

| Rating object | Rating information | |
|--|--|-------------------------------|
| Elisa Oyj Creditreform ID: 400981181 Incorporation: 6 June 1882 (originally) Based in: Helsinki, Finland (Main) Industry: Telecommunications CEO: Veli-Matti Mattila <u>Rating objects:</u> Long-term Corporate Issuer Rating: Elisa Oyj Long-term Local Currency (LT LC) Senior Unsecured Issues | Corporate Issuer Rating: | Type: |
| | BBB+ / stable | Initial rating unsolicited |
| | LT LC Senior Unsecured Issues: | Other: |
| | BBB+ / stable | n.r. |
| | Rating date: 11 June 2019 | |
| | Monitoring until: withdrawal of the rating | |
| | Initial rating: www.creditreform-rating.de | |
| | Rating methodology: CRA "Corporate Ratings" | |
| | CRA "Non-Financial Corporate Issue Ratings" | |
| | CRA "Rating Criteria and Definitions" | |
| | Rating history: www.creditreform-rating.de | |

Summary

Content

| | |
|--|----|
| Summary | 1 |
| Relevant rating factors | 2 |
| Business development and outlook | 4 |
| Structural Risk..... | 6 |
| Business Risk | 6 |
| Financial Risks..... | 8 |
| Issue Rating | 9 |
| Financial Ratio Analysis | 11 |
| Appendix | 12 |

Company

Elisa Oyj (hereafter called "Elisa", "the Company", "Group") is an integrated fixed-line and mobile telecommunications and digital services company which operates mainly in Finland and Estonia. The Company has over 6.2 million subscriptions, serving 2.8 million private, corporate, and public administration customers. Elisa is the market leader in Finland in terms of mobile and fixed network subscriptions; in Estonia it is the second largest operator. Along with wireless and wire-line telephony and broadband services, the Group is active in other internet and digital services such as pay TV and video conferencing. In addition to its domestic market and to the Estonian market, the Company provides digital services for the international markets. On a global basis, Elisa works in co-operation with Vodafone and Telenor.

In 2018, the Group, with approximately 4,800 employees, achieved revenues amounting to EUR 1,831 million (2017: EUR 1,787 million) and an EAT of EUR 316.0 million (2017: EUR 336.7 million).

Rating result

The current rating (**BBB+ / stable**) attests Elisa Oyj a highly satisfactory level of creditworthiness, which represents a low to medium default risk.

Elisa has an established position in the telecommunications market in Finland and in Estonia and is a key player in the both countries, holding the number one and number two positions respectively. Elisa has a strong balance sheet and stable earnings capacity, which is sufficient to cover the Company's capex and dividend payments, and enough liquidity reserves. The Company pursues a plausible strategy with a prudent financial policy. We consider it positive that the Company's strategical objectives include clear financial targets to maintain a solid financial structure. Elisa has a leading technological position. The Company was among the world's first companies who opened 5G network and is already using this technology in four locations in Finland and in Tallinn.

Elisa is a relatively small-scale company with geographical concentration on the Finnish and Estonian markets, countries which have stable political and economic environments. Both key

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markets are saturated and have high penetration rates in both mobile telephony and broadband, which limits the Company's growth potential. Intense competition in Finland, with three major market players, puts additional pressure on our rating assessment. Growth opportunities are associated with maintaining and developing the leading technological position, which would enable high-quality new products and higher speeds, supported by 4G and 5G and would create a basis for product upselling.

Outlook

The one-year outlook of the rating is stable. We expect steady development for Elisa according to its plan for 2019 with stable earnings, continuing strong EBITDA, and a well-balanced assets and liabilities structure. This outlook is based on the assumption of an overall stable economic situation in Finland and Estonia. Taking into consideration the Company's strategy and its declared readiness for the expanding of 5G technology, we do not expect any major capital expenditure that could lead to a deterioration of the Company's key financials.

