



# Pan-European Action Plan for Sturgeons Mid-term Evaluation and Introduction of Guidelines

Beate Striebel-Greiter, WWF CEE

Jörn Gessner, IGB, WSCS

# Europe's endangered sturgeons

- Least Concern
- Endangered
- Extinct in the wild
- Near Threatened
- Critically Endangered
- Vulnerable
- Extinct



Black Sea



● Beluga sturgeon  
(*Huso huso*)



● Stellate sturgeon  
(*Acipenser stellatus*)



● Danube or Russian sturgeon  
(*Acipenser gueldenstaedtii*)



● Sterlet sturgeon  
(*Acipenser ruthenus*)

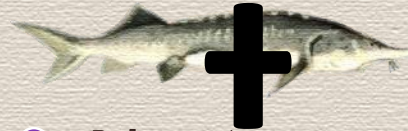


●● Ship sturgeon  
(*Acipenser nudiventris*)\*



● European Atlantic sturgeon  
(*Acipenser sturio*)

Adriatic Sea



● Beluga sturgeon  
(*Huso huso*)



● Adriatic sturgeon  
(*Acipenser naccarii*)

N-E Atlantic/Baltic



● Atlantic sturgeon  
(*Acipenser o. oxyrinchus*)



● European Atlantic sturgeon  
(*Acipenser sturio*)

\* Ship sturgeon (*Acipenser nudiventris*) is extinct in the Danube.

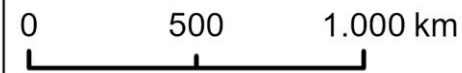
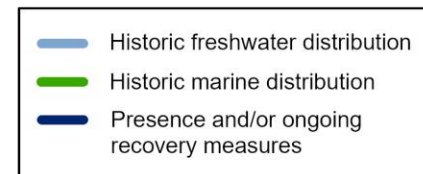




### Today:

Sturgeons survived at low population levels only in very few rivers (Gironde, Po, Danube, Dniester, Rioni)

but...are subject to active recovery measures (ex: Elbe, Oder, Vistula, Narva,..)



A person is sitting on the floor in front of a large aquarium tank. The tank is filled with water and contains several large sturgeon fish swimming. The water is clear and greenish. The person is looking at the fish. The text is overlaid on the top left of the image.

# Mid-term Evaluation of the Pan-European Action Plan for Sturgeons

with support documents and technical guidelines to improve its  
implementation

EC service contract 09.0201/2022/885601/SER/D.3  
'Supporting conservation and protection actions to  
implement the Pan- European Sturgeon Action Plan'



# Scope of the Service Contract

8 Species	11 Rivers	18 Countries
European Sturgeon	Gironde	France
	Rhine	Netherlands
	Elbe	Germany
Baltic Sturgeon	Narva	Estonia
	Gauja	Latvia
	Nemunas	Lithuania
	Oder	Germany/Poland
	Vistula	Poland
Adriatic sturgeon	Po	Italy
Sterlet	Upper-Middle Danube	Germany, Austria, Hungary, Slovakia, Slovenia, Croatia, Serbia
Stellate Sturgeon	Lower Danube	Serbia, Bulgaria, Romania, Ukraine
Beluga	Rioni	Georgia
Russian sturgeon		
Ship Sturgeon		

# Methodology

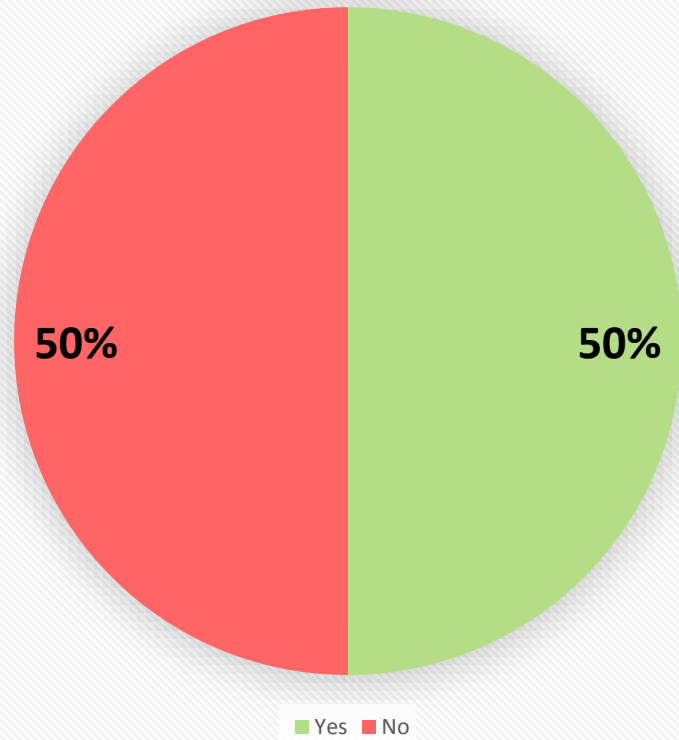
- Questionnaire with 85 questions covering 9 objectives of the PANEAUP
- Minimum 3 respondents per country including  
1 surgeon expert, 1 water management authority, 1 biodiversity authority
- In case of deviating answers – expert judgment was decisive
  
- Country assessments were compared within a region  
→ 18 country assessments and 5 regional reports
  
- Selection of priority questions for this presentation

# Example of results

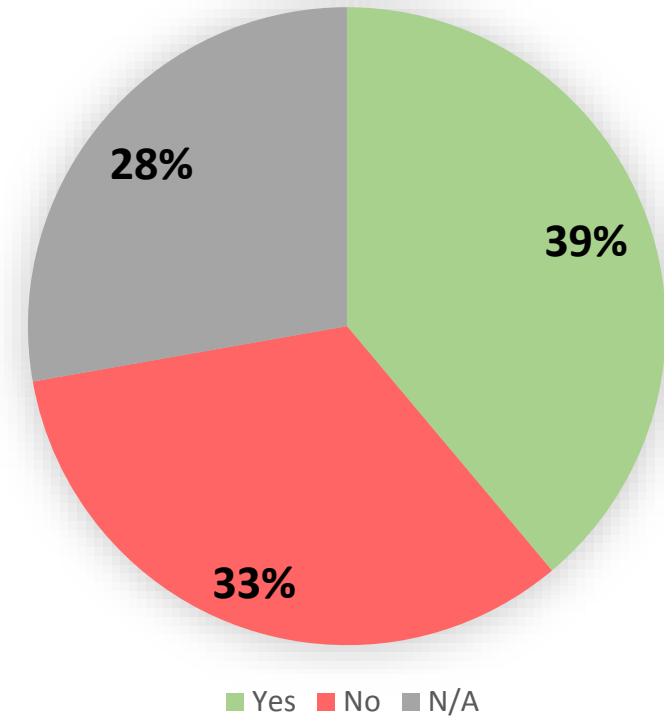
Question	Austria	Croatia	Hungary	Germany - Danube	Serbia	Slovakia	Slovenia
<b>OBJECTIVE 1 - REMAINING WILD POPULATIONS ARE PROTECTED FROM ACCIDENTAL AND DIRECTED REMOVAL OF INDIVIDUALS</b>							
<b>RESULT 1.1 - Directed removal of individuals is eliminated</b>							
<b>ACTION 1.1.1</b>							
9. Is fishing / angling of sturgeons prohibited or regulated in your country?	Fishing regulated	Fishing regulated	Fishing prohibited (unlimited)	Fishing prohibited (unlimited)	Fishing prohibited (unlimited)	Fishing regulated	Fishing prohibited (unlimited)
<b>ACTION 1.1.2</b>							
10. Is there a clear procedure in place for providing catch allowances (for scientific purposes) and monitoring them?	Procedure partly in place	Procedure is in place and responsible authority designated	Procedure is in place and responsible authority designated	Procedure is in place and responsible authority designated	Procedure is in place and responsible authority designated	Procedure is in place and responsible authority designated	Procedure is in place and responsible authority designated
<b>ACTION 1.1.2 / 1.1.3</b>							
11. Are the existing fishing regulations sufficiently enforced?	Enforcement in place and working	Enforcement partly working	Enforcement in place and working	Enforcement in place and working	Enforcement partly working	Enforcement in place and working	Enforcement lacking
12. Is Illegal, Unreported and Unregulated (IUU) fishing (of sturgeons) an issue in your country?	Can be neglected	IUU is under sufficient control	IUU is under sufficient control	Can be neglected	IUU is an issue	IUU is under sufficient control	Can be neglected
13. Are seizures and cases of IUU recorded?	Seizures not recorded	Seizures are recorded	Seizures are recorded	Seizures not recorded	Seizures partly recorded	Seizures partly recorded	Seizures are recorded
<b>ACTION 1.1.4</b>							
14. Do you consider the resources and the capacity building opportunities for enforcement authorities overall adequate? (drop-down menu)	Sufficient resources and capacities for the enforcement are in place	There is a distinct lack of resources and capacities	Resources and capacities for the enforcement are partly in place	Sufficient resources and capacities for the enforcement are in place	There is a distinct lack of resources and capacities	There is a distinct lack of resources and capacities	Resources and capacities for the enforcement are partly in place
<b>ACTION 1.1.5</b>							
15. Is the involvement of fishers / anglers / communities in the planning and implementation of conservation actions a practice in your country?	Practice established	Practice established	Practice partially in place	Practice established	Practice partially in place	Practice established	Practice established
16.a. Are affected fishing communities in	No	Yes	No	No	No information available	No	No

