NIST-DARPA Interagency Agreement: Spoken Language Program

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PROJECT GOALS

- 1. To coordinate the design, development and distribution of speech and natural language corpora for the DARPA Spoken Language research community.
- 2. To design, coordinate implementation, and analyze the results of performance assessment benchmark tests for DARPA's speech recognition and spoken language understanding systems.

RECENT RESULTS

- 1. Acquired hardware and installed the MIT/LCS-developed "TINA" and SRI-developed "DECIPHER"(tm) ATIS systems.
- 2. Revised the NIST speech recognition software to incorporate phonologically-motivated string alignment procedures, and prepared an ICASSP'93 paper to document the advantages of this approach.
- 3. Developed a speech data quality assurance software package to measure S/N and other properties. Shared this software package with other sites, including SRI, for use in monitoring quality for the WSJ-CSR corpora.
- 4. Acquired and made use of recordable CD-ROM technology for preliminary, limited, distribution of speech corpora.
- 5. Participated, with SRI, in annotation and "bug fixes" for the ATIS MADCOW-collected corpora.
- 6. Prepared for, and implemented benchmark tests for: (1) the Resource Management corpus (final test set, September), (2) the WSJ-CSR corpus (November), (3) the "dry run stress test" (December), (4) the ATIS MADCOW corpus (November), and (5) the "dry run end-to-end" evaluation (January).

PLANS

- 1. Produce and distribute the next phase of the WSJ-CSR corpora, "WSJ-CSR Phase II, Part 1", and some portion of Part 2, on pressed CD-ROM in collaboration with the Linguistic Data Consortium.
- 2. Coordinate collection, screening and processing of the next portion of ATIS MADCOW data, to be collected with the 46-city OAG- derived relational database.
- Implement benchmark tests in the WSJ-CSR and ATIS domains, as required by the DARPA Program Manager and Coordinating Committee.