

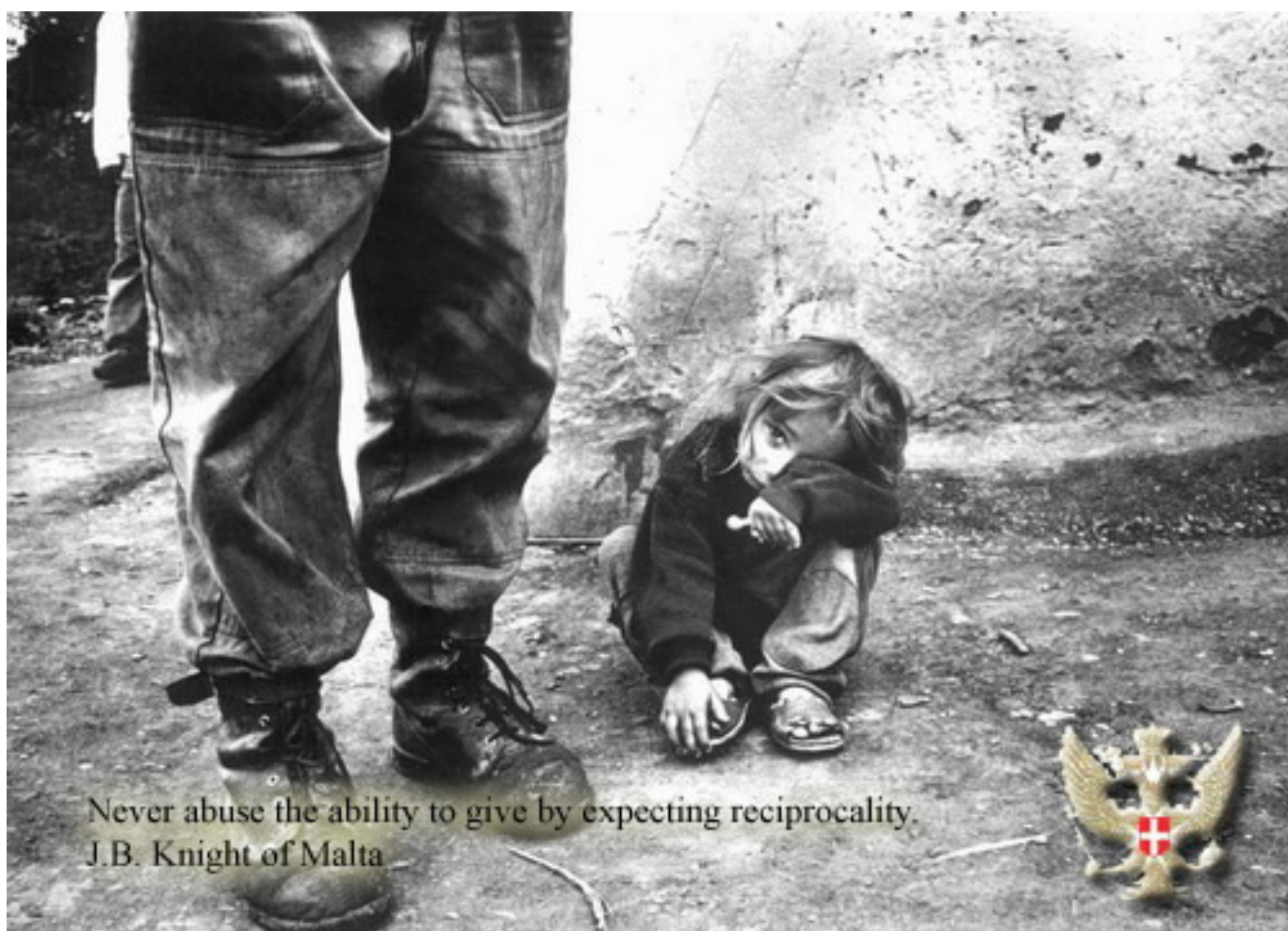


**IHLET**

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## The IHLET Tisza River Development Program



