

Agenda item 6.3 For information

Council

# CNL(17)35

Annual Progress Report on Actions Taken Under the Implementation Plan for the Calendar Year 2016

EU – Germany

# CNL(17)35

# Annual Progress Report on Actions taken under the Implementation Plan for the Calendar Year 2016

The primary purposes of the Annual Progress Reports are to provide details of:

- any changes to the management regime for salmon and consequent changes to the Implementation Plan;
- actions that have been taken under the Implementation Plan in the previous year;
- significant changes to the status of stocks, and a report on catches; and
- actions taken in accordance with the provisions of the Convention

These reports will be reviewed by the Council. Please complete this form and return it to the Secretariat **no later than 24 March 2017**.

Party:	European Union
Jurisdiction/Region:	Germany

# 1: Changes to the Implementation Plan

# **1.1 Describe any proposed revisions to the Implementation Plan** (Where changes are proposed, the revised Implementation Plans should be submitted to the Secretariat by 1 December).

./.

# **1.2** Describe any major new initiatives or achievements for salmon conservation and management that you wish to highlight.

# <u>Rhine</u>

A genetic monitoring programme has been launched at ICPR (see Action A2). Mayor improvements regarding salmon reintroduction are expected in the river Murg, a historically important salmon river in the upper Rhine region in *Baden-Wuerttemberg*. Some hydropower plants, which are unpassable barriers for salmon, will be equipped with innovative new fish passes, in the next years. In addition, minimum channel runoffs will significantly increased in channel reaches below dams of bypass hydropower plants. It is anticipated that salmon spawning habitats in the river Murg be enhanced in quantity and quality in the next years, due to the planned measures.

#### Elbe

The cross-border cooperation regarding salmon reintroduction in the Upper Elbe river between the *Czech Republic* and *Saxony* were strengthened in 2016. Due to the improved river connectivity the stocking measures were extended significantly in the river Nuthe in *Saxony-Anhalt* in 2016. Furthermore, a video-optically monitoring of adult salmon has been started in the river Nuthe. The inclusion of the river Bode in the salmon resettling programme of *Saxony-Anhalt* is currently under review.

In order to support salmon reintroduction in the Schwarze Elster / Pulsnitz river system, fishing associations in Saxony and Brandenburg have agreed an interregional cooperation. As result of this, salmon stocking has been doubled in 2016. The fish passability at the mayor obstruction (weir Kroppen) for migrating fish in the river Pulsnitz will be restored in 2017.

# **2:** Stock status and catches.

2.1 Provide a description of any new factors which may significantly affect the abundance of salmon stocks and, if there has been any significant change in stock status since the development of the Implementation Plan, provide a brief (200 word max) summary of these changes.

#### **Rhine**

The increasing trend in returned adult salmon observed in 2015 did not continue in 2016. In all sections, the registered number of returning adult salmon was lower than in the previous year, which was a record year at the upper Rhine. The number of registered adult salmon returning from the sea and observations of natural reproduction of salmon in the Rhine tributaries are documented (see graph and statistics attached in the annexes 1-3). After a decrease in 2015 due to problems at different breeding facilities, as many stocking measures as in the previous year were realized.

As every year, *Baden-Wuerttemberg* considered further efforts to increase the river connectivity and habitat improvement measures and the preservation of existing habitats as necessary. Smolt predation by birds, especially cormorants is still a significant problem in *Baden-Wuerttemberg*.

#### Elbe

Despite of good hydrophysical conditions (water supply and temperatures) during the salmon run and spawning season, the numbers of recorded adult salmon, fall short of expectations in the Elbe river and its tributaries in 2016 (see Annex 5).

Salmon habitats in the Stepenitz river system in *Brandenburg* are affected increasingly by the spread of beavers. Numerous beaver's lodges (see Annex 7) cause a damage due to change in water discharge (increased sedimentation, loss of spawning habitats, change in chemical and physical conditions e.g. temperature and oxygen level).

#### Weser

Adults return could only recorded in tributaries of the estuary of the Weser (see Annex 6). In tributaries of the middle Weser river, no adults return could recorded in 2016. There was no evidence for successful natural reproduction of salmon in *Lower Saxony* in 2016, neither in the river Weser nor in the river Elbe.

