

Strasbourg, 26 April 2007
[In257e_2005.doc]

T-PVS/Inf (2005) 25

CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

Standing Committee

25th meeting
Strasbourg, 28 November-1 December 2005

**UPDATING THE FOLLOW UP OF THE
IMPLEMENTATION OF THE
EUROPEAN STRATEGY
ON INVASIVE ALIEN SPECIES**

**6th meeting of the Bern Convention
Group of Experts on Invasive Alien Species.**

Palma de Majorca (Spain) 9 - 11 June 2005

Document prepared by
Laura Capdevila-Argüelles & Bernardo Zilletti
G.E.I. Grupo Especies Invasoras.
C/ Moisés de León Bloque 7, Portal 3, Oficina 9 C.P.24006 León (Spain)
Tel.: +34 987 215684 Fax: +34 987 215684
E-mail: invasionesbiologicas@geib.org.es URL: www.invasionesbiologicas.org

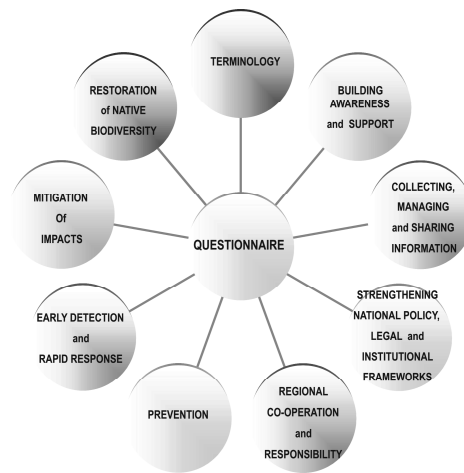
INTRODUCTION

After the European Strategy on IAS and Recommendation No99 was adopted in December 2003, Contracting Parties were recommended "to draw and implement national strategies on IAS taking into account the European Strategy".

In June 2004 the Council of Europe started to follow-up the actual implementation of national policies and measures on IAS in the countries that are part of the Bern Convention.

A questionnaire was prepared and sent to Contracting Parties. In order to easily detect new measures arising from the approval of the strategy as well as existing gaps, the questionnaire was planned according to the contents of the European Strategy.

The report was presented in December 2004 in the 24th Meeting of the Standing Committee of the Bern Convention (TPVS/Inf (2004) 4).



For the present meeting, the Secretariat of the Bern Convention requested governments to send a short written contribution on IAS work in their States.

- The questionnaire was responded by the following countries: Albania, Belgium, Bosnia Herzegovina, Cyprus, Denmark, Hungary, Iceland, Italy, Liechtenstein, Luxembourg, Poland, Slovakia, Slovenia, Switzerland and United Kingdom.
- Countries who sent reports for the 6th meeting of Group of Expert on IAS: Belgium, Bulgaria, Burkina Faso, Croatia, Czech Republic, Denmark, Estonia, Germany, Italy, Liechtenstein, Luxembourg, Malta, Moldova, Norway, Poland, Portugal, Spain and Sweden.

Main results could be summarised as follows:

BUILDING AWARENESS AND SUPPORT

Awareness raising campaigns should be a central part of national initiatives to educate people on the problems posed by IAS and inform them of the management options to face the problem.

Some actions have been undertaken in some countries approaching the problem of biological invasions at general level or, in other cases, focused in target species.

For example:

- In Spain, several NGOs have undertaken initiatives to aware the public on the problem of IAS through the spread of information by means leaflets, itinerant exhibition, etc. In the framework of the LIFE project "Control of exotic vertebrates in Islands of Portugal and Spain", the design of a strategy on environmental education activities on IAS was developed.
- Denmark set up awareness campaigns on *Heracleum mantegazzianum*, *Mustela vison*, release of pets in nature and Iberian slug. The Swedish National Board of Fisheries has developed a campaign for protecting the indigenous Noble crayfish in which information about the risks of spreading the Signal crayfish is a central part of the campaign.
- In the United Kingdom extensive use of awareness campaigns is made for plant health. To the general public, for example, by posters at ports and airports for species such as *Leptinotarsa decemlineata* and general information on the Defra website, for example, on

Phytophthora ramorum, and targeted information to growers and those handling imported produce who are most likely to receive pests and observe symptoms.

