

# Development of a planning tool concerning inspection of Natura 2000 sites

(including the option of using the IRAM tool)

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### Introduction to IMPEL

The European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) is an international non-profit association of the environmental authorities of the EU Member States, acceding and candidate countries of the European Union and EEA countries. The association is registered in Belgium and its legal seat is in Brussels, Belgium.

IMPEL was set up in 1992 as an informal Network of European regulators and authorities concerned with the implementation and enforcement of environmental law. The Network's objective is to create the necessary impetus in the European Community to make progress on ensuring a more effective application of environmental legislation. The core of the IMPEL activities concerns awareness raising, capacity building and exchange of information and experiences on implementation, enforcement and international enforcement collaboration as well as promoting and supporting the practicability and enforceability of European environmental legislation.

During the previous years IMPEL has developed into a considerable, widely known organisation, being mentioned in a number of EU legislative and policy documents, e.g. the 7th Environment Action Programme and the Recommendation on Minimum Criteria for Environmental Inspections.

The expertise and experience of the participants within IMPEL make the network uniquely qualified to work on both technical and regulatory aspects of EU environmental legislation.

Information on the IMPEL Network is also available through its website at: www.impel.eu



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Development of a planning tool concerning inspection of Natura 2000 sites (including the option of using the IRAM tool)

### **Number report:**

2018/14

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### **Executive Summary**

Planning is one of the key factors in making inspection more transparent, systematic and effective. Criteria for how often Natura 2000 sites should be inspected to ensure sufficient contribution to the maintenance of favourable status of the site are various and differ from country to country.

During its work in 2017 on the item, IMPEL identified the need for a planning tool for inspections. IMPEL project 2018/14 worked on the development of a tool and defined criteria which would manage the frequency of inspection at protected sites (with focus on Natura 2000 sites). If possible, the tool should also store data collated through inspections over the long term in order to be used by inspection authorities for the purposes of evidence and long term trends in nature protected sites change and setting policy. The option of using the IMPEL IRAM-Tool was considered, and shown as able to be further developed for the purpose. The tool is called IRAM for Nature (NIRAM). It is very flexible and can be adjusted to the needs of different countries.

### Disclaimer

This report is the result of a project within the IMPEL network. The content does not necessarily represent the view of the national administrations or the Commission.



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### 1. Introduction

According to 'Recommendation providing for minimum criteria for environmental inspections (RMCEI)' (adopted by the European Parliament and the Council in 2001) and the IMPEL document 'Doing the Right Things' Methodology (period 2006-2009) all inspection activities should be planned in advance and systematic approach to the inspection is recommended. Planning is about defining and explaining as accurately as possible beforehand the work to be done so that the work can be performed in an effective, efficient, transparent and accountable way. One important element in the planning procedure is the identification of the adequate inspection frequency. Different planning systems work with a risk based approach. This allows for dedicating most efforts to the objects of highest risk.

The Communication on the review of the RMCEI [COM (2007)707 final] highlights in section 2.1 that RMCEI does not include criteria for the inspection of Natura 2000 sites and it encourages IMPEL to develop such criteria. Criteria for the inspection of Natura 2000 sites to ensure sufficient contribution to the maintenance of favourable conservation status are various and may differ from country to country.

The IMPEL project on Implementation of Art. 6(3) of the Habitats Directive (IMPEL project 2017/19) – Roadmap for Planning Tool for inspection of Natura 2000 sites (including the option of using the IRAM-Tool)¹ found out that a considerable number of IMPEL member states confirms the need for developing an IT tool for planning Natura 2000 site inspections. It confirmed that an IT tool as a part of the planning of inspections of nature protected sites will provide a systematic approach which would maximize resources into key areas of concern. But it has to be taken into account that the approach to the inspection of protected areas is fundamentally different from the inspection of industrial installations.

The Roadmap for a planning tool for the Natura 2000 site inspections included in-depth discussions and decisions around the existing tools "IRAM", identifications of IT developers and development of criteria and scoring system. Other areas for considerations included tool development, test phases, final format and manual agreement, user feedback and any necessary adjustments.

### 1.1 Objectives and scope of IMPEL project 2018/14

In the IMPEL project 2018/14 the objective was to develop an easy and flexible tool as a part of the planning Natura 2000 site inspections - including the option of using the IRAM-Tool. The content of the inspection itself is not in the focus.

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<sup>&</sup>lt;sup>1</sup> https://www.impel.eu/wp-content/uploads/2016/02/FR-2017-19-Habitats-Directive-Project-part-2-Roadmap-for-a-planning-tool.pdf



The Terms of Reference (TOR) contained the following tasks:

- Decision on type of IT tool (use of the already existing IRAM tool or not)
- Definition of criteria that can be used for the IT tool and development of a scoring system
- Identification of defined frequencies for Natura 2000 site inspections by applying the tool (examples from the project participants)
- Resources needed for the development of the tool.

### 1.2 Background – IMPEL's strategic Work Programme 2016-2020

IMPEL's Strategic Work Programme 2016-2020 presents background information and the key priorities in line on the 7th EU Action Programme to 2020 "Living well within the limits of our planet" (Decision No 1386/2013/EU). According to both documents a key element for the improvement of shortcomings in the implementation of environmental requirements is an effective system of inspections and surveillance. The development of an IT planning tool for inspections is in line with both programmes. Benefits include:

- relief for the daily work of authorities
- transparency
- simplified approaches to maximize resources.

### 1.3 Inspections under the framework of the Habitats and the Birds Directive

Neither the Birds nor the Habitats Directive contain detailed inspection provisions. However, some studies (e.g. IEEP, Bio Intelligence Service and Ecologic Institute (2013))<sup>2</sup> relate to the inspection-type activities directed to Natura 2000 sites, namely:

Information collection an

<sup>&</sup>lt;sup>2</sup> Information collection and impact assessment of possible requirements for environmental inspections in the area of EU legislation on water, nature protection and trade in certain environmentally sensitive goods. Final report for the European Commission, DG Environment. Institute for European Environmental Policy, Brussels and London, July 2013. http://ec.europa.eu/environment/legal/law/pdf/Final%20report%20inspections.pdf.



- Checking compliance of projects with assessment provisions set out in Art. 6(3)  $(4)^3$  of Habitats Directive, ensuring the obligation of non-deterioration of sites under 6(2) (screening decisions, quality of assessments, alternatives) and related permits delivered (conditions attached there to concerning implementation of mitigation/compensation measures or monitoring requirements).
- Checking compliance with management requirements for Natura 2000 sites in accordance with respective management plans and designation acts set out in Art. 6(1) of Habitats Directive.
- Surveillance provided for in Article 11 of the Habitats Directive, of the conservation status of the natural habitats and species referred to in Article 2 with particular regard to priority natural habitat types and priority species.

The Recommendation of the European Parliament and of the Council of 4<sup>th</sup> of April 2001 providing for minimum criteria for environmental inspections in the Member States (RMCEI) does not include any criteria for the inspection of Natura 2000 sites. Nevertheless inspections of nature protected sites are environmental inspections.

The "Information collection and impact assessment of possible requirements for environmental inspections in the area of EU legislation on water, nature protection and trade in certain environmentally sensitive goods" describes aspects of inspection and follow-up activities.

Inspection requirements for nature protection should include:

- (a) Systematic surveillance, detection and characterization of breaches of site protection safeauards
- (b) Non-routine inspections where appropriate including in response to substantial complaints.
- (c) Co-ordination of site safeguard-related inspections with work focused on other related types of compliance work.

Follow-up requirements for nature protection should include:

(a) cessation of illegal activities.

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<sup>&</sup>lt;sup>3</sup> Article 6 3. Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

<sup>4.</sup> If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.



- (b) measures to rectify breaches (e.g. additional mitigation, restoration as where part of a protected site has been unlawfully destroyed).
- (c) dissuasive, effective and proportionate sanctions, incl. criminal penalties, monetary sanctions, confiscation of illegal equipment or other administrative measures.

In the context of this IMPEL project on the development of a planning tool for nature protected sites with focus on Natura 2000 sites the following definition of "environmental inspection" will be used (noting organizational differences between Member States):

'Environmental inspection' of Natura 2000 sites means all actions, including site visits, monitoring of impacts and checks of internal reports and follow-up documents, verification of monitoring, checking of the methods applied and adequacy of the environment management of the site, undertaken by or in behalf of the competent authority, to check and promote compliance of sites with their conservation objectives laid down in the standard data forms and, where necessary, to monitor the impacts and pressures on the sites to avoid breach of the concept of no deterioration and promote the development towards good conservation status.

### 1.4 Methodology

According to the Recommendation providing for minimum criteria for environmental inspections in the Member States (RMCEI) all routine environmental inspections should be planned in advance. For this purpose the competent authorities should draw up inspection plans and programs. This activity became biding through the Directive on Industrial Emissions (IED), 2010/75/EC.

The programs should take into account the environmental risks and should include where appropriate, the frequency of site visits. For the assessment of the frequency of inspections of industrial installations IMPEL has developed a rule based methodology, called Integrated Risk Assessment Method (IRAM)<sup>4</sup>. Besides the methodology the project also developed a web based tool Integrated Risk Assessment Methodology tool (IRAM), for which accessed can be applied for via the IMPEL website (www.impel.eu).

Based on the results of the Roadmap for a Planning Tool for inspection of Natura 2000 sites [IMPEL project 2017/19] and basic information about the components of the IRAM) it was decided to explore whether IRAM would allow for an adjustment to the needs of routine inspections of Natura 2000 sites.

The work started with the development of indicators/criteria and development of a scoring system, which was adjusted to the principles of the tool and were filled in. With available information about

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<sup>&</sup>lt;sup>4</sup> http://impel.eu/wp-content/uploads/2014/08/easyTools -Guidance-Book -2012-06-21.pdf (Version 16/11/2018).



selected Natura 2000 sites the system calculated the inspection frequencies. The result reflected the estimation of the expert. The criteria were then redefined, the system adjusted and another test on another Natura 2000 site was carried out. The name Nature Integrated Risk Assessment Methodology tool (NIRAM) was proposed for the IRAM adjusted to the needs of nature protected sites.

### 2. Development of a tool for planning Natura 2000 site inspections

IRAM is based on a set of basic assumptions and rules. It uses a risk based approach. The details are described in the easy-tools Risk Assessment Guidance Book<sup>4</sup>. Only the most important facts will be repeated here.

In the context of the assessment of the inspection frequency of Natura 2000 sites the **IRAM principles** are the following:

- 1. The inspection frequency is determined by value of the highest score;
- 2. The inspection frequency is reduced by one step, if the set minimum number of highest scores (called "the Rule") is not met;
- 3. The inspection frequency can be changed by only one step up or down based on the probability criteria
- 4. The higher the sum of scores the longer the inspection time.

Risk is a function of the severity of the consequence and the probability this consequence will happen. The easy-tools Risk Assessment Guidance Book defines Risk as: Risk = Effect x Probability.

Effect depends on the source (how powerful is it?) and on the receptor (how vulnerable is it?); what is the impact of the source on the receptor? In IRAM the effect is represented by **Impact Criteria** and it is acknowledged that Impact criteria can also include some probability.

In the context of the risk assessment of Natura 2000 sites probability is considered to be a function of the level of management the likelihood of activities and overlap of Natura 2000 site(s) with national or other international sites (and **Probability criteria**), its role is to affect the inspection frequency by lowering or increasing it, for this reason probability scores are considered.

### 2.1 Development of criteria and the scoring system

Protected sites are exposed to different threats and pressures. They can come from inside or outside the site and can be of different intensity. Each of them poses a risk to the individual site. Some of them are



based on the nature or vulnerability of the site itself. This tool was developed for all Natura 2000 sites, independent of the individual characteristics (including size) of each site. It can be applied to all sites, resulting in a risk analysis score that determines frequency of inspection visits.

For the development of criteria it was decided to choose the perspective of the site and to have in mind the requirements of the Directives.

A set of criteria was identified for each of the two types: impact criteria (Table 1) and probability criteria (Table 2). The scores were determined by the requirements of the IRAM tool. For each criteria a definition and supporting information about "when to use which score" was developed.

It turned out that the definition of criteria is difficult and manifold so that users may come to the conclusion to use other parameters. The high flexibility of the tool allows adjusting them to the individual needs.

