

## Consonant

|                   | ADAPT | SAMPA1<br>(ADAPT <sup>1</sup> ) | SAMPA2<br>(origin <sup>2</sup> ) | SAMPA3<br>(students used <sup>3</sup> ) | CGN | CGN2 <sup>4</sup> | Dutch  | English                    | IPA |
|-------------------|-------|---------------------------------|----------------------------------|---|-----|-------------------|--|----------------------------|-----|
| <b>Plosives</b>   | p     | p                               | p                                | p                                       | p   | p                 | <u>P</u> ak  | sport                      | p   |
|                   | b     | b                               | b                                | b                                       | b   | b                 | <u>B</u> ak  | bait                       | b   |
|                   | t     | t                               | t                                | t                                       | t   | t                 | <u>T</u> ak,had  | stop                       | t   |
|                   | d     | d                               | d                                | d                                       | d   | d                 | <u>d</u> ak  | duck                       | d   |
|                   | k     | k                               | k                                | k                                       | k   | k                 | <u>k</u> ap  | <u>s</u> chool             | k   |
|                   | g     | g                               | g                                | g                                       | g   | g                 | goal (only<br>foreign/loan-words)                                      | goal                       | g   |
| <b>Fricatives</b> | f     | f                               | f                                | f                                       | f   | f                 | <u>F</u> el  | feats                      | f   |
|                   | v     | v                               | v                                | v                                       | v   | v                 | <u>V</u> el  | very                       | v   |
|                   | s     | s                               | s                                | s                                       | s   | s                 | <u>S</u> ein,sok   | sock                       | s   |
|                   | z     | z                               | z                                | z                                       | z   | z                 | <u>z</u> ijn   | zip                        | z   |
|                   | S     | S                               | S                                | S                                       | S   | S                 | <u>S</u> how, <u>c</u> hef, <u>s</u> jabloon,<br><u>a</u> ction (CGN2) | Shall                      | ʃ   |
|                   | Z     | Z                               | Z                                | Z                                       | Z   | Z                 | <u>B</u> agage, <u>j</u> ury   | vision                     | ʒ   |
|                   | G     | G                               | G                                | G                                       | G   | G                 | <u>G</u> oed, <u>g</u> aan   | loch                       | ɣ   |
|                   | X/x   | x                               | x                                | x                                       | x   | x                 | <u>T</u> och, <u>w</u> eg, <u>a</u> cht                                | loch                       | x   |
|                   | h     | h                               | h                                | h                                       | h   | h                 | <u>H</u> and, <u>h</u> ad  | behind                     | ɦ   |
| <b>Sonorants</b>  | m     | m                               | m                                | m                                       | m   | m                 | <u>m</u> et  | <u>m</u> an                | m   |
|                   | n     | n                               | n                                | n                                       | n   | n                 | <u>n</u> et  | neck                       | n   |
|                   | N     | N                               | N                                | N                                       | N   | N                 | <u>b</u> ang   | <u>l</u> ong               | ŋ   |
|                   | l     | l                               | l                                | l                                       | l   | l                 | <u>l</u> and   | <u>l</u> and               | l   |
|                   | r     | r                               | r                                | r                                       | r   | r                 | <u>r</u> and   | trilled R or<br>guttural R | r   |
|                   | w     | w                               | w                                | w                                       | w   | w                 | <u>W</u> it, <u>w</u> ang  | between wine<br>and vine   | v   |
|                   | j     | j                               | j                                | j                                       | j   | j                 | <u>j</u> a   | yard                       | j   |
|                   | J     | n <sub>j</sub> **               | n <sub>j</sub> **                | n <sub>j</sub> **                       | J   | J                 | Campagne, oranje,<br>trijntje  | Like canyon                | ɲ   |

<sup>1</sup> [https://www.cls.ru.nl/clst-asr/doku.php?id=phonalphabet&s\[\]=sampa](https://www.cls.ru.nl/clst-asr/doku.php?id=phonalphabet&s[]=sampa) & Appendix A in ADAPT paper: <http://lands.let.ru.nl/literature/elffers.2005.1.pdf>

<sup>2</sup> <https://www.phon.ucl.ac.uk/home/sampa/dutch.htm>

<sup>3</sup> Used by students Julia Merkus, Emma de Reus and Fleur Boogmans in 2019 – 2020 for manually checking orthographic transcriptions of COPD, JASMIN and CHASING datasets, respectively.

