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**Describing measurement uncertainties in room acoustics with the  
concept of GUM**

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Considering the uncertainties in room acoustical measurements is a crucial step towards quality evaluation, comparability between different measurements methods and instrumentation. In the preceding discussion it was shown that the concepts specified in the "Guide to the expression of Uncertainty in Measurements" (GUM) can well be applied for room acoustical measurement tasks. In this initiatory step a detailed analytical formulation of a model function was avoided for reasons of simplicity and practicability. The waiving of complex modelling, however, requires comprehensive series of measurements to assess the measurement uncertainties. In this paper it is discussed how modelling can reduce such requirements. A special focus is placed on the influence of the directional radiation properties of sound sources.