2.2 Provide the following information on catches: (nominal catch equals reported quantity of salmon caught and retained in tonnes 'round fresh weight' (i.e. weight of whole, ungutted, unfrozen fish) or 'round fresh weight equivalent').

(a) provisional nominal	In-river	Estuarine	Coastal	Total
catch (which may be	0,12 t catch by	./.	./.	./.
	recreational			

subject to revision) for 2016 (tonnes)	fisheries for Lower Saxony			
(b) confirmed nominal catch of salmon for 2015 (tonnes)	0,15 t catch by recreational fisheries for Lower Saxony	./.	./.	./.
(c) estimated unreported catch for 2016 (tonnes)	./.	•/•	./.	There might still be some IUU fishery for salmon, but the degree is unknown. However, as the stocks are very low, the degree of illegal fishing for salmon likely is also very low.
(d) number and percentage of salmon caught and released in recreational fisheries in 2016.		mon is prohibited atchment areas no		

# **3: Implementation Plan Actions.**

# **3.1** Provide an update on progress against actions relating to the Management of Salmon Fisheries (Section 2.8 of the Implementation Plan).

**Note:** The reports under 'Progress on Action to Date' should provide a brief overview with a quantitative measure of progress made. While referring to additional material (e.g. via links to websites) may assist those seeking more detailed information, this will not be evaluated by the Review Group.

500	king more actanea injormation, inis wit	i nor se erananea sy me nerien Group.
Action	Description of Action	The ICPR has drafted recommendations aimed at
F1:	(as submitted in the IP)	improving legal compliance and thus reducing by-
		catches and illegal catches of salmon by professional
		and recreational fishing (see "Master Plan Migratory
		Fish Rhine").
	Expected Outcome	Diminish the pressure due to fishery.
	(as submitted in the IP)	
	Progress on Action to Date	Experts annually exchange information within the
	(Provide a brief overview with a	ICPR on the implementation of these
	quantitative measure of	recommendations in the Rhine bordering countries and
	progress. Other material (e.g.	report on their effectiveness in practice.
	website links) will not be	The Dutch delegation has been asked to provide
	evaluated.)	information on the legal implementation of the ban
		against fisheries on salmonids, due to a current case of
		illegal sale of salmonids at a Dutch market
	Current Status of Action	Ongoing

	If 'Completed', has the Action achieved its objective?	
Action F2:	Description of Action (as submitted in the IP)	Developing of a self-sustaining salmon population in the Agger river without stocking.
	Expected Outcome (as submitted in the IP)	Verification if the salmon population in this river is restored successfully.
	Progress on Action to Date (Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)	In a subsystem of the Agger river stocking has been gradually reduced since 2013. Since 2015 stocking was reduced to zero throughout the Agger-System.
	Current Status of Action	Ongoing
	If 'Completed', has the Action achieved its objective?	

2 2 D	ovido on undato on progress os	minut actions valating to Ushitat Dustration and
	storation (Section 3.4 of the Imp	ainst actions relating to Habitat Protection and plementation Plan).
Not	te: The reports under 'Progress on Ac	tion to Date' should provide a brief overview with a quantitative
		g to additional material (e.g. via links to websites) may assist those Il not be evaluated by the Review Group.
Action	Description of Action	The German Federal Ministry of Transport, Building
H1:	(as submitted in the IP)	and Urban Development launched the program
	(	"Durchgängigkeit Bundeswasserstraßen" (Patency
		Federal Waterways) in 2012. Its objective is to
		preserve and restore the ecological passability at about
		250 barrages in German federal waterways to improve
		fish migration. Many of the proposed measures in the
		catchments of Rhine, Ems, Weser and Elbe are located
		in the migration routes to current or potential salmon reintroduction rivers. Hence these activities have a
		high priority for reintroduction of salmon in Germany.
	Expected Outcome	Increased accessibility of spawning and juvenile
	(as submitted in the IP)	habitats.
	Progress on Action to Date	In 2016, the focus was on encouraging the planning
	(Provide a brief overview with a	process of 47 measures, which had been prioritized for
	quantitative measure of	the second implementation phase at the end of
	progress. Other material (e.g. website links) will not be	2015. Three measures have been built so far, of which
	evaluated.)	two measures are situated at the Müritz-Elde-
		Waterway and one at the Saale. For up to 3 measures located in the River Moselle and Neckar the plan
		approval procedure will start in 2017. Additional 21
		measures are already in the process of planning of
		which 5 will be implemented at the River Main, 7 at
		the River Neckar, one in the Weser and 8 in the region
		of Berlin/Brandenburg at the River Havel and Spree.
		Additional for 9 measures the preliminary planning
		phase has been started. The monitoring for a total of 12 (established since 2010) fishpasses at the Weser,
		Elbe and Rhine is in progress.
	Current Status of Action	Ongoing
	If Completed, has the Action	
A - 4°	achieved its objective?	Destantion of the state of the
Action H2:	Description of Action (as submitted in the IP)	Restoration of up- and downstream river continuity and development of the quantitative and qualitative
	(us submitted in the 11)	aspects of spawning and juvenile habitats in the entire
		Rhine catchment. The specific measures planned for
		anadromous migratory fish in the different sections of
		the Rhine are listed in the "Master Plan Migratory Fish
	<b>D</b>	Rhine".
	Expected Outcome	Increased quality and quantity of spawning and
	(as submitted in the IP)	juvenile habitats and decreased mortality due to
		barrages and hydropower plants.

