## **PANEL: THE ECONOMICS OF MT**

The economics of MT is an important subject in both the business world and in Government. What does it cost to run an MT shop, and how does the bottom line compare with contracting out or hiring in-house translators? How can one justify the sometimes substantial cost involved in MT? How is the picture likely to change in the near future? Panelists draw on their backgrounds as MT industry monitors, translation providers, and system builders to discuss the issues involved.

Moderator: Colin Brace, Language Industry Monitor Panelists: Ron Fournier, Lexi-tech Denis Gachot, SYSTRAN John Smart, Smart Communications Muriel Vasconcellos, AMTA Alan Weaver, ALPNET

## Measuring the Cost of MT

Muriel Vasconcellos, AMTA, Washington

MT costs fall into two basic categories. On the one hand, there is the initial investment, which typically includes purchase of the system itself and sometimes the hardware; several person-months devoted to customization of the knowledge base(s); and the recruitment or retraining of staff. On the other hand, there are the ongoing costs associated with processing the workflow. First and foremost, it is essential to determine that on a day-to-day basis MT will not only pay for itself but also yield at least some savings vis-a-vis traditional human translation. That level of savings is crucial to any consideration of the up-front costs.

How to determine whether or not MT is "paying for itself"? Short-term experiments with MT output may be misleading. It's not really safe to extrapolate future trends based on a small sample, even if the expected application is fairly repetitive. Every text is different and each translator/posteditor has his or her own way of working. Furthermore, it is never possible to make a true comparison between traditional human translation and MT postediting because the conditions cannot be replicated for the same reasons: either the texts or the humans will necessarily be different. Even if the same person translates and then postedits the same text, the fact of having solved the problems once already makes the second pass easier.

With these concerns in mind, managers at the Pan American Health Organization came to the conclusion that a long-term study was the only reliable measure of MT economics. In a controlled experiment, data were collected over a period of 8.5 months. The results provided the basis for deciding on an appropriate mix of resources in-house and contract MT and in-house and contract traditional human translation.

## Reference

Vasconcellos, Muriel. Long-term data for an MT policy. *Literary and Linguistic Computing* 4(3):203-213,1989.