

# **FINKMET**

## **Finnish-Kyrgyz Meteorology Project**

**Self-evaluation, January 2015**

**Agency on Hydrometeorology under Ministry of Emergency Situations of the Kyrgyz  
Republic (Kyrgyzhydromet)  
in cooperation with  
Finnish Meteorological Institute (FMI)**

**Annexes:**

**Annex 1. Project Logical Framework Matrix**

## 1. Introduction

The Finnish-Kyrgyz Meteorology Project (FINKMET) is a development project funded by the Ministry of Foreign Affairs of Finland's Institutional Co-operation Instrument (ICI). The project spans from 2014 to 2016 with the budget of 500 000 EUR. The overall objective of this ICI Project between the Finnish Meteorological Institute (FMI) and Kyrgyzhydromet is

**Promotion of economic development and reduced risks for the loss of life and property caused by severe weather, climate and environmental events in the Kyrgyzstan society with the main purpose being**

**Improved capacity of the Kyrgyzhydromet to deliver weather, climate, and environmental information and early warning services for the benefits of Kyrgyzstan society.**

A more detailed description of the Project Components can be found in the Logical Framework Matrix (Annex 1). The LogFrame also highlights the completed Results and Activities in the project thus far.

In January 2016, a self-evaluation survey on the project was made. This was based on a similar self-evaluation survey conducted by the Geological Survey of Finland (GTK) for their own ICI- project in Central Asia. A similar survey was conducted in October 2015 in Tajikistan for FMI's FINTAJ-project self-evaluation.

## 2. Survey Methods

The self-evaluation was based on a survey with a multiple-choice questionnaire of 19 questions on a five-level scale (with the option not to comment) and a set of verbal questions targeting the successes, challenges and lessons learnt in the project. The survey was conducted during an air quality mission in Bishkek in January 2015, i.e. when roughly 70 % of the project period was completed.

During the self-survey event, the FINKMET project manager Antti Hyvärinen first presented the project objectives (Overall objectives, Purpose-level objectives and Result-level objectives) and the related Logical Framework Matrix (Annex 1) for the people participating in the self-evaluation. The multiple-choice questionnaire was then filled by the following people:

- 1) Ryskeldi Azankhodzaev, Deputy Director and Sabira Tiuliundieva, FINKMET project manager (overall coordination of the project)
- 2) Ruslan Ermatov, Chief Specialist at Department of Telecommunication and Information Technologies (Component 1 responsible person, technical coordination of FINKMET in Kyrgyzstan)
- 3) Larisa Titova and Natalya Fedichkina Department of Air Quality (Component 2 participating personnel)

## 3. Survey Results

The aforementioned three groups or individuals filled the questionnaire. In addition, the groups worked together to answer the textual questions of the survey.

### 3.1. *Questionnaire answers of the survey*

The answers to questions 1-19 of the survey can be found below. The initials indicating the person answering refer to:

**RA/ST= Ryskeldi Azankhodzaev, Deputy Director and Sabira Tiuliundieva, FINKMET project manager (overall coordination of the project)**

**RE= Ruslan Ermatov, Chief Specialist at Department of Telecommunication and Information Technologies (Component 1 responsible person, technical coordination of FINKMET in Kyrgyzstan)**

**LT/NF= Larisa Titova and Natalya Fedichkina Department of Air Quality (Component 2 participating personnel)**

**1. Считаете ли Вы, что цели и достижения проекта соответствуют нуждам и приоритетам Вашего ведомства\команды?**

Are the objectives and achievements of the Project in line with the needs and priorities of the Agency/Expedition/team?

|        | <i>Очень</i>     | <i>В некоторой степени</i> | <i>Мало</i>     | <i>Очень мало</i>  | <i>Вообще нет</i> | <i>Без комментариев</i> |
|--------|------------------|----------------------------|-----------------|--------------------|-------------------|-------------------------|
|        | <i>Very much</i> | <i>Rather much</i>         | <i>A little</i> | <i>Very little</i> | <i>Not at all</i> | <i>No comment</i>       |
| RA /ST | 1                |                            |                 |                    |                   |                         |
| RE     | 1                |                            |                 |                    |                   |                         |
| LT/ NF | 1                |                            |                 |                    |                   |                         |

**2. Считаете ли Вы, что цели и достижения проекта соответствуют политике руководства Вашего ведомства?**

Are the objectives and achievements of the Project in line with the management policies of the Agency/Expedition/team?

|        | <i>Очень</i>     | <i>В некоторой степени</i> | <i>Мало</i>     | <i>Очень мало</i>  | <i>Вообще нет</i> | <i>Без комментариев</i> |
|--------|------------------|----------------------------|-----------------|--------------------|-------------------|-------------------------|
|        | <i>Very much</i> | <i>Rather much</i>         | <i>A little</i> | <i>Very little</i> | <i>Not at all</i> | <i>No comment</i>       |
| RA /ST | 1                |                            |                 |                    |                   |                         |
| RE     |                  | 1                          |                 |                    |                   |                         |
| LT/ NF | 1                |                            |                 |                    |                   |                         |

