

Note F1, cont'd.

Impairment of trade receivables and contract assets

Trade receivables and contract assets are assessed for impairment under a unified model. The Company has determined that credit risk largely depends on both the risk in the country where the customer resides (e.g. ability to make cross border payments) as well as the payment pattern of the customer. Therefore, expected credit losses (ECLs) are calculated using a provision matrix that specifies a fixed rate depending both on the number of days past due and the country risk rating. The country risk ratings depends on the ratings used by all Export Credit Agencies within the OECD. The rates defined in the provision matrix are based on historical loss patterns for that grouping of customers. These rates are adjusted for current conditions as well as management expectations for changes to political risks and payment patterns in the future. The provision rates are higher on high risk countries compared to low risk countries and also higher on amounts that remain unpaid for longer periods of time. There were no significant changes to the model during the year.

Trade receivables and contract assets together amounted to SEK 55,240 (64,350) million as of December 31, 2019. Provisions for expected credit losses on trade receivables and contract assets amounted to SEK 2,983 (4,123) million as of December 31, 2019. The allowance decreased in 2019 due to improvement in cash collection resulting in significant reduction of total past due invoices. The Company's write-offs have historically been low. During the year SEK 382 (890) million were written off due to the Company having no reasonable expectation of collection. Of these write-offs, SEK 0 (61) million are still subject to enforcement.

Movements in allowances for impairment of trade receivables and contract assets		
	2019	2018
Opening balance	4,123	4,575
Decrease (–)/increase (+) in allowance	–737	420
Write-offs	–382	–890
Translation difference	–21	18
Closing balance ¹⁾	2,983	4,123

¹⁾ Of which SEK 0 (15) million relates to contract assets.

The distribution of trade receivables and contract assets closely follows the distribution of the Company's sales, see note B1, "Segment information." The ten largest customers represented 49% (53%) of the total trade receivables and contract assets in 2019.

Aging analysis of gross values by risk category at December 31, 2019					
Days past due	1–90	91–180	181–360	>360	Total
Country risk: Low	1,347	125	127	313	1,912
Country risk: Medium	891	725	600	819	3,035
Country risk: High	583	365	217	1,315	2,480
Total past due	2,821	1,215	944	2,447	7,427

Customer finance credit risk

All major commitments to finance customers are made only after approval in accordance with the work procedure for the Board of Directors and according to the established credit approval process.

Prior to the approval of new facilities reported as customer finance, an internal credit risk assessment is conducted in order to assess the credit rating of each transaction for political and commercial risk. The credit risk analysis is made by using an assessment tool, where the political risk rating is identical to the rating used by all Export Credit Agencies within the OECD. The commercial risk is assessed by analyzing a large number of parameters, which may affect the level of the future commercial credit risk exposure. The output from the assessment tool for the credit rating also includes an internal pricing of the risk. This is expressed as a risk margin per annum over funding cost. The reference pricing for political and commercial risk, on which the tool is based, is reviewed using information from Export Credit Agencies and prevailing pricing in the bank loan and bond markets for structured financed deals. The objective is that the internally set risk margin shall reflect the assessed risk and that the pricing is as close as possible to the current market pricing. A reassessment of the credit rating for each customer finance facility is made on a regular basis.

As of December 31, 2019, the total amount payable to the Company under customer finance credits was SEK 5,924 (4,247) million. The carrying value of these assets was SEK 3,756 (2,883) million as of December 31, 2019, which represents the maximum exposure to credit risk on these assets. Customer finance is arranged for infrastructure projects in different geographic markets. As of December 31, 2019, there were a total of 80 (94) customer finance arrangements originated by or guaranteed by the Company. The five largest facilities represented 69% (62%) of the customer finance exposure in 2019. As of December 31, 2019, Middle East and Africa made up 49% (57%) of the outstanding exposure while South East Asia, Oceania and India made up 29% (15%). As of December 31, 2019, the Company also had unutilized customer finance commitments of SEK 25,854 (30,270) million.

Security arrangements for customer finance facilities may include pledges of equipment, pledges of certain assets belonging to the borrower and pledges of shares in the operating company. If available, third-party risk coverage is, as a rule, arranged. "Third-party risk coverage" means that a financial payment guarantee covering the credit risk has been issued by a bank, an export credit agency or an insurance company. All such institutions have been rated at least investment grade. A credit risk transfer under a sub-participation arrangement with a bank can also be arranged. In this case the entire credit risk and the funding is taken care of by the bank for the part that they cover.

Information about financial guarantees related to customer finance is included in note D2, "Contingent liabilities."

The table below summarizes the Company's outstanding customer finance as of December 31, 2019 and 2018.

Outstanding customer finance credit risk exposure ¹⁾		
	2019	2018
Fair value of customer finance credits	3,756	2,883
Financial guarantees for third-parties	24	42
Accrued interest	14	21
Maximum exposure to credit risk	3,794	2,946
Less third-party risk coverage	–309	–331
The Company's risk exposure, less third-party risk coverage	3,485	2,615

¹⁾ This table has been adjusted to show the maximum exposure to credit risk.

Fair value assessment of customer finance credits

Customer finance risk exposures are held at fair value and are classified as Level 3 on the fair value hierarchy. The Credit Asset Management Team within Ericsson Credit AB, reporting to Head of Group Treasury and Customer Finance, has established a process with respect to measurement of fair values. The quarterly credit review uses an internal model to determine a commercial rating for each credit and for calculation of the fair value. The model is based on external credit rating, political/country rating and bank pricing. Regular monitoring of customer behavior is also a part of the internal assessment. Revaluation of customer finance amounted to a net negative impact in the income statement of SEK 804 (1,073) million in 2019, of which SEK 804 (1,073) million is related to credits held as of December 31, 2019. This effect is presented within selling and administrative expenses and was mainly related to India and the Middle East, especially Iran and Iraq.

Customer finance fair value reconciliation		
	2019	2018
Opening balance	2,884	3,931
Additions	29,732	6,100
Disposals/repayments	–28,032	–6,200
Revaluation	–804	–1,073
Translation difference	–24	126
Closing balance	3,756	2,884
Of which non-current	2,262	1,180

Due to the increase in 5G buildout this year, demand for customer financing solutions has increased. Most of such financing has been successfully transferred to banks, hence the balance of customer finance receivables remains low.