Many awareness campaigns on target species are in process. It means a breakthrough in the field of prevention of their spread. This information is targeted to specific sectors (for example, fishermen, divers, etc.) that are the main cause of accidental release and spread of IAS.

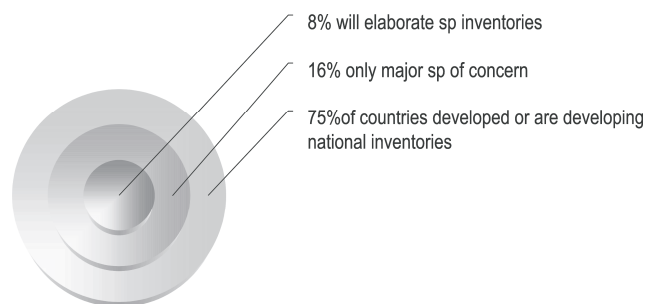
Nevertheless, up to the present time, a lack of awareness campaigns focused in a general approach of biological invasions addressed to the general public is observed.

Therefore, it shouldn't be forgotten that a key step in the prevention of new introduction is the global understanding of the biological invasions problem on the part of the general public. This is the way to eliminate intentional introductions derived from ignorance and made with the best of intentions. For example, the release of *Trachemys scripta* into the wild.

COLLECTING, MANAGING AND SHARING INFORMATION

Species Inventories

The identification of IAS within a country as well as information on their distribution, trends, etc. is a matter of great importance in order to prioritise actions and optimise human and economic resources.



- 16% of the countries have identified only major species of concern.
- 74% of the countries developed or are developing national inventories on IAS while 8,33% will elaborate them.

Lists

On the same line, lists system are a tool of primary importance for the regulation of intentional introductions.

- 44% of countries are currently developing it.

For the correct implementation of the European Strategy it is essential to know which species are present in the country. At present, it is looking very positive. Most countries are taking the necessary steps to achieve this. Many have produced inventories of exotic species. In this case, vertebrates and flora are well known, but it can be observed a lack of databases of invertebrates.

The next step could be to categorize species in function of their impact, and contrast it with the feasibility of control or eradication measures. This is the best way to achieve an adequate management of existing resources.

Research and Monitoring

A stronger scientific basis is necessary for management of invasive species, decision making and allocation of resources. The better understanding of IAS ecology should be improved through scientific research.

- Countries are implementing research programmes on IAS. Strong efforts in basic research projects or projects focused in target species have been done.

Nevertheless, it could also be very necessary to focus efforts in research programmes concerning vectors and pathways, to determine their magnitude and to design adequate prevention measures. The next step will be the evaluation of the effectiveness of the proposed measures after their application.

Some examples are presented:

- In Portugal in the context of the research project INVADER, aims to evaluate the rehabilitation of invaded systems, the native and invasive vegetation seed banks potential and to determine invasive species effects on soil functional diversity, namely on microbial diversity and N cycle. Furthermore, to evaluate efficiency of control methods against *Acacia longifolia*.
- AquAliens is a research programme aimed at increasing the knowledge on how to assess the risks posed by introduced aquatic species and their impact on ecosystems and economy (in Sweden). The programme will focus on: i) Evaluating the risks on the ecosystem level for organisms having specific functions or attributes; ii) Identifying the types of aquatic ecosystems that are most vulnerable to introductions and which kind of organism will pose the largest threat in different environments; iii) Tools for risk analyses and assessments; iv) Economic analyses of efficient risk management.

STRENGTHENING NATIONAL POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

Leadership and Coordination

In general, competences are fragmented and distributed across different departments showing in most cases low levels of coordination between agencies or departments and weak articulation between different levels of government.