**3. Насколько хорошо деятельность проекта сможет трансформировать существующие ресурсы в желаемые результаты, с точки зрения количества?**

How well the activities of the Project will transform the available resources into the intended outputs/results, in terms of quantity?

|    | <i>Отлично</i>   | <i>Хорошо</i>      | <i>В некоторой степени</i> | <i>Очень мало</i>  | <i>Вообще нет</i> | <i>Без комментариев</i> |
|----|------------------|--------------------|----------------------------|--------------------|-------------------|-------------------------|
|    | <i>Very well</i> | <i>Rather well</i> | <i>To some extent</i>      | <i>Very little</i> | <i>Not at all</i> | <i>No comment</i>       |
| RA |                  |                    | 1                          |                    |                   |                         |

|           |  |  |   |  |  |  |
|-----------|--|--|---|--|--|--|
| /ST       |  |  |   |  |  |  |
| RE        |  |  | 1 |  |  |  |
| LT/<br>NF |  |  | 1 |  |  |  |

**4. Насколько хорошо деятельность проекта сможет трансформировать существующие ресурсы в желаемые результаты, с точки зрения качества?**

How well the activities of the Project will transform the available resources into the intended outputs/results, in terms of quality?

|           | <i>Отлично</i>   | <i>Хорошо</i>      | <i>В некоторой степени</i> | <i>Очень мало</i>  | <i>Вообще нет</i> | <i>Без комментариев</i> |
|-----------|------------------|--------------------|----------------------------|--------------------|-------------------|-------------------------|
|           | <i>Very well</i> | <i>Rather well</i> | <i>To some extent</i>      | <i>Very little</i> | <i>Not at all</i> | <i>No comment</i>       |
| RA        |                  |                    |                            |                    |                   |                         |
| /ST       |                  | 1                  |                            |                    |                   |                         |
| RE        |                  | 1                  |                            |                    |                   |                         |
| LT/<br>NF |                  | 1                  |                            |                    |                   |                         |

**5. Достигнет ли проект своей цели в указанные сроки?**

Will the Project achieve its purpose in the future?

|           | <i>Безусловно</i> | <i>Да</i>          | <i>В некоторой степени</i> | <i>Очень мало</i>  | <i>Вообще нет</i> | <i>Без комментариев</i> |
|-----------|-------------------|--------------------|----------------------------|--------------------|-------------------|-------------------------|
|           | <i>Very well</i>  | <i>Rather well</i> | <i>To some extent</i>      | <i>Very little</i> | <i>Not at all</i> | <i>No comment</i>       |
| RA        |                   |                    |                            |                    |                   |                         |
| /ST       |                   | 1                  |                            |                    |                   |                         |
| RE        | 1                 |                    |                            |                    |                   |                         |
| LT/<br>NF |                   |                    | 1                          |                    |                   |                         |

**6. Был ли достигнут прогресс в достижении цели?**

Has progress been made towards achieving the overall objective of the Project?

|           | <i>Большой прогресс</i> | <i>В некоторой степени</i> | <i>Мало</i>     | <i>Очень мало</i>  | <i>Вообще нет</i> | <i>Без комментариев</i> |
|-----------|-------------------------|----------------------------|-----------------|--------------------|-------------------|-------------------------|
|           | <i>Very much</i>        | <i>Rather much</i>         | <i>A little</i> | <i>Very little</i> | <i>Not at all</i> | <i>No comment</i>       |
| RA        |                         |                            |                 |                    |                   |                         |
| /ST       | 1                       |                            |                 |                    |                   |                         |
| RE        | 1                       |                            |                 |                    |                   |                         |
| LT/<br>NF |                         | 1                          |                 |                    |                   |                         |

**7. Оправдывают ли средства достижения проекта?**

Can the costs of the Project be justified by the achievements?

|  | <i>Очень</i>     | <i>В некоторой степени</i> | <i>Мало</i>     | <i>Очень мало</i>  | <i>Вообще нет</i> | <i>Без комментариев</i> |
|--|------------------|----------------------------|-----------------|--------------------|-------------------|-------------------------|
|  | <i>Very well</i> | <i>Rather well</i>         | <i>A little</i> | <i>Very little</i> | <i>Not at all</i> | <i>No comment</i>       |
|  |                  |                            |                 |                    |                   |                         |

|     |   |   |  |  |  |  |
|-----|---|---|--|--|--|--|
| RA  |   |   |  |  |  |  |
| /ST | 1 |   |  |  |  |  |
| RE  | 1 |   |  |  |  |  |
| LT/ |   |   |  |  |  |  |
| NF  |   | 1 |  |  |  |  |

### 8. Были ли предположения верно сформулированы в документационном изложении проекта?

Have important assumptions been identified?

