

17 September 2020 – Neuss, Germany

## Rating Action / Update:

### Creditreform Rating has confirmed the unsolicited issuer and issue rating of Nokia Oyj at BB+. The outlook remains stable.

Creditreform Rating (CRA) has confirmed the unsolicited corporate issuer rating of Nokia Oyj and the unsolicited corporate issue rating of the long-term local currency senior unsecured notes issued by Nokia oyj at BB+. The outlook remains stable.

### Current relevant factors for the rating

The following considerations were of specific relevance for the rating assessment:

- Improved operating results in 2019 and H1 2020
- COVID-19-related fall in revenue of EUR 500 million recorded in H1 2020, revenues expected to be shifted towards future periods
- Improved cost structure following implemented cost reduction measures; further costs and cash outflows are to be expected, putting pressure on cost structure and cash flows
- Nokia has halted dividend payments to improve its net cash position

### ESG-criteria:

CRA generally considers ESG factors (environment, social and governance) within its rating decisions. In the case of Nokia Oyj we have not identified any ESG factor with significant influence.

A general valid description of Creditreform Rating AG, as well as a valid description of corporate ratings for understanding and assessing ESG factors in the context of the credit rating process, can be found here:

<https://creditreform-rating.de/en/about-us/regulatory-requirements.html?file=files/content/downloads/Externes%20Rating/Regulatorische%20Anforderungen/EN/Ratingmethodiken%20EN/The%20Impact%20of%20ESG%20Factors%20on%20Credit%20Ratings.pdf>

### Rating result

The unsolicited corporate issuer rating of BB+ attests Nokia Oyj a satisfactory level of creditworthiness. The main positive factors contributing to the rating are the Group's strong market position, its geographical diversification, the improved results generated in 2019 and H1 2020, mainly due to an improvement in the Company's cost structure and operating profitability resulting from measures implemented in the past. However, despite significant savings, we currently also see the current cost savings program of the Company as a constraining factor because further cash outflows and restructuring and associated charges are expected to at least the end of 2020, which will continue to put pressure on the Group's earnings and cash flows. Further constraining factors for the unsolicited corporate issuer rating are the fast-moving pace and cyclical nature of the industry, the dependence on the spending cycle of communication service providers, and the needed commitment for ongoing high R&D investments in order to retain its market position.

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## Outlook

The one-year outlook of the rating is stable. This assessment is based on the fact that the Group managed to improve their operating result again in H1 2020 despite a challenging business environment, and we expect that Nokia will be able to generate a slightly positive or positive result in the 2020 business year. Additionally, we see Nokia's decision to halt further dividend payments to strengthen its net cash position as positive, which also contributes to the stable outlook.

We do, however, see critical that Nokia adjusted its outlook in its Q3-reporting in 2019. Nokia significantly reduced its expectations for 2020 non-IFRS<sup>1</sup> diluted EPS, operating margin and recurring FCF. Additionally, the COVID-19 crisis had a negative impact on the Group's net sales in H1 2020 and is accompanied by a large degree of uncertainty, as it remains unclear how long this pandemic, the recession, and the subsequent recovery period will last.

### Please note:

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

### **Best-case scenario: BB+**

In our best-case scenario for one year, we assume a rating of BB+. Despite the improved operating results, we believe that an upgrade is unlikely in the short term for the unsolicited corporate issuer rating of Nokia Oyj. The Group experienced a significant drop in revenues in the first half of the 2020 business year largely driven by the COVID-19. Additionally, the continuing uncertainty in Nokia's key-markets with regard to the development of the COVID-19 crisis and the response of local governments further dampen this rating scenario.

### **Worst-case scenario: BB**

In our worst-case-scenario for one year, we assume a rating of BB. This could be the case if the COVID-19 crisis worsens and lockdown measures are reinstated, giving rise to further supply-chain disruptions and supply and implementation problems, which would cause a further fall in revenues and results, adversely affecting the Group's relevant key figures.

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<sup>1</sup> Nokia's Non-IFRS is a metric that deviates from reported earnings/cash-flows and excludes the costs such as the acquisition of Alcatel-Lucent and related integration, goodwill impairment charges, intangible asset amortization and other purchase price fair value adjustments, restructuring and associated charges and some other items.

