

## Mobile Communication Program - LTE

### Introduction

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LTE (Long Term Evolution) is a radio platform technology developed through 3GPP that is the fourth generation of mobile communications. The standard provides faster broadband data transmission that will enhance user experience and allow for more sophisticated mobile services. SAE (System Architecture Evolution), synonymous with Evolved Packet Core, or EPC, is the enhancement of Packet Switched technology to cope with the faster data rates and rapid growth in IP traffic anticipated with LTE. With the growing end-user demand for more bandwidth and faster connectivity on the go, the 4G mobile telecommunication technology is nowadays a fundamental requirement for users of smartphones. Moreover, each year new devices (e.g. tablets, routers, cars) with 4G capabilities emerge allowing the customers to benefit from fast exchange of data. As the result, the market is willing to pay a value to obtain access to this useful technology.

Using the LTE standard means profiting from years of investments, work and efforts of pioneering engineers and scientists, who deserve to be fairly compensated for the vast technological progress in the mobile telecommunication sector they achieved. And this is also true for the owners of patents essential to the LTE standard. At the same time, we believe that this attractive technology should be available to implementers on fair, reasonable and non-discriminatory terms (“FRAND”) to promote a wider dissemination of the LTE standard for the benefit of consumers and society at large. It all comes down to the need to achieve a fair balance between the interests of innovators and implementers and exactly this is what we are aiming at with our present offer.

Sisvel acts as administrator for a joint licensing program that offers manufacturers and users of 4G devices licenses under patents essential to LTE (“LTE SEPs”). The joint licensing program represents patents held by a variety of companies. The patent owners have declared all the LTE SEPs to the relevant Standard Setting Organizations (SSO) and have confirmed their commitment to license their standard essential patents under FRAND terms.

These owners of LTE Patents have decided to offer this collective license for the convenience of any third party using LTE technology in its products. Under the Sisvel Mobile Communication Program - LTE license agreement, your company’s products would be licensed for all, present and future, LTE and LTE-Advanced essential patents filed in the name of the participating patent owners for the use of LTE and LTE-Advanced, with the ease of a single agreement under fair, reasonable and non-discriminatory terms (“FRAND”).

The royalty rates of the Mobile Communication Program are offered on a non-discriminatory basis to anyone who wants to benefit from incorporating the patented LTE technology in their products, thus contributing to fair competition in the market. Our rates have been determined with a view to be considered a fair and reasonable compensation for the use of the patented technologies in the fields of use that are represented by the LTE SEPs and defined by the Mobile Communication Program – LTE License Agreement. As a matter of course, the same rates are offered to anyone we approach for concluding a Mobile Communication Program License Agreement for the specified field of use.

Moreover, we recognize that pooling patents should contribute to substantially reducing the transactional costs of licensing and we are happy to forward this positive effect also to the implementers. So, when determining the royalty rate for the Mobile Communication Program, in fact, the patent owners eventually agreed to discount their individual requirements which, considering

amongst other things the saving of transaction costs, led to the rates as offered for the Mobile Communication Program.

Our rates have been determined with many factors in consideration. The royalty rate was determined based on customary and appropriate practices in the market and other comparable offerings for similar patent portfolios. Factors include, but are not limited to, the value that the patents contribute to the 4G technology, the strength of the patents, enforcement actions to be taken in an effort to support a level playing field, the value attributed by consumers to the addition of the patented technology and - as a confirmation - a comparison with other licensing programs in similar technology areas.

The license is offered under the following royalty rate structure:

*Table 1*

Standard rate	Compliant rate
EUR 0.66	EUR 0.53

The Mobile Communication Program supports royalty rate determinations that capture the value of the technologies at stake and allow for an easy adoption of the license, including a straightforward calculation of the overall royalty due by each implementer thanks to its per unit royalty rate scheme.

To validate the FRAND offer, you may want to compare the rates of the Mobile Communication Program - LTE with those of other licensing programs in a similar technology space (a possible source for your assessment may be the following publication: IPRA, Inc., “Royalty Rates For Technology – Computers and Communications – 3rd Edition”, 2015). When looking at those other programs you can conclude that the royalty rate offered under the Mobile Communication Program happens to be very reasonable compared to the rates due under those other licensing programs. In the field of LTE, there are different actors actively offering licenses to their LTE essential patents and have publicly announced their respective royalty rates. When these rates are applied against an average LTE smartphone price, this results in the following comparison.<sup>1</sup>

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<sup>1</sup> According to Strategy Analytics, the global Average Sales Price (ASP) on wholesale level for LTE handsets has been USD 266 in 2016. Applying the annual average EUR/USD exchange rate in 2016 (1.10656 – source: <https://www.ofx.com/en-au/forex-news/historical-exchange-rates/monthly-average-rates/>), results in a ASP of about EUR 240.

Table 2

Company	Announced Royalty rate % of device price <sup>2</sup>	Royalty Rate in EUR
Qualcomm	3.25%	EUR 7.80
Motorola	2.25%	EUR 5.40
Huawei	1.5%	EUR 3.60
Ericsson	1.5%	EUR 3.60
Nokia	1.5%	EUR 3.60
ZTE	1%	EUR 2.40
Siemens	0.8%	EUR 1.92
<b>Sisvel Mobile Communication Program - LTE</b>	Standard rate Compliant rate	EUR 0.66 EUR 0.53

In a further effort to increase the transparency of its offer, Sisvel not only has been benchmarking the royalties determined per above, with other comparable license offers, but also with court adjudicated royalties.

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<sup>2</sup> IPRA, Inc., “Royalty Rates For Technology - Computers and Communications - 3rd Edition”, 2015