- Only six countries declared they count on a national authority or equivalent network to coordinate responsible department/agencies dealing with IAS.
- 10 countries count on advisory groups. It is important to emphasize that advisory groups of experts are a powerful tool to ensure the necessary scientific background to decision making processes and to contribute to the development of legislations in order to prevent importations and trade of IAS or to allocate resources for mitigation of their impacts. The set up of a governmental agency/department completely dedicated to IAS issues (centralization of information, policies coordination, etc.) would be highly desirable. Although it would require a great effort (in administrative, economic and political terms), its implementation would produce long term benefits in the optimisation of available resources as well as to avoid duplicate efforts in IAS management.

National Strategies/Policies on IAS

The European Strategy recommends Contracting Parties to draw and implement national strategies/policies on invasive alien species and measures for addressing issues related to biological invasions.

Some countries are carrying out or will undertake the development of a separate strategy on IAS.

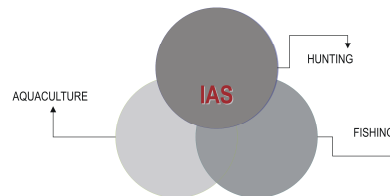
- In Germany, fundamentals for a national strategy on IAS have been worked out analysing the national and international legal situation and administrative responsibilities. Since the focus of legislation is on intentional introductions, future measures will be focused on the

prevention of new introductions and secondary spread. Furthermore, a risk assessment scheme for release permissions has been developed.

- The Ministry of Environment of Spain is developing a national action plan on IAS to be finished at the end of 2005. The action plan covers terminology, problems caused by IAS, prevention, risk analysis, control and eradication measures, technical and administrative coordination, lists of IAS and a database of experts. The action plan could also be a model for the future design of subnational strategies and to encourage the cooperation between subnational governments and other institutions. Sweden has initiated the development of a national package of measures to deal with IAS, focused on four components:
 - development of a national strategy and action plan
 - development of a list system and the use of risk analysis
 - development of laws and regulations on IAS
 - development of a monitoring systems and contingency plans on IAS
- In 2004, the United Kingdom stated that a separate strategy for alien invasive species policy was in the early stages of development for Great Britain. Other policies on IAS were implemented in the existing legal framework. Only 7 countries have developed legislation on IAS at national or regional level.
- 12 countries have carried out a review of existing measures and legal procedures related to IAS and potential IAS or are in the process of doing so.
- In most of the polled countries no special legislation on this matter have been developed yet, however some measures are in place.

Laws dealing with the introduction of species are in place in several countries for different sectors (hunting, fishing, aquaculture, etc.). One of the key points of the European Strategy on IAS is the review of the legal framework to detect gaps and inconsistencies to harmonize and implement laws. This action has been carried out by 12 countries while others are in process.

It is important to continue with this process because of the importance of legislation as a primary tool to face effectively biological invasions.



REGIONAL CO-OPERATION AND RESPONSIBILITY

Cooperation between Bern Convention Parties

Invasive alien species may move beyond the boundaries of the State where they were introduced, making international cooperation particularly important.

- 68% of the polled countries are actively interchanging information on IAS and potential IAS with other countries.
- It has to be emphasized that only 5% of the states notifies to other countries and, in particular, to bordering countries, the intentional introduction into their national territory of an alien species or its transfer within it.

Subregional Cooperation

Promote dialogue between countries in the same subregion to develop and/or implement subregional strategies, action plans or initiatives on IAS is a priority because continental Europe is characterised by territorial continuity with biogeographical differences in terms of species, subspecies, populations and ecosystems.