# Country level action plans or strategies?

Is there a National Action Plan for sturgeons in place in your country?



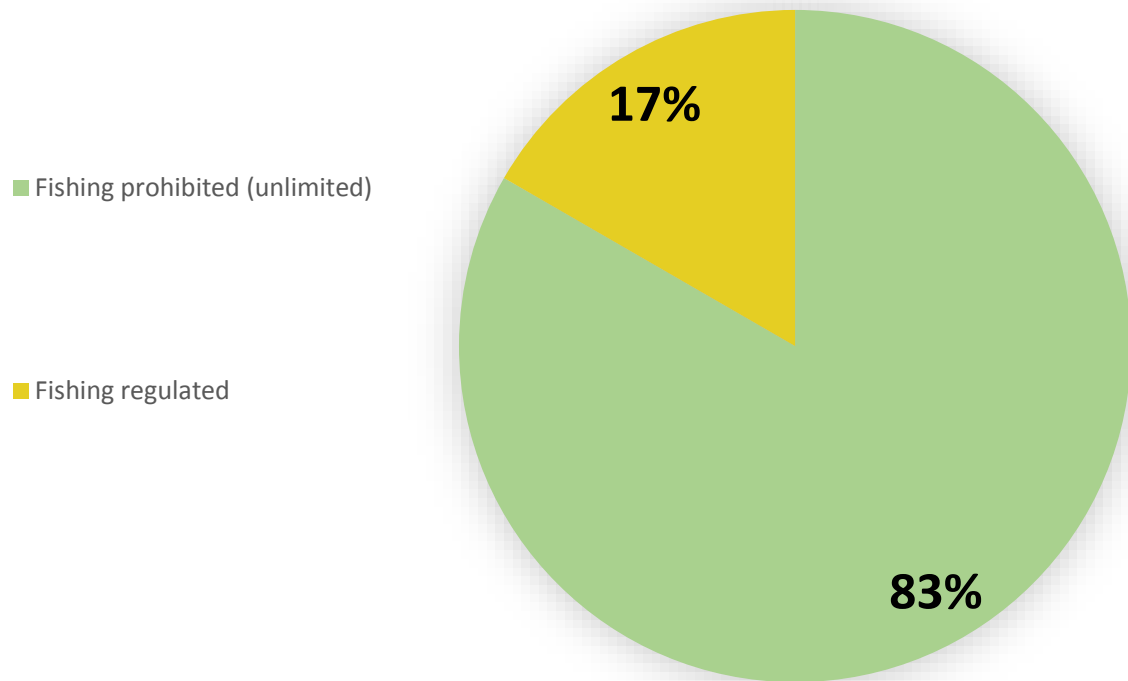
Is this national plan or strategy aligned with the PANEUAP?



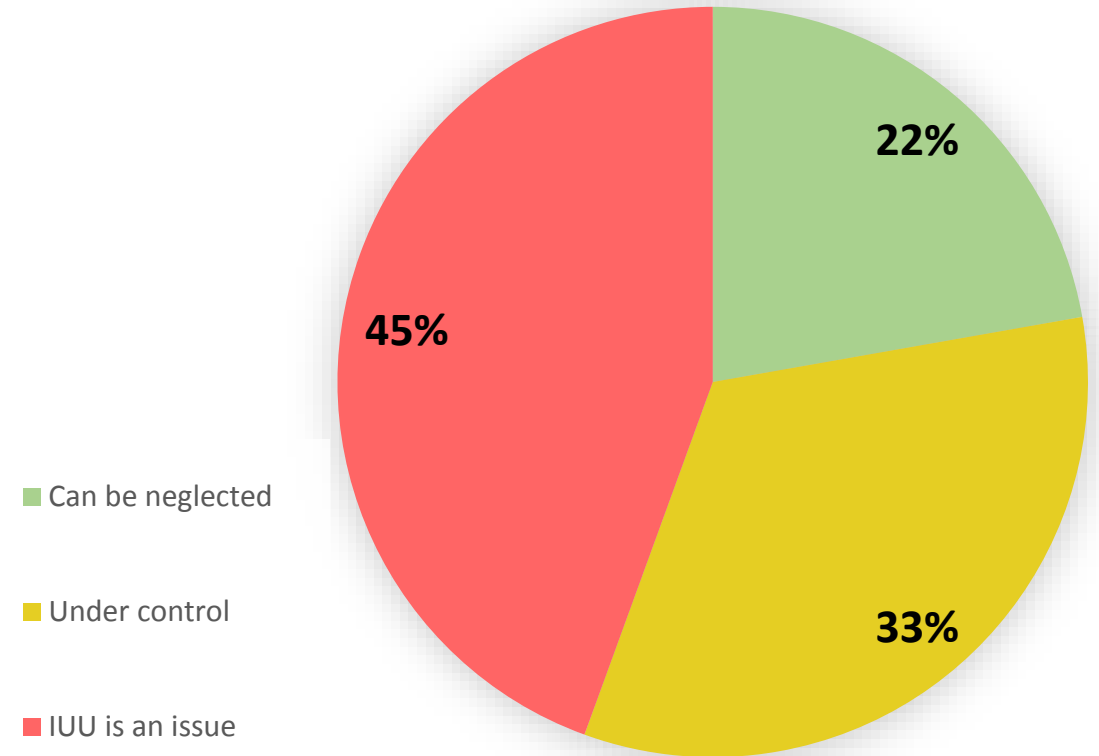


# Obj. 1: Removal from the wild is prohibited

Is fishing / angling of sturgeons prohibited or regulated?

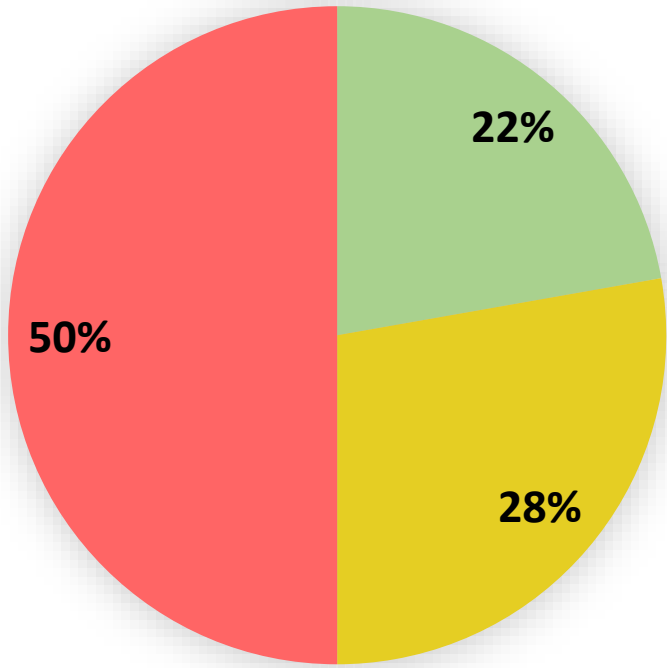


Is IUU fishing of sturgeons an issue?