Table 1- Impact criteria

No	Criteria		Sc	ore	
1	Presence of habitats and/or protected species	0	1	2	3
2	Site vulnerability	0	1	2	3
3	Gravity of offences	0	1	2	3
4	Conservation status of the site	0	1	2	3
5	Presence of activities with likely negative impact on conservation objectives, inside the Natura 2000 sites	0	1	2	3
6 a	Presence of activities outside the boundary of the Natura 2000 site which are likely to have a negative impact on the site conservation objectives – air quality	0	1	2	3
6 b	Presence of activities outside the boundary of the Natura 2000 site which are likely to have a negative impact on the site conservation objectives –water quality and water resources	0	1	2	3
7	Likely negative impact on conservation objectives changes in land use	0	1	2	3



**Table 2- Probability criteria** 

No	Criteria	Score		
8	Presence of management plan	-1	0	+1
9	Presence of custodian	-1	0	+1
6 c	Likelihood of activities with in combination impacts	-1	Not applicable	+1
10	Presence of activities with favourable impact on conservation	-1	0	Not applicable
11a / b	Overlap Natura 2000 sites with national or other international sites	-1	0	+1

### **Definitions:**

The following tables provide definitions for the application of the scoring:

Criteria 1 – Presence of habitats and/or protected species

SCORE	DEFINITION
0	Less than 33% of total site area covered by habitats and/or species of Community interest <sup>1)</sup> included in Habitats and/or Birds Directives.
1	More than 33% to 67% of total site area covered by habitats and/or species of Community interest <sup>1)</sup> included in Habitats and/or Birds Directives.
2	More than 67% of total site area covered by habitats and/or species of Community interest <sup>1)</sup> included in Habitats and/or Birds Directives.
3	Presence of habitats and/or species of priority interest (*) included in Habitats and/or Birds Directives.

<sup>1) &</sup>quot;of Community interest" = optional.



### Criteria 2 – Vulnerability of the habitats in the site

SCORE	DEFINITION
0	high ecological complexity high resilience low sensitivity
1	high ecological complexity medium/low resilience medium/high sensitivity
2	low ecological complexity medium/high resilience medium/low sensitivity
3	low ecological complexity low resilience high sensitivity

### Criteria 3 – Gravity of offences

SCORE	DEFINITION
0	No offences
1	Low offences
2	High offences
3	Criminal offences

Term	Explanation
Criminal offences	To be defined by MS
High offences	To be defined by MS
Low offences	To be defined by MS

### Criteria 4 – Conservation status of the site

SCORE	DEFINITION	
0	favourable	å



1	unfavourable - Inadequate when the conservation status of the site is unfavourable up to 25% of the area
2	unfavourable - bad when the conservation status of the site is unfavourable in more than 25% of the area
3	There is no information available

### Criteria 5 – Presence of activities with likely negative impact on objectives inside the Natura 2000 sites

0	Potential impact but no quantifiable threat.
1	Indirect impact with quantifiable threat to long term impact.
2	Mid-term impact and/or cumulative pressure.
3	Direct impact and/or current pressure.

# Criteria 6 a – Presence of activities outside the boundary of the Natura 2000 site which are likely to have a negative impact on the site – air

Score	Distance from Natura 2000 site boundary (km)
0	15 to 10
1	10 to 2
2	2 to 0.5
3	<0.5

# Criteria 6 b - Presence of activities outside the boundary of the Natura 2000 site which are likely to have a negative impact on the site – water

Score	Distance from Natura 2000 site boundary (km)
0	5 to 2



1	2 to 1
2	1 to 0.5
3	<0.5

# Criteria 6 c – Presence of activities outside the boundary of the Natura 2000 site which are likely to have a negative impact on the site – in combination

Score	Definition	
-1	No other activities within greatest emission distance	
0	Other activities that have no likely negative effect on objectives	
+1	Other activities within greatest emission distance which could have likely negative effect objectives	

### Criteria 7 – Changes in land use

SCORE	DEFINITION
0	There are no changes in land use (inside the Natura 2000 site and on the buffer zone).
1	The change of land use is nearby Natura 2000, inside the buffer zone, inside the Natura 2000 site but not on habitats of interest.
2	The change of land use is inside Natura 2000 site on areas of habitats of Community interest and/or habitats for species of Community interest.
3	The change of land use is inside Natura 2000 site on areas of priority habitats (*) and/or habitats for priority species (*).



### Criteria 8 – Presence of Management plan

SCORE	DEFINITION
-1	Site specific MP in place and the requirements of MP are followed.
0	General MP in place or under development and the requirements of MP are followed.
1	No site specific plan or general MP or MP in place but requirements are not followed.

### **Criteria 9 – Presence of Custodian**

SCORE	DEFINITION	
-1	The custodian activities positively effect the site.  The -1 is also used when it is determined that no custodian is required for the site.	
0	The custodian activities have no effect on the site.	
1	The custodian activities negatively effect the site.  The +1 is also used when it is determined that a custodian is required for the site but is not in place.	

# Criteria 10 – Presence of activities with likely favourable impact on conservation objectives inside Natura 2000 sites (number of habitats and/or species listed in SDF chapter No. 3.1. and 3.2.)

SCORE	DEFINITION
-1	Likely favourable impact on habitats and/or species.
0	No favourable impact on habitats and/or species.



+1	Not applicable

### Criteria 11 – Overlap of N2K with other national and/or international sites

Initial question: in your country does the overlap of N2K with other national and/or international sites means equal/more/less protection of the N2K site?

- Equal protection: criteria does not apply;
- More protection: apply subtable a);
- Less protection: apply subtable b).

### Subtable a) – overlap of N2K with other national sites means more protection of the N2K site

Score	Definition	
-1	Bigger than 67 % to 100 % overlap of N2K with other national and/or international sites	
0	67% to 33 % overlap of N2K with other national and/or international sites	
+1	Smaller than 33 % to 0 % overlap of N2K with other national and/or international sites	

### Subtable b) – overlap of N2K with other national sites means less protection of the N2K site

Score	Definition	
-1	Smaller than 33 % to 0 % overlap of N2K with other national and/or international sites	
0	67% to 33 % overlap of N2K with other national and/or international sites	
+1	Bigger than 67 % to 100 % overlap of N2K with other national and/or international sites	

It is important to point out that not applying all of the criterion is allowed (for example, in cases where the data is not available) and the final result is unaffected by the omissions and is still viable.

More detailed information on the "Integrated Risk Assessment Method (IRAM) – further developed to IRAM for Nature (NIRAM)" and the criteria can be found in the Annexes II and III to this report.



### 2.2 Template Nature Inspection Tasks

The criteria and the respective scoring were filled into the NIRAM tool. This is the task of the coordinator. Figure 1 shows the screenshot of the NIRAM template with the criteria "presence of habitats". The whole template with all criteria is shown in Annex IV. (From criteria 8 on the template in Annex IV still has the expression "operator performance criterion" on the left side instead of "probability criteria". This is due to the fact that during the adaptation of IRAM to NIRAM no programming work was carried out.)

Short step-by-step description of access to the IRAM-Tool:

- 1. Go to homepage of the European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL), <a href="https://www.impel.eu/">https://www.impel.eu/</a>
- 2. Enter IRAM under the SEARCH function of the IMPEL website
- 3. Click on "Risk criteria database (IRAM)" among the search results https://www.impel.eu/?s=IRAM
- 4. In the text about the Risk criteria database (IRAM) you click the button "GO TO TOOL" <a href="https://www.impel.eu/tools/risk-criteria-database-iram/">https://www.impel.eu/tools/risk-criteria-database-iram/</a>
- 5. IRAM website opens (<a href="https://www.fms.nrw.de/lip/authenticate.do">https://www.fms.nrw.de/lip/authenticate.do</a>)
  Here you find all general and specific information on the tool. For working with the tool you have to register. More detailed information can be found in Annex II.



Template Inspection Tasks	
Inspection task	Koordinator: Werner Möhring-Hüser
Name of the inspection task	Nature Inspection (Report number: 2018/14)
Minimum number of highest score	4
Lowest risk category	1
Highest risk category	3
Show Integrated Risk Assessment Method	∠ Linear Mean Value Method     ∠
inspection task inactive	
Language	EN
Impact criteria	
Impact criterion	Presence of habitats and/or protected species
Maximum possible score	3
Description of the criterion	
	6 of total site area covered by habitats and/or species abitats and/or Birds Directives.
Value 0	



### Template Inspection Tasks

value Included in Habitats and/or Birds Directives.	
Value 1	
Description of the value  More than 67% of total site area covered by habitats and/or species included in Habitats and/or Birds Directives.	
Value 2	
Description of the value  Presence of habitats and/or species of priority interest included in Hamand/or Birds Directives.	abitats
Value 3	
Shift of score (weight)	
Inspection weight 1	

**Figure 1:** Screenshot of the NIRAM template with the criteria "presence of habitats"



### 3. Application of the NIRAM tool – inspection frequency of selected sites

Before carrying out the assessment of an individual site with NIRAM the inspector/surveillance officer - (explanation: In some MS different services are authorized for surveillance. For example in Croatia, Rangers are also authorized to carry out inspections in Natura 2000 sites) - has to collect the information on the site. As stated before, omission of individual criteria is possible to suit the MS, without affecting the final result. Increasing knowledge about the site will improve over time so that the next assessments can be carried out based on improved information.

### 3.1 Inspection frequency of Delta Neretve (Croatia)

### 3.1.1 Preparatory work

The Natura 2000 site HR 5000031 Delta Neretva in Croatia was selected for testing. Significant work and information was needed to evaluate the proposed criteria. This site includes several natural protected reserves (ornithological) and overlaps with a Ramsar site (conservation of wetlands). Historically, traditional fishing and hunting occurred and the recent population tries to continue with these activities. The geographical position is also very interesting because it connects the middle and southern parts of Croatia (strategically important for traffic development), and its vicinity to the border with the neighbouring state of Bosnia and Herzegovina. Agriculture is also very intensive and its land use is noted as having a significant impact on biodiversity.

The majority (approx. 80 %) of the information needed for the assessment of the criteria was obtained from the Standard Data Form (SDF), the remainder (approx. 20 %) was obtained from the Ranger service, Nature Protection Inspectors and experts services (biologists), who are authorised to work in the area which includes the tested Natura 2000 site.

The following presentation provides the available information about the site.



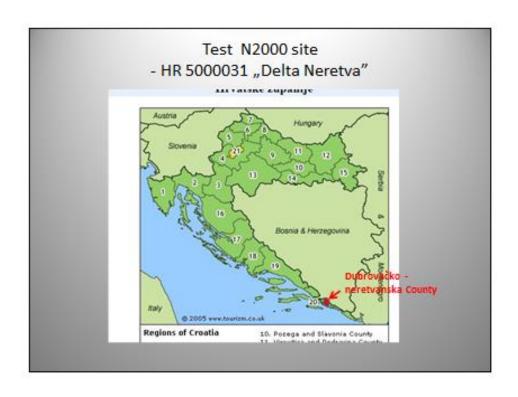
### Preparatory work - data collection

Development of a planning tool concerning inspection of Natura 2000 sites (using the NIRAM-Tool)

-test of the NIRAM criteria — site HR 5000031- "Delta Neretve"

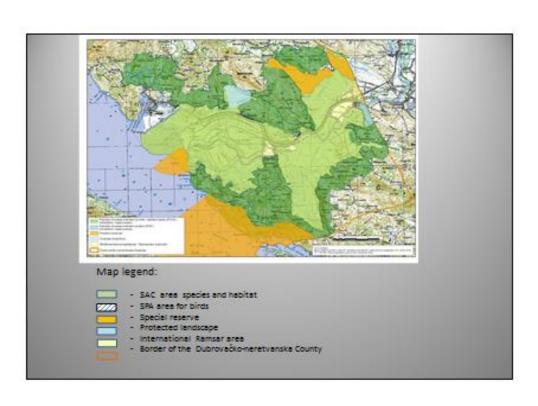
Katica Bezuh, Nature Protection Senior Inspector Ministry of Environmental Protection and Energy REPUBLIC OF CROATIA

Zwolle, NL, 27-28 September 2018











### General data about test site: HR 5000031- "Delta Neretva" (1)



- Total area of the Dubrovačko-neretvanska (DN) County 178.261,18 ha
- Area of land N2000 in DN County 100.873,55 ha 56,59 % of N2000 from total land area
- Area of Marine N2000 in DN County- 149.985,5 ha

### Other information:

- Public Institution DN County manage with 85 SAC and 5 SPA
- In total: 38 protected areas (10 special reserve, 6 natural monument, 8 protected landscape, 5 park forest, 8 monument of park architecture,
- PI has 8 employees-only one ranger (1 inspector MoEE)
- Surveillance not able to cover all territory
- HR5000031 Delta Neretve (SAC) and HR1000031 Delta Neretve (SPA)
- overlap-International Ramsar area migratory route for birds, nesting, feeding, wintering place
- Overlap national PA (5 protected areas -1620 ha): 2 ornithological reserve; 1 ichtio-ornithological reserve, 2 landscape



