Methodology

Rating Companies in the Communications Industry

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All DBRS ratings and research are available in hard-copy format and electronically on Bloomberg and at DBRS.com, our lead delivery tool for organized, Web-based, up-to-the-minute information. We remain committed to continuously refining our expertise in the analysis of credit quality and are dedicated to maintaining objective and credible opinions within the global financial marketplace.
Rating Companies in the Communications Industry

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Introduction to DBRS Methodologies

- DBRS publishes rating methodologies to give issuers and investors insight into the rationale behind DBRS’s rating opinions.
- In general terms, DBRS ratings are opinions that reflect the creditworthiness of an issuer, a security or an obligation. DBRS ratings assess an issuer’s ability to make timely payments on outstanding obligations (whether principal, interest, preferred share dividends or distributions) with respect to the terms of an obligation. In some cases (e.g., non-investment grade corporate issuers), DBRS ratings may also address recovery prospects for a specific instrument given the assumption of an issuer default.
- DBRS rating methodologies include consideration of historical and expected business and financial risk factors as well as industry-specific issues, regional nuances and other subjective factors and intangible considerations. Our approach incorporates a combination of both quantitative and qualitative factors.
- The considerations outlined in DBRS methodologies are not exhaustive and the relative importance of any specific consideration can vary by issuer. In certain cases, a major strength can compensate for a weakness and, conversely, a single weakness can override major strengths of the issuer in other areas. DBRS may use, and appropriately weight, several methodologies when rating issuers that are involved in multiple business lines.
- DBRS operates with a stable rating philosophy; in other words, DBRS strives to factor the impact of a cyclical economic environment into its ratings wherever possible, which minimizes rating changes due to economic cycles. Rating revisions do occur, however, when more structural changes, either positive or negative, have occurred, or appear likely to occur in the near future.
- DBRS also publishes criteria which are an important part of the rating process. Criteria typically cover areas that apply to more than one industry. Both methodologies and criteria are publicly available on the DBRS website and many criteria are listed below under “Rating the Specific Instrument and Other Criteria.”
Overview of the DBRS Rating Process

• There are generally three components to the DBRS corporate rating process: (1) an industry risk rating (IRR); (2) an issuer rating; and (3) considerations for specific securities. The figure below outlines this process.
• An IRR is a relative ranking of most industries that have a DBRS methodology, typically using just three ranges of the DBRS long-term debt rating scale (i.e., “A,” BBB and BB), without making use of the “high” or “low” descriptors. The IRR is a general indication of credit risk in an industry and considers, among other things, an industry’s: (1) profitability and cash flow; (2) competitive landscape; (3) stability; (4) regulation; and (5) other factors. An “industry,” for the purposes of the IRR, is defined as those firms that are generally the larger, more established firms within the countries where the majority of DBRS’s rated issuers are based; this remains true for DBRS methodologies that are more global in nature. The industry risk rating helps DBRS set the BRR grid (see below) in that it positions, in an approximate way, an average firm in the industry onto the BRR grid. For firms in industries with low IRRs, the IRR can, in effect, act as a constraint or “cap” on the issuer’s rating.
• The issuer rating is DBRS’s assessment of the probability of default of a specific issuer. It is a function of: (1) the business risk rating (BRR), determined by assessing each of the primary and (where relevant) additional BRR factors in the BRR grid for a specific issuer; and (2) the financial risk rating (FRR), determined by assessing each of the primary and (where relevant) additional FRR metrics. The two components, BRR and FRR, are combined to determine the issuer rating; in most cases, the BRR will have greater weight than the FRR in determining the issuer rating. Throughout the BRR and FRR determination process, DBRS performs a consistency check of the issuer on these factors against the issuer’s peers in the same industry.
• The issuer rating is then used as a basis for specific instrument ratings. DBRS assigns, for example, a recovery rating and notches up or down from the issuer rating to determine a specific instrument rating for instruments of non-investment grade corporate issuers. (See “Rating the Specific Instrument and Other Criteria” below.)

