <p>Information is uploaded on a voluntary basis. Removal of packages from the website can be applied in case of failure to do so.</p>	<p>N</p> <p>Information is updated on a voluntary basis, but providers must adhere to a code of practice for tariff presentation issued by the NRA (ComReg0486). Updates are required as changes occur. Providers are required to have prepared for activation in advance of go-live date of tariff. Enforcement can be made in relation to</p>

				ComReg0486 and/or may consist of removal of packages from the website.
Lithuania	No direct access (access exclusively reserved to NRA).	N	N	N
Norway	Direct access to separate module for updating prices and product information: http://telepriser.npt.no/ . NRA must verify and accept the changes before they can be published. The updated information is automatically transferred to the public website after being accepted by NPT.	N Information is provided on a voluntary basis. Removal of packages from the website can be applied in case of failure to do so.	N Information is uploaded on a voluntary basis. Removal of packages from the website can be applied in case of failure to do so.	N Information is updated on a voluntary basis. Removal of packages from the website can be applied in case of failure to do so.
Portugal	Direct access. Access to the data insertion tool is via a private website with user certificates to authenticate providers.	N Information is provided on a voluntary basis.	N Information is uploaded on a voluntary basis.	N Information is updated on a voluntary basis.
Slovenia	Direct access. The transparency project is based on cooperation with providers. They must regularly provide up-to-date information about their offers. In order to enter data, a provider has to identify itself.	N	N	N
Sweden	Direct access in order to modify, add and delete their own products and company information. Each provider has its own login account to Telepriskollen's operators' website. If they change any data on their account, an automatic e-mail notification will be sent to an e-mail account where the content officers can verify the changes and publish the information (only new products are published, current products are already published). If data is incorrect compared to information published on providers' own company website, the content officers will contact them in order to clarify the information on Telepriskollen. All providers can be managed from Telepriskollen's administration website, where PTS can create, deactivate and change all providers' login accounts.	Y 6 for mobile telephony, fixed telephony, Internet/broadband The NRA may issue orders and prohibitions as are necessary for a rectification to take place. An order or a prohibition may be combined with a default fine. The NRA has never used the tools provided in the law; instead an open dialogue with the providers has been used if there have been any problems.	N An open dialogue with the providers has been used if there have been any problems.	N An open dialogue with the providers has been used if there have been any problems.

4.2.2.7. Terms and Conditions governing the use of comparison websites

For seven out of ten surveyed websites, there are Terms and Conditions which govern their use (Table 18). These generally cover statements on the purpose of the website, limits of its capabilities and disclaimers on the limitation of liability undertaken by the NRA in respect of accuracy and reality of data, intellectual property, loss or damage arising out of or in connection with the use of the website etc. Some websites contain rules for providers and criteria they must fulfil in order to be included in the website.

Table 18. Terms and Conditions in offer comparison websites

Country	Terms and Conditions	Comments
Austria	N	Only a limited Disclaimer of liability (in German)
Denmark	Y	http://www.it-borger.dk/site1/verktøjer/teleguide/disclaimer (in Danish)
Estonia	Y	(in Estonian)
Hungary	Y	General Terms and Conditions are provided on the main page and separately for each service (mobile telephony, fixed telephony, Internet/broadband, radio/television broadcasting/transmission)
Ireland	Y	http://www.callcosts.ie/about_this_site/Terms_and_Conditions.139.LE.asp (in English)
Lithuania	Y	http://www.skaiciuok.lt/Agreement.htm (English translation)
Norway	Y	http://www.telepriser.no/portal/page/portal/telepriser/forsiden/om_telepriser_engelsk/terms
Portugal	N	No specific Terms and Conditions for the use of the comparison website, except for a Disclaimer of liability of ANACOM, according to which information on the rates offered to the public by mobile operators is their sole and exclusive responsibility.
Slovenia	N	No specific Terms and Conditions for the use of the comparison website, except for a Disclaimer of liability of APEK, according to which the information on the webpage is provided by the operators and is only informative.
Sweden	Y	There is a manual with course of actions and rules for providers. There are also basic criteria that providers must fulfil before joining Telepriskollen: http://www.telepriskollen.se/Information/KriterierMedverkan.aspx

4.2.2.8. Usage statistics for the comparison websites

Table 19 summarises the information collected via the NRA questionnaire on the usage of interactive comparison websites.

Table 19. Offer comparison websites ó Usage statistics

Statistics Country	Visitors/month	Services for which comparisons are most often requested	Most used search criteria, in descending order of usage frequency
Austria	NA	Mobile telephony (Note: the website is only for mobile)	1. monthly usage time 2. breakdown of calls according to time of day 3. breakdown of calls according to destinations (Note: all 3 mandatory)
Denmark	65,220 ^(*)	NA	NA
Estonia	NA	Mobile telephony Internet/broadband Bundles	1. monthly usage time 2. time of day when traffic is made
Hungary	5,000-5,500	Broadband Mobile telephony ó roaming	1. coverage 2. monthly expenditure 3. bandwidth
Ireland	16,500	Mobile telephony Broadband Fixed/broadband combined	NA
Lithuania	18,000 in the first month (end-2007)	Mobile telephony ó domestic voice calls	NA
Norway	50,000	Mobile telephony	NA
Portugal	1,900 (01/2008 ó 06/2008) Past statistics: 1,700 ó in 2007 3,600 ó in 2006 5,000 ó (07/2005 ó 12/2005)	Mobile telephony	NA
Slovenia	1,500	Broadband	1. coverage/availability of service in a certain municipality 2. operators offering a service in a municipality 3. monthly expenditure
Sweden	40,000-50,000	Example - in an active month as August, the total visits are divided as follows: - Mobile telephony: 10,839 (simplified calculator) 8,189 (tariff scheme/product data) 4,953 (pricelist) 4,605 (advanced calculator) - Fixed telephony: 9,096 (simplified calculator) 6,839 (pricelist) 6,087 (tariff scheme/product data) 2,926 (advanced calculator) - Fixed broadband and narrowband: 13,623 (pricelist) 8,738 (simplified calculator) 6,010 (tariff scheme/product data) 5,580 (general information) 3,057 (advanced calculator) - Mobile broadband: 2,419 (general information) 2,283 (pricelist)	1. monthly usage time 2. coverage (municipality/county) 3. data transmission speed

(*) User sessions; figure valid for the entire it-borger portal, of which the interactive guide is the part which generates most of the page views

Three types of indicators have been analysed:

(1) Number of visitors per month. Reported statistics from the NRAs shows that monthly visits vary between approximately 1,500 and 65,000.

(2) Services for which comparisons are most often requested. In six out of the ten cases analysed, **mobile telephony** is the service for which comparisons are most frequently requested and in two other cases it is ranking on the 2nd place. The second place is occupied by **Internet access/broadband**, quoted by three respondents on the 1st place and by another two on the 2nd; this number raises if bundles including broadband (mentioned by two respondents) are counted.

(3) Most used search criteria. A limited number of NRAs have provided this type of information. **Monthly usage time, coverage, time of day when calls are made, monthly expenditure** and **data transmission features** (bandwidth, speed) are frequently used criteria in a number of countries. The breakdown of calls according to destinations was also mentioned.

4.2.2.9. Impact of the comparison websites

The NRA questionnaire attempted to assess the impact of the comparison websites on the basis of information related mainly to two parameters:

(1) End-user awareness. The respondents pointed chiefly to the websites' visitor statistics and to empirical evidence related to user satisfaction with the website. It appears that user awareness is highly sensitive references to the website in the media. NRA press releases or articles appearing in newspapers, magazines or on the Internet making reference to the website are reported to bring about a steep increase in the number of visits on the offer comparison website.

(2) End-user switching behaviour. There is little evidence about the relation between the website availability and switching behaviour in the telecoms market. A survey done by the Swedish NRA revealed that about 3% of consumers change their subscription plan after using the NRA's comparison website. Impact on switching is difficult to estimate because availability of comparable information is just one of the measures aimed at removing barriers to switching put in place by NRAs, such as number portability.

In addition, the analysis of the information submitted in response to other sections of the questionnaire provides interesting indications with respect to the effectiveness of the different comparison websites maintained by NRAs.

Six out of the ten websites analysed have more than 5,000 visitors/month while five of them appear to be particularly successful, with more than 10,000 visitors/month. Quite remarkably, these figures do not seem to be correlated with the country population numbers in any way (Table 20).

Table 20. Comparison websitesø visitor statistics

Country	Visitors/month
Austria	NA
Denmark ⁽¹⁾	65,220 ^(*)
Estonia	NA
Hungary ⁽²⁾	5,000-5,500
Ireland ⁽³⁾	16,500
Lithuania ⁽⁴⁾	18,000
Norway ⁽⁵⁾	50,000
Portugal ⁽⁶⁾	1,900
Slovenia ⁽⁷⁾	1,500
Sweden ⁽⁸⁾	40,000-50,000

(1) Country population: approx. 5.475 million

(5) Country population: approx. 4.737 million

(2) Country population: approx. 10.045 million

(6) Country population: approx. 10.617 million

(3) Country population: approx. 4.419 million

(7) Country population: approx. 2.025 million

(4) Country population: approx. 3.366 million

(8) Country population: approx. 9.182 million

(*) User sessions; figure valid for the entire it-borger portal, of which the interactive guide is the part which generates most of the page views

The analysis of the features displayed by the most successful comparison websites offers interesting results:

All websites with more than 5,000 visits/month offer comparisons for **mobile telephony**, **fixed telephony** and (with one exception) **Internet access**. With two exceptions, they can also compare bundles. Five out of these six websites cover **broadband** services.

When it comes to search/calculation criteria, all websites with more than 5,000 visits/month but one use between 8 and 10 search criteria out of a maximum number of 11 (see Table 14 above), as opposed to the less visited websites, which make available between 4 and 7 criteria. Five of the six most visited websites offer comparisons according to the **type of subscription** (prepaid/post-paid), while half of the less visited websites do not provide this facility. Also, all of the websites with over 5,000 visits except for one have a search criterion for **data speeds** for Internet access/broadband, while only one of the other websites uses this criterion. Only three comparison websites out of the total ten feature the **technology** criterion (for Internet access or TV transmissions, e.g. xDSL, cable, wireless etc.) and all of them have over 5,000 visits a month. Finally, in only four websites out of ten the user can select **additional criteria/services** for Internet or TV transmissions and all of these websites exceed 5,000 visits per month; moreover, it seems that the most visited websites have the **highest selection of additional criteria/services** available.

On the point of information accessible on the website, it can be noted that five out of the six websites having over 5,000 visits/month make available between 12 and 14 information categories out of the maximum of 15 defined in the NRA questionnaire, while the rest of the websites do not exceed 10 (with one exception). Among these information categories, **billing options** are presented by five out of the ten websites and four of these five portals receive more than 5,000 visits a month. Also, **discounted/promotional offers** are accommodated only by two websites, both of them belonging to the group of most visited pages.

It is very important to note that four of the most visited comparison websites with over 16,000 visits/month use **model/default assumptions** in performing calculations. Two of the websites

exceeding 40,000 visits/ month **define** *Low*, *Medium* and *High* consumption patterns for mobile telephony, fixed telephony and Internet access and **show the cheapest prices or list of cheapest subscription packages** within each category **on the home page**.

Finally, at a more general level, the most visited websites display a **particularly user friendly interface** and attach significant value to the simplicity and ease of the user experience.

4.2.2.10. Challenges experienced in developing and maintaining comparison websites

The answers to the NRA questionnaire revealed several categories of challenges:

(1) Co-operation with the operators in developing the website. One of the conclusions resulting from the analysis of the available information on the structure and operation of comparison websites is that working closely with the market players in developing the detailed website specifications, in defining the data formats and in devising the content update procedures are key for the success of offer comparison websites.

NRAs have different experiences regarding co-operation with operators. The reactions vary from *extremely negative* and no cooperation to supportive and good co-operation. Two NRAs noticed some large stakeholders were sceptical about the launch of an interactive website, fearing that the quality of their services would not be displayed sufficiently. Another NRA indicated that one main problem was getting the providers to adhere to the website project on a voluntary basis.

One NRA believes that engaging the providers from the start and involve them in all stages of testing has helped foster a co-operative relationship.

(2) Operators not willing to provide or update data are pointed out as the main problem by some NRAs. In one instance, where certain providers did not keep their information updated on a regular basis, the NRA indicated that it set up formal guidelines regarding the update of tariffs and notification of changes to tariffs and had also, on rare occasions, temporarily suspended providers' plans, until information was updated. Also, one NRA indicated that the provision of up-to-date information is greatly enabled by the fact that its contractor who is in charge with maintaining and updating the website is constantly reminding the operators to provide data.

(3) Technical difficulties were considered significant issues by some respondents.

Technical difficulties were pointed out both on the NRA's side and on the operators' side. The very different formats of price lists used by operators made the work particularly cumbersome for the NRA in some cases. In addition, in one country, the structure of the website requires that substantial work is deployed to accommodate even very little changes due to the links existing between several different items; every single change to one of these items, no matter how small, consequently re-formats and reorganizes the whole solution. This makes it easier to create something new than to change something already on the page.

In another country, operators complained about the time consuming and burdensome procedures needed for loading and validating the tariffs plans in the very detailed format required by the software application.

(4) Getting accurate results. The choice of the algorithms that would deliver the most accurate results was indicated as an important challenge by several respondents. On some occasions, operators with a low ranking were reportedly arguing that they got an unfair treatment or that distorted results were generated by limitations in the calculator. They were able to complain to the NRA about alleged misuse of the calculator or about getting an undeserved ranking in any other way. One NRA has put in place an internal reference group to discuss and decide on these types of complaints; if changes in policy issues appear necessary and there are no clear answers, a consultation with the operators might be held.

In some other cases, the respondents pointed to problems related to the mere accuracy of data, e.g. a given service provider was not available in a particular area. Also, end-users complained that certain data was not up-to-date (mainly referring to postal codes or regions where operators were providing access to broadband Internet); the reason was that the operators did not update the relevant information.

Finally, it has been pointed out that developing comparison websites involve a certain legal risk, which must be included in the scope of NRAs liability.

(5) Choosing the most important parameters while keeping user friendliness is seen as a real challenge when developing the website. It is also important to anticipate what the user will be interested in and which would be the simplest way of providing the requested data to him/her. In some cases, end-users complained that the presentation of information on the website was difficult to understand.

In one case, where the website offers simulations of the monthly consumption, most of the end-users' complaints relate to the time consuming and unwieldy steps that the users must follow to obtain accurate estimates of their monthly consumption. This complexity is due to the fact that this tool does not produce estimates based on default/model assumptions. In order to obtain proper estimates the user is required to input actual consumption data at a quite detailed level.

(6) Raising user awareness. Some NRAs consider that building public visibility for the website and making users aware of the practical relevance of this tool are real challenges.

(7) Accommodating new price models. A persistent problem is how to include all price schemes that the service providers offer. One NRA indicated that providers may raise concerns if the website is unable to model a new aspect of their tariff plan; to deal with this issue, the NRA has asked providers to give it sufficient notice of tariff changes and to build this into website's development programme. NRAs will constantly have to decide if new price models should be included or not. In this process, the NRA will have to assess whether the new model will be used by many service providers or not, therefore it is important that the NRA stays in contact with numerous market players.

4.2.2.11. Future improvements to the comparison websites

All NRAs maintaining comparison websites think about improving them in the future. Table 21 presents an overview of the improvements sought by NRAs to the comparison websites that they maintain. Such improvements generally fall into three categories:

(1) Extensions to new categories of services. Some NRAs mentioned the intent to extend the website to cover also **Internet/broadband, mobile data, triple-play bundles and directory enquiry services**.

(2) Improvements to the functionalities offered by the website. The respondents mentioned a wide array of new or improved features that they consider introducing: **regional search** (particularly for broadband); **transparency of other charges outside subscription costs** (e.g. financial penalties consumers face if they cancel contracts prematurely); **presentation of minimum and maximum Internet speed limits** (instead of ðup toö indications).

One NRA considers adding extra functionalities such as **quality indicators** or **bandwidth measurement**. The only NRA whose website currently allows only comparisons ðper itemö to be made, but not calculations announced that it intends to add a calculator to the portal until the end of 2008.

Interestingly, two NRAs referred to the benefits of using **electronic bills** in price calculators, one of which considers appropriate to introduce a functionality allowing users to import directly their electronic invoice in the website.

(3) Improvements in terms of accessibility and user friendliness. More simplicity is sought by one NRA, who indicated that developments will go towards having one simple calculator that can be increased with more detailed information instead of having two separated calculator (one simplified and one advanced). Another respondent referred to improvements aimed at increasing accessibility, such as release of the text version (WAI ó Web Accessibility Initiative) of the service, which provides easier access to people with special needs and users with Internet dial-up access and mobile devices. Creating an English version of the website was mentioned by one of the respondents.

Table 21 below is listing the improvements sought by country.

Table 21. Future improvements to comparison websites

Country	Improvement	Comments
Austria	-	-
Denmark	Y	Regional search especially for broadband.
Estonia	Y	Including all MNOs into ðMobile telephony IIö website, based on e-bill (i.e. billing file in *.csv format) delivered by MNOs and used as input for price calculations, in order for this to work with all offers from all MNOs.
Hungary	Y	Quality indicators, bandwidth measurement, interactive guides.
Ireland	Y	Planning to include transparency of other charges outside package costs such as financial penalties consumers face if they cancel contracts prematurely. Mobile Data pricing and Directory Enquiry Service pricing are also planned.

Lithuania	Y	To make it available for Internet services price comparisons.
Norway	Y	Website was extended in May 2008 to include data traffic and voice mail. For the moment no essential changes are planned, but NRA is constantly upgrading the website to keep up with changes in the market. A simplified overview of mobile broadband is likely to be included within a few months.
Portugal	Y	Further development in order to include broadband tariff comparisons is being considered. Also, the NRA considers adapting the functionality of monthly consumption in order to allow users to import from operators' websites a file with the details of their electronic invoice to be used directly in the comparison website, without any change. Improvements in terms of accessibility, as to the release of the text version (WAI ó Web Accessibility Initiative) of the service, which provides easier access to people with special needs, and users with Internet dial-up access and mobile devices are also sought.
Slovenia	Y	Website in English language. The NRA will continue to develop and improve the website. Until the end of 2008, the NRA will add a calculator to the portal to enable end-users to conduct an informative calculation of costs incurred when potentially using services chosen on the website.
Sweden	Y	Website is continuously improved and developed by its active maintenance organisation. One of the biggest next coming changes is the introduction of multi-play, such as Internet, telephony and TV combined services. Another important change is the presentation of Internet speed in interval (minimum and maximum) instead of ðup toö indications. Regarding the graphical user interface, all developments will go towards having one simple calculator that can be increased with more detailed information instead of having two separated calculator (one simplified and one advanced). The feasibility study for a new tool called ðBroadband mapö is about to begin. The idea is to create a website where consumers can write their address or postal code and see which providers can deliver Internet connection. It might also be possible to see which providers have radio towers in the area (for mobile telephony and Internet). After getting a list of potential providers in the area, the consumer should be able to compare prices and quality of service with Telepriskollen.

