



*Convention on Protection and Use of Transboundary Watercourses and International Lakes
Working Group on Monitoring and Assessment*

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Working paper:

**RECOMMENDATIONS FOR IMPROVEMENTS TO THE UNECE GUIDELINES
FROM THE TACIS PROJECTS ON THE RIVERS SEVERSKI-DONETS, KURA,
TOBOL AND PRIPYAT**

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The Recommendations for improvements to the UNECE Guidelines are due to be produced at the end of the project but some ideas have already emerged and it may be helpful at the halfway stage of the project to give a preliminary indication of some of the issues that have been raised.

1. Stepwise approach

The UNECE Guidelines describe what might be called an ideal approach and take little account of resources available. It would be helpful to the poorer countries, whose resources if the Guidelines included advice on a progressive approach to full compliance for countries like those in the newly independent States (NIS) whose resources for monitoring are extremely limited and likely to remain so for some years.

2. Pollution warning

It would be helpful if the Guidelines gave described a methodology for assessing the risk of accidental pollution and for the level of pollution warning system that might be considered appropriate for different levels of risk. These needs of course to take account not just of the pollution risk but of its consequences, in other words the pollution hazard.

Perhaps not in the Guidelines but as a separate document advice might be given on dealing with accidental pollution incidents. The document in Annex 8 of the Overview report includes some of the elements that might be included.

3. Minimum flows

In some basins flow is regulated by releases from reservoirs.

Water quality, especially ecological quality, depends on the maintenance of a minimum flow in the river. It may not be a logical part of the Guidelines but flow maintenance across borders is vitally important and there is little guidance available.

4. Flood protection

The ecological quality of a river is strongly influenced by measures taken upstream to control floods. It may be that some account should be taken of this in the Guidelines.

5. Biological monitoring

Many of the NIS laboratories visited as part of this project carry out toxicity testing using photoluminescent bacteria or *Daphnia Magna*. The results of these tests provide little indication of water quality and even less about the nature or desirability of remedial measures. Only one of the laboratories carried out biological monitoring, which is of much greater value and essential for compliance with the EU Water Framework Directive.

The project lacks the resources to provide training in this area when the starting level of knowledge is so low but there is an argument for explaining the importance of biological monitoring and providing more detailed guidance on methodology in the Guidelines.

6. Sediment monitoring

As for biological monitoring sediment analysis is an important component of water quality monitoring and assessment but is outside the scope of the present project but more attention

might be paid to it in the Guidelines.

7. Strategy

The UNECE Guidelines give a view on the need to link policy and water management with monitoring, through the monitoring strategy and the user adapted reporting.

A major shortcoming of the UNECE guidelines is the recommendations for the strategy. The first chapter on river characteristics, functions and issues (except for driving forces-impact-response) is clear. However it is difficult for the countries to define their policy and criteria based on that. The information needs are not easily understandable either.

How to translate this into a strategy is unclear for most participants. This is partly due to the absence of a system of policy – strategy – legislation – necessary finances – implementation – enforcement.

Legislation is not based on the Roman legal tradition in which legislation should only lay down what is not allowed, who is responsible for the execution of the law and what kind of penalties can be taken. In the NIS, policy and legislation were for 70 years centralized, leaving legislation as mainly policy documents. Changes in policy meant that legislation became obsolete. Financing, implementation and enforcement are not described in legislation and in Soviet times there was little need for this due to the central organisation.

Therefore, traditionally there was no need to devise strategies for policy implementation.

In the UN-ECE guidelines a clearer view should be given of the place of strategy and its logical steps as well as examples of problems and needs in monitoring and management.

More practical information should be given on the development of a monitoring strategy.

8. Institutional flexibility

The Guidelines have so far provided a guiding framework for the project implementation, though of necessity in a generalized character. Particularly useful is the indication of the cyclical character of the monitoring process.

In view of the institutional setup in Russia and Kazakhstan the monitoring process cannot be seen yet as the ideal self-regulating cycle but is dependent on a hierarchical decision making process which is of necessity unwieldy and slow. The project still needs to work on this aspect. The Guidelines should point to the need of more freedom for involved institutions to look for their own ways in achieving the full turn of the monitoring cycle.

Institutional aspects on the positive side have already provided between Russia and Kazakhstan a transboundary institutional setup by organizing the individual national river basin management units (BVU) into joint transboundary river basin commissions. The guidelines should not insist in the aspect that a separate, independent transboundary organization be created, but in case, that the existing institutions potentially fulfill satisfactorily their task this should be seen as acceptable.

9. Problems with implementing them in the NIS include

- Weak system of river basin management
- Split responsibilities for resources and quality (environment)
- Monitoring planned centrally so no connection with river basin management even if there were effective river basin management able to define its needs for data
- No tradition of public consultation and in fact hostility to giving info to the public much less to listening to their suggestions!
- Monitoring programmes laid down centrally and difficult to change
- Culture of following rules (sometimes 30 years old!) and not thinking/adapting to needs.