

Table 2: COST Action 732 (Quality Assurance and Improvement of Microscale “Meteorological” Models): results versus objectives.

Objectives from MoU	Results
To develop a coherent and structured QA procedure for these type of models which gives clear guidance to developers and users of such models as to how to properly assure their quality and their proper application	Achieved: the Protocol document (doc. 4) and Best Practice Guidance (doc. 3) are the concrete deliverables where developers and users can find the required guidance
To provide a systematically compiled set of appropriate and sufficiently detailed data for model validation work in a documented, convenient and generally accessible form (www data bank)	Achieved: the MUST-dataset and the OKC-dataset have been compiled, documented and made available for download to be used for model validation experiments
To invite scientists and users from all participating states to apply and test the procedure and to prove its serviceability	Achieved: all groups represented within the Action have been invited to apply and test the procedure and about ten were actually involved in the testing process
To develop a tool kit that implements the model evaluation methodology	Achieved: the toolkit is rather a checklist that can be found in the Protocol document (doc. 4) and that is further documented in the Background document (doc. 2).
To contribute to the development of an algorithm for uncertainty determination	Partially achieved: the issue of uncertainty determination has been addressed, however, no concrete algorithm has been developed
To build a consensus within the community of micro-scale model developers and users regarding the usefulness of the procedure	Partially achieved: a consensus within the community of micro-scale model developers regarding the usefulness of the procedure has been achieved, however, non-scientific users have not been involved
To establish the minimum requirements as to input data (incl. meteorological, emission and concentration data) for a range of models	Partially achieved: about the issue of requirements to be met by validation data sets much has been said, however, a concrete set of minimum requirements has not emerged
To stimulate a widespread application of the procedure and the preparation of QA protocols which prove the ‘fitness for purpose’ of all micro-scale meteorological models participating in this activity	Partially achieved: the issue of “fitness for purpose” has been addressed, a methodology to derive a quantitative measure has been developed and tested but no concrete guideline made it to the Protocol document (doc. 4).
To contribute to the proper use of models by disseminating information on the range of applicability, the potential and the limitations of such models	Partially achieved: this kind of information can be found for instance in doc. 5, but not concretized in a separate paragraph of the model evaluation
To identify the current weaknesses of the models and data bases	Partially achieved: weaknesses of both models and databases have been mentioned in doc. 5 but not very explicitly
To give recommendations for focussed experimental programmes in order to	Not achieved: though several observations have been made on issues to be addressed

improve the data base	when setting up datasets of experimental programmes no recommendations as such have been put together
	Achieved (not planned): development of a powerful tool for exploratory analyses of model performance: excel workbooks