4.2.2.12. NRA accreditation of third party comparison websites

An alternative to an NRA running an interactive offer comparison website is where the NRA establishes a system for the accreditation of comparison websites maintained by third parties. Ofcom in the UK runs the Accreditation Scheme for Price Comparison Services (PASS) scheme which enables them to accredit websites which compare prices of different providers (see case study in section 5.3).

The PASS scheme pursues a number of objectives: to accredit calculators offering price comparisons on a wide range of communications services; to ensure that the application process for accreditation is fair and transparent; to ensure that the approval criteria on which applicants are judged leads to accurate and easy to use information for consumers; and to promote consumer awareness of accredited calculators and boost the value of accreditation.

The PASS scheme provides quality assurance that the calculation of price comparisons of fixed line, mobile, broadband and digital television services offered by accredited companies are accessible, accurate, transparent and comprehensive. The price accreditation scheme gives consumers confidence and reassurance in a market where finding the best deal can be an often confusing and sometimes daunting experience.

Companies accredited under PASS must undergo an annual audit conducted by Ofcom. The companies must also notify Ofcom of any material changes to their price calculator or how they provide information on prices. Ofcom may also at any time conduct spot checks on the quality and accuracy of the information being provided by accredited websites. If Ofcom finds that any accredited company no longer meets the terms of the accreditation agreement, Ofcom will withdraw the accreditation.

In July 2008, Ofcom accredited the first two Price Comparison companies under the PASS scheme.

4.2.3. Leaflets, TV and radio spots

Half of the NRAs responding to the questionnaire use leaflets or TV/radio spots to inform the end-users. These methods are used to provide guidance and advice to consumers on mobile telephony, fixed telephony and Internet/broadband services. Consumer rights are also often communicated via these methods. Other topics of consumer interest are block calls to premium rate numbers, awareness of number portability, campaigns for elderly users etc.

Media is also important when it comes to promoting end-user portals.

4.2.4. Regular provision of information to consumer representatives/associations

Around one third of the NRAs responding to the questionnaire have regular meetings with consumer representatives/associations to exchange information. The information sharing involves issues related to mobile telephony, fixed telephony, Internet/broadband and in some cases also broadcasting and postal services.

4.2.5. Other end-user information methods/tools

The methods used by NRAs to provide information to end-users also include:

- Other websites dedicated to specific consumer topics, for example safe use of the Internet (Norway);
- Other web based tools, for example tools for measuring and evaluating data transmission speeds (Sweden and Lithuania), vulnerability scanner (security test) (Sweden) and tools for consumers to test and learn how to create strong passwords (Sweden);

- Consumer assistance via telephone, mail, e-mail. Some NRAs provide a free phone number for consumers;
- Individual information at different events for example "open day" or visits to public places (library);
- Monthly newsletters containing regulatory developments and other relevant information (Portugal);
- Guidance for personnel selling mobile subscriptions. The guidance is used by the telecom operators in the training of sales personnel. Among other things this material contains information concerning tariffs, different tariff schemes and bundles, which should be always explained to the customer before sale (Finland).

4.2.6. Legal basis for use of the different information methods/tools

The different methods are often chosen and used by NRAs on voluntary basis. However, Article 8.4 (d) Framework Directive provides a clear role for NRAs in relation with the provision of information to end-users:

"The national regulatory authorities shall promote the interests of the citizens of the European Union by [] promoting the provision of clear information, in particular requiring transparency of tariffs and conditions for using publicly available electronic communications services."

The objective to promote the interest of end-users is for most NRAs implemented in their national legislation. Many NRAs have referred to this general objective (as transposed in the national legislation) as the basis for different methods/tools for the provision of information to end-users.

More specifically, for publicly available telephone services, Article 21 (1) of the Universal Service Directive requires Member States to ensure that transparent and up-to-date information on applicable prices and tariffs and on standard terms and conditions is available to end-users and consumers. A description of the information to be made available is provided by the Directive and the NRA has a responsibility to ensure that this information is published. To this end, the NRA may decide which information is to be published by the providers and which information is to be published by the NRA itself.

Article 21 (2) of the Universal Service Directive addresses the issue of comparing tariffs. According to this provision, NRAs shall encourage the provision of information to enable end-users, as far as appropriate, and consumers to make an independent evaluation of the cost of alternative usage patterns, by means of, for instance, interactive guides.

4.2.7. Effectiveness of various methods/tools

There are different views among the NRAs about the methods or tools which are the most effective. This is quite subjective since there are no common objective measures on how to

assess effectiveness. Although it is not possible to draw exact conclusions, the questionnaire has provided some interesting observations.

More than half of the countries who responded to this part of the questionnaire think that **general end-user information on the NRAs website** or the provision of **interactive offer comparison websites** (price calculators) to be the most effective information tools. Reasons quoted include the high visibility and popularity of these instruments, reflected by the number of visits to such websites which may reach figures in the range of several tens of thousands per month. Also, the provision of neutral and transparent information, as well as the highly relevant and tailored outputs delivered to end-users are emphasised as the most important arguments in support of the interactive comparison websites.

An alternative way of providing consumers with useful information is through **media**. This is assessed as a very effective method among a number of NRAs. Radio and TV slots as well as press articles are mentioned.

Other methods considered to be effective are **leaflets** with information about consumer rights and **customer service** via telephone, e-mail or by mail. Individual and reliable support is highlighted as an important reason for NRAs to maintain a good customer service.

However, one of the key factors when assessing the effectiveness of information methods/tools is to reach a wide audience. This is also the main reason for NRAs to use the media for empowering end-users. Statistics also demonstrate that press articles may have a great impact on the visibility and usage of interactive comparison websites.

4.2.8. Information methods/tools that NRAs consider may be appropriate to introduce in the future

Out of the 21 NRAs having responded to this question, six NRAs that do not have **offer comparison websites** in place consider that the introduction of such websites would be an appropriate measure in the future (Bulgaria, Italy, Malta, Poland, Romania and Turkey). Italy is considering introducing an **accreditation scheme** for price comparison calculators similar to the one run by Ofcom in the UK. AGCOM intends to make available the accreditation scheme by the first quarter of 2009.

Also, virtually all of the NRAs that already have interactive price guides contemplate improving them in the future in respect of both content and functionalities.

Concrete methods considered by other NRAs include:

- Regular provision of information to **consumer representatives/associations**;
- Different types of **end-user information websites**: webpage handling submissions where consumers can submit their complaints, guided information websites, micro sites, interactive websites;
- Door to door distribution of **information leaflets**, published materials comparing offers for communications services ó particularly relevant for those who do not have access to the Internet;

- Using **media channels**, e.g. by TV/radio spots commissioned by the NRA or by participating in events, TV and radio programmes.

4.2.9. Conclusions on information methods/tools provided by NRAs

NRAs have put in place a variety of methods and tools to inform end-users. The approaches include static and unidirectional (such as publication of general information on websites maintained by NRAs), dynamic and unidirectional (e.g. through media campaigns) and dynamic and bi-directional or interactive (offer comparison websites, consumer assistance via telephone, mail or e-mail etc.).

NRAs' websites are regarded by many regulators as effective information tools. Most NRAs publish general end-user information on their websites, including the possibility of switching between providers, end-users' rights in dealing with service providers, complaint and dispute settlement procedures, advice on choosing an offer, generalities on tariffs and billing and special charging rules.

Other tools considered to be effective by responding NRAs are the interactive web-based price guides (price calculators), which can perform calculations based on preferred consumption volumes and rank subscription packages from different providers according to their price. Overall, half of the NRAs have introduced or consider it appropriate to introduce such tools, directly or via the accreditation of third-party initiatives. Successful price calculators cover the full range of electronic communications services, are rich in features but at the same time display a particularly user friendly interface and attach significant value to the simplicity and ease of the user experience.

An alternative to an NRA running an interactive price calculator website is where the NRA establishes a system for the accreditation of such websites maintained by third parties. An accreditation scheme can provide quality assurance, for example by certifying that the price calculations offered by accredited websites are accessible, accurate, transparent and comprehensive.

Other information methods rated as effective by NRAs include the use of media channels (radio, TV, newspapers), the distribution of leaflets or the use of individual communication channels with the end-users seeking for assistance. These tools may have a particular relevance for those who do not have access to the Internet and can complement the use of web-based information instruments.

4.3. Information methods/tools made available by third parties

Service providers, NRAs and public bodies in general are not alone in their effort to inform end-users. Many other private organisations (NGOs, consumer organisations, provider associations) (hereinafter referred to as 'third parties') are active in the area of protecting and promoting consumers' interests and to help them to defend and promote fundamental rights and interests (freedom of choice, access to information, retail prices transparency, etc.).

The answers received to the NRA questionnaire do not provide a comprehensive and clear picture of the extent to which consumers are empowered by third parties through the provision of information.

13 out of the 25 NRAs in the ERG countries that replied to the relevant part of the questionnaire did not give any information about consumer associations working in the protection of consumers' rights in their national markets.

Some NRAs reported positive experiences as far as the third-party action is concerned. In Germany, the consumer advice centres ('Verbraucherzentralen') and their umbrella organisation ('Verbraucherzentrale Bundesverband') are registered associations, mainly funded by the federal states, which provide reliable information and advice on consumer issues, including with regard to telecoms market, and are widely known and trusted by the public.

Generally, consumer associations do not provide comprehensive information tailored and targeted particularly at the end-users of electronic communications services. These organisations represent a consultative voice for consumers; nevertheless, in a large number of cases, they refer the matter to the regulator which they consider to be best placed to give the detailed and reliable information or to intervene.

Half of the 25 respondents pointed out to the existence of some general end-user information on third-party owned websites. Also, half of the responding countries have offer comparison websites developed by third parties (see Table 22 for some examples, where NRAs have also indicated the relevant web addresses); these websites generally cover mobile telephony, fixed telephony and Internet/broadband, but also in some cases TV transmissions. Less than a quarter of the respondents mentioned media campaigns or other information methods launched by third parties.

Table 22. Examples of offer comparison websites developed by third parties

Country	Comparison websites
Austria	www.tarifcheck.at
Denmark	www.telepristjek.dk
Finland	www.vaihtovirta.fi www.vertaa.fi
France	www.budgetelecom.com www.comparatel.fr
Germany	www.billiger-telefonieren.de www.teltarif.de www.preisvergleich-dsl.de

	www.verivox.de
Italy	www.tariffe.it www.mondotariffe.it
Latvia	www.tarifi.lv
Netherlands	www.bellen.com www.internetten.nl www.telecomvergelijker.nl
Sweden	www.abonnemang.nu www.cint.se/sweden/asp20/cintnews/showcintnews.aspx www.compricer.se/telekom www.easychange.se www.finansportalen.se/tradlost.htm www.kelkoo.se www.pricerunner.se www.prisfakta.se www.prisjakt.nu
Switzerland	www.comparis.ch/comparis/telecom.aspx
United Kingdom	www.uswitch.com www.broadbandchoices.co.uk www.simplifydigital.co.uk

Offer comparison websites maintained by third parties are judged to be more or less effective and efficient, depending on the country. For example, they appear to be reliable, useful and trustworthy in Austria, Germany, Slovenia, Switzerland or the United Kingdom, whereas in Latvia or Poland such third-party tools are judged to be limited, little known or outdated.

One NRA commented extensively on the fact that the effectiveness and efficiency of third-party comparison websites is to a considerable degree limited. These websites are usually run by private persons and most of them don't provide up-to-date information and full details about the electronic communications services. No such website would enjoy a high/special reputation among end-users. One of the reasons is that telecom operators do not provide the information about their offers directly to the third parties, but these parties must gather this information from the operators' websites and usually upload it themselves on the comparison website. This process is particularly time and effort consuming.

Even when comparison websites are efficient, the unique use of the Internet as communication channel by third parties may exclude those consumers who have no Internet access from the benefits of this information tools. Moreover, many websites are monolingual and/or do not exploit all the interactive options that the Internet can offer.

Consumer decision making research carried out by Ofcom in UK in 2007 suggested that third-party websites are the second most important source of trusted information for consumers when making decisions in the communications market after personal sources such as friends/relations and followed by supplier sources. Between 17 and 25% of consumers visit price comparison websites. However, the research also suggests that there are variations in the use of these sources by different age and socio-economic groups. For example, in general, older consumers (65+) are less likely than average to use websites or suppliers for trusted information.

In UK, the Ofcom Price Accreditation Scheme provides quality assurance that the calculation of price comparisons of fixed line, mobile, broadband and digital television services offered by

accredited companies are accessible, accurate, transparent and comprehensive. Companies can apply to Ofcom for accreditation of their price comparison services and may be accredited by Ofcom following an audit of their service (see also section 4.2.2.12 - "NRA accreditation of third party comparison websites" and case study in section 5.3).

In Poland an education campaign targeted at end-users, focused on children and mobile technology, has been designed and it is meant to start in September 2008 under the title "My first Mobile". This is an initiative carried out by CenterNet S.A. (MNO) under the auspices of the Polish NRA. The aim of this activity is the promotion of rational use of mobile phones by children. The campaign has its own website (<http://www.mojapierwszacomorka.pl/>), its own logo and mascot (called Fonia) and tries to guide children in the good use and culture of mobile telephony.

Apart from these third party information initiatives focused on electronic communications services, it has to be mentioned that there are many other organisations around the world that protect and represent consumers' rights in general and who could also play a role in informing consumers. Some of the most active ones are listed below:

- **Consumers International** (<http://www.consumersinternational.org>). CI is a world non-for-profit federation of consumer groups that includes over 220 member organizations in 115 countries. CI is working to put the rights of consumers at the heart of decision-making. This federation is committed to acting as a global watchdog campaigning against any behaviour that threatens, ignores or abuses the principles of consumer protection and, for this objective, it works together with global bodies such as the United Nations (UN), World Health Organization (WHO), International Organization of Standardization (ISO), and the Food and Agriculture Organization (FAO).

- **BEUC - The European Consumers' Organisation** (<http://www.beuc.eu>). BEUC is a European non-for-profit federation that integrates 41 independent consumers' organisations from thirty European countries. BEUC acts as a sort of embassy for these organisations in Brussels and it represents its members and protects and enhances European consumers' rights.

- **Euroconsumers** (<http://www.conseur.org>). Euroconsumers is a European Group that develops in every European country the same task of information and consumers' right protection. Its objective is to achieve a European market oriented to and focused on the end-user, by helping consumers in their legal and economic position. Euroconsumers brings together more than 1,5 million of European consumers and publishes 32 magazines with practical information in 5 different languages.

- **International Consumer Research and Testing Ltd (ICRT)** (<http://www.international-testing.org>). ICRT is an association of 41 consumer organisations from 37 countries, mostly in Europe but also further afield (e.g. Australia, New Zealand or Hong Kong). ICRT promotes cooperation in consumer research and testing among its members and other organisations concerned with consumer matters. The results are often used by many national consumer organisations and made public in their respective magazines.

However, these associations do not normally develop special programmes or tools to enhance transparency and empower end-users in the electronic communications market.

National and international third parties may be useful in developing complementary initiatives to those deployed by service providers and NRAs in their effort to inform end-users. Positive experiences as far as third-party action is concerned were reported in some ERG countries, including the provision of reliable information and advice on consumer issues by associations which are widely known and trusted by the public. It is noted however that third parties do not generally provide tailored comprehensive information targeted particularly at the end-users of electronic communications services. The experience recorded by some NRAs shows that third-party initiatives to inform these end-users can be sporadic and rarely have a wide reach. Also, the experiences with comparison websites developed by third parties appear to be very different, the perception of responding NRAs as to the degree of effectiveness and trustworthiness of such initiatives varying to a significant extent.

5. Case studies

5.1. Norway – NPT's tariff comparison website: Telepriser.no

Introduction

Telepriser.no (www.telepriser.no) is a service offered by the Norwegian Post and Telecommunication Authority (NPT) established in 2002. The website allows consumers to compare the prices of different providers for mobile and fixed telephony and for Internet service. The purpose of Telepriser.no is to simplify price comparison for consumers and to help them find the optimal subscription based on his or her use of the services.

In NPT's view, the website has been a success, receiving about 50,000 visits every month (5,200,000 mobile subscribers in 2007).

General information about Telepriser.no

Consumer portal

The consumer portal was re-designed in May 2008. Screenshot of the first page of the consumer portal is presented below (Screenshot no.1).

Screenshot no.1

The screenshot shows the homepage of Telepriser.no. At the top is a navigation bar with links: FORSIDEN, MOBILETELEFONI, FAST- OG BREDBÅNDELEFONI, BREDBÅND, OM TELEPRISER, and KONTAKT OSS. Below this is a main content area with a sidebar on the left and a main table on the right.

Sidebar (Left):

- Verdt å vite** (28.08.2008): Billigere å ringe i Europa. Priser for å bruke mobiltelefon på reise i Europa settes ned fra 30. august. Det vil bli 24 øre billigere per minutt å ringe, og 18 øre billigere per minutt å motta samtaler innen EU/EØS. [Les mer](#)
- Din veiviser til telepriser i Norge**: På disse sidene kan du som forbruker sammenligne priser både for fast- og mobiltelefon og for bredbånd. Du får også gode råd om hva du bør tenke på når du skal velge tilbyder. Klikk på bannerne på toppen for å gå til kalkulatoren for de enkelte tjenesteområdene.

Main Content Area (Right):

Velg ditt forbruk og tjenesten du vil prissammenlikne

	Mobiltelefoni	Fast- og bredbåndstelefon	Bredbånd
Lavt	Ringer sjeldent 28 minutter, 29 samtaler, 59 SMS per måned Fra 9 kr/måned	Ringer sjeldent 111 minutter, 30 samtaler Fra 65 kr/måned	Moderat hastighet < 2 Mbit/s Fra 125 kr/måned
Middels	Ringer daglig 101 minutter, 68 samtaler, 119 SMS per måned Fra 29 kr/måned	Ringer daglig 253 minutter, 51 samtaler Fra 71 kr/måned	Middels hastighet 2 - 6 Mbit/s Fra 269 kr/måned
Høyt	Ringer hyppig 374 minutter, 164 samtaler, 262 SMS per måned Fra 311 kr/måned	Ringer hyppig 687 minutter, 92 samtaler Fra 163 kr/måned	Høy hastighet > 6 Mbit/s Fra 288 kr/måned
Info	Regn ut ditt forbruk	Regn ut ditt forbruk	Regn ut ditt forbruk

Oversikten viser de tre billigste landsdekkende teleproduktene innen hver tjeneste. Listene er basert på typiske forbruksmønstre for privatpersoner. Prisene er inkl. mva.