## Business development and outlook

During the business year of 2019, Nokia generated revenues of EUR 23,315 million (2018: 22,563 million), gross profit of EUR 8,326 million (2018: EUR 8,446 million), EBITDA of EUR 2,145 million (EUR 1,396 million), EBIT of EUR 485 million (2018: -59 million) and an EAT of EUR 11 million (2018: -335 million). Revenues increased by 3% against the prior business year, predominantly driven by the Networks segment, in particular Mobile Access and IP Routing. Adjusted by currency effects, the net sales of the Group increased by 1%.

The Networks business continues to be the main revenue driver for the Group. Please see table 1 for an overview of Nokia's business segments, and table 2 for an overview of the business Groups within Networks.

Table 1: Results of business segments of Nokia Oyj | Source: Annual Report 2019

in Mio. EUR	Networks	Nokia Software	Nokia Technologies	Group Common and Other
Revenue	18,209	2,767	1,487	952
Gross profit	5,577	1,453	1,459	34
EBIT	665	589	1,239	-490

Table 2: Revenues of business groups within Nokia Networks Source: Annual Report 2019

In Mio. EUR	Mobile Access	Fixed Access	IP Routing	Optical Networks
Revenues	11,655	1,881	2,921	1,752

Despite higher revenues, the gross profit decreased to EUR 8,326 million (2018: EUR 8,446 million), primarily driven by lower margins in Mobile Access resulting from higher 5G product costs that arose from the deployment in the early stages of the new technological cycle. Gross profit also declined to a lesser extent due to challenges in the market transition from copper to fiber in Fixed Access, and a decline in the Group Common and Other business segment due to a decrease in Radio Frequency systems.

On the other hand, the Group's operating results (EBITDA, EBIT) rose significantly with an EBITDA of EUR 2,145 million (2018: EUR 1,396 million) and an EBIT of EUR 485 million (2018: EUR -59 million). This was primarily the result of a non-recurring gain of EUR 168 million related to a defined benefit plan amendment, lower integration costs relating to the Alcatel Lucent acquisition, and lower product portfolio strategy costs offset by higher restructuring and associated charges, of which EUR 450 million relate to the current and past cost savings programs. Due to progress with the cost savings program, particularly within Mobile Access, the Group reduced its operating expenses by approximately EUR 200 million in 2019.

Table 3: Financials of Nokia Oyj | Source: Nokia Oyj Annual report 2019 standardized by CRA

Nokia Oyj Selected key figures of the financial statement analysis Basis: Annual accounts and report of 31.12. (IAS, Group)	CRA standardized figures <sup>2</sup>	
	2018	2019
Sales (million EUR)	22,563	23,315
EBITDA (million EUR)	1,396	2,145
EBIT (million EUR)	-59	485
EAT (million EUR)	-335	11
EAT after transfer (million EUR)	-340	7
Total assets (million EUR)	31,954	31,315
Equity ratio (%)	21.97	20.83
Capital lock-up period (days)	77.21	59.27
Short-term capital lock-up (%)	36.88	32.00
Net total debt / EBITDA adj. (factor)	11.83	8.57
Ratio of interest expenses to total debt (%)	3.15	2.61
Return on Investment (%)	-0.07	1.12

The analysis of the structured financial key ratios show a noticeable improvement against the prior year, mainly driven by improved operating results in the 2019 business year. The return on investment, EBITDA interest coverage and other key profitability ratios show clear improvements against the previous years. The same holds for the Group's net total debt/EBITDA, which improved to 8.57 (2018: 11.83). This was mainly due to better operating results partially offset by an increase in gross debt, which was to a certain extent due to newly issued debt, but also due to the first-time application of IFRS 16 (EUR +1,006). As of 31.12.2019 Nokia had gross debt of EUR 5,307 million (2018: EUR 3,822 million). As we already incorporated the existing lease agreements in our previous rating assessments, the first-time application of IFRS 16 has a neutral influence on the unsolicited corporate issuer rating and does not affect the creditworthiness of the Group. None of Nokia's interest-bearing liabilities have financial covenants. The improvement of the financial key ratios was somewhat curbed by a small decline in the Group's equity ratio of 20.83% (2018: 21.97%), which mainly declined due to the issuance of dividends in 2019 (EUR -570 million).

