European Bank for Reconstruction and Development

LEGAL TRANSITION PROGRAMME
Telecommunications Regulatory Development

COMPARATIVE ASSESSMENT of the
TELECOMMUNICATIONS SECTOR in the
TRANSITION ECONOMIES

Assessment Report  Albania

December 2008
I. BACKGROUND AND OBJECTIVES ....................................................................................... 2
II. SUMMARY OF COMMUNICATIONS SECTOR IN EBRD REGION ........................... 3
   1. EBRD in South East Europe .................................................................................... 3
   2. Albania 3
III. REGIONAL ASSESSMENTS ......................................................................................... 8
    A. SEE Region .............................................................................................................. 8
    B. Performance against Sector Benchmarks ............................................................... 10
       1. Fixed Network Penetration .............................................................................. 10
       2. Mobile service penetration .............................................................................. 12
       3. Broadband penetration .................................................................................... 13
       4. Interconnection Charges ................................................................................. 14
IV. SUMMARY OF RECOMMENDATIONS ......................................................................... 15
V. DATA COLLECTION AND ASSESSMENT METHODOLOGY .................................... 17
   A. Information sources .............................................................................................. 17
   B. WTO Reference Paper and the EBRD assessment model .................................... 19
   C. Explanation of assessments and results ............................................................... 20
      1. Spider diagram .................................................................................................. 20
      2. Fixed network penetration ................................................................................ 21
      3. Mobile network penetration ............................................................................. 22
      4. Broadband network penetration ....................................................................... 22
I. BACKGROUND AND OBJECTIVES

Under the Legal Transition Programme of the European Bank for Reconstruction and Development (the “EBRD” or the “Bank”), the Bank’s Legal Transition Team (LTT) has focused part of its work on the development of detailed analytical assessments of the state of legal transition in a number of commercial and financial sectors of its countries of operation. These assessments benchmark the developments in each country against international or harmonised standards, providing a clear analysis of the existing legislative framework and identifying gaps and future legal reform needs.

The EBRD commenced a project in May 2008 to assess the communications sector in each of the Bank’s countries of operation. The communications sector in this context refers to the market for the supply of telecommunications services, principally fixed line, mobile and broadband services.

The EBRD’s areas of operation are Albania, Armenia, Azerbaijan, Belarus, Bosnia & Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, FYR Macedonia, Georgia, Hungary, Kazakhstan, Kyrgyz Republic, Latvia, Lithuania, Moldova, Mongolia, Montenegro, Poland, Romania, Russian Federation, Serbia (including Kosovo), Slovak Republic, Slovenia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan. Turkey, which was an applicant for EBRD country of operation status during the course of the assessment, was admitted as such in October 2008, and has thus been included in this assessment.

The purpose of this assessment is to examine whether the legal and regulatory framework for communications in the Bank’s countries of operation is sufficiently extensive to secure fundamental sector transition and reform objectives. It therefore measures the state of play in the communications sector (i.e. status, progress, level of approximation of local laws/regulations to international standards, future needs, etc).

EBRD also wishes to be in a position to assess the effectiveness of its technical cooperation efforts as well as pinpointing elements the Bank could provide new or additional technical assistance in furtherance of its mandate.

EBRD contracted consultants Cullen International SA (CI), in conjunction with Development Dynamics Limited (DDL) (the “Consultant”) to collect and analyse the required data and to prepare an assessment report (the “Assessment”).

The results from the Assessment are being published on the EBRD website (http://www.ebrd.com/country/sector/law/telecoms/index.htm) and, on a standalone basis, while summaries of the Assessment will appear in EBRD’s economic review, Transition Report (2008) and in EBRD’s legal journal, Law in transition (Spring 2009).

The specific objectives of the communications sector assessment are:

- Firstly, to provide a credible assessment of the communications sector in the Bank’s countries of operation in order to encourage, influence and provide guidance for ongoing and future legal reform efforts in those countries.
- Secondly, the information provided by the assessments can assist the EBRD to measure legal and regulatory risk in its countries of operations and in specific investment activities.

---

1 Although the Czech Republic is no longer an EBRD country of operation it has been included in the Assessment for comparison purposes.
II. SUMMARY OF COMMUNICATIONS SECTOR IN EBRD REGION

1. EBRD in South East Europe

This section includes summaries of the status of the telecommunications sectors throughout the South East Europe (SEE) Region where EBRD is active. Comprising this sub-region are Albania, Bosnia & Herzegovina, Croatia, Montenegro, Serbia (with Kosovo assessed separately), and FYR Macedonia. Turkey has been added to this sub-region, as it has applied for EBRD country of operation status, and acts as a useful comparator.

This information is copied from the first report of the study: “Supply of services in monitoring regulatory and market developments for electronic communications and information services in enlargement countries”, which is being performed by Cullen International for the European Commission. This report, which has been in development from the second quarter of 2008, is planned for publication on the European Commission’s website in the September/October time frame.

The summaries are intended to provide an insight into the regulatory regime and to highlight factors that have influenced the regulatory assessment.

2. Albania

a) Institutional framework

The new Law on Electronic Communications (Law No. 9918 of May 19, 2008) that entered into force on June 26, 2008 is the main legal instrument that regulates the electronic communications sector in Albania and defines its institutional framework, including the responsibilities of the government, the relevant ministry and the national regulatory authority. That law replaces the previous Law on Telecommunications of 2000 and is intended to bring the Albanian law in compliance with the principles of the EU 2003 regulatory framework for electronic communications.