Spørsmål og svar

- Hvorfor er ikke subsidierte telefoner inkludert på Telepriser.no? [Les mer](#)
- Hvorfor er ikke alle såkalte vennerabonnement inkludert på Telepriser.no? [Les mer](#)
- Er det lov å kreve ekstra betalt av kunder som bare har bredbånd, og ikke fasttelefon? [Les mer](#)

Aktuelt

Fortsatt dyrt å bruke mobilen på Internett i Europa

Det har blitt mye billigere å bruke mobilen i Europa, takket være regulering som har tvunget prisene ned. Men pass opp: prisreguleringen gjelder bare for samtaler. Fortsatt kan regningen etter ferien i utlandet bli en ubehagelig opplevelse, og Post- og

Enlarged view of screenshot no.1 is presented below (Screenshot no.2):

Screenshot no.2

Velg ditt forbruk og tjenesten du vil prissammenlikne			
	1 Mobiltelefoni	2 Fast- og bredbåndstelefon	3 Bredbånd
Lavt	Ringer sjeldent ¹ 28 minutter, 29 samtaler, 59 SMS per måned <u>Fra 9 kr/måned</u>	Ringer sjeldent 111 minutter, 30 samtaler <u>Fra 65 kr/måned</u>	Moderat hastighet < 2 Mbit/s <u>Fra 125 kr/måned</u>
Middels	Ringer daglig ² 101 minutter, 68 samtaler, 119 SMS per måned <u>Fra 29 kr/måned</u>	Ringer daglig 253 minutter, 51 samtaler <u>Fra 71 kr/måned</u>	Middels hastighet 2 - 6 Mbit/s <u>Fra 269 kr/måned</u>
Høyt	Ringer hyppig ³ 374 minutter, 164 samtaler, 262 SMS per måned <u>Fra 311 kr/måned</u>	Ringer hyppig 687 minutter, 92 samtaler <u>Fra 163 kr/måned</u>	Høy hastighet > 6 Mbit/s <u>Fra 298 kr/måned</u>
Info	Regn ut ditt forbruk 123	Regn ut ditt forbruk 123	Regn ut ditt forbruk 123
Oversikten viser de tre billigste landsdekkende teleproduktene innen hver tjeneste. Listene er basert på typiske forbruksmønstre for privatpersoner. Prisene er inkl. mva.			
Spørsmål og svar		Aktuelt	

The front page shows for each category, Mobile (1), Fixed (2) and (3) Broadband the most inexpensive subscriptions according to different consumer patterns, "Low" (1), "Medium" (2) and "High" (3) are listed.

Patterns of consumption

Many consumers have limited knowledge of their use of electronic services. To guide consumers who have problems defining their consumption, NPT created three different user profiles. (The three different consumer profiles were implemented in May 2008. Before this date, Telepriser.no only used one consumer profile.)

For voice services the profiles are:

1. Low - Calls rarely (1)
2. Medium - Calls daily (2)
3. High - Calls frequently (3)

For broadband the profiles are:

1. Low - Moderate speed
2. Medium - Medium speed
3. High - High speed

Call data records from the largest providers are the basis for defining the consumption patterns. To estimate the consumer patterns the following data was collected from the largest providers:

1. Number of calls
2. Number of minutes called
3. Number of SMS
4. Number of MMS
5. Data traffic, measured in Kbytes
6. Directions of calls, divided into:
 - a. Mobile network
 - b. Fixed network
 - c. Voice mail

From each pattern the consumer is presented a rated list according to the selected pattern of consumption.

The products are rated according to monthly cost as shown on screenshot no.3 below.

Screenshot no.3

The screenshot shows the 'Mobilkalkulator' (Mobile Calculator) website. On the left, there's a sidebar with two main sections: 'Velg betalingsform' (Choose payment method) and 'Juster ditt forbruk' (Adjust your consumption). The 'Velg betalingsform' section has two options: 'Kontantkort / Forhåndsbetalt' (selected) and 'Abonnement / Etterbetalt'. The 'Juster ditt forbruk' section has input fields for 'Antall minutter fordelt på' (101), 'Antall minutter til' (68), 'Antall SMS' (119), 'Antall MMS' (5), 'Antall kB' (700), and 'Antall oppringninger til mobilsvr' (10). Below these are buttons for 'Klikk og beregn' and 'Tilbakestill'. The main content area is a table titled 'Tilbydere / Produkt' (Providers / Product) with columns for 'Mnd.kost.' (Monthly cost), 'Etabl.kost.' (Establishment cost), 'Forutsetning' (Assumption), and 'Mobilnett' (Mobile network). The table lists various providers and their products, such as Tele2 Sheriff, MTU MTU Fri, One Call Faktura, etc. At the bottom, it says '20 av 84 tilbydere' (20 of 84 providers) and has a 'Komplett oversikt' (Full overview) button.

Tilbydere / Produkt	Mnd.kost.	Etabl.kost.	Forutsetning	Mobilnett
Tele2 Tele2 Sheriff	29 kr	0 kr	Ja	Netcom
MTU MTU Fri	33 kr	0 kr	Ja	MTU
One Call Faktura	79 kr	0 kr	Ja	Network Norway
Tele2 Tele2 Uno	104 kr	0 kr	Ja	Netcom
Chess Premium	104 kr	0 kr	Ja	Netcom
One Call Aktiv	135 kr	0 kr	Ja	Network Norway
She talks She Talks Faktura	166 kr	0 kr	Ja	Netcom
She talks She Talks Kontroll	166 kr	0 kr	Ja	Netcom
Tello Snakk Mobil	168 kr	0 kr	Ja	Network Norway
Ventelo Privat Ventelo Rocky	169 kr	0 kr	Ja	Telenor
One Call Kontant	173 kr	0 kr	Ja	Network Norway
Vitel AS Vitel Mobil Online	177 kr	0 kr	Ja	Netcom
TalkMore AS Talkmore Forhåndsbetalt	181 kr	0 kr	Ja	Telenor
Tele2 Tele2 Champion	182 kr	0 kr	Ja	Netcom
Telenor Mobil djuice zero	187 kr	0 kr	Ja	Telenor
Chess King	190 kr	0 kr	Ja	Netcom
Mobitalk AS Talk Kontant	199 kr	99 kr	Ja	Telenor
Lebara as Mobil blu	203 kr	0 kr	Ja	Network Norway
Tele2 Kompis Kontant	203 kr	0 kr	Ja	Netcom
Tele2 Tele2 Kompis	203 kr	0 kr	Ja	Netcom

On the left side you can change the consumption values to reflect your personal consumption pattern:

- 1) Choose method of payment
- 2) Adjust your consumption
 - a. Minutes
 - b. Number of calls

- c. Divide traffic between fixed and mobile telephone
- d. Number of SMS
- e. Number of MMS
- f. Downloaded data in kB
- g. Number of voicemail calls.

The calculations are made per day, per week or per month.

The ranking gives information about the different products:

- 1) Name of provider and subscription
- 2) The calculation result is presented as cost per month
- 3) Start-up cost
- 4) Assumptions
- 5) Mobile network information
- 6) Additional information

Provider portal

The service is based price information given by the providers. The providers have access to a separate portal in order to report prices for their products. The providers are responsible for updating the website with new products and changes made to existing products. NPT accepts the changes electronically before they are published on Telepriser.no. The screenshot no.4 below shows the provider portal.

Screenshot no.4

Produkt: Altibox Familie 10/10 Mbit/s Logg ut!

Angre, gå til hovedmeny

1.0 Produkt informasjon [hjelp]	
1.1 Produkt navn	Altibox Familie 10/10 Mbit/s
1.2 Generell informasjon/rabatt ordninger (maks. 400 tegn):	Etableringsprisen forutsetter at egeninnsatsen er utført. Det innebærer -2000,- for graving på egen eiendom og -500,- for innvendig kabling. Etableringsprisen inkluderer adapter/
1.3 Nedlastingshastighet (skriv 64 for Oppringt internett)	10000 (kb/s)
1.4 Opplastingshastighet (skriv 64 for Oppringt internett)	10000 (kb/s)
1.5 Brukerstøtte	Hele døgnet
1.6 Bindingstid	12 (i måneder)
1.7 Aksess type	Fiber
1.8 Er det forutsetninger/begrensninger knyttet til abonnementet (ref punkt 1.2)?	<input checked="" type="checkbox"/>
1.9 Tilbys bredbåndstelefon?	<input checked="" type="checkbox"/>

2.0 Faste abonnement kostnader [hjelp]	
2.1 Etableringsavgift	1400
2.2 Månedlig avgift	449
2.3 Ekstravgift dersom kunden sier opp fasttelefonen	
2.3.1 For kunder som har både bredbånd og bredbåndstelefon hos deres selskap	0
2.3.2 For kunder som kun har bredbånd hos deres selskap	0
2.4 Månedlig faktura avgift	0

3.0 Oppkoblingskostnader (alle priser i kr per minutt) [hjelp]	
Koble oppringtabonnement til vanligst benyttede fasttelefonabonnement (kveld/helg takster vil bli benyttet)	
<div></div>	

4.0 Produktet tilbys i følgende fylker [hjelp]	
<input type="checkbox"/> Alle	<input type="button" value="Velg alle"/> <input type="button" value="Fjern alle"/>
<input checked="" type="checkbox"/> Akershus <input checked="" type="checkbox"/> Aust-Agder <input checked="" type="checkbox"/> Buskerud <input type="checkbox"/> Finnmark	<input type="checkbox"/> Hedmark <input checked="" type="checkbox"/> Hordaland <input type="checkbox"/> Møre og Romsdal <input checked="" type="checkbox"/> Nord-Trøndelag
<input checked="" type="checkbox"/> Nordland <input type="checkbox"/> Oppland <input checked="" type="checkbox"/> Oslo <input type="checkbox"/> Rogaland	<input type="checkbox"/> Sogn og Fjordane <input type="checkbox"/> Sør-Trøndelag <input checked="" type="checkbox"/> Telemark <input checked="" type="checkbox"/> Troms
<input type="checkbox"/> Vest-Agder <input checked="" type="checkbox"/> Vestfold <input checked="" type="checkbox"/> Østfold	

Angre, gå til hovedmeny

The legal basis for the use of Telepriser.no

Price information is provided and updated by the provider on voluntarily basis. There has been no need to impose obligations on the operators with regards to Telepriser.no. However, NPT has put in place some terms of providers' use of the service (see box below).

Terms of providers' use of Telepriser.no

1 General:

Telepriser.no comprises providers who offer telephony services and Internet access to the private market in Norway. The purpose of Telepriser.no is to provide consumers with a better basis for choosing a provider of products/services (hereinafter called products) by publishing an overview of providers, their products and a price calculator. Telepriser.no is owned and administered by the Norwegian Post and Telecommunications Authority (NPT).

2 Terms of use:

NPT determines the terms of use for Telepriser.no. As far as possible, providers registered at Telepriser.no will be notified in the case of significant changes in terms and conditions. However, it is the providers' own responsibility to ensure that their use of Telepriser.no at all times is in accordance with the applicable terms.

3 Registration of company etc.:

Providers must be represented at Telepriser.no by the enterprise's company, not by brands.

Providers of fixed and mobile telephony services and certain providers of Internet access are obliged to be registered in NPT's provider register in accordance with the Ecom regulations section 1-2. Providers must ensure that changes in company situation are reported to NPT.

4 Minimum criteria for provider:

Providers must fulfil certain minimum criteria with respect to market behaviour and other commitments in order to participate at Telepriser.no. It is required that:

- The provider must fulfil the requirements of the Electronic Communications Act and the Electronic Communications Regulations, including participation in the Bruerklagenemda for elektronisk kommunikasjon (BKN).
- The provider must have terms that regulate the consumers' rights and obligations for use of the system, and these must be readily available.
- The provider must fulfil the requirement of written authority where this applies, and may not register consumers as subscribers without express consent. It must also be clear under which terms the agreement has been entered into.
- The provider must have an operative, well-functioning customer service facility that can be reached within reasonable time and without significant cost to consumers. Handling of complaints must be taken seriously.

5 Approval of products and prices:

New products or changes to existing products must be approved by NPT prior to the changes becoming active at www.telepriser.no. Approval by NPT is ordinarily available five working days after the product or the changes to the product has been launched and available to the public. The precondition for this is that all required information on the product is updated and readily available on the provider's website and that the terms of use for Telepriser.no are complied with in their entirety.

New products or changes to existing products will be available at Telepriser.no on the day following approval by NPT.

6 Information on prices and preconditions:

All information relevant to the price of the product shall appear clearly, unambiguously and completely at Telepriser.no. All provided prices shall include VAT. If a price is dependent on special conditions, this shall be made clear in the information field for the product. Amongst other things, providers must supply information on:

- lock-in period (advance invoicing of products with no refunds upon termination is considered lock-in)
- various fees related to the product, e.g. termination and administration fees
- other preconditions, e.g. that the customer must have a broadband connection, use of invoicing or that the customer must have a fixed telephony line.

Prices and preconditions published at Telepriser.no must at all times be identical to information on the providers' websites. All information of significance to the price of the product shall be available at the provider's website. This information shall be readily available and appear in a clear, unambiguous and complete manner.

Terms of provider's use of Telepriser.no (cont'd)

7 Other limitations in access to publishing products at Telepriser.no:

It is not permitted to publish several versions of the same product at Telepriser.no. Examples of this may be:

- one and the same mobile product with different prices, with and without porting fees
- one and the same fixed telephony product with different prices depending on whether the customer is a member of a certain organization or not
- one and the same Internet product with different prices for lock-in periods of six and twelve months
- one and the same Internet product with different prices for cable TV customers depending on whether the customer lives in a housing cooperative or not

It is not permitted to publish products that require that one has a different product with the same provider (bundling). Exceptions from this apply to broadband telephony where subscriptions may require that one has broadband from the same provider.

It is not permitted to publish products where telephony is charged in other ways than by the second.

8 Contact person

NPT must always be given the name of a contact person with direct telephone number and e-mail address in the provider's organisation. NPT shall at all times be kept up to date on who the contact person is in the provider's organisation.

9 Sanctions

The provider's use of Telepriser.no shall be in compliance with the terms applicable at any given time for such use. If the provider does not comply with the terms for use of Telepriser.no, NPT reserves the right to remove the provider or any of its products from Telepriser.no. The provider will be given a reasonable deadline for correcting any deficiencies, but in serious cases NPT may remove providers or any of their services/products, without prior notification. In such cases a notification to the provider shall be given as soon as possible after removal has taken place.

In deciding whether a provider is to be removed from Telepriser.no, primary weight shall be attached to the seriousness of the breach of these terms. Repeated violations that in themselves are not serious may be considered in the aggregate to be grounds for removal.

In cases where there may be some time from when NPT registers a violation of terms until a provider is removed, NPT may consider informing consumers about the violation via Telepriser.no while it is considering what the sanction for the violation will be. Such a sanction is less intrusive than removal, but is nevertheless regarded as protecting consumer interests in that consumers are informed of the violation before making any choice of new provider.

NPT may remove a provider or individual products from Telepriser.no, if so doing is regarded as necessary in order to preserve the website's reputation or prevent the website from communicating misinformation. The provision applies even if the provider complies in other respects with the terms for participation.

Cooperation with the operators

Telenor and NetCom, the two biggest mobile operators in Norway, were sceptical to the website in the beginning. However, since the launch of the calculator in 2002 the co-operation with the operators has been very good. They pay close attention to the website and contact NPT frequently with suggestions and comments.

Today operators normally contact NPT to get their subscriptions listed on the website. Usually they update their prices on Telepriser.no at the same time as they update their own websites. The smallest operators, especially the mobile operators, are the most eager users of the website. It has been, and is still, a very important information channel for them as they have limited marketing budgets.

It is in the operators own interest to keep price information updated. Telepriser.no has a high standing among both operators and consumer and the website is regarded as the most neutral and independent price guide in the Norwegian market. The website is also often referred to in other media. Therefore it is important for operators to have their products present at the website and with correct price information.

A tool for soft regulation

NPT uses Telepriser.no also as a tool for "soft regulation" with success. Charging interval is an example of this.

For voice telephony NPT believes that the fairest and most transparent way of charging consumers is per second. The consumers only pay for the time used, and they do not have to pay for time not used i.e. if there are seconds left in a minute. Instead of imposing direct obligations on charging intervals, NPT includes per second charging in the "Terms of providers' use of Telepriser.no". This means that operators have to charge per second to be present at the website. This term applies both to mobile, fixed and broadband telephony. The result of this has been that all the operators, except for one provider of broadband telephony, have arranged their products to charge per second.

Challenges

The high interest in the website both by the consumers and the operators raise some challenges.

Quality

Operators must fulfil certain criteria with respect to market behaviour and other commitments in order to have their products presented at Telepriser.no. (See Terms of providers' use of Telepriser.no, paragraph 4).

These are the only criteria assessed by NPT with regards to the quality of the products/services presented at Telepriser.no. This is partly due to the lack of suitable systems for reporting quality of services. NPT tries to communicate to consumers that the website is a price information tool only and that NPT does not guarantee for the quality of the services. However, consumers still seem to read the information as a general recommendation of products, and there have been a few cases where consumers have blamed NPT for misleading them to buy a cheap but very poor product.

Because of this, NPT has recently included a term in the terms of use for operators which make it possible to remove an operator or a product from the website if it is necessary to protect the website's good reputation or prevent consumers from getting misleading information.

Criticised for restricting price plans

The website has been criticised for restricting price plans. To present a product at Telepriser.no operators must upload the product in a specified format and their price plan must therefore fit

into this format. NPT has tried to make it possible to upload most types of price plans, but it is impossible to take into account all possible price plans. Operators must therefore adopt to one of the existing price models.

Even so, with regard to transparency for consumers, NPT believes that it can have a positive effect that operators standardise their price plans to a certain degree.

There have been many cases where operators clearly have adjusted their price plans according to the default usage pattern to achieve high ranking scores in the calculator. This problem is somehow solved by including three different default usage patterns for each category of services.

Constant request for new functionality

Both consumers and operators frequently request new functionality and updates. However, NPT believes that it is important to keep the website simple and user-friendly. Therefore, we try to balance requests for new functionality with the need to keep the website simple. All requests for changes are carefully assessed on the basis of criteria like impact on results, relevance for a majority of the users etc. Only changes that increase transparency and accuracy for consumers, without making the website too complex, are implemented.

An overall history of success

Even though there are challenges with regards to operating Telepriser.no, NPT believes the website is a success as it has improved transparency for consumers.

Results from a survey among users made in 2006 showed that 86% of consumers were satisfied or very satisfied, 85 % found the website useful or very useful and 80 % would use the website again.

Number portability for mobile telephony was also introduced in Norway around the same time as Telepriser.no was established. There has been a constant increase in the total number of ported mobile numbers since the introduction. Today more than 500,000 people port their mobile numbers to other operators every year. These two factors have been very important for the competition in the mobile market in Norway.

5.2. Hungary – TANTUSZ comparison website

In 2004, Article 126 of the Act 100 of 2003 on Electronic Communications established a new institutional unit called the Representative of Communications Users' Rights (RCUR). RCUR is the independent representative of consumer protection at National Communications Authority Hungary (NHH) and it promotes the cooperation between the consumers and the service providers by soft law measures.

