I. Strengthening cooperation on hydrology and environment between Afghanistan and Tajikistan in the upper Amu Darya River basin (v 21 November 2013)

II. Background

Amu Darya is the largest river of Central Asia with the total length of nearly 2500 km and the drainage basin covering 0.5 million sq.km. Average main river flow is 62 cub.km per year, most of which comes from the mountains of Tajikistan and Afghanistan. Roughly, about 3/4 of Tajikistan's and 1/3 of Afghanistan's territories lie within the Amu Darya basin.

Environmental conditions of the Amu Darya upstream watershed, including state of glaciers and snow, vegetation, soil cover and human activities are important determinants of water flow and its quality. Growing population, agricultural, infrastructural and industrial development projects as well as global environmental challenges - such as climate change - are among the key factors influencing environmental conditions in the upper Amu Darya basin.

Security, economic development and natural resource management are among the top priorities for cooperation between the Islamic Republic of Afghanistan and the Republic of Tajikistan. In this regard, the adequate knowledge and sharing of information about natural resources and hazards – especially water, climate extremes and floods – are important for the sustainable development of agriculture and other key economic sectors such as energy, industry, civil protection and the environment. In short, the information is crucial for the development of integrated water resources management in these countries as well as in countries downstream.

Effective decision-making in the region is hampered by the lack of inclusive transboundary cooperation and information exchange. Specifically, in the case of the upper part of Amu Darya information on on-going and planned water sector developments and projects (hydrometeorology, flood control, irrigated agriculture and integrated water resource management) is fragmented.

As a consequence water management policies have to be made in a context of incomplete information and without sufficient knowledge of the state, availability and quality of water resources, including flow forecast and flood control.

The upper Amu-Darya river basin is monitored by a network of hydrometric and climatic stations operated by Tajikistan and Afghanistan. Four river gauging stations in Tajikistan are measuring water levels and discharge on the Panj River (Amu-Darya) and are positioned on the river's right bank; a dozen of stations are conducting hydrometric survey of small tributaries and lakes in Tajikistan draining into Amy Darya. A new fifth station has been constructed in summer 2013. With international support Afghanistan has substantially increased its hydrometric and climate monitoring network, including in the Panj river basin, although data exchange with Tajikistan is still missing, therefore capabilities of flow monitoring and forecasting in the upper Amu Darya remain very limited, while the Central Asian counterparts have little and inadequate information on the recent water sector developments in Afghanistan.

The mountain ecosystems and communities in the upper Amu Darya are considered the most vulnerable across the river basin due to combined risks from insecurity, poverty, lack of food, poor access to safe water and electricity, and environmental stress factors.

In both countries a number of projects have been initiated in order to reverse this situation and to make environmental data available for policy making and the public. Countries agreed in 2010 to broaden cooperation activities into a transboundary context – to address the complex cross-border nature of water resource management in the upper Amu Darya basin. UNECE-facilitated meetings held in 2012 and 2013 in both countries with financial support of the Russian Federation initiated expert contacts and technical task force creation, and set priorities and framework for institutional and technical cooperation.

The proposed project could provide a major impulse and build a basis for long-term cooperation on environment and hydrology between Afghanistan and Tajikistan and contribute to the practical implementation of the existing and foreseen cooperation frameworks and protocols.

The project will attempt to take into account women's perspectives, as water users and carers of children, and family health.

The project is a part of the UNECE Water Convention Work Programme and has been developed in line with official requests from the beneficiary countries.

Main national project partners are:

- in Afghanistan: Ministry of Energy and Water (Hydrological Dept.) and National Environmental Protection Agency
- in Tajikistan: State Committee on Environmental Protection and its Agency on Hydrometeorology International observers and synergies:
- WMO (World Meteorological Organization)
- Central Asia water and hydrometeorology programmes and projects sponsored by the German, Finnish and Swiss governments and the international organizations,
- the International Fund for the Saving of the Aral Sea , Interstate Commissions on Water and Sustainable Development and their information centres/hubs

The project will be implemented 2014-2016.

III. Objective

To strengthen cooperation on hydrology and environment between Afghanistan and Tajikistan in the upper Amu Darya River basin.

IV. Expected accomplishments

- **EA1** Improved framework for bilateral cooperation on hydrology and environment
- EA2 Improved practical bilateral cooperation on hydrology including first steps in the exchange of data
- **EA3** Improved practical bilateral cooperation on environment

V. Indicators of achievement

- **I1** Platform for sustained cooperation on hydrology and environment further developed
- I2 Components on hydrology included in the jointly agreed work programme implemented
- I3 Components on environment included in the jointly agreed work programme implemented

VI. Main activities

- **A1** Annual bilateral meetings (as a minimum: alternatively in both countries) for exchange of information and development of hydrology and environment cooperation
- A2 Hydrology meetings and a mechanism for data exchange
- A3 Joint expeditions and training, afforestation support

VII. Assumptions and Risks

The main threat to the timely and effective implementation of the project is the unstable situation in Afghanistan, in particular in connection with the withdrawal of US and other troops in 2014 and fluctuating insecurity on the Afghan-Tajik border and the Panj River.

VIII. Budget

The annual budget requested from the Russian Federation is 50,000 USD, in total 150,000 USD over three years.

Projected co-funding is:

- From UNECE in-kind 20,000 USD
- From participating countries and international partners in-kind 100,000 USD

The opportunity to get further co-funding from other sources is being investigated.

IX. Work plan

Expected accomplishment (EA)	Activity	Tentative timeframe by activity/ output		me ity/	Cost esti- mates (in US \$)	Partners	Beneficiaries	Venue, timeframe and the expected
		2014	2015	2016				number of participants (where applicable)
EA 1: Improved framework for bilateral cooperation on hydrology and environment	A1 Annual bilateral meetings (as a minimum: alternatively in both countries) for exchange of information and development of hydrology and environment cooperation	x	X	X	60,000	AFG and TJK GOV	Main national partners (see above)	Meetings held alternatively in the two countries with approximately 30 participants each meeting
EA 2: Improved practical bilateral cooperation on hydrology including first steps in the exchange of data	A2 Hydrology meetings and a mechanism for data exchange	х	х	X	50,000	AFG and TJK GOV	National authorities responsible for hydrology	Technical task force support (technical meetings and expert work), data exchange platform and data flow
EA 3: Improved practical bilateral cooperation on environment	A3 Joint expeditions and training, afforestation support	х	X	X	40,000	AFG and TJK GOV	National authorities responsible for environment	One training (involving up to 20 young professionals), one joint expedition to glaciers and protected area in the Pamirs, tree plantings