



REGULATORY SCORECARD 2009

EXECUTIVE SUMMARY

Report on the relative effectiveness

of the regulatory frameworks for electronic communications in

**Austria, Belgium, Bulgaria, the Czech Republic, Denmark, Finland, France, Germany,
Greece, Hungary, Ireland, Italy, the Netherlands, Norway, Poland, Portugal, Slovenia,
Spain, Sweden, Switzerland, the United Kingdom and Turkey**



SPC Network

EXECUTIVE SUMMARY

This report compares the regulatory environment of the electronic communications sector in 22 countries (19 EU Member States, Norway, Switzerland and Turkey) and its effectiveness in promoting the objectives of the EU regulatory framework. The scope of the survey includes the wider institutional and legislative environment affecting the sector as well as the application of regulation by National Regulatory Authorities (“NRAs”) and the market outcomes in key wholesale access and retail markets.

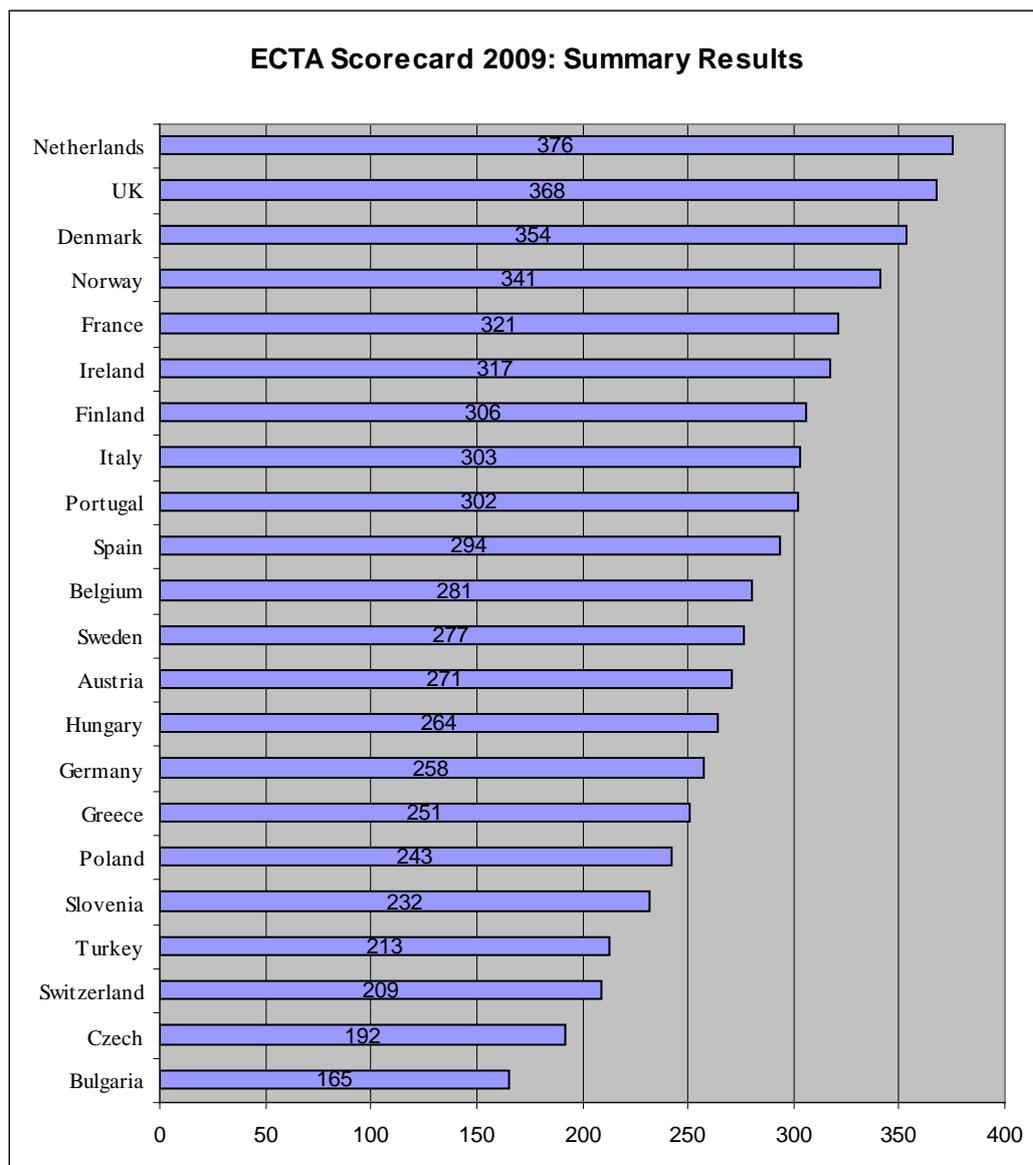
On the basis of this study, a comparative analysis has been conducted to identify areas of best practice and weaknesses in the application of the current legislative framework and to assess the implications of variations in regulatory approach on consumer welfare, competition and investment. Finally, on the basis of this analysis, the authors have drawn conclusions and made recommendations on actions that could be taken by EU institutions, national governments and NRAs to improve outcomes for Europe’s citizens and businesses.

The EU Member States surveyed in this report are Austria, Belgium, Bulgaria, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, the Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and the UK. In addition, three non-EU countries are also covered: Norway, Switzerland and Turkey.

The Scorecard is based on responses submitted by NRAs and ECTA members to a detailed questionnaire consisting of 118 questions grouped in five sections: (A) overall institutional environment, (B) key enablers for market entry and network roll out, (C) the NRA’s regulatory processes, (D) application of regulation by the NRA, and (E) regulatory and market outcomes. The questionnaire and methodology were compiled following consultations with NRAs, ECTA members and the European Regulators Group (ERG) and take account of the requirements and recommendations contained in the EU regulatory framework, the World Trade Organisation (WTO) reference paper on telecommunications, and European Commission and ERG Guidelines.

On the basis of consolidated responses received for each country from the various stakeholders, a comparative quantitative analysis was conducted, resulting in an overall score for the effectiveness of the regulatory environment in each country. The overall results of the Scorecard are shown in Figure 1.