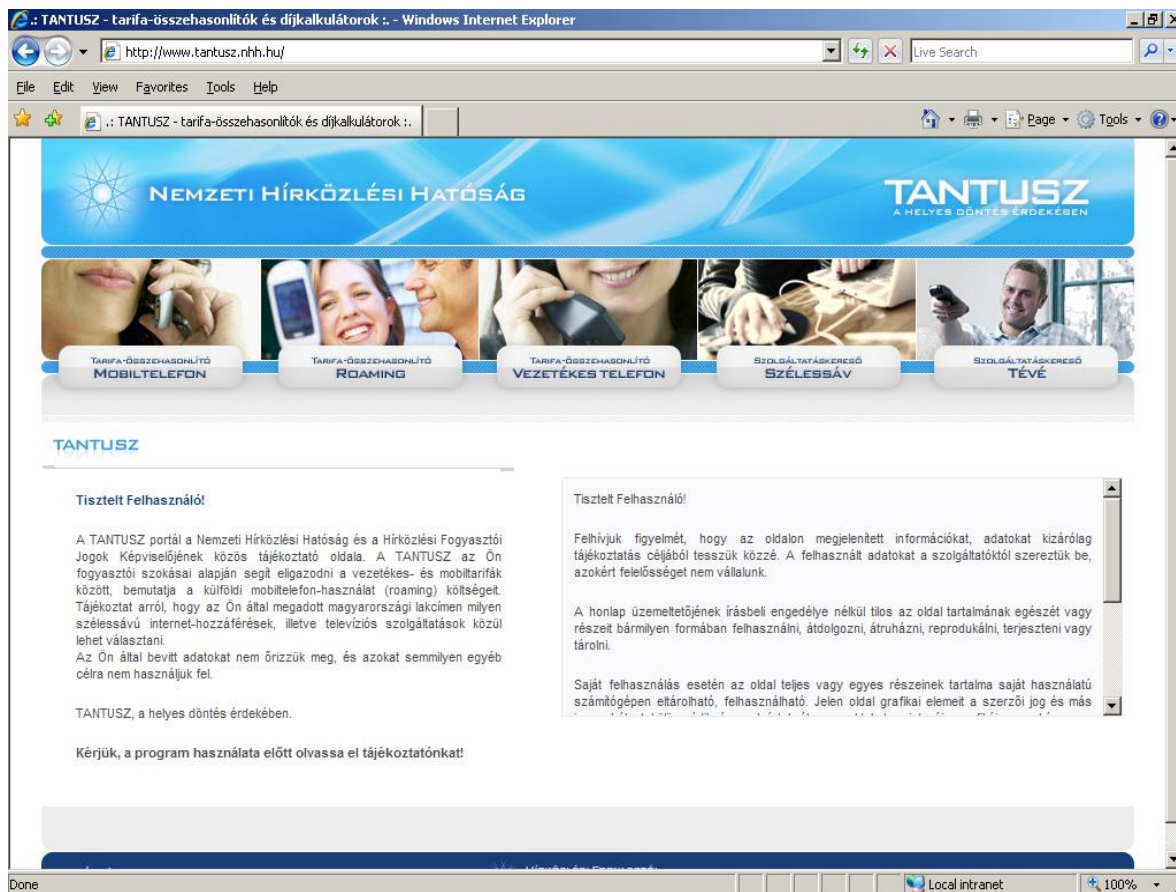
The main objective of the Representative of Communications Users' Rights is to increase consumer awareness. With the increasing competition in the telecommunications market, available subscriber packages, differing in price and other factors, have become difficult to follow. Therefore, RCUR created TANTUSZ portal in 2005 (www.tantusz.nhh.hu). It is a unique information system representing service providers and their services – e.g. mobile, roaming, fixed, and cable TV – browsers and calculators. The portal enables end-users to follow and compare the offers of different operators being present in a particular geographical area. Besides comparison TANTUSZ is able to calculate, providing the most suitable offer for the end-user. The name –tantusz– refers to an old type of coin used for public phones in Hungary, as the first module of the website was the fixed module. Since 2006 five modules –fixed, mobile, roaming, broadband, cable TV– have been developed.

The main objective of the portal is to provide up-to-date information for the end-users and to enable for service providers without capital to be represented on the website free, neutrally and equally to SMPs. Being represented on the TANTUSZ website free of charge is also unique in Hungary. Therefore, the data on the website is provided by the service providers, there is no connection between TANTUSZ and NHH's own register. For gathering data RCUR has a cooperation agreement with the service providers where providers are asked to upload and constantly upgrade their data on TANTUSZ.

Promoting TANTUSZ is a continuing emphasis of RCUR's program. Continuous media appearances, regular press conferences ensure that consumers are informed about the operation and the recent developments of TANTUSZ. The participation in consumer protection conferences, where the aim, roles and operation of TANTUSZ can be introduced to the public, is also an opportunity for promotion. A close cooperation with civil consumer organizations and service providers' alliances is essential for the effective operation of the web portal.

TANTUSZ has had more than 6 million visitors since its launch.

Screenshot no.1: TANTUSZ Homepage



TANTUSZ Fixed

The fixed module on TANTUSZ is a calculator which shows the available packages for the end-users after filling out the necessary fields (number of connections, call directions, time of calls, duration, etc.)

Screenshot no.2: TANTUSZ Fixed

Vezetékes TANTUSZ - NHH

NEMZETI HÍRKÖZLÉSI HATÓSÁG

TANTUSZ VEZETÉKES

TANTUSZ Vezetékes Útmutató

Alap

Az Ön körzetszáma: Település:

Rendelkezik-e Ön ISDN vonallal?
☐ igen, rendelkezem

Ön lakossági vagy üzleti felhasználó?
☒ lakossági
☐ üzleti

Töröl Tovább

Belföldi hívásirányok:

Hívásirány	07h-18h (perc:másodperc)	18h-07h (perc:másodperc)
Helyi hívás	00:00	00:00
Helyi hívás egyéb1	00:00	00:00
Helyi hívás egyéb2	00:00	00:00
Helyközi I.	00:00	00:00
Helyközi I. egyéb1	00:00	00:00
Helyközi I. egyéb2	00:00	00:00
Helyközi II.	00:00	00:00
Helyközi II. egyéb1	00:00	00:00
Helyközi II. egyéb2	00:00	00:00
Belföldi távolsági	00:00	00:00
Belföldi távolsági egyéb1	00:00	00:00
Belföldi távolsági egyéb2	00:00	00:00
T-Mobile	00:00	00:00
Pannon GSM	00:00	00:00
Vodafone	00:00	00:00

Külföldi hívásirányok:

TANTUSZ Mobile

TANTUSZ mobile, similar to TANTUSZ fixed, is a calculator, which can help the consumer choose the appropriate package according to the consumer's phoning habits. Since there are only 3 mobile operators on the Hungarian telecommunications market the lists of results includes a package of each mobile operator. The end-user's habits can be provided on 3 levels, from basic to complex. The basic level search calculates from the quantitative data of simple services (e.g. voice, SMS, MMS, data transfer, etc.), the medium level search uses the data of the end-user's invoice, while the complex search is similar to the fixed calculation where detailed data is needed for the optimal package. TANTUSZ mobile is focused on national services but international calls are taken into account as well.

Screenshot no.3: TANTUSZ Mobile ó Simple search

The screenshot shows the TANTUSZ Mobile Simple search interface within a Windows Internet Explorer browser window. The browser's address bar displays the URL <http://www.tantusz.nhh.hu/mobil/tkalk/tk.php>. The page features a blue header with the text "NEMZETI HÍRKÖZLÉSI HATÓSÁG" and "TANTUSZ MOBIL". Below the header, a navigation bar includes the text "TANTUSZ MOBIL - Felhasználói szokások egyszerűsített megadása" and a button labeled "Útmutató". The main content area is titled "Kérjük adja meg az egy hónap alatt igénybevett szolgáltatások mennyiségét" (Please specify the quantity of services used in the last month). It contains a form with six rows, each representing a different service: "Beszéd:" (Voice), "VideoTelefon:" (Video Phone), "SMS:", "MMS:", "WAP:", and "Adat:" (Data). Each row has a text input field followed by a unit (perc, db, or Mbyte) and two buttons: "Részletes megadás" (Detailed specification) and "Beccsés" (Estimated).

Service	Unit	Buttons
Beszéd:	perc	Részletes megadás, Beccsés
VideoTelefon:	perc	Részletes megadás, Beccsés
SMS:	db	Részletes megadás, Beccsés
MMS:	db	Részletes megadás, Beccsés
WAP:	perc	Részletes megadás, Beccsés
Adat:	Mbyte	Részletes megadás, Beccsés

Screenshot no.4: TANTUSZ Mobile ó Search based on the details of the invoice

TANTUSZ - Számla jellegű - Windows Internet Explorer

http://www.tantusz.nhh.hu/mobil/tkalk/tk.php

File Edit View Favorites Tools Help

TANTUSZ - Számla jellegű

NEMZETI HÍRKÖZLÉSI HATÓSÁG TANTUSZ MOBIL

TANTUSZ MOBIL - Felhasználói szokások számla jellegű megadása Útmutató

Kérjük adja meg az egy hónap alatt igénybevett szolgáltatások listáját

Szolgáltatás	Irány	Ország	Összesen

Hozzáad Módosít Töröl Becslés

Szolgáltatás: Beszéd Irány: Pannon

A felhasznált mennyiség időszakonként (Nappal-08-18 Reggel és Este-18-08):

	perc / hónap	db / hónap	átlagos hossz
H-Cs 08-18	0	0	2
H-Cs 18-08	0	0	4
P 08-18	0	0	2
P 18-08	0	0	4
Sz-V 00-24	0	0	4

Done Local intranet 100%

Screenshot no.5: TANTUSZ Mobile ó Detailed search

TANTUSZ - Részletes - Windows Internet Explorer

http://www.tantusz.nhh.hu/mobil/tkalk/tk.php

File Edit View Favorites Tools Help

TANTUSZ - Részletes

NEMZETI HÍRKÖZLÉSI HATÓSÁG TANTUSZ MOBIL

TANTUSZ MOBIL - Felhasználói szokások részletes megadása Útmutató

Kérjük adja meg az egy hónap alatt igénybevett szolgáltatások listáját

Szolgáltatás	Irány	Ország	Nap	Átl. hossz	Összesen

Hozzáad Módosít Töröl Becslés

Szolgáltatás: Beszéd Irány: Pannon Nap: Hétfő-Csütörtök Darab: Átl.hossz: 1.5 perc

mikor	perc
00-01	0
01-02	0
02-03	0
03-04	0
04-05	0
05-06	0
06-07	0
07-08	0
08-09	0
09-10	0
10-11	0
11-12	0
12-13	0
13-14	0

Done Local intranet 100%

TANTUSZ Roaming

TANTUSZ Roaming differs from the previous two modules, it is rather a simplified browser. End-users are informed from a simple list after having chosen the service provider, type of subscription (prepaid/postpaid), package, call destination from the drop-down list. The search result list contains the available service provider in the given country, the relevant information, and the price of the incoming/outgoing calls, MMS, SMS and GPRS traffic. The chosen package and the service providers webpage in the given country is linked on the list. As mobile Internet roaming might be regulated in the near future, these data will be included in TANTUSZ roaming as well.

Screenshot no.6: TANTUSZ Roaming

TANTUSZ Roaming Útmutató

Szolgáltató: T-Mobile Fizetés: előfizetés Díjcsomag: Relax 500 Célország: Brazilia

Brazilia (+55)		Relax 500 tarifák	
Szolgáltató (név a kijelzőn)	Díjtételek	Díjak	Megjegyzés
Algar Telecom Leste (Algar Telecom Leste/Claro)	Hívás fogadása *	216	
	Hívás kezdeményezése Magyarországra *	552	
	Hívás kezdeményezése belföldre *	552	
	SMS küldés díja	138	
	SMS fogadás díja	dímentes	
	MMS küldés díja	348	
	MMS fogadás díja	dímentes	
	GPRS Roaming wap díja	300	
	GPRS Roaming internet díja	300	
	Hívás fogadása *	216	
Hívás kezdeményezése Magyarországra *	552		
Hívás kezdeményezése belföldre *	552		
SMS küldés díja	138		
SMS fogadás díja	dímentes		

Új keresés Nyomtatás

Bruttó díjak, forintban. * 1 percre jutó díj.

TANTUSZ Broadband

TANTUSZ Broadband is also a simplified browser module, where end-users are informed about the available services and service providers after giving their home address. Besides provider data end-users are informed about the tariff packages, bandwidth, monthly fee, limits, price, etc. Most of this information can be filtered on the results page. Currently this is the most popular module of TANTUSZ.

Screenshot no.7: TANTUSZ Broadband

TANTUSZ SZELESSÁV

Keresett utca: 1015. BUDAPEST OSTROM UTCA

Új keresés

Szűrés

Sávszélesség	Korlátosság	Hűségnyilatkozat	Technológia	Szolgáltató	Ár
Mindegy	Mindegy	Mindegy	Mindegy	Mindegy	Mindegy
512	Korlátlan	Nincs	ADSL	Actel Távközl.	<5000 Ft
555	Korlátos	1-12 hónap	Kábel	Business Tel	<10000 Ft
768		13-18 hónap	Wireless	DunaWeb Int	<15000 Ft

Ok

A szűrőparaméterek listáiban egyszerre több elem is kiválasztható a CTRL billentyű lenyomása mellett (kivéve az árat).

Figyelem! A lista csak az ár alapján történő rendezés szerinti első 30 tarifacsomagot tartalmazza (összesen 263 találatból). Az összes találat megjelenítéséhez [kattintson ide!](#) (Ez azonban több másodpercig is eltarthat!)

Tarifacsomag	Szolgáltató	Letöltés sebesség	Hűségnyilatkozat	Havi ár
Privát	EnterNet 2001 Számítástechnikai Szolgáltató és Kereskedelmi Kft.	1280 Kbit/s	12 hónap	990 Ft
Technológia: ADSL Belépési díj: 0 Ft Korlátozás: Letöltésben korlátos (túllépés esetén fizetni kell)				
Részletek >>>				
Tempó	EnterNet 2001 Számítástechnikai Szolgáltató és Kereskedelmi Kft.	2560 Kbit/s	12 hónap	1190 Ft
Technológia: ADSL Belépési díj: 0 Ft				

TANTUSZ TV

TANTUSZ TV is based on the same method as TANTUSZ broadband. End-users are informed about the available broadcasting providers and about the related data. This module is currently under development and the renewed version will be available in the next few weeks.

Screenshot no.8: TANTUSZ TV

The screenshot displays the TANTUSZ TV service selection interface within a Windows Internet Explorer browser window. The address bar shows the URL: <http://webold.nhh.hu/tantuszlek/tv/utcaValaszt.jhtml>. The page header features the logo of the NEMZETI HÍRKÖZLÉSI HATÓSÁG and the TANTUSZ TÉVÉ logo.

The search results are filtered by the following criteria:

- Keresett utca:** 1044. BUDAPEST EZRED UTCA
- Szűrés:**
 - Csatornák szűrése:** (Nyissa le ezt a paneelt!)
 - Hűségnyilatkozat:** Mindegy, Nincs, 1-12 hónap, 13-18 hónap
 - Technológia:** Mindegy, Kábel, Mikrohullám, Műhold
 - Szolgáltató:** Mindegy, AMTEL Hang és Internet Kommunikáció Magyarország Kft.
 - Ár:** Mindegy, <5000 Ft, <10000 Ft

A message below the filters states: "A szűrőparaméterek listájában egyszerre több elem is kiválasztható a CTRL billentyű lenyomása mellett (kivéve az árat). Tarifa csomagok száma: 12."

The table below lists the available service packages:

Tarifacsomag	Szolgáltató	Technológia	Hűségnyilatkozat	Havi ár
Alap 0804 Belépési díj: 0 Ft Részletek >>>	AMTEL Hang és Internet Kommunikáció Magyarország Kft.	Kábel (Analog)	24 hónap	1440 Ft
Alap 0804 Belépési díj: 0 Ft Részletek >>>	AMTEL Hang és Internet Kommunikáció Magyarország Kft.	Kábel (Analog)	12 hónap	1530 Ft
Alap 0804 Belépési díj: 16200 Ft Részletek >>>	AMTEL Hang és Internet Kommunikáció Magyarország Kft.	Kábel (Analog)	n.a.	1608 Ft
Medium 0804 Belépési díj: 0 Ft Részletek >>>	AMTEL Hang és Internet Kommunikáció Magyarország Kft.	Kábel (Analog)	24 hónap	2520 Ft
Medium 0804 Belépési díj: 0 Ft Részletek >>>	AMTEL Hang és Internet Kommunikáció Magyarország Kft.	Kábel (Analog)	12 hónap	2760 Ft
HBO 0804 Belépési díj: Ft Részletek >>>	AMTEL Hang és Internet Kommunikáció Magyarország Kft.	Kábel (Analog)	24 hónap	3000 Ft
HBO 0804 Belépési díj: Ft Részletek >>>	AMTEL Hang és Internet Kommunikáció Magyarország Kft.	Kábel (Analog)	12 hónap	3096 Ft
Medium 0804 Belépési díj: 16200 Ft Részletek >>>	AMTEL Hang és Internet Kommunikáció Magyarország Kft.	Kábel (Analog)	n.a.	3204 Ft
HBO 0804 Belépési díj: Ft Részletek >>>	AMTEL Hang és Internet Kommunikáció Magyarország Kft.	Kábel (Analog)	n.a.	3240 Ft
Lux 0804 Belépési díj: 0 Ft Részletek >>>	AMTEL Hang és Internet Kommunikáció Magyarország Kft.	Kábel (Analog)	24 hónap	3480 Ft
Lux 0804 Belépési díj: 0 Ft Részletek >>>	AMTEL Hang és Internet Kommunikáció Magyarország Kft.	Kábel (Analog)	12 hónap	3960 Ft

As bundles have appeared a Double/Triple Play module of TANTUSZ is being developed, where telephone-Internet, telephone-TV, Internet-TV, telephone-Internet-TV bundles can be compared. The browsing mechanism of the module is similar to the ones used by TANTUSZ broadband and TANTUSZ TV. This Double/Triple play module will be published in the middle of November this year.

The telecommunication services are changing, new services and different kind of Internet platforms are available (computer, palmtop, mobile phone). These trends forecast the future development of TANTUSZ. Both the image of TANTUSZ portal and the used technology will be updated in the near future. The specific implementation is currently in progress.

5.3. United Kingdom Æ Ofcom Accreditation Scheme for Price Comparison Calculators

Active consumer behaviour is a key condition for healthy competition to exist in a market. By searching out offers in terms of price and quality, comparing them, switching between providers or negotiating a better deal with an existing communications provider, consumers can influence the market in many ways. Furthermore, some consumers play an important role in giving advice about services, providers, prices and quality to other consumers, enabling them to make better informed choices.

If consumers cannot switch easily or buy new services because they do not have the right information, competition does not deliver the intended benefits. In addition, where vulnerable groups of consumers cannot engage in the market, they may fail to benefit from competition or new services that others take for granted.

Ofcom recognises that in some cases the market may not deliver to consumers the information they want or need, or may fail to deliver information to certain groups of consumers. Where the market does not deliver the information consumers want or need, Ofcom will consider appropriate intervention where this is deemed to be effective in improving the situation. In such cases, Ofcom will choose the most effective and proportionate option. This could be a self/co-regulatory initiative, an initiative that would involve the provision of information by an independent third party or Ofcom providing the information itself.

In 2006 Ofcom undertook a review of Ofcom's Consumer Policy¹ which, amongst other things, looked at what regulation might be appropriate for pricing transparency.

Ofcom concluded that, in practice, it believes it is unlikely that Ofcom would have a role to provide coordinated information that involves complex computation and requires significant resources to keep up-to-date ó such as price comparison information on tariffs for mobile, fixed line, broadband or digital television services. Here, the role of intermediaries is vital and the market for these services is well supplied. However it do believe that Ofcom may be best placed to provide other types of generic, impartial information ó such as advice about opportunities for switching.

At the end of 2006 Ofcom launched a new accreditation scheme for price comparison providers².