	Progress on Action to Date (Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)	The ICPR project group PG ORS (Oberrhein/Rhin- Supérieur) continued its work which aims at supporting the implementation planning of an efficient fish passage system at the three barrages in Rhinau, Marckolsheim and Vogelgrün in the Upper Rhine. Ecological continuity on the main stream of the Rhine was further improved, since the fish passage at the barrage weir in Strasbourg was officially launched in spring 2016. Partial opening of the Haringvliet sluices in the Netherlands in 2018 is on schedule. An ICPR workshop on fish protection at downstream migration was held in Maastricht from 6 to 7 October 2016. The presentations are available on <u>www.fishmarket.fish</u> . The Master Plan Migratory fish is currently updated and will be published end of 2017.
	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	
Action H3:	Description of Action (as submitted in the IP)	Reestablishing continuity of the Elbe river and its primary tributaries from estuary to the springs. The action includes 34 weirs in Brandenburg, 6 in Hamburg, 3 in Mecklenburg-Western Pomerania, potentially 1 in Lower Saxony, 9 in Saxony-Anhalt, 1 in Schleswig-Holstein, 23 in Thuringia, 54 in Saxony and 3 under responsibility of the Federal Government.
	Expected Outcome (as submitted in the IP) Progress on Action to Date (Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)	Improved access to spawning grounds and decreased mortality due to barrages and hydropower plants. The International Commission for the Protection of the River Elbe has updated the International Management Plan for the Elbe River Basin District for the period 2016-2021 according to the European Water Framework Directive for the period 2016-2021. The selection of the supra-regional priority watercourses was slightly modified in the updated plan. The aim is to restore river continuity for migrating fish at all significant transverse structures of the Elbe river and 53 other water courses in the basin:

			the supra-regional of operational object					
	State	Number of supra-regional priority water courses	Implemented in the first management period <sup>1)</sup>	Plan for the second management period <sup>2)</sup>				
	Germany	Elbe + 41	60	172				
	Czech Republic	Elbe + 12	25	130				
	Total	Elbe + 53	85	302				
	in the period 2010 2) Number of additio	- 2015.	s where river continuity e structures where rive					
	An overview	1	0 1	•				
	watercourses		-	nented and				
	planned meas	sures is given	in Annex 4.					
Current Status of Action	Ongoing	Ongoing						
If Completed, has the Ac achieved its objective?	on							

# **3.3** Provide an update on progress against actions relating to Aquaculture, Introductions and Transfers and Transgenics (Section 4.8 of the Implementation Plan).