Figure 1: Overall Results of Scorecard



Specific country rankings can lie within the bounds of error, particularly where differences are small. However, the Table shows that countries can be grouped broadly into four categories. Leading countries which perform well across all sections include the Netherlands, the UK, Denmark, Norway, France, and Ireland. These are the same six leading countries as in the last Scorecard. With the exception of Ireland, which has a weaker result for market outcomes, these countries perform well across all sections of the Scorecard. The second group of countries are countries which are generally strong but may show weaker performances in some specific areas. It includes Finland, Italy, Portugal, Spain, Belgium, and Sweden. The third group of countries has more variable performance and includes Austria, Hungary, Germany, Greece, Poland and Slovenia. Finally, the fourth group are countries with weak performances in most sections covered by the report, namely Turkey, Switzerland, the Czech Republic, and Bulgaria. However, the report also shows that some of these countries have specific strengths or have improved since the 2008 Scorecard report.

A comparative analysis with last year should take account of the extended scope of the questionnaire as well as the methodological changes that were made, as described in the report.

In total, this year's questionnaire includes 14 additional questions and certain existing questions have been substantially revised on the basis of previous years' experience and consultations with stakeholders. Overall, however, one can observe that the stronger and weaker performing countries remain largely the same over the years. Interesting changes can nonetheless be observed, some of which may result from the increased scope of the questionnaire or from new criteria introduced in the methodology (such as the increased focus on access to modern interfaces such as Ethernet and networks based on FTTH and vDSL technologies, the importance given to non-discrimination and equivalence of inputs, the need to address margins squeeze, discounts and bundles, the attention to mobile data and roaming services, the distinction between the existence of a technologically neutral market analysis and the imposition of remedies, etc.). Changes in regulatory policy and implementation have also affected the results for other countries.

In particular, the Netherlands, which was second in 2008, ranks first in this year's Scorecard. This results from its achievements regarding the regulatory environment and the economic market conditions. The Netherlands has benefited from its proactive and effective approach on NGA access and from favourable market outcomes, in particular in terms of low pricing across all retail markets. The UK, which had come first in previous Scorecards is still close second with the best result in terms of efficiency. Norway and Denmark have swapped places when compared to the 2008 Scorecard: Denmark ranks third supported by very steady results across all sections, while Norway suffers from comparatively weaker results on the institutional framework and the application of the regulation by the NRA. Ireland has obtained the highest scores for both the institutional framework and the application of regulation by ComReg. Its weakness lies in the market outcomes. This discrepancy may reflect difficulties or delays in the effective enforcement of the regulatory remedies.

Several countries have improved their positions compared with the 2008 results. This includes Belgium which comes up four places, from 15th in 2008 to 11th this year. This progression reflects the improved regulatory environment and the BIPT's forward looking regulation. Belgium still continues to suffer from certain institutional weaknesses and under-performing market outcomes, that improved regulatory conditions have been unable to curb as of yet. Poland also significantly improved its regulatory environment by improving the NRA's independence and adopting *ex ante* regulation in various fields. Spain has also improved its ranking.

Other countries have declined in the ranking. This includes Germany, which is now ranked 15th while ranking 12th in 2008. This position may be due to a historically poor institutional framework and the lack of NGA regulation which receives more weight in the present report. Austria, Italy, and Slovenia are also ranked slightly lower than in 2008. In Italy, this score might be partially affected by the delays in the adoption of the relevant market analysis, pending the adoption of Telecom Italia's commitments. Austria also shows weaknesses in relation to recent regulatory approaches of its NRA, such as its approach to NGA, which affects its scores.

It is also interesting to note that certain countries have very different scores for different sections, which confirms that a granular analysis must be made of the Report. As already mentioned, Ireland performs well in sections concerning the legislative environment and regulatory policy, but is generally weaker on the resulting regulatory and market outcomes. Also, Germany and Poland have low scores on the institutional environment as a result of continuing legislative weaknesses extending in some cases beyond the telecoms sector, whereas they might score comparatively better in other sections. Conversely, Austria scores better in the market outcomes than it does in other sections of the report.

The weakness of certain countries also appears to be attributable to weaker overall economic conditions or later implementation. For example, Bulgaria that scores last in the Scorecard, may use the review of the national framework to implement the revised EU framework as an opportunity to improve, as the positive impact of legal amendments can be observed for example in Poland.

It should also be noted that the Bulgarian and Czech NRAs were unable to participate in the data collection for the purpose of the present report which necessarily reduces the granularity of the responses and could negatively affect their performances. Overall, we observe, however, that the best performing countries are the countries that observe the greatest administrative transparency and where access to data and information is the most extensive.

Furthermore, the results for Turkey and Switzerland should also be put in perspective as those countries are outside the EU. Although it lags behind compared to several other surveyed countries, Turkey has already accomplished a substantial amount of work to bring the regulatory environment in line with European benchmarks, and its score has increased as compared to 2008. Similarly, Switzerland has a regulatory framework exclusively based on reactive regulation, which creates regulatory uncertainty for operators and affects its score on the institutional framework, efficiency of the NRA and application of regulation by the NRA¹.

To illustrate the contrast between the overall institutional conditions and the deliberate regulatory options, Figures 2 and 3 show the results for “Institutional” questions, Sections A and B1 of the Scorecard and the remaining “Regulatory” questions, B2 to E4, respectively. In general, Institutional questions lie outside the control of NRA, whilst Regulatory questions are generally (although not always) within the remit of the NRA.

¹ Where the Swiss NRA complained that a question was biased against their ex post and non-EU regime, Switzerland was awarded intermediate marks for the question to counter the bias.