Some initiatives are remarkable:

- NOBANIS: The Nordic/Baltic Network on Invasive Alien Species (NOBANIS) will develop a distributed but integrated network of common databases encompassing national and regional specialist databases in the Nordic/Baltic countries. NOBANIS is intended to be a gateway to data on invasive species in Northern Europe - The Nordic and Baltic Region incl. Russia, Poland and Germany.
- DAISIE: DAISIE is a project supported by the European Commission. The aim of this project is to create an inventory of invasive species that threaten European terrestrial, fresh-water and marine environments and to provide the basis to prevent and control biological invasions through the understanding of the biological, social, economic and other factors involved.
- EPIDEMIE aims to:
 - raise awareness and advance existing understanding of the problems posed by invasive plants in the Mediterranean
 - develop management strategies which aid the conservation of native habitats and species, in line with E.U. Obligations under the Biodiversity Convention.
- LUTANUIS
 - In Belgium there is an Interreg project (Lutanuis) for cooperation between France, Flanders and Wallonia on:
 - How to control the muskrat
 - To define infestation norms
 - To put the results on the internet to enhance exchange of information with other countries who encounter problems with *Ondatra zibethicus*.

In terms of cooperation and information exchange among countries, there are several initiatives like NOBANIS and DAISIE that could become very important tools. To make them effective, countries should increase their effort in terms of collaboration by sharing and dumping their own data into these databases.

This kind of tools already exists, but we should keep them in good working order avoiding the proliferation of new tools only useful to further disperse the information.

It is necessary to encourage and reinforce the development of international initiatives of cooperation being the most logical and effective way to resolve common problems. This is specially important for bordering countries.

Prevention

In general terms, prevention measures related to export and especially import of goods are in place. However, these measures are focused on the prevention of plagues or diseases. Although they could be helpful to intercept some IAS, they are insufficient to detect many others IAS which are a treat for biological diversity.

The obligation to take preventive measures is established by all international instruments that concern alien species. Prevention is more cost effective and environmentally desirable than remedial measures taken after the introduction of alien invasive species. It should be given priority as the first line of defence. Prevention efforts need to begin at the place of origin or export.

- 42% of the polled countries have measures to avoid the exit of species to other countries together with export goods.
- However, 62% of these countries declare that these measures are insufficient.

To the question: what importance does your country give to a future establishment of measures to avoid the exit of species to other countries together with the export goods, only 25% of the states consider that the importance level is high or medium in front of 75% that consider is low or unknown.

At the point of import, border control and quarantine measures need to be used to prevent or minimise unintentional or illegal introductions of alien species that are or could become invasive.

- The majority of polled countries declare that is necessary to review their border control and quarantine measures, and implement training and capacity-building programmes for border officials (63%). 26% pointed out the lack of technical and economical resources.

Intentional introductions

As the first line of defence, proposed introductions must be assessed through a comprehensive screening system based on risk analysis.

- Seven countries confirm the proposed introductions are assessed through a screening system based on risk analysis. Five countries say that they want to develop an appropriate evaluation process in the future.
- Five countries demand the need for more information about risk analysis. Eleven countries didn't respond or responded in the negative.

It has to be highlighted that Risk Analysis previous to the introduction of new species is an essential tool to carry out an objective evaluation of the risk. So it would be important to draw import Risk Analysis models for animal and plant species as well as their products. Risk Analysis models could also be very useful to analyse vectors and entry pathways.

Furthermore, it would be greatly desirable that countries who have already developed Risk Analysis protocols share them with other countries who are demanding information, giving details of their successes, failures and problems when it comes to applying them.

On the other hand precautionary approach should always be taken into account in front of new introductions.

Unintentional introductions

Unfortunately, it can be very difficult to control unintentional introductions that occur through a wide variety of ways and means. They include the most difficult types of movement to identify, control and prevent.

One of the main points about unintentional introductions is identify the risk related to species introductions resulting from sectoral activities.

- 17 countries have identified these risks and 10 among them have appropriate measures to minimise unintentional introductions resulting from sectoral activities.

Involvement of stakeholders

It is essential to improve actions with the most relevant stakeholders and sectors to raise awareness and develop codes of best practices to avoid unwanted introductions.

- In this sense, only 21% of the polled countries are developing it.

For this reason, it would be desirable that countries developed codes of good practices targeted to high risk sectors in order to minimise the chance of unintentional introductions due to activities such as horticulture and gardening.

