On October 2012, IVC team from the IRCCyN laboratory was pleased that one of his submitted research project was selected by the prestigious institute “European Space Agency”. The call was entitled “Quality of Experience (QoE) Tool for Telemedicine.” The consortium is composed of the AccepTV Company, IRCCyN laboratory and LISA laboratory. For the IVC team, this is the first research project funded by the European Space Agency. We hope it is the start of a long-term collaboration with ESA.

**European Space Agency**

The European Space Agency (ESA) is Europe’s gateway to space. Its mission is to shape the development of Europe’s space capability and ensure that investment in space continues to deliver benefits to the citizens of Europe and the world.

ESA is an international organization with 20 Member States. By coordinating the financial and intellectual resources of its members, it can undertake programmes and activities far beyond the scope of any single European country.

ESA’s job is to draw up the European space programme and carry it through. ESA’s programmes are designed to find out more about Earth, its immediate space environment, our Solar System and the Universe, as well as to develop satellite-based technologies and services, and to promote European industries.

**Development of a QoE measurement and real time monitoring solution for telemedicine**

Having a good audiovisual quality is mandatory for telemedicine applications. Indeed, when health or even lives are at stake, medical experts must be sure that technical constraints (like bitrate for audio video encoding, or transmission errors) won’t complicate or compromise their diagnoses.

However, developing a solution able to measure audiovisual quality is an ambitious task because it requires expertise in several domains: subjective quality assessment testing, human perception modeling, software development, diagnosis quality assessment testing.

In the domain of telemedicine, developing such a solution is even more challenging because the quality measurement has to be adapted to the way medical experts use the audio and video streams. Therefore, subjective quality assessment tests must include medical expertise with medical experts as observers.

To succeed in this project, skills from different domains must be put together. It is why this consortium is constituted by the following entities:

- AccepTV, an SME specialized in QoE solutions for audio video services,
- IRCCyN, an academic laboratory with expertise on QoE, human perception, subjective and objective QoE assessment, video compression and transport over heterogeneous networks,
- LISA, an academic laboratory specialized in medical imaging and having very close relations with medical experts.

In the consortium, the presence of quality measurement technologies and of a strong know-how in subjective testing gives us the confidence that the development of the software will contribute to the progress of telemedicine.