Figure 2: Institutional results (section A, B1)

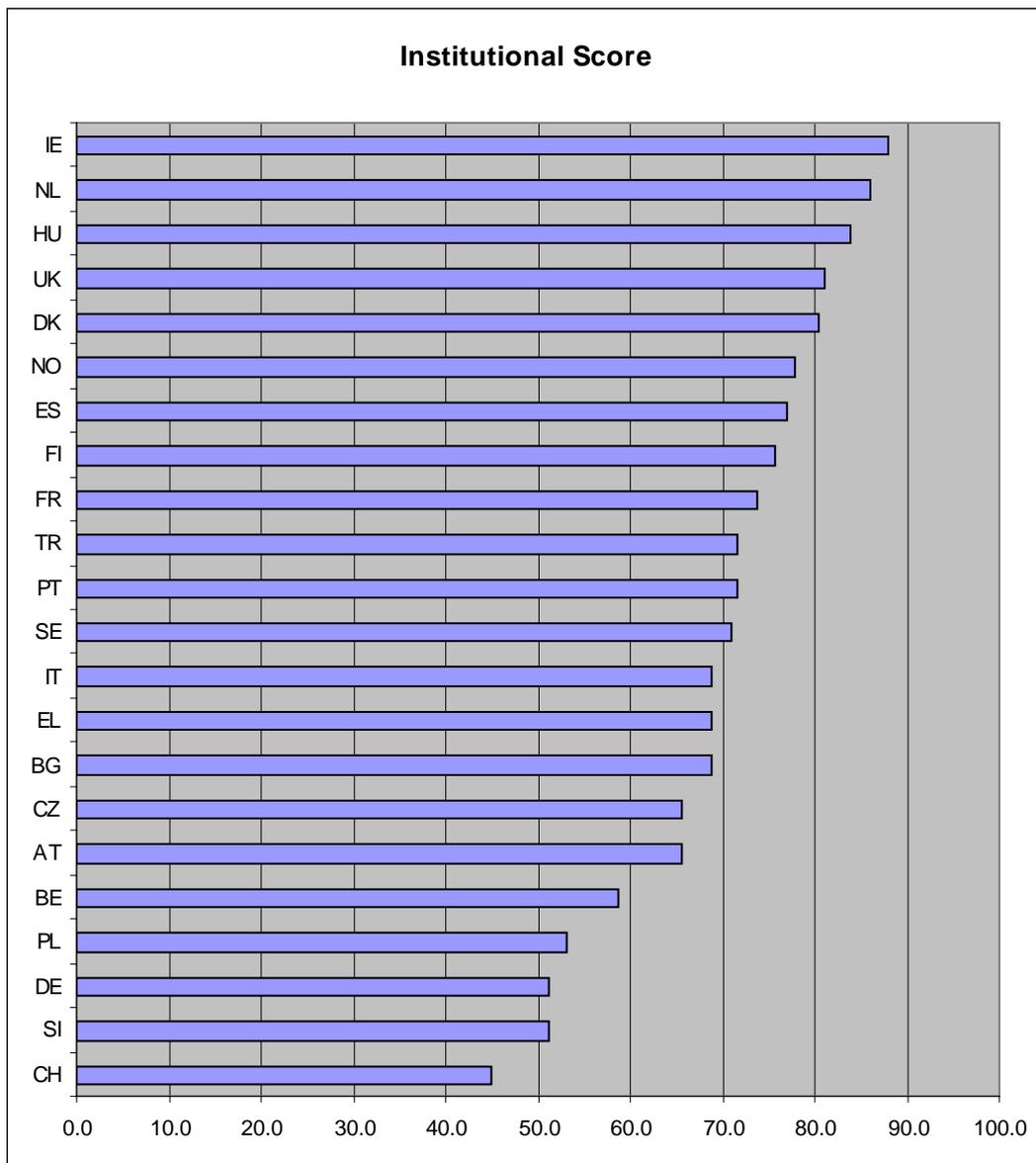


Figure 3: Regulatory results (Section B2 through E4)