Ofcom believes that its new price accreditation scheme, offering consumers quality-assured price comparison services for both individual and bundled communications services ó which is widely promoted by Ofcom and which consumers are advised to use ó is the most effective means of ensuring wide availability of independent price comparison information, one of the key elements of consumer empowerment.

The objectives of the Ofcom Accreditation Scheme for Price Comparison Services (PASS) are to:

¹ <http://www.ofcom.org.uk/consult/condocs/ocp/>

² <http://www.ofcom.org.uk/consult/condocs/ocp/statement/pricescheme/pricescheme.pdf>

- accredit calculators offering price comparisons on a wide range of communications services;
- ensure the application process for accreditation is fair and transparent;
- ensure the approval criteria on which applicants are judged leads to accurate and easy to use information for consumers; and
- promote consumer awareness of accredited calculators and boost the value of accreditation.

In July 2008, Ofcom accredited the first two Price Comparison companies under the Accreditation Scheme. Broadband Choices (www.broadbandchoices.co.uk) and Simplify Digital (www.simplifydigital.co.uk) applied for accreditation in early 2008 and following both qualitative and independent technical audits of their service, successfully gained accreditation under the Scheme. Both companies display, on their websites, the Scheme logo that states "This price comparison calculator is accredited by Ofcom, the independent regulator of communications services in the UK" and includes the Ofcom corporate logo.

The Ofcom Price Accreditation Scheme provides quality assurance that the calculation of price comparisons of fixed line, mobile, broadband and digital television services offered by accredited companies are accessible, accurate, transparent and comprehensive. The price accreditation scheme gives consumers confidence and reassurance in a market where finding the best deal can be an often confusing and sometimes daunting experience.

Companies accredited under the Ofcom Price Accreditation Scheme must undergo an annual audit conducted by Ofcom. The companies must also notify Ofcom of any material changes to their price calculator or how they provide information on prices.

Ofcom may also at any time conduct spot checks on the quality and accuracy of the information being provided by accredited websites. If Ofcom finds that any accredited company no longer meets the terms of the accreditation agreement, Ofcom will withdraw the accreditation.

Since accrediting these two companies Ofcom has held discussions with numerous other intermediaries providing price and service comparison information to consumers and SMEs and is currently considering applications for accreditation from some of these companies.

It is still too early to assess the success of the Accreditation Scheme for Price Comparison Calculators, but Ofcom believes that this initiative is likely to help in providing consumers with access to independently evaluated price comparison information.

5.4. Slovenia – APEKB web portal www.komuniciraj.eu

The transparency project – an introduction

The Post and Electronic Communications Agency of the Republic of Slovenia (from here on the Agency) has established the web portal www.komuniciraj.eu. Users can access the portal from their homes, from a public Internet location or via mobile Internet access, and are able to compare all available operators' offers in one place, thus gaining the necessary information needed to choose an operator that will best suit their needs.

With the growth of competition in the market of electronic communications, the magnitude of available subscriber packages, differing in price and other factors, has become very hard to follow. With the portal www.komuniciraj.eu, the Agency wishes to enable end users to become familiar with and follow the offers of different operators present in a user's particular geographical region.

In addition to helping end users and legal entities make an informed decision, the portal can also be used as a tool for operators to form their own pricing policy, which further enables lower prices and better offers, and consequently a higher degree of competition.

The prices, as well as the latest operators' discounts and offers, are kept up to date.

The categories currently available on the portal are roaming (ogostovanje), national and international calls, both fixed and mobile (nacionalni in mednarodni klici) and broadband Internet access (irokopasovni dostop). The comparison between different offers takes place in the 'My choice' (Moj izbor) menu, where the user can directly compare the chosen offers of different operators.

In future, based on questions and opinions of users, as well as on its own agenda, the Agency plans to further develop and maintain the portal, making it as user-friendly as possible and a useful tool when it comes to choosing a telecommunications service.

Stages of the transparency project

In March 2006, the Agency began its work on a portal that would ensure transparency of operators' work in connection with end users. In cooperation with an outside source, the work on the web portal www.komuniciraj.eu began, a process that lasted until the beginning of 2007.

- To work on the project of ensuring the transparency of operators' work in connection with end users, a project team of six Agency employees was formed. The tasks of the project team were as follows:

- The comparison of published prices and general conditions of the operators of publicly available telephone services and ISP, as well as their technical and organizational provisions for ensuring network and service safety.

- The use of the findings of the already existing safety project team and the forum for the safe use of e-services, as well as cooperation with both of these teams.
- The preparation of a webpage within the Agency's webpage that would contain a price overview and general conditions, as well as safety provisions of operators of publicly available telephone services and ISP.
- Cooperation with operators in collecting the data for the before-mentioned webpage.

At least twice a year, the project team had to report on their work to the director of the Agency.

- The project team had three work meetings where they defined the data that had to be collected, as well as their form and appearance on the webpage. In doing that, the project team took into account the findings of the existing project team for the safe use of e-services.

- In order to create a webpage within APEK's webpage, the project team chose to enlist the help of an outside source, whose tasks would be as follows:

- The creation of an input form, a database, and a portal for the assurance of the transparency of operators' work in connection with end users.
- The creation of a form that would allow operators to enter their data. In order to enter data, an operator would have to identify itself, with the appropriate safety of data ensured.
- The database must be consistent and created in a dynamic way, enabling later additions and the saving of old data.
- The subscriber must have the option of adding, removing and changing the attributes entered by the operators.
- The creation of an interactive web portal within the Agency's webpage intended for end users. The web portal must contain data gathered from operators, with this data arranged in categories defined by the subscriber.

- In the beginning of 2007, operators and organizations that have contact with end users were informed by the Agency that work was beginning on the project of the transparency of operators' work in connection with end users. The Agency was satisfied with the initial response of the operators. Before the public introduction, they were once again called to cooperation, namely when it came to checking their offers. In cooperation with an outside source, the web portal www.komuniciraj.eu was formed, borrowing somewhat from the form of the Irish portal www.callcosts.ie.

- When the project team's tasks were completed, individual members of the team, each functioning within their own area of expertise, kept in contact with the outside source when needed. Contact with the operators was taken over by individual members of the project team.

- Before the public introduction of the portal, the Agency once again called for operator cooperation. This time, however, the operators did not respond in as great of a number as before. The Agency had to remind them to provide refreshed data. The main reasons for a poorer response were: the opinion of the operators that APEK was burdening them with new, unnecessary work; uncompetitive prices that certain operators were aware of; the lack of staff for this kind of work. The Agency provided the operators with the option of refreshing their data directly on the portal, for which a username and password would be provided when first

imputing data. Another option was for them to email the data in question directly to the Agency or to the outside source. The call for operator cooperation continued after the public introduction of the portal. At the end of February 2008, there was only one operator left who did not provide the necessary data. As a consequence, the Agency received only a small number of end user e-mails (only two) pointing out the fact that certain data was not up-to-date (mainly data having to do with postal codes or regions where operators were providing access to broadband Internet). The Agency immediately sent the necessary clarifications to these end users, who were satisfied with the reply.

- The Agency introduced the portal to the public in December, making it available for use from 17.12.2007 onward. With the help of an advertising campaign, the use of the portal was intensively promoted. This promotion was carried out in several media outlets, namely on the Internet (banners), with radio ads, print advertisements (bathroom ads) and with articles in several newspapers.

The assurance of up-to-date data and the development of the web portal www.komuniciraj.eu

The transparency project is based on cooperation with operators. Primarily the duty of an operator is to regularly provide refreshed data about their offer, with the Agency reminding them to accordingly correct their data if they do not.

In the beginning stages of the portal some data was not in accordance with the actual situation, for which the harmonization of data and the differing reaction times of operators when it came to refreshing data were to blame. The Agency tried its hardest to entice operator interest in a serious approach to the transparency project, a project which could also be used to form an operator's own pricing policy, especially when it came to competitive offers.

As the goal of the Agency is to ensure that the portal is transparent and active, the refreshing of data present on the portal was entrusted to an outside source. This outside source makes sure that all data on the portal is regularly refreshed and maintained, that operators are regularly called on to provide up-to-date data, that e-mails with end user questions received via a form on the portal are answered and that questions that cannot be answered by the outside source are forwarded to the Agency, as well as that other activities are coordinated with the authorised Agency employee.

The refreshing of data on the portal is manual. A programme that starts up every morning is in place. It browses through operators' websites, making a copy of the website content, as well as of the current prices. This process is repeated daily. The data collected is then compared. The content of a certain page is compared, with the programme clearly showing any changes on a certain webpage in comparison to the previous day. When a change is found, it is entered into the portal via an input form. Mobile and fixed operators, as well as Internet service providers are included in this checking of webpages, with the price of international calls and roaming being additionally checked once a week. There are operators, however, that do not provide up-to-date data on their webpages.

The Agency is aware that, despite the refreshing of data, in future a wrong piece of information could still find its way onto the portal, either because of an input error, an operator's irregular

refreshing of data, or because the operator will be technically unable to provide a connection at a certain address (the operator itself also checks the possibility of a connection at a certain location before signing a subscriber contract). In light of this, the Agency is of the opinion that the portal will not lose on functionality, and will be fully functional as soon as efficient cooperation among all contributing to the transparency of the portal is established.

Alongside the daily refreshing of data, the Agency continues to develop the portal. A feature of the portal is in preparation, where, under the menu *national calls*, a user would be able to input their number and/or the number of the person called and see the called party's chosen operator, as well as the price of an individual call, SMS, and other services. Until the end of 2008, the Agency will add a calculator to the portal. This calculator will enable end users to conduct an informative calculation of costs when potentially using services chosen on the portal.

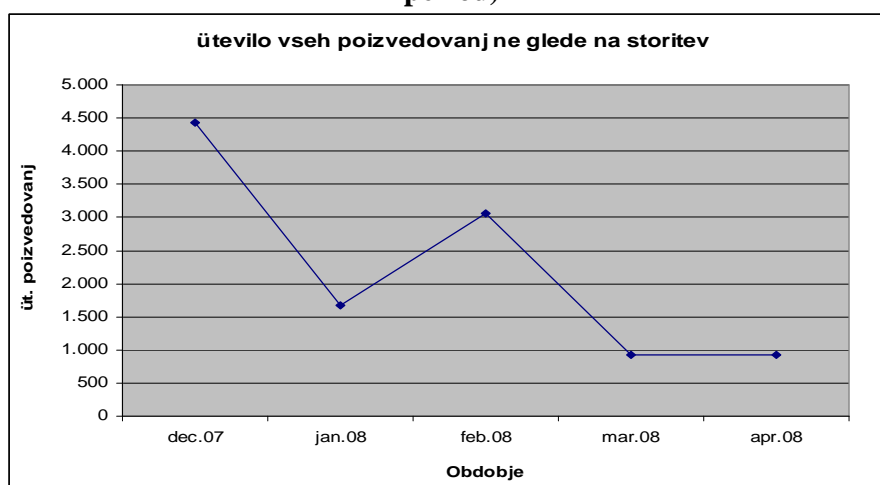
The Agency decided against an interactive form of communication with end users in the form of a forum, as the person in charge of the transparency portal is overtaxed with other work assignments as it is.

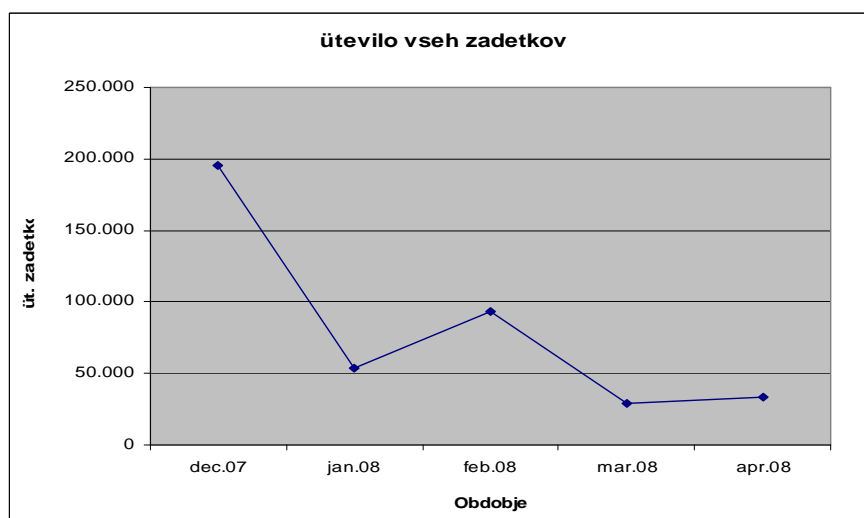
The goal of the Agency is to enable end users to become familiar with different operator offers in a particular geographical region and to follow and compare these offers, so the opinions of end users are taken into account when updating and perfecting the portal. Many end users were glad of the portal and shared their enthusiasm with the Agency.

Web portal www.komuniciraj.eu statistics

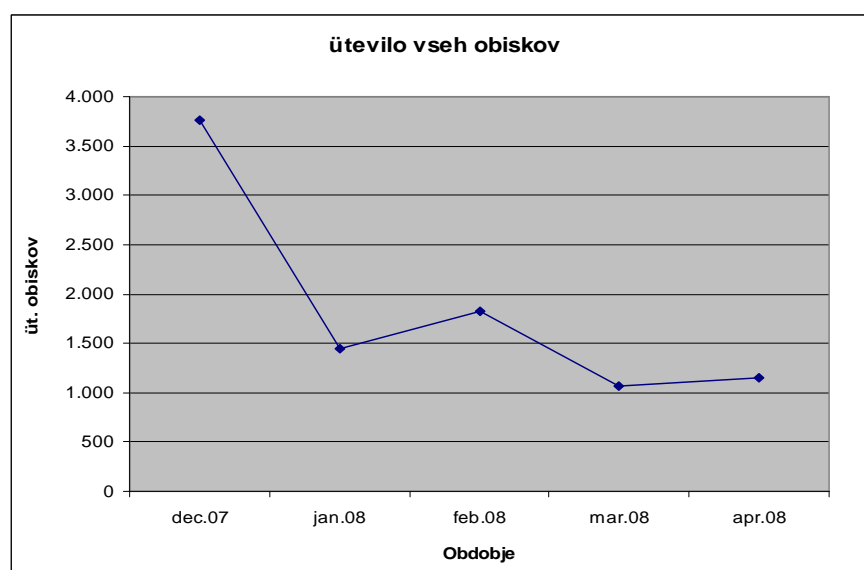
As the graphs show, the number of searches during the advertising campaign in which the Agency intensively encouraged people to use the portal was extraordinary. The portal was available to the public from 17.12.2007 onward. The number later came to a still at approximately 1000 searches per month. In future, after certain new features are added to the portal, the advertising campaign will have to be repeated.

Graph 1: Number of searches based on service (number of searches in a certain time period)



Graph 2: Number of all hits (number of hits in a certain time period)

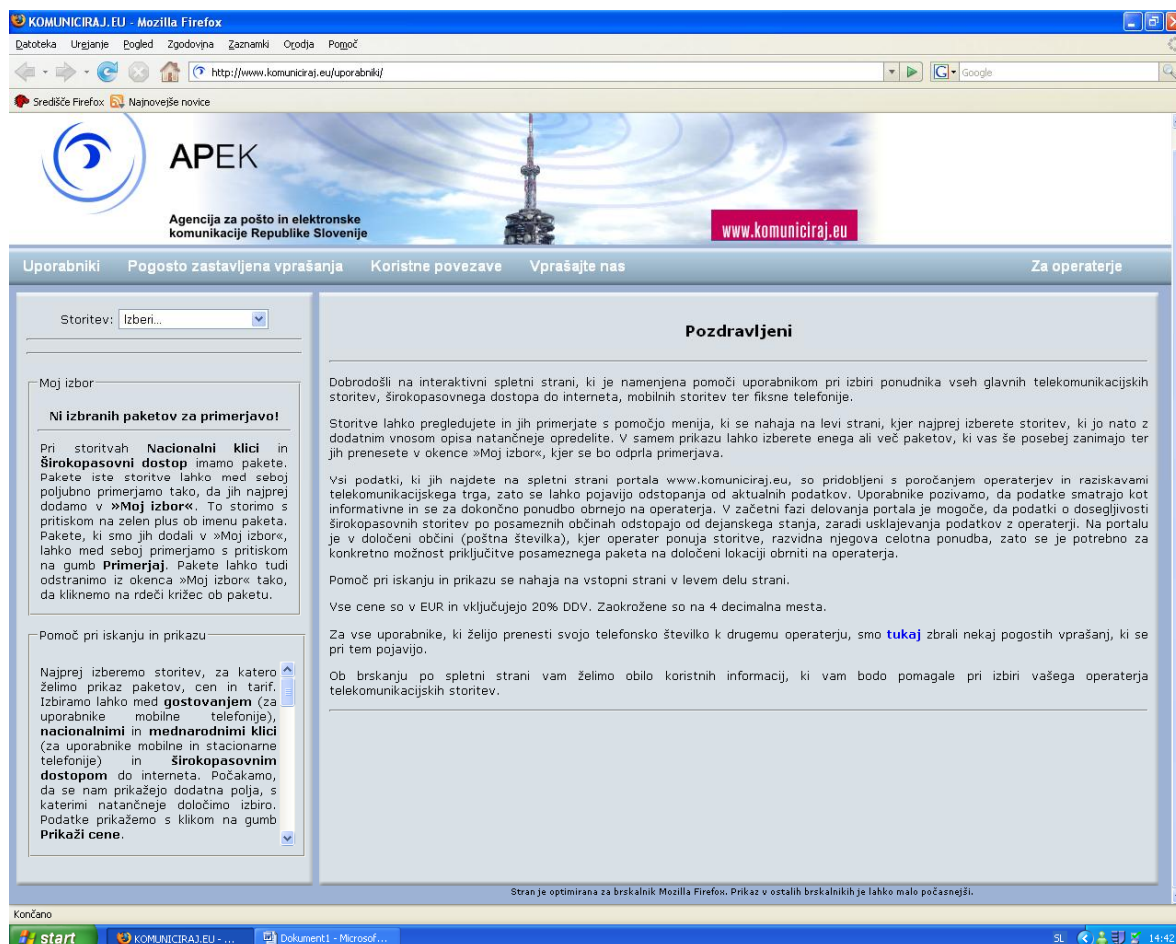
Hits represent the total number of requests made to the server during the given time period (month, day, hour etc.).

Graph 3: Number of all visits (number of visits in a certain time period)

Visits occur when some remote site makes a request for a page on your server for the first time. As long as the same site keeps making requests within a given timeout period, they will all be considered part of the same Visit. If the site makes a request to your server, and the length of time since the last request is greater than the specified timeout period (default is 30 minutes), a new Visit is started and counted, and the sequence repeats. Since only pages will trigger a visit, remote sites that link to graphic and other non- page URLs will not be counted in the visit totals, reducing the number of false visits.

Description of www.komuniciraj.eu

Screenshot no.1: Homepage



- Upper row, left corner:

Users / Frequently asked questions/ Useful links/ Ask us

- Upper row, right corner:

For Operators

- Body of homepage (left column):

Welcome

Welcome to the interactive webpage designed to help users choose a provider of all the main telecommunications services, broadband Internet access, mobile services and fixed telephony. You can browse and compare different services with the help of a menu located on the left, where you first choose a service that is then further defined with an additional description. You can choose one or more subscriber packages you are especially interested in and transfer them into the "My choice" window, where a comparison will be shown.

