

2

END

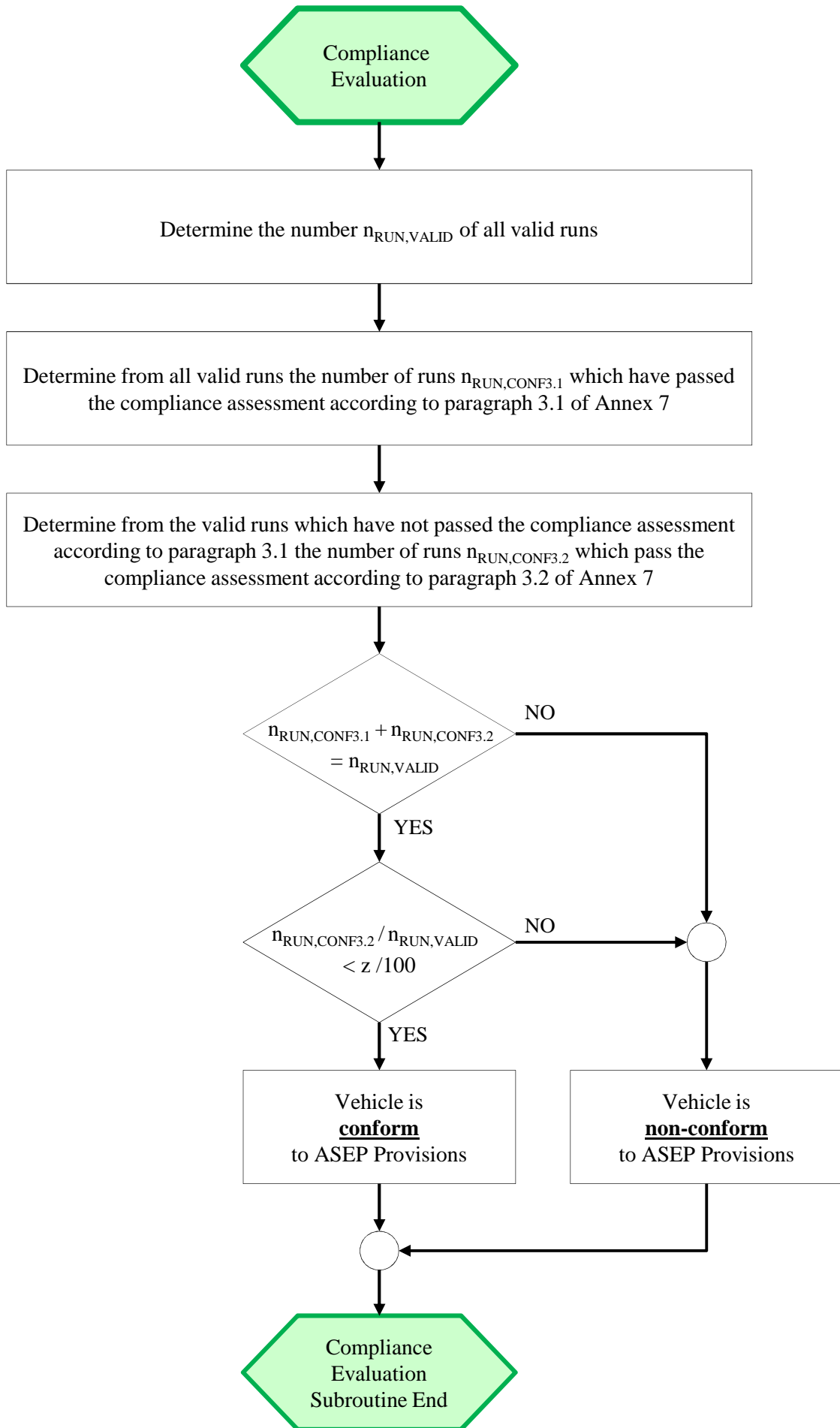
Calculate expectation
sound level $L_{EXP,TEST}$ for
an individual test run

$$L_{EXP,TEST} = 10 \text{ LOG} \left(10^{0.1 L_{EXP,TR}} + 10^{0.1 L_{EXP,PT}} + 10^{0.1(L_{EXP,DYN} + \Delta L_{DYN,EXP})} \right)$$

END

Calculate expectation
sound level $L_{EXP,TEST}$ for
an individual test run

$L_{EXP,TEST}$ determined
→ Subroutine End



Compliance Evaluation

Determine the number $n_{\text{RUN,VALID}}$ of all valid runs

Determine from all valid runs the number of runs $n_{\text{RUN,CONF3.1}}$ which have passed the compliance assessment according to paragraph 3.1 of Annex 7

Determine from the valid runs which have not passed the compliance assessment according to paragraph 3.1 the number of runs $n_{\text{RUN,CONF3.2}}$ which pass the compliance assessment according to paragraph 3.2 of Annex 7

$$n_{\text{RUN,CONF3.1}} + n_{\text{RUN,CONF3.2}} = n_{\text{RUN,VALID}}$$

NO

YES

$$n_{\text{RUN,CONF3.2}} / n_{\text{RUN,VALID}} < z / 100$$

NO

YES

Vehicle is **conform** to ASEP Provisions

Vehicle is **non-conform** to ASEP Provisions

Compliance Evaluation Subroutine End

Parameter Table

Model Part	Parameter	Symbol	Unit	M1		
				ICE	PEV	PMR < 25
TYRE	Reference Vehicle Speed	v_{REF}	km/h	50	50	40
	Tyre Rolling Sound Energy Fraction of Annex 3 Cruise Test $L_{CRS,REP}$	x	%	90	98	50
	T/R Sound Slope ≤ 50 km/h	$\theta_{TR,LO}$	---	20	20	20
	T/R Sound Slope > 50 km/h	$\theta_{TR,HI}$	---	40	40	40
MECHANIC NO LOAD	P/T Sound Slope $\leq n_{BB,CRS,REP}$	$\theta_{PT,LO}$	---	60	60	60
	P/T Sound Slope $> n_{BB,CRS,REP}$	$\theta_{PT,HI}$	---	150	150	150
	Form Factor for the logarithm function of the meachanic sound model	$n_{SHIFT,PT}$	rpm	5000	5000	5000
DYNAMIC LOAD	Dynamic Sound Slope $\leq n_{BB,WOT,REP}$	$\theta_{DYN,LO}$	---	60	60	60
	Dynamic Sound Slope $> n_{BB,WOT,REP}$	$\theta_{DYN,HI}$	---	110	110	110
	Form Factor for the logarithm function of the dynamic sound model	$n_{SHIFT,DYN}$	rpm	5000	5000	5000
DYNAMIC	Reference Performance	v_{aREF}	m^2/s^3	28	28	28
	Dynamic v_a Factor β	β	---	16	16	16
	Partial Load Form Factor α	α	---	0,111	0,111	0,111
GENERAL	Base Margin	$marg_B$	dB(A)	2	2	2
	Extended Margin	$marg_E$	dB(A)	2	2	2
	Conformity Percentage	z	%	75	75	75