

Slovenian contribution to the EU-mixed submission

Views and experiences for the in-depth review of work on invasive alien species (IAS)

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Views and experiences

In general, Slovenia has limited experience with the implementation of decisions on IAS and related topics since they have not yet been fully addressed. Already in 2002, Slovenia published the Biodiversity Conservation Strategy of Slovenia in which one of the goals is prevention of introduction of non-native organisms. The preparation of a detailed IAS strategy and its action plan is one of the priority objectives in the National Environmental Action Programme (NPVO, 2005). However, in the last years we have concentrated our efforts on other aspects of biodiversity conservation, such as establishing the Natura 2000 network of the biodiversity important areas at the European level. Experts' data show that IAS threats are increasing. We are aware that the problems caused by IAS cannot be neglected and immediate actions are needed.

We have grouped topics of the relevant decisions in 6 themes and accordingly included our experiences.

1. Awareness-raising, communication, spread of information

Plant IAS were discussed in a threat analysis related to Ramsar sites in Slovenia (Jogan, 2005). The dynamics of long term occurrence of alien plant species is used as one of the environmental indicators in the official report on the state of the environment in preparation (Turk, in prep.).

The Phytosanitary Administration of the Republic of Slovenia (FURS) is providing information on invasive alien species identified by European and Mediterranean Plant Protection Organisation (EPPO) on their official web-site (<http://www.furs.si/svn/zvr/invrastline.asp>).

The issue of alien freshwater fish species has been discussed in several articles published in scientific and popular magazines (i.e. Povž et al., 2006) as well as in specialized fisheries magazines (i.e. Šumer, 2004, Veenvliet, 2006).

As an increasing ecological threat, IAS are also addressed in scientific biological publications and reports (i.e. Govedič, 2006; Hlad et al., 2001).

In general, public awareness on the issues of IAS is slightly raising and this can be seen by the increased coverage of IAS related topic in the media and on internet.

2. Regulatory framework

Intentional introductions of non-native species is considered in several acts and regulations, however the problem of “*invasive*” species has not been addressed as such and therefore, terms “invader” and “invasive species” are not explicitly used in our legislation.

The **Nature Conservation Act** (Official Gazette of the RS, No. 96/04) regulates the administrative supervision on intentional introductions of alien species into the territory of the Republic of Slovenia. Provisions in this act relate to introduction, reintroduction, repopulation and captive breeding of non-native species.

Executive regulation regarding IAS was introduced in 2002 by the **Rules on the carrying-out of the assessment of risk to nature and on the obtaining of authorisation** (Official Gazette of the RS, No. 43/02). These Rules lay down the conditions and methods for the risk assessment to nature (the “risk assessment”, dealing also with potential invasiveness) prior to the introduction or repopulation of non-native wild plant and animal species in the wild or breeding of non-native wild animal species.

The Forestry Act (Official Gazette of the RS, No. 30/93) anticipates for forest management plans to define guidelines for conservation or reintroduction of autochthonous species and their habitats. Thus, there is implicitly stated that non-native species commonly planted all-over Slovenia, should be replaced by native species. However, IAS are not explicitly mentioned in this act.

One of the aims of the new **Act on Freshwater Fisheries** (Official Gazette of the RS, No. 61/06) is to prevent introduction and spread of alien species in the inland waters. It prohibits release of alien species and regulates sustainable breeding of fish stocks to specific catchment areas and prohibits relocation of living organisms between different catchments.

Regulation on Fishing Species in Inland Waters (Official Gazette of the RS, No. 46/07) lists fishing species by the river basin and specifically names alien species of fish and crayfish.

The legal basis, determining the plant health is the **Act on Plant Health** (Official Gazette of the RS, No. 62/07), implementing Council Directive 2000/29/EC and the International Plant Protection Convention (IPPC). The Phytosanitary Administration of the Republic of Slovenia (FURS) is the central responsible body for plant health in Slovenia. FURS provides for safety of the food of plant origin and the health and quality of agricultural plants, enabling the optimal plant production and regulating the trade in plants and plant products at national and international level in conformity with international standards and requirements. From the phytosanitary point of view there is a considerable number of alien species that can harm cultivated plants, but only a fraction of these pose a direct threat to native species or nature in general.

3. Research

Research on IAS is a special issue demanding inter-sectoral cooperation and coordination. To-date, IAS were not included as a separate topic in the national scientific research scheme. However, Slovenian research organisations are partners in two international projects funded by the 6th Framework programme focused on IAS (DAISIE and ALARM), so that some coordinated research on IAS in the territory of Slovenia is going on and also some tools, developed in the framework of these projects, will be available in the near future (internet portal, CHM etc.). The final conference of the international DAISIE project will be held in Slovenia next year.

One of the ongoing projects in Slovenia is the Marble Trout repopulation project. The project started in 1993, dealing with rehabilitation of native fish species in the upper part of the Soca and Idrija river basins and was initially funded by the Tour du Valat Foundation, Arles France and WWF-International (project 9E0073). The two main objectives of the project are to ensure viable populations of pure Marble Trout and to rehabilitate the genes of Marble Trout in the hybridisation zone until the disappearance of the introduced genes.

In several Slovenian research institutes and universities, there are working groups and projects focusing on IAS, but there is little coordination between them. Several taxonomic experts, covering majority of groups of organisms, are familiar with IAS issues and are collecting data on occurrence of non native taxa, but systematically compiled checklists considering IAS occurrence in Slovenia has yet to be prepared.

4. Inter-sectoral and international (regional) cooperation

Several decisions demand inter-sectoral and international cooperation and coordination.

Cooperation between the FURS and the Ministry of the Environment and Spatial Planning (MOP) is based on legal provisions stated in the Act on Plant Health regarding the introduction of living alien species of fungi, mites, nematodes and insects used for biological control of harmful organisms in agriculture and forestry.

In Slovenia, some special cases where IAS causing serious problems gained attention of specific sectors. For example *Ambrosia artemisiifolia*, which spread rapidly in about two decades all-over Slovenia and is the main allergen causing autumn hay-fever and *Pistia stratiotes* locally completely changed an ox-bow lake ecosystem, causing problems to fishermen, as well as several other IAS which are considered weeds or pest on arable land and gardens.

Slovenia is a member of the trilateral ballast water management sub-commission for the Adriatic Sea (Croatia-Italy-Slovenia) which deals with the problem of introduction of harmful organisms which are transported into the region in ballast water of ships.

The FURS represents Slovenia in international organisations and bodies of International Plant Protection Convention (IPPC) and European and Mediterranean Plant Protection Organisation (EPPO).

Representatives of Slovenia are also regularly attending meetings of the Bern Convention Standing Committee and have participated in the expert group preparatory meetings for the European Strategy on IAS. We are also actively involved in the preparation of an EU framework on IAS.

5. Education

At the level of primary and secondary schools IAS are addressed at environment protection and biology classes. IAS have been placed in the curriculum recently and therefore only new textbooks provide information on IAS and their threats to nature.

Teachers and pupils are also encouraged to consider IAS by specific actions organized by media. For example, Slovenian popular scientific journal "Proteus" has named *Fallopia japonica* as "plant of the year" describing its nature in detail and exposing its invasiveness. This action was well accepted and achieved its goal as several basic research projects on IAS resulted from it.

6. Concrete actions

In Slovenia, existing legislative measures provide a good basis required for implementation of an effective policy on invasive alien species. However, stronger efforts and especially coordination are needed to support an effective development and implementation of invasive alien species management.

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