Labeling of Product Sound Quality

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Section I 3.4 Noise Abatement of Industrial Plants and Products, Noise Impact
Noise of Products
Incentives for Stakeholders
Technical Requirements

\[ L_p / L_W \text{ vs. } L_N / N \]
\[ \bar{L} \text{ vs. } \bar{L} + K \]

Forces for the Use
The European Outdoor Noise Directive

Lower machinery noise

European role model for noise labelling
Labeling of Product Sound Quality

The European Energy Label Directive

90's 2010's

9 product types 10 product types

\[ L_{WA} \]

\[ \bar{L}(+K) \]

\[ L_{WA,\text{max}} \]

(3 prod. types)

Consumers knowingly buy quiet!
Labeling of Product Sound Quality

Take Advantage of Existing Resources

\[ L_{WA} = \bar{L} + K \]

\[ L_{WA,\text{max}} - x \text{ dB} \]
“The Blue Angel” for Low-Noise Products

70’s

76 product types

Der Blaue Engel
weil lärmmarm
schützt UMWELT und GESUNDHEIT

ECO
B.A.T.

Endorsement of 2014/24/EU

Blue Angel Products preferred in public tendering procedures!
Other Existing Noise Labels
Labeling of Product Sound Quality

Ideas

\[ \bar{L}_W + K_N \]

\((+ S/ R)\)

SOUND QUALITY

Exellent

Sound Quality Tested

SLG

APPLIANCE CLASS

manufacturer

model

B

A

C

D

E

F

G

QUIETER

LOUDER

SOUND QUALITY RATING

\(L_{WA}\) dB

EN ISO XXXXX:YYYY

PNR 65

More information on Product Noise Ratings and what the PNR value

More info: www.************/PNR

Warning:

Danger:

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Conclusions

1. Introduction of a Label
   Find Incentives, Requirements and Forces

2. Existing Labels
   Outdoor Noise Label
   Energy Label
   Blue Angel and others

3. A Sound Quality Label?
   Use Existing Resources
   Create Majorities

Thank you! Questions?