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**Ship navigation and natural treasures
- conflicts and focal points**

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The Danube in Serbia: Natural Treasures, Legal Issues, Political and Public Concerns

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Abstract:

A brief description is given of the Danube river basin section on the territory of Serbia & Montenegro, in view of natural conditions and the current state of navigation. An overview of the legal framework is discussed for water resource protection and regulation, regarding the Danube water as a natural treasure. Destructive effects of human conflicts on water quality and navigation routes stress the importance of an integrated approach to defining a priority agenda for water management in the Danube basin.

Key words: The Danube, Serbia & Montenegro Danube basin sub-region, navigation regime, natural wealth, conflicts and focus points.

Introduction

The Europe's second largest river (2850km, 17 tributary river basins) - the Danube - has now been gaining more economic significance in Serbia & Montenegro not only due to navigation as a relatively cheap and environment-friendly means of transport.

As it leaves Hungary at its 845th kilometer, the Danube forms the Serbo-Croatian border, crosses Serbia and leaves it forming the Romania-Bulgarian border. This river is the Central Europe's »blood vessel« feeding its economies, cultures, integrative processes...The National Music Festival of the riparian countries and the Danube regatta are among best known traditional manifestations. However, it is this very "blood vessel" through which the polluting traces of human behaviour are disseminated.

The Danube has enormous significance for domestic and industrial water supply and for the biodiversity in Serbia and Montenegro. There are two areas in this sub-region of the Danube basin protected by the Ramsar Convention: Ludasko jezero special reserve (lake) and Stari Begej-Carska Bara (swampy area). There are also some other areas protected on the national level: Jezero Palic nature park, Selevenjska pustara, Slano kopovo and Deliblatska pescara special reserves; Ponjavica nature park, Apatin and Kovilj swamps, Dyerdap National park, and several other areas of international significance – according to Ramsar Convention (wetland protection). In addition the following sites should also be mentioned: Suboticke sume forest area, the Jegricka river, Mrtva Tisa wetland area, and Titelski breg.

Natural fish breeding capacities in the mentioned protected areas enrich the Danube with some 50 fish species. These areas are also important »mid-points« on the regular routes of several migratory bird species. There are 100 bird species in these areas (Irsai, 1997).

Speaking of natural treasures, the Danube-Tisza-Danube canal system should be mentioned first. This hydrosystem project was designed by Nikola Mirkov in the early 1950s. Locally called "the Panonian sea" this canal system is an artificial waterway of 930 km, of which 664 km are navigable, but not actually used. Even its irrigation potential has never been fully used.

Its natural potentials are enormous, it is one of the rarities in Europe, with one shameful exception: the canal sections neighbouring small industrial towns of Crvenka, Kula and Vrbas have been enormously polluted (discharging of industrial waste waters). Industry, or what is left of it in these hard transitional times, is generally responsible for the majority of hazardous substances discharged into the Serbian share of the Danube basin sub-region.

Paradoxically, the exceptional ecosystem has mostly been preserved due to the UN sanctions against the Federal Republic of Yugoslavia in early 1990s, i.e. consequential reduction in agricultural and industrial production and dramatical drop of the volume of transportation on the Danube – which all reduced the pollution.

For the first time after the Second World War, in 1999 a European country experienced an 11-week bombardment. Among other targets the oil refinery in a Novi Sad suburb was bombed, "contributing" with its chemical spills to underground waters. NATO airstrikes destroyed the only three bridges in the city of Novi Sad. The debris blocked navigation, the waterway was considerably clogged, freight shipping tied. However, two years later, due to measures taken to alleviate the areas worst affected by bombing as well as to navigation blockage another paradox : it was a front-page news that the Danube bank fishermen were using its water for preparing fish soups (for the first time after several decades). It was the clear, transparent water of a "human-friendly river".

However, some important conclusions derived from the everyday experience have not been generalised and articulated on the policy levels.

There is still no general strategy on the national level of protection and use of either the Danube or its canal system as a waterway and natural habitat, let alone for (nautical) tourism, sports, education and other objectives. Lack of planning, lack of responsibility and lack of environmental consciousness have marked the treatment of the Danube over the last decade. The only river port on the whole section of the Danube before it reaches Belgrade is the one recently built by the optimistic (and almost broke) owner of a river-side restaurant in Sremski Karlovci.

