

ERICSSON AT A GLANCE



NETWORKS

Create one network for a million different needs

IT

Transform IT to accelerate business agility

MEDIA

Delight the TV consumer every day

INDUSTRIES

Connect industries to accelerate performance

42,000 Patents

24,100 R&D Employees

31,6 B. SEK In R&D

1 BILLION

Subscribers managed by us

2.5 BILLION

Subscribers supported by us

62,400

Services professionals

222,6 B. SEK

Net Sales

180

Countries with customers

111,000

Employees

WHAT ARE CELLULAR STANDARDS?



The foundation of mobile telephony

Mobile telephony for everyone

The foundation of mobile broadband

The evolution of mobile broadband

Non-limiting access; anywhere, anytime, anyone, anything

1G

Cellular standards AMPS, TACS NMT, Hicap, Mobitex... 2G

Cellular standards
- GSM, GPRS, EDGE, TDMA,
D-AMPS, CDMAONE,
PDC, PHS...

3G

Cellular standards WCDMA/HSPA, CDMA2000, RTT DO Adyanced... 4G

Cellular standards
LTE Advanced adopted
worldwide after competing
with WiMAX...

5G

Cellular standards
Under development

~1980

~1990

~2000

~2010

~2020

Competition between different technologies during the standard development process

ESSENTIAL PATENTS



A patent which is necessarily infringed when implementing a standard



Consequently, anyone making a product implementing a standard needs to take a license to patents essential to such standard





PATENTS AND STANDARDIZATION



- Patent: A territorial right to prevent others from commercially exploiting an invention, granted to an inventor or his successor in rights, in exchange for the public disclosure of the invention
- So how does this work in an environment of standardization – i.e. the idea is to have products interoperable with one another?
 - FRAND COMMITMENT

FRAND EXPLAINED



FRAND has a proven track record of global market success. It provides an incentive for further innovation, and makes it possible for new companies to enter the market.

A FRAND commitment means:

- Standard essential patents are made accessible on fair, reasonable and non-discriminatory terms
- The telecoms standard is not blocked, therefore vendors can invest in infrastructure and device businesses
- Technology sharing is possible through reasonable cumulative royalty

FAIR COMPENSATION



NO MONOPOLY



A standard essential patent refers to an invention that is necessary in order to comply with a technical standard

HOW LICENSING WORKS



Licensing agreements usually come about as a result of bilateral business negotiations.

Established vendors:

- When cross-licensing is required between two essential patent holders, each receives a license from the other and obtains a royalty as compensation
- The strength and level of exposure to the patent portfolio determines how much compensation each will receive

New entrants:

When a new entrant requires a license from existing essential patent holders, the new entrant signs the license and the patent holders receive compensation in relation to the strength and level of exposure to the patent portfolio



DRIVING THE WIRELESS ECOSYSTEM



Ericsson is creating an environment in which 2G, 3G and 4G wireless technologies can thrive. We're doing this in the following ways:

Early investment in research and development

Fair and reasonable licensing for new entrants



Creation of industry open standards

Selection of the best solution based on general consensus

Ericsson holds the number one patent portfolio for wireless technologies

We own the largest number of essential patents in wireless 2G, 3G and 4G combined

