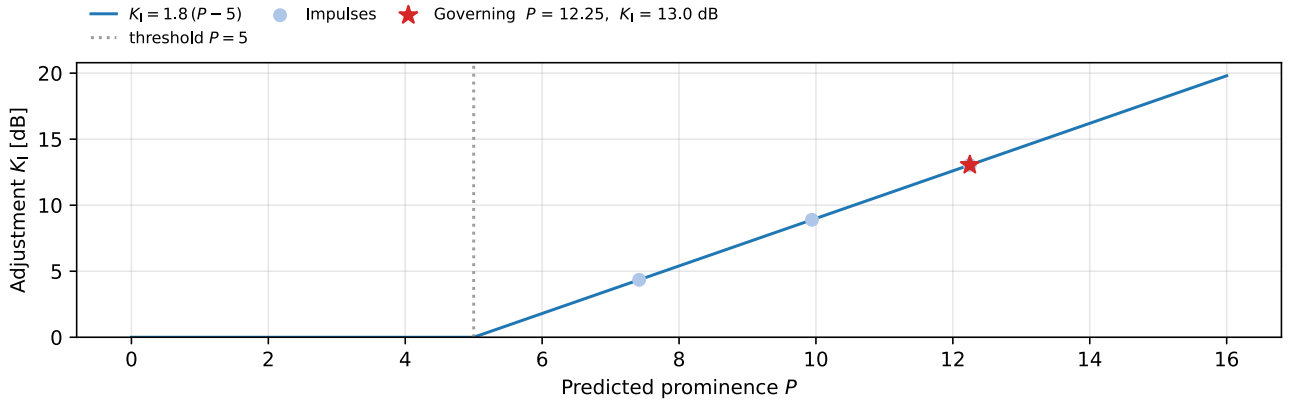
Impulsive sound prominence assessment

ISO 1996-2 assessment of impulsive-sound prominence and the L_{Aeq} adjustment per NT ACOU 112:2002 (ISO/PAS 1996-3:2022).

Source / situation:	Pile-driving site, intermittent hammering	Client:	Example client
Measurement position:	Free field, 25 m from source (example)	Instrumentation:	Class 1 SLM (IEC 61672-1), L_pAF logged at 100 ms
Date of test:	2026-07-21	Assessment period:	30 min

Candidate impulses

Impulse	OR [dB/s]	LD [dB]	P	Onset > 10 dB/s
1	1200	32.0	**12.25**	● Yes
2	300	18.0	9.94	● Yes
3	60	11.0	7.42	● Yes



Governing prominence P = 12.25 L_{Aeq} adjustment K_I = 13.0 dB

Governing impulse: OR = 1200 dB/s, LD = 32.0 dB

Result vs requirement: P = 12.25, required ≤ 10.00 → **FAIL**

A prominent impulse is present (governing P = 12.25 > 5); the L_{Aeq} adjustment K_I = 13.0 dB (NT ACOU 112:2002 Formula 2) applies.

The predicted prominence P = 3 lg(OR) + 2 lg(LD) combines the onset rate OR (dB/s) and the level difference LD (dB) of each impulse (NT ACOU 112:2002, clause 7, Formula 1); the governing value is the highest P over the assessment period among impulses with an onset rate above 10 dB/s (clauses 4.5/8).

The L_{Aeq} adjustment K_I = 1.8 (P – 5) dB for P > 5, else 0 dB, is applied to the L_{Aeq} of the assessment period on the basis of the single impulse with the highest prominence (clause 8, Formula 2).

Laboratory: Phonometry reference example
Report no.: EXAMPLE-NTACOU112
Date: 2026-07-21
Operator: phonometry Signature: _____

■ The results relate only to the tested specimen.

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