The Ministry of Public Affairs, Transport and Telecommunications (the “Ministry”) is the central state administration body responsible for electronic communications and postal services through its General Directorate of Posts and Telecommunications.

The Ministry is responsible for preparing and presenting for the approval by the Council of Ministers the proposal for the policy on electronic communication field, drafting relevant primary and secondary legislation, preparing the National Radio Frequency Plan and approval of the tender procedures for the frequency assignment and designation of the universal service providers based on the proposals of the regulator.

The Law on Electronic Communications establishes the Albanian Authority of Electronic and Postal Communications (AKEP) as a new regulatory authority that assumes the tasks and responsibilities of the previous regulator for telecommunications (the Telecommunications Regulatory Entity). AKEP is a public, independent, non-budgetary, legal entity responsible for carrying out regulatory tasks defined under the Law on Electronic Communications, including adoption and administration of implementing legislation within its competencies.

AKEP is governed by a Governing Council composed of five members appointed for a 5 year office term, by the Assembly of the Republic of Albania, on the proposal of the Council of Ministers, and having the right for no more than one office term. The Assembly appoints one of the members of the Governing Council as the Chairman, who also acts as the Executive Director of AKEP.

AKEP is a self-financed entity funded from the annual market supervision fees paid by undertakings providing electronic communications networks and services. There is a requirement for AKEP to present, at the beginning of each financial year, its forecasted operational costs for approval by the Council of Ministers. Any amount exceeding the expenses of AKEP in the year is transferred to the State Budget.

AKEP is accountable for its activities before the Assembly of the Republic of Albania. At the end of each year, AKEP is required to submit an annual report on its activity to the Assembly.
Appeals against decisions of the AKEP Governing Council may be brought before the Tirana District Court (the Court of First Instance), within 30 days from the decision date.

b) Regulatory independence

On June 19, 2007, after a two-year period of negotiations over the details over the privatisation of Albtelecom, Calik Enerji and the Albanian Ministry of Economy, Trade and Energy, signed the agreement for the sale of a 76% stake of the incumbent operator to a joint venture of Calik Enerji and Turk Telekom. The deal also included Eagle Mobile, the third mobile operator. The privatisation agreement was ratified by the Albanian Parliament on July 19, 2007.

The Albanian state still controls 24% of the shares in Albtelecom and Eagle Mobile and 12.6% of the shares in the mobile operator AMC\(^2\). The ownership functions are exercised by the Ministry of Economy, Trade and Energy.

Although the Law on Electronic Communications stipulates that the members of AKEP Governing Council may not be owners, stockholders or shareholders in regulated entities or perform any other tasks resulting in a conflict of interest, the complete separation of operational from regulatory functions has not been accomplished as officials from the Ministry of Public Affairs, Transport and Telecommunications are also represented in the managing boards of the operators.

The administrative independence of AKEP is undermined by the legal provisions restricting its ability to decide independently on its organisational structure and the salary level of its staff. Similarly to the previous Law on Telecommunications, the new Law on Electronic Communications maintains the requirement for AKEP organisational structure and its staff salary level to be approved by the Assembly upon proposal by the Council of Ministers.

Another factor undermining the regulator’s independence is the recent record of repeated dismissals of its Council members for reasons that were not always stated in a transparent manner and possibly caused by politically motivated decisions.

c) Market access and authorisations

Liberalisation of fixed electronic communications networks and services was introduced gradually: starting with rural local networks in 1998, moving to domestic long distance networks in July 2003 and international networks in January 2005. However, in practice, competition has only emerged at the level of rural local networks, as no alternative fixed network operators have been licensed to supply long distance and international services in competition with the incumbent Albtelecom. Only amendments to the Law on Telecommunications adopted in November 2006 introduced a new concept of regional licences for rural, urban, and domestic long distance networks and effectively opened urban local networks for competition. The relevant implementing legislation was adopted by the regulator in April 2007.

The new Law on Electronic Communications (June 2008) introduced a general authorisation regime where electronic communications network and services that do not require the use of limited resources can be provided without individual licences, subject to a general authorisation with a notification submitted to AKEP, which must complete the registration of the notification within 15 days from its receipt.

NB. The new Law on Electronic Communications came into effect on June 26, 2008. In practice, it requires secondary legislation before the new authorisation regime is fully implemented. The regulatory assessment carried out for Albania therefore reflects the fact that the country is still in transition as this report is being written.

Individual licences will be issued by AKEP for the rights of use of the radio frequency spectrum. There are plans to licence a fourth GSM mobile operator in compliance with the provisions of the new law.

\(^2\) The Albanian government has announced in October 2008 that it will sell its remaining 12.56% share of Albanian Mobile Communications (AMC),
d) Significant market power

Under the Law on Telecommunications of 2000, the regulator had discretion to define relevant markets applying competition law principles. However, the undertakings with SMP were designated on the basis of the static 25% market share threshold, sometimes together with assessment of other criteria. Basic remedies applied to all operators with SMP were defined by the Law on Telecommunications, while some further discretionary remedies that could be imposed on SMP operators by the NRA were set out in TRE Regulation on Access and Interconnection of December 7, 2007.

On September 18, 2007 the regulator designated the mobile operators, AMC and Vodafone, as having SMP in the markets for wholesale call termination in individual mobile networks and retail public mobile services and imposing the regulatory obligations of access and interconnection, non-discrimination, transparency including the requirement to publish RIO, price control, accounting separation and cost accounting.