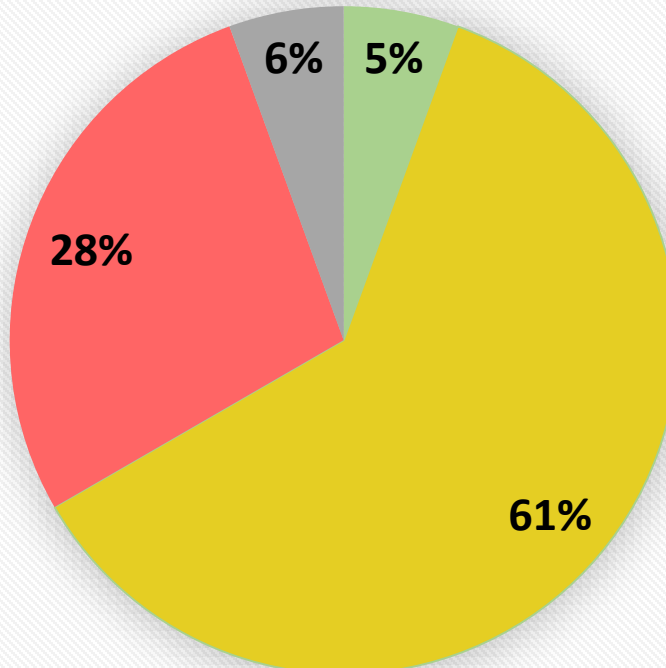
# Obj. 1: Reduce bycatch

Is (marine / freshwater) bycatch considered an issue ?



■ No ■ Partly ■ Yes

Is (marine / freshwater) bycatch recorded in your country?

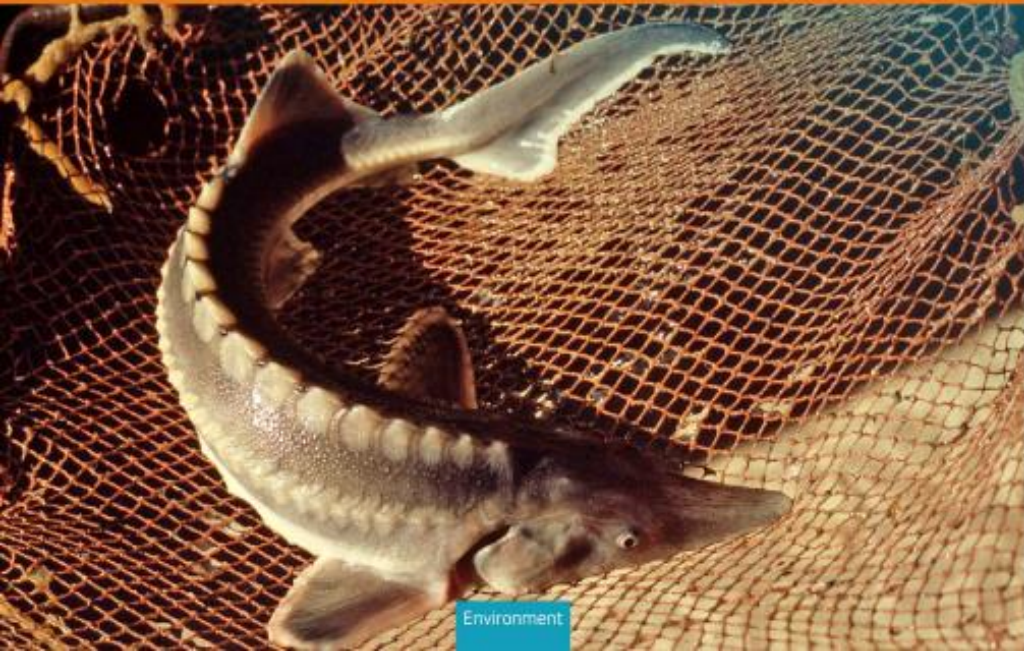


■ Yes ■ Partly ■ No ■ N/A



## Review of Bycatch Prevention and Mitigation Measures for Sturgeons

SUPPORT DOCUMENT FOR THE IMPLEMENTATION OF  
THE PAN-EUROPEAN ACTION PLAN FOR STURGEONS



Environment

# Bycatch Review - Content

- First review on sturgeon bycatch ever
- European and N-American literature analysed
- Includes
  - simple examples of communication tools for exchange with fishers from different European regions
  - Other recommendations



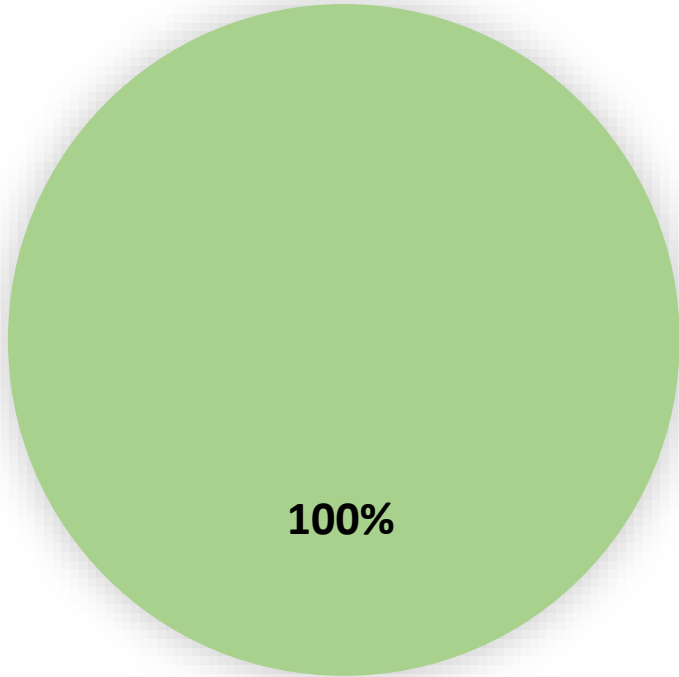
# Main conclusions

- Bycatch issue currently underestimated as populations are very small - will rise with increasing populations
- Despite legal obligations, official sturgeon bycatch data are not available
- Only voluntary reports by fishers (biased but only info source)
- Fishers as key target group must be transparently involved – big communication effort
- Implement and enforce regulations to increase effectiveness of protection
- Better knowledge on sturgeon spatial and temporal distribution in marine areas can be gathered by obligatory catch reports
- Data exchange within the sea basins needed



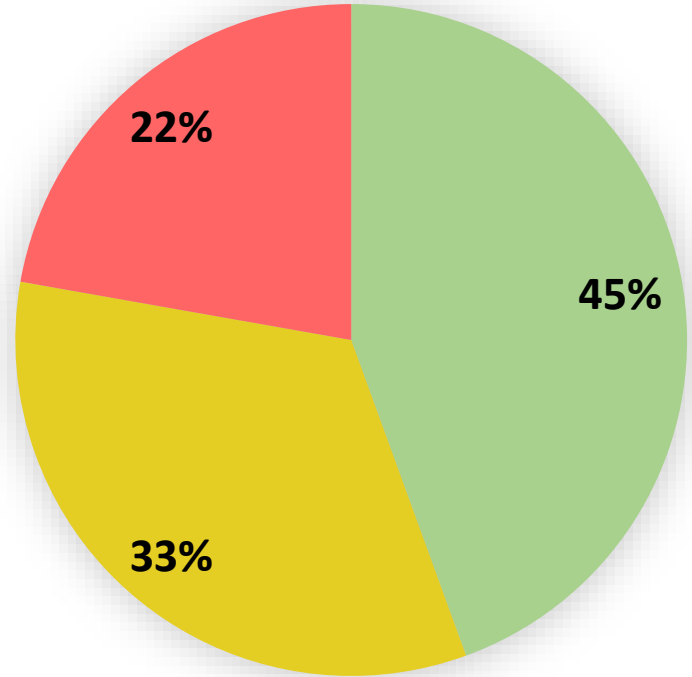
# Obj. 2: Populations are actively supported

Is a release program considered necessary?