Relevant rating factors

Table 1: Financials of Elisa Oyj (Group) | Source: Elisa Oyj annual report 2018, standardized by CRA

Excerpts from the financial key figures Analysis 2018

- + increased revenues
- + improved EBITDA
- + improved equity ratio
- + improved net total debt / EBITDA

- increased assets
- ratio of interest expenses to total debt
- return on investments

| Elisa Oyj Selected key figures of the financial statement analysis Basis: Annual report of 31.12. (IFRS, Group) | CRA standardized figures ¹ | |
|---|---------------------------------------|---------|
| | 2017 | 2018 |
| Sales (million EUR) | 1,787.4 | 1,831.5 |
| EBITDA (million EUR) | 607.7 | 640.4 |
| EBIT (million EUR) | 378.0 | 404.2 |
| EAT (million EUR) | 336.7 | 316.2 |
| EAT after transfer (million EUR) | 336.6 | 316.0 |
| Total assets (million EUR) | 2,038.0 | 2,128.4 |
| Equity ratio (%) | 25.6 | 28.8 |
| Capital lock-up period (days) | 42.2 | 37.3 |
| Short-term capital lock-up (%) | 17.1 | 22.5 |
| Net total debt / EBITDA adj. (factor) | 2.4 | 2.3 |
| Ratio of interest expenses to total debt (%) | 1.6 | 1.7 |
| Return on Investment (%) | 17.5 | 15.9 |

¹ For analytical purposes, CRA adjusted the original values in the financial statements in the context of its financial ratio analysis. For example, the analytical equity ratio, deferred tax assets, goodwill (entirely or partly), and the internally developed intangible assets are subtracted from the original equity. Deferred tax liabilities are added to the equity. With the calculation of Net total debt all balance sheet liabilities are taken into account. As a result, the key financial figures shown often deviate from the original values of the Company.

Please note:

General rating factors summarize the key issues that – according to the analysts as per the date of the rating – have a significant or long-term impact on the rating, positive (+) as well as negative (-).

General rating factors

- + Leading market position in both Finland and Estonia
- + Stable political and economic situation in both countries
- + High level of 4G coverage
- + State-of-the art technological level and readiness for commercial launching of 5G
- + Comprehensive product portfolio with telecom and digital services
- + Good presence in the corporate sector
- + Stable earnings capacity and strong balance sheet
- + Good access to financial markets

- Small scale
- Limited growth potential due to focusing on Finland and Estonia and limited country risk diversification
- Intense competition
- Highly regulated market for telecom operators
- High capital intensity with significant ongoing investments in infrastructure and spectrum
- Decreasing traditional voice services
- Dependence on rush technological changes

Current rating factors (rating 2019)

- + Slightly improved revenues and EBITDA
- + Slightly improved equity ratio
- + Implementation of structural and process improvements
- + ARPU (average revenue per user) improvement

- Slightly incongruent relation of assets and liabilities as of 31 December 2018
- Increased total assets
- Increased ratio of interest expenses to total debt

Prospective rating factors

- + Commercial launching of 5G and introduction of new products based on 5G
- + Successful integration of acquired companies
- + Overall increasing demand for telecom services
- + Upselling through higher broadband speeds with improved margins

- Risk of deterioration of operating performance due to keen competition
- Increasingly strict regulatory requirements
- Unexpected increase in capex

Current rating factors are the key factors that have, in addition to the underlying rating factors, an impact on the current rating.

Prospective rating factors are factors and possible events that – according to the analysts as per the date of the rating – would most likely have a stabilizing or positive effect (+) and a weakening or negative effect (-) on future ratings, if they occurred. This is not a full list of possible future events with potential relevance for future ratings. Circumstances can arise that are not included in the list of prospective factors whose effects are impossible to assess at the time of the rating, either because these effects are uncertain or because the underlying events are deemed unlikely to occur.

Best-case scenario BBB+

Worst case scenario: BBB

Please note:

The scenarios are based on the information available at the time of the rating. Within the forecast horizon, some circumstances could occur that would lead to a rating change out of the indicated range.