On November 13, 2007 the regulator designated Albtelecom as having SMP in the six relevant markets, covering retail access and publicly available phone calls at fixed location, wholesale call termination on geographic numbers in Albtelecom fixed network, wholesale call origination on the public fixed telephone network, national transit services in the public fixed telephone network and International transit services in the public telephone network. The scope of regulatory obligations includes: carrier selection, carrier pre-selection, access and interconnection, non-discrimination, transparency including the requirement to publish RIO, price control, accounting separation and cost accounting.

Since 2007, AKEP has introduced full market analysis procedures, definition of relevant markets, SMP designations and imposition of remedies on SMP operators based on the principles of the Law on Competition and the EU 2003 regulatory framework. The new law requires AKEP to carry out market analysis procedures at least once every two years. Until the Agency has completed its market analyses under the new framework, the previous SMP designations and regulatory obligations will remain in force.

e) Competitive safeguards

Most of the key competitive safeguards foreseen under the EU 1998 regulatory framework have not yet been fully implemented in Albania.

- In March 2008 Albtelecom, AMC and Vodafone submitted their first RIOs to the regulator for approval and the decision on compliancy of RIOs will be adopted following a public consultation.
- TRE adopted a regulation in December 2007 on Access and Interconnection that includes the rules for publication and content of a RUO, but there is no obligation yet for Albtelecom to provide LLU and publish a RUO.
- CS/CPS is imposed as a regulatory obligation on Albtelecom but implementation is not foreseen before 2009.
- No decision on implementation of number portability has been adopted so far.

f) Universal service and consumer issues

Under the Law on Electronic Communications, AKEP can designate one or more universal service providers based on a public tender procedure, subject to Ministry approval. The scope of universal service includes the following elements;

- access to the telephone service available to the public from a defined geographic location, enabling the user to make and receive local, national and international calls, facsimile communications and data communication at a minimum speed of 32 kbps;
- telephone directory;
- public payphones;
- equivalent access to and use of telephone service made available to the disabled end-users, including access to emergency calls services and information in telephone directory.
All public telecommunications networks operators are required to provide free access to emergency services.

g) Outlook
The main requirements of the 2003 EU framework in the field of electronic communications networks and services will now be implemented following the adoption of the new Law on Telecommunications (June 2008). Competitive safeguards, such as number portability, carrier selection, carrier pre-selection, local loop unbundling and costing models for the introduction of cost-based tariffs are all planned. AKEP is also improving its expertise and capacity.

h) Assessment
Albania is deemed to have “High compliance”.
Key indicators for Albania

For details of the definitions of the main terms used in these graphics, please refer to “Explanation of assessment and results” in Section II of this report.
III. REGIONAL ASSESSMENTS

A. SEE Region

For details of the definitions of the main terms used in these graphics, please refer to “Explanation of assessment and results” in Section II of this report.

Regulatory environment

Independent regulatory authorities that meet the conditions defined in our assessment model\(^3\) have been established throughout almost all of the South East Europe Region. Kosovo is deemed to have the weakest arrangement because the NRA is financially dependent on the state budget, it lacks a clear requirement for consultation with market participants and only one example is provided where the NRA has acted against the incumbent operator. Nevertheless, Kosovo is ranked on par with the best from the CIS+M group.

For dispute resolution and appeal, Albania, Croatia, FYR Macedonia, and Turkey can provide several examples of dispute cases that have been successfully resolved.

Some within the SEE Region have legislation that triggers automatic suspension when a regulatory decision is appealed. This is the case for Albania and Serbia. Automatic suspension can seriously weaken the authority of the regulator, in particular where the appeal procedure is lengthy. In Croatia, an appeal can take several years.

Market access

FYR Macedonia, and recently Albania and Croatia after adoption of their new laws, have established a framework with general authorisations in line with the EU requirements for all activities that do not require access to scarce resources.

Serbia ranks at the other end of the scale, because it has not yet established an operational licensing regime for fixed telephony networks and services.

---

\(^3\) The situation in Montenegro has changed following the passing of a new Law in August 2008, see footnote 16
The other constituents of the SEE Region have licensing regimes with some remaining deficiencies, in particular for telephony:

- Bosnia & Herzegovina have high licensing fees which may act as a barrier to entry;
- Montenegro grants licences through a tendering procedure;
- Kosovo has high licensing fees which may act as a barrier to entry;
- Turkey has restrictions on the granting of licences.

The provisions for granting rights to scarce resources are mostly correct. However, Serbia has been marked down for granting a mobile licence to the incumbent operator without a competitive procedure within the last three years.

Operational environment

Regimes are in place for market analysis and designation of operators with significant market power throughout the SEE Region, although it is fairly rudimentary in Kosovo.

In Albania, Bosnia & Herzegovina, FYR Macedonia, and Turkey the regimes meet or resemble the requirements of the EU, i.e. precise definition of retail and wholesale markets. In Montenegro and Serbia, the regime is still based on the 1998 acquis of the European Union, while Croatia is in transition from the 1998 to the 2002 acquis.

Most regulators in the SEE region have designated SMP operators and established remedies to ensure fair competition. However, this has not yet happened in Montenegro. Serbia has designated two operators, but there is no available information on what remedies have been applied. Kosovo has designated an operator with a range of remedies, but only for retail markets. There has been no SMP designation yet for wholesale markets.

Albania, Serbia, and Kosovo have not yet taken steps to implement carrier selection, pre-selection and number portability. In Bosnia & Herzegovina and Croatia, these safeguards are operational, while in FYR Macedonia and Turkey they are now partly implemented.