■ Yes ■ No

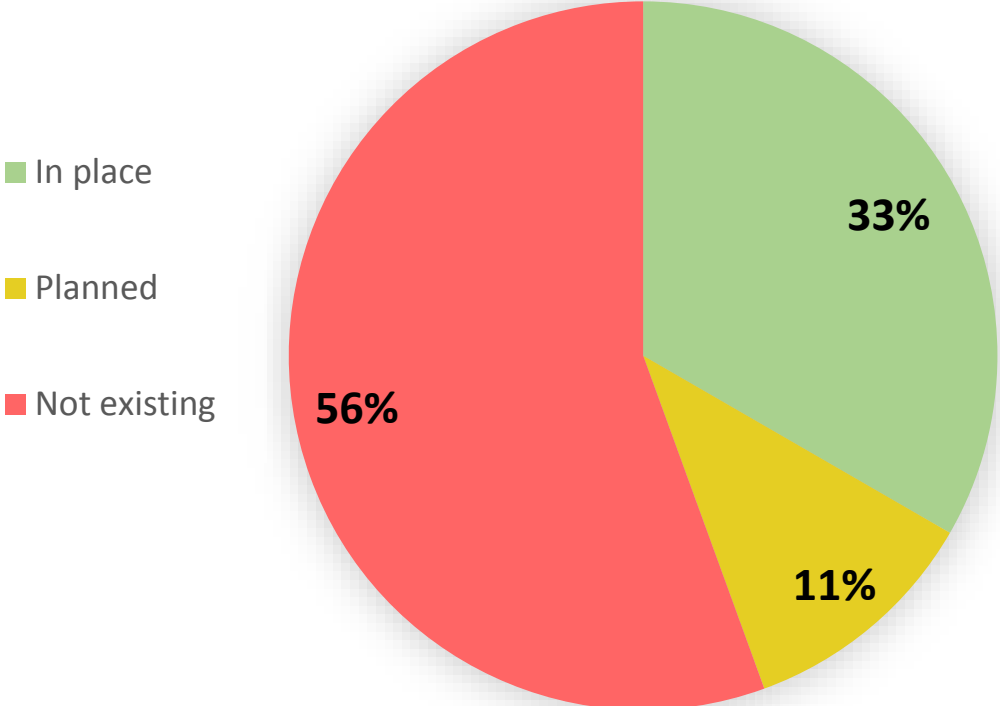
Are releases taking place from *ex situ* programs?



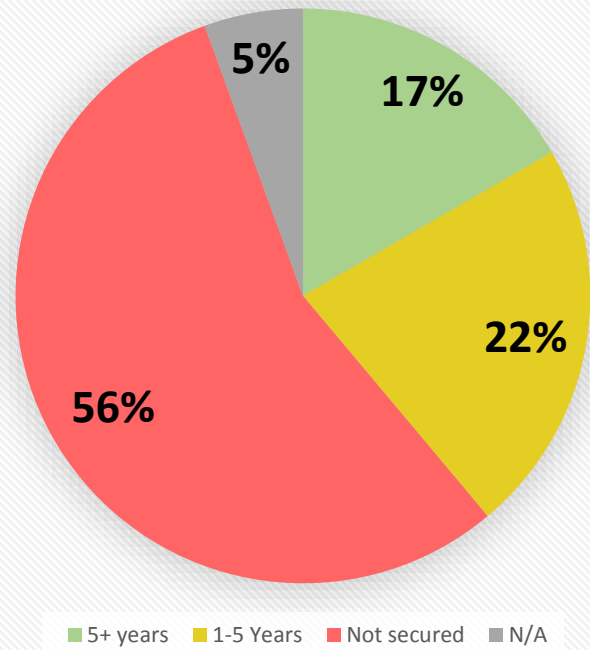
■ Regularly ■ Occasionally ■ No

# Obj. 2: Populations are actively supported

A national or jointly managed *ex situ* programme is:



Funding for the construction and operation of *ex-situ* facilities is secured for:







# Technical Guideline for EX SITU Conservation Measures in Sturgeons

**SUPPORT DOCUMENT FOR THE IMPLEMENTATION OF  
THE PAN-EUROPEAN ACTION PLAN FOR STURGEONS**



# Ex situ conservation measures



- The guideline contributes to Objective 2 **POPULATION STRUCTURE IS ACTIVELY SUPPORTED TO REVERSE THE DECLINE**
- Comprises all measures to protect and promote
  - Genetic diversity between populations of different origin (reflect adaptations to different environmental conditions)
  - Genetic diversity within populations (represents their adaptive potential)
- in threatened species and their populations **under controlled conditions**
- Involves propagation and rearing
- Can serve as a stop gap measure while other recovery actions are implemented

# Main recommendations

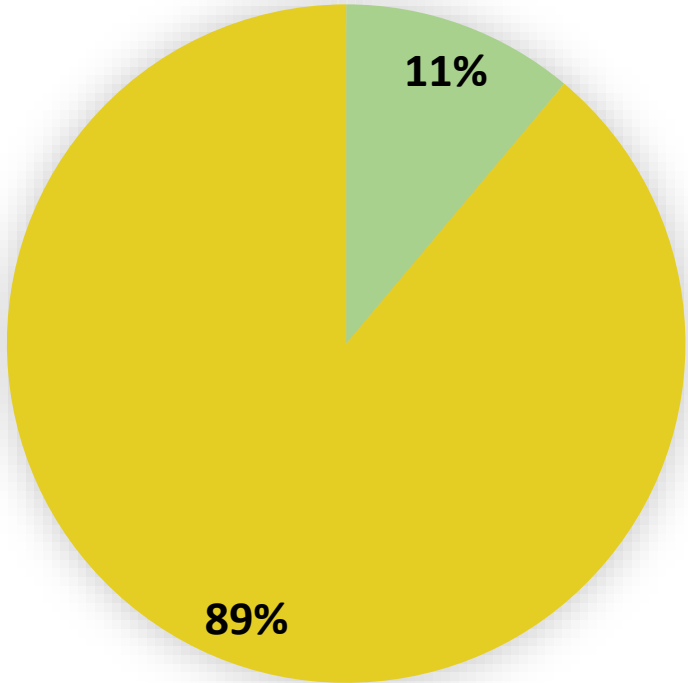


- Plan *ex situ* programs in cooperation with range countries sharing populations  
→ Shared costs, capacities and impact
- Long-term planning and funding needed
- Use guideline to build on best practices and avoid risks
- Include monitoring to evaluate success/failure
- Restocking alone is not an option – threat reduction needs to be addressed in parallel



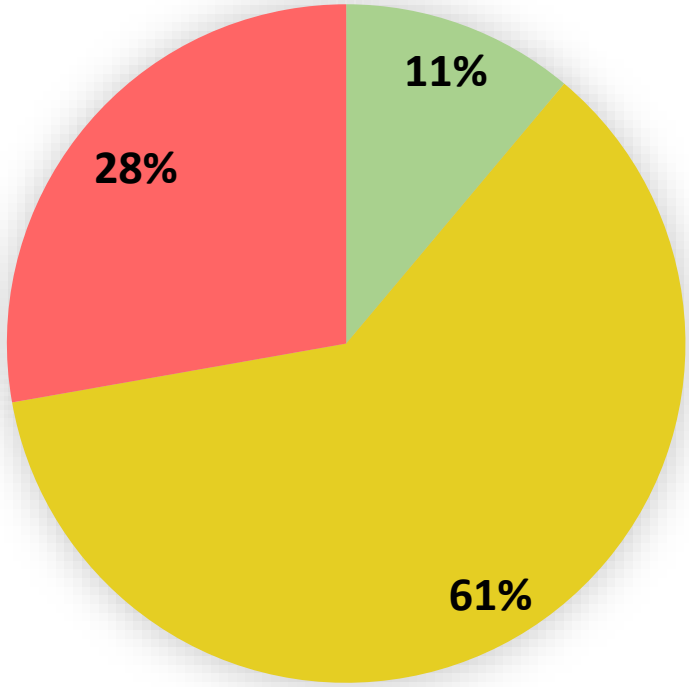
# Obj. 3: Habitats are protected and restored

Have the habitats of sturgeon been identified?