All data found on the web portal www.komuniciraj.eu is attained from the information provided by operators and from the research of the telecommunications market, causing the data provided to potentially differ from the actual data. Users should bear in mind that the data provided is of an informative nature and that details on the actual offers should be attained from the operators themselves. In the initial stages of the portal it is possible for data on the availability of broadband services according to municipality to differ from the actual situation due to the harmonization of data with the operators. On the portal, an operator's complete offer in a municipality (defined by postal code) is shown, so details on individual subscriber packages concrete connection options should be attained from the operator.

Search and site help is located in the left corner of the homepage.

All prices are provided in EUR and include 20% DDV. They are rounded to four decimal places. For all users that wish to transfer their phone number to a different operator, we have gathered some frequently asked questions [here](#).

When visiting the website, we wish you an abundance of useful information that will help you choose your operator of telecommunication services.

- *Moja izbora (My choice) column:*

My choice

There are no chosen packages to compare!

In **National Calls** and **Broadband Access** services, there are different packages available. Different packages of the same service can be compared at will by adding them to **My Choice**. This is done by pressing the green plus next to the name of the package. Packages added to **My Choice** can be compared by pressing the button **Compare (Primerjaj)**. Packages can also be removed from the **My Choice** window by clicking on the red cross next to the package.

- *Search and Site Help (Pomoč pri iskanju in prikazu) column:*

Search and Site Help

The user must first select the service for which he/she wishes to see the available packages, prices and tariffs. The user can choose between **roaming** / **ogostovanje** (for users of mobile telephony), **national** / **narodni** and **international calls** / **mednarodni klici** (for users of mobile and fixed telephony) and **broadband Internet access** / **irokopasovni dostop**. The user must wait for additional menus to appear in order to further define his/her choice. The data is then shown by clicking the button **Show the Prices** / **Prikaži cene**.

Screenshot no.2: Selecting the services

- Selecting **Roaming** (ðGostovanjeö) - Screenshot no.3

There are two options when selecting Roaming. One can choose between **ðCalls to Sloveniaö** (ðKlici v Slovenijoö) and **ðIncoming callsö** (ðDohodni kliciö). In both cases, the user chooses the **home operator** (ðdoma i operaterö) and the **foreign country** (ðtuja drflavaö) he/she is roaming in.

Screenshot no.4: Roaming (lowest price of call minute highlighted in orange, lowest price of sent SMS highlighted in green)

KOMUNICIRAJ.EU - Mozilla Firefox

Agencija za pošto in elektronske komunikacije Republike Slovenije

Cenik gostovanja - Argentina

Cene so v EUR

Naročniki

Operator	Debitel	Mobitel	Simobil
Pogovori	Enotna tarifa	ENOTNA TARIFA	Vodafone World-zasebni Vodafone World-poslovni
CTI	2.18 €	1.96 €	3.75 € 3.6 €
Nextel	-	0.85 €	3.75 € 3.6 €
Telecom Personal	-	-	3.75 € 3.6 €

Operator	Debitel	Mobitel	Simobil
SMS sporočila	Enotna tarifa	ENOTNA TARIFA	Vodafone World-zasebni Vodafone World-poslovni
CTI	0.2594 €	0.2332 €	0.31 € 0.38 €
Nextel	-	-	0.31 € 0.38 €
Telecom Personal	-	-	0.31 € 0.38 €

Predplačniki

Operator	Simobil
Pogovori	Odisej
CTI	3.75 €
Nextel	3.75 €
Telecom Personal	3.75 €

najnižja cena minute klica najnižja cena poslanega SMS-a

- Selecting National Calls (Nacionalni klici) - Screenshot no.5

With national calls there are two kinds of searches: **from** (a network) **to** (a network) / **Kli em iz** (a network) - **v** (a network), and **Calling to** (a network) **from** (a network) / **Kli em v** (a network) - **iz** (a network). The user can choose the operator whose call, SMS and MMS prices he/she is interested in, as well as the type of user (Zasebni/Poslovni ó Private/Business). With a click on **Additional (Dodatno)**, one may choose further search criteria (Subscriber/Prepaid, SMS, MMS ó Naro niki/Predpla niki, SMS, MMS). By ticking the correct box, the SMS and MMS prices shown can also be removed.

Storitev: Nacionalni klici

Kličem iz Amis

v vsi

Zasebni/Poslovni

Vsi

Dodatno

Prikaži cene

Screenshot no.6: National Calls (lowest price of conversation highlighted in orange, lowest price of sent SMS highlighted in green, lowest price of sent MMS highlighted in blue)

Kliče iz: Mobitel

Cene so v EUR

Dodaj v Moj izbor		Mobitel		Debitel						
				NT	VT	ET	ST	V/P	NT	VT
+	Poslovni družinski	Pogovori	0.0209 €	-	0.1022 €	-	-	-	0.0209 €	-
		SMS	-	-	0.0835 €	-	-	-	-	-
		MMS	0.0313 €	0.0835 €	-	-	-	-	0.0313 €	0.0835 €
+	Telemetrija	Pogovori	0.0459 €	0.0918 €	-	-	-	-	0.0459 €	0.0918 €
		SMS	-	-	0.0626 €	-	-	-	-	-
		MMS	0.0626 €	0.3547 €	-	-	-	-	0.0626 €	0.3547 €
+	Paket 15.000	Pogovori	0.0209 €	0.0835 €	-	-	-	-	0.0209 €	0.0835 €
		SMS	-	-	0.0835 €	-	-	-	-	-
		MMS	0.0313 €	0.0835 €	-	-	-	-	0.0313 €	0.0835 €
+	Podatkovni bonus	Pogovori	-	-	0.1001 €	-	-	-	-	-
		SMS	-	-	0.0626 €	-	-	-	-	-
		MMS	0.0313 €	0.0835 €	-	-	-	-	0.0313 €	0.0835 €
+	MOBI paket	Pogovori	0.0209 €	0.1836 €	-	-	-	-	0.0209 €	0.1836 €
		SMS	-	-	0.0876 €	-	-	-	-	-
		MMS	0.0326 €	0.0876 €	-	-	0.0647 €	-	0.0326 €	0.0876 €
+	Prosti čas	Pogovori	0.0209 €	0.1544 €	-	-	-	-	0.0209 €	0.1544 €
		SMS	-	-	0.0835 €	-	-	-	-	-
		MMS	0.0313 €	0.0835 €	-	-	-	-	0.0313 €	0.0835 €
+	Vesna družinski	Pogovori	0.0209 €	-	0.1022 €	-	-	-	0.0209 €	-
		SMS	-	-	0.0835 €	0.0417 €	-	-	-	-
		MMS	0.0313 €	0.0835 €	-	-	-	-	0.0313 €	0.0835 €

najnižja cena pogovora najnižja cena poslanega SMS-a najnižja cena poslanega MMS-a

- Selecting International Calls (Mednarodni klici) - Screenshot no.7

If the user is interested in calls abroad, he/she must first choose the home network where calls are made from (**Home Operator** / **Doma i operaterö**), as well as the foreign country calls are made to (**Foreign Country** / **Tuja državaö**).

Storitev: Mednarodni klici

Domači operater: Vsi

Regija: Vse regije

Tuja država: Afganistan

Prikaži cene

Screenshot no.8: International Calls (lowest price of call minute highlighted in orange)

The screenshot shows the KOMUNICIRAJ.EU website in a Mozilla Firefox browser. The page is titled 'Mednarodni klici' (International Calls) and displays a table of call prices for Mobitel to Romania. The lowest price is highlighted in orange.

Domači operater		Romunija				Dodatek
		NT	ST	VT	ET	
Mobitel	Naročniki	0.3464 €	-	0.434 €	-	-
	Predplačniki	-	-	-	0.4382 €	-
	Posebna cena	-	-	-	-	-

The lowest price, 0.3464 €, is highlighted in orange. Below the table, it says 'najnižja cena minute klica' (lowest price of call minute).

- Selecting Broadband Access (Širokopasovni dostop) - Screenshot no.9

Broadband Internet access packages of Slovene providers can be shown according to two criteria: according to the municipality where the packages are available or according to the provider. Choice is made between different providers and municipalities.

There are packages available when it comes to national calls and broadband access. If the user is interested in the details of an individual package, he/she clicks on the name of the package, and details will appear. If the mouse runs across a piece of information highlighted in grey, a new pop-up window appears, containing additional details.

The screenshot shows the 'Širokopasovni dostop' (Broadband Access) section of the website. It includes a search form with the following fields:

- Storitev:** Širokopasovni dostop (selected)
- Pošta:** [Empty text box]
- Občina (izberi):** Vse (selected)
- Ponudnik:** Vsi (selected)
- Prikaži cene** (button)

Screenshot no.10: Broadband Access (pop-up windows, lowest subscription price highlighted in orange, lowest connection price in green)

KOMUNICIRAJ.EU - Mozilla Firefox

Datoteka Urjenje Pogled Zgodovina Zaznamki Otrodja Pomoč

http://www.komuniciraj.eu/uporabniki/

Središče Firefox Najnovejše novice

Agencija za pošto in elektronske komunikacije Republike Slovenije

www.komuniciraj.eu

Uporabniki Pogosto zastavljena vprašanja Koristne povezave Vprašajte nas Za operaterje

Storitev: Širokopasovni dostop

Pošta: 1000

Občina (izberi): 1000 Ljubljana

Ponudnik: Vsi

Prikaži cene

Moj izbor

Ni izbranih paketov za primerjavo!

Pri storitvah **Nacionalni klici** in **Širokopasovni dostop** imamo pakete. Pakete iste storitve lahko med seboj poljubno primerjamo tako, da jih najprej dodamo v »Moj izbor«. To storimo s pritiskom na zelen plus ob imenu paketa. Pakete, ki smo jih dodali v »Moj izbor«, lahko med seboj primerjamo s pritiskom na gumb **Primerjaj**. Pakete lahko tudi odstranimo iz okenca »Moj izbor« tako, da kliknemo na rdeči križec ob paketu.

Pomoč pri iskanju in prikazu

... splošno prebrskanje, raziskovanje, med različnimi ponudniki in občinami.

Pri nacionalnih klicih in širokopasovnem dostopu imamo pakete. Če nas zanimajo podrobnosti določenega paketa, kliknemo na ime paketa in prikazale se nam bodo vse podrobnosti. Če se z miško postavimo na sivo obarvan podatek v prikazu, se nam v dodatnem pop-up oknu prikažejo podrobnosti, ki se navezujejo na ta podatek.

Ponudniki širokopasovnega dostopa

Cene so v EUR

Vsi ponudniki širokopasovnega dostopa v občini 1000 Ljubljana

Operater***	Dodaj v Moj izbor	Ime paketa**	Opomba	Naročnina
Amis	+	Skyline KS4		22,27 €
Amis	+	Skyline KS5		30,05 €
Amis	+	Skyline KS6		37,56 €
Amis	+	Skyline KS7		58,42 €
Amis	+	Skyline KS8-Odprta hitrost	Operator: Amis	0,0 €
Amis	+	Skyline KS9-Odprta hitrost	Občina: 1000 Ljubljana	0,0 €
Amis	+	Skyline KST1	Opomba v paketu: Skyline KST4	0,9 €
Amis	+	Skyline KST2		0,0 €
Amis	+	Skyline KST3	Preberi	25,9 €
Amis	+	Skyline KST4	Preberi	28,9 €
Amis	+	Skyline KST5	Preberi	36,26 €
Amis	+	Skyline KST6	Naročnina vključuje storitev TELEFONJE, Amis telefonija / en tel. priključek (do dve telefonski številki).	77 €
Amis	+	Skyline KST7		64 €
Amis	+	Skyline KST8-Odprta hitrost		63 €
Amis	+	Skyline KST9-Odprta hitrost	Preberi	25,63 €
Amis	+	Telemach 1.0 MEGA		28,38 €
Amis	+	Telemach 1/2 MEGA		27,12 €
Amis	+	Telemach 1/8 MEGA		20,82 €

* Cene klicev za ta paket telefonije si lahko ogledate pri nacionalnih klicih.

** Za polizvedbo o možnosti priključitve posameznega paketa na določeni lokaciji se je potrebno obrniti na operaterja, ker je priključitev odvisna od operaterjevih tehničnih možnosti.

*** Pri operaterju Sinfonika podatki o poštnih številkah in občinah, kjer navedeni operater ponuja storitve širokopasovnega dostopa, niso osveženi s strani slednjega, zato podatki niso zanesljivi.

najnižja naročnina najnižja priključnina

Končano

start Web portal www.kom... KOMUNICIRAJ.EU - ...

SL 12:04

5.5. Portugal – ICP-ANACOM measures to promote tariff transparency among end-users of electronic communications services

Provision of information concerning end-users on the ANACOM website

For the time being, ANACOM's website (www.anacom.pt) has an area where end-users may find the answer to Frequently Asked Questions, which include information to promote transparency on prices¹. A specific area strictly dedicated to end-users is currently under construction. It will contain all the information which is already available, but is dispersed in different places in the current website, as well as new content.

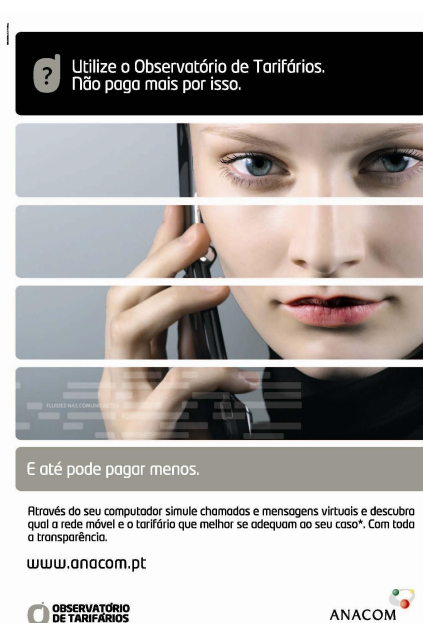
ANACOM may conclude that its website is an extremely useful information tool, considering the available figures of visits. In 2007, the total number of visits to ANACOM website was exceeding one million and a half (1,606,104). Approximately 9 million and a half pages (9,406,456) were viewed, with an average daily number of visits of 4,400 and an average of 25,771 daily pages.

The Tariff Observatory of the mobile telephone service

The Tariff Observatory of the mobile telephone service (<http://www.anacom.pt/template30.jsp?categoryId=60307>, available only in Portuguese) is a simulator, available online, designed and developed by ANACOM with the voluntary collaboration of the three mobile network providers – TMN, Vodafone and Optimus (now, Sonaecom) – which allows individual consumers to see and compare all the tariffs available, and simulate consumption, free of charge and interactively.

The designation and logo “Observatório de tarifários” is a trade mark of ANACOM. Despite its own validation of the information, ANACOM discards any responsibility as regards the tariff information introduced in the observatory by the operators.

The Tariff Observatory was made available to the public in July 2005 with the release of four features for mobile voice services: simulate monthly consumption; compare calls; simulate calls; and consult tariffs. In November 2005, the text messaging service (SMS) and multimedia messaging service (MMS) were also included among the features.



¹ e.g. <http://www.anacom.pt/template25.jsp?categoryId=38970> and <http://www.anacom.pt/render.jsp?categoryId=254342&languageId=1>

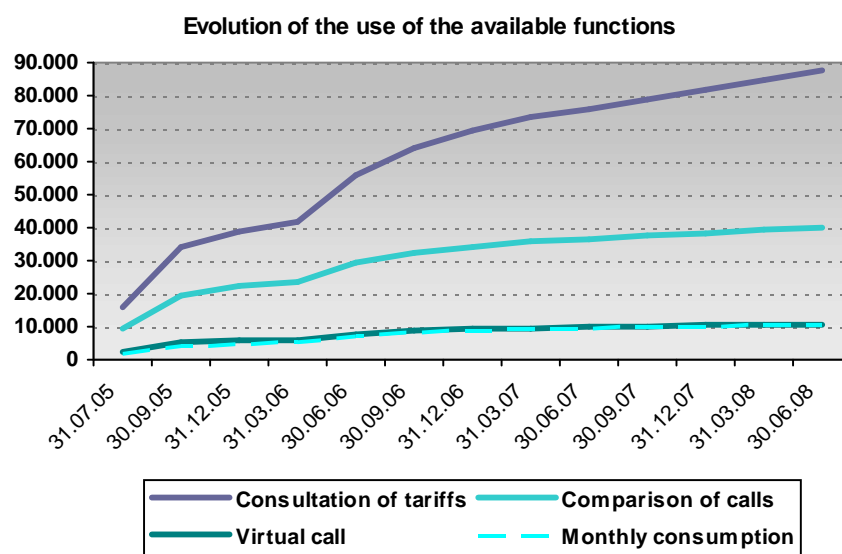
Between April and July 2006, ANACOM launched an information campaign aimed at promoting extended knowledge on the Observatory and its wider use. Mainly, it was based on the wide distribution of a leaflet and a poster (image on the right), as well as on a banner posted on various websites and on informative ads in newspapers and national ATM network.

In July 2006, in order to improve the level of simulation on monthly consumption, the Observatory presented a new feature, "My profile of monthly consumption", an option that allows users to perform a simulation of monthly consumption and obtain detailed information about their profile, which may be modified and used in other simulations. The monthly consumption was at this stage suited to the use of a single type of data on users' monthly billing.

Nowadays, the Tariff Observatory has available, strictly to the mobile telephone service, the following features:

- estimate on monthly consumption (for service of voice, SMS and MMS);
- comparison of calls or messages;
- making a virtual call or message; and
- consultation on tariffs.

Since the launch of the Tariff Observatory, users have focused primarily on the consultation of tariffs and then on comparison of calls, as it can be seen on the following graph².



In a near future, the Tariff Observatory is to be developed on the following aspects:

² Simulation data on SMS and MMS are not included, given low volumes.

- The adaptation of the functionality of monthly consumption to the use of a single type of data on the user's monthly bill, which can only be fully performed with the provision of that model by providers of mobile telephone service; only then the users will be able to import directly, from the operators websites, a file with the details of their electronic invoice which can be used directly in the Observatory, without any need for change. This requires contacts and meetings with the providers, in order to raise awareness for the importance of this development.
- It will be necessary to consider the extension of the simulator to other communication services such as Internet.
- Improvements in terms of accessibility, as to the release of the text version (WAI ó Web Accessibility Initiative) of the service, which provides easier access to people with special needs, and users with Internet dial-up access and mobile devices.

The following benefits of the Observatory may be highlighted:

- Providers submit tariff data themselves;
- Users can have different tariff data altogether;
- Users may adapt their consumption to their profile in order to get the lowest cost; and
- Tariff information ready to be used in ITU, OECD and EC questionnaires.

Nevertheless, some limitations can also be identified:

- The operators provide the information when they want;
- ANACOM has to be alert to changes in tariffs;
- The "Observatório" doesn't include international, data or special services tariffs; and
- Only available offers are considered (the ones users can apply for).

Disclosure of price information by the service providers

With regard to prices of electronic communications services, information made available to end-users must follow the ANACOM determinations:

- *“Object and form of public disclosure of the conditions of provision and use of electronic communication services”*, of April 21, 2006³; and
- *“Guidelines for minimum content to be included in electronic communication contracts”*, of September 1, 2005⁴.