Best-case scenario

In our best-case scenario for one year, we assume a rating of BBB+. We assume that the Company will manage to compensate falling revenues in traditional services through upselling and replacements through new products and digital services based on 4G and, gradually, 5G, which will facilitate moderate growth. We do not expect substantial growth due to the geographical concentration of Elisa and to competitive tension.

Worst-case scenario

In our worst-case scenario for one year, we assume a rating of BBB. This could be the case if the earnings capacity deteriorates substantially following increased termination rates, or in the case of increased investment necessity associated with a significant increase of debt.

Business development and outlook

In the financial year 2018, the Company achieved an increase in revenues by 2.5% to EUR 1,831.5 million (2017: EUR 1,787.4 million). The increase was driven by growth in mobile and digital services, equipment sales, and by acquisitions. On the other hand, lower mobile interconnection and roaming revenue as well as the decrease in usage and subscriptions of traditional fixed telecom services and divestments negatively affected revenues. The adjusted EBITDA grew by 4.3% to EUR 638.6 million, mainly due to the acquisitions, revenue growth, and to productivity improvement measures such as increasing automation and data analytics in processes like customer interaction, network operations and delivery. The annual result was EUR 316.0 million, 6.1% lower than in the previous year, mainly due to the positive non-recurring effect of EUR 44 million from the sale of Comptel shares in the comparison year. Adjusted net profit, excluding the sale of Comptel shares in 2017 and other non-recurring effects, amounted to EUR 312 million, an increase of 5.0% (2017: EUR 297 million).

Table 2: The development of business of Elisa Oyj. Source: Consolidated annual report 2018 and 1Q 2019

| Elisa Oyj | | | | |
|----------------|-------|-------|---------|---------|
| In million EUR | 2017 | 2018 | 1Q 2018 | 1Q 2019 |
| Revenues | 1,787 | 1,832 | 450 | 440 |
| EBITDA | 608 | 640 | 153 | 155 |
| EBITDA adj. | 612 | 639 | 156 | 158 |
| EBIT | 378 | 404 | 95 | 90 |
| EBT | 403 | 381 | 89 | 83 |
| EAT | 336 | 316 | - | - |

Both customer segments recorded positive performance and contributed to the overall growth of the Group in 2018. In Consumer Customer Business, revenues increased by 2% to EUR 1,150 million (2017: EUR 1,125 million) while adjusted EBITDA increased by 6% to EUR 415 million. In Corporate Customer Business, revenues increased by 3% to EUR 681 million (2017: EUR 663 million) and adjusted EBITDA increased by 1%.

Table 3: The development of business segments in 2018 | Source: Consolidated annual report of Elisa Oyj

| Elisa Oyj according to individual corporate divisions in 2018 | | | | |
|---|--------------------|-------|---------------------|------|
| In million EUR | Consumer Customers | | Corporate Customers | |
| | 2017 | 2018 | 2017 | 2018 |
| Revenue | 1,125 | 1,150 | 663 | 681 |
| EBITDA | 388 | 416 | 219 | 224 |
| EBITDA adj. | 391 | 415 | 222 | 224 |
| EBIT | 247 | 268 | 131 | 135 |

During 2018, the Group's structure changed following acquisitions and divestments as well as the integration of previously acquired entities. The main acquisitions in 2018 were connected to IT as well as to streaming and video production services. Capital expenditure in 2018 (EUR 268 million; 2017: EUR 350 million) was mainly related to the capacity and coverage increase of the 4G networks, as well as other network and IT investments. Furthermore, the Company acquired the necessary frequencies for its 5G standard and prepared its networks for the commercial launch of 5G. The first 5G devices are expected to appear in the first half of 2019, and Elisa stated its readiness for the roll out of its 5G network.