**Note:** The reports under 'Progress on Action to Date' should provide a brief overview with a quantitative measure of progress made. While referring to additional material (e.g. via links to websites) may assist those seeking more detailed information, this will not be evaluated by the Review Group.

aett	illea information, this will not be evalu	detailed information, this will not be evaluated by the Review Group.							
Action A1:	Description of Action (as submitted in the IP) Expected Outcome	Stocking material is completely attained from material gained from returning spawners, from reconditioned kelts and captive breeding in North Rhine Westphalia Rhine tributaries. No further use of ova from foreign origin.							
	(as submitted in the IP)	Establish a separate locally adapted indigenous salmon population in North Rhine Westphalia Rhine tributaries.							
	Progress on Action to Date (Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)	The capacity of the gene bank facility at LANUV NRW is found in the long-term mean as yet not sufficiently enough to meet the demand, and achieve a complete import independence. Measures to enable an increase of the captive breeding ova production are being taken. "Wild Salmon Center Rhine-Sieg" (hatchery) operated very successfully, producing stocking material, using partially ova from returning spawners and partially imported ova. All program waters could be sufficiently supplied with young-of-the-year salmon, which has priority over the import independence.							
	Current Status of Action	Ongoing							
	If Completed, has the Action achieved its objective?								
Action A2:	Description of Action (as submitted in the IP)	Experts annually exchange information within the ICPR expert group FISH about the possibilities of genetic monitoring of salmon in the Rhine catchment. The							

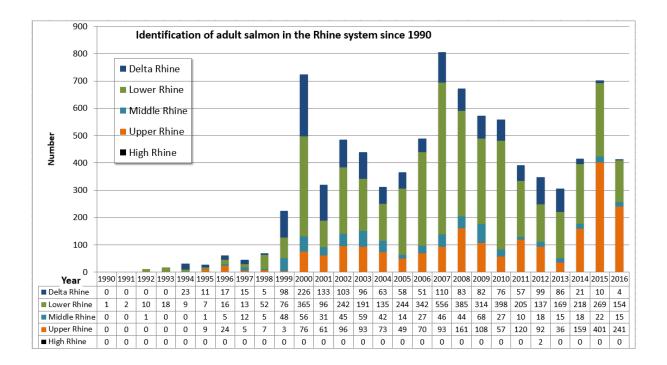
	different initiatives in the Rhine catchment now aim at harmonizing their genetic monitoring.
Expected Outcome (as submitted in the IP)	<ul> <li>Genetic monitoring will allow assessing</li> <li>1. the efficiency of <ul> <li>o stocking measures performed;</li> <li>o different strains that are stocked;</li> <li>o different stocking strategies (age, parents used, the origin of broodstock etc.)</li> </ul> </li> <li>2. the relative importance for stocking of the different streams of the Rhine catchment.</li> </ul>
Progress on Action to Date (Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)	A genetic monitoring programme has been launched at ICPR. The plan is to take genetic samples of parent fish in hatcheries, whose offspring is used for stocking measures in the Rhine catchment. This will allow to assign the returning adult salmons to their "home" hatchery and by this to identify the most promising stocking strategies. Almost all hatcheries in the Rhine basin participated in a pilot sampling campaign that was conducted in winter 2016/2017. The programme will be further developed in 2017.
Current Status of Action	Ongoing
If Completed, has the Action achieved its objective?	

- 4.1 Details of any laws, regulations and programmes that have been adopted or repealed since the last notification.
- ./. 4.2 Details of any new commitments concerning the adoption or maintenance in force for specified periods of time of conservation, restoration and other management measures.
- ./. 4.3 Details of any new actions to prohibit fishing for salmon beyond 12 nautical miles.

./.

- 4.4 Details of any new actions to invite the attention of States not Party to the Convention to matters relating to the activities of its vessels which could adversely affect salmon stocks subject to the Convention.
- ./. 4.5 Details of any actions taken to implement regulatory measures under Article 13 of the Convention including imposition of adequate penalties for violations. ./.