A note on scientific researches

The International Gemeinschaft Donauforschung (IAD) was founded in 1956 within the Societas Internationalis Limnologiae. In the very initial phase of the IAD research activity there was a scientist representing Serbia and other republics of the post-war Yugoslavia - dr. Sinisa Stankovic. IAD had in many ways contributed to development of scope and method of Danube basin research. Three of its regular annual scientific meetings were held in our country: in 1969 in Belgrade (40 papers and reports presented); in 1979 it was held in Belgrade (over 80 papers and reports). In April this year, the 35th IAD Conference was organised in Novi Sad, by Nacionalni komitet za istrazivanje Dunava Srbije i Crne Gore (National Committee of Serbia and Montenegro for Danube Research). The results of our researches focused on our

“share” of the Danube have been publicised in the Archif fur Hydrobiologi (several papers by Petrovich et al., in 1987, Maletin et al. in 1996, Ivanc et al., in 1996, etc.) In the “Limnologie aktuel” the results of the research on the Danube water quality were publicised (Pujin, 1994).

Some legal aspects of transboundary water protection and management in the Danube basin

The most important international legal instrument relating only to the Danube Basin is the *Convention on Co-operation for the Protection and sustainable Use of the Danube River (DRPC)*.

In the category of the regional legal instruments, of utmost importance is the *Directive 2000/60/EC of the European Parliament and of the Council of 23rd October 2000 Establishing Framework for Community Action in the Field of Water Policy (WFD)*, aimed at protection of inland surface waters, transitional waters, coastal waters and groundwater.

There is a large number of other legal instruments dealing with water. The *Council Directive 97/11/EC of 3rd March 1997 amending Directive 85/337/EEC on the Assessment of the Effects of Certain Public and Private Projects on the Environment (EIA Directive)* like several others correlates to the UN/ECE environmental conventions, particularly to the Espoo Convention.

The next one is the *Council Directive 96/61/EEC of 24th September Concerning Integrated Pollution Prevention and Control (IPPC Directive)*.

All these instruments, as the parts of *Acquis communautaire* are supposed to be transposed into the legal systems of the EU membership candidate countries, make the basis for implementation of some key elements of the EU environmental policy, i.e. prevention of pollution and nuisances at source and assessment of the effects to the environment at the earliest possible stages in all technical planning and decision making processes.

The Framework Agreement on the Sava River Basin (FASRB) signed on 3rd December 2002 at Kranjska Gora, is one of the recent results of international co-operation regarding transboundary water resources at the sub-regional level in the Danube basin. Such is the *Protocol on the Navigation Regime to the FASRB*, too.

At the sub-regional level, legal regimes of development, use/utilisation (both navigational and other) flood control and water protection of the former Yugoslavia (i.e. SFRY) transboundary water resources in the Danube basin, were set up by a number of bilateral and multilateral treaties. A number of old treaties is still in power (particularly those pertaining to relations between Serbia and Montenegro and its neighbouring countries), desoite of the fact that they do not satisfy contemporary needs of the post-socialist countries.

The issues pertaining to transboundary water resources between Serbia and Montenegro and Bosnia and Herzegovina and Between Serbia and Montenegro and Croatia should be considered as open issues of regional co-operation. Still there are issues that should be regulated only in bilateral co-operation (e.g. River Drina-relations between Serbia and Montenegro and Bosnia and Herzegovina, and the Danube- joint border part between between Serbia and Montenegro and Croatia).

A short check on the internet would confirm that there are more than 400,000 web sites dealing with the term “integrated water management”.