In the 1Q 2019, revenues decreased as a result of divestments, a decrease in equipment sales, and lower interconnection revenues, while EBITDA increased slightly following efficiency improvements and due to effects of applying IFRS 16. Consumer Customers revenue declined by 2% from EUR 279 million in 1Q 2018 to EUR 273 million in 1Q 2019, while the EBITDA improved by 4% (EUR 105 million; 1Q 2018: EUR 100 million). Corporate Customers revenue declined by 2% (EUR 166 million; 1Q 2018: EUR 170 million), the EBITDA decreased by 3.6% (EUR 53 million; 1Q 2018: EUR 55 million). In both Consumer Customers and in Corporate Customers segments the negative effects from declining equipment sales, interconnection revenue, and traditional fixed services were balanced by growth in mobile and digital services.

For 2019, against the background of intense competition and of generally decelerating economic activity in Finland, the Group expects an overall similar development to the financial year 2018, with increased revenues in mobile data and digital services. The Company plans to achieve the same or slightly increased sales and comparable EBITDA with limited capital expenditure of up to 12% of sales. Medium-term objectives include the above industry revenue growth and EBITDA margin of above 37%, coupled with the in our view prudent financing policy aimed at maintaining an equity ratio of at least 35%, net financial debt / EBITDA of 1.5-2.0, and capex of maximum 12% of sales (reported figures).

Considering the Company's concentration on the Finnish market with its clear distribution of forces between the three leading telecom corporations, as well as its already high degree of penetration, we see the Company's strategy of focusing on process optimization, expansion of its product spectrum, quality improvement, and on maintaining its solid technological level as plausible and appropriate. We also have a favorable view of the Company's objective, fundamental to its strategy, of maintaining a balanced financing situation and stable balance sheet structure. In view of the Company's well-established market position, as well as its position as one of the leaders in technology, we see its strategic objectives for the coming three years as realistic and attainable.

Structural risk

Elisa is a publicly-listed company on Nasdaq OMX Helsinki with approximately 186,000 shareholders. Approximately 55% of the shareholders are Finnish households and institutions. The largest shareholders are Solidium (a Finnish state-owned investment company), Varma (a mutual pension insurance company), and the State Pension Fund. There is no shareholder that directly or indirectly holds a controlling share of the Group's share capital.

The Group divides its customers into two different segments: Consumer Customers and Business Customers. Elisa operates mainly in Finland and Estonia, but also has employees internationally. The Group comprises the parent company, Elisa Oyj, and its ten subsidiaries which concentrate on specific products and fields of business (telecom operators, IT services companies, videoconferencing, streaming services). Over 80% of the revenues are generated in the parent company. With the exception of Kepit Systems Oy (70%), Elisa holds 100% of shares on all of its subsidiaries. The Group prepares its financial statements according to IFRS, the individual companies use local GAAP.

Elisa's corporate structure observes the recommendations of the Finnish Corporate Governance Board. The main governing bodies are the Board of Directors, which currently comprises seven members, and the Executive Board with the CEO at the head. Currently, the Board of Directors is supported by two committees: the People and Compensation Committee (in issues regarding management and incentive schemes) as well as the Audit Committee (in issues related to financial reporting, accounting and risk management).

The Company currently has approx. 4,800 employees, of which more than 1,100 work in 10 other countries, most of them in Estonia, Spain and the United Kingdom.

Elisa has to comply with high legislative, regulative and corporate governance standards. Structural risks are associated with market regulation, obtaining licenses and spectrum, as well as with the maintenance of modern infrastructure. According to publicly available information regarding corporate governance and compliance measures, we assume sufficiently developed structures with regard to risk management, accounting and controlling, and other administrative and operational functional areas, and do not see any core risks in connection with the Company's structure. The Company is mainly focused on the Finnish and Estonian markets which both have well-developed regulatory frameworks and a stable political and economic situation. However, because Finland and Estonia are smaller countries with regard to population, and considering that these markets have almost reached market saturation, while the competition is rather intense, growth opportunities for the Group are limited in these markets.