The Neretva Delta is one of the most valuable wetlands in this part of Europe

### General data about test site: HR 5000031- "Delta Neretva" (2)

- Negative history of nature conservation in Delta Neretva
- "black point" for illegal killing of birds (100 years traditional hunt)
- . Illegal fishing-traditional food-eels, frogs, other
- Seasonal cutting and burning of reed (nesting for birds species)
- · Illegal melioration drainage of wetlands for agriculture
- Intensive agro tecnick, chemicals-herbicide and pesticide
- Use of fertilizer (chemical)
- Touristic events in delta (kite-surfing, paragliding, party-loud music, fireworks, local ethno manifestations)
- · Legal hunting and fishing area

### Outside influence

- Vicinity of state border with B&H, cross border impact (dam on the hydroelectric plant)
- vicinity of the construction site of highway to Dubrovnik and the construction site of Pelješac bridge
- the main road from Republic of Montenegro to EU countries



# First action: • on December 6, 2017 two poachers are caught in coordinated action (ambushed) carried out by police, inspector, ranger and activist from NGO • One poacher was poaching in the Special Reserve for birds where hunting is forbidden • the poacher had a hunting rifle and few hunted birds in possession • poacher was noticed a little earlier as poaching on the rugged terrains in artificial pond-made for luring birds • other person is arrested in action carried out by police at the Delta of the Neretva outside the hunting area (N2000)





### Substantiated complaints/incidents/accidents(2)

### Second action:

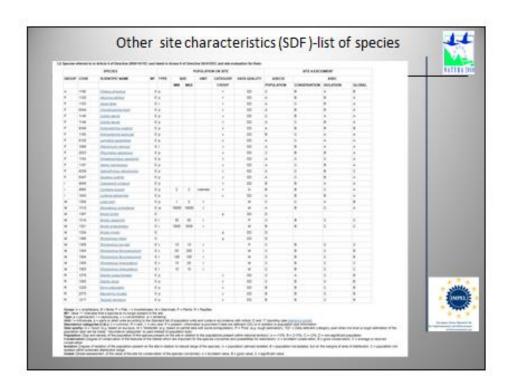
- on December 7 and 8, 2017, ranger and the other employees of the PI carried out the action of <u>removing</u> <u>illegally placed objects</u> in special ornithological reserves in vicinity of the Neretva River (Decision of Inspector).
- objects were located along the illegally formed ponds, to which the birds go to feed and rest
- The purpose of these object: hunting facility where a hunter is hiding and lurking on birds- None of the hunters has confirmed that he has made these illegal objects
- there were a significant number of hunting cartridges (bullets) and plastic decoys, gunshots were regularly recorded

Against the poachers police submit criminal charges!





# Other Site characteristics (SDF) Habitat types There are 15 habitat types- 2 priority types 1150 Costal lagoons 6220 Pseudo-steppe with grasses and annuals of the "Thero- Brachypodietea" Priority species (1 priority species) Proteus anguinus (Cave salamander)





### Other Site characteristics (SDF) - threates

cope	DESCRIPTION	TYPE	RANK	POLLUTION	OCCURENCE
100	modification of cultivation practices	14	**		1
AGT	use of brookles, hormones and chemicals	N.	11		b
A06	Pertituation	N	M		6
100	Roads paths and redroads	N.	M		1
801	Urbanised areas, human habitation	N	W		V.
600	Discharges	N.	M		1
F02	Fishing and harveying aquatic ressources	16	14		b
HOS	Polution to surface waters (Immi: & terrestrial)	10	M		0
H05.01	gartiage and solid weste	16	M		6
99	myssive non-native species	N	11		1
,60	human induced changes in hydrautic conditions	11	16		b

### Other Site Characteristics (SDF) -general

- The Neretva River and its tributaries comprise the largest complex of wetland habitats in the Croatian coastal zone, with well-developed coastal and other wetland vegetation (floating and submerged). The Neretva Delta has many lagoons, shallow sandy bays, low sandy shores, sand flats, salt beaches, etc. Though a large area of the wetland habitat has been transformed into agricultural lands, due to the branching network of channels, these areas are still important habitats for aquatic birds and a very important habitat which great. The delta, lagoons and braddish waters are an exceptionally important habitat which greats from for the intensive growth of fin; which later spend their life cycle in the sea or fresh water. Furthermore, these areas are important for the migration of anodromous and catadromous fish species. With a large number of endemic species and greet diversity, the mouth of the Neretva River is one of the most interesting areas of Croatia.
- There are three ornithological Special reserves in the area (Orepak, Pod gredom and Prud), ichthyological and ornithological Special reserve (Neretva Delta) and two Significant landscapes (Modro oko and Lake Desne, Predolac – Sibenica). Neretva River Delta is designated as internationally important wetland under the Convention on Wetlands (Ramsar, 1971).
- Lithostratigraphic units represented in this area are rudist limestones (cenomarian-masstricht-K21-6), marsh deposits (b-bQ2), limestone and dolomite (lower cetaceous K1), alluvial sediments (b-aQ2), etc. Soils are hydroameliorated, low peat, limestone and dolomite black soil, brown soil on limestone. Neretiva River and its delta is dominated at this area; delta area is composed of three triangular extensions that are tectonically predisposed, it was created as a result of tectonic movements during the last orogenic phases; delta took current form after the transgression of sea 10 000 years ago.



### Quality and Importance (SDF) - general

- this area contains a high diversity of water habitats, the delta, lagoons, brackish waters, network of channels springs, streams with reophilic characteristics and lakes that are inhabited with almost 20 fish species endemic to Adriatic basin
  - one of two important sites for endemic species Squalius svallize
  - -freshwater habitats with reophilic characteristics are important for Salmothymus (Salmo) obtusirostris
  - -freshwater habitats with reophilic characteristics and oligotrophic lakes as the Lake Modro Oko are important for Salmo marmoratus with up to 60% of total Croatian population, this is only important site for that species
  - brackish habitats of the site are important for Pomatoschistus canestrinii and Knipowitschia panizzae
  - one of two sites important for reproducing of Petromyzon marinus
  - one of two sites important for Lampetra zanandraei, endemic lamprey, it is inhabited with 30-40% of
  - one of three sites important for Knipowitschia croatica
  - only important site for endemic species Chondrostoma knerii with the 100% of Croatian population
  - only important site for Alosa fallax, important for reproduction
  - only important site for endemic species Alburnus neretives (syn. Alburnus albidus) with the 100% of Croatian population
  - only important site for endemic species Cobitis narentana (syn. C. taenia) with the 100% of Croatian population
  - smaller area the Bacina Lakes included in the site Delta Netetve is important for Cobitis illyrica (syn. C. teenie)
  - Delminichthys adspersus inhabits Bacinska jezera
  - important site for herpetofauna species Elaphe quatuorlineata, Zamenis situla, Emys orbigularis,
  - Mauremys rivulate and Testudo hermanii
  - southernmost site of distribution of Lutra lutra

### Quality and Importance (SDF) - general

- site is important for \$310 Gayes not open to public -area important for Congona Russon, the only living underground bivalue in the world - species a found in altegether 7 localities in Octa Norths site - two colonies (Jama v Predelou Pessing more than 72 000 individuals and Puketina viturely polic Jeson - Pessite Blate), one locality where only individual live specimens were found (tever Spilja ked Rapelice) and four localities with only dead shells; five new underground taxa found and scientific described (Cyphopidialmus nerolvanus, Trichoniscus matulici, Emmorio a narontana, Roncus narontana, volhooffi); Alpionisaus herold known from seven localities of South Creatia, distribution area also in Hersegovinia, Sexurinator brandti known from five localities of South Creatia
  - this is one of on two sites important for the conservation of Coonagrion ornatum in the Mediterranean Siegeographical
  - Bossuss of the large population (see, 40% of the national population) the site is of great importance for the conservation of Lindonia totraphylla in Crostia
  - the largest Minieptorus schrobesii hibomation edony in the meditoranean biogeographical region in Creatia
  - and of the 34 underground sites with 10,000 or more bats recorded in Europe
  - internationally important undergorund site for Minolophus forum quinum (nusery, migration), Myetis emarginatus (nursery, migration) and Minioptorus schroibosii (Nibonation)
  - the southernmost known Myotis capaconii nursery
  - important for Khinolophus hipposidores nursely and migration
  - inologhus curyale summer roost

  - important site for Meditoranean salt meadows (Junestalia mantim)
     important site for Meditoranean and thorno-Atlantic halophilous scrubs (Sarcocometes frutices) and Salicomia and other annuals colonising mud and sand; these two habitat types occure together on the site, with Saleomia represented in much
  - the area is considered to support a synficent

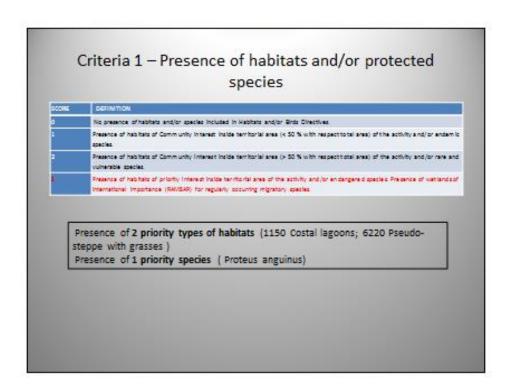
  - presence of Costist legions
     important site for 330 hebitat type, with some plant communities known only from the part of Crostis; estimated area of this HT includes water bodies where it occurs along the water odges and over the take bottom when water withdraws.
  - important site for habitat type 6240

  - one of the best areas for 9,200 Southern neanan gallenes and thickets (None-Tamaneetes and Securing) on treatment in

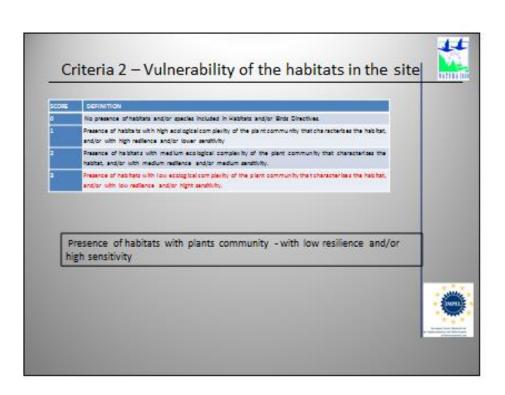
  - important site for Mudflats and sandflats not
  - covered by seawater at low tide

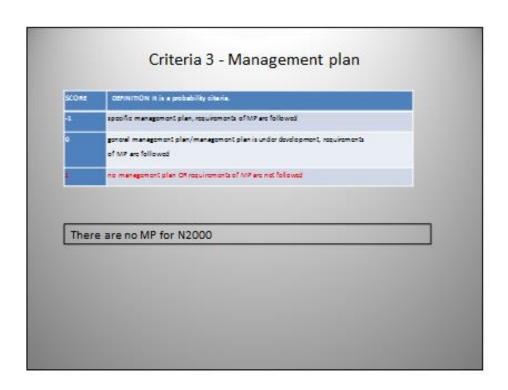


## NIRAM Criteria -test of HR 5000031

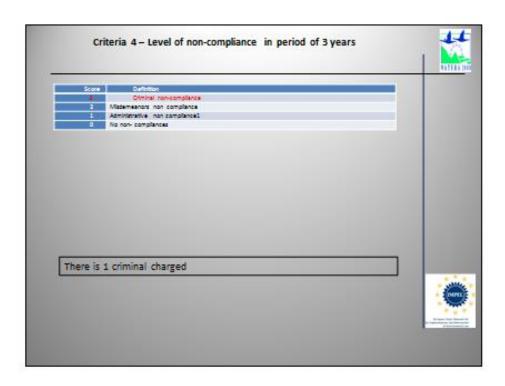


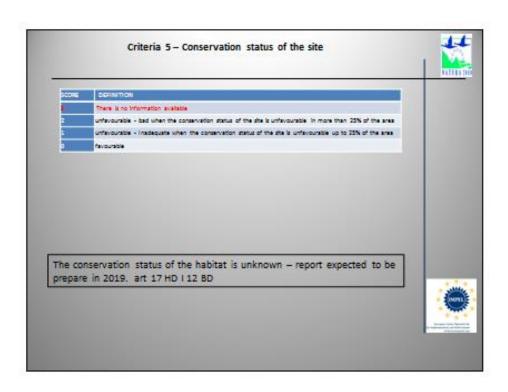




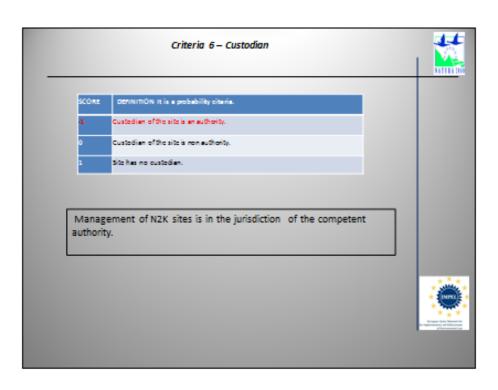


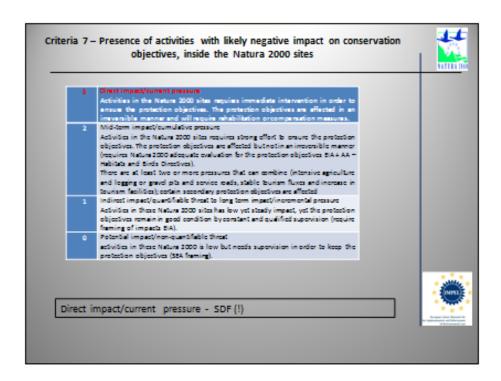














Criteria 8a / 8b 8c - Presence of activities outside the boundary of the Natura 2000 site which are likely to have a negative impact on the site conservation objectives—air quality / water quality and water resources

• Criteria 8a - air emission

Activity likely to have negative impact on N2K?