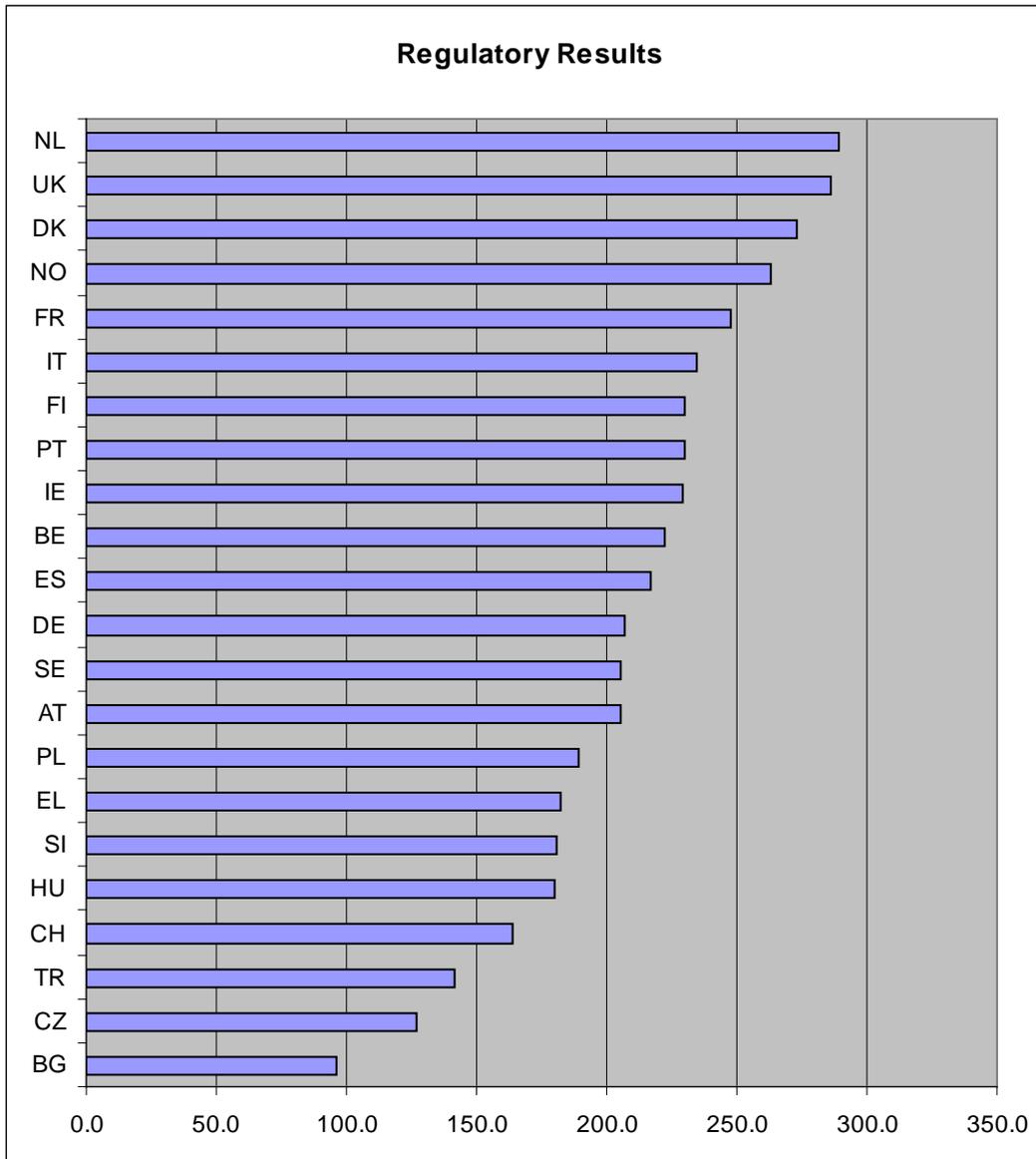
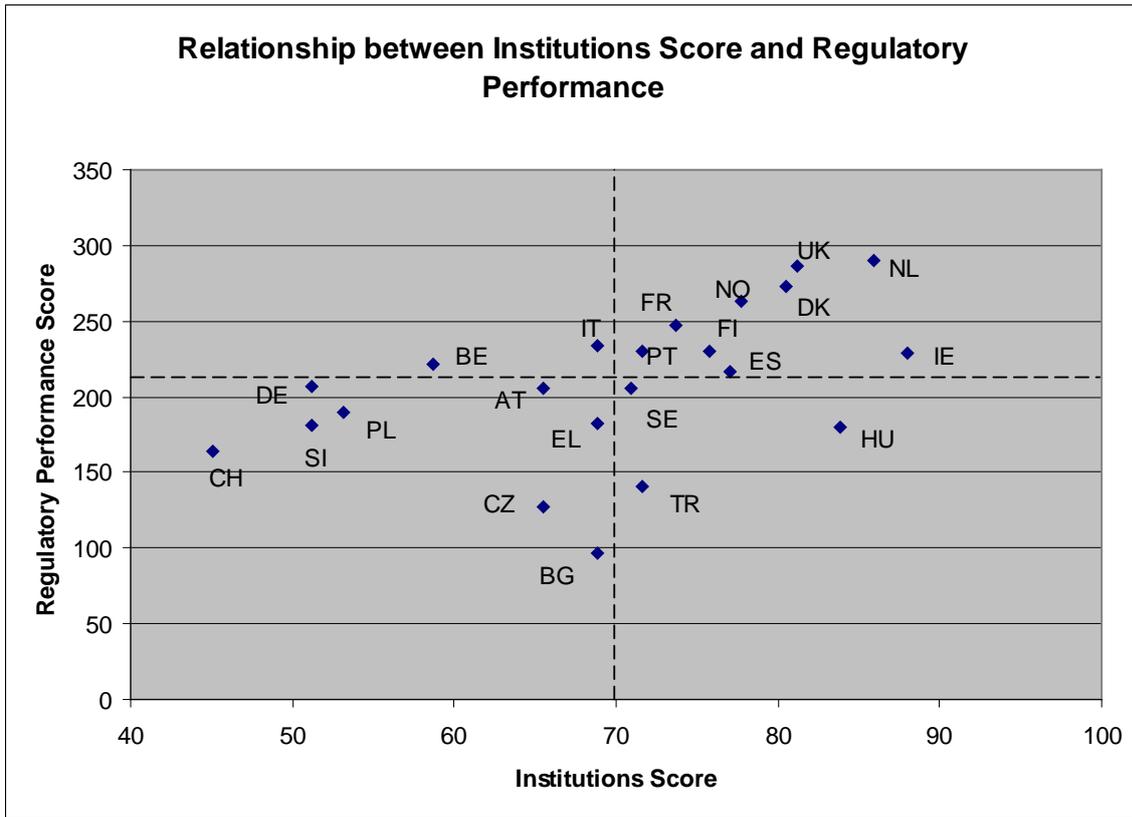


Figure 4 shows the Institutional score and the Regulatory Performance score plotted on the same graph. The dashed lines show the average score for each of the two axes.

In many ways the most interesting group is the bottom right quartile, where Regulatory Performance underperforms compared with their Institutional score. The two greatest underperformers are Hungary and Turkey, whilst Sweden is a little less than average for both.

The bottom left quartile shows the general underperformers and so, as expected given overall results, includes Austria, Bulgaria, Czech Republic, Germany, Greece, Poland, Slovenia and Switzerland.

Figure 4: Relationship between Institutional and Regulatory Performance Score



A. Qualitative Findings

The institutional framework as well as the application of regulation varies significantly across Europe. For example, some NRAs have no power to impose penalties whilst others can impose fines ranging from 0.5% to 10% of turnover. The average timeframe for appeal processes ranges from three months to over two years. In view of the national transposition of the new framework, it is also noteworthy that divergences remain in NRAs' reported level of independence, and that there is still no country where the NRA has the explicit power to impose functional separation. On the other hand, with the exception of Germany and Switzerland, all countries seem to allow the imposition of equivalence of inputs (although this is actually imposed in only about a third of the countries surveyed).

As regards the application of regulation by NRAs, divergences remain both on timescales for concluding market reviews and disputes and in regulatory approaches and effectiveness in addressing significant market power. The regulatory approach to existing technologies such as local loop unbundling appears to have become more consistent over successive Scorecards. However, it is notable that outcomes differ with unbundling prices ranging from €134 in Poland to approx. €439² in Ireland and the take-up varies widely from less than 1% of incumbent lines in Czech Republic, Poland and Turkey to more than 40% in the UK.

