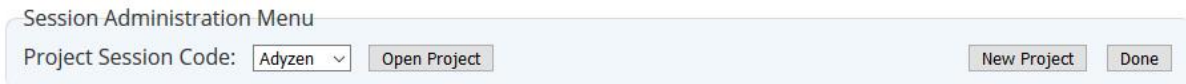# AHP-OS Quick Reference

1. Session Administration

The **Session Administration Menu** allows you to open your AHP projects. You can also open a project by *clicking on the link of the session code in the project table*.

Open Project	Open project summary of selected project session.
New Project	Start a new project (hierarchy definition) – opens hierarchy page.
Done	Back to AHP main page.

2. Project Administration

The **Project Administration Menu** allows you to manage a selected AHP project.

View Result	View result (greyed, if no result available).
PWC Input	Start your pairwise comparisons input as participant.
Use Hierarchy	Use decision hierarchy of the selected project to define a new one.
Rename	Rename project name or edit project description.
Edit	Edit a saved project (greyed, when project has participants' inputs).
Del Sel. Part.(s)	Delete selected participant(s) (greyed, if no participant is selected.) Select participants in the participants table and refresh.
Delete Project	Delete the whole project.
Toggle Project Status	New: Toggle project status between open and closed
Done	Close the selected project. Go back to session table.

3. Decision Hierarchy

Input new text in the text field below. (See examples)

```
AHP-Project:Crit-1,Crit-2,Crit-3;
Crit-1:a=.6,b=.4;
Crit-2:c,d;
Crit-3:e,f;
```

The syntax is defined as follows:

```
<hierarchy> → <branch>; [{<branch>;}]
<branch>   → <node>: <leafs>, <leafs> [,<leafs>]
```

```
<leafs>        → {<leaf> [ = <weight>]}
```

For all `<leafs>` in a `<branch>` the sum of `<weight>` has to be one. A `<node>` of the second and any further `<branch>` has to be one of the `<leaf>` in `<leafs>`. Each `<node>` represents a decision matrix, and the corresponding priority vector's dimension is the number of `<leafs>`. The example shown has defined weights for the two criteria a (60%) and b (40%. For all other criteria weights are automatically set to the default value $1/n_{leaf}$.

In the **Hierarchy Input Menu** you can define a new hierarchy and save it as new project.

Button	Description
Submit	Submit new hierarchy text input
Save/Update	Save hierarchy definition as new project
Download (.csv)	Export data as comma separated value file
dec. comma	Export with "," as decimal separator when checked
Reset Priorities	Reset all priority values given within the hierarchy text input. Clears also alternative names
Reset all	Reset hierarchy definition and all other session parameter
Done	Go back to Session Administration

4. Save New/Modified Projects

When you want to save a new or modified project, or rename the project name or description, the AHP Session Input Page will open. You can edit the AHP Project Name and input a Project Short Description. The project short description (max. 400 chars) will be shown to the participants/respondents.

AHP Project Name:

Vendor Selection

Project Short Description:

5. Group Input (Participants)

Start project evaluation inputs as participant: Click on *Group Input* in the project administration menu, or follow the group link provided on the project administration page.

The session code is sUhYmA. Provide this session code or the following link to your participants:

https://bpmsg.com/academic/ahp-hiergini.php?sc=sUhYmA

Session Input Menu
Check input | Go | Reset | Cancel

Check Input	Check your input (session code and participants' name. Red outline when required.
Go	Start: will show decision hierarchy with AHP buttons to click and start pairwise comparisons.
Reset	Reset form.
Cancel	Cancel input.

6. Pairwise Comparisons

AHP AHP	Start pairwise comparison (red) for selected node of the hierarchy. Once the comparison is done, the button outline will be green.
Check Consistency	Check consistency of the pairwise comparison.
Submit_Priorities	Submit priorities and go back to the hierarchy to continue evaluation.

Once all judgments are completed, they can be saved to the database.

Group Input Menu
Save Judgments | View Group Result | Done

Save Judgments	Submit judgment for group evaluation – red outline, when all comparisons are completed.
View Group Result	View consolidated group results.
Done	Exit the Group input page – red outline, when judgments are saved.

7. Group Results

The **Group Result Menu** allows you to analyse the results and download them as csv text file.

Group Result Menu
0 - Standard AHP linear scale ∨ | □ var | Refresh | View Input Data | Download (.csv) | □ dec. comma | Define Alternatives | Done

0 - Standard AHP linear scale ∨	Scale selection
□ var	Uncertainty evaluation and sensitivity analysis (alternatives).
□ wpm	Weighted product method instead of weighted sum method.

Refresh	Refresh page – outlined red when required.
View Input Data	View participants input data.
Download (.csv) ☐ dec. comma	Download results as csv text file.
Define Alternatives	Use hierarchy with resulting priorities for definition of alternatives.
Done	Go back to project list.

8. Define Alternative Project

Click *Use Consol. Prio* in the Group Result Menu and click on *Alternatives* in the hierarchy table. Define number and names of alternatives.

Input number and names (2 – 12) [2] Go

Save as new project.

Alternative Menu
Save as Project   Reset Alternatives   Done

Save as Project	Hierarchy with consolidated priorities and defined alternatives will be saved as a new project (mode alternative evaluation).
Reset Alternatives	Reset al defined alternative names to input new ones.
Done	Go back to hierarchy page.

9. Results Page

On the result page following details are shown:

Project result data	Selected judgment scale, Number of judgment variation for uncertainty estimation, Weighted Product Method (WPM) if selected. - Project summary table, - Alternative table (if any), - Project participants table with checkbox for selection of individual participants.
Hierarchy with consolidated priorities	"All" or selected participants from participant's table, decision hierarchy table with alternatives (if any) and consolidated weights from all or selected participants.
Consolidated global priorities or weights of alternatives	Graph with priorities and uncertainties (if selected).
Sensitivity analysis	1. Weight uncertainties overlap, 2. Robustness (for alternative evaluation).
Alternatives by Participants (alternative evaluation)	Group result of alternative weights, uncertainties and breakdown by participant.
Breakdown by nodes (Details/Hide)	Consistency Ratio CR, AHP group consensus, Table with weights and uncertainties, Consolidated decision matrix, Group result and weights for individual participants.
Global priorities (hierarchy evaluation)	Group consensus and global weights, uncertainties and breakdown by participants.