■ Yes ■ Partly ■ No

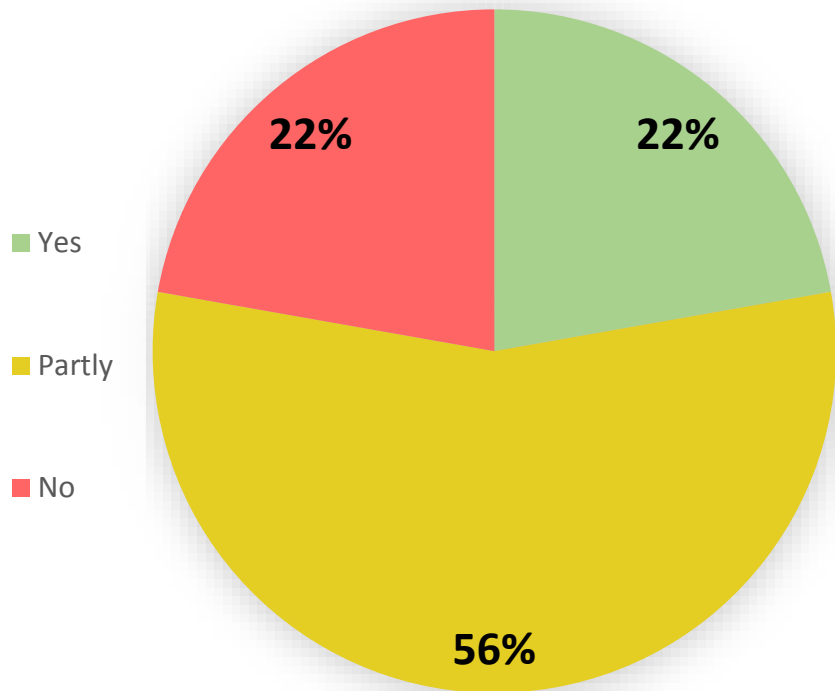
To which extent have the identified habitats received legal protection?



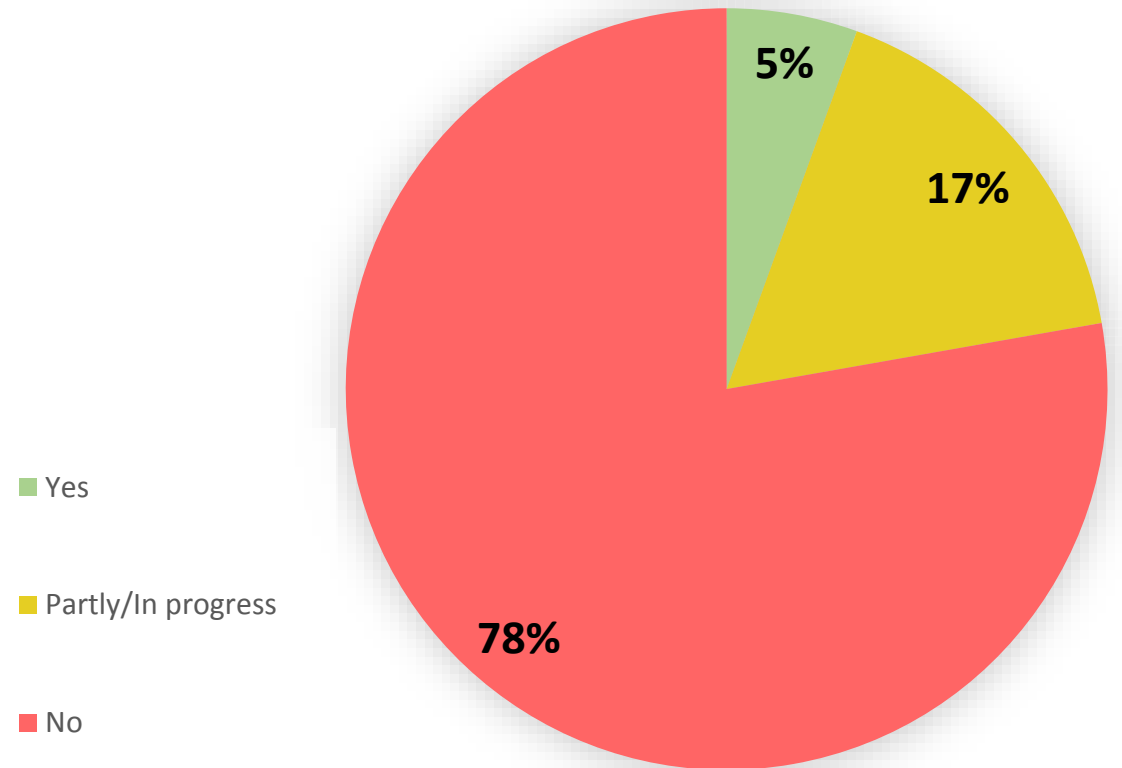
■ All/most critical ones ■ Some ■ None

# Obj. 3: Habitats are protected and restored

Is it known which habitats are threatened by economic developments?



Is there a habitat restoration plan with sturgeon as target species?





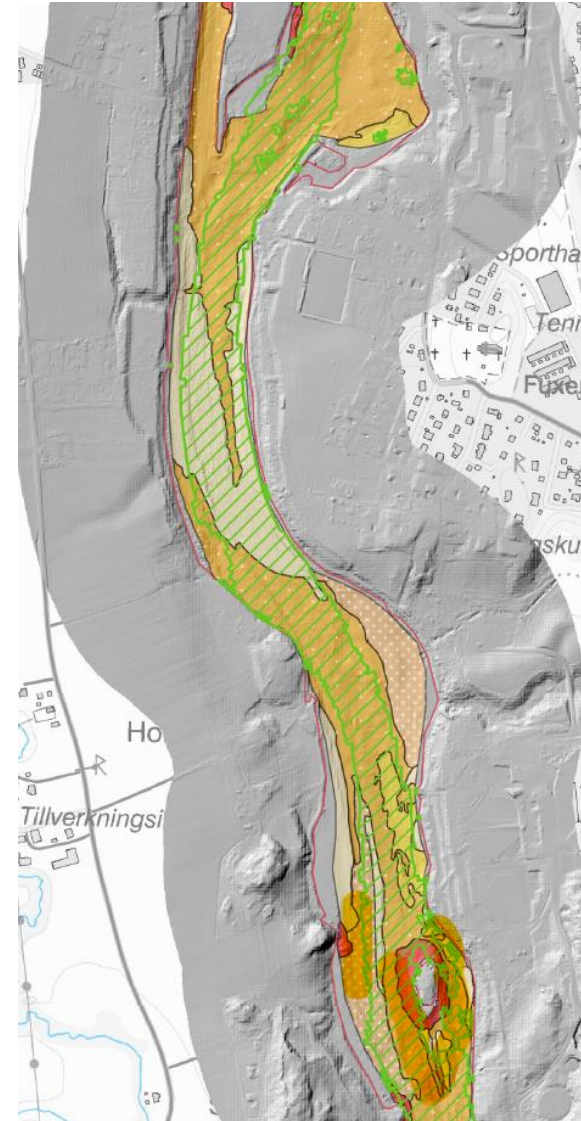
# Technical Guideline for Sturgeon Habitat Monitoring