Significant for the future, the Scorecard also shows a divergence of regulatory approaches in the treatment of 'next generation' FTTx and Ethernet technologies amongst those regulators who have examined these issues, which may translate into diverging outcomes in subsequent years. In particular, decisions effectively excluding forms of NGA from regulation in Germany and Spain and delays in addressing these issues in some other markets, in particular in the Czech Republic, Bulgaria and Hungary, may lead to a weakening of competition assessed by future Scorecards compared with present outcomes. This confirms the need for the Commission to proceed with the adoption of the NGA Recommendation. Another regulatory issue where significant discrepancy and lack of consistency can be observed concerns the NRAs approaches to discrimination, price squeeze, bundling and discounts. NRAs have generally failed to establish clear principles to go beyond the existing principles of competition law and effectively address the specific needs of asymmetric market conditions.

Key areas of divergence in the legislative framework and regulatory practice are described as follows.

- NRAs' power to enforce rules under the EU telecoms framework remains limited in several significant respects. No NRA has yet been granted full powers to apply the remedy of functional separation, even in countries such as the UK, Sweden, Italy and Ireland. NRAs' powers to impose fines are also generally more restricted than those granted to the Commission as a competition enforcer. Furthermore, the Danish, Swiss and Swedish NRAs are still not empowered to conduct inspections at the premises of the SMP operators and the BnetzA is the only NRA that might be restricted from collecting information on network deployment plans. Finally, in some countries like Spain, the NRA does not have full responsibility for spectrum.
- NRA independence is not always fully guaranteed. In a number of countries, NRA powers are restricted, subject to general guidance from Ministries, or, in other cases, the tenure of Management is undermined. These issues are of particular concern in Germany, Norway and Slovenia. Governments also continue to retain significant ownership interests in

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These are the total prices for a two year subscription. Connection charges are depreciated over two years. Thus the calculation is connection charge + (monthly rental x 24). This approach allows for an evening out of prices should countries adopt and high connection fee and lower monthly rental, or vice versa.

incumbents or other telecoms operators in Austria, Belgium, Bulgaria, Germany, Greece, Norway, Poland, Portugal, Slovenia, Sweden, Switzerland and Turkey.

- Appeals remain a significant source of legal uncertainty in some countries particularly where numerous challenges combine with lengthy court processes to delay the outcome. This is of particular concern in Belgium, Czech Republic, Italy, Poland Slovenia and Switzerland.
- Rights of way regimes remain largely dictated by local or regional authorities and one-stop shops are only available in the UK for the grant of authorizations and only in Norway, Ireland and Belgium for resolving disputes. Charges are high or variable in many cases and delays are also of concern across a number of countries including in Austria, Czech Republic, Greece, Sweden and Switzerland. Regulated availability of access to ducts and sewers (other than through SMP regulation) is also limited except in Finland, France, Italy, the Netherlands and Portugal.
- Number portability for mobile and fixed services is becoming increasingly effective. However, only Ireland provides a timescale of 1 day for the porting of numbers as required by the new regulatory framework and, even then, it is only for mobile numbers. Porting can take as much as 23 days in Poland. In most other cases timeframes exceed 5 days. In addition, the largest mobile and fixed operators still apply a retail charge for porting out their customers' number in Austria (only for mobile), Bulgaria, Germany and Slovenia.
- Frequency policy remains generally conservative and national although recent initiatives at the EU level are progressively being implemented. The Nordic countries have traditionally made the most progress in liberalizing frequency bands, progressing towards the digital switchover and ensuring technological neutrality, but Germany and Switzerland have also adopted a more liberal approach. Despite the adoption of Directive 2009/114/EC, technology neutral conditions for 900 MHz and/or 1800 MHz are only adopted in Belgium, Czech Republic, Finland, Germany, Italy and Switzerland.
- Full compliance with the four month legal deadline for resolving access disputes has been achieved in only about a third of the countries surveyed. Similarly, less than half of the countries surveyed timely publish the pending disputes.
- While transparency of the NRA's processes has significantly improved over the years, excessive redactions of confidential data are reported in various countries including Bulgaria, Czech Republic, Germany, Greece, Hungary, Poland, Portugal, Slovenia and Turkey. Similarly, if most NRAs publish detailed accounts showing their cost of operations, some do not publish forward looking action plans.
- Several NRAs have a poor track record in identifying violations of SMP obligations and pursuing enforcement actions. Some NRAs, like Bulgaria, Germany, France and Switzerland have failed to identify even one violation of SMP obligations, despite sometimes receiving numerous complaints. On the basis of this Report, however, one should not conclude that other NRAs have been much more active in opening infringement procedures. It rather appears that there are a limited number of enforcement proceedings that are effectively being opened.
- NGA developments have been addressed in an inconsistent manner by NRAs: Some, like the Netherlands and Ireland, have defined a technological neutral framework, which addresses NGA issues. Others, like Germany or Austria, have adopted technology based market definitions that have the effect of excluding certain forms of next generation access networks from regulation. In certain countries, like Spain, some markets have been defined in a technological neutral way but the corresponding remedies were restricted on the basis of speeds or technology. Portugal has included FTTC and FTTH in the market definition,

but has not imposed corresponding remedies. Finally, NGN access is still not addressed in some countries even when there are reported fibre deployments. At this stage, it is also noteworthy that only Belgium, Ireland and Spain provide for a five year notice period for the closure of MDF sites, as foreseen in the Commission's draft NGA Recommendation