Reference interconnection offers are implemented and operational in most of the SEE Region. The main exception is Serbia, where a RIO is not yet established.

Only Croatia and Turkey have implemented local loop unbundling in practice. FYR Macedonia has established the enabling regulations, but cannot demonstrate that it is being used yet.

Universal service

Throughout the SEE Region the criteria for universal service is met as defined by our assessment model.

Conclusions on regulatory compliance for SEE sub-region

These assessments lead to the overall conclusions that:

- Full compliance is found in Croatia and FYR Macedonia;
- High compliance is found in Albania, Bosnia & Herzegovina and Turkey;
- Medium compliance is found in Montenegro and Kosovo;
- Low compliance is found in Serbia.
B. Performance against Sector Benchmarks

Information on the penetration of fixed networks, mobile services, and broadband services was collected from the EBRD Region of operation during the assessment. In most cases, this information is collected routinely by government ministries or sector regulators. In other cases, independent sources were used. In the case of the EU, fixed line penetration is no longer reported in the Implementation Report\(^4\), and we have relied on the ITU database for comparable figures. In some other countries, where figures in comparable form were not available centrally from government or regulatory sources, we have relied upon independent estimates from press releases or interviews with the main market operators.

In the graphical presentations that follow, fixed network penetration, mobile penetration and broadband penetration levels are compared within each of the three sub-regions (EBRD countries of operation in the EU, SEE Region, CIS countries plus Mongolia) and within the ETC countries, in addition to the EU with its 27 Member States. All penetration figures are expressed in terms of numbers of lines in service per 100 population.

To allow comparisons within each sub-region, and between sub-regions, the average penetration for each sub-region is shown on each graph. In some graphs, the range of highest and lowest is also shown for particular sub-regions.

For broadband, if the penetration has been estimated at less than 1 per 100 population (<1%), no figure is shown on the graphs.

For CIS+M and SEE Region, the information was collected in May and June 2008 and is quoted as the latest available (normally end March 2008). Where a date is known to be significantly different from March 2008, this is shown as a special note. For EU countries, the data relates to mid 2007.

Some information was requested during the assessment on fixed operator interconnection charges for wholesale call termination rates (the actual figures requested were from the incumbent fixed operator for local, single transit and double transit per minute call termination charges). The figures shown in our benchmarking results are from countries where the results could be reasonably compared with equivalent EU27 average results, as reported in the 13\(^{th}\) Implementation Report. For this reason, only selected countries are shown. The figures expressed on the graphs are comparative to the EU results, using a simple average of the highest and lowest call termination charges for a country, compared to the equivalent average of the EU27 average country result. This is therefore an approximate measure of comparative interconnection charges, giving only a broad indication of the level of interconnection charges that are faced by operators in other regions, in comparison to the EU.

1. Fixed Network Penetration

Average fixed network penetration in CIS+M is around the same as the SEE region and the EBRD countries in the EU. All three sub-regional averages are significantly behind the average for the whole of the EU. Average fixed penetration in ETC countries is significantly behind all averages.

Fixed network penetration SEE Region

Note: The shaded area in pale red represents the span between the highest and the lowest penetration figures in the EU Member States where the EBRD operates. The penetration figures are from the annual ITU statistics for 2007.

For details of the definitions of the main terms used in these graphics, please refer to “Explanation of assessment and results” in Section II of this report.

The EU countries achieved their relatively high levels of fixed network penetration before the introduction of mobile networks and during their monopoly period (up to 1998), in most cases largely under state control. The average fixed network penetration in EU27 countries is 45 per 100 population. For the EBRD countries of operation that are within the EU, fixed network penetration ranges from 20 to 43 per 100 population.

CIS+M and SEE Region generally failed to achieve average EU levels of fixed network penetration. Only Belarus, Croatia and Serbia, have achieved between 30-40 fixed lines per 100 population. In the remainder of these sub-regions where only between 10-30 fixed lines per 100 population was reached, far greater universality with mobile networks under competitive conditions has been achieved than was ever achieved with fixed lines under monopolies.

Universal service policy in EU countries now includes issues such as whether the lack of availability or non-use by a minority of consumers results in social exclusion. This means that, with universality largely achieved, the focus of the market shifts towards consumer issues such as better payment options, and better services for disadvantaged customers (for example disabled users and low income groups).
Where low penetration countries have now started to implement effective universal service policies, such as Mongolia and Russia, the focus has been not only on increasing the penetration of basic services, but also on providing Internet services.

Sub-regional averages on fixed network penetration are as follows:

<table>
<thead>
<tr>
<th>Sub-region</th>
<th>Above their sub-regional averages</th>
<th>Below their sub-regional averages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EBRD countries in EU</strong></td>
<td>Bulgaria, Estonia, Hungary, Slovenia, Latvia, Poland, Czech Republic</td>
<td>Lithuania, Romania, Slovak Republic</td>
</tr>
<tr>
<td><strong>South Eastern Europe</strong></td>
<td>Serbia, Croatia</td>
<td>Montenegro, Bosnia &amp; Herzegovina, Macedonia, Albania, Kosovo</td>
</tr>
<tr>
<td><strong>CIS plus Mongolia</strong></td>
<td>Belarus, Russia, Ukraine, Armenia, Moldova</td>
<td>Kazakhstan, Georgia, Azerbaijan, Kyrgyz Republic, Uzbekistan, Turkmenistan, Mongolia, Tajikistan</td>
</tr>
</tbody>
</table>

2. Mobile service penetration

The rapid penetration of mobile services has been dramatic and is now exceeding fixed line penetration in all throughout. The highest performers have been Lithuania, Latvia, Estonia, Bulgaria, Czech Republic, Hungary, Slovak Republic, Montenegro, Russia, Ukraine, Croatia and Serbia, which have all achieved penetration rates over 100%. The significantly higher rate (168%) for Montenegro is reported to be a result of the high number of tourists (relative to the county’s population) that take out a temporary mobile subscription.

