Overview
FAUST aims to develop fluent, web-based MT systems which respond to user feedback.

Feedback  As translation technology is brought ever closer to its community of users, there is strong potential for creating collaborative interaction between translators, casual active users, and technology developers. For example, on the Reverso.net website, which translates an average of 30 million text passages each month, users are invited to provide feedback and to suggest improvements to the automatic translation of any given sentence. Unfortunately this feedback cannot yet be exploited because:
• User feedback tends to be very noisy;
• No research published to date makes explicit how statistical translation systems can be adapted to benefit from feedback provided by web users;
• No mechanisms exist to identify user feedback of value and for immediately modifying a statistical MT system so that subsequent users do not run into the same problem.
FAUST aims to address these problems to ‘close the loop’ so that user feedback becomes part of the development and evaluation cycle for machine translation systems deployed in online translation.

Fluency  Machine Translation can be disconcerting for the uninitiated. Automatic systems which make basic mistakes in grammar and word sense are perceived as unreliable and unpleasant to use. We take the view that MT systems must become fluent if they are to be accepted and trusted by large communities of users.
FAUST aims to improve user satisfaction with online MT by bringing natural language generation into statistical machine translation to improve MT fluency.

Project Fact Sheet
Project Objectives
1. Enhance the high-volume, Reverso.net translation website with an experimental and evaluation infrastructure for the study of instantaneous user feedback in MT.
2. Deploy novel web-oriented, feedback collection mechanisms that reduce noise in feedback provided by users and increase the utility of the web contributions.
3. Automatically acquire data collections to study translation with user feedback.
4. Develop mechanisms for instantaneously incorporating user feedback into the machine translation engines that are used in production environments, such as those that power the Reverso.net website.
5. Create novel automatic metrics of translation quality which reflect preferences learned from user feedback.
6. Develop new translation models driven by user feedback data and integrate natural language generation directly into MT to improve translation fluency and reduce negative feedback from users.

Project Highlights
FAUST will create two new interfaces to the Reverso.net translation services:
• labs.reverso.net : research MT systems will be deployed directly on so that researchers can observer users interacting directly with MT systems.
• forums.reverso.net : will provide a meeting place for translation users to interact with each other and to experiment with novel feedback collection mechanisms.

FAUST Project Academic Partners
• Department of Engineering, University of Cambridge, UK
• Computer Laboratory, University of Cambridge, UK
• Center for Language and Speech Technologies and Applications (TALP), Universitat Politecnica de Catalunya, Spain
• Institute of Formal and Applied Linguistics, Charles University, Czech Republic

FAUST Project Commercial Partners
• Language Weaver Inc., USA
• Language Weaver SRL, Romania
• Softissimo, Inc., France