- Measures to address discrimination, in particular (i) the obligation to provide a wholesale offer before launching a retail offer and (ii) the imposition of equivalence of inputs, have only been imposed cumulatively in the UK and Denmark, but any such provisions remain absent in countries such as France, Greece, Slovenia, Spain, Sweden, Switzerland and Turkey. Furthermore, only about half the countries impose appropriate Chinese walls obligations to prevent anti-competitive win-back campaigns.
- Foreclosure practices, such as margin squeeze, bundling and discounts, have never been addressed in countries such as Poland, Sweden, Switzerland and Turkey. By the same token, over two-thirds of the countries surveyed have not imposed either a truly cost oriented MTR in accordance with the Commission Recommendation on termination rates, or any internal non-discrimination obligations.
- Accounting separation is now generally introduced in all countries, albeit still not in Germany, and Switzerland. The methodology is also generally published, although sometimes not in sufficient detail. However, those obligations are often ineffective as the accounts themselves are not published in a timely or in a sufficiently detailed manner in over 80% of the countries surveyed.
- A review of Section E, which primarily examines the existing status of competition and consumer outcomes affected by previous actions taken by the regulator, shows that :
 - (i) Sweden, Portugal and Norway benefit from the most competitive environments for fixed voice services generally, whilst Slovenia, Norway, the Netherlands, Greece, France, Denmark and Belgium have made particular progress in achieving voice competition through VoB. Meanwhile, competition in fixed voice remains limited and prices are high in Belgium, the Czech Republic, Ireland, Finland, Poland, Spain and Turkey, although low mobile prices in Finland and Poland may partly compensate for this.
 - (ii) The most competitive environments for mobile and wireless services are in Austria, the UK, the Nordic countries and the Netherlands. Highly performing countries in mobile markets also generally have the most liberal frequency principles and benefit from the presence of real MVNOs. The UK and Austria also have particularly low roaming tariffs. The use of mobile Internet services and of mobile broadband data dedicated services is particularly developed in Austria, Finland, Ireland and Sweden.
 - (iii) Regimes for business service competition based on traditional interfaces are most advanced in the Netherlands, Portugal, France and the UK while particular weaknesses are evident in Bulgaria, Czech Republic, Greece, and Turkey. Turkey and Poland are the sole countries where there are no wholesale leased lines terminating segment available. However, effective take up of Ethernet-based services is currently limited to Austria, Belgium, France, the Netherlands, Norway, Portugal and the UK. Specific business grade (low contention) bitstream services are still not available in Bulgaria, Greece, Poland, Sweden and Turkey
 - (iv) Regarding broadband services, the Netherlands, Norway and France perform most strongly overall. Average (median) retail prices for a 1 -2 Mbps package

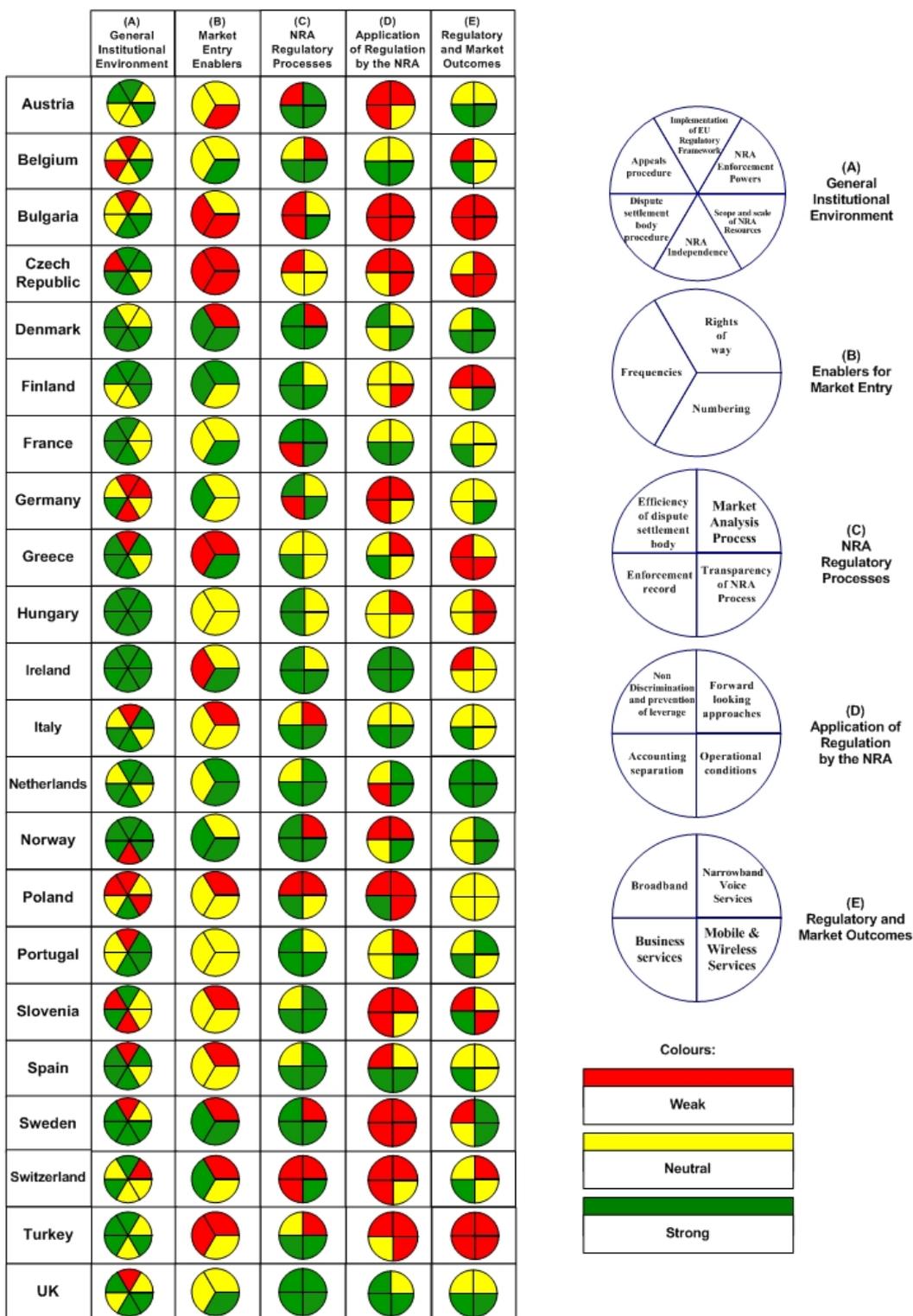
range from about 8 EUR in the UK to about 62 EUR in Poland³. Fibre full loop or subloop (from the ODF) is only available in Finland, France, the Netherlands, Norway and Sweden. Subloop unbundling is only available and used in about a third of the countries surveyed. Similarly, wholesale naked bitstream is not available or used in about nine of the countries surveyed. For the provision of triple play offers, some countries face a monopoly position while the most competitive markets are found in Denmark and Norway.