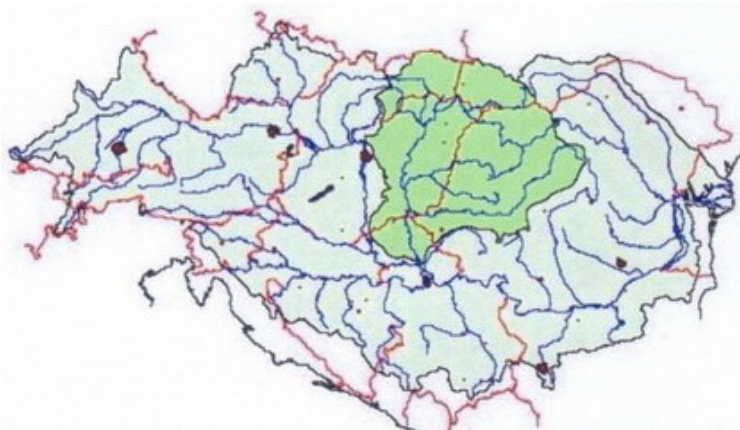
**Workshop on the IHLET Tisza River Development Program:  
A Cross-Border SDI Approach -- *From Local to Global*,  
European Parliament, Brussels,  
June 20-22, 2007.**



## The Tisza River Development Program

### Background

The Tisza Development Program is initiated by IHLET, a non-profit Research Center of Social, Environmental and Economic Matters, established vis-à-vis the Regional Environmental Technology Center (RETC) in 1998. IHLET's Tisza Development Program is a cross-border initiative, embracing five countries (Hungary, Romania, Serbia, Slovakia, Ukraine – see chart 1 below) along the Tisza River. The target area of this regional cooperation is 154.039 km<sup>2</sup>, with a population of approximately 15.7 million.



The Program's primary goal is to develop the Tisza River Basin from three perspectives:

1. Environmental protection;
2. Economic development;
3. Social development.

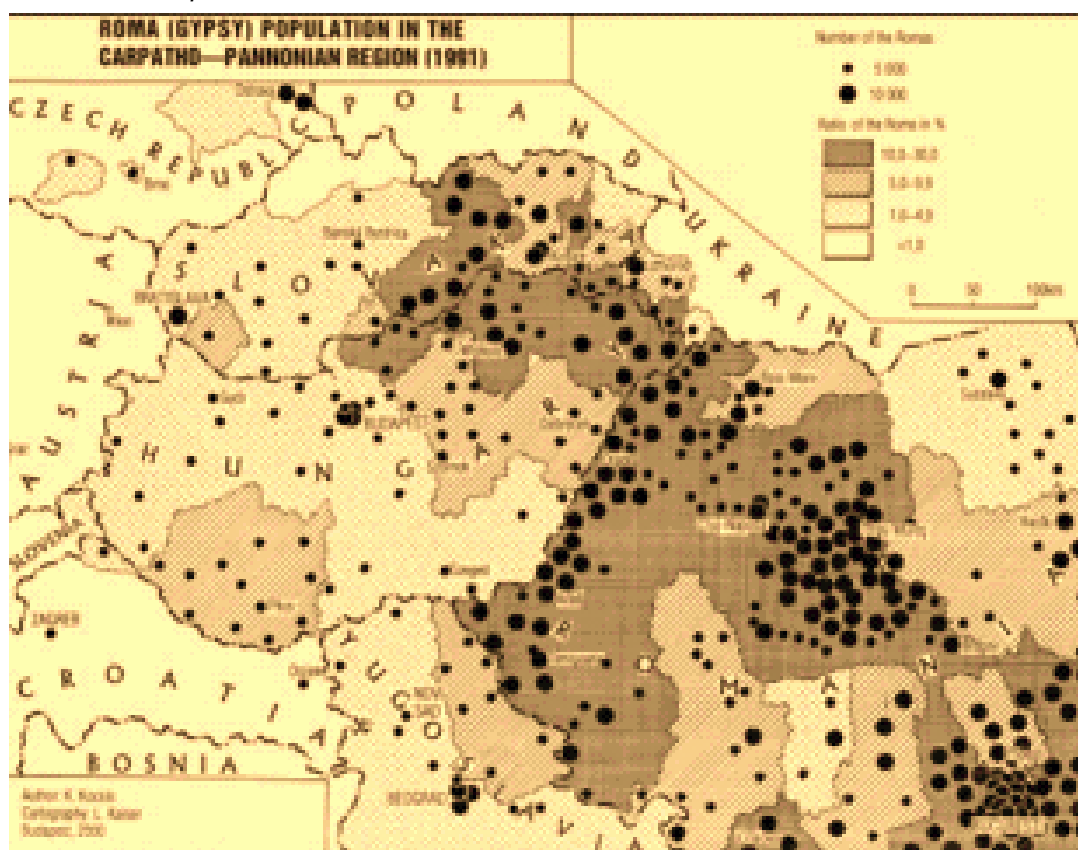
This holistic development policy approach reflects the essence of the Johannesburg Declaration whereas only considering these pillars as inseparable can sustainable development be achieved.