The lowest penetration for mobiles can be found in Mongolia, Kyrgyz Republic, Tajikistan, Uzbekistan and Turkmenistan, each at still under 50%. These are the same countries in the CIS+M region that have the lowest fixed penetration. In the SEE Region, the lowest mobile penetration can be found in Kosovo and Albania, areas which also have the lowest fixed network penetration in SEE.
Mobile penetration in SEE Region

Note: The shaded area in pale red represents the span between the highest and the lowest penetration figures in the EU Member States where the EBRD operates.

Sub-regional averages on mobile penetration are as follows:

<table>
<thead>
<tr>
<th>Sub-region</th>
<th>Above their sub-regional averages</th>
<th>Below their sub-regional averages</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBRD countries in EU</td>
<td>Latvia, Lithuania, Estonia, Bulgaria, Czech Republic</td>
<td>Hungary, Poland, Romania, Slovak Republic, Slovenia</td>
</tr>
<tr>
<td>South Eastern Europe</td>
<td>Montenegro, Serbia, Croatia, FYR Macedonia</td>
<td>Albania, Bosnia &amp; Herzegovina, Kosovo</td>
</tr>
<tr>
<td>CIS plus Mongolia</td>
<td>Ukraine, Russia</td>
<td>Kazakhstan, Belarus, Azerbaijan, Armenia Georgia, Moldova, Azerbaijan, Mongolia, Kyrgyz Republic, Tajikistan, Uzbekistan, Turkmenistan</td>
</tr>
</tbody>
</table>

Mobile Service Penetration: Above and below their sub-regional averages

3. Broadband penetration

In the EU countries, where fixed penetration is highest and the competitive safeguard of Local Loop Unbundling is obligatory on SMP operators, broadband has soared. In CIS+M and the SEE Region, those with the lowest fixed line penetration started with a major disadvantage here, with Kosovo, Montenegro, Bosnia Herzegovina, Albania, and the whole of the CIS+M region (except
Russia) having less than a 5% penetration of Broadband. Russia has achieved only 6%, despite strong investment generally in the sector.

![Broadband access penetration](image)

Note: The graph does not show penetration figures under 1%. The shaded area in pale red represents the span between the highest and the lowest penetration figures in the EU Member States where the EBRD operates.

4. Interconnection Charges

One of the largest operating costs that a competitor faces when entering the telecommunications market is the wholesale interconnection charge that the incumbent fixed network operators make for terminating calls to their customers.

Wholesale interconnection arrangements are normally agreed between operators, but these arrangements become a main target for regulators when it is suspected that the incumbents are using their dominant position to restrict supply of interconnection capacity, or to charging higher than fair prices. Without regulatory intervention, incumbent operators with significant market power could use interconnection capacity restrictions and high charges to restrict competitors’ growth and to apply “margin squeeze”.

Regulators in the EU have successfully reduced interconnection charges, and made sure that the arrangements for interconnection are fairly applied by incumbents in an open, non-discriminatory manner. EU levels of fixed call termination charges have become the industry benchmark because regulatory action has managed to reduce these towards best practice long-run average incremental costs. This means that new entrants to the market only face modern technology-based incremental costs, and not the higher costs reflecting the historic inefficiencies of the incumbent.
Regulators in CIS+M and SEE have been less successful in applying this important competitive safeguard, as the graphs below illustrate.

![Graph](image)

Relative fixed network termination charge (selected SEE Region)

For details of the definitions of the main terms used in these graphics, please refer to “Explanation of assessment and results” in Section II of this report.

The assessment results show that generally, where fixed networks call termination charges are relatively high, competition develops slower than where this is not the case.

Incumbent fixed network operators should not pass on their higher operating costs to competitors in the form of monopolistic call termination charges. Competitors cannot avoid paying interconnection charges, because they have to use the incumbent’s network to terminate calls to the incumbent’s customers.

This is therefore one instrument where CIS+M and SEE sector regulators could make rapid improvements in market conditions for competitors. The EU experience has now given us reliable empirical data on interconnection charges from a many countries, which can be used confidently in other areas as proxies for best practice long-run incremental costs.

IV. SUMMARY OF RECOMMENDATIONS

The general conclusion of the assessment is that for countries with only low or medium compliance, the most important steps to be taken are to achieve independent sector regulation and to put in place best practice competitive safeguards (especially SMP and interconnection). Other factors such as universal service, market access (including licensing/authorisation) and

---

5 In September 2008, the telecommunications regulator in Albania enforced a reduction in call termination charges to align with the EU average
dispute resolution/appeals mechanisms are important steps, but they appear secondary when considering overall regulatory performance.

The key elements of the required reforms in medium and low compliance countries are:

- **Regulatory Independence:**
  First and foremost, the country’s legal framework must include the objective to establish a regulatory authority that is independent from the operators and reasonably independent from political pressure. In practice, such a legal environment may be in place, and yet the regulator does not necessarily behave in an independent and fair way. Real independence and fairness are difficult to measure in an objective way. However, the regulator has to demonstrate that it makes decisions that are fair, transparent, and non-discriminatory after taking into account the market conditions and by consulting widely.

