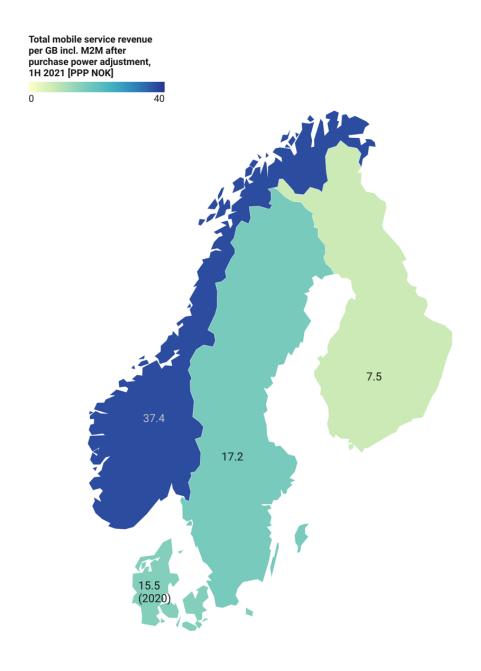


Analysis prepared for Kommunal- og distriktsdepartementet

Assessment of Norwegian mobile revenues in a Nordic context – 2022





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1. Executive summary

This analysis is commissioned by Kommunal- og distriktsdepartementet (KDD). It provides a one-year-later update of the revenue, usage and pricing parts of the original analysis "Assessment of Norwegian mobile revenues in a Nordic context", dated 22 December 2020¹.

A multitude of metrics are used – always compared between the same four Nordic markets: Norway, Denmark, Sweden and Finland. The analysis shows why these markets form a near-perfect peer group.

Regulator data shows that the Norwegian revenue per mobile subscription – after purchase parity adjustment – is about as high as Finland's but significantly higher than Denmark's and Sweden's. The average data usage is however higher in Denmark, Sweden and, especially, Finland.

To give a sense of the current pricing of data-rich plans, the analysis compares 81 plans with unlimited data or a bucket of at least 30 GB per month. After having adjusted for purchasing power, Norway generally has higher prices, but some prices have come down (or data buckets have been increased) which means that Norwegian plans now can compete on price with some Swedish plans. The Norwegian unlimited plans are still more restricted than in the rest of the Nordics, though.

Telenor and Telia Norway again have the highest EBITDA margins in the Nordics, so high OPEX isn't behind the higher mobile revenue in their case. Ice continues to have the lowest EBITDA margin in the Nordics although it has increased significantly in 2021 following the new national roaming agreement with Telia.

Norwegian operators use more on CAPEX than the median Nordic operator. This is particularly true for Ice which again invests the most in relation to its revenue. Since the EBITDA-CAPEX (~cash flow) margins of Telenor and Telia Norway are higher than the median, the companies can well afford its current level of CAPEX. Ice's situation is different with the highest OPEX and the highest CAPEX in relation to revenue.

Norway has the lowest mobile data usage in the Nordics, but after three years with the slowest growth rate, Norway didn't have the slowest growth rate in the first half of 2021. Norway still has the unfavourable (from a consumer point of view) combination of high revenue² yet lowest usage per subscription, though.

The speeds when using mobile data in Norway is however higher than in the other three countries. As mobile speed depends on the traffic load, Norway's low mobile data usage helps on speed. It is also an indication of that Norwegian operators have invested in capacity not fully utilised. With a wider take on mobile network quality – not just speed – the mobile network experience in Norway is still great, but Denmark and Finland are higher ranked than Norway.

The analysis shows that the Norwegian mobile market is uniquely concentrated although the concentration index HHI decreased in 2020.

This updated analysis doesn't repeat the full root cause analysis of the original analysis, but establishes the key finding: After adjustment for purchasing power, the Norwegian mobile revenue per GB is higher than in Denmark, Sweden and Finland and the most likely root cause is the market concentration.

¹ The report can be downloaded from https://www.regjeringen.no/no/dokumentarkiv/regjeringen-solberg/aktuelt-regjeringen-solberg/kmd/nyheterKMD/2021/ny-rapport-viser-at-konkurransen-i-mobilmarkedene-ma-bli-bedre/id2843838/

² After adjustment for purchase power



2. Background

This analysis is commissioned by Kommunal- og distriktsdepartementet (KDD). It provides a one-year-later update of the revenue, usage and pricing parts of the first analysis "Assessment of Norwegian mobile revenues in a Nordic context", dated 22 December 2020³ which was written to support Kommunal- og moderniseringsdepartementet's⁴ white paper to the Norwegian Parliament covering electronic communications issued 9 April 2021⁵.

Some of the root cause assessment in the original analysis – on e.g. population, population density and size of the mobile site infrastructure – has not been updated as these numbers essentially have not changed in a year.

³ The report can be downloaded from https://www.regjeringen.no/no/dokumentarkiv/regjeringen-solberg/aktuelt-regjeringen-solberg/kmd/nyheterKMD/2021/ny-rapport-viser-at-konkurransen-i-mobilmarkedene-ma-bli-bedre/id2843838/

⁴ The ministry changed name from Kommunal- og moderniseringsdepartementet to Kommunal- og distriktsdepartementet 1 Jan 2022

⁵ https://www.regjeringen.no/no/dokumenter/meld.-st.-28-20202021/id2842784/



3. Peer group

Just like in the original analysis, the peer group consists of the four Nordic countries **Norway, Denmark, Sweden and Finland**. As argued in that analysis, these four countries form a near-perfect international peer group. All metrics will always⁶ be compared between these four countries to allow the reader to understand how one metric may affect another metric.

Below are some high level indicators to show why Norway, Denmark, Sweden and Finland most often are comparable.

	Norway	Denmark	Sweden	Finland		
Mobile						
High smartphone penetration	>90%	>90%	>90%	>90%		
High data-only (mbb) penetration	5%	14%	10%	23%		
High mobile data traffic [GB per SIM per month]	7,5	12,8	12,3	32,6		
High contract share of mobile subscriber base	92%	98%	80%	93%		
Low/medium mobile churn [per year]	15-25%	20-30%	15-25%	15-25%		
Subsidy/instalment model in mobile equipment sales	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes		
World-class mobile network quality	Yes	Yes	Yes	Yes		
High 4G population coverage	>99%	>99%	>99%	>99%		
	Except Ice 94% if excl. national roaming		Except '3' 93% June 2021			
Commercial 5G	3 of 3 operators	4 of 4 operators	4 of 4 operators	3 of 3 operators		
	Fast rollout on a mixture of spectrum bands. Telia with 31% population coverage by end of 2021, Telenor following. Ice launched 5G in Oslo by end of 2021.	Early nationwide rollout (95% of population by mid-2021) on 700 MHz from TDC. Other operators accelerated rollout in 2021, rather focused on 3.5 GHz.	Limited rollout on 3.5 GHz and 700 MHz, likely as a consequence of the delay in the 3.5 GHz auction	Large rollout (60-70% of population by the end of 2021) on 3.5 GHz and 700 MHz from all three		
Mobile active network sharing	No	Yes	Yes	Yes		
		TT-Netværket between Telenor & Telia for 2G, 3G, 4G & 5G	SUNAB between Tele2 & Telia for 3G; 3GIS between Telenor & '3' for 3G; Net4Mobility between Tele2 & Telenor for 2G, 4G & 5G	Suomen Yhteisverkko between Telia & DNA for 2G, 3G, 4G & 5G (Northeast half of Finland)		

⁶ On a few occasions, regulatory data with sufficient break-down isn't available, leaving out that metric for the country in question

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