DBRS Rating Analysis Process

* Depending on the instrument, “other criteria” may include the recovery methodology for non-investment grade issuers or the preferred share and hybrid criteria, for example. Please refer to the section below entitled “Rating the Specific Instrument and Other Criteria” for a list of these criteria, as well as other criteria that may be applicable at any stage of the rating process.
Communications Industry

- The communications industry includes: (1) telecom operators that offer fixed-line and wireless services to residential and enterprise customers, including local and long-distance voice services, high-speed Internet services and, increasingly, video services; (2) cable operators that offer video services (including direct-to-home satellite operators), high-speed Internet and, increasingly, voice services; and (3) wireless operators that are both integrated as part of a telecom/cable operator or on a stand-alone basis that offer wireless voice and data services to residential and enterprise customers.
- Per the three-tier IRR system described on the previous page, the communications IRR is BBB.
- The communications industry is characterized by: (1) profitability that is stable and somewhat higher than average, given the non-discretionary nature of the services that are somewhat immune to general economic cycles and (2) converging technologies (in the telecom and cable sectors) and rapidly changing technologies more generally, giving rise to increased competition and increasing capital needs for new investment in infrastructure.
- Horizontal integration (e.g., cable operators offering telecom services and vice versa) blurs the distinction between the three operating segments of the established firms. These larger firms benefit from barriers to entry in the forms of infrastructure and capital investment which may become, however, a liability in an environment of rapidly changing technology. Bundling of services, as indicated by average revenue per user (ARPU) growth, enhances profitability and can reduce subscriber turnover (churn).
- Competition is usually limited to three or four operators per region, each competing for telephony, high-speed Internet and video services. Competitive clout can be assessed with metrics, such as homes passed or population covered as well as current and projected penetration rates. Demographic trends give an indication of future market growth, market attractiveness and likely resulting competition.
- Communications services, particularly fixed-line telephony, video and high-speed Internet services are generally non-discretionary and are sold under medium-term contracts, which makes them somewhat insensitive to general economic cycles; however, voice, data and wireless services show higher correlation to economic cycles.
- The network capacity, functionality, contiguity and scope of a communications provider’s fixed-line and wireless networks determine an operator’s ability to provide advanced communications services. They also affect operating costs and give an indication as to the capital expenditures that will be required in the future; however, technology can be a double-edged sword in that the benefits of the latest technology may be lessened by the substitution threats that the technology creates.
- The traditional wireline businesses of both telecom and cable operators are eroding because of the impact of technology substitution (wireless for wireline, Internet Protocol television for cable and high-speed Internet for second lines), a trend that will likely continue for the foreseeable future. To counteract the steady declines in high-margin voice and long-distance revenues, operators must continue to focus on growing data revenues in both their wireless and wireline businesses.
- Access to content can be a competitive advantage and is the motivation for vertical integration and the acquisition of media companies.
- While there has generally been a liberalizing trend in most markets for most services, regulators continue to set the framework, enforce rules as well as arbitrate and conduct discrete events, such as the sale of wireless spectrum. Regulation can arise from a number of levels and different services are typically covered by different and often numerous statutes, laws and acts. Regulation and changes to existing regulatory guidelines can have an impact on both the operating and competitive environment of a communications operator.
## Communications Business Risk Rating

### PRIMARY BRR FACTORS

- The BRR grid below shows the primary factors used by DBRS in determining the BRR. While these primary factors are shown in general order of importance, depending on a specific issuer’s business activities, this ranking can vary by issuer.