A regional cross-border cooperation along the Tisza River Basin is especially important in light of the more frequent and severe floods, and recent cyanide poisonings and other water quality incidents. The Tisza River Basin area is also the place with several communities living in extreme poverty, the majority of them of Roma origin. Also, in general, this area is economically declining or stagnating, not attracting significant investment and trade opportunities.

The Tisza River Development Program builds on a network of local governments and civil society organizations, including business enterprises and research institutes. The Program is designed to develop the Tisza River Basin area through creating a cross-border spatial data infrastructure for the Tisza River Basin. 80% of data used in public administration is directly or indirectly spatial in nature, e. g. addresses, real property ownership registration numbers, regulatory zones, neighborhood, use of public areas, etc. A harmonized and co-operative utilization and exchange of such data, using the network of IHLET, could increase the efficiency and, thus the impact of managing environmental, social and economic problems.

The Program has three components which are interrelated. First, it aims at establishing an **(i) environmental and flood protection system**, building on a unified and harmonized River Basin management. This will include the development of a cohesive environmental monitoring system, able to respond to special local requirements and needs, and to take on an essential prevention role, providing timely warnings and action plans.

Chart 2: Spatial Distribution of Roma Communities in the Tisza River Basin

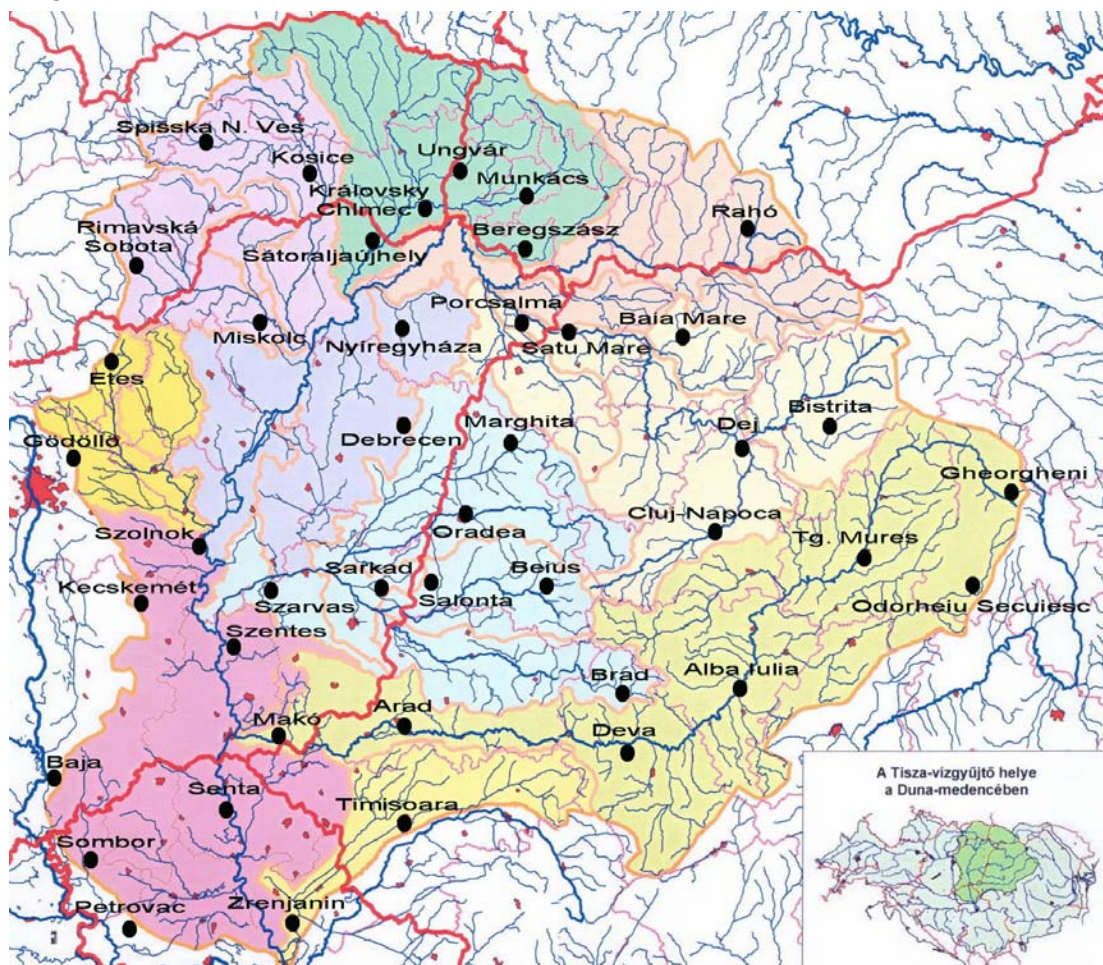


Second, the Program will set up the **(ii) social cadastre** of the affected cross-border area, identifying the most impoverished settlements, those that offer unhealthy living conditions. The Roma is the most affected social group (see chart 2 above) in the area, requiring supportive social policies and employment generation. The concentration of Roma minorities in the overall Tisza River-basin is approximately 20% of the overall population, as compared to the maximum 10% ratio in the relevant countries' population. As per estimates, the Roma population of the Tisza River-basin is around 3 million. It is essential for the respective local governments, as well as national and international development agencies to get access to an unbiased and reliable source of information or a database, defining the settlements and geographical areas that need attention. This social cadastre could help launch more real need-based and accurately targeted projects, facilitating the access of the socially disadvantaged to employment which would ultimately lead to the liquidation of the impoverished settlements.



Third, the Program aims at **(iii) boosting the economic potentials** of the region since in order to achieve long term and sustainable results, the region's ability to attract investment and promote trade is of primary importance. The Program will assemble, synchronize and collate spatial data that could become useful and valuable for national and international investors and different business entities. This component of the Program will also aim at launching specific labor generation activities and providing tools, such as microcredit for the most disadvantaged and poorest in the area. Building on the Program's network of around 1,000 local development associations, the Component intends to help from the bottom up the economic and social development of the poorest in the Tisza River Basin.