### Annexes CNL15.1037 EU-Germany



#### Annex 1: Registered salmon in the Rhine since 1990

		-		Year of spawning proof (reproduction during the preceding autumn/winter)															
		Project water - Selection		Teal	U Sp	awiiii	ig pro	or (re	Jiouu	LUOII	uuring	, uie j	JIECE	uniy a		II/WIII	lei)		
		of the most important	First																
Count		tributaries (* no stocking)	salmon																
ry	System		stocking	1994	1995	1996		1998	2006	2007		2009	2010		2012	2013	2014	2015	20
D	Wupper-	Wupper		1	1	1	1	1	1	1	(X)	1	1	1	1	1		1	
	Dhünn	Dhünn	1993	1	1	1	1	1	х	1	1	1	1	1	1	1		1	L
		Eifgenbach		1	1	1	1	1	0	1	1	1	1	1	1	1		1	
D	Sieg	Sieg NRW	syste cal un and	х	1	1	1	1	1	1	1	1	1	1	XX	1	XX	0	Ľ
		Agger (lower 30 km)	river syst lassical u ialler and	Х	1	1	1	$-I^{-}$	ХХ	хххх	хххх	хххх	1	1	XXX	XXX	ХХХ	ххх	X
		Naafbach	ieg river o classic smaller	1	1	1	1	1	XXX	хххх	XXXX	хххх	1	1	XXX	XXX	ХХХ	хххх	¢ x
		Pleisbach	000	1	1	1	1	1	1	Х	1	Х	1	1	1	1		1	Г
		Hanfbach		1	1	1	1	1	1	1	1	1	1	1	1	1		1	Г
		Bröl	the Si dition t lected	х	1	1	х	1	ХХ	ххх	1	ххх	1	1	1	ХХ	ххх	ххх	
		Homburger Bröl	드러고	1	1	1	1	1	XX	х	1	1	1	1	1	1	0	хх	
		Waldbröl	ures 3 in a 0 in s	1	1	1	1	1	ххх	ххх	1	0	1	1	1	1	ххх	0	r
		Derenbach	easu 998 i also ks	1	1	1	1	1	0	1	1	1	1	1	1	1		1	F
		Steinchesbach	measi e 1998 ns also ooks	1	1	1	1	1	0	1	1	1	1	1	1	1		1	t
		Krabach	mon stocking me e 1988, since 19 barbel regions : lium sized brook	1	1	1	1	1	1	1	1	1	1	1	1	1		1	t
		Gierzhagener Bach		1	1	1	1	1	1	x	1	1	1	1	1	1		1	t
		Irsenbach	Salmon stoc since 1988, and barbel i medium sizi	1	1	1	1	1	1	1	1	1	1	1	1	1		<i>'</i>	⊢
		Sülz	Salmon since 19 and bart medium	1	1	1	1	1	xx	1	1	1	1	1	XXX	1	ххх	, xxxx	d x
		Schlingenbach	Saln since and med	1	1	1	1	1	/	x	xxxx	xxx	1	1	XXX	0	0	0	ŕ
				,	1	1	1	1	x		XXXX	X	0	?	?	?	?		-
		middle Sieg RLP	1994		1					X			-					?	F
		Nister system	1991	1		1	1	1	XXX	XX	XXXX	X	X	X	X	X	X	X	┢
		Wisserbach	1991	1	1	1	1	1	XXX	XX	XXXX	0	X	0	0	0	0	XX	L
		Elbbach	1995	1	1	1	1	1	1	XX	XX	0	0	0	1	1	1	1	
		Heller-Daade	1998	1	1	1	1	1	1	X	X	x	0	0	0	0	0	0	L
		Asdorf	1997	1	1	1	1	1	1	1	/	1	0	/	1	/	0	0	
D	Ahr	Ahr	1995	1	1	1	1	1	0	0	?	0	XX	XX	0	XX	XX	XXX	
D	Nette	Nette *	-	1	1	1	1	1	х	0	х	0	х	0	х	0	ХХ	ХХ	L
D	Saynbach	Saynbach	1994	1	1	1	1	1	ХХ	хххх	XXXX	XX	XX	XXX	X	X	XX	XX	
		Brexbach	1994	1	1	1	1	1	0	0	XXX	ХХ	ХХ	0	0	0	0	0	Ľ
D	Moselle	Elzbach	2005	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	)
		Kyll	1996	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		Prüm system	1996	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	L
Lux/D		Sauer	1992	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		Our	1992	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
D	Lahn	Mühlbach	1994	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		Weil	1995	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	Г
		Dill	1995	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Г
D	Nahe	Nahe	2013	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	r
D	Wisper	Wisper	1999	1	1	1	1	1	0	ХХ	xxxx	0	X	XX	0	0	ХХ	0	x
D	Main	Schwarzbach	2009	1	1	1	1	1	1	1	0	0	0	0	0	0	0	х	f
		Kinzig system (Hesse)	2003	1	1	1	1	1	0	1	1	1	1	1	1	2	0	$\hat{i}$	┢
D	Alb	Alb	2001	1	1	1	1	1	1	1	1	1	1	X	X	X	X	x	t
D/F	(Wies)Laute		1991	1	1	1	1	1	1	1	X	X	X	X	X	X	X	x	┢
D	Murg	Murg	2001	. 1	1	1	1	1	x	x	1	1	1	X	X	X	1	î	╋
F/D	Rhine	Rhine downstream Iffez		. /	1		1			1				1	7	1			-
D	Rench	Rench		1	1	1	1	1	1	1	1	1	1	1	1	1	1		┝
F	III		2001		-	+	+							-	-		-	1	⊢
r	<b>"</b>	Ш	1995	1	/	1	1	1	/	1	/	/	X	X	X	0	0	1	L.
		Bruche	1991	1	X	X	X	X	x	х	х	ХХ	ХХ	ХХ	XX	XX	XX	ХХ	2
		Giessen	1992	1	1	1	1	1	- 1	1	1	1	1	0	0	1	0	1	
		Lièpvrette	1995	1	1	1	1	1	- 1	1	1	1	1	0	0	1	1	1	
		Fecht	1991	1	1	1	1	1	1	1	1	1	Х	Х	X	0	Х	Х	
		Weiss	1991	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	L
		Doller	1993	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
D	Kinzig	Kinzig (Baden-Württ.)	2001	1	1	1	1	1	1	1	1	1	Х	Х	X	1	Х	Х	
	Elz-Dreisam	Elz	2005	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Г
D	LIZ-DI GIOUIII		2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Γ
	EIZ-DI GISUIII	Dreisam	2000			-	-	-	1	-					1	1	1	1	T
	Rhein		1991	1	1	1	1	1	1	1	1	1	1	1					
D		Dreisam Restrhein (Altrhein) Wiese		- 1-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	T
D F/D CH	Rhein Wiese	Restrhein (Altrhein) Wiese	1991 1984	1	1	1	1	1	1	1	1	1	1	1	-7	1	1	1	
D F/D	Rhein	Restrhein (Altrhein)	1991						-								<u> </u>	<u> </u>	ļ