A section by section analysis of the Scorecard results is shown in figure 4 overleaf whilst more granular question by question analysis is contained at the back of the report.

³ Based on basket 1024-2048 kbs/s of the BIAC Report, 2008. The 2009 BIAC report was released too late to be included in this report.

Figure 4: Overview of Strengths and Weaknesses of the Surveyed Countries

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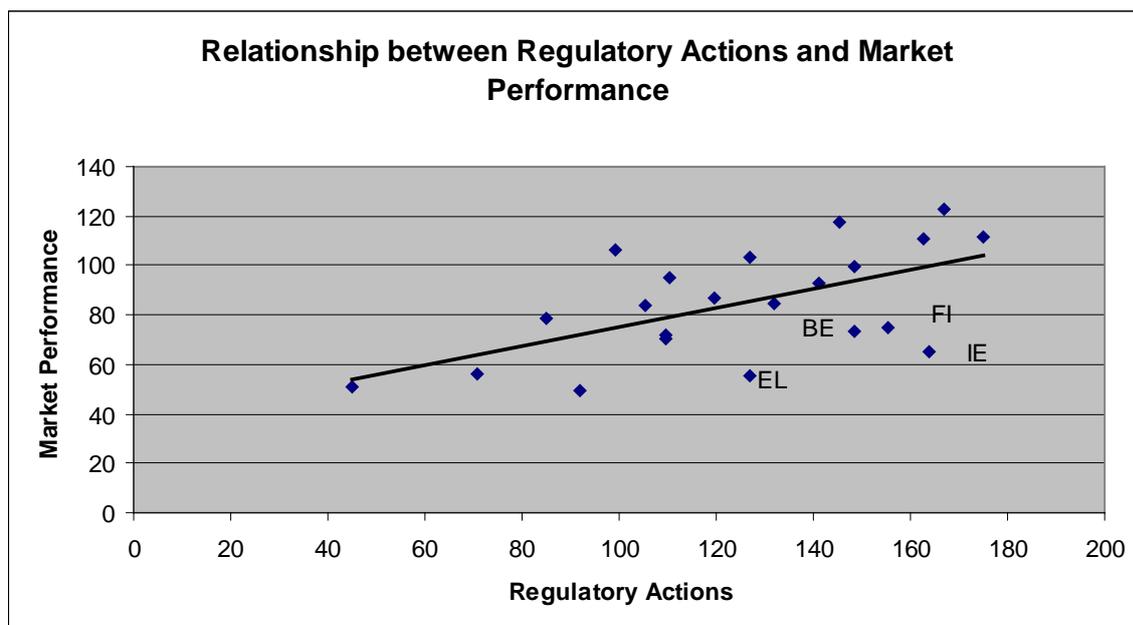


B. Quantitative Findings

To assess what impact, if any, divergent regulatory approaches may have on competitive and consumer outcomes in the market, we have again examined the relationship between the actions and policies of the NRAs (as reflected in sections B2-D4 inclusive) and the resulting market conditions assessed in section E, which includes measures of the presence of parallel infrastructures and access-based competition, together with resulting retail market shares and prices in four key areas: narrowband access, mobile, business services and broadband access. Overall we find a strong positive correlation (59%). Countries where the regulator is more active tend to achieve broadly better results in terms of competition and consumer welfare. The scores for these two sets of questions are shown in Figure 5.

As we found in the last Scorecard, Ireland underperforms compared to how we might expect given its Score for regulatory action, as do Belgium, Finland and Greece.

Figure 5: Scores for NRA Actions and Market Conditions

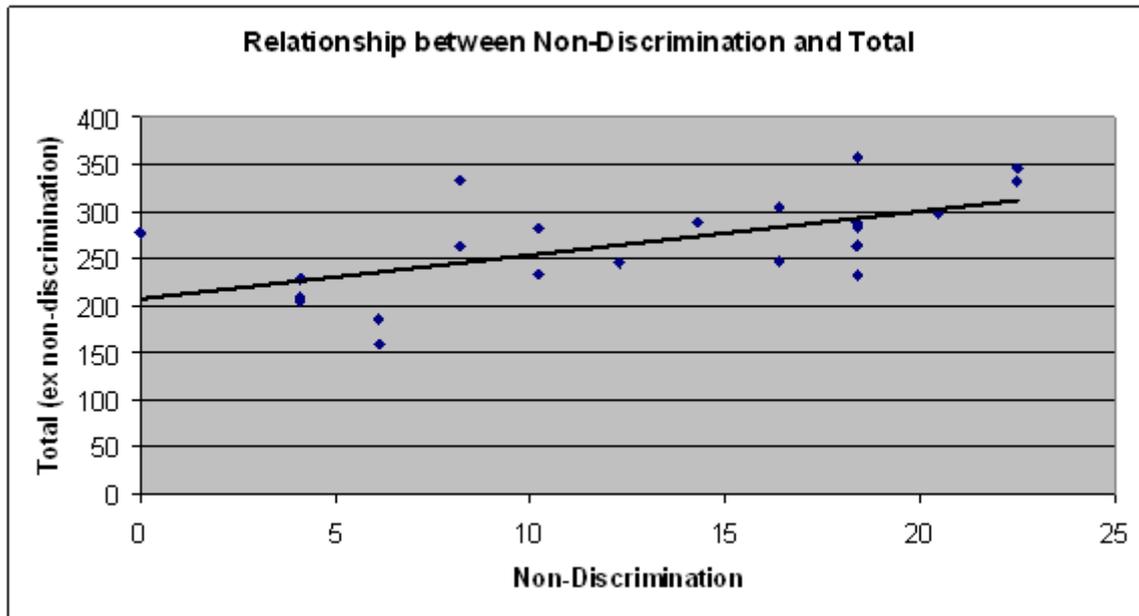


In this Scorecard we have examined some of the key regulatory actions and their impact on market conditions and the overall performance of the regulatory regime. In particular, we have examined how an effective non-discrimination regime affects performance.

We find that there is a positive correlation (29%) between an effective non-discrimination regime (Section D4) and market conditions. In particular those countries that score highest on non-discrimination (Denmark, Netherlands and the UK) also have generally good market outcomes.