Business risk

Elisa is a full-service telecom operator, offering a full range of telecommunication services ranging from voice and data services to ICT solutions, international communication solutions, and cable TV services. The Company has its own mobile and fixed network in Finland and Estonia with 4.6 million mobile subscriptions (of which 4.0 million in Finland and 0.6 million in Estonia) and 1.5 million fixed network subscriptions (of which 1.2 million in Finland and 0.3 million in Estonia).

The competitive situation in Finland's telecom market, which is dominated by three network operators, offering digital mobile services through 2G, 3G and 4G/LTE networks, is challenging.

It is difficult for telecom operators to retain their clientele and to hold termination rates under control due to the challenging competitive situation. The main competitors are DNA and Telia. Elisa remains the leading company in terms of subscriptions (around 35% of the Finnish market in both mobile and fixed segments). The telecom market suffers from declining fixed connections and declining revenues from mobile interconnections and roaming. Additionally, regulated tariffs put pressure to the Group's revenues. The market has shifted from traditional fixed network to mobile data and mobile broadband. The usage of mobile services is continuously growing, supported by the growth of smartphone market. The increased network coverage and capacity of 4G standard has also been contributing to the growth of the mobile market.

Finland enjoys one of the highest mobile and broadband penetration rates in the world. Domestic operators have concentrated on network upgrades which would allow improved mobile broadband services to the population. The Company strives to maintain its current number of customers and to win new ones by offering technologically innovative packages of IT and communication services, and through high-quality entertainment content such as TV series, digital newspapers, and e-book resell.

The Group has purchased the necessary frequencies for 5G in Finland and announced its readiness for the wide commercial launch of a 5G network after release of 5G-compatible modems and other devices. The introduction of the 5G standard will enable a range of new services through new technologies such as IoT, virtual reality, augmented reality and low-latency applications and would create additional competitive opportunities for Elisa.

Moreover, the Company invests in its fast broadband network using optical fiber, which has resulted in an increased number of fixed broadband connections. Another strength of Elisa is the offering of unlimited data traffic with speed based pricing model, which creates upsell opportunities.

As of 31 December 2018, the Company managed to improve its ARPU (average revenue per user) by 2.8% to EUR 18.2 per month (2017: EUR 17.7 per month) through campaigning and upselling. In 1Q 2019 the figure was at EUR 18.3 per month.

The Company's strategy is based on the three global objectives: increase of mobile and fixed service revenues, enhancing of digital services, and improvement of efficiency and quality. The Company sees growth and efficiency improvement opportunities in the expansion of the mobile data market, as well as digital online and ICT services. The initiated productivity improvement measures of increasing of automation and data analytics in processes such as customer interaction, network operations, and delivery are part of the Company's strategy along with quality improvement measures, aimed at increasing customer satisfaction and efficiency, hence reducing the overall cost.

Telecom services are subject to heavy regulation and monitoring by several public authorities, which may affect prices on Elisa's services and the necessary investment levels.

In our view, the Company has a well-established market position and strong technological know-how, making it possible to maintain moderate organic growth in medium-term perspective. Given the limited growth potential due to Elisa's geographical concentration, we consider the Group's focus on improvements in high-quality content, maintaining and enhancing its high technological know-how, which will enable upselling, such as higher mobile data speeds, and introducing of products based on new technologies, supported by 4G and 5G networks, as plausible and prudent.

Financial risks

For the purposes of its financial ratio analysis, Creditreform Rating AG (CRA) adjusted the original values in the financial statements. Contrary to our normal practice, we deducted the goodwill shown on the balance sheet from the equity by 50%, suggesting a certain recoverability of the goodwill.