**SUPPORT DOCUMENT FOR THE IMPLEMENTATION OF  
THE PAN-EUROPEAN ACTION PLAN FOR STURGEONS**



# Relevance of Habitat Assessment and Monitoring Guideline

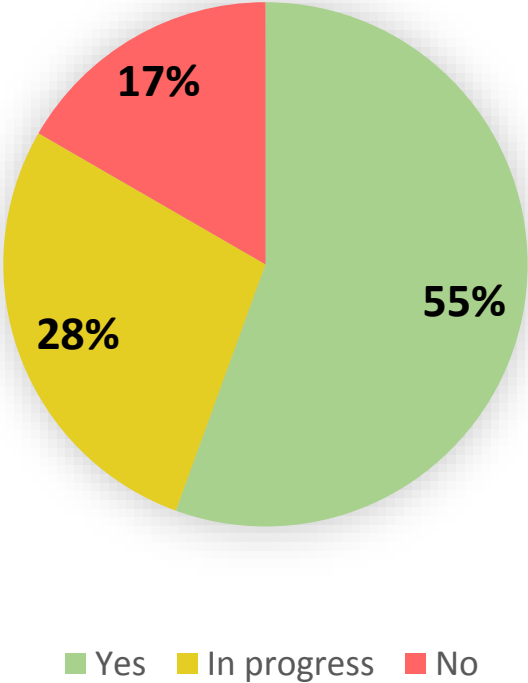
- Habitat assessment provides **an indispensable knowledge on the environmental suitability of habitats**
- The guideline proposes a **four step approach** of
  - (1) identification
  - (2) verification
  - (3) confirmation and
  - (4) recurring monitoring measures for sturgeon habitats
- Standardized methodology and harmonized approach within a river or sea basin is needed
- It is the basis for all habitat protection measures and any infrastructure plannings (no-harm principle)



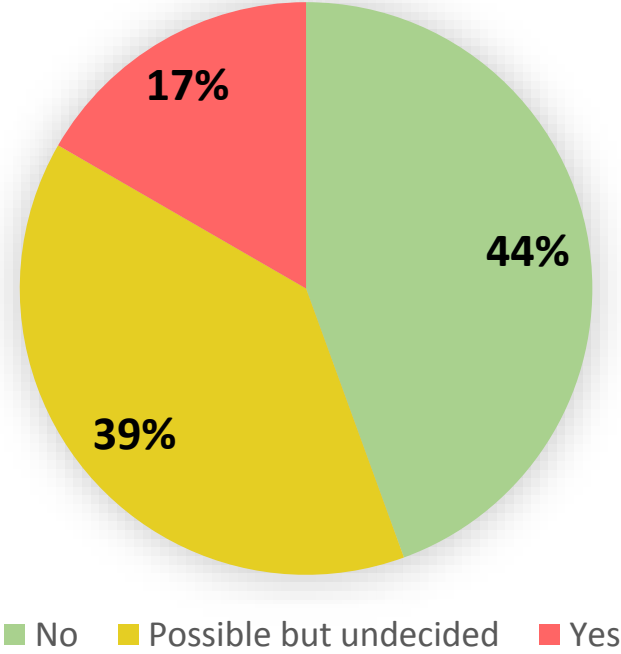


# Obj- 4: Migration is secured or facilitated

Has the identification of relevant obstacles on migration routes been achieved?

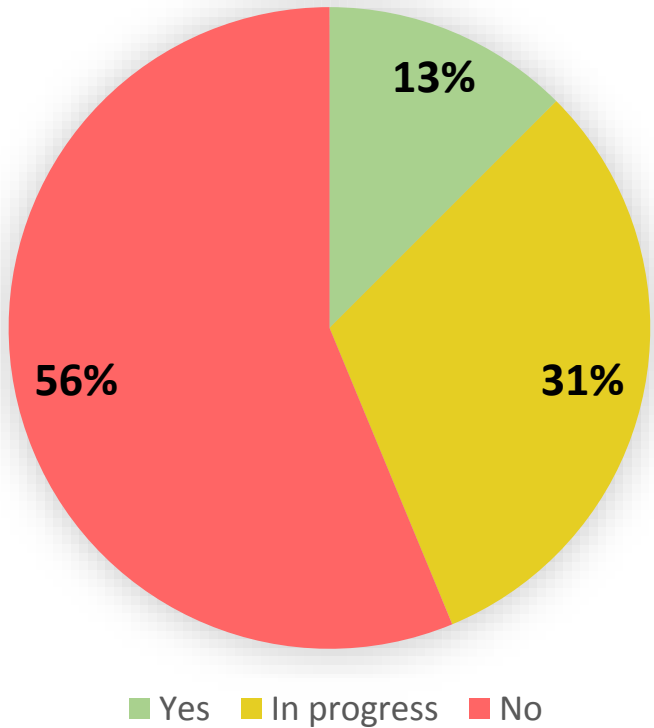


Are there plans for building new migration obstacles in key sturgeon rivers?

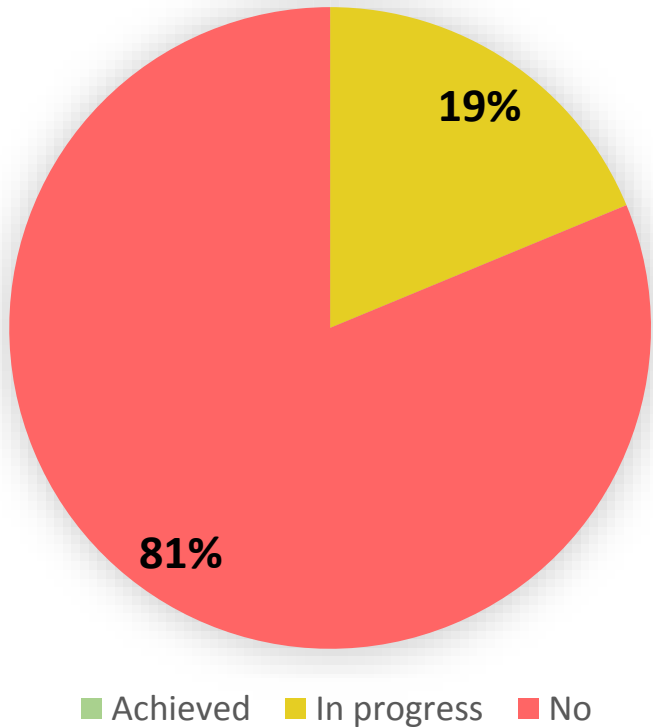


# Obj. 4: Migration is secured or facilitated

Have funds been allocated for feasibility studies as well as mitigation measures?

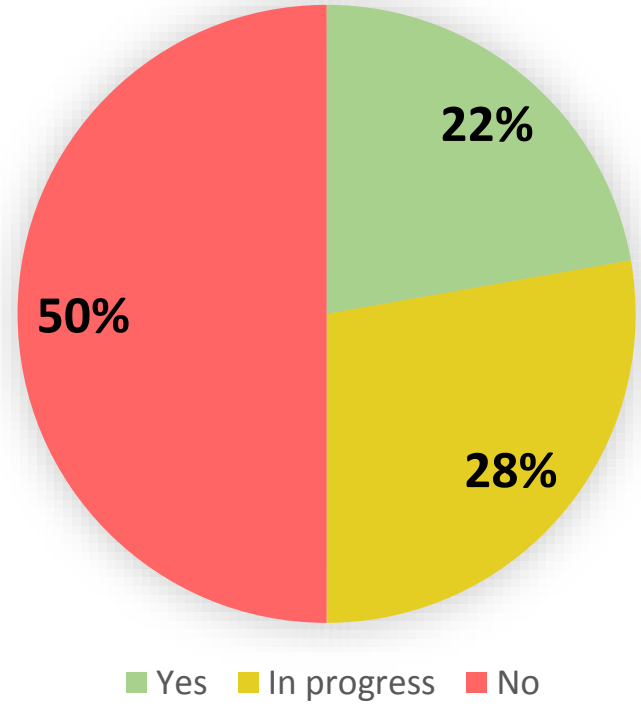


Have functional passage solutions for sturgeons been implemented?

