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*The division of phonologically transcribed texts into syllables for application in speech signals' processing*

*Podział tekstu transkrybowanego fonologicznie na sylaby dla zastosowań praktycznych związanych z przetwarzaniem sygnału mowy*

**Słowa kluczowe:** sylaba; sylabizacja; podział na sylaby; fonologia; morfologia; zasada sonorności; skala sonorności; korpus tekstowy; fonetyka akustyczna; grupy spółgłoskowe;

**Key words:** syllable; syllabification; division into syllables; phonology; morphology; sonority sequencing principle; sonority hierarchy; text corpus; acoustic phonetics; consonant clusters

### **Summary**

The paper presents a satisfactory solution to the problem of dividing the phonologically transcribed texts into syllables. The solution relies on the conception of two-stage syllabification (as described in the author's earlier publications), according to which the first stage consists in determining a broad range of division principles for the consonant clusters on the basis of phonological rules. In the second stage, detailed principles for the given consonant clusters are determined either on the basis of morphological, phonetic and acoustic factors, or on the basis of subjective impressions' assessment.

The paper provides information on the preliminary optimization of the principles developed previously in view of determining the syllable borders in the recorded speech signal. A set of complementary principles has been put forward in order to cover these categories of consonant clusters in which the phonological rules proved to be inapplicable.

Thus, a comprehensive solution may be achieved. In addition, the analysis of geminate consonants that appeared in the corpus has been offered – the author suggests that such structures should not be separated during the syllabification of the recorded speech signal.

The presented solution is one of the several variants of syllabification systems that the author is elaborating, and it is still preparatory.