Air amissions

Scene Distance from N2K boundary (km)

1 10 to 10

1 10 to 2

2 10 0,5

3 10 5

Criteria 8a / 8b 8c - Presence of activities outside the boundary of the Natura 2000 site which are likely to have a negative impact on the site conservation objectives—air quality / water quality and water resources

Criteria 8b – water emission



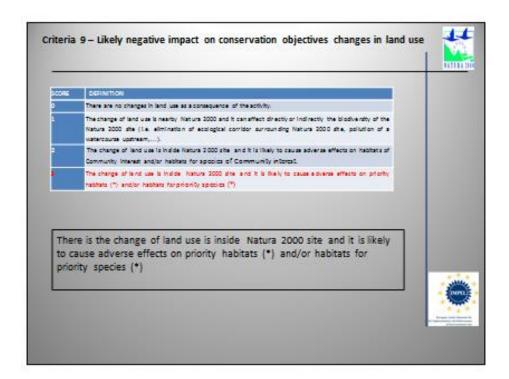
There are likely negative impact Water emission on N2K in 2-0,5 km ( settlements, fertilizers, ...)



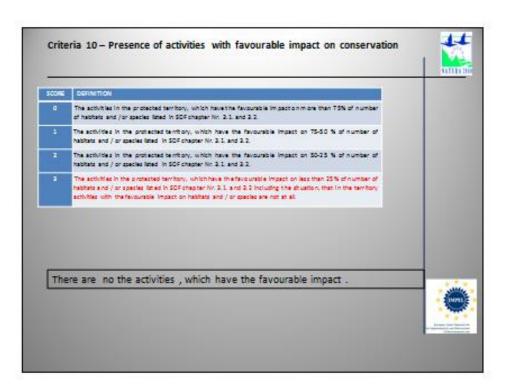
Criteria 8a / 8b 8c - Presence of activities outside the boundary of the Natura 2000 site which are likely to have a negative impact on the site conservation objectives—air quality / water quality and water resources

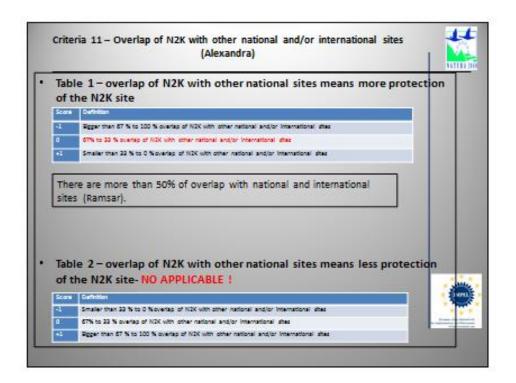
• Criteria 8c — Likelihood of in combination impacts

| Same | Compact | Compa

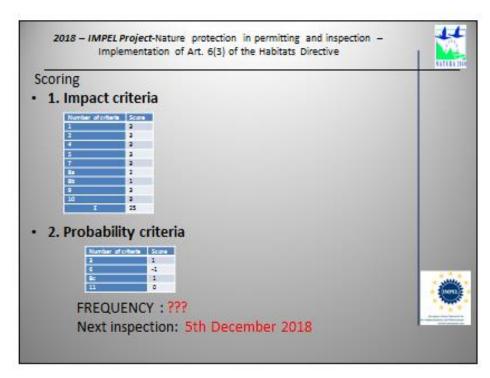












### 3.1.2 Inspection frequency for the Neretve Delta as result of using NIRAM

The main goal of a risk assessment is to prioritise the workload for an inspecting authority. The result of an assessment is an accurate inspection frequency of Natura 2000 sites.

In conclusion, the result of NIRAM testing model showed that the determined inspections frequency is one year, which reflects the fact that Neretve Delta is an area in Croatia with the highest risk and should be inspected with the highest effort.

The following pages show the screenshots of the completed NIRAM template for the Neretve Delta.



Status: in use

Assessment done by	Horst Büther			
Inspection object	Delta Neretve		ID DI	11-1
	h			
Inspection task	Nature Inspection 8a			1
Date of inspection planning	27.10.2018	Date of last inspection		15.12.2017
Address data				
Street				
Postal code	Location			
Input of Impact Scores				
Impact criteria				
		Maximum score	Score	Shift of score (weight)
Presence of habitats and / or pr	otected species	3	3	0
Vulnerability of the habitats in the	ne site	3	3	0
Level of non-compliance		3	3	0
Conservation status of the site		3	3	0
Activities inside with negative in	npact	3	3	0
Activities outside with negative	impact on air quality	3	2	0
Changes in land use		3	3	0
Activities with favourable impac	t	3	3	0
Activities outside with negative	impact on water quality	/3	1	0
Minimum number of	Lowest ris		Highest	la
highest score 4	category	1	category	3



Status: in use

Assessment done by	Horst Büther				
Inspection object	Delta Neretve			ID DN	1-1
Inspection task  Date of inspection planning	Nature Inspection 8		st inspectio	n	15.12.2017
Date of inspection planning	27.10.2010	Date of la	ist ilispectio	"	15.12.2017
Input of Operator Performance	e Scores				
Operator performance criter	ia				
		v	Veight of cri	teria	Score
Management Plan		1			1
Custodian		1			-1
Overlap of N2K with other nati	onal and/or internation	nal 1			0
Likllihood of in combination impacts		1			1
Mean of operator performance					lo
					<u> </u>
Risk Scores and Inspection P	rofile				
Impact criteria				Inspection	Inspection
		F	lisk profile	weight	profile
Presence of habitats and / or p	rotected species	3	<u> </u>	1	3
Vulnerability of the habitats in t	the site			1	3
Level of non-compliance		3		1	3
Conservation status of the site		3		1	3
Activities inside with negative i	mpact	3	<u> </u>	1	3
Activities outside with negative	impact on air quality	2	<u>!</u>	1	2
Changes in land use		13		11	3

Activities with favourable impact

Activities outside with negative impact on water quality



Status: in use

Assessment done by	Horst Büther		
Inspection object	Delta Neretve		ID DN1-1
Inspection task  Date of inspection planning	Nature Inspection	on 8a/8b Date of last inspection	15.12.2017
Disk sanking number			J  333333321
Risk ranking number Highest risk score			3
Number of highest risk scores	3		7
Risk category			3
Inspection frequency			12
Latest inspection date			15.12.2018
Maximum inspection effort (10	00%)		27
Sum of inspection profile			24
Inspection effort (percentage)			88 %
Inspection category			D
Sum of risk profile			24
Mean of risk profile			2,7
Remarks			
Criteria 8a and 8b are separated	d		

Table 3: Results of the assessment of the inspection frequency for Neretve Delta by using the NIRAM tool.



#### 4. Conclusions on the development of NIRAM

The work of developing a Natura 2000 risk assessment tool began with two questionnaires, sent to MS with a purpose to identify other methodologies to determine the frequency of inspections and to verify the need for the tool.

Results of the questionnaire clearly indicated the need for such tool from all participating countries, and differing approaches where identified for supervising Natura 2000 sites (Final report 2017/19 part 2, Roadmap for a planning tool, 2018)<sup>5</sup>.

Based on that knowledge it was decided to use an existing approach, the IRAM tool developed under the IMPEL project 2011/5 "easyTools - Risk Assessment Guidance Book" (adopted by IMPEL in June 2012)<sup>6</sup>.

Adjusting the IRAM tool that was developed for the risk based assessment of the inspection frequency of industrial installations to other inspection tasks allows the IRAM rules and principles to be used for nature inspection.

Experience from the assessment of different sites showed that inspectors had not complete information to assess all criteria. If for one or more criteria data are not available, inspectors should try to work at the beginning without it and collect necessary data continuously so that increasing knowledge about the site will improve over time and then the next assessments can be carried out based on improved information. It is important to reiterate that not applying all of the criterion is allowed (for example, in cases where the data is not available) and the final result is unaffected by the omissions and is still viable.

Agreement on criteria has been challenging due to differences between MS practices. The work in one authority/inspection body should be done with a set of fixed criteria, and it is recommended that all criteria are attempted in the first instance. However, the tool is flexible and can be adjusted to different needs.

The previous NIRAM tool test phases for the assessment of Natura 2000 sites indicated that it is applicable for the purpose of establishing a multiannual inspection program for authorities.

 $<sup>^{5} \, \</sup>underline{\text{https://www.impel.eu/wp-content/uploads/2016/02/FR-2017-19-Habitats-Directive-Project-part-2-Roadmap-for-a-planning-tool.pdf}$ 

<sup>&</sup>lt;sup>6</sup> https://www.fms.nrw.de/lip/download/IRAM\_Guidance\_Book.pdf



#### 5. Feedback from participating IMPEL member states

In **Latvia**, July 2018, the current state of the inspection planning tool and results so far were presented to inspectors and directors of the inspectorate. The feedback was very positive and all showed significant interest in the results of the project.

Mid October 2018 the basic principles and the current state of inspection planning tool for Natura 2000 sites were presented during the annual national IMPEL network meeting in **Portugal**.

**Slovenia** proposed to be the host for the workshop of the IMPEL project in 2019 and to provide information on Slovenian sites to be assessed during the meeting. Based on the results of the 2018 project the workshop shall provide a sort of training for NIRAM users.

Further steps such as training of inspectors in different MS and translation of basic documents on NIRAM are necessary in future.

#### 6. Recommendations for future IMPEL work

The applicability of NIRAM has to be substantiated through tests and practical work. To achieve these objectives its aim will be to improve the proposed criteria and to adjust the first version of the NIRAM tool to manage the frequency of inspections of Natura 2000 sites. It was proposed that Slovenia hosts the testing of NIRAM on Natura 2000 sites in 2019.

The joined inspections of two Natura 2000 sites will explore the applicability of the tool and if it is fit for purpose.

The project will also explore the possibilities for storing data collated through inspections over the long term in order to be used by inspection authorities for the purposes of evidence and long term trends in nature protected sites change.

In 2020 IMPEL will provide training for NIRAM administrators, coordinators and inspectors in different IMPEL member countries.