Specific reference has to be made in respect of the information to be provided on prices under number portability regulations.

“Object and form of public disclosure of the conditions of provision and use of electronic communication services”

With regard to prices, this determination established the information that must be published and disclosed by providers of electronic communication services ó information on normal prices,

³ <http://www.anacom.pt/render.jsp?categoryId=232664&languageId=1>

⁴ <http://www.anacom.pt/render.jsp?categoryId=208622&languageId=1>

covering access to standard tariffs, all types of usage charges, maintenance, including details of standard discounts applied and special and targeted tariff schemes. This information aims to enable consumers to determine how service is charged and billed⁵.

It is recommended that service providers make available simulators that enable the comparison of different tariffs in the respective websites and sales points.

Also, all required information must be publicised and disclosed clearly in writing, at a visible location, at the business premises of providers, their agents and distribution partners, and at the respective websites, where appropriate.

Information made available on companies' websites must be published clearly, visibly, and be easily accessed, namely, through the same page where the service to be engaged is publicised or through a link set for this purpose, in a size and graphic presentation enabling the easy identification thereof.

Should the engagement of the service involve the purchase of a package (kit), the outside of the package must clearly provide specific information⁶.

All remaining information referred to in ANACOM determination must be provided in writing next to sales points of packages.

The amendment of conditions provided involves at all times the update of the information made available to the public and users pursuant to this determination.

Guidelines for minimum content to be included in electronic communication contracts

With regard to prices, this determination established that providers offering services of connection or access to the public telephone network must enter into contracts with their customers, which should be required to contain pricing specifications and means of obtaining up-to-date information on all applicable pricing and maintenance fees.

This information must provide end-users with a means of determining how service fees will be billed and collected, along with orientation on how to obtain up-to-date information on

⁵ For this purpose, it is recommended that the following specific information is published and disclosed: (a) Type and levels of prices applicable to the service in question; geographic grades, on-net and off-net prices and prices for different types of numbers; (b) Minimum service cost, where it does not correspond to the price set for the established charging unit; (c) Installation, reinstallation and disconnection cost (breaking down costs for restoring pre-installation conditions) for the services under consideration, where appropriate; (d) Minimum monthly payment, where appropriate; (e) Maintenance fees, where appropriate; the price of communications to customer services for reporting faults must be also specified; (f) Equipment rental fees, where appropriate; (g) Conditions for granting discounts and credit, where appropriate; (h) Peak versus off-peak hours, where appropriate; (i) Prices for these periods; (j) Publication in the website of the service operator of the link to ANACOM tariff observatory, in the scope of services undertaken by this observatory; and (k) Costs attached to operator portability.

⁶ Namely: (a) Identification of the service provider; (b) General description of the service, stating its main features; (c) Prices as regards the service base tariff; and (d) Locations whereat the information on other conditions of provision and use of the service may be consulted, as well as the identification of the respective website.

applicable service rates. For this purpose, the contract must include specific information with regard to pricing⁷.

ANACOM concluded, on July 2008, a public consultation ó now final decision is pending ó on the amendment of this determination according to the Law no. 12/2008, pursuant to which electronic communication services are now considered Essential Public services (*e. g.* accordingly, these Guidelines should now be modified in order to foresee that the end-users right to monthly billing is assured). The public consultation also included a draft decision on the amendment of the Guidelines determination in what concerns minimum contract retention time (customer loyalty period), in order to solve the problems suggested by a significant number of complaints on this issue. Such complaints were, in most cases, caused by lack of clear and unambiguous information to be disclosed by providers.

Information on prices under number portability rules

In what concerns transparency of price information under number portability rules, it is important to mention that in Portugal two main reasons contributed to the early existence of serious problems of transparency after the implementation of portability, mainly in mobile-to-mobile calls:

- The existence of very high tariff differential, depending on the call network destination (according to the benchmark ANACOM made in 2005, Portugal was the European country with the highest tariff differential between on-net calls and off-net calls, and that differential still remains very high; alongside with the emergence of various tariff schemes in which the price of a mobile-mobile call is the same regardless the network of destination, also appeared tariff schemes with free calls for the same network);
- Furthermore, end-users established a very strong association of prefixes of the mobile networks to their providers. Before the introduction of portability, this association allowed end-users a perception of the approximate price charged for each call. However, after the introduction of portability, there was a loss of transparency for end-users who dialled ported numbers, because the prefix dialled no longer indicated the network to which the call was destined indeed.

This combination of reasons led to numerous complaints after the introduction of number portability, drawing attention to the lack of an effective protection, given the loss of information on the network of destination.

ANACOM approved, early, by determination dated April 18, 2002, that the providers of fixed telephone service and/or mobile telephone service, with rate plans that might imply that the price of a call to a ported number could be higher than the price applicable before their portability, were required to implement an information service regarding price of calls to ported numbers (where applicable, voice calls, data and short messages). Since this determination, ANACOM

⁷ As follows: (a) Type and levels of prices applicable to the service in question; (b) Payment methods for services or information in bills concerning such modalities; (c) Installation or reinstallation cost for the services under consideration, where appropriate; (d) Minimum monthly (or other) payment, where appropriate; (e) Maintenance fees, where appropriate; (f) Equipment rental fees, where appropriate; (g) Conditions for granting discounts and credit, where appropriate; (h) Peak versus off-peak hours, where appropriate, and respective costs; (i) Place and method for obtaining up-to-date pricing information; (j) Service disconnection fees, where appropriate, breaking down costs for restoring pre-installation conditions; (k) The tariff applicable to the subscribed service, in force on the date the contract is signed, must be annexed to the list of clauses.

has been providing on its website the information services numbers for data on tariffs of calls to ported numbers⁸.

Subsequently, by determination of February 27, 2003, ANACOM imposed on mobile telephone service providers with rate plans that might imply that the price of a call to a mobile number ported were higher than the price applicable before the same be ported the additional obligation to provide a free online notice on national voice calls between networks of the mobile telephone service to ported numbers. The content of the on-line message to display was also pre-defined in this determination.

ANACOM included all these obligations in the Portability Regulation no. 58/2005, published on August 18, 2005⁹. Some light changes were, although, introduced, i.e. the content of the online alert message was modified in order to become more self-explanatory and the mobile service providers were required to implement, free of charge, the possibility to avoid the listening of the online message, offered to subscribers upon request.

Disclosure by service providers of information on the Quality of Service and on other service features

A number of issues related to the effective understanding by end-users of the service characteristics covered by a particular price are also relevant from the point of view of tariff transparency (for example, it may not be always clear to end-users what level of maximum speed of access to the Internet is covered by a specific tariff scheme). In that sense, it may be important to know which information providers are obliged to make available to safeguard expectations regarding a specific tariff scheme. Examples in this regard are the obligation of providers to inform on possible limitations of coverage, or the VoIP service providers' obligation to report on limitations in terms of location of the caller to contact emergency services, or the obligation of Internet service providers to inform that the speeds of transmission advertised are maximum speeds, and that real speed may depend on possible network traffic overload¹⁰.

Two ANACOM determinations already mentioned above contain relevant provisions in this regard:

- *õGuidelines for minimum content to be included in electronic communication contractsö*¹¹;
- *õObject and form of public disclosure of the conditions of provision and use of electronic communication servicesö*¹².

⁸ <http://www.anacom.pt/render.jsp?categoryId=38970>

⁹ <http://www.anacom.pt/render.jsp?contentId=422371>

¹⁰ This chapter does not address in detail the parameters of quality of service that providers are required to publish, under the Regulation on Quality of Service regarding the access to the public telephone network at a fixed location and telephone service at a fixed location no.46/2005. The information disclosed by each service provider under this regulation is mainly useful for customer to be aware, in general terms (and not for a specific offer/tariff) of the provider performance, and not to be aware of the service characteristics covered by a specific price.

¹¹ <http://www.anacom.pt/render.jsp?categoryId=208622&languageId=1>

¹² <http://www.anacom.pt/render.jsp?categoryId=232664&languageId=1>

Guidelines for minimum content to be included in electronic communication contracts

Regarding quality of service, this determination states that contracts must establish the obligation upon the service provider to provide regular and uninterrupted service. The contract must clearly set the levels of quality which the service provider undertakes to uphold with its customers, i.e. the minimum (target) service levels of quality which the customer is entitled to, non-compliance with which determines the payment of compensation or reimbursement.

Given that service providers have voiced uncertainties with regard to parameters concerning which levels of quality should be set, ANACOM suggested some parameters in an appendix to the determination. This does not preclude service providers from including additional indicators which they may deem relevant, nor does it rule out the possibility of ANACOM eventually instituting specific parameters of quality under the Electronic Communications Law, for the purpose of publishing and providing end-users with comparable, clear, comprehensive and up-to-date information on quality of service.

In the event that the service provider does not wish to provide or otherwise undertake to uphold any level of quality of service, this must be clearly stated in the contract.

Thus, ANACOM suggested service providers to measure the following parameters:

- a) Maximum service start-up time¹³;
- b) Maximum service interruption/suspension time¹⁴;
- c) Maximum repair time for faults¹⁵;
- d) Maximum time to disconnect/deactivate services¹⁶;
- e) Maximum response time to customer claims and information requests¹⁷;
- f) Guaranteed minimum access speeds (applies to Internet service);
- g) Maximum time to satisfy requests for number portability¹⁸;
- h) Maximum time to satisfy pre-selection orders¹⁹.

¹³ Measured in consecutive calendar days/hours, from the moment the customer submits a valid request for the service up to the moment the service is made available. Maximum service start-up times for changes to service modes/features, change of customer address and the installation of additional services should also be taken into account. The provision period shall be considered from the date the providing company receives the request, or from the date it receives requests to amend/complement existing agreements.

¹⁴ Measured in hours per month from the moment the customer ceases to be provided with access to the service up to the moment the service is restored, where responsibility falls under the service provider or electronic communications network operator supporting the service. If service has not been restored by the end of the month, the time counting will begin again on the first day of the following month.

¹⁵ Measured in consecutive hours, from the instant a valid fault in the network of the providing company (or in any interconnected public network involved in eligible communications for calculation purposes) has been reported to the services of the providing company, which entails the creation and register of a claim number, to the instant where the service has been restored to full normal working order. The services of the providing company shall mean the services intended for the report of faults on the part of customers.

¹⁶ Measured in consecutive hours from the moment a valid service termination request is received from the customer up to the moment the service is actually disconnected. "Valid request" is defined as any request submitted by the customer in accordance with documented instructions.

¹⁷ Measured in calendar days from the date the service provider is presented with the claim/information request, which entails the creation and register of a claim number, up to the date of notification of the claim decision/date of response to the information request.

¹⁸ Measured in the number of working days from the date the customer's portability request is received by the service provider up to the date the portability is carried out.

As far as maintenance services are concerned, the contract must include the obligation on the part of the company providing the service to ensure the repair of faults and to maintain and repair the infrastructures and equipment it owns or uses to provide the service. It is also recommended that the contract provides for:

- Obligation of the company to agree with the subscriber on the date and amount of time needed for repairs whenever access the place of installation is necessary for these repairs;
- Customer service information for reporting faults and terms of use (means of reporting faults, hours of operation and costs of communications made for reporting purposes);
- Minimum level of quality provided in terms of fault repair time;
- Maximum period of time following which, and in case faults have not been repaired, the service provider undertakes to contact the customer to provide information thereto on the reported situation.

The guidelines for minimum content to be included in electronic communication contracts also establish that the contract should specify the following compulsory provisions:

Publicly available telephone services (mobile or at a fixed location)	Other electronic communications services	Television distribution services
<p>Compulsory provisions:</p> <p>É Scope of the publicly available telephone service, with a description of the services provided (ability to make and receive domestic and international calls and to access emergency services, additional services and service facilities);</p> <p>É Designation of services included under the subscription cost, where appropriate;</p> <p>É Conditions under which the company may provide the service ó the contract must inform whether the service is available at the customer's area, or whether the provision thereof, at a given location, is subject to the prior fulfilment of technical conditions necessary to the service provision. Should such conditions be fulfilled, the contract shall inform the customer of the method for requesting reimbursement of any costs incurred and for ending the agreement, in case the service may not be provided;</p>	<p>Compulsory provisions:</p> <p>É Description of the services provided, as well as additional services, service facilities and associated features;</p> <p>É Conditions under which the company may provide the service ó the contract must inform whether the service is available at the customer's area, or whether the provision thereof, at a given location, is subject to the prior fulfilment of technical conditions necessary to the service provision. Should such conditions be fulfilled, the contract shall inform the customer of the method for requesting reimbursement of any costs incurred and for ending the agreement, in case the service may not be provided;</p> <p>É Potential restrictions resulting from the service in terms of the subscriber's ability to access other services/features (for example, inability to access the Internet when engaging a given telephone service provision);</p>	<p>Compulsory provisions:</p> <p>É Description of the services provided, as well as additional services, service facilities and associated features;</p> <p>É Conditions under which the company may provide the service ó the contract must inform whether the service is available at the customer's area, or whether the provision thereof, at a given location, is subject to the prior fulfilment of technical conditions necessary to the service provision. Should such conditions be fulfilled, the contract shall inform the customer of the method for requesting reimbursement of any costs incurred and for ending the agreement, in case the service may not be provided;</p> <p>É Coverage of services, even if only by reference to a location whereat the user may obtain update information on service coverage and provision;</p> <p>É Conditions for accessing and using</p>

¹⁹ Measured in the number of working days from the date the customer's pre-selection request is presented up to the date pre-selection is made available.

<p>É Potential restrictions resulting from the service in terms of the subscriber's ability to access other services/features (for example, inability to access the Internet when engaging a given telephone service provision, inability to make preset calls for certain types of numbers, regarding the provision of the telephone service at a fixed location, in the indirect access modality);</p> <p>É Coverage of services, even if only by reference to a location whereat the user may obtain update information on service coverage and provision;</p> <p>É Conditions for accessing and using the service ó way in which the service will be provided.</p>	<p>É Coverage of services, even if only by reference to a location whereat the user may obtain update information on service coverage and provision;</p> <p>É Conditions for accessing and using the service ó way in which the service will be provided.</p>	<p>the service ó way in which the service will be provided;</p>
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Í Object and form of public disclosure of the conditions of provision and use of electronic communication servicesĴ

Concerning quality of service and other related service features, this determination establishes that companies providing publicly available telephone networks and services are bound to publish and disclose the following information as to the telephone services:

a) Description of services provided (possibility of making and receiving national and international calls and accessing emergency services; other attached services, namely, the facility connected to the calling line and called line identification, operator services, directories, directory enquiry services, selective call barring, roaming, among others; where the roaming service is not automatically activated, it is recommended that providers make available information on how this activation may be carried out, as well as on the location where additional information on this facility may be provided, including applicable prices);

b) Possible restrictions in the access to services, resulting namely from the prior need to fulfil technical prerequisites for the service provision, the failure to access the Internet in case certain telephone service offers are engaged, inability to make pre-selection calls for certain types of numbers;

c) Information on coverage of services, even if only by reference to a location whereat the user may obtain up-to-date information on service coverage and provision; and

d) Levels of quality provided - information on the levels of quality which the service provider undertakes to uphold with its customers, that is, the minimum levels of quality of service to be engaged with the customer, non-compliance with which determines the payment of compensation or refund. In the annex to this determination were also suggested by ANACOM some parameters to be released by the providers, the same as those referred on the "Guidelines for minimum content to be included in electronic communication contracts".

For other electronic communications services, a specific set of information must be publicised and disclosed²⁰. As far as the Internet access service is concerned, the disclosure of levels of quality on access and surfing maximum and average speed must attach a warning stating that the speed provided for any connection, at any time, may not be ensured, as it depends on the level of use of the network and server to which the customer is connected.

Assessment of disclosure of information by the service providers on prices and quality of service

Regarding the determination on the *Object and form of public disclosure of the conditions of provision and use of electronic communication services*, ANACOM has been monitoring providers' compliance in particular with the provisions and recommendations with regard to information disclosed on the websites of companies. It was concluded, first, that those provisions and recommendations have not been fully met by all providers and, second, that there are improvements to be made concerning this determination, in terms of greater explanation of what is meant by *information published in a clear and visible way and easily accessible*, particularly on the same page where the service is made available, in size and layout that is easily identifiable.

For improvement of the determination, ANACOM is beginning an internal procedure of review, in order to analyse all aspects that need to be amended.

Moreover, ANACOM is also considering centralizing on its own website the information on the links to the providers of electronic communication services websites, in order to allow end-users to easily compare the information disclosed by them.

As to the *Guidelines for minimum content to be included in electronic communications contracts*, ANACOM concluded, on July 2008, a public consultation on the amendment of this determination according to the Law no. 12/2008, pursuant to which electronic communication services are now considered Essential Public services. The public consultation also included the draft decision on the amendment of the Guidelines in what concerns the minimum contract retention time (customer loyalty period), in order to solve the problems suggested by a significant number of complaints, caused in most cases by lack of clear and unambiguous information to be disclosed by providers²¹.

ANACOM has been monitoring the evolution on complaints related to tariff transparency on calls to ported numbers. At first stage it was concluded that the initial determinations related to

²⁰ (a) Description of services provided, as well as attached services and facilities; (b) Possible restrictions in the access to services, resulting namely from the prior need to fulfil technical prerequisites for the service provision and the failure to access the Internet in case certain telephone service offers are engaged; (c) Information on coverage of services, even if only by reference to a location whereat the user may obtain update information on service coverage and provision; and (d) Levels of quality provided - information on the levels of quality which the service provider undertakes to uphold with its customers, that is, minimum levels of quality of service to be engaged with the customer, non-compliance with which determines the payment of compensation or refund. In the annex to this determination were also suggested by ANACOM some parameters to be released by the providers, the same as those referred on the *Guidelines for minimum content to be included in electronic communication contracts*.

²¹ <http://www.anacom.pt/render.jsp?contentId=599016>

this issue needed some tuning, namely because immediately after the implementation of the on-line message displayed on mobile-to-mobile voice calls to ported numbers, complaints were received mentioning that its content was not clear enough or even annoying to the calling party. Thus, when the Portability Regulation no. 58/2005 was released, some changes were introduced in the content of the message, together with the additional obligation for providers to allow end-users to override the listening of the message, upon subscriber request.

After Portability Regulation no. 58/2005 has been published, the number of complaints received regarding price information portability decreased considerably, which allows making a positive assessment of the measures in place.

Annex *Ē*NRAs questionnaire

<u>TITLE OF THE QUESTIONNAIRE</u>	Transparency of electronic communications services to end-users ó Questionnaire for the National Regulatory Authorities (<u>PART I</u>)	
<u>PROJECT</u>	Transparency of Retail Tariffs	
<u>ISSUER</u>	ERG End User Project Team	
<u>OBJECTIVES OF THE QUESTIONNAIRE</u>	PART I	<ul style="list-style-type: none"> - Provide an overview of the end-user transparency problems in the ERG countries - Find out how <i>providers</i> of electronic communications services in the ERG countries inform end-users about the tariffs and other terms and conditions for the use of their services (<i>Section I</i>)
<u>DEADLINE FOR ANSWERS BY NRAs</u>	September 30 th , 2008	
<u>NAME OF THE NRA:</u>	í	
<u>NAME AND CONTACT DETAILS OF THE PERSON FILLING IN THE QUESTIONNAIRE:</u>	í	

Note on how to fill in: Please fill in following the general instructions provided in the header of the column, as well as the specific instructions where provided in the individual cells.

