



A vital tool for connected innovation in Europe

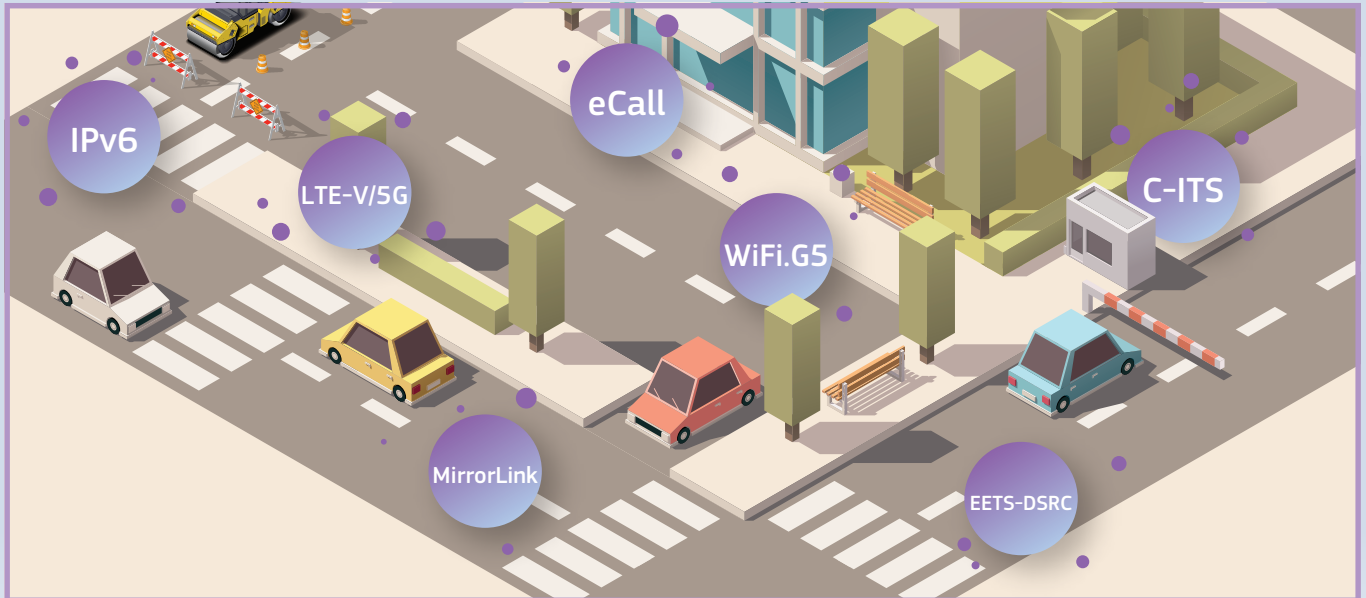
Today's interconnected and interactive world is made possible by standards, based on patented technologies which enable machines to interact among themselves. A typical consumer product such as a smartphone must meet a huge number of standards and needs the patented technology to do so. But just as a housebuilder generally does not make its own bricks, but rather buys them, so does a manufacturer buy technological building blocks for its product. These technological building blocks are often protected by Standard Essential Patents (SEPs).

SEPs AND YOUR SMARTPHONE



More than **23,500 patents** have been declared essential to the GSM and the 3G. Standards, based on patented technologies are implemented in all smartphones and devices with mobile connection. Implementers need to obtain a license to market their interconnected products.

SEPs AND CONNECTED CARS



IMPORTANCE OF THE INTERNET OF THINGS (IoT) AND SEPs

- The economic potential of the Internet of Things in developed countries is estimated at up to **€9 trillion per year** by 2025, in devices for personal use, homes, offices, factories, worksites, retail environments, cities, vehicles etc.

- The digitisation of products and services can add more than **€110 billion revenue** to the European economy per year over the next 5 years.

- Europe is the major player for the development of key standardised technologies. Patents declared at the European Telecommunications Standards Institute (ETSI) represent **70% of worldwide SEPs**.

- The economic stakes are high. The royalty income for 2G, 3G and 4G standards is approx. **€18 billion per year**.

To allow innovative manufacturers to provide consumers with products incorporating new functionalities such as mobiles, connected cars or smart house appliance and to stay competitive in the quickly evolving technological markets, the licensing of SEPs needs to take place under predictable and transparent conditions. Equally, the people and companies developing the technological building blocks must be able to get a fair protection for their innovation and obtain a fair return on their investment.

We need a balanced system that is good for all parts of the value chain as we move to the IoT – the connected world we are already starting to see around us.

SEPs – HOW DOES IT WORK?

- Representatives of the industry come together under Standard Developing Organisations such as ETSI to develop technical specifications of a standard. They commit to make their patented technology available under Fair, Reasonable and Non-Discriminatory (FRAND) terms.

- Manufacturers of standard-compliant products which use one or more SEPs, negotiate with the SEP holders the conditions to use the technology.

- The outcome of this negotiation is formalised by a license agreement which has to reflect FRAND terms.