|     | <i>Очень хорошо/Верно</i> | <i>В некоторой степени</i> | <i>Мало</i>     | <i>Очень мало</i>  | <i>Вообще нет</i> | <i>Без комментариев</i> |
|-----|---------------------------|----------------------------|-----------------|--------------------|-------------------|-------------------------|
|     | <i>Very much</i>          | <i>Rather much</i>         | <i>A little</i> | <i>Very little</i> | <i>Not at all</i> | <i>No comment</i>       |
| RA  |                           |                            |                 |                    |                   |                         |
| /ST | 1                         |                            |                 |                    |                   |                         |
| RE  | 1                         |                            |                 |                    |                   |                         |
| LT/ |                           |                            |                 |                    |                   |                         |
| NF  | 1                         |                            |                 |                    |                   |                         |

### 9. Хорошо ли были рассчитаны риски?

Are risks appropriately managed?

|     | <i>Очень хорошо/Верно</i> | <i>В некоторой степени</i> | <i>Мало</i>     | <i>Очень мало</i>  | <i>Вообще нет</i> | <i>Без комментариев</i> |
|-----|---------------------------|----------------------------|-----------------|--------------------|-------------------|-------------------------|
|     | <i>Very much</i>          | <i>Rather much</i>         | <i>A little</i> | <i>Very little</i> | <i>Not at all</i> | <i>No comment</i>       |
| RA  |                           |                            |                 |                    |                   |                         |
| /ST | 1                         |                            |                 |                    |                   |                         |
| RE  | 1                         |                            |                 |                    |                   |                         |
| LT/ |                           |                            |                 |                    |                   |                         |
| NF  |                           | 1                          |                 |                    |                   |                         |

### 10. Будут ли достижения проекта жить после окончания внешней поддержки?

Will the benefits produced by the Project be maintained after the termination of external support?

|     | <i>Конечно</i>   | <i>В некоторой степени</i> | <i>Скорее всего нет</i> | <i>Нет</i>         | <i>Точно нет</i>  | <i>Без комментариев</i> |
|-----|------------------|----------------------------|-------------------------|--------------------|-------------------|-------------------------|
|     | <i>Very much</i> | <i>Rather much</i>         | <i>A little</i>         | <i>Very little</i> | <i>Not at all</i> | <i>No comment</i>       |
| RA  |                  |                            |                         |                    |                   |                         |
| /ST | 1                |                            |                         |                    |                   |                         |
| RE  |                  | 1                          |                         |                    |                   |                         |
| LT/ |                  |                            |                         |                    |                   |                         |
| NF  |                  | 1                          |                         |                    |                   |                         |

### 11. Были ли учтены другие проекты, была ли проведена работа с другими лицами, реализующими проекты?

Have other projects been taken into account in implementation, including joint work with other actors?

|        | <i>Конечно</i>   | <i>В некоторой степени</i> | <i>Мало</i>     | <i>Очень мало</i>  | <i>Вообще нет</i> | <i>Без комментариев</i> |
|--------|------------------|----------------------------|-----------------|--------------------|-------------------|-------------------------|
|        | <i>Very much</i> | <i>Rather much</i>         | <i>A little</i> | <i>Very little</i> | <i>Not at all</i> | <i>No comment</i>       |
| RA /ST | 1                |                            |                 |                    |                   |                         |
| RE     | 1                |                            |                 |                    |                   |                         |
| LT/NF  |                  |                            |                 |                    |                   | 1                       |

## 12. Дополняет ли этот проект работу других проектов?

Does the Project complement other projects?

|        | <i>Достаточно сильно</i> | <i>В некоторой степени</i> | <i>Мало</i>     | <i>Очень мало</i>  | <i>Вообще нет</i> | <i>Без комментариев</i> |
|--------|--------------------------|----------------------------|-----------------|--------------------|-------------------|-------------------------|
|        | <i>Very much</i>         | <i>Rather much</i>         | <i>A little</i> | <i>Very little</i> | <i>Not at all</i> | <i>No comment</i>       |
| RA /ST | 1                        |                            |                 |                    |                   |                         |
| RE     | 1                        |                            |                 |                    |                   |                         |
| LT/NF  |                          |                            |                 |                    | 1                 |                         |

## 13. Мешают ли достижениям этого проекта несоответствия с др. проектами?

Мешают ли достижениям этого проекта несоответствия с другими проектами?

Do contradictions with other projects prevent implementation and the achievement of the Project objectives?

|        | <i>Достаточно сильно</i> | <i>В некоторой степени</i> | <i>Мало</i>     | <i>Очень мало</i>  | <i>Вообще нет</i> | <i>Без комментариев</i> |
|--------|--------------------------|----------------------------|-----------------|--------------------|-------------------|-------------------------|
|        | <i>Very much</i>         | <i>Rather much</i>         | <i>A little</i> | <i>Very little</i> | <i>Not at all</i> | <i>No comment</i>       |
| RA /ST |                          |                            |                 |                    | 1                 |                         |
| RE     |                          |                            |                 |                    | 1                 |                         |
| LT/NF  |                          |                            |                 |                    | 1                 |                         |

## 14. Каково качество исполнения проекта?

What is the quality of the Project management?

