

CASE STUDY: USE OF EXPERT CHOICE SOFTWARE¹ FOR FACILITATION OF POLITICAL DECISION-MAKING

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Background

The idea to establish the Central-Asian Regional Environmental Centre (CAREC) with the similar objectives and principles as EU-funded Regional Environmental Centre near Budapest has been put forward by Central Asian countries in the first half of 1998. This idea has been supported by the Fourth Ministerial “Environment for Europe” Conference in Arhus, Denmark in June 1998.

Unfortunately in spite of several meetings Central Asian countries couldn't reach an agreement on such important issues regarding the establishment of CAREC like the location of the Centre and the main principles of its charter. At the donor meeting in Brussels it was proposed to use some decision support system to facilitate the process of the reaching an agreement on CAREC between five Central Asian countries using one of the regional fora – the so-called Interstate Sustainable Development Commission. Presidents of Central Asian countries have established this Commission in 1994 as a regional advisory body on the Aral Sea crisis issues.

Following the letter of Ms. Ritt Bjerregaard, European Commissioner on Environment to the Governments of Central Asian countries, extensive consultations with the Governments were organized in order to get their agreement to use decision support system and the mutually agreed set of criteria for the selection of the CAREC.

Taking into account that countries agreed to use special criteria for the selection, the Expert Choice Software was selected for facilitation of the decision making process. This package (see <http://www.expertchoice.com>) was used because it represents one of the well known commercial products based on the Analytic Hierarchy Process — a mathematical model that is considered one of the most accurate and successful decision-making methodologies. Expert Choice enables companies and government organizations to define, prioritize and align project portfolios with overall strategic objectives for improved business performance. The software guides decision makers through a process comprised of defining objectives; using pairwise comparison to a) identify priorities for the objectives; b) evaluating projects; and c) performing “what-if” testing on them. It provides a simple, easy- to-use interface that guides you and your group through the process of:

1. Structuring your decision into objectives and alternatives
2. Measuring your objectives and alternatives using pairwise comparisons
3. Synthesizing objective and subjective inputs to arrive at a prioritized list of alternatives, taking care of all the heavy mathematical lifting

¹ <http://www.expertchoice.com>

4. Managing your decision with documentation, reporting and sensitivity analysis capability

Expert Choice is specially designed for those who are making group decisions and saves you significant time and insures that your decisions accurately reflect your team's input by providing you with the ability to:

- synthesize judgments from multiple stakeholders and enjoy the peace of mind of knowing that your calculations are correct
- track each team member's judgments
- weight team members and evaluate outcomes based on team member demographics
- insure consensus and avoid having somebody to dominate your meetings.

Results of the regional meeting

Delegations of five Central Asian countries came to the meeting ready to present and to select the candidates for the location of CAREC using nine criteria, which were proposed them in advance by EU Commissioner:

1. Legislation allowing independent and effective management of REC including withdrawal, exchanges and transfer of convertible currency
2. Easy international access to the country and safety within the country\city
3. Developed (regional) transport infrastructure and information system
4. Financial or in kind contribution by host country
5. Readiness to support the creation and functioning of REC by host country Government
6. Significant need in REC service by its potential clients in host country
7. Encouraging financial legislation for noncommercial and NG organizations
8. Reasonable office costs
9. Acceptance by other CA countries

Three candidates to host CAREC were officially presented at the first session:

1. Almaty (former capital of Kazakhstan)
2. Bishkek (capital of Kyrgyzstan)
3. Tashkent (capital of Uzbekistan).

After presentations the delegations evaluated the rating of the candidates using the Expert Choice decision support software for multi-criteria analysis. Actually each country delegation was just filling the tables for pairwise comparison (see example of the table in Attachment provided to delegations in Russian in order to make it understandable without translation). The results of the pairwise rating were inserted in the computer which provides the following summary rating:

	KAZ	KYR	TAJ	TUK	UZB	$\Sigma/5$
Almaty	0.814	0.383	0.782	0.801	0.326	0.6212
Bishkek	0.114	0.414	0.121	0.100	0.219	0.1936
Tashkent	0.072	0.203	0.097	0.098	0.455	0.1850

It is clear from the Table that Almaty is the most preferable location from the point of view of all five delegations. If to exclude the rating made by KAZ delegation, one could see that Almaty is still preferred by the rest four delegations (0.57 for Almaty and around 0.21 for both Bishkek and Tashkent). Tajikistan and Turkmenistan provided actually crucial support to Almaty as a location of CAREC. All these options were easily presented to the delegations using opportunities provided by the software.

At the morning session the authorized representatives approved the results of the rating and selected Almaty as the location of the CAREC despite the fact that they couldn't make this decision for almost one year of meetings and negotiations.

Conclusion

Why all delegations accepted this sometimes bitter pill of compromise decision? It looks that the key conditions of successful implementation of this decision support system were the following:

- (i) crucial step – agreement to use developed and agreed in advance set of criteria for the selection (in this case this was imposed on by the EU Commissioner as the condition to provide funds for CAREC establishment);
- (ii) pairwise comparison is much easier and acceptable than using several criteria simultaneously;
- (iii) the process of pairwise comparison is transparent and is done by the representatives themselves;
- (iv) all calculation process could be made hidden from the participants but they should be able to test the results using sensitivity analysis.

This example shows that proper design and interface of the decision support systems could really help in making even very sensitive political decisions even by politicians, which are largely not aware of any sophisticated computer tools and not willing and ready to use them.

Attachment:

Критерии для отбора:

1. Наличие законодательства, допускающего независимость и оперативность деятельности РЕЦ ЦА, включая получение, обмен и перевод иностранной валюты
2. Простота международного доступа и безопасность пребывания в стране\городе
3. Развитая (региональная) транспортная инфраструктура и информационная система
4. Финансовый или иной взнос принимающей страны
5. Готовность Правительства принимающей страны способствовать организации и деятельности РЕЦ ЦА
6. Значительная потребность в наличии РЕЦ ЦА со стороны всех потенциальных его клиентов в стране пребывания
7. Способствующие финансовые законы, включая законодательство о некоммерческих и неправительственных организациях
8. Разумные расходы на содержание офиса РЕЦ ЦА
9. Приемлемость другими странами Центральной Азии

Делегации сравнивают достоинства кандидатов, используя материалы презентации и указанные критерии. Для отбора будет предложено специальное программное обеспечение, обеспечивающее поддержку принятия решений. Каждой делегации необходимо заполнить таблицы попарного сравнения кандидатов.

	Критерий 1	Критерий 2	Критерий 3	Критерий 4	Критерий 5	Критерий 6	Критерий 7	Критерий 8	Критерий 9
Алматы									
Бишкек									

	Критерий 1	Критерий 2	Критерий 3	Критерий 4	Критерий 5	Критерий 6	Критерий 7	Критерий 8	Критерий 9
Алматы									
Ташкент									

	Критерий 1	Критерий 2	Критерий 3	Критерий 4	Критерий 5	Критерий 6	Критерий 7	Критерий 8	Критерий 9
Бишкек									
Ташкент									