# Annexes



#### Annex I. Terms of Reference of IMPEL project 2018/14

TOR Reference No.:	Author(s): Gisela Holzgraefe and project team	
Version: 1.0	Date: 10.2017, Project	
TERMS OF REFERENCE FOR WORK UNDER THE AUSPICES OF IMPEL		

#### 1. Work type and title

1.1 Identify which Expert Team this needs to go to for initial consideration		
Industry		
Waste and TFS		
Water and land		
Nature protection	₩	
Cross-cutting – tools and approaches -	₹	
1.2 Type of work you need funding for		
Exchange visits	✓	
Peer reviews (e.g. IRI)	No.	
Conference	E	
Development of tools/guidance	▼	
Comparison studies		
Assessing legislation (checklist)		
Other (please describe):		
(F	hand	
1.3 Full name of work (enough to fully describ	oe what the work area is)	
Inspection of nature protected sites - Development of an easy and flexible tool as a part of the planning of inspections of Natura 2000 sites linked to European environmental law and the RMCEI (including the option of using the IRAM-Tool)		
1.4 Abbreviated name of work or project		
Development of a planning tool for inspections of nature protected sites with focus on Natura 2000 sites		

#### 2. Outline business case (why this piece of work?)

# 2.1 Name the legislative driver(s) where they exist (name the Directive, Regulation, etc.) Habitats Directive, Council Directive 92/43/EEC of 21 May 1992 Birds Directive, Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009

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Action Plan for nature, people and the economy COM(2017)198

2.2 Link to IMPEL MASP priority work areas

1. Assist members to implement new legislation

2. Build capacity in member organisations through the IMPEL Review Initiatives

3. Work on 'problem areas' of implementation identified by IMPEL and the European Commission

2.3 Why is this work needed? (background, motivations, aims, etc.)

#### A. Motivations

#### Decline in EU biodiversity

The alarming decline in Europe's biodiversity has driven the adoption, by the European Union (EU) of two key pieces of legislation — the Habitats and Birds Directives — to conserve Europe's most valuable species and habitats across their entire natural range within the EU.

The Birds and Habitats Directives are central to achieving the EU 2020 target of halting and reversing the loss of biodiversity endorsed by Heads of State and Government. The Commission has adopted an ambitious strategy to achieve this objective, comprised of six targets. Target 1 of this Strategy is focused on "Full implementation of EU nature legislation to protect" biodiversity and requires a significant improvement in conservation status. The implementation of EU nature legislation also contributes significantly to other targets of the biodiversity strategy, including in relation to green infrastructure and restoration under Target 2.

The Action Plan for nature, people and the economy COM(2017)198 points out that key factors behind the shortcomings in the implementation of the Nature Directives are i.a. "limited resources, weak enforcement, poor integration of nature objectives into other policy areas, insufficient knowledge and access to data." The development of an IT tool as a part of the planning of inspections of nature protected sites will provide a systematic approach which would maximize resources into key areas of concern.

Development of an easy and flexible tool as a part of the planning of inspections of Natura 2000 sites linked to European environmental law and the RMCEI

(including the option of using the IRAM-Tool)

During the Green Expert Team Meeting in Trogir (Croatia) 19 – 21 September 2016 the need for a planning tool for inspections of nature protected sites was identified. The discussion showed that it is a complex item. Therefore the roadmap for its development became part 2 of the IMPEL project 2017/18. The development of the tool itself is planned for 2018.

#### Background and input from other IMPEL projects:

So far, European nature conservation legislation does not regulate inspection activities concerning nature protected sites. In 2001, recognising that there was a wide disparity between inspection systems in the Member States, the European Parliament and the Council adopted Recommendation 2001/331/EC providing for minimum criteria for environmental inspections in the Member States (RMCEI). The RMCEI contains non-binding criteria for the planning, carrying out, following up and reporting on environmental inspections. The RMCEI says that inspection activities should be planned in advance and recommends a systematic approach (inspection plan and program). In section 2.1 the RMCEI highlights that it does not include criteria for the inspection of Natura 2000 sites and it encourages IMPEL to develop such criteria. This IMPEL project intendeds to provide such criteria and an IT tool as part of the planning of inspections of nature protected sites in the member



states. One option might be to adjust the already existing IRAM-Tool to the needs in this field.

IRAM (Integrated Risk Assessment Methodology) tool is a method for assessing the frequency of regulatory/compliance visits to industry. The project intends to evaluate different methods and find out whether the IRAM tool could be expanded out of its current remit to include a risk based approach to the frequency of visits to nature protected sites, including Natura 2000 sites.

IMPEL's Strategic Work Programme 2016-2020 presents background information and the key priorities, in line on the 7th EU Action Programme to 2020 "Living well within the limits of our planet" (Decision No 1386/2013/EU). According to both documents a key element for the improvement of shortcomings in the implementation of environmental requirements is an effective system of inspections and surveillance. The development of an IT planning tool for inspections is in line with both programmes. Benefits will be:

- a) relief for the daily work of authorities
- b) transparency
- c) simplified approaches to maximize resources.

#### B. Background

From 2013 on IMPEL has worked on a projects in the field of "Nature protection in permitting and inspection". 2014, 2015 and 2016 the main focus was on "Nature protection in permitting and inspection of industrial installations - implementation of Art. 6(3) of the Habitats Directive" In 2017 the IMPEL project concentrated on the development of a guidance document for environmental and nature protection inspections of quarries and open cast mining in or near Natura 2000 sites.

During the Green Expert Team Meeting in Trogir (Croatia) 19 – 21 September 2016 the need for a planning tool for inspections was identified. Planning of inspections is one of the key factors to make inspection more transparent, systematic and effective. Criteria how often Natura 2000 sites should be inspected to ensure sufficient inspection and to contribute to the maintenance of the favourable status of the site are various and differ from country to country. The project team agreed on a two-step approach:

- a) setting up a roadmap for the development of a planning tool for inspections of nature protected sites in 2017 and
- b) development of the tool itself from 2018 on.

#### C. Aim

The main objective of this project is to contribute to the continuing development of capacity within IMPEL, to the gather forces and to share experience between MS to assure proper implementation and enforcement of the Nature directives and to promote nature conservation.

To achieve such objective the project team proposes an IMPEL follow-up project in 2018. Its aim is to define criteria and to build a tool to manage frequency of nature protected site visits (including Natura 2000 sites). If possible, the tool will also store data collated through inspections over the long term in order to be used by inspection authorities for the purposes of evidence and long term

Template for IMPEL TOR - Final version: 07.08.2014



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trends in nature protected sites change. The option of using the IMPEL IRAM-Tool is included. If it turns out that the IRAM tool is not the right tool for the purpose, the aim can only be achieved by using a multi-annual approach. The timeline would be the following:

- Project 2018 will:
  - Map out detailed 'asks' of the tool
  - Definition of a fixed set of criteria
  - Create clear, detailed schematic of the tool and what is required.
  - Identify source and level of funding available for development.
  - Shortlist suitable specialists for IT development phase.
  - Identify successful developer and have initial conversation about the tool and what is required.
  - Identify any challenges or pitfalls in development as well as identify developer timescales
- Project 2019 will:
  - Start of phase 1 of tool being developed
  - Trial of phase 1 tool by project group and feedback to developer for changes
  - Start of phase 2 of tool being developed
  - o Trial of phase 2 tool by project group and key member states
  - Feedback to developer for final changes and go ahead for phase 3 (final) development stage.
- Project 2020 will
  - o Agree final format of the tool based on changes in phase 3.
  - Develop user manual to accompany the tool.
  - Roll out tool across member states.
  - Raise profile of the tool roll out through IMPEL communication channels.
- Project 2021 will:
  - Gather feedback from users and identify needs for improvement and further recommendations for the tool.

Interim reports of progress, key successes and failures will be provided at the end of each project year and a final report at the end of tool development highlighting successes, failures, feedback and lessons learned.

#### 2.4 Desired outcome of the work (what do you want to achieve? What will be better / done differently as a result of this project?)

In project phase 2018:



40-1-1

Exchange of experience concerning the frequency of inspections of nature protected sites (including Natura 2000 sites), the planning and definition of a set of criteria.

Identification of source and level of funding as well as finding an IT developer,

Identify challenges and pitfalls in development and definition of the timeline for the developer.

For the development of a common understanding and sharing as well as spreading knowledge an interim report will be produced. The results will be available for all interested parties.

#### 2.5 Does this project link to any previous or current IMPEL projects? (state which projects and how they are related)

- 2013: "Nature protection in permitting and inspection"
- 2014: "Nature protection in permitting and inspection of industrial installations Implementation of Art. 6(3) of the Habitats Directive" – general overview
- 2015: "Nature protection in permitting and inspection of industrial installations Implementation of Art. 6(3) of the Habitats Directive" evaluation of the Guidance Document "Wind energy developments and Natura 2000" and development of a Sector specific guidance document on Article 6(3) HD in permitting of farm projects (pigs and poultry).
- 2016: Nature protection in permitting and inspection of extractive industry (quarries and open cast mining) – Implementation of Art. 6(3) of the Habitats Directive
- 2017: Nature protection in permitting and inspection: Implementation of Art. 6(3) of the HD -
- (1) inspection of non-energy extractive industry (quarries and open cast mining), and
- Roadmap for a planning tool concerning inspection of Natura 2000 sites (including the option of using the IRAM-Tool)

#### 3. Structure of the proposed activity

#### 3.1 Describe the activities of the proposal (what are you going, to do and how?)

Working with a core team for the preparation of the project activities,

Invitation of experts concerning inspection of nature protected sites (including Natura 2000 sites) to a workshop for

- Identification of a set of criteria that can be used for the IT tool and definition of frequencies
- The check whether the IMPEL IRAM tool might be an option.

Identification of an IT developer for the adjustment of the IRAM tool or development of a new tool. Preparation of the documents / outputs of the project phase 2018.

### 3.2 Describe the products of the proposal (what are you going to produce in terms of output / outcome?)

Defined frequencies for inspection of nature protected sites,

A set of criteria that can be used for the IT tool,

Decision on kind of IT tool (IRAM or not),

Amount of resources needed for the development of the tool.

Timeline for the IT developer,

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#10-inances/ips

## 3.3 Describe the milestones of this proposal (how will you know if you are on track to complete the work on time?)

January 2018: identification of core team members

February to May 2018: identification of contributors to the project

March 2018: first core team meeting

April 2018: invitation for the workshop to MS

End of June 2018: workshop with experts
August 2018: second core team meeting

September 2018: draft final report for green expert team

November 2018: submission of the draft interim report to GA

# 3.4 Risks (what are the potential risks for this project and what actions will be put in place to mitigate these?)

#### 4. Organisation of the work

### 4.1 Lead (who will lead the work: name, organisation and country) – this must be confirmed prior to submission of the TOR to the General Assembly)

Overall responsibility:

Project Manager: Gisela Holzgraefe, Ministry for Energy Transition, Agriculture, Environment, Nature and

Digitalisation of Land Schleswig-Holstein, Germany

Project Co-Manager: t.b.d.

#### 4.2 Project team (who will take part: name, organisation and country)

8 countries:

Germany, Portugal, Slovenia, Croatia, Latvia, Romania. Spain and England

#### 4.3 Other IMPEL participants (name, organisation and country)

t.b.d

#### 4.4. Other non-IMPEL participants (name, organisation and country)

t.b.d

e.g. ENCA, Habitats Committee, ORNIS Committee, JASPERS, Working group for Appropriate Assessment procedure. Working group on EIA (Espoo Convention) and SEA (Kyiv Protocol), possibly others with experience in the use of different planning tools, e.g. IRAM



# 5. High level budget projection of the proposal. In case this is a multi-year project, identify future requirements as much as possible

	Year 1 (exact)	Year 2	Year 3	Year 4
How much money do you require from IMPEL?	17 270 €			
How much money is to be co-				
financed	-			
Total budget	17 270 €			

#### 6. Detailed event costs of the work for year 1

	Travel € (max €360 per return journey)	Hotel € (max €90 per night)	Catering € (max €25 per day)	Total costs €
Event 1				
First core team meeting,	6 x 360 € =	540 €	150 €	2 850 €
March 2017,	2 160 €			
Location t.b.d.				
6 participants				
2 days, 1 night				
Event 2				
workshop	18 x 360 € =	3 240 €	1 350 €	11 070 €
June 2017	6 480 €			
Location t.b.d.				
18 (6 core team plus 12				
experts)				
3 days / 2 nights				
Event 3				
second core team meeting	2 160 €	540 €	150 €	2 850 €
September 2017				
Location t.b.d.				
6 participants				
2 days, 1 night				
Event 4				
<type event="" of=""></type>				
<data event="" of=""></data>				
<location></location>				
<no. of="" participants=""></no.>				
<no. days="" nights="" of=""></no.>				
Total costs for all events	10 800 €	4 320 €	1 650 €	16 770 €

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#### 7. Detailed other costs of the work for year 1

7.1 Are you using a consultant?	☐ Yes ✓ No
7.2 What are the total costs for the consultant?	-
7.3 Who is paying for the consultant?	-
7.4. What will the consultant do?	
7.5 Are there any additional costs?	Yes □ No Namely: 630 €
7.6 What are the additional costs for?	participation in IMPEL green expert team meeting
7.7 Who is paying for the additional costs?	IMPEL
7.8. Are you seeking other funding sources?	☐ Yes ☑ No Namely:
7.9 Do you need budget for communications around the project? If so, describe what type of activities and the related costs	Yes No Namely:

#### 8. Communication and follow-up (checklist)

	What		By when
--	------	--	---------

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			the topic reprotor and information of the formation of th
8.1 Indicate which communication materials will be developed throughout the project and when  (all to be sent to the communications officer at the IMPEL secretariat)	TOR* Interim report* Project report* Progress report(s)* Press releases News items for the website** News items for the e-newsletter Project abstract** IMPEL at a Glance * Other, (give details):		t.b.d.
8.2 Milestones / Scheduled meetings (for the website diary)	First core team meeting Workshop Second core team meeting		
8.3 Images for the IMPEL image bank	✓ Yes 🗆 No		
8.4 Indicate which materials will be translated and into which languages	t.b.d.		
8.5 Indicate if web-based tools will be developed and if hosting by IMPEL is required	t.b.d.		
8.6 Identify which groups/institutions will be targeted and how	COM, non-IMPEL participants, e.g ORNIS Committee, JASPERS, Worl Assessment procedure. Working ( and SEA (Kyiv Protocol)	king gr	oup for Appropriate
8.7 Identify parallel developments / events by other organisations, where the project can be promoted			
9. Remarks Is there anything else you would like to add to the Terms of Reference that has not been covered above?			