|        | <i>Отлично, очень хорошо</i> | <i>Достаточно хорошее</i>    | <i>Средне</i>    | <i>В какой-то степени не успешно</i> | <i>Провалился</i> | <i>Без комментариев</i> |
|--------|------------------------------|------------------------------|------------------|--------------------------------------|-------------------|-------------------------|
|        | <i>Succeeded very well</i>   | <i>Succeeded rather well</i> | <i>Tolerably</i> | <i>Somewhat unsuccessful</i>         | <i>Failed</i>     | <i>No comment</i>       |
| RA /ST |                              | 1                            |                  |                                      |                   |                         |
| RE     | 1                            |                              |                  |                                      |                   |                         |

|           |  |   |  |  |  |  |
|-----------|--|---|--|--|--|--|
| LT/<br>NF |  | 1 |  |  |  |  |
|-----------|--|---|--|--|--|--|

### 15. Как в целом вы оцениваете учебные мероприятия?

In general, how would you rate training events?

|           | <i>Были очень успешны</i>  | <i>Достаточно успешно</i>    | <i>Средне</i>    | <i>В какой-то степени не успешно</i> | <i>Провалился</i> | <i>Без комментариев</i> |
|-----------|----------------------------|------------------------------|------------------|--------------------------------------|-------------------|-------------------------|
|           | <i>Succeeded very well</i> | <i>Succeeded rather well</i> | <i>Tolerably</i> | <i>Somewhat unsuccessful</i>         | <i>Failed</i>     | <i>No comment</i>       |
| RA /ST    |                            | 1                            |                  |                                      |                   |                         |
| RE        | 1                          |                              |                  |                                      |                   |                         |
| LT/<br>NF |                            |                              | 1                |                                      |                   |                         |

### 16. Как были организованы практические занятия в тренингах?

How were the practical arrangements in training events?

|           | <i>Были очень успешны</i>  | <i>Достаточно успешно</i>    | <i>Средне</i>    | <i>В какой-то степени не успешно</i> | <i>Провалился</i> | <i>Без комментариев</i> |
|-----------|----------------------------|------------------------------|------------------|--------------------------------------|-------------------|-------------------------|
|           | <i>Succeeded very well</i> | <i>Succeeded rather well</i> | <i>Tolerably</i> | <i>Somewhat unsuccessful</i>         | <i>Failed</i>     | <i>No comment</i>       |
| RA /ST    |                            | 1                            |                  |                                      |                   |                         |
| RE        | 1                          |                              |                  |                                      |                   |                         |
| LT/<br>NF |                            |                              | 1                |                                      |                   |                         |

### 17. Как вы оцениваете содержание тренингов?

How do you find the contents of training?

|           | <i>Очень применимы</i> | <i>Вполне применимы</i> | <i>Средне</i>    | <i>В какой-то степени не успешно</i> | <i>Провалился</i> | <i>Без комментариев</i> |
|-----------|------------------------|-------------------------|------------------|--------------------------------------|-------------------|-------------------------|
|           | <i>Very suitable</i>   | <i>Rather suitable</i>  | <i>Tolerably</i> | <i>Somewhat unsuccessful</i>         | <i>Failed</i>     | <i>No comment</i>       |
| RA /ST    |                        | 1                       |                  |                                      |                   |                         |
| RE        | 1                      |                         |                  |                                      |                   |                         |
| LT/<br>NF |                        | 1                       |                  |                                      |                   |                         |

### 18. Достигло ли обучение первоначально поставленных целей?

Did training meet your primary objectives?

|        | <i>Посностью</i> | <i>Достаточно</i>  | <i>Средне</i>    | <i>В какой-то степени не успешно</i> | <i>Провалился</i> | <i>Без комментариев</i> |
|--------|------------------|--------------------|------------------|--------------------------------------|-------------------|-------------------------|
|        | <i>Very well</i> | <i>Rather well</i> | <i>Tolerably</i> | <i>Somewhat unsuccessful</i>         | <i>Failed</i>     | <i>No comment</i>       |
| RA /ST |                  | 1                  |                  |                                      |                   |                         |
| RE     | 1                |                    |                  |                                      |                   |                         |
| LT/ NF |                  |                    | 1                |                                      |                   |                         |

### 19. Оцените уровень преподавателей тренингов?

Are the teachers capable?

|        | <i>Очень компетентны</i> | <i>Довольно компетентны</i> | <i>Терпимый уровень</i> | <i>Несколько не достаёт уровень</i>    | <i>Не компетентны</i>               | <i>Без комментариев</i> |
|--------|--------------------------|-----------------------------|-------------------------|--|-------------------------------------|-------------------------|
|        | <i>Very capable</i>      | <i>Rather capable</i>       | <i>Tolerably</i>        | <i>Somewhat lacking qualifications</i> | <i>Fully lacking qualifications</i> | <i>No comment</i>       |
| RA /ST | 1                        |                             |                         |  |                                     |                         |
| RE     | 1                        |                             |                         |  |                                     |                         |
| LT/ NF | 1                        |                             |                         |  |                                     |                         |

### 3.2. Verbal answers of the survey by the project components' responsible persons

Final set of the survey consisted of eight targeted questions, which were filled as a discussion group work. The purpose of the questions was to discuss on the achievements, problems and lessons learnt in the project. The answers (translated from Russian) can be found below.

