

WLTC 5.3	phase	phase i	distance [km]	cum. dist. d_i [km]	fractional UF_i [-]	cumulated UF [-]
1	low	1	3,095	3,095	0,096	0,096
	mid	2	4,756	7,850	0,128	0,224
	high	3	7,162	15,012	0,155	0,378
	exHigh	4	8,254	23,266	0,134	0,513
2	low	5	3,095	26,361	0,041	0,553
	mid	6	4,756	31,117	0,055	0,608
	high	7	7,162	38,278	0,067	0,675
	exHigh	8	8,254	46,533	0,059	0,734
3	low	9	3,095	49,627	0,018	0,752
	mid	10	4,756	54,383	0,025	0,777
	high	11	7,162	61,545	0,031	0,809
	exHigh	12	8,254	69,799	0,029	0,837
4	low	13	3,095	72,893	0,009	0,847
	mid	14	4,756	77,649	0,013	0,859
	high	15	7,162	84,811	0,016	0,876
	exHigh	16	8,254	93,065	0,016	0,891
5	low	17	3,095	96,160	0,005	0,896
	mid	18	4,756	100,916	0,007	0,903
	high	19	7,162	108,077	0,009	0,913
	exHigh	20	8,254	116,331	0,009	0,922
6	low	21	3,095	119,426	0,003	0,925
	mid	22	4,756	124,182	0,004	0,930
	high	23	7,162	131,344	0,006	0,936
	exHigh	24	8,254	139,598	0,006	0,942
7	low	25	3,095	142,692	0,002	0,944
	mid	26	4,756	147,448	0,003	0,947
	high	27	7,162	154,610	0,004	0,951
	exHigh	28	8,254	162,864	0,004	0,955

parameter	value
C <sub>1</sub>	26,250
C <sub>2</sub>	-38,940
C <sub>3</sub>	-631,050
C <sub>4</sub>	5964,830
C <sub>5</sub>	-25094,600
C <sub>6</sub>	60380,210
C <sub>7</sub>	-87517,160
C <sub>8</sub>	75513,770
C <sub>9</sub>	-35748,770
C <sub>10</sub>	7154,940
d <sub>n</sub> [km]	800,000

For the calculation of each phase specific utility factor (UF) the following equation shall be applied:

$$UF_i(d_i) = 1 - \exp\left(-\left(\sum_{j=1}^k C_j * \left(\frac{d_i}{d_n}\right)^j\right)\right) - \sum_{l=1}^{i-1} UF_l$$

$UF_i$  - Utility factor for phase i.

$d_i$  - Distance driven to the end of phase i in km.

$C_j$  -  $j^{\text{th}}$  coefficient (see table x).

$d_n$  - Normalized distance (see table x).

$k$  - Amount of terms and coefficients in the exponent (see table x).

$i$  - Number of considered phase.

$j$  - Number of considered term/coefficient.

$\sum_{l=1}^{i-1} UF_l$  - Sum of calculated utility factors up to phase (i-1).