PART I

INTRODUCTION. SUMMARY OF THE END-USER TRANSPARENCY PROBLEMS

Improving transparency and awareness can empower consumers and enable them to better protect their interests and make better choices in relation with the electronic communications service providers.

The ERG End User PT has identified a number of possible areas of concern about the transparency of end-user terms and conditions for electronic communications services in the ERG countries. A main possible area of concern is tariff transparency - particularly the difficulty of comparing offers, accessing information, controlling spend and post-contract tariff changes. These problems can be generated and amplified by a variety of factors, including:

- Complexity of tariff plans (tariffs for on-net/off-net calls, calls to mobile/fixed networks, depending on destination, during peak/off-peak hours, towards favourite numbers, family options etc.);
- Bundling of services (particularly in the context of the transition to next generation networks);
- Lack of billing control tools;
- Manner of publication of information on tariffs and on other terms and conditions;
- Manner in which end-users are informed about post-contract tariff changes.

Please provide information on the extent to which there are end-user transparency problems in your country, including any supporting facts and figures (for instance: statistics on the topics of complaints lodged by end-users; statistics on the keywords/topics of questions most frequently asked by end-users; statistical information resulted from the operation of interactive guides (number of visitors, search criteria used etc.).

SECTION 1. PROVISION OF INFORMATION BY SERVICE PROVIDERS

- 1.1. How do providers of electronic communications services in your country (mobile/fixed telephony and Internet/broadband) inform end-users about tariffs and other terms and conditions applicable to their services, as well as about changes occurring after the signature of (or otherwise entry into) the contract?**

Type of information made available by providers	Mobile/fixed telephony				Internet/broadband			
	Is this information made available by providers on a mandatory or voluntary basis? [M/V or Nónot made available]	Method/tool used [1 ó Publication at the points of sale 2 ó Publication on providers' websites 3 ó Bills and/or leaflets sent with the bills 4 ó Customer service 5 ó Others (specify) 6 ó not applicable]	Indicate if there is an obligation on providers to make this information available in a form which is: [Cócomparable Uóup-to-date EAóeasily accessible or Oóother requirements (specify) or Nónot obliged]	If applicable, indicate the legal basis (in primary law/regulation) for the transparency obligations and penalties for non-compliance [Act, Article, link to webpage (if available)]	Is this information made available by providers on a mandatory or voluntary basis? [M/V or Nónot made available]	Method/tool used [1 ó Publication at the points of sale 2 ó Publication on providers' websites 3 ó Bills and/or leaflets sent with the bills 4 ó Customer service 5 ó Others (specify) 6 ó not applicable]	Indicate if there is an obligation on providers to make this information available in a form which is: [Cócomparable Uóup-to-date EAóeasily accessible or Oóother requirements (specify) or Nónot obliged]	If applicable, indicate the legal basis (in primary law/regulation) for the transparency obligations and penalties for non-compliance [Act, Article, link to webpage (if available)]
(a) Standard tariffs								
(b) Indication of what is included in each tariff element (e.g. charges for access, all types of usage charges, maintenance charges)								
(c) Standard discounts								

(d) Minimum contract period								
(e) Quality of service (provide short description: type of indicators, format, frequency etc.)								
(f) Coverage (geographic areas where the service is available)								
(g) Changes occurring after the signature of (or otherwise entry into) the contract								
(h) Others <i>[please specify, including as many rows as necessary]</i>								

1.2. Do providers also use specific methods/tools to inform end-users about tariffs/billing/charging?

Method/tool	Is this method/tool used in your country? [Y/N]	For what services is it used? <i>[1 ó mobile telephony 2 ó fixed telephony 3 ó Internet/broadband 4 ó other services (specify) 5 ó not applicable]</i>	Is it subject to legal/regulatory/voluntary code of conduct requirements? [Y/N] If Yes, please give details and provide the legal reference [Act, Article, link to webpage (if available)]
(a) Instant billing control applications (accessible via e.g. website, SMS or phone)			
(b) Online voice announcements/acoustic signals in			

case of off-line calls or calls to ported numbers			
(c) Others <i>[please specify, including as many rows as necessary]</i>			

1.3. Do you have information on the impact of the methods/tools and other transparency requirements referred to under 1.1 and 1.2? For example:

Type of impact information	<i>[Please provide any facts and figures that you consider relevant, if available]</i>
(a) Usage information (e.g. number of visitors for websites/instant billing control applications or statistics on the number of calls or SMS)	
(b) The information methods/tools and transparency requirements considered to be the most effective by providers and/or end-users	
(c) Any effect on the number and topics of complaints to providers and/or authorities	
(d) Other relevant information <i>[specify, including as many rows as necessary]</i>	

1.4. Which of the methods/tools and other transparency requirements referred to under 1.1 and 1.2 do you consider to be the most effective? Please explain. Any supporting facts and figures would be useful.

Answer <i>[please include as many rows as necessary]</i>

1.5. Which of the information methods/tools or other transparency requirements not mandatory in your country in the present would you consider appropriate to be imposed on the service providers in the future (including improvements to the existing ones)? Please explain.

Answer <i>[please include as many rows as necessary]</i>

<u>TITLE OF THE QUESTIONNAIRE</u>	Transparency of electronic communications services to end-users ó Questionnaire for the National Regulatory Authorities (<u>PART II</u>)	
<u>PROJECT</u>	Transparency of Retail Tariffs	
<u>ISSUER</u>	ERG End User Project Team	
<u>OBJECTIVES OF THE QUESTIONNAIRE</u>	PART II	<ul style="list-style-type: none"> - Identify the methods/tools used by <i>NRA</i>s in the ERG countries to improve end-users information about the tariffs and other terms and conditions for the use of the electronic communications services (<i>Section 2</i>) - Identify the methods/tools made available by <i>third parties</i> in the ERG countries to improve end-users information about the tariffs and other terms and conditions for the use of the electronic communications services (<i>Section 3</i>)
<u>DEADLINE FOR ANSWERS BY NRAs</u>	September 5 th , 2008	
<u>NAME OF THE NRA:</u>	í	
<u>NAME AND CONTACT DETAILS OF THE PERSON FILLING IN THE QUESTIONNAIRE:</u>	í	

Note on how to fill in: Please fill in following the general instructions provided in the header of the column, as well as the specific instructions where provided in the individual cells.

PART II

SECTION 2. PROVISION OF INFORMATION BY THE NRAs

- 2.1. What administrative body (or bodies) deal with the protection of end-users of electronic communications services in your country (in particular on transparency issues ó for instance, the authority responsible for mandating publication of tariffs)? Please specify the specific responsibilities for end-user transparency.**

National body <i>[please include as many rows as necessary]</i>	Tasks

(NB : please note that under questions 2.2 to 2.6 below the term “NRA” refers to any relevant administrative body dealing with end-users issues in your country, and not only to the National Regulatory Authority in charge of market analysis and regulation)

- 2.2. What methods/tools are used by the NRA(s) in your country to improve information of end-users about the tariffs and other terms and conditions for the use of the electronic communications services?**

Method/tool	Is it used by NRA(s) in your country? <i>[Y/N]</i> If Yes, please specify name of the NRA(s) using it and the other details requested	For what services is this method/tool used by the NRA(s) on a voluntary basis? <i>[1 ó mobile telephony 2 ó fixed telephony 3 ó Internet/broadband 4 ó other services (please specify) 5 ó not applicable]</i>	For what services is this method/tool mandatory for the NRA(s)? <i>[1 ó mobile telephony 2 ó fixed telephony 3 ó Internet/broadband 4 ó other services (please specify) 5 ó not applicable]</i>	Please specify the legal basis for the voluntary or mandatory use of this method/tool by the NRA(s) <i>[1 ó electronic communications primary law 2 ó primary legislation in other fields 3 ó NRA regulation 4 ó not applicable]</i> Please also provide the legal reference [Act, Article, link to webpage (if available)]
(a) General end-user information section on NRA's own website/ dedicated website with general end-user	<i>[If Yes, please also specify web address]</i>			

information maintained by the NRA				
(b) Offer comparison website (interactive guide, price calculator) maintained by the NRA	<i>[If Yes, please also specify web address]</i>			
(c) Other end-user information service maintained by the NRA (e.g. via freephone number)	<i>[If Yes, please also provide contact details and short description]</i>			
(d) Leaflets/TV/radio spots commissioned by the NRA	<i>[If Yes, please also provide short description: content, target, no. of distributed items, distribution channels and distribution area]</i>			
(e) Regular provision of information to consumer representatives/ associations	<i>[If Yes, please also provide short description: working groups/ mailing, frequency etc.]</i>			
(f) Others <i>[please specify, including as many rows as necessary]</i>	<i>[If Yes, please provide short description]</i>			

2.3. Which of the methods/tools referred to under 2.2 do you consider to be the most effective? Please explain. Any supporting facts and figures would be useful.

Answer <i>[please include as many rows as necessary]</i>

2.4. Which of the information methods/tools not yet used by NRA(s) in your country in the present would you consider appropriate to be introduced in the future (including improvements to the existing ones)? Please explain.

Answer <i>[please include as many rows as necessary]</i>

2.5. General end-user information section on NRA's own website/dedicated website with general end-user information maintained by the NRA

If you have indicated under point 2.2 above that method (a) is used by the NRA in your country, please specify what type of general end-user information is made available on the website that you specified:

Information category	Available [Y/N; please also specify any details that you consider relevant]
(a) Possibility of switching between providers	
(b) What to look at when choosing a certain offer	
(c) Minimum contractual provisions	
(d) General provisions regarding tariffs, billing and special charging rules (e.g. potentially different charges for calls to ported numbers, charging of calls received in roaming)	
(e) Methods/tools used by service providers to inform users about tariffs and other terms and conditions	
(f) Methods/tools used by service providers to inform users about changes occurring after the entry into the contract	
(g) End-user rights in dealing with providers	
(h) Possibility to terminate a contract	
(i) How to complain/dispute settlement mechanisms	
(j) Others [please specify, including as many rows as necessary]	

2.6. Offer comparison website (interactive guide, price calculator) maintained by the NRA

In case you have indicated under point 2.2 above that method (b) is used by NRA in your country, please specify the following (points 2.6.1 to 2.6.11):

2.6.1. Services for which the website can provide comparisons/calculations (please specify whether separate interactive guides/websites are maintained by NRA(s) for different services):

Service	Can the website provide comparisons/calculations for this service? [Y/N]
(a) Mobile telephony	[If Yes, please indicate the types of services included in the website (e.g. voice calls/SMS/MMS, domestic/international/roaming)]
(b) Fixed telephony	[If Yes, please indicate the types of services included in the website (e.g. voice

	<i>calls/SMS, domestic/international)]</i>
(c) Internet access/broadband	<i>[If Yes, please indicate the types of services included in the website (e.g. broadband/narrowband, fixed/mobile, domestic/roaming)]</i>
(d) Television transmissions	<i>[If Yes, please indicate the types of services included in the website (e.g. cable/satellite/terrestrial/IPTV)]</i>
(e) Bundles	<i>[If Yes, please provide the exact description of the types of services included in the website, specifying what services the bundles include]</i>
(f) Others <i>[please specify, including as many rows as necessary]</i>	

2.6.2. Search/calculation criteria that can be employed by the end-user on the comparison website (please fill in separate tables if separate guides/websites are maintained by NRA(s) for different services):

Search/calculation criterion	Is this criterion available on the offer comparison website? <i>[Y/N; please also specify any details that you consider relevant]</i>
(a) (Average/maximum) monthly usage time	
(b) (Average/maximum) monthly expenditure	
(c) Time of day/week when the end-user makes most of his/her traffic	
(d) Destinations that the end-user is likely to call most (mobile/fixed/given networks)	
(e) Coverage in the end-user's residence area (for fixed services)/desired service area (for mobile services)	
(f) Preferred contractual arrangement (monthly subscription/prepaid arrangement)	
(g) Subsidised terminal offered on subscription	
(h) Additional services available	
(i) Others <i>[please specify, including as many rows as necessary]</i>	

2.6.3. Are the search/calculation criteria alternative or can they be used in combination? If so, how can they be combined? (Please specify this separately for each guide/website, as applicable, as well as for each type of service for which comparisons/calculations can be made.)

Answer

2.6.4. Categories of information which are accessible on the comparison website (please fill in separate tables if separate guides/websites are maintained by NRA(s) for different services):

Information category	Is this information category accessible on the website? <i>[Y/N; please also specify how can it be accessed (e.g. as default input, as search results) and any other details that you consider relevant]</i>

(a)	Name of (and link to) the tariff scheme	
(b)	Contractual arrangement (prepaid/postpaid)	
(c)	Standard subscription charge/one-off charge	
(d)	Connection fee	
(e)	Usage charges	Call charges depending on time of day/week (peak/off-peak)
		Call charges depending on destination (on net/off-net)
		Data transmission charges (price per MB/flat rate)
(f)	Billing options (e.g. free/paid itemised billing, online billing)	
(g)	Discounted/promotional offers	
(h)	Coverage (i.e. geographical area where the service is available)	
(i)	Data transmission speeds	
(j)	Subsidised terminal offered on subscription	
(k)	Additional services available	
(l)	Minimum contractual period	
(m)	Others <i>[please specify, including as many rows as necessary]</i>	

2.6.5. Please provide details on how the discounted/promotional offers are included in the comparison website (if applicable). (Please specify this separately for each guide/website, as applicable.)

Answer

2.6.6. Are there any model/default assumptions used in making a search/calculation on the comparison website (e.g. time when most calls are made, calls distribution among different destinations etc.)? How were these chosen? (Please specify this separately for each guide/website, as applicable.)

Answer

2.6.7. Comparison website's usage statistics (please fill in separate tables if separate guides/websites are maintained by NRA(s) for different services):

Indicator	<i>[Fill in as appropriate and specify any details that you consider relevant]</i>
(a) Visitors/month	
(b) The services (including categories of communications for which comparisons	<i>[e.g. mobile telephony ó domestic voice calls]</i>

are most often requested	
(c) The three most used search criteria, in descending order of usage frequency	<i>[e.g. 1 - monthly expenditure; 2 - monthly usage time; 3 - time of day when the end-user makes most of the traffic. Please specify the three most used criteria separately for each type of service for which comparisons are made.]</i>
(d) Other relevant statistics <i>[specify, including as many rows as necessary]</i>	

2.6.8. Information on the impact of the comparison website since its introduction, if available (please fill in separate tables in case separate guides/websites are maintained by NRA(s) for different services):

Type of impact information	<i>[Please provide any facts and figures that you consider relevant]</i>
(a) End-user awareness	
(b) End-user switching behaviour	
(c) Other relevant information <i>[specify, including as many rows as necessary]</i>	

2.6.9. General information regarding the comparison website (please fill in separate tables in case separate guides/websites are maintained by NRA(s) for different services):

Type of information	<i>[Fill in as appropriate]</i>
(a) Year when website was made available	
(b) Position(s) expressed by the service providers in the country in relation to the creation of the website	
(c) Main problems encountered when creating the website and how the NRA has dealt with them	
(d) Language(s) in which the website is available	
(e) Fixed cost of building the website	
(f) Website maintenance cost/month	
(g) No. of man-hours/week for website & IT maintenance ¹	<i>[please specify whether employed directly by NRA or outsourced]</i>
(h) No. of man-hours/week for verifying information on website	<i>[please specify whether employed directly by NRA or outsourced]</i>
(i) Access by providers of electronic communications services	<i>[please indicate whether service providers whose offers are included in the website are able to access the website to input data as follows: (1) no direct access (access exclusively reserved to NRA) / (2) direct access ó also specify how this is made and the categories of data to which service providers have access]</i>
(j) Any complaints made by providers regarding the website	<i>[please give details]</i>
(k) Any complaints made by end-users regarding the website	<i>[please give details]</i>
(l) Any improvements that the NRA thinks appropriate to bring to the website in the future	
(m) Other relevant information <i>[specify, including as many rows as necessary]</i>	

¹ E.g.: 1 dedicated person accounts for 40 man-hours/week.

2.6.10. Legal/regulatory obligations imposed on providers in relation with the comparison website (please fill in separate tables in case separate guides/websites are maintained by NRA(s) for different services):

Type of obligation	What categories of services or service providers are subject to obligation? <i>[1 ó mobile telephony 2 ó fixed telephony 3 ó Internet/broadband 4 ó other services (please specify) 5 ó not applicable]</i>	If applicable, please also provide the legal reference <i>[Act, Article, link to webpage (if available)]</i>	What penalties are applicable in case of non-compliance? Please also provide the legal reference <i>[Act, Article, link to webpage (if available)]</i>	<i>[Please provide any other details that you consider relevant]</i>
(a) Provide to NRA detailed information on their offers, in a specified format				
(b) Upload on the website detailed information on their offers, in a specified format				
(c) Regularly update the information provided				<i>[Also specify the frequency of the update]</i>
(d) Update the information within a specified time limit from the occurrence of changes in provider's offer				<i>[Also specify the time limit for the update]</i>
(e) Others <i>[please specify, including as many rows as necessary]</i>				

2.6.11. Are there any Terms and Conditions governing the use of the comparison website? Please provide link and English translation (if not available on link). (Please specify this separately for each interactive guide/website, as applicable.)

Answer

SECTION 3. PROVISION OF INFORMATION BY THIRD PARTIES

3.1. What methods/tools are used by third parties (consumer associations, provider associations, other entities) in your country to provide information to end-users about the terms and conditions, including tariffs, for electronic communications services?

Method/tool	Is this method/tool used by third parties in	For what services is it used?	Is it subject to legal/regulatory/voluntary code	Do service providers have any legal/regulatory obligations in relation
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	your country? <i>[Y/N]</i> If Yes, who are the third parties using it?	<i>[1 ó mobile telephony 2 ó fixed telephony 3 ó Internet/broadband 4 ó other services (please specify) 5 ó not applicable]</i>	of conduct requirements²? <i>[Y/N]</i> If Yes, please give details and provide the legal reference [Act, Article, link to webpage (if available)]	with the provision of information for the purpose of making available/maintaining these methods/tools³? <i>[Y/N]</i> If Yes, please also provide the legal reference [Act, Article, link to webpage (if available)]
(a) General end-user information section on third parties' own website/dedicated website with general end-user information maintained by third parties	<i>[If Yes, please also specify web address]</i>			
(b) Offer comparison website maintained by third parties	<i>[If Yes, please also specify web address]</i>			
(c) Other end-user information service maintained by third parties (e.g. via freephone number)	<i>[If Yes, please also provide contact details and short description]</i>			
(d) Leaflets/TV/radio spots commissioned by third parties	<i>[If Yes, please also provide short description: content, target, no. of distributed items, distribution channels and distribution area]</i>			
(e) Others [please specify, including as many rows as necessary]	<i>[If Yes, please also provide short description]</i>			

3.2. How would you comment on the effectiveness, efficiency and capabilities of the information methods/tools used by third parties in your country? Any supporting facts and figures would be useful.

Answer

² E.g. to ensure that information is duly updated and that any service provider has the possibility to have his offers included therein.

³ E.g. to ensure that third parties have access (and under what conditions, e.g. free of charge) to comparable and up-to-date information from service providers.