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# Annex II. Description of the Integrated Risk Assessment Method (IRAM) – adjusted to nature protected sites (NIRAM) with focus on Natura 2000 sites

#### The IRAM Web app

# Description of the internet application of the Integrated Risk Assessment Method (IRAM) – further developed to IRAM for Nature (NIRAM)

https://www.fms.nrw.de/lip/authenticate.do

The internet application of the "Integrated-Risk-Assessment-Method (IRAM)" reflects the results of the *easyTools* and later projects within the European IMPEL network (www.impel.eu) dealing with risk assessment questions. In 2018 this method was adapted to the assessment of the inspection frequency of Natura 2000 sites. This application is called IRAM for Nature (NIRAM). This document provides support for administrators, coordinators and inspectors. For getting access to the NIRAM tool users have to register via the IRAM webpage.

#### Content

This description provides information on fundamental principles of IRAM and their adaptation to NIRAM, like f. ex. "The Rule" to calculate the risk category, the meaning of inspection effort or the possibilities of steering parameters. It explains the registration with the web app and describes the result presentation. Another focus is on the functions of the app especially for coordinators, inspectors. A detailed description can be found in the Guidancebook "easyTools – RISK ASSESSMENT GUIDANCE BOOK", which can be downloaded from the website. A quick guide with screen shots is also available there for a rapid entry into the process.

#### Assessment Criteria of NIRAM (based on the IRAM principles)

NIRAM makes a distinction between two different kinds of assessment criteria: **impact criteria (IC)** and **probability criteria (PC)**. Impact criteria such as site vulnerability, gravity of offences etc. are used to assess the possible impacts of different hazards to the protected site. Probability criteria are used as a measure for the probability of the occurrence of an impact. In combination the impact and the probability criteria describe the environmental risk of the assessed inspection object (e.g. a protected site). IC are scored for each inspection object by the responsible inspector according to the presetting by the coordinator. E.g. 0 = no impact, 1 = low impact, 2 = moderate impact, ..., n= maximum impact. PC are scored by the inspector in the following way: -1 = effective reduction of probability, 0 = no change of probability and 1 = increased probability.

From the scores of the probability criteria the average is calculated by the program – the **Probability Term (PT).** The PT can take the values of "-1", "0" or "1". The PT is added to each impact



score by the program giving the risk profile. As a result the risk category will be one step lower for "-1" and one step higher for "1" (see below).

#### Fundamental principles of IRAM (with reference to NIRAM criteria)

#### "The Rule" to calculate the risk category

In IRAM the minimum number of highest risk scores determines the risk category and consequently the inspection frequency: "x" or more than "x" highest scores result in a risk category with the same score (and an inspection frequency related to this score as set by the coordinator). If there are less than "x" highest scores the risk category and inspection frequency will be one step lower. In IRAM the number "x" is free to choose under "Minimum number of highest score". For up to 5 impact criteria the number of highest scores may be 1, for up to 10 it may be 2 and for up to 15 it may be 3.

#### **Inspection effort**

In IRAM the sum of the (weighted) impact scores are related to the inspection effort; the higher the scores the more effort has to be put into the inspection and more time is needed for the inspection. If all scores are at maximum level the result of the inspection effort is 100%. The inspection effort output from IRAM (i.e. how much time or effort is needed for the inspection) is actually reported as a range of 4 categories in 25% increments. The highest range (100% - 75%) is termed "D" and the lowest (0% to 25%) "A". Coming from this the coordinator may assign fractions of the maximum inspection time to the A, B and C inspection effort categories.

#### **Steering parameters**

IRAM offers a lot of steering parameters to make it fit for different demands of the inspection tasks and the inspection authorities. The most important is the minimum number of highest scores (see above). The default value is "2".

Other steering parameters are:

<u>Lowest risk category</u> (safety net) – the resulting risk category of the assessment cannot be lower than the set value. The default value is "1".

<u>Highest risk category</u> – the resulting risk category of the assessment cannot be higher than the set value. The default value is "5".

<u>Maximum possible score</u> (of an impact criterion) – the inspector cannot score higher than the set value; it is also used for the determination of the inspection effort. If the maximum score of a specific criterion is lower compared to other criteria it cannot induce the highest inspection frequency (kind of weighting). The default value is "5".



<u>Shift of score</u> (weight) – is used to put a weighting term (addition) on this specific impact criterion. The default value is "0"; the weight should be in the range from "-2" to "2".

<u>Inspection weight</u> – is used to put a weighting factor (multiplication) on the inspection effort of this specific impact criterion. The idea behind it is that some kinds of inspections needs more effort and takes more time than others. The inspection weight will also be multiplied with the maximum score to give the maximum inspection effort of the specific criterion. The default value is "1"; the weight should be in the range from "1" to "10".

Weight of criterion – is used to put a weighting factor (multiplication) on this specific NIRAM probability criterion. The default value is "1"; the weight should be in the range from "1" to "3"; fractions are also possible. In spite of this multiplication the result of the mean value will not be smaller or bigger than -1 or 1. The advantage of weighting is that the most important NIRAM probability criterion (e.g. compliance) will count more than the others.

Finally – beginners should start with the default values and only introduce other steering values when they are familiar with the method.

#### **Result presentation**

Under "Risk profile" the calculated risk scores for every impact criterion of the inspection object are displayed. The risk profile indicates which criteria are more important and which are less. The information of the risk profile can be used for the inspection planning. No impact criterion scored with "0" can be in- or decreased by the NIRAM probability or a weighting factor. No risk score can be lower than "0".

Under "Inspection profile" the weighted impact criteria (shift of score and inspection weight: see above) are displayed. The scores tell us how much inspection effort is needed for every criterion in relation to the other criteria. The information of the inspection profile can be used for inspection planning.

The risk category is calculated from the highest score of all risk criteria and the number of highest score. If the number is bigger than or equal to "minimum number of highest score" the risk category will be identical to the highest score. If the number is smaller than that the risk category will be identical to the highest score minus 1. If the risk category would be bigger than "highest risk category" it will be reduced to "highest risk category". If — on the other hand — the risk category would be lower than "lowest risk category" it will be increased to "lowest risk category" (safety net!).

From the sum of weighted impact scores (sum of inspection profile) the "inspection effort (%)" is calculated as a percentage of the "Maximum inspector effort". The inspection effort output from IRAM (i.e. how much time to inspect) is reported as a range of 4 categories in 25% increments. The highest range (100 - 75%) is termed "D" and the lowest (0 - 25%) is "A".



The risk category is assigned to an inspection frequency (in month) given by the coordinator. Also the latest date of the next inspection is calculated by using the inspection frequency and the date of the last inspection.

As an alternative the "Sum of risk profile" or the "Mean of risk profile" can also be used to determine risk categories if appropriate.

#### Linear mean value method

An alternative approach to the integrated risk assessment method is realised with the linear mean value method. It is independent from NIRAM and should only be used if IRAM seems to be inadequate for the specific inspection task. In the linear assessment approach all risk criteria (there is no distinction between impact and operator performance criteria) are considered as equal and are combined in a linear equation together with weighting factors:

```
Risk = (RC_1*WF_1 + RC_2*WF_2 + ... + RC_n*WF_n) (WF<sub>1</sub> + WF<sub>2</sub> + WF<sub>n</sub>) with RC = Risk criterion and WF = Weighting Factor
```

#### Registration and functions of the web app

https://www.fms.nrw.de/lip/authenticate.do

For registration the "Register" button on the start page has to be pressed. A registration form will be displayed in which the user has to fill in the following data: first name, surname, user identification, email address and the language. After the button has been pressed an email containing the password will be forwarded to the user's email address. After the user has got the password he can log into the app by entering the user ID and password on the start page of the IRAM tool.

To provide access to assessment forms for a new registered inspector the coordinator has to activate in the next step the account of the inspector (see below Functions of the coordinator level). To get an easy and flexible tool four types of registered users of IRAM were developed: authority, coordinator, group leader and inspector. These users have different levels of access into the system.

**The authority** has the highest level of authority in the IRAM tool. Its responsibilities are:

- Granting coordinator status to nominated users
- Deleting registered users
- Keeping contact with the host of the app

#### **The coordinator** has the following responsibilities:

- Putting the inspectors of his administration under his coordination
- Development of forms for specific inspection tasks (f.ex. Natura 2000 sites) including determination of steering parameters
- Setting up inspection groups and promoting inspectors to group leaders



#### The group leader is an inspector who has

- an overview of all assessment results of the assigned inspectors. On this basis he can draw up inspection programs for the next year.
- In addition he has the right to change the risk assessments of the assigned inspectors.

**The inspector** has the lowest level of authority in the IRAM tool.

- His responsibility is to fill in the data into the form developed by the coordinator.

#### **Functions of the coordinator level**

The coordinator will be set by the authority or the IRAM administrator after nomination by the competent authority.

After logon into the system using ID and password the coordinator gets five menus:

- Forms which includes the Integrated Risk Assessment for Inspection Planning template
- Master data containing the User Administration template
- Folders A Z which cover all folders developed within the tool
- Forms A Z which contain all IRAM/NIRAM forms developed within the tool
- Search which facilitates to find a certain form by following criteria: title, author or keywords
- Support with the source code and the description of the Java script used for the programming of the tool

The User Administration template (under master data) allows changing the coordinator's inspection identification data including password. Also under this field the coordinator can choose the inspectors who will be under his coordination by marking the box corresponding to the inspector's ID/name. Unmarking this box will release the inspector from his coordination.

For every inspection task a specific template should be used, f.ex. Natura 2000 sites. For this purpose the coordinator can develop a specific template or copy an existing one, change it and store it under a new name. Examples are provided in the Guidancebook.

The coordinator can create a new form for risk assessment under Master data, then Template Inspection Tasks, then pressing the button "New record". As a first step the coordinator has to choose the method he wants to use for risk assessment:

- IRAM by marking the box corresponding to Integrated Risk Assessment Method Or
- LMVM by marking the box corresponding to Linear Mean Value Method

Using the "+"-button beneath the impact criteria box and operator performance criteria box new criteria can be created. Here the name and the graduation of score (between "0" and "maximum score") have to be set for each criterion. For this the coordinator can use the examples given by the guidance book or the inspection authority can develop new ones.

Under the IRAM/NIRAM method the coordinator has to set the steering values like lowest/highest risk category, minimum number of highest score, maximum score, weight term/factor and



inspection weight. The lowest risk category should be set according to regulatory request (f.ex. for Natura 2000 sites the minimum inspection frequency should be at least one inspection every six years). The steering values set by the coordinator are mandatory for the inspectors under his coordination.

Every form developed by the coordinator will be stored in the folder "Master data". Also a compilation of these forms will be found under the drop down menu of "Template Inspection tasks" and "Data Browser".

#### **Functions of the inspector level**

The inspector has the lowest level of authority in the IRAM tool. His responsibility is to fill in the data into the form developed by the coordinator.

The inspector enters into the system using ID and password. Under menu "Forms" on the start page of IRAM he can open the folder "Integrated Risk Assessment for Inspection Planning" where the forms developed by his coordinator can be found. For flexibility reasons a compilation of these forms will be found under drop down menu "Inspection task" from the IRAM/NIRAM form. To find the adequate form for the task it is recommended to enter "NIRAM" or "nature" into the "search criteria" box.