During H1 2020 Nokia managed to improve its results in comparison with the prior year despite a challenging environment. The Group made progress with its cost savings program and benefited from a favourable regional and product sales mix, which lead to better operating results; however, despite the progress made, Nokia recorded a fall of approximately 7% in net sales to EUR 10,005 (H1 2019: 10,726 million). The fall was mainly due to the COVID-19 crisis (EUR -500 million) and the difficult market environment in China, coupled with a prudent approach in deal-making in that market (EUR -339 million). The revenues lost due to COVID-19 have mainly been due to supply-chain disruptions, as well as supply and implementation challenges. Nokia believes that the COVID-19-related fall in revenue is not lost, but will be shifted towards future periods. The Group's gross profit grew to EUR 3,784 million (H1 2019: EUR 3,646 million) and

<sup>2</sup> For analytical purposes, CRA adjusted the original values in the financial statements in the context of its financial ratio analysis. For example, when calculating the analytical equity ratio, deferred tax assets, goodwill (entirely or partly), and internally-generated intangible assets are subtracted from the original equity, whilst deferred tax liabilities are added. Net total debt takes all balance sheet liabilities into account. Therefore, the key financial figures shown often deviate from the original values of the company.

EBIT increased to EUR 94 million (H1 2019: EUR -581 million). The main reasons are progress with the cost savings program, lower restructuring and associated charges, lower amortization of acquired intangible assets and lower travel expenses due to COVID-19 related travel bans. The Group's EAT for the period was EUR -17 million (H1 2019: EUR -638 million).

The cost savings program is expected to yield EUR 500 million recurring non-IFRS cost savings in full year 2020 compared to full year 2018. In the third and fourth quarters of 2020, Nokia expects in total to incur a further EUR 240 million of restructuring and associated charges, and EUR 330 million of restructuring and associated cash outflows. EUR 550 million in cash outflows related to the cost savings program will be recorded beyond 2020. These costs and cash outflows will continue to put pressure on the Group's earnings and cash flows, which currently still dampen the rating result.

The Group shows a significant improvement in its free cash flow generation. As of H1 2020, the Group's FCF stood at EUR 259, a significant improvement against full year 2019 (EUR -297 million) and H1 2019 (EUR -1,954 million). The improvement in free cash flow generation in Q2 was mainly due to an improved operating result and less severe negative working capital adjustments. We expect the cash flow generation to increase in the third and fourth quarter, as the Group usually experiences disproportionate cash flow growth during the fourth quarter. Additionally, Nokia has declared it will not pay any dividends over the 2019 business year and will only resume dividend payments when the net cash position reaches EUR 2 billion. The net cash position was EUR 1.55 billion at the end of Q2.

As of Q2 2020, the Group had positive working capital of EUR 5,892 million (2019: EUR 4.73 million) and a total position of cash and current financial investments of EUR 7.487 (2019: EUR 6.007 million). The improved liquidity position is partially due to debt issuance of EUR 1 billion in response to the COVID-19 virus.

Nokia Oyj is still in the process of restructuring its internal business, and has managed to significantly improve its operating result due to implemented cost savings programs. As the current program has not yet been successfully brought to an end, we do expect further restructuring costs and cash outflows to put pressure on the Group's earnings and cash flows for the business year 2020, and possibly also in the following business year. Further dampening factors for the rating are the downwards adjustments by Nokia in its outlook in non-diluted EPS in Q3-2019 (non-IFRS operating margin from 12 - 16% to 9.5% +/- 1.5%), and the minor corona-related correction in Q1-2020, which was adjusted upwards again at the end of Q2-2020. While the COVID-19 crisis adversely affected the Group's operations during the first half of 2020, we believe that the effects will be mostly temporary as Nokia expects to recover the lost revenues in future periods. Furthermore, we see the Group's decision to halt dividend payments as positive, as it will further strengthen the Groups liquidity position without affecting its financial position.