|   | <b>Achievement / Success Stories</b>                           | <b>Problems and development needs</b>   | <b>Lessons learnt</b>   |
|---|--|---|---|
| Relevance of the activities/missions in respect of needs in order to achieve the Project result | All missions have been relevant to the needs of Kyrgyzhydromet | The need for automatic stations for air quality is very large, but the project was able to cover the installation of only one pilot station | It is necessary to train personnel how to work with the automatic stations<br><br>It is necessary to train personnel mastering English for international best practices |



|   |  |  |   |
|---|--|--|---|
| Efficiency; could we achieve the Project results better by do things differently?   |  |  | Improved communication skills in English lead to better efficiency. |
| Effectiveness; Could we do something more effective in order to achieve the project purpose?  |  | By improving employee motivation   | Perhaps with an increase in the number of training sessions         |
| How you find coordination between Finnish and Kyrgyz project management   | Effective  |  |   |
| Impact of the project achievements; What are the overall impacts of the Project, intended and unintended, long term and short term, positive and negative?  | Improving the monitoring of air quality<br><br>Reduction of manual operations<br><br>The availability of data in real-time on site   |  |   |
| Sustainability of the achievements; What are the possible factors that enhance or inhibit sustainability, including ownership/commitment, economic/financial, institutional, technical, socio-cultural and environmental sustainability aspects |  | Economic risk of a rise in price of consumables (e.g. filters) increases the risk of sustainability of the project in the long term<br><br>Risk factors decreasing the sustainability:<br>- Financial;<br>- Institutional;<br>- Technical. |   |
| Training: needs and development ideas   | Increasing the number of training staff in various areas of hydrometeorology and management, IT technologies, etc.<br>Increasing the number of training sessions in general. |  |   |
| Suggestions and comments  | Expand the scope of the project.<br><br>Consider a new project for the implementation of European standards for air quality in the Kyrgyz Republic.                          |  |   |

#### 4. Summary and conclusions

The Project LogFrame Matrix (Annex 1) highlights the completed results and activities in the project until the end of 2015 (second year of the project). These were presented to the persons participating in the self-evaluation survey. In general, good progress has been made, and all of the planned indicators are likely to be achieved by the end of the project.

The project responsible persons all agree that the objectives and achievements of the project are in line with the needs and priorities of the Agency *very much*. They have found that the project will transform the available resources into the intended output in terms of quality *rather well*. Progress has been made towards achieving the overall objective either *very much* or *rather much*, and the project should achieve its purpose in the future from *very well* (by persons responsible for the overall coordination of the project) to *some extent* (by personnel participating in the air quality component). In addition, other projects have been taken into account *very much* and the different projects complement each other. An exception to this is the Air Quality component, where the FINKMET project is one of its kind for Kyrgyzhydromet, and the air quality participating personnel have answered that the project does not complement other projects. Risks seem to be *very well* identified and appropriately managed. The benefits produced by the project were believed to be maintained after the termination of external support *very much* or *rather much*. The quality of project management was found to have succeeded between *very well* and *rather well*.

Some shortcomings were also identified by the project responsible persons. In terms of quantity, the project was found to transform the available resources into the intended outputs/results *to some extent*. The training events were generally rated with a wide scale from *tolerably* to *succeeded very well*, following the answer to fulfilling the primary objectives of the training. In particular, the participating air quality personnel rated the trainings only as *tolerably*. These training sessions have suffered from having to sort out some technical difficulties, and from the Kyrgyzhydromet capacity to provide staff to the trainings.

According to the verbal answers, all missions have been relevant to the needs of Kyrgyzhydromet, and the project management is seen as effective. Improving the communication skills in English is now seen important, and a way that would lead to a better efficiency. It should be noted that an English course was suggested in the beginning of the project by FMI, but it was not seen necessary by the Kyrgyzhydromet at that time. More trainings are sought after in different topics. The Kyrgyzhydromet suggests also expanding the scope of the project, e.g. by introducing a new project to upscale the pilot operation of the air quality station.

# FINKMET Logical Framework Matrix – Intervention Logic

| Overall objective  | Indicators   | Sources of verification  |             |
|--|--|--|-------------|
| Promotion of economic development and reduced risks for the loss of life and property caused by severe weather, climate and environmental events in the Kyrgyz society | <p>Improved customer satisfaction and reliability scores for the public weather, climate and environmental service products delivered by Kyrgyzhydromet</p> <p><b>(Baseline available)</b></p> <p>Improved number, quality and timeliness of information, services and products disseminated to the public and authorities</p> <p><b>(Baseline available)</b></p>  | <p>Customer satisfaction survey results</p> <p>Baseline and endline study results on the delivery of products by Kyrgyzhydromet</p>                      |             |
| Project purpose  | Indicators   | Sources of verification  | Assumptions |
| Improved capacity of the Kyrgyzhydromet to deliver weather, climate, and environmental information and early warning services for the benefits of Kyrgyz society       | <ul style="list-style-type: none"> <li>Enhanced integrated central data management system for observation data planned and piloted</li> </ul> <p><b>(Data management system for Kyrgyzhydromet planned in co-operation with World Bank CAHMP project)</b></p> <ul style="list-style-type: none"> <li>New air quality measurement instruments delivered and operational</li> </ul> <p><b>(Completed)</b></p> <ul style="list-style-type: none"> <li>New services and products with improved quality for customers of Kyrgyzhydromet services</li> </ul> <p><b>(Not yet completed)</b></p> | <ul style="list-style-type: none"> <li>Project reports</li> <li>Kyrgyzhydromet products</li> <li>Feedback and questionnaire from stakeholders</li> </ul> |             |

