IPA	example	SAM-PA	CELEX	CPA	DISC
p	**p**at	p	p	p	p
b	**b**ad	b	b	b	b
t	**t**ack	t	t	t	t
d	**d**ad	d	d	d	d
k	**c**ad	k	k	k	k
g	**g**ame	g	g	g	g
ŋ	ba**ng**	N	N	N	N
m	**m**ad	m	m	m	m
n	**n**at	n	n	n	n
l	**l**ad	l	l	l	l
r	**r**at	r	r	r	r
f	**f**at	f	f	f	f
v	**v**at	v	v	v	v
θ	**th**in	T	T	T	T
ð	**th**en	D	D	D	D
s	**s**ap	s	s	s	s
z	**z**ap	z	z	z	z
ʃ	**sh**eep	S	S	S	S
ʒ	measure	Z	Z	Z	Z
j	**y**ank	j	j	j	j
x	lo**ch**	x	x	x	x
h	**h**ad	h	h	h	h
w	**w**hy	w	w	w	w
ʧ	**ch**eap	tS	tS	T/	J
ʤ	**j**eep	dZ	dZ	J/	_
n̩	baco**n**	N,	N,	N,	C
m̩	idealis**m**	m,	m,	m,	F
n̩	burde**n**	n,	n,	n,	H
l̩	dangl**e**	l,	l,	l,	P
*	fath**er**	r*	r*	r*	R
(possible linking 'r')					

Table 3: Computer phonetic codes for English consonants

'half-open front rounded' vowel sound has been implemented as / (ASCII code 47). The second is a set originally designed for use within CELEX. The third is CPA, the *Computer Phonetic Alphabet*, or *Esprit 291*, which was developed in the Ruhr Universität Bochum, Germany.

The fourth set is the DISC set, so called because it is a computer phonetic alphabet made up of distinct single characters. It is fundamentally different from the other three in

IPA	example	SAM-PA	CELEX	CPA	DISC
ɪ	pit	I	I	I	I
ɛ	pet	E	E	E	E
æ	pat	{	&	^/	{
ʌ	putt	V	V	^	V
ɒ	pot	Q	O	O	Q
ʊ	put	U	U	U	U
ə	another	@	@	@	@
iː	bean	i:	i:	i:	i
ɑː	barn	A:	A:	A:	#
ɔː	born	O:	O:	O:	$
uː	boon	u:	u:	u:	u
ɜː	burn	3:	3:	@:	3
eɪ	bay	eI	eI	e/	1
aɪ	buy	aI	aI	a/	2
ɔɪ	boy	OI	OI	o/	4
əʊ	no	@U	@U	O/	5
aʊ	brow	aU	aU	A/	6
ɪə	peer	I@	I@	I/	7
ɛə	pair	E@	E@	E/	8
ʊə	poor	U@	U@	U/	9
æ	timbre	{~	&~	^/~	c
ɑ̃ː	détente	A~:	A~:	A~:	q
æ̃ː	lingerie	{~:	&~:	^/~:	O
ɔ̃ː	bouillon	O~:	O~:	O~:	~

Table 4: Computer phonetic codes for English vowels and diphthongs

that it assigns one ASCII code to each distinct phonological segment in the sound systems of Dutch, English and German. Here *segment* means a consonant, an affricate, a short vowel, a long vowel or a diphthong. There are two main advantages to this set. First, it provides one character for one segment – in contrast to the other three sets which use extra characters for long vowels, affricates and diphthongs. Second, there is no possibility of ambiguous transcriptions. A diphthong is always shown as a diphthong, and two separate vowels in proximity to each other (say on either side of a syllable boundary) can thus no longer be confused with a real diphthong; an affricate is always shown as such, and not as two consonants. For both these reasons, those interested in processing phonetic transcriptions—as opposed to reading transcriptions in a character set that resembles the familiar