# Annex 2: Proof of reproduction of salmon returned to the Rhine system

LEGEND	
quality proof / individuals detected / samples taken from individual location	Х
qualitative evidence / returnees released upstream of obstacle	(X)
little success of reproduction (1 to ≤ 5 parr/100 m2)	ΧХ
considerable success of reproduction (> 5 - 50 parr/100 m2)	ххх
extremely high rate of success of reproduction (> 50 parr/100 m2)	xxxx
Investigations carried through, no cases detected	0
no investigation	1
Evidence uncertain	?

Spawning grounds (largely) accessible	
pawning grounds partially accessible/ac	cessible to a limited exte
Spawning habitats not accessible/access	ible in exceptional cases

witzerland Viese Ithein Liehenteich It. Alban-Teich Iirs (unterster Abschnitt)	Kind and stage Lp Lp	Number 3000	Origin	Marking	smolt equivale
Viese hein tiehenteich ti. Alban-Teich birs (unterster Abschnitt)	Lp	3000		Hartang	
thein tiehenteich St. Alban-Teich Sirs (unterster Abschnitt)					1
tiehenteich St. Alban-Teich Sirs (unterster Abschnitt)	Lp		Petite Camargue R22, B2, B3, B4, B5	genetics	
it. Alban-Teich Birs (unterster Abschnitt)	1	3.800	Petite Camargue B9, B10, B11, B13	genetics	1
Birs (unterster Abschnitt)	Lp	1.000	Petite Camargue B9, B10, B11, B13	genetics genetics	1
	Lp	2.000	Petite Camargue R22, B2, B3, B4, B5	genetics	
risdörferbach	Lp	3.500	Petite Camargue R23	genetics	
Birs	Lp	1.200	Petite Camargue R23	genetics	1
rgolz	Lp	2.500	Petite Camargue R23	genetics	1
lagdenerbach	Lp	4.000	Petite Camargue R20	genetics	
Iöhlinbach (Bachtele, Möhlin)	Lp	500	Petite Camargue B6B7	genetics	1
töhlinbach (Möhlin / Zeininge töhlinbach (Zuzgen, Hellikon)	Lp Lp	1.000 1.300	Petite Camargue B6B7 Petite Camargue B6B7	genetics genetics	
Iöhlinbach	Le	6.100	Petite Camargue B8	genetics	1
1öhlinbach	Lb	6.000	Petite Camargue B9, B10	genetics	
tzgerbach	Lp	4.600	Petite Camargue R20	genetics	
thein	Lp	1.200	Petite Camargue R21	genetics	1
lter Rhein	Lp	3.200	Petite Camargue R21	genetics	
Bachtalbach	Lp	1.000	Petite Camargue R20	genetics	1
ickerwasserkanal Klingnau um	Lp	1.000 46.900	Petite Camargue R20	genetics	0
rance		40.500			<u> </u>
hein (Alt-/Restrhein)	LO	195.000	Allier	genetics	9750
oller	La	34.950	Rhine	genetics	3495
	1-	12,000	×10		1200
hur auch	La La	12.000 5.000	Allier Allier	genetics genetics	1200
aucn echt und Zuflüsse	La	38.700	Aller	genetics	3870
	La	14.000	Rhine	genetics	1400
	La	2.500	Rhine	genetics	250
iessen und Zuflüsse	La	26.250	Rhine	genetics	2625
ruche	La	56.250	Rhine	genetics	5625
osel	LO	5.150	Allier	genetics	258