### Communications – Primary BRR Factors

<table>
<thead>
<tr>
<th>Rating</th>
<th>AA</th>
<th>A</th>
<th>BBB</th>
<th>BB</th>
<th>B</th>
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</thead>
<tbody>
<tr>
<td><strong>Competitive Landscape</strong></td>
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<tr>
<td>Single incumbent fixed-line services operator with minimal or no competition and leading market position. (This situation is currently very rare.)</td>
<td>Generally two or three fixed-line service operators competing for each individual service on a regional or national basis.</td>
<td>Three to six operator market for both fixed-line and wireless services.</td>
<td>Market with more than six operators for both fixed-line and wireless services.</td>
<td>Extremely competitive and highly fragmented market environment.</td>
<td></td>
</tr>
<tr>
<td>Three national or large regional wireless operators or fewer, with fixed-line incumbent being a market leader.</td>
<td>Three or four national or large regional wireless operators with some smaller regional players.</td>
<td>Rational to modest competitive environment.</td>
<td>Highly competitive market environment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Modest competitive environment.</td>
<td>Market leaders would garner better consideration, while operators with smaller market positions would garner less consideration.</td>
<td>Market leaders would garner some consideration, while operators with smaller market positions would have modest consideration.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Market leaders would garner strongest consideration.</td>
<td></td>
<td></td>
<td>Competitive equilibrium is in embryonic stage.</td>
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<tr>
<td><strong>Technology</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Operator benefits from latest technologies, which provides a competitive advantage.</td>
<td>Operator benefits from relatively new technologies, which provide a modest competitive advantage.</td>
<td>Operator has not embraced latest technologies putting it at a modest competitive disadvantage.</td>
<td>Operator has not embraced latest technologies, which puts it at a competitive disadvantage.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barriers to entry remain high; low substitution threats to existing services.</td>
<td>Barriers to entry and substitution threats are modest and manageable.</td>
<td>Barriers to entry are low and substitution threats from other technologies are high.</td>
<td>Barriers to entry are low and substitution threats from other technologies are high.</td>
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<tr>
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<th>A</th>
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<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Networks</td>
<td>Highly advanced networks capable of providing full suite of fixed-line communications services and/or wireless communications services.</td>
<td>Advanced networks capable of providing multiple fixed-line communications services and/or wireless communications services.</td>
<td>Adequate networks capable of providing one or two fixed-line communications services and/or wireless communications services.</td>
<td>Acceptable networks capable of providing one or two fixed-line communications services and/or wireless communications services.</td>
<td>Sufficient networks capable of providing one or two fixed-line communications services and/or wireless communications services.</td>
</tr>
<tr>
<td>Networks covers close to entire operating region.</td>
<td>High penetration rates in operating regions.</td>
<td>Adequate and growing penetration rates in operating regions.</td>
<td>Acceptable but slow-growing penetration rates in operating regions.</td>
<td>Networks provide a modest competitive advantage for one or two services.</td>
<td>Networks provide little or no competitive advantage for any services.</td>
</tr>
<tr>
<td>Networks provide a clear competitive advantage for all services.</td>
<td>Networks provide a competitive advantage for some services.</td>
<td>Networks provide a moderate competitive advantage for one or two services.</td>
<td>Networks provide a competitive advantage for one or two services.</td>
<td>Networks provide little or no competitive advantage for any services.</td>
<td></td>
</tr>
<tr>
<td>Product Diversification/Ability to Bundle Services</td>
<td>Operator has ample ability to bundle all fixed-line and wireless services in all of its coverage territories.</td>
<td>Operator has sufficient ability to bundle multiple fixed-line and wireless services in a majority of its coverage territories.</td>
<td>Operator has modest ability to bundle multiple services in a reasonable portion of its coverage territories.</td>
<td>Operator has limited ability to bundle fixed-line and wireless services in any of its service territories.</td>
<td></td>
</tr>
<tr>
<td>Regulatory environment supportive of incumbent’s market position, which creates a high barrier to entry and limited competition.</td>
<td>Regulatory environment is relatively supportive of incumbents while moderately pursuing competition-enhancing framework and policies.</td>
<td>Regulatory environment has a balance between regulation and competition-enhancing framework and policies.</td>
<td>Regulatory environment supports enhancement to competitive environment, which reduces barriers to entry and fosters greater competition.</td>
<td>Regulatory environment pursues competition at all costs in its framework and policies.</td>
<td></td>
</tr>
</tbody>
</table>

The following BRR risk factors are relevant to issuers in all industries (although the relevance of sovereign risk can vary considerably):

**Sovereign Risk**
The issuer rating may, in some cases, be constrained by the credit risk of the sovereign; in other words, the rating of the country in which the issuer operates generally sets a maximum rating for the issuer. If the issuer operates in multiple countries and a material amount of its business is conducted in a lower-rated country, DBRS may reflect this risk by downwardly adjusting its issuer rating.

