

**ViSiCAST Deliverable D5-4: Integrated Editing Environment
Peer Review**

Project Number:	IST-1999-10500
Project Title:	ViSiCAST
	Virtual Signing: Capture, Animation, Storage and Transmission
Document Type:	Peer Review

Deliverable Number:	D5-4
Contractual Date of Delivery:	October 2002
Actual Date of Delivery:	December 2002
Title of Deliverable:	Integrated Editing Environment
Work-Package contributing to the Deliverable:	Workpackage 5 (Language and Notation)
Nature of the Deliverable:	PR (Prototype)
Author(s):	I. Marshall et al.

Peer Review Author(s):	Onno Crasborn
Date of Review:	December 2002

Qualifications and Expertise as Peer Reviewer:
Linguist specialised on sign language phonetics and phonology; knowledge of the field of gesture recognition and synthesis.

✓	I have read the report of the Deliverable.
✓	I have seen the prototype software.
✓	I have read the Workpackage Description relating to the Deliverable.

Rating of the deliverable as a whole:

1	2	3	4	5	Poor = 1, Excellent = 5
			•		Overall quality
			•		Reflecting the state-of-the-art
				•	Meeting the objectives of the Workpackage
	•				Meeting a real need
				•	Contributing to this field
	•				Style and clarity of the report

Executive Summary:
The system is a convincing prototype of a full semi-automatic text-to-sign translation and generation system. Keeping its prototype status in mind, it succeeds in an excellent manner in distinguishing and making visible the different parts of the translation and synthesis process. It allows for user intervention at different stages of the process, and thus enables implicit discovery of both the virtues and shortcomings of the project; a summary of the latter is unfortunately missing from the accompanying report. The flexibility in altering aspects of the whole process is impressive.

Comments:

The comments below address a few minor issues, largely related to the way the deliverable software is described in the report.

- The rating for “Meeting a real need” is based on the interpretation of ‘real need’ as something by society at large; the deliverable clearly meets a real need in the research community.
- The role of the different sign languages is not made clear. The workpackage description as a whole (B3) mentions three sign languages, the specific description pertaining to deliverable 5.4 does not mention any specific language, and the report (D5.4) mentions DGS and BSL but not NGT. The final system appears to be based largely on DGS, yet some work (including the creation of a relatively small lexicon) has also been put into a BSL version. Given the prototype status of the complete system, it would a priori appear efficient to focus on one single sign language. It is not made clear in the D5.4 report why a different choice has been made.
- It is clear that several important sign language specific grammatical processes (such as number incorporation, aspectual modulation, and spatial inflection of verbs) are dealt with in the software and the accompanying report; it is not made very explicit in the report why this is necessary. It is not the grammatical differences per se that form a challenge for the system, but rather the fact that sign languages manifest non-concatenative (simultaneous) morphology to such a large extent. This makes it impossible to simply sequence morphemes from the lexicon. The report would have benefited from some discussion on why these morphological-phonological processes take place during the conversion from the DRS to the HPSG grammar, rather than in the generation of the latter into the SiGML representation.
- The report would have benefited from an extra round of editing. While it does appear to cover each of the steps that were taken in working towards the software deliverable, the different levels of detail in the different sections make the report hard to parse. (The use of up to five levels of sub-sections in a less than 50 page document is illustrative of this problem.)
- With one minor exception, the report does not discuss the limitations (section 7 ‘Achievements and limitations’) of the present product in summary. Such a discussion would have been greatly helpful for both the field as a whole as well as people continuing the present effort. For example, a relatively large step forward could be made by taking the relatively small step of limiting the range of motion for each joint (specifically the wrist).

Signed:**Onno Crasborn****Date: December 17, 2002**