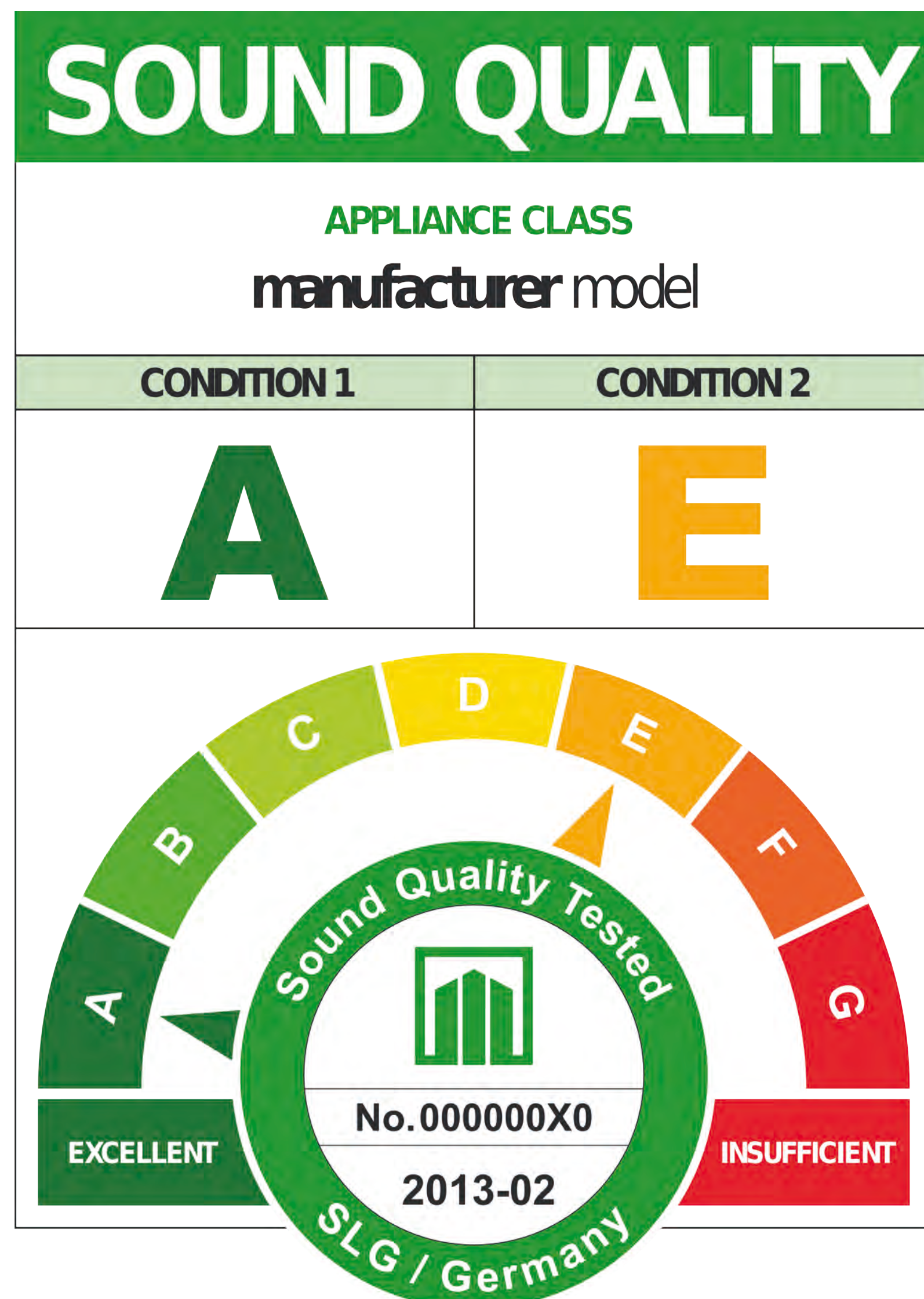# Designing a Soundlabel

a ZIM research project of BMWi

Task

Creating an additional tool for a qualitative and quantitative description of subjective sound characteristics.

SOUND QUALITY

APPLIANCE CLASS

manufacturer model

CONDITION 1	CONDITION 2
A	E

Sound Quality Tested

No.000000X0

2013-02

SLG / Germany

A B C D E F G

EXCELLENT

INSUFFICIENT

Aim

- Designing a Soundlabel for different product groups.
- Creating a relation between the sound power level and subjective opinion in order to be able to show a direct ranking within a product group.
- Including objective measurable variables for repeatable results.
- Intention of the Soundlabel: Providing consumers with an additional criterion for their buying decision.

Procedural method

- Determination of sound pressure level, sound power level and the subjective variables loudness, sharpness, tonality, roughness and fluctuation strength as well as detection of annoying noises.
- Realisation of subjective noise tests and combination of the results with the acoustical characteristics.

Household appliances under test

- Vacuum cleaners (carpet and hard floor)
- Cooker hoods (exhaust and recirculating air)
- Tumble dryers
- Washing machines (washing and spinning)
- Refrigerators and freezers

Result

As a result of this combination, appliances can be divided into classes and this classification can be represented in a Soundlabel, giving consumers an orientation for their buying decision.