

Cost-effectiveness analysis of new measures - method development and progress

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Approach and steps for the cost-effectiveness analysis

1. Identification of potential new measures based on synopses
 - Measures + step toward measures (if the step toward measures are concrete enough to identify the effectiveness indicators)
 - Identify overlapping synopses or dependence of synopses (grouping)
2. Data collection (next slide)
 - Effectiveness data
 - Cost data
3. Analyzing cost-effectiveness
 - Effectiveness part will use SOM model to estimate the effectiveness of existing + new measures (joint effects will be considered)

Data sources of CEA for new measures

Effectiveness data	Cost data
<ol style="list-style-type: none">1. Synopses of proposed new measures2. References listed in the synopses<ul style="list-style-type: none">• peer-reviewed literature• grey literature such as project reports3. ACTION project outcomes4. Expert-based data collected for the SOM model, and identification of the links of new measures to the measure types in the expert surveys5. Update the effectiveness estimates with the outcomes/notes from the BSAP workshops6. Use the literature reviewed for the cost data collection when it includes suitable effectiveness estimates	<ol style="list-style-type: none">1. The cost descriptions in the synopses of proposed new measures2. References listed in the synopses3. ACTION project outcomes (WP2)4. The literature that have been reviewed for the effectiveness of existing and new measures when cost data also exists5. Reviewing the cost estimates and relevant studies conducted for the Finnish Water Framework Directive6. Cost data from a national survey and EN ESA cost data call: Finland, Estonia, Latvia, Lithuania and Sweden

Effectiveness of new measures and scaling of effectiveness and costs

- Effectiveness of new measures are from literature estimates and effectiveness of measure types used for SOM.
- Overlaps and joint impacts for **effectiveness and costs** were identified based on grouping and measure-activity-pressure-state chains.
- Three scenarios are used for measure implementation to calibrate **effectiveness and costs** (low-medium-high).
- SOM approach/model is used to assess effectiveness of new measures: What is the additional impact of new measures on SOM results?

Progress

Task	Progress
Identification of potential new measures	<ul style="list-style-type: none">• Done
Effectiveness data	<ul style="list-style-type: none">• Data collection done• Transferring the collected data into SOM input format• Model revision for the existing + new measures with new data
Cost data	<ul style="list-style-type: none">• Data collection done• Have a first draft of cost database (363 items and will be updated with 90 possible literature+ more SE national cost)• Calculating the cost of measures
Analyzing cost-effectiveness	<ul style="list-style-type: none">• Defining the application extent for both effectiveness and cost calculation• Plan to start the calculation and model estimation this week

Expected results

1. Effectiveness estimation of (existing + all new measures) from SOM with total costs for new measures
2. Cost and effectiveness of each (grouped) measure
3. If time available: cost effectiveness for subsets of measures will be analyzed
4. We will make the final cost database public accessible

Appendix 1. Cost database and collected cost estimates

- Explain in Excel
- Issue of cost transfer