ouille	La	5.350	Allier	genetics	535
ouille lies	La	4.490	Allier	genetics	449
aar (Moselsystem)	La	4.450	Allei	geneucs	449
um		399.640			29.95
uxemburg ure (Moselle)					
um ermany, Baden-Württemb	perg	0			<u></u>
b	Lp	17805	Loire-Allier	genetics	1.016
urg	Lp	68500	Loire-Allier	genetics	11.41
os, Oosbach				genetics	
ench	La	10300	Rhine	genetics	258
ench	Lp	8000	Rhine	genetics	1.333
-	La	82550	Rhine	genetics genetics	2.064
inzig mit Zuflüssen	Lp	66750	Loire-Allier	genetics	3.338
rlenbach, Gutach, Wolf	Lp	68780	Rhine	genetics	11.46
	Ls	250	Rhine	genetics	63
z	LO	11000	Rhine	genetics	275
z	Lp	20600	Rhine	genetics	3.433
reisam	Lp	10000	Rhine	genetics	1.667
liese um	Lp	21000 385.535	Rhine	genetics	3.500 39.82
ermany, Hesse		303.333			35.02
dda *	Mfp	3.500	Rhein, Wupper	a/c	700
hn, Dill, Weil, Elbbach	Lp	6.000	EFH		
hn, Dill, Weil, Elbbach					
hnsystem gesamt					1.200
nzig (Main)	Lp	600	EFH		200
chwarzbach (Main)	L 1	4.270	EFH	a/c	1.025
eschnitz	1 -	25.250	551		5.050
isper	Lp	25.250	EFH	-	5.050
Jm		39.620			8.175
ermany, Rhineland Palati	nate	33.020		1	
nr	Ls	5.000	EFH		
nr	Lp	61.500	EFH		11.50
ihn, Mühlbach					
	1 -	22.250			0
osel, Elzbach aynbach	L p L 1	23.250 4.270	EFH EFH	a/c	
aynbach		7.270	LIII	0/0	
aynbachsystem gesamt					1.025
ister, Kleine Nister (Sieg)	Lp	58.770	KFS		
ister, Kleine Nister (Sieg)	Lp	34.450	EFH		
inter (Sieg)	Ls	2.000	EFH		
ister (Sieg)					
/isserbach (Sieg)	Lp	4.930	KFS		
eller (Sieg)	Lp	3.850	KFS		
iegsystem gesamt					17.50
ahe	Ls	4.650	EFH		
uldenbach (Nahe) & Nahe	Lp	32.500	EFH		6.580
peyerbach	La	30.000	EFH Obenheim		3.000
ieslauter um	La	35.000 300.170	EFH Obenheim		3.500 43.10
ermany, North Rhine Wes	tohalia	500.170		+	-5.10
	La	504.938	Sieg-Returners, Ätran / Gudenau-Returners	without	84.04
	Ls	5.630	Sieg-Returners	without	1.407
eg and tributaries	L1	11.600	Sieg-Returners	without	2.320
-5 and choose into	L2	200	Sieg-Returners	NEDAP-Transponder	50
	LO	51.000	Sieg-Returners	without	2.550
1	LO	82.500	Sieg-Returners	without	12.37
upper and small tributaries					
upper and small tributaries				without	12.00
	La	80.000	Sieg-Returners	without	22100
nünn and small tributaries	La		Sieg-Returners	without	
nünn and small tributaries		735.868		without	114.74
nünn and small tributaries JM t= coded wire tags; a/c = adipose olippin	ng; EFH = parent fish kee	<b>735.868</b> ping; DCV = Danish I	Center for Vildlaks		
nünn and small tributaries	ng; EFH = parent fish kee e = salmon spawn; L b = S	<b>735.868</b> ping; DCV = Danish I Salmon fry; L0 0 unfe	Center for Vildlaks eded fry: La - feeded fry:		