## Issuer / Issue rating details

### Issue rating

This issue rating is exclusively valid for the long-term senior unsecured issues denominated in euros, issued by Nokia Oyj, and 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 Notes have been issued within the framework of Nokia Oyj's EMTN Program, most recently renewed in 27 March 2020. The total nominal value of the bonds issued must not exceed EUR 5 billion. According to the prospectus as of 27 March 2020, the notes benefit from a negative pledge provision and a cross acceleration mechanism. We have assigned the long-term senior unsecured issues issued by Nokia Oyj a rating of BB+. This decision is mainly based on the corporate rating of Nokia. Other types of debt instruments or issues denominated in other currencies 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: Summary of CRA Ratings | Source: CRA

Rating object	Details information	
	Date	Rating
Nokia Oyj (Issuer)	17.09.2020	BB+ / stable
Long Term Local Currency Senior Unsecured Issues	17.09.2020	BB+ / stable

Table 5: Overview of Nokia's Debt Issuance Program | Source: Nokia Oyj

Issue details			
Volume	EUR 5,000,000,000	Maturity	Depending on the respective bond
Issuer	Nokia Oyj	Coupon	Depending on the respective bond
Arrangers	Deutsche Bank	Currency	Depending on the respective bond
Credit Enhancement	-	ISIN	Depending on the respective bond

All future LT LC senior unsecured Notes that will be issued by Nokia under the current EMTN program, denominated in Euro 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 program. Notes issued under the program 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.

## Appendix

### Rating history

The rating history is available under:

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

Table 6: Corporate issuer rating of Nokia Oyj | Source: CRA

Event	Rating date	Publication date	Monitoring period	Result
Initial Rating	11.12.2018	17.12.2018	16.09.2020	BB+ / stable

Table 7: LT LC senior unsecured issues by Nokia Oyj | Source: CRA

Event	Rating date	Publication date	Monitoring period	Result
Initial rating	11.12.2018	17.12.2018	16.09.2020	BB+

### Regulatory requirements

The present rating is an unsolicited rating in the regulatory sense. The analysis was carried out on a voluntary basis by Creditreform Rating AG, which was not commissioned by the Issuer or any other third party to prepare the present rating.

The rating is based on the analysis of published information and on internal evaluation methods for the assessment of companies and issues. The rating object was informed of the intention of creating or updating an unsolicited rating before the rating was determined.

The rating object participated in the creation of the rating as follows:

With Rated Entity or Related Third Party Participation	No
With access to Internal Documents	No
With Access to Management	No

A management meeting did not take place within the framework of the rating process.

The documents and information gathered were sufficient to meet the requirements of Creditreform Rating AG's rating methodologies.

The rating was conducted based on the following rating methodologies and the basic document.

Rating methodology	Version number	Date	Website
Corporate Ratings	2.3	29.05.2019	<a href="https://creditreform-rating.de/en/about-us/regulatory-requirements.html?file=files/content/downloads/Externes%20Rating/Regulatorische%20Anforderungen/EN/Ratingmethodiken%20EN/Rating%20Methodology%20Corporate%20Ratings.pdf">https://creditreform-rating.de/en/about-us/regulatory-requirements.html?file=files/content/downloads/Externes%20Rating/Regulatorische%20Anforderungen/EN/Ratingmethodiken%20EN/Rating%20Methodology%20Corporate%20Ratings.pdf</a>
Non-financial Corporate Issue Ratings	1.0	October 2016	<a href="https://creditreform-rating.de/en/about-us/regulatory-requirements.html?file=files/content/downloads/Externes%20Rating/Regulatorische%20Anforderungen/EN/Ratingmethodiken%20EN/Rating%20Methodology%20Non-Financial%20Corporate%20Issue%20Ratings.pdf">https://creditreform-rating.de/en/about-us/regulatory-requirements.html?file=files/content/downloads/Externes%20Rating/Regulatorische%20Anforderungen/EN/Ratingmethodiken%20EN/Rating%20Methodology%20Non-Financial%20Corporate%20Issue%20Ratings.pdf</a>
Rating Criteria and Definitions	1.3	January 2018	<a href="https://creditreform-rating.de/en/about-us/regulatory-requirements.html?file=files/content/downloads/Externes%20Rating/Regulatorische%20Anforderungen/EN/Ratingmethodiken%20EN/CRAG%20Rating%20Criteria%20and%20Definitions.pdf">https://creditreform-rating.de/en/about-us/regulatory-requirements.html?file=files/content/downloads/Externes%20Rating/Regulatorische%20Anforderungen/EN/Ratingmethodiken%20EN/CRAG%20Rating%20Criteria%20and%20Definitions.pdf</a>

The documents contain a description of the rating categories and a definition of default.