- **Competitive Safeguards:**
  Competitive safeguards are those measures that are intended to protect new entrants against the anti-competitive practices of incumbent operator(s) with significant market power. Firstly there have to be formal and objective procedures to identify the existence of significant market power. This procedure should ideally be based on formal market definition and analysis according to competition law principles. Once it has been established that the designation procedure is in place, the next requirement is whether the procedure has been carried out whether the SMP operators been set proportionately and effective obligations such as the need to observe non-discrimination and transparency.

In addition, specific implementation (in legal provisions and in practice) of number portability, carrier selection and carrier pre-selection are required.

A proven safeguard is the use of a reference interconnection offer (RIO) that is approved by the regulator and published. This RIO should also apply to competitive activities of the incumbent operator. Similarly, the existence of a reference unbundling offer (RUO) and its actual use in providing services by alternative operators.

The countries most in need of reform for making the regulator more independent are Russia, Kazakhstan, Tajikistan, Belarus, Turkmenistan, Uzbekistan, and Azerbaijan.

These same countries, plus Ukraine, Kosovo, Armenia, and Serbia would benefit most from the introduction of more effective competitive safeguards.

Therefore, the main recommendations resulting from this assessment are:

1. Continue the fast pace of regulatory reform in South Eastern Europe, and apply special attention to Serbia and Kosovo, where the reforms have been slowest.

2. Significantly increase the pace of regulatory reform in the low performing CIS+M countries, particularly Kazakhstan, Tajikistan, Belarus, Turkmenistan, Uzbekistan, and Azerbaijan. The main focus of the needed reforms is regulatory independence and implementing competitive safeguards.

3. Continue reform efforts already well underway in all medium performing countries (particularly Montenegro, Mongolia, Ukraine, Kyrgyz Republic, Armenia and Moldova).

4. In countries where the dominant fixed network incumbent still charges high call termination charges (and other high wholesale fees to competitors), immediate benefits could be realised by regulatory action. Regulatory powers should be applied to enforce best practice long-run average incremental costs to be used by incumbents, and refer to EU empirical data as reliable benchmarks.

5. CIS+M countries still employing soviet-style “universal service” legacy policies should abandon these. For example:
• Unbalanced tariff structures (where line rentals and/or local calls are priced well below cost and are cross-subsidised by excess profits made on international and national calls) should be phased out as quickly as possible.

• The continued use state funds to subsidise loss-making services for basic fixed line rentals should be phased out in parallel with tariff rebalancing.

• Legacy policies related to the use of state subsidies should be replaced in favour of more modern technologically and competitively neutral polices, as demonstrated effectively in Mongolia.

6. In order to monitor the progress of reform, and to direct the focus of technical assistance efforts, the assessment needs to be on a regular basis of at least once per year. The assessment of the EU countries is already effective with widespread and up to date commentaries are easily available. For SEE Region, where regulatory reform has been most rapid, assessment is already improving as investors focus more on this region. The CIS+M countries need a more regular flow of information in order to perform regulatory assessments equal to the detailed understanding of the workings of the EU telecommunications framework.

7. For this reason, it is recommended that a formalised country tracking system is developed which can feed into regular assessments of telecommunications markets in the 12 CIS states plus Mongolia.

V. DATA COLLECTION AND ASSESSMENT METHODOLOGY

A. Information sources

The Consultant has drawn upon a variety of sector data and information, both inside and outside each country. Some background information was readily available and easily accessible for desk research. These sources included the European Commission; the International telecommunications Union; EBRD; World Bank; together with the websites of national regulatory authorities, national governments and their constituent ministries, official national data sources, local technical and general news and industry websites, professional data sources, international organisations and institutions, etc.

For the EBRD countries of operation that are in the European (EU), i.e. Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic and Slovenia, plus the Czech Republic, we have relied upon the “Progress Report on the Single European Electronic Communications Market 2007 (13th Report) {COM(2008) 153}”.

The primary source of data for the assessment of the remaining countries was the country sector authorities (i.e. national regulatory authorities, sector related agencies and sector ministries).

For the South Eastern Europe (SEE) Region, i.e. Albania, Bosnia and Herzegovina,, Croatia, FYR Macedonia, Montenegro and Serbia, (with Kosovo assessed separately), the required data was collected alongside the parallel project: “Supply of Services in Monitoring Regulatory and Market Developments for Electronic Communications and Information Society Services in Enlargement Countries”: This is a European Commission project that was awarded to Cullen International in 2007. The first monitoring report was published on the Commission’s website\(^6\) in October 2008.

To achieve a consistent basis for the collection of data in the remaining EBRD countries of operation (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Mongolia, Russian Federation, Tajikistan, Turkmenistan, Ukraine and

Uzbekistan), a specially designed questionnaire was used. The full Questionnaire is included in Annex A.

The Consultant received a varying degree of co-operation from these authorities. Some have been fully co-operative, while other authorities have been less responsive.

Where possible, particularly where the response of the sector authorities was insufficient or absent, appropriate alternative sources of data were referred to, including:

- Business information of interest to existing and prospective operators/investors such as licensing procedures, technical requirements, interconnection agreements, online forms for certification, authorisation etc. Here information, which explains and describes the procedures and requirements looked for, rather than the mere formal documentation and legislation itself.