First the ID-number and the name of the inspection object (e.g. IPPC installation, Seveso establishment, waste water purification plant, landfill or Natura 2000 site) must be entered by the responsible inspector. Also the date of the last inspection and the address data can be entered for identification purposes.

Then the inspector has to enter values for "lowest risk category" and "highest risk category". For that he/she has to check if there are any regulatory demands or an inspection task (like at least one inspection every six years for Natura 2000 sites). The corresponding risk category has to be entered in the "lowest risk category" cell. If after the calculation the risk category will be lower than that it will be increased to the set value for "lowest risk category". All other results will remain unchanged. Also if the calculated risk category will be higher than the value entered for the "highest risk category" it will be decreased to this value. All other results will remain unchanged.

In the next step the scores for all impact criteria (IC) have to be entered according to the settings of the coordinator. The range of scores is from "0" to "maximum score". The description of each score from this range is set by the coordinator and can be seen under the corresponding drop down menu.

Next the scores of the probability criteria (PC) have to be entered. The range of scores is from "-1" to "1". The description of each score is set by the coordinator and can be seen under the corresponding drop down menu.



After clicking the calculator button on top of the form the results of the calculation are shown in and under the "Risk and inspection profile" box. The tool will calculate the following parameters:

- Risk ranking number
- Highest score
- Number of highest scores
- Risk category
- Maximum inspection effort (100%)
- Sum of inspection profile
- Inspection effort (percentage)
- Inspection category
- Inspection frequency (in month)
- Latest date of next inspection
- Sum of risk profile and
- Mean of risk profile

All entered and calculated data can be downloaded into inspector's computer by clicking "Download XML" or "Download CSV" buttons. The XML and CSV files will be named according to the ID of the inspection object and date of assessment. The tool will also develop a printable file (PDF) if the "Print" button is pressed.

The XML files can also be uploaded into the IRAM tool for recalculations with changed risk scores or with different steering values. This could be done with the help of the "Upload XML" button.

The XML and CSV files can be read into databases to see all data together and compare them.

The IRAM app can also be used for drawing up of inspection programs. All IRAM assessment data are stored within the IRAM database and can be used for the needs of an inspection program within the app. There is a table (data browser) within the folder "Forms" where the conducted risk assessments are displayed.

In this table the name and ID-number of the site, the inspection task, risk category, inspection category and inspection frequency, the latest date of the next inspection and the status of the risk assessment are displayed. To see the calculated date of the next inspection the date of the last inspection has to be typed in during the assessment. The status distinguishes between "in use" (the typed in data can still be changed), "completed" (the typed in data cannot be changed any longer) and "archive" (the data shall not be used any longer, e.g. incorrect entry or installation is closed down). The data set can be completed by the inspector within the risk assessment form. Completed data sets can be copied and used for a new assessment. A completed data set can be reset to "in use" or put into archive by the coordinator.



# For optimal use as an inspection program the data browser comes up with a lot of filter and sorting functions.

Most changes of the app were introduced for coordinators:

- 1. Under "Master data" the coordinator can use the data browser "Template Inspection Tasks" to browse all risk assessment forms of all coordinators and copy them for his own purposes. Modifications or forms are only possible within own or copied forms.
- 2. At the bottom of the form an inspection frequency (in month) can now be introduced for each inspection category.
- 3. The coordinator can now also use the data browser under forms and see all risk assessments done by the inspectors under his coordination.
- 4. The coordinator can select individual assessments of his inspectors and change them. At the top of the form he can also change the inspector for this specific installation or for all installations of this inspector, e.g. in case of staff change.
- 5. The coordinator can complete and reset assessments or put them into the archive.
- 6. The coordinator can create inspection groups and promote inspectors to group leaders.

Dr. Horst Büther Bezirksregierung Köln



#### Annex III. Criteria for Natura 2000 sites – Supporting information

#### CRITERIA 1. PRESENCE OF HABITATS AND/OR PROTECTED SPECIES.

#### Criteria 1 – Presence of habitats and/or protected species

This is a impact criteria.

Natura 2000 is a coherent European ecological network with the aim of the biodiversity conservation. Biodiversity is determined, inter alia by the richness and quality of habitats and species that compose it. Natura 2000 is composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II of the Habitats Directive and the special protection areas classified under Birds Directive.

- 1. Natural habitat types of Community interest (Article 1 Definitions of the Habitats Directive).
- 2. Priority natural habitat are natural habitat types in danger of disappearance and for which the Community has particular responsability in view of their conservation. Priority natural habitat types are indicated by an asterisk (\*) in Annex I. Also, in Article 2 of the Habitats Directive and with the aim to contribute towards ensuring biodiversity through the conservation across EU are classified the species of Community interest:

Such species (flora and fauna) are listed or may be listed in Annex II and/or Annex IV or V. Also, priority species (like priority habitats) are indicated by an asterisk (\*) in Annex II.

The percentage classes are a proposal that can be adapted according to the actual needs. The current figures are based on an abstract split, of thirds, and can be adapted according to the needs of the MS.

#### Source:

- SDF
- GIS
- Country specific data

#### Criteria 2 - Vulnerability of the habitats in the site

This is a impact criteria.

This is a impact criteria.



The Natura 2000 network consists of sites housing different natural habitats (Annex I) and species habitats (Annex II) of the Habitats Directive, and special protection areas under the Birds Directive.

Defining the vulnerability of a habitat to pressures due to human activities is very complex. If we consider vulnerability of a habitat as defined for a study in climate change (in Somodi et al., 2016) with the appropriate adaptations, we can think vulnerability as the degree to which a system is susceptible to, and unable to cope with, adverse effects of external pressures; vulnerability is a function of the character, magnitude, and rate of external pressure and variation to which a system is exposed, its sensitivity, its resilience and its adaptive capacity.

This is a criteria to be used by technicians who may not have basic training to assess the vulnerability of a site, so this indicator should be obtained relatively easily, taking into account its complexity.

Which aspects of vulnerability (i.e., sensitivity, exposure and/or poor adaptive capacity, resilience) are most prevalent for the habitats/species at the site. Vulnerability is related to potential outside impact and habitat capacity to respond to this impact. So, vulnerability is closely linked to habitat resilience, considering resilience as the degree of change a system can undergo without changing state.

The greater the ecological complexity of the plant community that characterizes the habitat, the greater its resilience and the lower its sensitivity (Flor et al., not published) in general terms.

The methodological suggestion with regard to the criterion "vulnerability" considers:

- identification of the Natura2000 Site under study
- identification of the habitats/species present and its distribution data (national cartography of habitats and species is an essential tool)
- review of the Natura 2000 Sector Plan and/or Management Plan
- assignment of index to the criterion based on the identification of these habitats.

#### Criteria 3 – Gravity of offences

This is an impact criteria.

Supervision of legal and natural persons in respect of compliance with regulations regulating the implementation of N2K, resulting from article 11 and 12 of Habitat Directive, and from article 5 Bird Directive is obligation to all MS. Each MS is obligated to develop supervisory services to monitor (surveillance) the conservation status of natural habitats and species (art. 11 HD) and undertake the requisite measures to establish a general system of protection for all species of birds (Art. 5. BD) prohibiting particular activities listed in art. 5 BD. The degree of offences in the time period of the



surveillance can indicate whether the risk is increasing or decreasing. It is recommended that the time period is three years but the MS can be flexible.

Because of the differences in the legal systems of the MS concerning the classification of the breaches of law, each MS will adopt a definition/explanation according to their national legislation.

Some provisional definitions are described here, in an example of Croatia. The severity of an offence is graded as criminal, misdemeanour or as a mandatory fine for the purpose of scoring, where the most severe grade is criminal.

**Criminal Offence** – any conduct which causes the significant deterioration of a habitat within a protected site (art. 3.h of the Crime Directive<sup>7</sup> when unlawful and committed intentionally or with at least serious negligence). According the art. 2.c of the same Directive, a habitat within a protected site is considered to be any habitat of species for which an area is classified as a special protection area pursuant to art. 4.1 or 4.2 of the Birds Directive<sup>8</sup>, or any natural habitat or a habitat of species for which a site is designated as a special area of conservation pursuant to art 4.4 of the Habitats Directive<sup>9</sup>. Pursuant to art. 3. Of the Crime Directive MS shall ensure that the above mentioned conducts constitute a criminal offence.

**Misdemeanour (Minor) Offence** – any conduct which causes minor damage (as determined by the MS legislation) on conservation objectives, species and habitats of Natura 2000. Note that many legal systems of the MS recognise the difference between offences and criminal acts and they do not classify any offence as a misdemeanour in accordance with the Nature Protection Law and bylaws.

**Mandatory Fine/Fine** – any breaches of the Nature Protection Provisions fined on site by the enforcement officer and payed directly to the enforcement officer thus presumably the most minor offense. (These breaches are not registered in official records as offences).

#### No offences

 $<sup>^7</sup>$  DIRECTIVE 2008/99/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on the protection of the environment through criminal law

<sup>&</sup>lt;sup>8</sup> DIRECTIVE 79/409/EEC of 2 April 1979 on the conservation of wild birds

<sup>&</sup>lt;sup>9</sup> DIRECTIVE 92 /43 /EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora



#### <u>Criteria 4 – Conservation status of the site</u>

This is an impact criteria.

The Habitats Directive aims to achieve and maintain a favourable conservation status for all habitat types and for species of community interest.

It can be described as a situation of prosperous in habitat or species (qualitative and quantitative aspects) where both, the perspectives regarding the vitality of species populations or habitat structures and the intrinsic ecological elements of ecosystems or geoclimatic conditions for the habitats, are favourable.

The conservation status assessment includes a diagnostic based on the present state elements, but also considers future prospects and evolution in their state, based on foreseeable and assessable threats.

The assessment is carried out in Europe according to a common protocol. The result of this assessment can be consulted in the National Report on the Implementation of the Habitats Directive.

Source: Standard Data Form (SDF).

# <u>Criteria 5 – Presence of activities with likely negative impact on conservation objectives, inside the</u> Natura 2000 sites

This is an impact criteria.

The criteria refers to activities of an economic or recreational nature.

#### Potential impact but no quantifiable threat.

Activities in the Natura 2000 site are low but still need supervision in order to meet its objectives.

#### Indirect impact with quantifiable threat to long term impact.

Activities in the Natura 2000 site are low but have a steady impact. Objectives remain protected by constant and qualified supervision.

#### Mid-term impact and/or cumulative pressure.

Activities in the Natura 2000 site require increased effort to ensure that the objectives are met. The objectives are impacted, but not in an irreversible manner.

There are at least two or more activities that can act in combination to change the impact (for example, intensive agriculture and logging, gravel pits and service roads, stable tourism fluxes and increase in tourism facilities, etc.).



#### Direct impact and/or current pressure.

Activities in the Natura 2000 site require immediate intervention in order to meet the objectives. The objectives are affected in an irreversible manner and may require mitigation, rehabilitation or compensation measures.

# <u>Criteria 6a / 6b / 6c - Presence of activities outside the boundary of the Natura 2000 site which are likely to have a negative impact on the site – air/water/in combination</u>

This is an impact criteria (6a and 6b) and probability criteria (6c).

Activities outside the Natura 2000 boundary with likely negative impact on objectives. An activity is any plan or project with an emission likely to have a negative impact on the nature conservation site either directly or indirectly. The criteria refers to activities of an economic or recreational nature.

Emissions from a plan or project can have a widespread impact through extended dispersion in the atmosphere (e.g. atmospheric ammonia or nitrogen deposition), dilution and downstream flows of a watercourse (e.g. pollutants entering a watercourse) or even upstream 'blocking' activities such as reduced flows or increased temperatures limiting migration (e.g. spawning salmon). As a result of the different media and extended range some pollutants can have, it is virtually impossible to create one singular scoring system for all.

The criteria is scored by distance from the Natura 2000 site boundary, with greater distances being afforded to air impacts and shorter distances to water impacts. Current distances are based on UK screening processes, but can be changed to member states/authorities' needs.

Criteria 6 c is a probability criteria to cover the possibility of in combination issues, and will have an outcome of +1 (impact) or -1 (no impact).

#### Criteria 7 – Likely negative impact on conservation objectives - changes in land use

This is an impact criteria.

Changes in land use are causing the alteration of ecosystems and the loss of biodiversity.

The data for detecting changes in land use can be obtained from different sources, for example the Programme Corine Land Cover provides information on the main changes that occurred in land cover coverages with respect to different periods of time, its evolution and trends and be able to take action on those changes of land use management.