The adjusted equity increased as of 31 December 2018 by EUR 91.4 million to EUR 612.1 million, and was influenced by the distributions for 2017 financial year (EUR 263 million). The Group has an adequate adjusted equity ratio of 28.76% (2017: 25.55%). The inherently high capital intensity of its assets (68.4%) is customary in the industry. Against the background of the Group's high capital intensity and following the technology standards, ongoing capital expenditures are required in both its infrastructure and spectrum. A significant part of the capital expenditure is associated with acquisitions, which help the Company to maintain and develop its technological strength and to enlarge its product portfolio. This is why the carrying amount of goodwill, which is tested annually, in the reported financial statements (EUR 1,020.7 million) is relatively high, accounting for 38% of the total assets as of 31 December 2018.

There was a slight imbalance in the financing structure as of 31 December 2018, taking into consideration that the reported amount of current liabilities was higher than the amount of current assets (EUR 601.1 million vs. EUR 567.2 million). The situation improved by the end of 1Q 2019 (EUR 498.1 million current liabilities vs. 693.4 million current assets). The main reason for this improvement is the shift in the financial structure following the issue of new EUR 300 million of Eurobond in February 2019 in terms of the EMTN-programme. The amount of current financial liabilities has dropped to EUR 205.2 million (31 December 2018: EUR 287.4 million), while the amount of non-current financial liabilities increased to EUR 1,084.5 million (31 December 2018: EUR 861.3 million).

The main external financing instruments of the Group are the following financing arrangements: EUR 300 million in committed credit lines which remained undrawn as of 31 December 2018; a commercial paper programme with a total amount of EUR 350 million, of which EUR 107 million had been used; and an EMTN programme with a total volume of EUR 1,500 million, of which EUR 780 million have been used. As of 31 December 2018, the Group's net financial liabilities amounted to EUR 1,067.8 million (2017: EUR 1,073.1 million; 1Q 2019: EUR 1,075 million).

The Group's net cash flow from operating activities improved to EUR 515.4 million (2017: EUR 500.8 million), driven mainly by the improved EBITDA and changes in the net working capital. The cash flow after investments was EUR 272 million (2017: EUR 300 million). Excluding the share investments and sale of shares, the adjusted cash flow after investments was EUR 282 million (2017: EUR 246 million). The positive development of adjusted cash flow after investments was driven, along with the afore-mentioned factors, by the lower capex (EUR 235.6 million, 2017: EUR 254.8 million).

Elisa has, in our view, a strong and adequate financial position, taking into consideration its very solid ratio of net total debt to adjusted EBITDA of 2.25 and net financial debt to adjusted EBITDA of 1.7 as of 31 December 2018 (1.7 as of 1Q 2019). The Company's cash generation capacity with revenues of about EUR 1.8 billion and EBITDA of over EUR 600 million are sufficient to cover the Company's necessary capex and to pay dividends according to the declared volume of 80% to

100 % of the annual result. We do not expect any liquidity shortages in the course of the implementation of the Company's strategy, taking into consideration its unused credit lines and generally good access to the financial markets (EMTN-programme, commercial paper programme, unused credit lines at commercial banks and with supranational lenders). We see the commitment of Elisa to maintain its solid financials through targeted net financial debt to EBITDA ratio of up to 2.0 and capex of up to 12% of revenues as positive. Risks could emerge related to elevated capex necessity in the course of introducing new products or due to large acquisitions, as well as in connection with a substantial deterioration of its cash generating capacity, e.g. against the background of higher termination rates. We do not consider these risks as likely in the short-term perspective given the stable economic and political environment in Finland and Estonia, the Company's established market position, and the fact that the Company stated its readiness for the next technological phase connected with the introduction of 5G.

Issue rating

Issue rating details

The rating objects of this issue rating are exclusively the long-term senior unsecured issues, denominated in euro, issued by Elisa Oyj (issuer) which are included in the list of ECB-eligible marketable assets. The ECB list of eligible marketable assets can be found on the website of the ECB.

The issues have been issued under the EMTN programme with its latest prospectus from 14 August 2018. This EMTN programme amounts to EUR 1.5 billion. The notes and coupons under the EMTN programme constitute direct, unconditional, unsubordinated, unsecured obligations of the Issuer, and rank at least pari passu among themselves and with all other present and future unsecured obligations of the issuer. Additionally, the notes benefit from a negative pledge provision, a change of control clause and a cross default mechanism.