- Positive feedback from public and other users on Kyrgyzhydromet information and products

**(Positive feedback from line Ministry obtained)**

| Results  | Indicators   | Sources of verification   | Assumptions  |
|--|--|---|--|
| Result 1: Improved observation data management process | <ul style="list-style-type: none"> <li>Present situation assessment and pre-feasibility study completed</li> </ul> <p><b>(Completed together with the World Bank CAHMP project)</b></p>  | <ul style="list-style-type: none"> <li>Mission reports, project reports</li> <li>Assessment and pre-feasibility report</li> <li>Data management plan</li> <li>Pilot database report and data examples, user feedback report</li> <li>Report on Future development plan and roadmap</li> <li>Training materials and feedback</li> <li>Instructions for future development and maintenance</li> </ul> | <p>Information of all existing observation stations, telemetry and data systems available for the assessment and planning</p> <p>Information on the observation, data management and ICT-related development projects available</p> <p>All existing information about current working and maintenance procedures available</p> <p>Qualified Kyrgyzhydromet available to participate training</p> |
|  | <ul style="list-style-type: none"> <li>Plan for integration of data management completed</li> </ul> <p><b>(Completed together with the World Bank CAHMP project)</b></p> <ul style="list-style-type: none"> <li>Integrated data management system piloted and internal user feedback collected</li> </ul> <p><b>(Pilot data management system demonstrated)</b></p> <ul style="list-style-type: none"> <li>Future development plan and road map for implementation completed</li> </ul> <p><b>(Not yet completed)</b></p> <ul style="list-style-type: none"> <li>Kyrgyzhydromet staff trained on implementation, operation and maintenance of modern integrated data management system</li> </ul> <p><b>(Training given through the pilot data management demonstration)</b></p> |   |  |

| Results   | Indicators  | Sources of verification  | Assumptions  |
|---|---|--|--|
| Result 2: Improved air quality observation system | <ul style="list-style-type: none"> <li>Present situation assessment available</li> </ul> <p><b>(Completed)</b></p>  |  |  |
|   | <ul style="list-style-type: none"> <li>Pilot automatic air quality observation station delivered and operational</li> </ul> <p><b>(Completed)</b></p>   |  | Information of existing observation stations, telemetry and data available for the assessment and planning   |
|   | <ul style="list-style-type: none"> <li>Kyrgyzhydromet staff trained on operation, maintenance and calibration of the new observation equipment</li> </ul> <p><b>(Training given, continues)</b></p> | <ul style="list-style-type: none"> <li>Mission reports, project reports</li> <li>Assessment report</li> <li>Report on future modernisation plan</li> </ul> | All existing information about current working and maintenance procedures available  |
|   | <ul style="list-style-type: none"> <li>Kyrgyzhydromet staff trained on the analysis and reporting of observation data</li> </ul> <p><b>(Training given, continues)</b></p>                          | <ul style="list-style-type: none"> <li>Training materials and feedback</li> <li>Tendering and procurement documentation</li> </ul>                         | All needed legal, logistical and technical support as well as telemetry, container and construction on the measurement site secured and made available |
|   | <ul style="list-style-type: none"> <li>Real time air quality data available for the public and authorities</li> </ul> <p><b>(Not yet completed)</b></p>   | <ul style="list-style-type: none"> <li>Instructions for operation, maintenance and calibration</li> </ul>  | Qualified Kyrgyzhydromet available to participate training   |
|   | <ul style="list-style-type: none"> <li>Future modernisation plan for air quality observation network completed</li> </ul> <p><b>(Completed)</b></p>   |  |  |

| Results  | Indicators  | Sources of verification  | Assumptions   |
|--|---|--|---|
| Result 3: Improved strategic and technical planning capacity | <ul style="list-style-type: none"> <li>Feasibility study and Kyrkyzhydromet Modernisation Plan available</li> </ul> <p><b>(Not yet completed)</b></p>                               | <ul style="list-style-type: none"> <li>Mission reports, project reports</li> </ul>                   |   |
|  | <ul style="list-style-type: none"> <li>Stakeholder workshop organized</li> </ul> <p><b>(Completed)</b></p>  | <ul style="list-style-type: none"> <li>Report on Fesibility study and Modernisation Plan</li> </ul>  | Information of Kyrkyzhydromet operations, services and stakeholders available |
|  | <ul style="list-style-type: none"> <li>End-user survey completed and results analysed</li> </ul> <p><b>(Completed)</b></p>  | <ul style="list-style-type: none"> <li>En-user survey questionnaire and report on results</li> </ul> | Government supports Kyrkyzhydromet modernisation                              |
|  | <ul style="list-style-type: none"> <li>Kyrkyzhydromet directors and managers trained on strategical planning and quality management principals</li> </ul> <p><b>(Completed)</b></p> | <ul style="list-style-type: none"> <li>Training materials and feedback</li> </ul>                    | Qualified Kyrkyzhydromet available to participate training                    |

