

Environmental and Social Data Sheet

Overview

Project Name:	3 Scandinavia 4G Network
Project Number:	2012 0051
Country:	Sweden & Denmark
Project Description:	<i>The project concerns the rollout of a new 3G/Long Term Evolution (LTE) mobile network and the upgrade of a 3G/UMTS mobile network both in Sweden and in Denmark. It will lead to increased 3G coverage and substantially improved data services for the entire 3G network and particularly through the new 4G/LTE network (peak down load speeds of up to 70 Mbps). In Sweden the 3G population coverage for mobile broadband service will increase from 70% today to 99.8% in 2014 while the LTE coverage will increase from 0% to 75%. In Denmark the 3G and 4G coverage will reach 98% by 2014. The project takes place 2012 to end 2014.</i>

EIA required: No

Project included in Carbon Footprint Exercise¹: No

Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The project activities do not fall under Annexes I and II of the EU Directive 2011/92/EC, and are therefore not subject to mandatory Environmental Impact Assessments. Generally, mobile networks based on UMTS/LTE technology have limited environmental effects.

The majority of new equipment will be put on existing sites, only a limited number of new sites (Sweden: about 100 sites / +5%, Denmark: 450 sites / + 25%) will be newly erected. The impact from new towers such as the visual one will be mitigated by appropriate construction and operation measures.

Potential health risks from electromagnetic radiation are still being studied at an international level, but WHO classified them in 2011 as being possibly carcinogenic to humans based on a review of recent studies. Therefore, more research on the link between cell phones and the cancer risk is proposed and also users are asked to handle the cell phone more carefully particularly in the case of high usage customers. Still, the ICNIRP² thresholds are considered appropriate.

Therefore, the project is classified as B, i.e. "acceptable, with minor negative residual impacts".

¹ Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO₂e/year absolute (gross) or 20,000 tons CO₂e/year relative (net) – both increases and savings.

² The International Commission on Non-Ionizing Radiation Protection

Environmental and Social Assessment

Environmental Assessment:

Sweden:

Sweden has transposed the EU recommendation (1999/519/EC) on exposure limits (based on the ICNIRP³ principles) into national laws. The Swedish Radiation Safety Agency is in charge to supervise such thresholds.

The erection of new sites requires, as typical for the industry, a building permit. Such permits are issued by the local authorities and in some cases also a consultation needs to be held with the county administrative board. Depending on the location also clearance by the military, Civil Aviation and Airport Authorities is required.

As the project concerns the replacement of existing nodes with latest technology and the installation of new equipment at mostly existing sites, it is estimated that only about 100 new sites (about 5% of the existing site number) will be newly erected.

Generally the promoter follows the rules set by the authorities such as radiation exposure thresholds, safety regulations (set by the Swedish Work Environment Authority) and MNO guidelines regarding roof works.

Based on the promoter's data, about 8 sites are currently located in National parks in Sweden.

Denmark:

The recommendations in 1999/519/EC are not directly implemented into the Danish legislation. However section 5 / subsection 3 of the Danish Law concerning radio and telecommunication equipment and electromagnetic matters states that: "radio equipment and telecommunication equipment has to be construed in a way, which protects the users' and other persons' health and security".

The Danish Business Authority (in Danish: "Erhvervsstyrelsen"), who is the supervisory authority of the Danish telecommunication sector, assesses whether the radio and telecommunication equipment comply with section 5, subsection 3. For such assessments the authority uses the recommended standards from ICNIRP as guidance. In case the operator does not follow the ICNIRP standards, the operator has to prove that the equipment is still in compliance with section 5, subsection 3 protecting the users' and other persons' health and security. This proof is extremely difficult and so far none succeed in a Danish court until now.

The erection of new sites requires, as typically for the industry, a building permit. Such permits are issued by the local authorities.

As the project concerns the replacement of existing nodes with latest technology and the installation of new equipment at mostly existing sites, it is estimated that only about 450 new sites (about 25% of the existing site number) will be erected. In Denmark a higher number of new sites need to be erected as there is no network sharing agreement in place on which the new nodes could be installed.

³ The International Commission on Non-Ionizing Radiation Protection