Corporate issue rating result

We have provided the debt securities issued by Elisa Oyj with a rating of **BBB+**. The rating is based on the corporate rating of Elisa Oyj. Other types of debt instruments or issues denominated in other currencies of the issuer have not been rated by CRA. For a list of all currently valid ratings and additional information, please consult the website of Creditreform Rating AG.

Overview

Table 4: Overview of CRA Ratings | Source: CRA

| Rating objects | Details | |
|--|--------------|----------------------|
| | Date | Rating |
| Elisa Oyj (Issuer) | 11 June 2019 | BBB+ / stable |
| Long-term Local Currency (LT LC) Senior Unsecured Issues | 11 June 2019 | BBB+ / stable |
| Other | -- | n.r. |

Table 5: Overview of 2018 Euro Medium Note Programme I Source: Elisa Oyj, Base Prospectus dated 14 August 2018

| Overview 2018 EMTN Programme | | | |
|------------------------------|-------------------|----------|----------------------------------|
| Volume | EUR 1,500,000,000 | Maturity | Depending on the respective bond |
| Issuer | Elisa Oyj | Coupon | Depending on the respective bond |
| Arranger | Nordea | Currency | Depending on the respective bond |
| Credit enhancement | none | ISIN | Depending on the respective bond |

All future LT LC senior unsecured Notes that will be issued by Elisa Oyj and that have similar conditions to the current EMTN programme, denominated in euros and included in the list of ECB-eligible marketable assets will, until further notice, receive the same ratings as the current LT LC senior unsecured notes issued under the EMTN programme. Notes issued under the programme in any currency other than euro, or other types of debt instruments, have not yet been rated by CRA. For a list of all currently valid ratings and additional information, please consult the website of Creditreform Rating AG. For the time being, other emission classes or programmes (such as commercial paper programme) and issues that do not denominate in euro will not be assessed. For a list of all currently valid ratings and additional information, please consult the website of Creditreform Rating AG.

Financial ratio analysis

Table 6: Financial key ratios | Source: Elisa Oyj consolidated annual report 2018, structured by CRA

| Asset structure | 2015 | 2016 | 2017 | 2018 |
|--|-------|--------|--------|--------|
| Fixed asset intensity (%) | 64.63 | 65.40 | 69.68 | 68.40 |
| Asset turnover | -- | 0.98 | 0.89 | 0.88 |
| Asset coverage ratio (%) | 8.27 | 37.26 | 37.97 | 63.44 |
| Liquid funds to total assets (%) | 2.15 | 2.22 | 2.17 | 3.80 |
| Capital structure | | | | |
| Equity ratio (%) | 3.94 | 23.36 | 25.55 | 28.76 |
| Short-term-debt ratio (%) | 42.12 | 32.59 | 26.21 | 28.25 |
| Long-term-debt ratio (%) | 1.41 | 1.00 | 0.91 | 14.64 |
| Capital lock-up period (in days) | 30.35 | 37.51 | 42.23 | 37.29 |
| Trade-accounts-payable ratio (%) | 9.66 | 8.40 | 10.15 | 8.79 |
| Short-term capital lock-up (%) | 26.32 | 29.06 | 17.12 | 22.45 |
| Gearing | 23.85 | 3.19 | 2.83 | 2.35 |
| Leverage | -- | 6.44 | 4.09 | 3.68 |
| FinancialsStability | | | | |
| Cash flow margin (%) | -- | 29.38 | 28.89 | 29.84 |
| Cash flow ROI (%) | -- | 24.02 | 25.38 | 25.60 |
| Total debt / EBITDA adj. | 2.45 | 2.73 | 2.48 | 2.37 |
| Net total debt / EBITDA adj. | 2.40 | 2.65 | 2.41 | 2.25 |
| ROCE (%) | 31.36 | 21.56 | 24.38 | 24.31 |
| Total debt repayment period | -- | 4.48 | 2.24 | 3.01 |
| Profitability | | | | |
| Gross profit margin (%) | 61.20 | 61.70 | 61.08 | 61.55 |
| EBIT interest coverage | 11.39 | 13.79 | 15.82 | 16.17 |
| EBITDA interest coverage | 19.44 | 22.89 | 25.43 | 25.62 |
| Ratio of personnel costs to total costs (%) | 16.97 | 16.80 | 16.98 | 17.05 |
| Ratio of material costs to total costs (%) | 38.80 | 38.30 | 39.03 | 38.27 |
| Cost income ratio (%) | 80.17 | 79.32 | 79.10 | 77.76 |
| Ratio of interest expenses to total debt (%) | 2.11 | 1.60 | 1.58 | 1.65 |
| Return on investment (%) | 19.83 | 13.78 | 17.49 | 15.92 |
| Return on equity (%) | -- | 98.89 | 68.15 | 55.83 |
| Net profit margin (%) | 15.52 | 15.74 | 18.80 | 17.31 |
| Operating margin (%) | 93.11 | 94.34 | 94.81 | 94.31 |
| Liquidity | | | | |
| Cash ratio (%) | 5.11 | 6.83 | 8.29 | 13.46 |
| Quick ratio (%) | 61.40 | 86.27 | 87.23 | 85.40 |
| Current ratio (%) | 83.97 | 106.20 | 115.69 | 111.88 |