**Corporate Governance**
Please refer to DBRS Criteria: Evaluating Corporate Governance for further information on how DBRS evaluates corporate governance and management.
ADDITIONAL BRR FACTORS

- The additional BRR factors discussed below may be very important for certain issuers, depending upon their activities, but they do not necessarily apply to all issuers in the industry.

Size and Scale
- Larger providers can: (1) spread costs over a wider customer base; (2) have greater purchasing power, marketing clout, branding and distribution opportunities; (3) have the ability to drive procurement of new networks and services; (4) absorb any unforeseen shocks that may occur in the operating environment; and (5) better serve large national or international customers. Notwithstanding the general benefits of size and scale, it is still possible for a small firm with a dominant market position in a low-competition, regulated market to be of good credit quality.
- For firms that distribute video services, size and scale can provide bargaining power in negotiations with content providers, leading to improved — or at least sustained — profit margins.

Subscriber Growth, ARPU and Churn
- Subscriber growth trends by region or segment can support projections of operating metrics and cash flow generation.
- ARPU is a measure of average monthly revenue per subscriber and gives an indication of the success of the issuer in maximizing revenues per customer, usually achieved by bundling services.
- Churn is subscriber turnover measured as a percentage of an operator’s average subscriber base over a specific period and stated on a monthly or annual basis. Churn is a measure of customer satisfaction. Low monthly churn rates indicate subscriber satisfaction. High churn rates, on the other hand, can indicate poor-quality services and/or the success of competitive actions.

Capex Levels/Capital Intensity/Cost of Customer Acquisition
- Analyses of the mix of capital expenditures, future spending plans and inflection points in capital spending are critical to understanding the quality of the network and its potential for free cash flow generation.
- The cost of customer acquisition indicates the average incremental cost to add a new customer. The lower the average cost of customer acquisition, the greater the future profitability from those new customers, all else being equal.

Geographic Mix
- Operating in several regional or national markets provides diversification benefits. It also allows carriers to leverage expertise and purchasing power. On the other hand, geographic diversification can increase costs, demands on management and operating risks.

Government Ownership
- While government ownership and control have been liberalized in recent years, where still present, this can have a positive impact on a firm’s credit rating.
Communications Financial Risk Rating

PRIMARY FRR METRICS

• The FRR grid below shows the primary FRR metrics used by DBRS to determine the FRR. While these primary FRR metrics are shown in general order of importance, depending upon an issuer’s activities, the ranking can vary by issuer.
• DBRS ratings are primarily based on future performance expectations, so while past metrics are important, any final rating will incorporate DBRS’s opinion on future metrics, a subjective but critical consideration.
• It is not unusual for a company’s metrics to move in and out of the ranges noted in the grid below, particularly for cyclical industries. In the application of this matrix, DBRS looks beyond the point-in-time ratio.
• Financial metrics depend on accounting data whose governing principles vary by jurisdiction and, in some cases, industry. DBRS may adjust financial statements to permit comparisons with issuers using different accounting principles.
• Please refer to DBRS Criteria: Financial Ratios and Accounting Treatments – Non Financial Companies for definitions of, and common adjustments to, these ratios in the FRR grid below.
• DBRS considers an issuer’s financial policy including factors such as its targeted financial leverage, its dividend policy and the likelihood of share buybacks or other management actions that may favour equity holders over bondholders.
• Liquidity can be a material risk factor, especially for lower-rated non-investment grade issuers. DBRS will consider available sources of liquidity including cash on hand, cash flow, access to bank lines, etc., as well as uses of liquidity such as operations, capital expenditures, share buybacks and dividends for every issuer.
• DBRS considers an issuer’s financial policy including factors such as its targeted financial leverage, its dividend policy and the likelihood of share buybacks or other management actions that may favour equity holders over bondholders. While market pricing information (such as market capitalization or credit spreads) may on occasion be of interest to DBRS, particularly where it suggests that an issuer may have difficulty in raising capital, this information does not usually play a material role in DBRS’s more fundamental approach to assessing credit risk.

