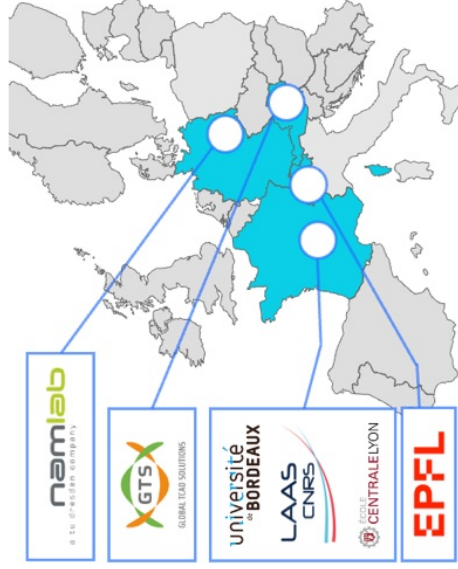


## Project Vision

Connecting the people of Europe via a lightweight in-ear device with direct speech-to-speech translation capability. The neural network compute cube (N2C2) will help us to empower speech recognition and translation. We aim to demonstrate the potential of this architecture based on emerging vertical nanowire transistor technologies. The project will help secure inclusive and sustainable life in Europe in the context of the fourth industrial revolution.

## FVLLMONTI partners



FVLLMONTI is organized around 4 specific objectives:

**Compactness** - From fabricated low-complexity hardware to minimal neural network compute cube (N2C2)

**Performance** - Energy-delay-product assessment of the computational layer, the embedded Non-Volatile Memory (e-NVM) and interconnects

**Validation** of the VNW-FET technology for live English-French streaming speech recognition to text

**Robustness** - 3D NN architecture and up to the machine translation application.

## More information



[www.fvllmonti.eu](http://www.fvllmonti.eu)



**Ferroelectric Vertical Low energy Low latency  
low volume Modules for Neural network  
Transformers In 3D**



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101016776.