Appendix

Rating history

The rating history is available under:

<https://www.creditreform-rating.de/de/ratings/published-ratings/>

Table 7: Corporate issuer Rating of Elisa Oyj

| Event | Rating date | Publication date | Monitoring period | Result |
|----------------|--------------|----------------------------|--------------------------|---------------|
| Initial rating | 11 June 2019 | www.creditreform-rating.de | Withdrawal of the rating | BBB+ / stable |

Table 8: LT LC Senior Unsecured issues issued by Elisa Oyj

| Event | Rating date | Publication date | Monitoring period | Result |
|----------------|-------------|----------------------------|--------------------------|---------------|
| Initial rating | 11.06.2019 | www.creditreform-rating.de | Withdrawal of the rating | BBB+ / stable |

Regulatory requirements

The present rating² is an unsolicited rating. Creditreform Rating AG was not commissioned by the Issuer with the preparation of the rating. The present analysis was prepared on a voluntary basis.

The rating is based on the analysis of published information and on internal evaluation factors. The rating was conducted based on Creditreform Rating AG's "Corporate Ratings" methodology and the "Non-Financial Corporate Issue Rating" methodology, as well as on the "Rating Criteria and Definitions".

The documents submitted and information gathered were sufficient to meet the requirements of Creditreform Rating AG's rating methodologies. A complete description of Creditreform Rating AG's rating methodologies and Creditreform Rating AG's basic document "Rating Criteria and Definitions" is published on the following internet page:

www.creditreform-rating.de/en/regulatory-requirements/

This rating was carried out by analysts Elena Alexeenco (e.alexenco@creditreform-rating.de) and Rouven Weber (r.weber@creditreform-rating.de), both located in Neuss, Germany. A management meeting did not take place.

The rating was presented to the rating committee on 11 June 2019. The company has previously received the rating result, along with the key reasons that led to the rating prior to publication and was given at least one full working day to appeal the rating committee's decision and to provide additional information. The rating decision was not amended following this examination.

The rating will be monitored until Creditreform Rating AG removes the rating and sets it to non-rated (n.r.).

² In these regulatory requirements the term "rating" is used in relation to all ratings issued by Creditreform Rating AG in connection to this report. This may concern several companies and their various issues.

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1. Annual report
2. Website
3. Internet research

Corporate issue rating:

1. Corporate issuer rating incl. information used for the corporate issuer rating
2. Documents on issues / instruments

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