We also find a strong and positive correlation (61%) between non-discrimination and total score (excluding non-discrimination). This would imply that better regulatory regimes recognize the importance of non-discrimination (Figure 6).

Figure 6: Relationship between non-Discrimination and Total



Recommendations to the Commission, the Parliament and the Council

- Monitor the **timely and consistent transposition of the revised Framework and take enforcement action** where principles are not adhered to – such as the independence and full empowerment of the NRA, and ensuring the publication of a full and technology neutral reference offer for unbundled access by firms found with SMP;
- Ensure the **lifting of technological limitations in the 900MHz and 1800 MHz bands** in accordance with the rules of the amended GSM Directive in all Member States in a timely manner and encourage non-discriminatory and pro-competitive national spectrum policies (including **the assignment of the Digital Dividend**) supporting high mobile broadband take-up.
- The **planned Commission NGA Recommendation should ensure a consistent and technologically neutral approach to broadband regulation supporting the deployment of open networks** in order to create market conditions, which drive demand and innovation to justify investments in high speed fibre access networks. To ensure that access is effective, access pricing should allow a fair return for the investor, but **not have the effect of discriminating in favour of the dominant firm** so as to give it a competitive advantage. Finally, it should maintain the requirement of a minimum **five year notice period** for the closure of MDF sites.
- The Commission should give guidance on the application of price control and non-discrimination rules under the EU telecoms framework so that best practice can be encouraged for these important rules across the EU.
- **Compliance with the Recommendation on fixed and mobile termination rates** should be pursued to guarantee consistency across the EU and guarantee the application of a truly cost-oriented price that prevents abusive on-net practices.
- **Technologically neutral regulation of local access networks should be assured** in all Member States where there is dominance in local access. NRAs should also make full use of the **explicit powers they have been given to seek information on NGA deployments** through Article 5 Framework Directive.
- The new cooperation mechanisms involving BEREC and the Commission should be used **to ensure that consistent analysis and remedies are applied when similar circumstances are found.**

Recommendations to national Ministries

- The **early (or at least timely) national transposition** of the revised Telecoms Framework should be encouraged and guaranteed. This should allow NRAs to mandate **functional separation** under Article 13a of the Access Directive. It would also guarantee that **number portability** takes place in one day at a wholesale charge that is cost-oriented and with retail charges that do not give rise to a disincentive to switching.
- **Independence of NRAs should be guaranteed** (and the Commission should take appropriate infringement actions where it is not), building on the new Article 3 Framework Directive including measures to assure the tenure of Heads and to prohibit Ministerial guidance on issues concerning economic regulation.
- Member States should guarantee, at national level, **NRA empowerment** and independence. Powers should explicitly include the possibility to mandate functional separation, impose Equivalence of inputs, conduct inspections at the corporate and operational premises of operators, apply dissuasive fines up to 5% turnover and periodic penalty payments and

suspend launch of non-compliant services or prices. NRAs should also be made responsible for spectrum activities.

- Member States should establish a **‘one-stop-shop’ mechanism for authorizing rights of way** and addressing disputes concerning rights of way. Reasonable charges and timescales should be established centrally.
- Member States should aim to **streamline appeals proceedings through implementing fast-track measures and/or specialised tribunals** with deadlines for prompt handling telecoms matters. Third parties should be able to intervene in the process.
- Member States should **divest shareholdings in incumbents** or other telecoms operators.
- Member States should ensure that NRAs have adequate resources to perform their tasks and may set wages and incentive schemes independently from civil service benchmarks, if these are insufficient to compete with private sector salaries.

Recommendations to NRAs

- NRAs should review **markets 4 (physical access) and 5 (wholesale broadband access)** in a technology neutral manner so as to ensure that they include FTTH and FTTC technologies within the market and include fibre-based remedies. NRAs should also establish in advance conditions for migration to NGA including notice periods and compensation applicable to the closure of MDF sites. The availability of naked bitstream should be ensured to facilitate competition in double play including VoB.
- Particularly in cases where take-up is low compared with EU benchmarks, NRAs should, in cooperation with each other, **review pricing of essential SMP wholesale products** such as LLU and **ensure consistent access prices for copper and fibre based wholesale products**.
- NRAs should ensure that the **non-discrimination obligation imposed on SMP operators is adequately detailed in relation to each market concerned and strictly enforced**.
- NRAs should ensure compliance with ERG best practice on **SLAs (including varied SLAs to address business needs), KPIs and bulk migration** processes for key wholesale products. NRAs should examine other mechanisms to address non-price discrimination and prevent foreclosure including the use of the same systems (equivalence of inputs) and measures to prevent winback.
- NRAs should ensure the **timely and detailed publication of regulatory accounts** containing sufficient public data to allow independent verification that products are cost-oriented and no anti-competitive cross-subsidies have occurred.
- NRAs should improve **transparency** where possible by ensuring that requests for confidentiality are not granted automatically, but subject to more stringent review. This is in particular the case for cost models.
- NRAs must assess and take necessary action to remedy **incumbents’ foreclosing practices including margin squeeze, bundling and rebates** and adopt methodologies that go beyond the existing principles of competition law and effectively address the specific needs of asymmetric market conditions. This should be in particular the case for multiple play offers.
- NRAs should ensure, through further review of **market 6** (terminating segments of leased lines) if necessary, the availability on reasonable terms of key forward-looking inputs for competitive business service markets – in particular wholesale Ethernet services.

- NRAs should make certain that **complaints about SMP infringements** are addressed in a timely fashion, and that established violations are subject to dissuasive sanctions. NRAs should also **actively pursue enforcement action** when SMP rules are breached including applying penalties and securing compliance within a reasonable timeframe.
- NRAs should prevent the incumbent operators from applying wholesale charges that are not cost-oriented or any retail charges for **number portability**, and should mandate one-day number portability, in particular when wholesale portability costs are high and portability levels are below EU benchmarks.
- NRAs should review **timescales for market analyses and resolution of disputes**. Ideally market analyses should be completed within one year whilst dispute resolution should respect the EU's four month deadline. There should be no mandatory timeframe prior to submitting a dispute.
- NRAs should publish a **forward-looking action plan** following consultation with stakeholders.