*Chart 3: The Distribution of the 48 Offices/End Points of the IHLET Tisza River Development Program*



The Program is a truly cross-border cooperation project, with 48 offices (each office covering approximately 20 local communities) in five countries (see chart 3 above). It builds on the network of local governments and other local players, creating synergies and launching common actions among the five affected countries. The Program is independent from central governments and central budgetary allocations. It uses local government funds and those gained through the economic development component. These funds will then get re-channeled into the social and environmental components.



## **Relevance of the Tisza River Development Program to the European Commission**

-- from the perspective of European Union enlargement and development aid coordination.

The Tisza Development Program of the IHLET's Research Center of Social, Environmental and Economic Matters is a cross-border initiative, embracing five countries (Hungary, Romania, Serbia, Slovakia, Ukraine) along the Tisza River. The program's primary goal is to develop the Tisza River Basin from three perspectives:

1. Environmental protection;
2. Economic development;
3. Social development.

The five affected countries have decided to launch this initiative as a common effort to help improve the life of the communities living along the Tisza River. Technical international agencies, such as the Tisza Committee, The United Nations Development Program (UNDP), The World Bank and the Food and Agriculture Organization (UN/FAO), The United Nations Economic Commission for Europe (UN/ECE), European Organization of Geo-Information (EUROGI), etc., are aware of this initiative and endorse its importance.

From the perspective of the European Commission, this initiative can also be interesting since this is the only region currently in Europe that embraces 3 EU members (Slovakia, Hungary and Romania), 1 Western Balkan – Sap (Serbia), and 1 European Neighborhood Policy partner country (Ukraine). This is a unique and intensively complex space/region which condenses the most important legal, environmental, economic and social issues the EC has to and will eventually have to face and resolve. These include, for instance, water poisoning and flood problems, originating from outside of the EU, though affecting the EU's territory. From this perspective, the EC's awareness about this initiative is of ultimate importance.

In addition, three of the five affected countries are new European Union members that pledged to fulfill their commitments as emerging donors. Both Slovakia and Hungary along with the rest of the EU members adopted the European Union Statement on Aid Effectiveness (March 2, 2005) and the European Consensus on Development (November 23, 2005). In these statements, it was stated, "*national ownership, donor coordination and harmonization, starting at field level, alignment to recipient country systems and results orientation are core principles.*" Also, the Consensus sets out that the "*EU will advance coordination, harmonization and alignment*".