- Consumer and citizen Information: Information of interest to investors, prospective investors, end-users or prospective end-users about consumer information, universal service, consumer rights (and reporting abuses) and tariffs. In addition to actual legislation and formal guidelines, digested information was looked for, such as clear explanations (e.g. complaint procedure), and frequently asked questions (FAQs) on Ministry and regulatory websites, which will be important to the consumers.

- Telecom regulatory news and other news or journalistic based sources: This element covered information, regulatory news and developments published or available from researchers and journalists.

A full list of the people contacted in each country is given in Annex B.

Note: The information collected from the EU Member States and the South East European Region is a result of monitoring procedures and methods that have been developed over many years. The information collected from Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Mongolia, Russian Federation, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan (collectively referred to in this report as “CIS+M”) represents a first effort to collect regulatory information with a certain level of detail. The availability of information from these sub-region can suffer not only from a varying degree of co-operation from the authorities, but also from what is often a lower level of transparency in general when it comes to many aspects of regulations. Accordingly, the same level of accuracy should not be expected for the information presented from these sub-regions.

The above information was collected during May and June 2008 after which an assessment methodology developed for the purposes of the Assessment was applied. This regulatory assessment model is intended as a guide to place national regulatory arrangements for the telecommunications sector into one of four broad categories: Full compliance, High compliance, Medium compliance and Low compliance.

Compliance in this context should be understood as compliance with the World Trade Organisation (WTO) Reference Paper on Telecommunications Services, which is explained below. It specifically does not mean full compliance with EU regulatory framework(s). Such compliance would require much more detailed assessment than that provided by this model. Furthermore, assessment and the assessment categories are intended to provide a quick guide to the overall situation in the country. This assessment model is intended to work with a wide range of national environments. In this context, we would expect that all EU Member States would be found fully compliant according to this model. The assessment indicators are intended to be as objective and factual as possible. Value judgments are avoided as far as possible.

In the assessment, each country is given a compliance score, as follows;

*Full Compliance* means an assessment score of 90-100

*High Compliance* means an assessment score of 75-89

---

7 At the date of the assessment the Republic of Georgia was part of the Confederation of Independent States (CIS). The CIS Council of Ministers approved Georgia’s application to withdraw from the organisation on 9th October 2008.
Medium Compliance means an assessment score of 50-74
Low Compliance means an assessment score of under 50

Note: All compliance categories are defined as ranges of assessment values; This is also the case for "Full Compliance", which may therefore not always represent 100% compliance in the sense of a score of 100. It is the highest assessment category in the EBRD assessment model, but there may still be some aspects of the framework that have been marked down by the assessment model.

The details of the regulatory assessment model and methodology are given in Annex C.

B. WTO Reference Paper and the EBRD assessment model

Some telecommunications services, mainly value added services, were included in the Uruguay Round of trade negotiations which took place between 1986 and 1994. After completion of these negotiations, WTO Members decided to open special negotiations for trade in basic telecommunications services, such as voice telephony, data transmission and satellite services. These additional negotiations took place from 1994 to 1997 and around 70 countries agreed in February 1997 to open their markets for basic telecommunications services in a multilateral agreement. Since then, more countries have become WTO Members and/or signatories to the agreement on basic telecommunications services\(^8\).

The agreement itself is complex and allows each signatory to define its own set of commitments, i.e. which services can be open for international competition, the categories of business models that would be allowed and whether to extend these commitments to other countries or not, through most-favoured-nation clauses.

The agreement also includes provisions for how this international competition shall be regulated. This is done through a “Reference Paper”, which defines a set of regulatory principles for the establishment of fair market conditions. In the context of the trade negotiations that took place, the countries were given the choice of making a formal commitment to accept the Reference Paper. Most of the WTO Members made this commitment. At this time around 75 countries, including the EU Member States, have accepted the Reference Paper. From a legal point of view, a commitment to the Reference Paper means that it is part of the international treaty and therefore binding on the WTO Members.

The WTO Reference Paper\(^9\) itself is a short 2½ page document that sets out rather broad and general principles which have achieved a high degree of consensus. Its main points are:

- **Competitive safeguards**
  - Prevention of anti-competitive practices
  - Safeguards

- **Interconnection**
  - Interconnection to be ensured
  - Public availability of the procedures for interconnection negotiations
  - Transparency of interconnection arrangements
  - Interconnection: dispute settlement

- **Universal service**

- **Public availability of licensing criteria**

---

\(^8\) The full name of the agreement is Scheduled Commitments on basic telecommunications services annexed to the Fourth Protocol of the GATS (15 February 1997)

\(^9\) http://www.wto.org/english/news_e/pres97_e/refpap-e.htm
• Independent regulators
• Allocation and use of scarce resources

By comparison, the EU framework is set out in several directives with around 100 pages of detailed specification of how these principles should be implemented.

The EBRD assessment model is based on the WTO Reference Paper, but many of the specific indicators are drawn from the examples provided by the EU framework. The structure of the assessment model is as follows:

• Institutional framework
  o Regulatory independence
  o Dispute resolution and appeal
• Market access
  o Access to non-scarce resources
  o Access to scarce resources
• Operational environment
  o Safeguards
  o Interconnection and special access
• Universal service

A full description of the EBRD assessment model is provided in Annex C.

C. Explanation of assessments and results

1. Spider diagram

A spider diagram presents the main results of the Assessment. It includes six main group indicators. For each indicator, the diagram presents the scores as percentages of the maximum achievable score. The scores begin at zero at the centre of the chart and reach 1.00 at the outside, so that in the overall chart, the wider the web, the better the scores in the assessment.