| Results   | Indicators  | Sources of verification   | Assumptions  |
|---|---|---|--|
| <p>Result 4: Improved capacity of Kyrgyzhydromet staff on modern observation technology and weather service process</p> | <ul style="list-style-type: none"> <li>• Kyrgyzhydromet technical staff trained on operation, maintenance and calibration of modern observation equipment<br/><b>(Not yet completed)</b></li> <li>• Kyrgyzhydromet forecasters trained on the weather and climate service process<br/><b>(Not yet completed)</b></li> </ul> | <ul style="list-style-type: none"> <li>• Mission reports, project reports</li> <li>• Training materials and feedback</li> </ul> | <p>Qualified (basic technical skills and English language skills) Kyrgyzhydromet available to participate training in Kyrgyz republic and in Finland</p> <p>Visa's to Finland issued on time</p> |



| Activities (Result 1)  | Means   | Assumptions   | Resources   |
|--|---|---|---|
| <p>1.1 Present situation assessment of observation and data management system and pre-feasibility study<br/><b>(Completed together with the World Bank CAHMP project)</b></p>                    | <ul style="list-style-type: none"> <li>FMI experts meetings and consultation with Kyrgyzhydromet units. (such as data center, technical and IT unit)</li> <li>Visits to observation stations</li> <li>Workshop in Bishkek to analyze and plan for the improvements</li> </ul>                       | <ul style="list-style-type: none"> <li>Detailed technical information from other projects related to observation network and data management available</li> </ul>   | <ul style="list-style-type: none"> <li>13 242.72 €</li> <li>16 expert days</li> </ul> |
| <p>1.2 Planning of integrated data management system to serve all observations and departments and needs of Kyrgyzhydromet<br/><b>(Completed together with the World Bank CAHMP project)</b></p> | <ul style="list-style-type: none"> <li>FMI experts meetings and consultation with Kyrgyzhydromet data management and IT staff</li> <li>Training on integrated data management system for real-time and climatological data and on observation level real-time and manual quality control</li> </ul> | <ul style="list-style-type: none"> <li>Technical solutions depends on other on-going projects related to observation network and data management system</li> </ul>  | <ul style="list-style-type: none"> <li>16 088.91 €</li> <li>20 expert days</li> </ul> |
| <p>1.3 Developing pilot data management system for real time observation with quality control tools<br/><b>(Completed)</b></p>   | <ul style="list-style-type: none"> <li>FMI experts meetings and consultation with Kyrgyzhydromet staff and managers</li> <li>Hands on training on future development, operation and maintenance</li> </ul>  | <ul style="list-style-type: none"> <li>Observation and telecommunication systems meets the requirements for real time data acquisition</li> </ul>   | <ul style="list-style-type: none"> <li>31 339.81 €</li> <li>40 expert days</li> </ul> |
| <p>1.4 Planning of future modernisation of observation and data management system<br/><b>(Completed together with the World Bank CAHMP project)</b></p>  | <ul style="list-style-type: none"> <li>FMI experts meetings and consultation with Kyrgyzhydromet staff and managers</li> <li>Recommendations for future developments and roadmap for implementation</li> </ul>  | <ul style="list-style-type: none"> <li>Full information of others project in planning phase available</li> <li>Information about Kyrgyzhydromet future strategy, operational budget and organisation available</li> </ul> | <ul style="list-style-type: none"> <li>6 554.20 €</li> <li>5 expert days</li> </ul>   |
| Activities (Result 2)  | Means   | Assumptions   |   |