In sum, this Program could very well demonstrate and/or pilot how three new donors coordinate their development activities not only among each other, but also with the next wave of potential EU members and a European Neighborhood Policy partner country, to achieve higher scale and sustainable results at a coordinated and harmonized fashion. In addition, a true ownership demonstrated by the five countries largely contributes to the expected final positive outcomes.



## **Technical Aspects – Geographic Information Infrastructure for the Tisza River Basin**

### **Component 1**

The Tisza River Basin covers an area of about 154.039 square kilometers of five countries (Hungary, Romania, Serbia, Slovakia, Ukraine), with a population of about 15.7 million.

In the framework of the IHLET program, the Regional Centre for Environmental Technology has been established by 48 associations at NUTS4 level in the five countries for harmonizing development strategies, planning and running joint projects, and providing common services. The organization is an NGO; its main activities are oriented to prevent future damages of natural and industrial catastrophes, to collect and disseminate data, to channel and transfer environmental innovation, and to assist in co-financing.

The environmental needs of the region have generated a comprehensive IT system, focusing on:

- Catalytic effect: Environmental sub-system needs tight co-operation of partners and this tight cooperation enables wider exploitation of common services;
- Interdependencies: An environmental measure depends on and impacts on the economic and social aspects;
- Channeling innovation: This common infrastructure makes possible to access metadata and transfer good-practice and applications.

The Tisza River Basin is not just a geographic area but an organic system based on environmental, economic and social analogies and interdependencies. In order to resolve spatial related problems of common interest, an interoperable geographical information (GI) infrastructure is necessary. In November 2000, representatives of the local associations of the five affected countries declared their intention to establish a common GI infrastructure. However, the simple unification of the five countries by itself is unlikely to lead to a common regional level GI system, since it cannot easily solve problems of interoperability, dissemination, access rights, etc. For these reasons, the INSPIRE initiative, and especially the Environmental Thematic User Needs Position Paper, issued by the INSPIRE Environmental Thematic Coordination Group in 2002, is considered the main source to start the technical design of developing a common GI infrastructure for the Tisza River Basin.

### **Standards and Specifications**

The ground is laid by ISO and OGC. The industry adopted numerous new standards. Other standards such as COGI standard for projection and INSPIRE results will be taken into consideration when available.

## Benefits of a common GI infrastructure for the Tisza River Basin

The main success factors for a common GI infrastructure for the Tisza River Basin can be summarized as follows:

- Solving targeted (environmental, economic and social) problems are of great interest for the involved countries;
- The project objectives are relevant for accessing various kinds of EU Funds;
- National GI Infrastructure is being strengthened in the region;
- Focus is on regional scale and adding value;
- Tools and GI information are becoming more common;
- Synergy with others is a key condition.
- Addresses the needs of the socially excluded.

The GI infrastructure will be managed on three levels:

1. Centre - Tisza River Basin Region level
  - Aggregated and generalized data.
  - Data to cover gaps of the national GI infrastructure (orthophoto).
  - Added subjects: environmental, economic, social.
  - Meta data.
2. Node Points - National
  - Aggregated and generalized data.
  - Access to relevant national level thematic maps.
3. Local Offices - Association at NUTS4 level
  - Local large scale data: cadastre, utilities, urban planning, etc.

The motivations to maintain the infrastructure are mainly economic. The Program must recover its costs. In addition, the role and involvement of policymakers at all levels, including mayors and Parliamentarians, are of ultimate importance in order to help prevent and alleviate the risks of potential environmental disasters in the Tisza River basin.

The e-government aspects are of interest at the local level, though they receive limited attention by the local administrations. The private sector will be involved as suppliers of standard and customized GIS and maintainers of the GI data.

## Data flow, production, distribution and use

The members of the geographic infrastructure can access their own data, also that at the National Node-points and the Centre. External user can only access the data of the Centre.

Data production is not a core business of the Centre and its members, thus it is inevitable to involve national and international GI bodies. Additional GI data could also be gathered by the Centre or by local associations.

Data owned by the members and the Centre will be managed based on copyrights. Local authorities, being members through the local associations, can share data among them; however, external users will be charged for access.

The process of assessing user needs has not yet started. For such, the INSPIRE Environmental Thematic User Needs Position Paper is taken as the starting point and then a second step will be to interview the partners.

Categories of users are three-fold: project (environmental, regional development, etc), member, partner, etc; nature of the user (Local Authority, Utility company, etc).