Numerous criteria could be applied in determining, the content of “integrated water (resources) management”, offering different outputs. For example, *geographical / hydrological* criteria may assume the entire watercourse as a unitary wholeness, and not as a number of separate parts, of the entire river basin as the basis for integrated management of its water resources. Surface and underground waters could be managed separately, but the managerial approach could be integrated, what is a modern approach. Another case may be given when meteoric waters are managed (or better to say influenced) through an integrated management of all water resources in the respective (e.g. national) territory. One *functional criterion* would comprise discharging of all the managerial functions in a designated territory (i.e. river basin) like informative ones, regulatory, planning, administrative, operative, control, research and development, etc. Another functional approach would lead to integration of all the elements that make water related activities, i.e. water protection, use/utilisation of waters and protection of detrimental effects from waters etc.

Today a new, fast developing field of law, the environmental law, often uses a terminology not well defined and precise enough. This may override or disintegrate the basic water law and water management terminology built through an intensive and at least half a century long effort of lawyer and engineers dedicated to research into the subject. We often see the use of expressions like “development and management” of water resources, or “protection and management...”, indicating that development or protection of water (resources) are not the elements of the notion of “water (resources) management”.

The use of such ambiguous terminology reveals the standpoint that protection of waters is a part of one (holistic?) system of the protection of the environment. This does not include the management of (water resources) quantities, excluding in that way all kinds of use/utilisation of waters as well as protection from detrimental effects of waters. The practical consequence of such approaches is distortion of the meaning of terms and wrong designation of the content of notions. This particularly can be seen at national level in the countries in transition (in the Danube basin, too). In this context the notion of the “river basin management plan” (referred to clearly in the WFD) may be renamed into the “plan of protection of river basin” etc. At the practical level, various governmental departments compete for “water management” and for “water protection”, lowering the chance for development of one “integrated” water management approach.

It seems that the possibility for development of the notion of “sustainable water (resources) management” may contribute to “integration” of the environment protection water related aspects into the “traditionally” designed notion of “integrated water (resources) management” (comprising use/utilisation of water resources, control of detrimental effects of waters and certain aspects of water protection). Such an attempt can be seen in the FASRB. In this case, the notion integrated management of water resources of the Sava Basin have been “enriched” with ecological elements (covering in that way the environment protection requirements).

(Visible) detrimental competition for obtaining responsibilities for only certain (separated) elements of water management notion (or, at practical level -system)

between governmental departments could be overcome by use of different means, i.e. institutional ones (taking care of the conflict of functions), or planning ones.

Still open is the issue of the scope of competence of various institutional mechanisms established by international legal instruments (those listed in the table 1, and others) dealing with transboundary water (resources), their interaction and possibility for networking aimed at harmonisation of their activities.

Conclusion

With its navigation potential, still preserved fabulous biocenoses and drinking water reserves for future generations the Danube river basin contributes massively to the national treasure of Serbia&Montenegro.

The international regime of the Danube basin water resource protection should be reconsidered and improved so as to reflect the necessity of riparians' co-ordinated, joined addressing the environmental threats to water quality that have not been regulated yet. In that respect, the NGOs should have a very significant role in promoting the environmental values, informing the wider public and initiating various forms of participation.

The consciousness is increasingly present in Serbia of the fact that meeting the needs and interests of present generations and taking into account those of future ones (the inter-temporal aspect of environment protection) require highly responsible management of natural resources on all levels. The governments of the riparian countries are expected to partly transfer their sovereign powers to supranational legal entities, which can certainly provide more successful and efficient integrated management of transboundary natural resources.

Riparian states of the Danube river basin differ significantly in terms of economic and technological potentials. That is why we consider one particular principle to be a highly important aspect of responsibility in a strategic and integrated management of the transboundary natural resources. That principle is solidarity – on both regional and international levels.

Transboundary water pollution resulting from the 1999 NATO bombing of a sovereign European country has proved the absurd effects of political confrontations in view of the growing interdependence of people living in the Danube basin.

Over the last decade, the cruel reality of 1999 military aggression as well as the post-communist greedy devastation of natural resources have most strikingly stressed (again) the necessity of legal protection of the Danube basin water resources. On the regional level the unified water quality monitoring system, the system of assessing environmental impacts and the system of navigation improvement should be introduced. This should be accompanied by sufficient and prompt information provision to local stakeholders and wider public as well as information exchange. There can hardly be adequate participation in protecting and enhancing environmental values without quality communication.

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