The rating was carried out by the following analysts:

Name	Function	Mail-Address
Rudger van Mook	Lead analyst	R.vanMook@creditreform-rating.de
Artur Kapica	Analyst	A.Kapica@creditreform-rating.de

The rating was approved by the following person (person approving credit ratings, PAC):

Name	Function	Mail-Address
Christian Konieczny	PAC	C.Konieczny@creditreform-rating.de

On 17 September 2020, the analysts presented the rating to the rating committee and the rating was determined. The rating result was communicated to the company on 17 September 2020. There has not been a subsequent change to the rating.

The rating will be monitored until Creditreform Rating AG withdraws the rating. The rating can be adjusted as part of the monitoring if crucial assessment parameters change.

In 2011, Creditreform Rating AG was registered within the European Union according to EU Regulation 1060/2009 (CRA-Regulation). Based on this registration, Creditreform Rating AG is allowed to issue credit ratings within the EU and is bound to comply with the provisions of the CRA-Regulation.

### ESG-factors

You can find out whether ESG factors were relevant to the rating in the upper section of this rating report "Relevant rating factors".

A general valid description for Creditreform Rating AG, as well as a valid description of corporate ratings for understanding and assessing ESG factors in the context of the credit rating process, can be found here:



<https://creditreform-rating.de/en/about-us/regulatory-requirements.html?file=files/content/downloads/Externes%20Rating/Regulatorische%20Anforderungen/EN/Ratingmethodiken%20EN/The%20Impact%20of%20ESG%20Factors%20on%20Credit%20Ratings.pdf>

#### **Conflict of interests**

No conflicts of interest were identified during the rating process that might influence the analyses and judgements of the rating analysts involved or any other natural person whose services are placed at the disposal or under the control of Creditreform Rating AG and who are directly involved in credit rating activities or in approving credit ratings and rating outlooks.

In the event of providing ancillary services to the rated entity, Creditreform Rating AG will disclose all ancillary services in the credit rating report.

#### **Rules on the presentation of credit ratings and rating outlooks**

The approval of credit ratings and rating outlooks follows our internal policies and procedures. In line with our "Rating Committee Policy", all credit ratings and rating outlooks are approved by a rating committee based on the principle of unanimity.

To prepare this credit rating, Creditreform Rating AG has used following substantially material sources:

#### Corporate issuer rating:

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

There are no other attributes and limitations of the credit rating or rating outlook other than those displayed on the Creditreform Rating AG website. Furthermore, Creditreform Rating AG considers as satisfactory the quality and extent of information available on the rated entity. With respect to the rated entity, Creditreform Rating AG regarded available historical data as sufficient.

No amendments were made to the credit rating between the time of disclosure of the credit rating to the rated entity and the public disclosure.

The Basic Data Information Card indicates the principal methodology or version of methodology that was used in determining the rating, with a reference to its comprehensive description.

In cases where the credit rating is based on more than one methodology or where reference only to the principal methodology might cause investors to overlook other important aspects of the credit rating, including any significant adjustments and deviations, Creditreform Rating AG explains this fact in the credit rating report and indicates how the different methodologies or other aspects are taken into account in the credit rating. This information is integrated in the credit rating report.

The meaning of each rating category, the definition of default or recovery and any appropriate risk warning, including a sensitivity analysis of the relevant key rating assumptions such as mathematical or correlation assumptions, accompanied by worst-case scenario credit ratings and best-case scenario credit ratings are explained.

The date at which the credit rating was initially released for distribution and the date when it was last updated, including any rating outlooks, is indicated clearly and prominently in the Basic Data Information Card as a "rating action"; initial release is indicated as "initial rating", other updates are indicated as an "update", "upgrade" or "downgrade", "not rated", "confirmed", "selective default" or "default".

In the case of a rating outlook, the time horizon is provided during which a change in the credit rating is expected. This information is available within the Basic Data Information Card.

In accordance with Article 11 (2) EU-Regulation (EC) No 1060/2009, a registered or certified credit rating agency shall make available, in a central repository established by ESMA, information on its historical performance data including the rating transition frequency and information about credit ratings issued in the past and on their changes. Requested data are available at the ESMA website: <https://cerep.esma.europa.eu/cerep-web/statistics/defaults.xhtml>

An explanatory statement of the meaning of Creditreform Rating AG's default rates are available in the credit rating methodologies disclosed on the website.

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