# Annex 3: Stocking measures with migratory salmonids in the Rhine system 2016

Federal state	Watercourse	Number of adult salmon
Saxony	Lachsbach	10
	Müglitz	2
	Wesenitz	0
	Mulde	0
Saxony-Anhalt	Nuthe	3
Brandenburg	Stepenitz	12
Lower Saxony	Elbe (Geestacht)	42
	Oste	1
	in total	70

# Annex 4: Returned adults recorded in the Elbe catchment area in 2016

# Annex 5: Returned adults recorded in the Weser catchment area 2016

Federal state	Watercourse	Number of counted adult salmon
Lower saxony	Ochtum/Delme	23
	Hunte	2
	in total	25

# Annex 6: Operational objectives in the supra-regional priority watercourses according to the International Commission for the Protection of the Elbe River (ICPER) published in the updated "International Management Plan for the Elbe River Basin District (Part A) for the period 2016-2021"

Country	Watercourses	Number of implemented measures in the first period	Number of planned measures for the second period (2016-2021)
	Labe (Elbe)	6	11
	Kamenice	2	6
	Ploucnice	2	15
	Ohre (Eger)	2	2
.0	Vltava (Moldau)	0	8
Czech Republic	Berounka	4	10
Rep	Úslava	0	0
ech	Radbuza	0	2
CZ	Úhlava	2	1
	Jizera	5	35
	Orlice (vereinigte)	0	3
	Divoká Orlice / Dzika Orlica	0	14
	Tichá Orlice	2	23
Czech Republic in total	13 watercourses	25	130
	Alster	6	—
	Berner Au	0	9
	Bille	1	1
	Chemnitz	5	4
	Dove-Elbe	0	1
	Elbe	1	_
	Elde	2	8
	Freiberger Mulde	2	1
	Gerdau	1	0
	Havel	0	8
ъ	Hohenwischer Schleusenfleet	0	0
Germany	Illmenau	0	0
Ge	Jeetze(I)	2	6
	Kirnitzsch	4	7
	Kleine Spree	1	8
	Krückau	0	1
	Lachsbach	1	1
	Luhe	1	0
	Müglitz	0	5
	Mulde (Vereinigte)	5	1
	Neuenfelder Wettern	0	1
	Oste	1	0
	Plane	0	7

Country	Water courses	Number of implemented measures in the first period (2010-2015)	Number of planned measures for the second period (2016-2021)
	Polenz	1	2
	Pulsnitz	2	15
	Saale	7	21
	Schleusengraben	1	—
	Schwarze Elster	0	4
	Sebnitz	0	2
	Seeve	0	0
	Seevekanal	1	—
	Spree	0	14
	Stellau	0	4
	Stepenitz	1	5
	Sude	4	7
	Unstrut	2	5
	Wandse	0	6
	Würschnitz	2	1
	Zschopau	0	2
	Zwickauer Mulde	1	7
	Zwönitz	5	8
Germany in total	41 watercourses	60	172
Elbe catchment area in total	54 watercourses	85	302



Annex 7: Beaver's lodge in the river Freudenbach, a tributary of the river Stepenitz. The water in this river section was half a metre deep and used as spawning habitat by salmonids, before the beaver's lodge was built.