Buffer zones are used only in certain MS, this depends on how a MS has defined its Natura 2000 sites. Several Member States have proposed large sites including 'buffer zones' as Natura 2000 sites, while others have proposed only the core areas.

#### Criteria 8 – Presence of Management plan (MP)

This is a probability criteria.

According to HD, within six years of designation of any Natura 2000 site, MS need to adopt conservation measures involving if need be, appropriate MP and other measures which correspond to the ecological requirements of the natural habitat types and the species of Community interest (e.g. conservation MP, protection plan and other).

#### -1 Site specific MP in place and the requirements of MP are followed

Site specific MP contains detailed descriptions of practical management techniques which are designed to help site managers prepare their own site-specific management plans for the habitat types and species targeted, and to implement these "in the field", taking local constraints into account. Specific MP should include information on the distribution, ecological requirements of the habitat, main trends and threats. Relevant management actions and prescriptions are described in detail. Main constraints, risks and modifiers of the proposed management are also included. Relevant parameters for cost estimates, cost estimate examples and potential sources of EU financing are illustrated.

#### 0 General MP in place or under development and the requirements of MP are followed

General MP does not contain a detailed description of activities and actions (dedicated to subjects of protection with description of their occurrence) or MP is under development (draft of the document is available/ management planning authority announced that the document is under development)

#### 1 No site specific plan or general MP or MP in place but requirements are not followed

There is no MP for the Natura 2000 site and the process of this document development has not been started yet or the requirements of already existing MP are not followed.

#### Criteria 9 – Presence of Custodian

This is a probability criteria.

According to 6.1 Art. HD for special areas of conservation, MS shall establish the necessary conservation measures involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans, and appropriate statutory, administrative or contractual measures which correspond to the ecological requirements of the natural habitat types in Annex I and the species in Annex II present on the sites. Conservation measures are positive and apply to all the natural habitat types of Annex I



and the species of Annex II present on the sites, except those whose presence is non-significant according to the Natura 2000 standard data form. A regime laying down special conservation measures for the SPAs is classified under the 'Birds'directive, according to its Article 4(1) and (2). The ecological requirements can only be defined on a case-by-case basis and on the basis of scientific knowledge.

Custodian are responsible for the implementation of measures when they are required in the field custodians could be different entities, such as land owners, authorized bodies from responsible Ministries, entrerpreneurs, local communities, tourism associations, NGOs, other individuals etc.

On the field many of Natura 2000 sites has a specific custodian who takes care of the site and provides the implementation of conservation measures set up in management plans or other appropriate documentation.

- -1 The custodian activities positively effect the site.
  - The -1 is also used when it is determined that no custodian is required for the site.
- 0 The custodian activities have no effect on the site.
- 1 The custodian activities negatively effect the site.

The +1 is also used when it is determined that a custodian is required for the site but is not in place.

# <u>Criteria 10 – Presence of activities with likely favourable impact on conservation objectives inside Natura</u> 2000 sites (number of habitats and/or species listed in SDF chapter Nr. 3.1. and 3.2.)

This is a probability criteria.

Each Natura 2000 site has one or more objectives for why it is established – to protect species, habitats, landscape, cultural and historical heritage. In Natura 2000 SDF information can be found about species and habitats for which the site is established. In most cases to ensure favourable conservation status of species and habitats within a site, there is a need for appropriate management activities, including mitigation, restoration or maintenance of specific environmental conditions. However, sometimes for ensuring favourable conservation status of species and habitats, it is better to avoid any disturbance.

The activities can be carried out as part of different projects or as regular activities according to the MP. This criteria includes activities directed at improving the conservation status of species and habitats listed in SDF or restored in certain Natura 2000 sites. The indicators for this criteria can serve a number of species and habitats, listed in SDF chapter 3.1. (Habitat types present on the site and assessment for them) and 3.2. (Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them) on which activities with a positive effect are directed.

In the context of activities with likely favourable impact on conservation objectives the scoring is only 0 (no favourable impact) or -1 (favourable impact). If there are favourable impacts, the inspection frequency might become lower.



#### Criteria 11 – Overlap of Natura 2000 with other national and/or international sites

This is a probability criteria.

In different countries the overlap of Natura 2000 with national and/or international sites can increase, decrease or be irrelevant for the protection of a Natura 2000 site. In each country it is up to the inspector using NIRAM to decide (based on experience/studies/etc.) on how the criteria will be applied and the outcome of the overlap. Based on this answer NIRAM will apply table 1, table 2 or skip this criteria all together.

For example, an area recently designated as a Natura 2000 site overlaps with a longstanding National Park. There is a historical environmental structure installed to protect the national site. The public is well informed that in order to use the land they must get a permit from the National Park. There are National Park staff that regularly inspect the area and report illegal uses of the land, etc. The overlap of these two sites results in an increased level of protection for the Natura 2000 site, thus there is more protection for the National Park that extends to the Natura 2000 site. Table 1 is applied, as the risk decreases and as the overlap increases.

In other cases the opposite may happen, then Table 2 is applied. In this case the risk decreases with the decrease of the overlapping area.

If the inspector thinks the level of protection is the same, with or without overlapping national and/or international sites, then this criteria does not apply.



### Annex IV. NIRAM Template Nature Inspection Tasks

Template inspection Tasks	
Inspection task	Koordinator: Werner Möhring-Hüser
Name of the inspection task	Nature Inspection (Report number: 2018/14)
Minimum number of highest score	4
Lowest risk category	1
Highest risk category	3
Show Integrated Risk Assessment Method	☐ Linear Mean Value Method ☐
inspection task inactive	EN EN
Language	EN
Impact criteria	
Impact criterion	1) Presence of habitats and/or protected species
Maximum possible score	3
Description of the criterion	
value included in Hat	of total site area covered by habitats and/or species bitats and/or Birds Directives.
Value 0	_



	Description of the value	More than 33% to 67% of total site area covered by habitats and/or species included in Habitats and/or Birds Directives.
	Value	1
	Description of the value	More than 67% of total site area covered by habitats and/or species included in Habitats and/or Birds Directives.
	Value	2
	Description of the value	Presence of habitats and/or species of priority interest included in Habitats and/or Birds Directives.
	Value	3
	ft of score (weight)	0
Ins	pection weight	1



Impact criterion	2) Vulnerability of the habitats in the site
Maximum possible score	3
Description of the criterion	<u>-</u> 
Description of the Criterion	
Description of the value	high ecological complexity high resilience low sensitivity
Value	0
Description of the value	high ecological complexity medium/low resilience medium/high sensitivity
Value	1



Description of the value	low ecological complexity medium/high resilience medium/low sensitivity
Value	2
Description of the value	low ecological complexity low resilience high sensitivity
Value	3
ft of score (weight) pection weight	<u> 0</u>  1



Impact criterion	3) Gravity of offences
Maximum possible score	3
Description of the criterion	
Description of the value	No offences
Value	0
Description of the value	Low offences
Value	1



Description of the value	High offences
Value	2
Description of the value	Criminal offences
Value	3
Shift of score (weight) Inspection weight	0 1



Impact criterion	4) Conservation status of the site
Maximum possible score	3
Description of the criterion	
Description of the value	Favourable
Value	0
Description of the value	Unfavourable - inadequate when the conservation status of the site is unfavourable up to 25% of the area
Value	1



Description of the value	Unfavourable - bad when the conservation status of the site is unfavourable in more than 25% of the area
Value	2
Description of the value	No information available
Value	3
ft of score (weight) pection weight	<u>  0</u>   <u>1</u>



Impact criterion	5) Activities inside with likely negative impact
Maximum possible score	3
Description of the criterion	Presence of activities with likely negative impact on conservation objectives, inside the Natura 2000 sites
Description of the value	Potential impact but no quantifiable threat
Value	0
Description of the value	Indirect impact with quantifiable threat to long term impact
Value	1



Description of the value	Mid-term impact and/or cumulative pressure
Value	2
Description of the value	Direct impact and/or current pressure
Value	3
ft of score (weight) pection weight	D  1



Impact criterion	6a) Activities outside with negative impact on ait quality
Maximum possible score	3
Description of the criterion	Presence of activities outside the boundary of the Natura 2000 site which are likely to have a negative impact on the site conservation objectives – air quality
Description of the value	Distance from Natura 2000 site boundary (km): 15 to 10
Value	0
Description of the value	Distance from Natura 2000 site boundary (km): 10 to 2
Value	1



Description of the value	Distance from Natura 2000 site boundary (km): 2 to 0.5
Value	2
Description of the value	Distance from Natura 2000 site boundary (km): <0.5
Value	3
ft of score (weight) pection weight	0 1



Impact criterion	6 b) Activities outside with negative impact on water
Maximum possible score	3
Description of the criterion	Presence of activities outside the boundary of the Natura 2000 site which are likely to have a negative impact on the site – water
Description of the value	Distance from Natura 2000 site boundary (km): 5 to 2
Value	0
Description of the value	Distance from Natura 2000 site boundary (km): 2 to 1
Value	1



Description of the value	Distance from Natura 2000 site boundary (km): 1 to 0.5
Value	2
Description of the value	Distance from Natura 2000 site boundary (km): <0.5
Value	3
ft of score (weight) pection weight	0



Impact criterion	7) Changes in land use
Maximum possible score	3
Description of the criterion	Likely negative impact on conservation objectives changes in land use
Description of the value	There are no changes in land use (inside the Natura 200 site and on the buffer zone)
Value	0
Description of the value	The change of land use is nearby Natura 2000, inside the buffer zone, inside the Natura 2000 site but not on habitats of interest
Value	1



Description of the value	The change of land use is inside Natura 2000 site on areas of habitats of Community interest and/or habitats for species of Community interest.
Value	2
Description of the value	The change of land use is inside Natura 2000 site on areas of priority habitats (*) and/or habitats for priority species (*)
Value	3
ft of score (weight) pection weight	<u> 0                                    </u>

Operator performance criteria



Operator performance criterio	8) Presence of management plan
Description of the criterion	Probability criteria
Description of the value	Specific management plan, requirements of MP are followed
Value	-1
Description of the value	General management plan/management plan is under development, requirements of MP are followed
Value	0



Description of the value	No manageme	ent plan OR requirements of MP are not followed
Value	1	_
Weight of criteria		<u> 1</u>
Operator performance criterion  Description of the criterion		9) Presence of custodian Probability criteria



	Description of the value	The custodian activities positively effect the site. The -1 is also used when it is determined that no custodian is required for the site.
	Value	-1
	Description of the value	The custodian activities have no effect on the site.
	Value	0
	Description of the value	The custodian activities negatively effect the site.  The +1 is also used when it is determined that a custodian is required for the site but is not in place.
	Value	1
		L.
Wei	ight of criteria	1



Ope	rator performance criterio	n 10) Activities with likely favourable impact
Des	cription of the criterion	Probability criteria
	Description of the value	Likely favourable impact on habitats and/or species
	Value	-1
	Description of the value	No favourable impact on habitats and/or species
	Value	0
Wei	ght of criteria	1



Operator performance criteri	on	11) Overlap of N2K with other national/international sites
Description of the criterion		Probability criteria
Description of the value	protection of the b) overlap of N	2K with other national/international sites means more e N2K site: > 67 % 2K with other national/international sites means less e N2K site: < 33 %
Value	-1	_
Description of the value	protection of the b) overlap of N	2K with other national/international sites means more e N2K site: > 33 % 2K with other national/international sites means less e N2K site: > 33 %
Value	0	_



Description of the value	protection of the	2K with other national/international sites means more e N2K site: < 33 % 2K with other national/international sites means less e N2K site: > 67 %
		-
Weight of criteria		1
Operator performance criteri	on	6c) Likelihood of activities with in combination impacts
Description of the criterion		Probability criteria Presence of activities outside the boundary of the Natura 2000 site which are likely to have a negative impact on the site – in combination *** skip this criteria, if there is a lac of information ***



	Description of the value	No other activities within greatest emission distance
	Value	-1
	Description of the value	Other activities that have no likely negative effect on objectives
	Value	0
	Description of the value	Other activities within greatest emission distance which could have likely negative effect on objectives
	Value	1
Wei	ight of criteria	1



#### Risk category

Category	Frequency	Information	
1	72	months	
2	36	months	
3	12	months	
3	12	monuis	

#### Information about inspection category

Inspection category	Information
Α	1 day
В	2 days
С	3 days
D	4 days

(From criteria 8 on the template still has the expression "operator performance criterion" on the left side instead of "probability criteria". This is due to the fact that during the adaptation of IRAM to NIRAM no programming work was carried out.)