|   |   |  |  |
|---|---|--|--|
| <p>2.1 Assessment of the current air quality in Kyrgyz Republic based on the available information and present situation assessment of the observation system</p> <p><b>(Completed)</b></p> | <ul style="list-style-type: none"> <li>• FMI experts meetings and consultation with Kyrgyzhydromet staff.</li> <li>• Visits to observation stations and laboratory</li> <li>• Workshop in Bishkek to analyze and plan for the improvements</li> </ul> | <ul style="list-style-type: none"> <li>• All needed data sources available</li> <li>• Detailed technical information related to current observation network available</li> </ul>   | <ul style="list-style-type: none"> <li>• 18 435.55 €</li> <li>• 20 expert days</li> </ul>  |
| <p>2.2 General plan for the Air Quality Observation system and technical specification for the pilot stations</p> <p><b>(Completed)</b></p>   | <ul style="list-style-type: none"> <li>• FMI experts meetings and consultation with Kyrgyzhydromet staff.</li> <li>• Workshop in Bishkek to present the plans and get feedback</li> </ul>   |  | <ul style="list-style-type: none"> <li>• 10 805.15 €</li> <li>• 12 expert days</li> </ul>  |
| <p>2.3 Procurement and delivery of pilot air quality stations'</p> <p><b>(Completed)</b></p>  | <ul style="list-style-type: none"> <li>• FMI home office work, tendering process</li> <li>• Delivery of the instrumentation with help of FMI experts</li> </ul>   | <ul style="list-style-type: none"> <li>• Kyrgyz Government supports the procurement process and secures the delivery without import taxes</li> <li>• Station locations meets the requirements and all needed permissions and licenses etc. secured for installation</li> <li>• Technical infrastructure in the observation site meets the requirements (founding, telecommunication, electricity, etc.)</li> </ul> | <ul style="list-style-type: none"> <li>• 121 145.83 €</li> <li>• 30 expert days</li> </ul> |
| <p>2.4 Training on operation, maintenance and calibration of the air quality stations and data</p>  | <ul style="list-style-type: none"> <li>• Hands on training during FMI expert missions</li> <li>• Workshop and hands on training</li> </ul>  | <ul style="list-style-type: none"> <li>• Qualified staff with proper language skills available for training</li> </ul>   | <ul style="list-style-type: none"> <li>• 53 374.67 €</li> <li>• 48 expert days</li> </ul>  |

| analysis<br><b>(Training completed, continues)</b>                                | during study visit to Finland  | <ul style="list-style-type: none"> <li>• Kyrgyzhydromet gets visa and other permission for travelling</li> </ul>   |   |
|---|--|--|---|
| <b>Activities (Result 3)</b>  | <b>Means</b>   | <b>Assumptions</b>   |   |
| 3.1 Feasibility Study and future modernization plan<br><b>(Not yet completed)</b> | <ul style="list-style-type: none"> <li>• FMI experts meetings and consultation with Kyrgyzhydromet staff.</li> <li>• Visits to observation stations and different units of Kyrgyzhydromet</li> <li>• Workshop in Bishkek to present the results and plan and get feedback</li> </ul> | <ul style="list-style-type: none"> <li>• Full information of others project available</li> <li>• Information about Kyrgyzhydromet future strategy, operational budget and organisation available</li> <li>• Information about different sectors of Kyrgyz society available</li> </ul> | <ul style="list-style-type: none"> <li>• 37 858.81 €</li> <li>• 40 expert days</li> </ul> |
| 3.2 Stakeholder workshop and end-user survey<br><b>(Completed)</b>                | <ul style="list-style-type: none"> <li>• FMI experts meetings and consultation with Kyrgyzhydromet staff.</li> <li>• Workshop in Bishkek for the Kyrgyzhydromet stakeholders and customers</li> <li>• End-user survey</li> </ul>   | <ul style="list-style-type: none"> <li>• Stakeholders motivated to participate in the workshop and contribute to the Kyrgyzhydromet modernization</li> <li>• Kyrgyz Government support</li> </ul>  | <ul style="list-style-type: none"> <li>• 23 019.79 €</li> <li>• 20 expert days</li> </ul> |
| 3.3 Study visit and strategic planning workshop in Finland<br><b>(Completed)</b>  | <ul style="list-style-type: none"> <li>• Kyrgyzhydromet directors and managers visit to Finland</li> <li>• Training by FMI managers and experts and support in developing the strategy</li> </ul>  | <ul style="list-style-type: none"> <li>• Kyrgyz Government supports the implementation of the strategy</li> <li>• Kyrgyz Government allocate proper funding for future modernization</li> <li>• Kyrgyz Government secures the operational budget for</li> </ul>                        | <ul style="list-style-type: none"> <li>• 79 506.02 €</li> <li>• 24 expert days</li> </ul> |

| Activities (Result 4)  | Means  | Assumptions  |   |
|--|--|--|---|
| 4.1 Training on modern observation technology<br><b>(Not yet completed)</b>      | <ul style="list-style-type: none"> <li>• FMI experts visit to Kyrgyz Republic, hands-on training and workshops</li> <li>• Kyrgyzhydromet experts study visit to Finland</li> </ul> | <ul style="list-style-type: none"> <li>• Qualified staff with proper language skills available for training</li> <li>• Kyrgyzhydromet gets visa and other permission for travelling</li> </ul> | <ul style="list-style-type: none"> <li>• 28 564.25 €</li> <li>• 30 expert days</li> </ul> |
| 4.2 Training on modern weather forecasting process<br><b>(Not yet completed)</b> | <ul style="list-style-type: none"> <li>• FMI experts visit to Kyrgyz Republic, hands-on training and workshops</li> <li>• Kyrgyzhydromet experts study visit to Finland</li> </ul> | <ul style="list-style-type: none"> <li>• Qualified staff with proper language skills available for training</li> <li>• Kyrgyzhydromet gets visa and other permission for travelling</li> </ul> | <ul style="list-style-type: none"> <li>• 62 343.90 €</li> <li>• 36 expert days</li> </ul> |