



EC FP7 (2011/2014) under grant agreement no. 113806



## Search through personalised, adaptive interaction

# **Objectives**

- develop *incremental*, responsive spoken dialogue systems in 3 languages (English, Mandarin and Spanish),
- develop *personalised* conversational search systems that adapt to different users with different goals in different contexts,
- develop dialogue systems that are dynamic and evolve towards open-ended domains,
- develop interactive hyper-local search.

#### Baseline

The statistical end-to-end spoken dialogue system built on the CLASSiC project (FP7/2007-13) under grant agreement no. 216594 (http://www.classic-project.org) will be used as a baseline for comparison, resulting in an end-to-end incremental, dynamic system.

### Target Groups

PARLANCE has the potential to become embedded in everyday life for millions of people. As the amount of information on the web increases at a huge rate, in the near future interactive, personalised search will be the only way to digest and explain this information to the overwhelmed user. Natural, interactive search will provide vital conversational information access to many sectors of the population.

### Application domains

Our use cases will be searching in the local vicinity for places of interest in 3 languages. Here is an example dialogue of one such interaction:

S1: How can I help you?

U2: Umm, I'm looking for um you know that famous

S2: Erm...I'm not quite sure what you mean.

U3: You know it's a church.

S3: There are a few famous churches around where you are now. The nearest one is Église Saint-Germain-l'Auxerrois U4: uhhuh...

S4: The next one along is Église de Saint-Jean de Gervais-Saint.....

### **Project Outputs**

The PARLANCE programme targets significant impact in the scientific community and in commercial applications of speech technology. Through its work on incrementality, data-driven techniques and adaptivity, it will increase the naturalness of spoken dialogue systems, making them more likely to be adopted in everyday life. In addition, PARLANCE will move away from the traditional method of creating systems, reducing development costs and shorter time-to-market, and stimulating innovation and expanding markets. PARLANCE is also expected to have a significant impact on the European competitive position in a multilingual digital market by providing improved services to citizens and businesses across language barriers.