This type of diagram is useful because it provides a summary of the assessment at a quick glance. However, it is not able to show the relative weight given to each group indicator. Nor is it able to present negative values. This means that it cannot include universal service, which is handled in the assessment model by the alternative means of applying a negative score to unsatisfactory results. Where this occurs, it is mentioned in a note below the diagram.

For a more detailed description of the assessment model, see Annex C.

The six group indicators shown in the spider diagram are:

8. Regulatory independence – maximum 22 points

This group indicator is intended to show whether the legal framework includes a regulatory authority that is independent from the operators, reasonably independent from political pressure and with sufficient powers to regulate the market.

9. Dispute resolution and appeal – maximum 10 points

Points have been assigned where the National Regulatory Authority (NRA) has the power to resolve commercial disputes between operators and can demonstrate that such disputes have been resolved. The group indicator also assigns points where there is a reasonably efficient appeal mechanism. Most countries have the possibility to appeal a decision by the NRA to the administrative court system. But a country has points taken away if the appeal procedure takes too much time or if the appeal mechanism is not being used.

10. Market access wired – maximum 20 points
This group indicator looks at the authorisation framework for networks and services that do not depend on scarce resources. A country has points taken away if there are services that are not open to competition, if the licensing fees are high and if the authorisation framework is complex and there is uncertainty whether licences will be granted.

11. Market access radio – maximum 10 points

This group indicator looks at whether the regulatory framework provides certainty for non-discriminatory access to radio spectrum. It also considers whether numbering resources are available to all operators.

12. SMP and safeguards – maximum 20 points

Competitive safeguards are those measures that are intended to protect new entrants against the anti-competitive practices of incumbent operator(s) with significant market power.

The model identifies if there are formal and objective procedures to identify the existence of significant market power. It assigns a higher value if this procedure is based on a formal market analysis according to competition law principles and a lesser value if a simpler procedure based on market share is used.

In addition, the assessment model looks for specific implementation (in legal provisions and in practice) of number portability, carrier selection and carrier pre-selection.

13. Interconnection and special access – maximum 18 points

This group indicator gives points for the existence of a reference interconnection offer (RIO) that is approved by the NRA and published. However, a country has points taken away if the legal framework does not set out requirement for non-discrimination for RIO usage or if there is little evidence that the RIO is being used.

Similarly, the assessment model looks for the existence of a reference unbundling offer (RUO) and assigns value where a RUO has been approved and additional points if it is used to provide services by alternative operators.

14. Universal service

The WTO Reference Paper does not require a universal service policy. But if such a policy is implemented, it should meet certain criteria:

- the objectives should be reasonable in light of the national economy and the status of the network(s).
- the objectives should be expressed in a form that is technologically neutral. (For example, they should take into account the contributions of mobile networks to the provision of universal service.)
- the obligations arising from universal service obligations, which may be a funding requirement for some of the competitors, should be non-discriminatory, competitively neutral and not overly burdensome. They should not be perceived as a barrier to market entry.

If these criteria are not met, a negative value may be assigned. Spider diagrams cannot reflect negative values. Where such negative values occur, it is mentioned in a note under the diagram.

2. Fixed network penetration

This chart provides the fixed network penetration defined as active subscriber lines as a percentage of population. The averages are defined as follows:
3. Mobile network penetration

This chart provides the mobile network penetration defined as active pre- and post-paid subscribers as a percentage of population. The averages are defined as follows:

- The EU average is the average for the 27 EU Member States as reported by the 13th Implementation Report by the European Commission.
- The SEE average is the average for Albania, Bosnia & Herzegovina, Croatia, FYR Macedonia, Montenegro, Serbia, Kosovo and Turkey as reported in Cullen International’s first report of the study: “Supply of Services in Monitoring Regulatory and Market Developments for Electronic Communications and Information Society Services in Enlargement Countries” for the European Commission. Turkey, which is included in the report for the European Commission, is not included in the averages for SEE in this report.
- The CIS average is the average for the Commonwealth and Independent States (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan) plus Mongolia as reported in this study.
- The EU10 average is the average for the EU Member States that are included in this report, i.e. Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic and Slovenia.

4. Broadband network penetration

This chart provides the broadband network penetration defined as the number of access subscribers with speeds of 144k/bits or more as a percentage of population. The averages are defined as follows:

- The EU average is the average for the 27 EU Member States as reported by the 13th Implementation Report by the European Commission.
- The SEE average is the average for Albania, Bosnia & Herzegovina, Croatia, FYR Macedonia, Montenegro, Serbia, Kosovo and Turkey as reported in Cullen International’s first report of the study: “Supply of Services in Monitoring Regulatory and Market Developments for Electronic Communications and Information Society Services in Enlargement Countries” for the European Commission. Turkey, which is included in the report for the European Commission, is not included in the averages for SEE in this report.
- The CIS average is the average for the Commonwealth and Independent States (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan) plus Mongolia as reported in this study.
- The EU10 average is the average for the EU Member States that are included in this report, i.e. Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic and Slovenia.
The EU10 average is the average for the EU Member States that are included in this report, i.e. Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic and Slovenia.

Note: The date of the main information used in this assessment is April 2008. Changes that we are aware of that have occurred since Spring 2008 have been incorporated in the report with appropriate footnotes/references. There may have been changes that have occurred that we are not aware of, in which case we would welcome readers to send in details with appropriate reference sources. The regulatory assessment results have used the April 2008 information in order to present a consistent set of results for comparison purposes. Any new information will be used in a full update of the assessment, recommended for 2009.