On the other hand it would be very important to put in force the tools aimed to prevent unintentional introductions which already exist, like the Ballast Water Convention of the International Maritime Organization.

Regulation for containment facilities

An important pathway of introduction of potential IAS is through containment facilities holding potential IAS. In this sense, to have control systems to avoid the escape or release of the species to the environment is a priority.

- Only 37% of countries have control systems but we must take into account that more than half of them state that control systems are inadequate.

Early detection and rapid response

The early detection of new introductions of potentially invasive exotic species, together with the capacity to give a rapid response to an invasion is, generally, the key to develop successful mitigation programmes that are economically viable. Surveillance is a critical element of prevention. On the whole (63%), countries lack security systems to identify the new arrival of exotic species. But it is more important to emphasize that 42% proclaim the necessity for more information about them.

There is only a limited period of time in which eradication is a practicable option, before the invasive alien species reach a certain level of population and/or range expansion. 63% of countries have not developed these plans.

- 31% have developed them, but only in some cases (e.g. *Oxyura jamaicensis*; West Nile Virus, *Aedes albopictus*).

In general terms, early detection systems are efficient to detect plagues and animal diseases like *Diabrotica virgifera* or the foot and mouth disease. However early detection of IAS which threat biodiversity is still anecdotal with the exception of surveillance systems arranged to detect the spread of specific species already present in the territory (i.e. *Caulerpa taxifolia*).

Moreover the lack of taxonomic knowledge of many groups (for example, fungi, arthropods, microorganisms) let the introduction of many species goes unnoticed.

On the other hand, it would be highly desirable to count on established teams for rapid response, contingency plans, as well as economic resources predestined to these tasks. A legal framework to support these actions is essential.

Conscious of the difficulties to set up this kind of systems, a first but very important step forward would be to set up early detections systems and teams for rapid response, at least for those IAS included in black lists, whose invasive potential has been proved and with high risk of introduction into the country.

Mitigation of impacts

The mitigation processes correspond to two different conceptual frames: eradication and control.

Eradication

Eradication is an essential management tool and should be encouraged and promoted where appropriate and feasible.

54% of countries have developed programmes to eradicate invasive alien species which threaten native biodiversity. For example:

- On Lundy island (England), *Rattus rattus* *Rattus norvegicus* are being eradicated to protect the internationally important populations of ground nesting birds; brown rats are also being eradicated from Handa island (Scotland) and there are proposals for eradication from Canna and Sanday islands (Scotland).
- Estonia has a national strategy to eliminate *Heracleum mantegazzianum* from 2005-2010.
- Other countries are also carrying out eradication campaigns on *H. mantegazzianum*.
- Norway has an action plan for the eradication of the salmon parasite *Gyrodactylus salaris*, etc.

Control

Around 67% of countries have developed contention or control programmes for invasive alien species which threaten native biodiversity. For example:

- The Azores Regional Government has published a Regional Plan for the Eradication and Control of Flora Invasive Species in Sensitive Areas, that will be implemented until 2009. It will be carried out in every island of the Azores archipelago. Germany spent 1,5 million of euros in conservation measures to control the 39% of invasive neophytes

As it can be observed, many efforts are devoted in the control or eradication of the most problematic invasive alien species. This kind of projects has outstandingly increased in number in recent times.

Sharing these experiences and results (whether successful or not) is fundamental in order to manage similar experiences with more probability of success.

On the other hand, in the case that the species is established in bordering countries or in neighbouring subnational areas, this kind of efforts should be carried out jointly to avoid that unilateral effort in the mitigation of a species can be annulled by the inertia of the bordering area/country.

On the other hand, it has to be stressed that these impressive efforts in mitigation are not accompanied by similar efforts in terms of prevention.

To conclude it should be pointed out that activities dealing with IAS are possibly underestimated in the present report due to the fact that only half part of the Countries sent the requested information.

Nevertheless in spite of this lack of information, a positive trend in the increase of initiatives on IAS could be observed.