

## FACT SHEET

### TeliaSonera's 4G service

- 4G's theoretical maximum speed is 100 Mbit/s. Normal speeds in TeliaSonera's 4G networks are in 20-80 Mbit/s range. Ten times higher than today's turbo 3G.
- Response times are as fast as around 20 ms, compared to 50-100 ms for 3G.

### TeliaSonera's 4G network: one year of usage

- 4G users transfer approximately five times more data than 3G users. In early 2010, 4G users transferred ten times more data. When the 4G network expanded across Sweden, covering more "ordinary" users, data traffic usage changed.
- When TeliaSonera recently surveyed the world's first 4G users, many respondents reported dramatic changes to their media consumption habits
  - 49 percent use 4G outside their home
  - Over 46 percent now surf the web more frequently when away from home
  - 29 percent increasingly work away from the office
  - 12 percent increased online gaming frequency
  - 63 percent have fixed broadband
  - 4G users are unsurprisingly also tech enthusiasts. 24 percent have a media player in their homes and 18 percent own a tablet.
- In Telia's annual IT & Telecom Tracker around the communications needs and trends of Swedish companies, over 70 percent stated a clear ambition to use 4G.
- Swedish media companies broadcasted the June 2010 Royal Swedish wedding live via 4G. Japanese Nippon TV was using 4G for the 2010 Nobel Prize events.
- In September, Telia in Sweden released new mobile broadband offerings, now also differentiating 4G around speed and use of data. At the same time, Telia launched several more combination offers, i.e. fixed broadband customers was offered discounted mobile broadband subscriptions.
- In November, Telia in Sweden became the world's first operator to offer 4G for M2M-solutions (machine-to-machine), and in December the world's first 4G B2B deal was signed.

TeliaSonera provides telecommunication services in the Nordic and Baltic countries, the emerging markets of Eurasia, including Russia and Turkey, and in Spain. We are the leading European provider of quality cross-border voice, IP and capacity services, provided through our wholly-owned international carrier network. In 2008, TeliaSonera's net sales amounted to SEK 104 billion, and at the end of December 2008 the total number of subscriptions was 135 million in 20 countries. The TeliaSonera share is listed on NASDAQ OMX Stockholm and NASDAQ OMX Helsinki. Simplicity and service are important tools for us in creating profitable growth and value for our customers and shareholders. Read more at [www.teliasonera.com](http://www.teliasonera.com)

## TeliaSonera's 4G networks

- TeliaSonera deployed the world's first 4G network on Dec 14, 2009 in Stockholm and Oslo.
- 4G is based on the global mobile communications LTE standard (Long Term Evolution).
- TeliaSonera continues to roll out 4G service in Norway (Bergen, Trondheim and Stavanger) during 2010.
- In Sweden, 4G is available in Stockholm, Visby, Gothenburg, Malmö, Lund, Västerås, Uppsala, Linköping, Örebro, Helsingborg, Jönköping, Norrköping, Växjö, Borås, Karlstad, Eskilstuna and Gävle. Before the end of the year, 4G will be available in Sundsvall, Umeå, Luleå as well as in the ski resort towns of Åre, Duved, Sälen, Vemdalen, Branäs, Tärnaby, Hemavan and Idre. 4G will be available in 28 cities by year-end 2010 and in more than 228 cities and villages by the end of 2011.
- TeliaSonera launched the first 4G network in Finland (Turku and Helsinki) on November 30, 2010.
- TeliaSonera launched the first 4G network in Denmark (Copenhagen, Århus, Odense and Aalborg) on December 9, 2010.
- EMT made the first 4G connection in Estonia in February 2010.
- 4G demo network launched in Lithuania on May 12, 2010; pilot 4G networks deployed in four major Lithuanian cities in November.
- Market pilots carried out in Latvia since June 2010.
- Ericsson supplies TeliaSonera's 4G core network in the Nordic and Baltic countries. Ericsson and Nokia Siemens Networks supply radio networks.
- Samsung supplies 4G modems (USB dongles supporting 4G/3G/2G).

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