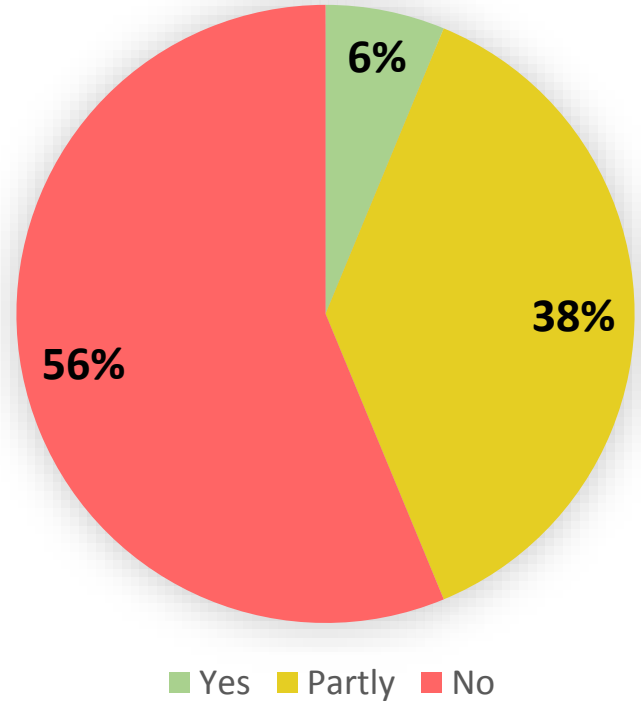


# Obj. 5: Population monitoring is designed and implemented

Is there a monitoring programme designed for sturgeon population(s)?



Is monitoring coordinated with other countries for shared populations?





# Technical Guideline for Sturgeon Population Monitoring

**SUPPORT DOCUMENT FOR THE IMPLEMENTATION OF THE PAN-EUROPEAN ACTION PLAN FOR STURGEONS**





# Population monitoring



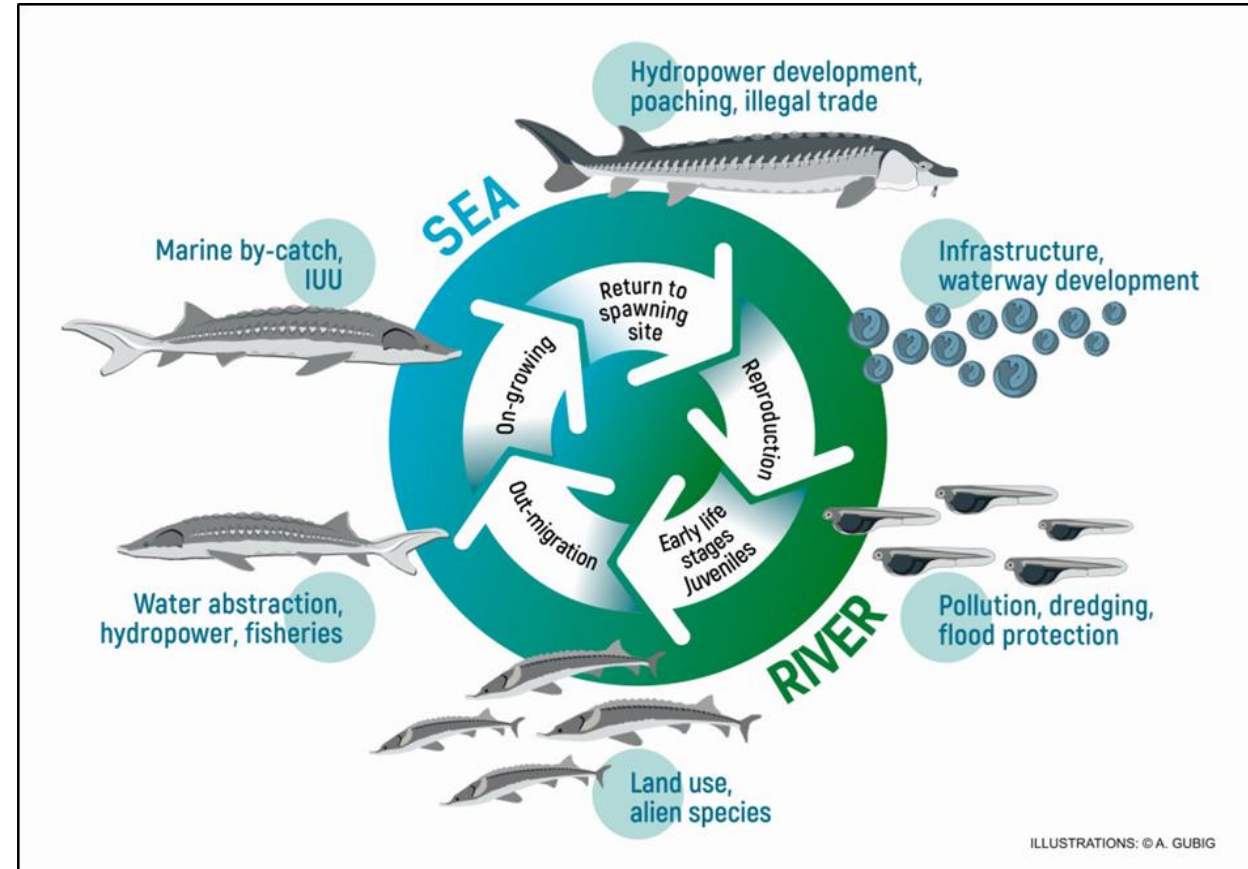
serves to:

- Provide science-based data
- Assess development of populations
- Evaluate effects of ongoing recovery measures
- Identify bottlenecks

→ Prerequisite for science-based management decisions

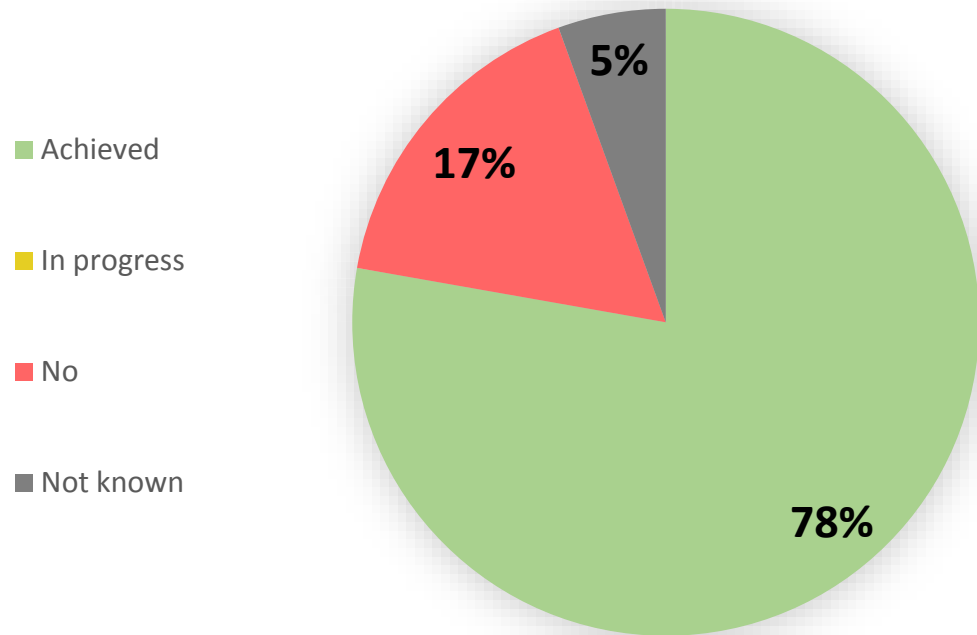
# Relevance of monitoring guideline

- The guideline provides
  - Methods and applications based on life-cycle stages
  - Guidance for practitioners
- Sturgeon monitoring is a long-term endeavour and needs appropriate funding!
- Data collected (in particular with public funding) must be made accessible and shared between institutions and countries

