## PET: a Tool for Post-editing and Assessing Machine Translation

## Wilker Aziz\* and Lucia Specia\*\* \* University of Wolverhampton, UK - W.Aziz@wlv.ac.uk \*\* University of Sheffield, UK - L.Specia@sheffield.ac.uk Download: http://pers-www.wlv.ac.uk/~in1676/pet/

Given the significant recent improvements in Machine Translation (MT) quality and the increasing demand for cheap and fast translations, the post-editing of automatic translations is becoming a popular practice in the translation industry to save time and costs. The post-editing of automatic translations can also help identify problems in such translations and this can be used as feedback for researchers and developers to improve MT systems. Finally, post-editing can be used as a way of evaluating translations from one or more MT systems in terms of the effort required to correct them.

PET, a stand-alone **Post-Editing Tool** has two main purposes: facilitate the post-editing or revision of translations from any MT system and collect segment-level information from this process, e.g.: translation quality scores and post-editing time. In addition, it can be used to collect information for translation from scratch. PET works on any platform running a Java Virtual Machine. The interface displays source and target language texts in two columns, with many interface artefacts customisable through a configuration file.



The segment to translate or edit can be a text of any length. Segments are seen in context, between already edited segments (green) and segments to edit (red). For the active segment (yellow) it is possible to display additional information, such as the original draft translation, alternative translations (from other MT systems), or a reference translation. In fact any external textual information can be displayed on a per-segment basis, such as definitions, paraphrases or alternative translations, time or space constraints, etc. This information must be provided to the tool via XML files.

Once a segment is completed, assessment windows can be displayed to collect *explicit* feedback, e.g. translation fluency scores. PET also provides built-in *implicit* assessment indicators, such as i) time spent translating or editing a segment; ii) time spent assessing a segment; iii) assessment tags from pre-defined sets; iv) keystrokes grouped by type of keys; v) the Human Translation Edit Rate (HTER) between the draft translation and its post-edited version; vi) a time-stamped history of edit operations (i.e. insertion, deletion and substitution). Many other indicators can be added via PET's API.