Communications — Primary FRR Metrics

<table>
<thead>
<tr>
<th>Primary Metric</th>
<th>AA</th>
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<th>BBB</th>
<th>BB</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash flow-to-debt</td>
<td>&gt; 60%</td>
<td>30% to 60%</td>
<td>20% to 30%</td>
<td>10% to 20%</td>
<td>&lt; 10%</td>
</tr>
<tr>
<td>Debt-to-EBITDA</td>
<td>&lt; 1.0x</td>
<td>1.0x to 2.0x</td>
<td>2.0x to 3.5x</td>
<td>3.5x to 5.0x</td>
<td>&gt; 5.0x</td>
</tr>
<tr>
<td>EBITDA-to-interest</td>
<td>&gt; 10.0x</td>
<td>7.0x to 10.0x</td>
<td>4.0x to 7.0x</td>
<td>2.0x to 4.0x</td>
<td>&lt; 2.0x</td>
</tr>
<tr>
<td>EBIT-to-interest</td>
<td>&gt; 8.0x</td>
<td>5.0x to 8.0x</td>
<td>3.0x to 5.0x</td>
<td>1.5x to 3.0x</td>
<td>&lt; 1.5x</td>
</tr>
<tr>
<td>Debt-to-capital</td>
<td>&lt; 20%</td>
<td>20% to 30%</td>
<td>30% to 45%</td>
<td>45% to 60%</td>
<td>&gt; 60%</td>
</tr>
</tbody>
</table>

ADDITIONAL FRR METRICS

• While the primary FRR metrics above will be the most important metrics that DBRS will use in determining the FRR of an issuer, other metrics may be used, depending upon an issuer’s activities, capital structure, pension liabilities and off-balance sheet obligations.
• Profitability, particularly in the medium term, can be an important differentiator of credit risk. DBRS may assess profitability through a variety of metrics, including return on capital.
• Free cash flow-to-debt can give an indication of cash available to repay debt after capital expenditures and dividends have been paid. Companies may have negative free cash flow in the short term during a period of network upgrade; however, in the medium term, a firm’s ability to produce positive free cash flow may be an important differentiator of credit risk.
Blending the BRR and FRR into an Issuer Rating

- The final issuer rating is a blend of the BRR and FRR. In most cases, the BRR will have greater weight than the FRR in determining the issuer rating.
- At the low end of the rating scale, however, particularly in the B range and below, the FRR and liquidity factors play a much larger role and the BRR would, therefore, typically receive a lower weighting than it would at higher rating levels.

Rating the Specific Instrument and Other Criteria

- For non-investment grade corporate issuers, DBRS assigns a recovery rating and reflects the seniority and the expected recovery of a specific instrument, under an assumed event of default scenario, by notching up or down from the issuer rating in accordance with the principles outlined in the criteria DBRS Recovery Ratings for Non-Investment Grade Corporate Issuers.
- Preferred share and hybrid considerations are discussed under Preferred Share and Hybrid Criteria for Corporate Issuers.
- The issuer rating (which is an indicator of the probability of default of an issuer’s debt) is the basis for rating specific instruments of an issuer, where applicable. DBRS uses a hierarchy in rating long-term debt that affects issuers that have classes of debt that do not rank equally. In most cases, lower-ranking classes would receive a lower DBRS rating. For more detail on this subject, please refer to the general rating information contained in the DBRS rating policy Underlying Principles.
- For a discussion on the relationship between short- and long-term ratings and more detail on liquidity factors, please refer to the DBRS policy Short-Term and Long-Term Rating Relationships and the criteria Commercial Paper Liquidity Support Criteria for Non-Bank Issuers.
- The existence of holding companies can have a meaningful impact on individual security ratings. For more detail on this subject, please refer to the criteria Rating Holding Companies and Their Subsidiaries.
- Guarantees and other types of support are discussed in DBRS Criteria: Guarantees and Other Forms of Explicit Support.
- For further information on how DBRS evaluates corporate governance, please refer to DBRS Criteria: Evaluating Corporate Governance.
- Please refer to DBRS Criteria: Financial Ratios and Accounting Treatments – Non Financial Companies for definitions of, and common adjustments to, these ratios.