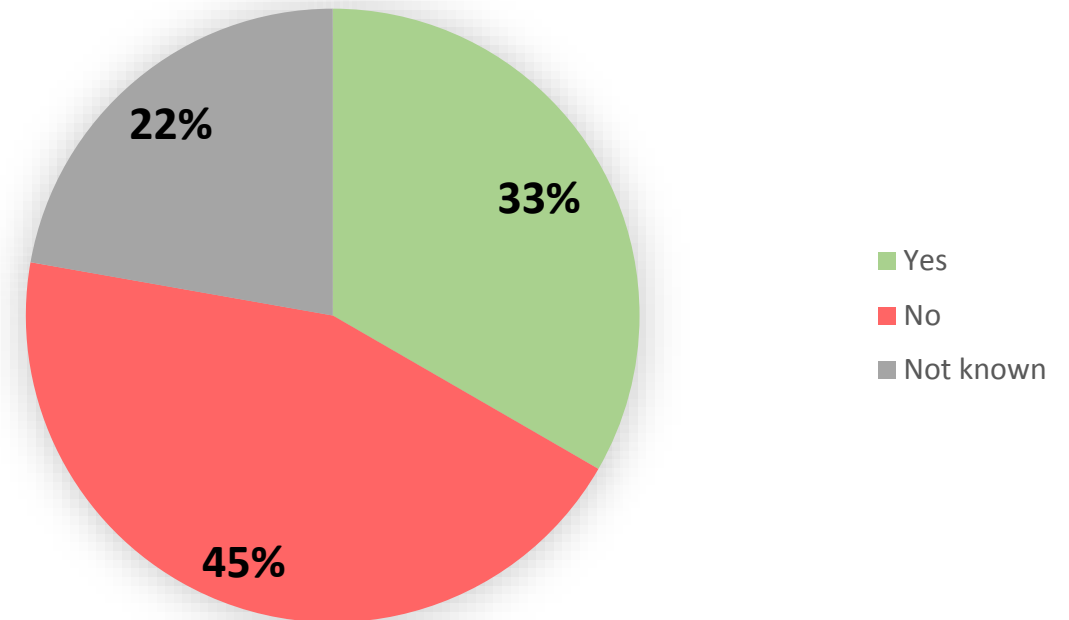


# Obj. 9: Monitor national implementation of PANEUAP

Has a national surgeon focal point been appointed?

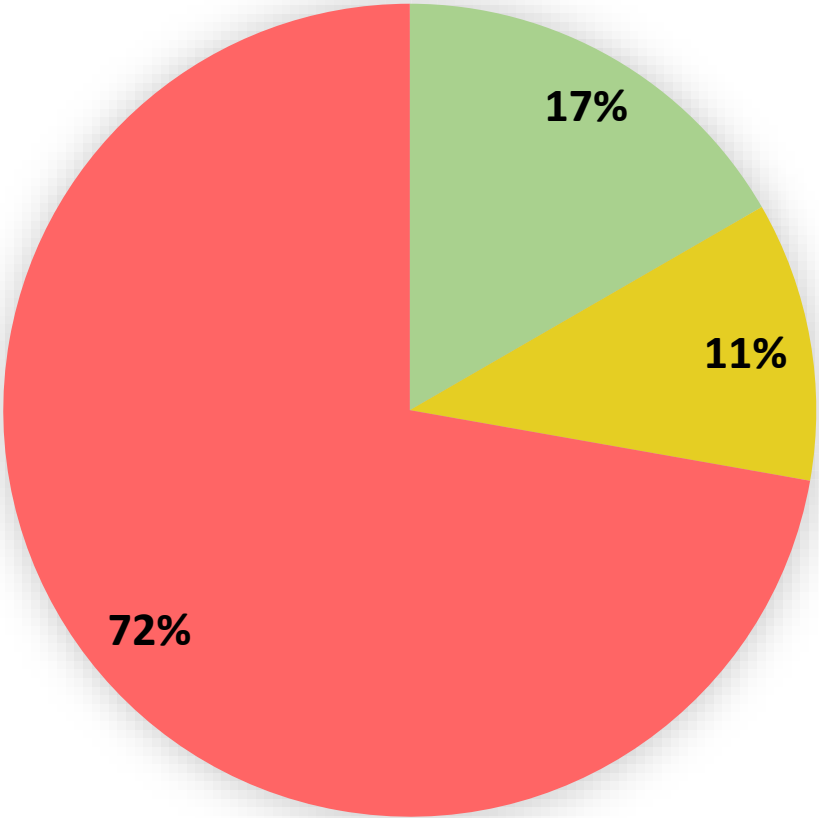


Does the focal point have a mandate to coordinate the implementation of the Action Plan?



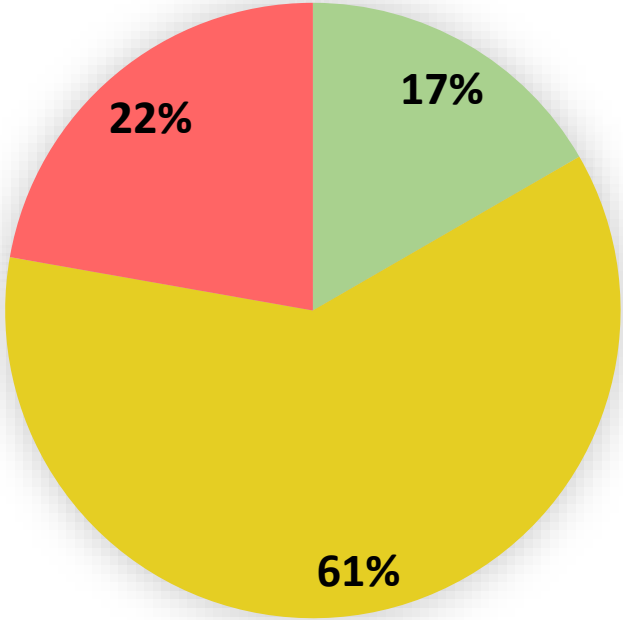
# Obj. 7: Enabling Conditions – Funding & Awareness

Is there a coordinated funding plan for Action Plan implementation?



■ In place   ■ Under development/discussion   ■ Not done yet

Is the awareness of main stakeholders and authorities considered high enough?



■ Yes   ■ Medium   ■ No



# Summary and Conclusions

- **50% of countries have a national strategy**
- Legal protection – in place but 8 countries state **poaching remains an issue**
- **Bycatch** is a problem for a majority of countries but is not tackled jointly
- All 18 countries say **release programs are necessary!**  
Yet in 10 countries an *ex situ* program is lacking
- **Habitat identification** is in progress but **protection** of habitats is largely **lacking** or not functional and **restoration** basically not happening
- Obstacles to migration are mostly identified but **passage is not facilitated**
- **Monitoring programs** are in place in 4 countries but in progress for other 5
- **Coordination** of monitoring between countries is lacking
- 17 of 18 countries have **national focal points** but their mandate is not clear

*Developed under EC service contract No 09.0201/2022/885601/SER/D.3  
‘Supporting conservation and protection actions to implement the Pan-European Sturgeon  
Action Plan’*

*in support of  
Recommendation No. 199(2018) of the Standing Committee of the Bern Convention on the  
Pan-European Action Plan for the conservation of the sturgeon*

**Thank you for your attention!**



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Subcontractors:

PhD. Ralf Reinartz