

**EVALUATION 101: TRAINING SESSION
ON ITS PERFORMANCE MEASURES
AND EVALUATION TECHNIQUES**

ITS WORLD CONGRESS

19 NOVEMBER 2003

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INTRODUCTION

Session AE 9 **ITS Evaluation 101: Training Session on ITS Performance Measures and Evaluation Techniques**

Thurs, 19 Nov: **10:00 – 11:30 and 12:00 – 13:30**

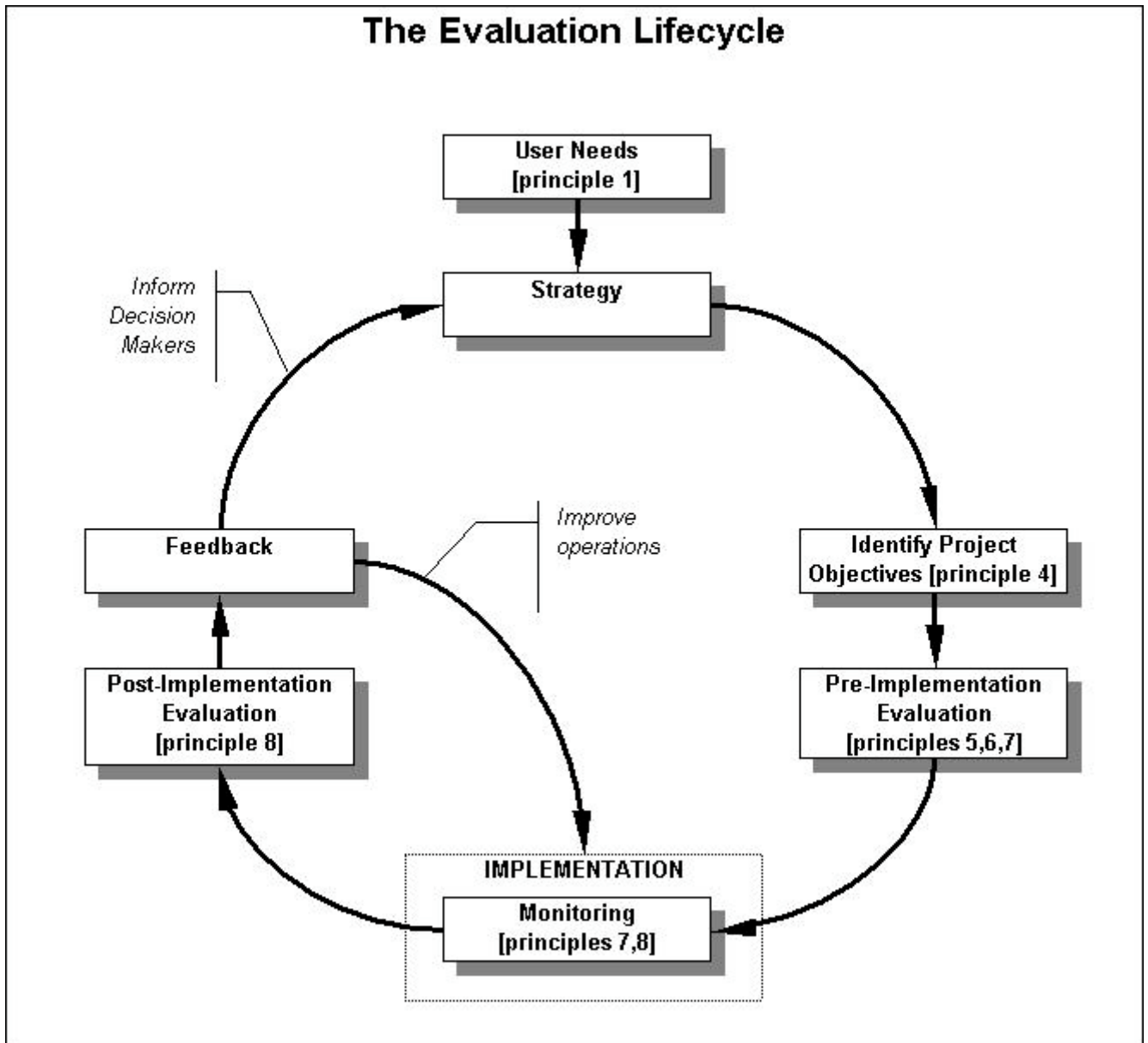
Description: This session will teach a variety of methods for evaluating ITS projects and measuring the performance of ITS systems. Presentation material is derived from ITS evaluation methodologies performed in both the U.S. and Europe. The session will include case studies from those regions, as well as other locations around the world. Upon completion of this session, participants will gain two important skills: how to conduct an evaluation of an ITS project and how practitioners can benefit from the feedback that evaluation provides.