<sup>4</sup> Used by Dutch Forced Aligner (FA: <https://www.cls.ru.nl/clst-asr/doku.php?id=forced-aligner>) and Grapheme to Phoneme converter (G2P <https://webservices-1st.science.ru.nl/g2pservice/index/>)

## Vowel

|                  | ADAPT  | SAMPA1<br>(ADAPT) | SAMPA2<br>(origin) | SAMPA3<br>(students used) | CGN    | CGN2   | Dutch  | English                       | IPA |
|------------------|--------|-------------------|--------------------|---------------------------|--------|--------|--|-------------------------------|-----|
| <b>Lang</b>      | i      | i                 | i                  | i                         | i      | i      | <u>V</u> ier                                       | <u>d</u> ee <u>p</u>          | i   |
|                  | e      | e                 | e:                 | e:                        | e      | e      | <u>ve</u> er                                       | <u>m</u> a <u>d</u> e         | e:  |
|                  | a      | a                 | a:                 | a:                        | a      | a      | <u>na</u> am                                       | <u>l</u> a <u>d</u>           | a:  |
|                  | o      | o                 | o:                 | o:                        | o      | o      | <u>vo</u> or                                       | <u>b</u> o <u>r</u> n         | o:  |
|                  | u      | u                 | u                  | u                         | u      | u      | <u>vo</u> er                                       | <u>bo</u> ot                  | u   |
|                  | y      | y                 | y                  | y                         | y      | y      | <u>vu</u> ur                                       | <u>go</u> ose                 | y   |
|                  | 2      | UNK               | 2:                 | 2:                        | 2      | EU     | <u>de</u> ur                                       | <u>f</u> ur                   | ø:  |
| <b>Korte</b>     | I      | I                 | I                  | I                         | I      | I      | <u>pit</u>   | <u>s</u> it                   | I   |
|                  | E      | E                 | E                  | E                         | E      | E      | <u>pet</u>   | <u>bed</u>                    | ε   |
|                  | A      | A                 | A                  | A                         | A      | A      | <u>pad</u>   | Father(short)                 | α   |
|                  | O      | O                 | O                  | O                         | O      | O      | <u>pot</u>   | <u>off</u>                    | ɔ   |
|                  | Y      | Y                 | Y                  | Y                         | Y      | U      | <u>put</u>   | <u>n</u> urse                 | Y   |
| <b>Sjwa</b>      | @      | @                 | @                  | @                         | @      | @      | <u>gemak</u> /hem <u>e</u> l?                      | <u>A</u> gain                 | ə   |
| <b>Diftongen</b> | &      | Ei                | Ei                 | Ei                        | E+     | EI     | <u>f</u> ij <u>n</u>                               | <u>may</u>                    | ei  |
|                  | 1      | 9y                | 9y                 | 9y                        | Y+     | UI     | <u>hu</u> is                                       | <u>hou</u> se                 | œy  |
|                  | 3      | Au                | Au                 | Au                        | A+     | AU     | <u>Gou</u> d                                       | <u>ou</u> t                   | au  |
| <b>Leen</b>      | 4      | E:                | E:                 | UNK                       | E:     | E2     | <u>Cr</u> ème                                      | <u>S</u> quare                | ε:  |
|                  | 5      | 9                 | 9:                 | UNK                       | Y:     | O j    | <u>Fre</u> ule                                     | <u>fu</u> r                   | œ:  |
|                  | 6      | O:                | O:                 | UNK                       | O:     | O      | <u>ro</u> ze                                       | <u>dog</u>                    | ɔ:  |
| <b>Nasale</b>    | 7      | UNK               | UNK                | UNK                       | E~     | E n    | <u>Bassin</u> , <u>hautain</u>                     | <u>doyen</u>                  | ẽ:  |
|                  | 8      | UNK               | UNK                | UNK                       | A~     | A n    | <u>Ensemble</u> , <u>genre</u>                     | <u>croissant</u>              | ã:  |
|                  | 9      | UNK               | UNK                | UNK                       | O~     | O n    | <u>Compagnon</u> , <u>fond</u> ,<br><u>chanson</u> | <u>montage</u>                | õ:  |
|                  | %      | UNK               | UNK                | UNK                       | Y~     | U n    | <u>vingt-et-un</u>                                 |                               |     |
| <b>Andere</b>    | a_ j** | a_ j**            | a:i                | a:_ j*                    | a_ j** | a_ j** | <u>draai</u>                                       | <u>prize</u>                  | a:i |
|                  | o_ j** | o_ j**            | o:i                | o:_ j*                    | o_ j** | o_ j** | <u>mooi</u>  | <u>boys</u>                   | o:i |
|                  | i_ w** | i_ w**            | iu                 | i_ w*                     | i_ w** | i_ w** | <u>nieuw</u>                                       | <u>ew</u> or <u>free will</u> | iu  |
|                  | y_ w** | y_ w**            | yu                 | y_ w*                     | y_ w** | y_ w** | <u>duw</u>   | <u>few would</u>              | yu  |
|                  | e_ w** | e_ w**            | e:u                | e:_ w*                    | e_ w** | e_ w** | <u>sneeuw</u>                                      | <u>say oo</u>                 | e:u |
|                  | u_ j** | u_ j**            | ui                 | u_ j*                     | u_ j** | u_ j** | <u>roei</u> boot                                   | <u>to e</u> ternity           | ui  |

\* = ‘\_’ separates phonemes in phoneme tier

\*\* = separate phonemes