

## A Mobile Phone Interface to the Pediaphon Service

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For mobile phone access we have established an WAP interface to the 'Pediaphon' [1] service, but the communication costs are still a limiting factor for mobile users. The WAP interface to the Pediaphon service provides a WML 1.1 input mask as well as a WML server response. The response includes a link to the corresponding article at the Wapedia WAP service (a WAP representation of all Wikipedia articles) as well as a link to the generated MP3 audio file. Downloading the usually huge MP3 files can be very expensive for users without a GPRS or UMTS flat fee contract. To avoid those communication costs and the limitation to users of the mobile internet we have created a pure SMS and GSM based service, too. No (probably expensive) GPRS or UMTS mobile Internet access is required. The service works with all mobile phones today without the need of additional configuration or expert knowledge. The costs are transparent for the users, only communications fees for an SMS request and a land line call have to be paid. Since the users are paying directly to the communications service provider, the 'Pediaphon' service can be established without any costs for the university. The very successful Pediaphon GSM interface [2][3][4][5][6] was realized by usage of voice over IP technology (VoIP) and the Asterisk[7] open source PBX (private branch exchange).



Figure 1: WAP interface of the Pediaphon speech output of Wikipedia articles and 2D barcode representation of the corresponding URL

[1] <http://prt-i61.fernuni-hagen.de/~bischoff/radiopedia/sms.html>

[2] <http://www.sueddeutsche.de/computer/artikel/320/99221/>

[3] [http://www.welt.de/webwelt/article715772/Wikipedia\\_liest\\_Handy-Nutzern\\_Lexikon-Artikel\\_vor.html](http://www.welt.de/webwelt/article715772/Wikipedia_liest_Handy-Nutzern_Lexikon-Artikel_vor.html)

[4] [http://www.chip.de/news/c1\\_news\\_23947738.html](http://www.chip.de/news/c1_news_23947738.html)

[5] <http://www.macwelt.de/news/mobil/343174/index.html>

[6] <http://www.handy.at/Artikelansicht.126+M5d262fd8b8c.0.html>

[7] <http://www.asterisk.org>