AGENDA

<i>Time</i>	<i>Session</i>
10:00 – 10:10	Introductions <ul style="list-style-type: none">• Mark Carter
10:10 – 10:25	Background: The U.S. Perspective <ul style="list-style-type: none">• Joe Peters
10:25 – 10:40	Background: The European Perspective Steve Tarry
10:40 – 11:30	The Evaluation Process Mark Carter
11:30 – 12:00	<i>Coffee Break</i>
12:00 – 12:35	Evaluation Techniques and Performance Measures <ul style="list-style-type: none">• Steve Morello
12:35 – 13:05	Real Evaluations <ul style="list-style-type: none">• Steve Tarry
13:05 – 13:30	Wrap-up and Conclusions <ul style="list-style-type: none">• Steve Morello

HANDOUT 1:

EVALUATION LIFECYCLE AND EVALUATION GUIDING PRINCIPLES



Evaluation Guiding Principles

The following guiding principles should be considered when undertaking an evaluation. Those that are to be considered during the exercise are in black.

1. **Be clear about the reasons for undertaking evaluation** – they might be to fine-tune the performance of ITS applications, to demonstrate project benefits (to different groups of stakeholders), to assess the merits of integrated applications and justify expenditure;
2. **Use and build on national approaches to ex ante appraisal and ex post evaluation** – this will help ensure that results are comparable with the expected results determined prior to the implementation of the scheme, as well as consistent with results from the evaluation of other transport projects, and that cost and duplicated efforts are minimised;
3. **Ensure national objectives are adopted within the evaluation framework** – this will ensure that the evaluation is focussed on demonstrating that the appropriate objectives have been met at a national level;
4. **Clearly state the objectives of the application** – this will enable the evaluation to be tightly focused on demonstrating that objectives have been met at an application level;
5. **Clearly describe the environment in which the ITS application resides** – this will ensure that all parties reading the evaluation report can appreciate the environment in which the application resides and understand the situation before the application was installed or service commenced. This will assist in judging the applicability of the results to other deployments of the ITS application;
6. **Clearly describe the measurement approach taken – including survey techniques** – this will ensure that all parties reading the evaluation results can understand the measurement approach and any bias there might be in the results;
7. **Determine the spatial and temporal perspective of the evaluation** – the evaluation should cover the network and area, which are relevant with regard to the impacts of the scheme to be evaluated. The data collection after the implementation should be scheduled so that the evaluation will cover the long-term impacts of the scheme including relevant forms of behavioural adaptation and not biased by the so-called novelty effects.
8. **Use well-established indicators in measuring the impacts** – this will improve the comparability of the results and the success of related activities;
9. **Express the results in real and not just relative numbers** – this helps readers to verify the results in terms of their own experiences and to use the results in their own assessment of the impacts of ITS applications;
10. **Clearly indicate the level of statistical significance of the result, if appropriate** – this enables readers to attribute a level of confidence in the results;
11. **Provide supporting information** – especially if country-specific coefficients, other parameters (e.g. the ‘value of time’) or estimation procedures have been used. The supporting information enables readers to ‘convert’ the results according to the parameters and practices of their own countries.

HANDOUT 2:

U.S. AND EUROPEAN EVALUATION PROCESS

