

LAWA methodology for assessing progress towards the achievement of objectives

How the tool works

Based on individual measures and their status in the 1st and 2nd cycle, the Excel tool uses various formulae to automatically calculate the progress contribution of each APSFR and LAWA measure and convert them into a verbal assessment of progress.

This Excel tool is the technical implementation of Annex 4 of the recommendations on establishing, reviewing and updating flood risk management plans (LAWA 2019, updated in February 2020).

Guide to individual worksheets

Blue worksheets

The blue worksheets contain explanatory comments or general information (LAWA catalogue of measures)

Orange worksheets

The orange worksheets contain the input fields for entering data (basic data, individual measures, APSFR list).

Green worksheets

The green worksheets contain the automatically generated results for each overarching objective, summarised into texts, tables and charts.

Grey worksheets (masked out)

The grey worksheets are masked out by default. They contain calculations, interim results, text generators and list templates. These worksheets may be re-activated if required.

Guide to the coloured cells in the worksheets

Orange cells

The bright orange cells represent the titles of the input boxes. The pale orange cells underneath are the input boxes.

Blue cells in the APSFR list worksheet

When forwarding data e.g. to the river basin communities, the blue cells in the “APSFR list” worksheet may be copied together with the expert columns C-T and the “APSFR code” column and pasted into a new Excel spreadsheet. Use “Paste values” to transfer the results (rather than the formulae).

Grey cells

The grey cells are calculated fields and should not be edited by the user.

Basic instructions

- We recommend retaining worksheet protection with all worksheets so that you don't accidentally overwrite formulae.
- Results highlighted in red indicate an error in one of the input worksheets.
- To delete entered data, select the relevant cells and delete the contents with “Clear contents” - never delete or move cells, rows or columns.

How to edit with the tool

Complete the worksheet of individual measures

Each data row in the 'Individual measures' worksheet contains the LAWA measure code, the title/abbreviation of the APSFR (using the official complete APSFR code, identical to the APSFR list) and another column (individual measure) to provide a clear definition of each measure. The final piece of information is optional. For example, you could use the country measure code / stakeholder ID / cycle ID.

Additionally for each of these measures, you should indicate the status as per the reporting date for the 1st and 2nd cycles.

For new measures created in the 2nd cycle, the status for the 1st cycle is left blank.

MeasureCode	APSFRCode	Einzelmaßnahme	STATUS 1. Zyklus	STATUS 2. Zyklus
301	DEBY_RG_138_ALT_PE01	3011_4521_1	OG	OGM
303	DEBY_RG_138_ALT_PE01	3031_4552_1	OG	OGM
306	DEBY_RG_138_ALT_PE01	3061_11_1	NS	POG
315	DEBY_RG_138_ALT_PE01	3153_415_1	NS	OGC
316	DEBY_RG_138_ALT_PE01	3161_415_1	POG	OGM

The status entries are checked, and if inadmissible entries are made, an error message will appear in columns F and G. Provided there is at least one error message in a given column, the column header will likewise change to the colour of the error.

Column H states that the APSFR belonging to this measure is not included in the APSFR list. (This may be intentional if only partial evaluation is required, for example: All individual data for the Rhine, but evaluation only for the Moselle region => Only all APSFR for the Moselle region should be entered in the APSFR list.)

D	E	F	G	H
STATUS 1. Zyklus	STATUS 2. Zyklus	Eingabepfung Status 1:	Eingabepfung Status 2:	Eingabepfung APSFR in APSFR-Liste vorhanden
OG	OGM	-	-	APSFR nicht vorhanden
OG-C	OGC	-	-	APSFR nicht vorhanden
POG	POG	-	-	APSFR nicht vorhanden
NS	NS	-	-	APSFR nicht vorhanden
OG-Ms	OGM	Status korrigieren	Status korrigieren	APSFR nicht vorhanden
POG	OGM	-	-	APSFR nicht vorhanden
NS	NS	-	-	APSFR nicht vorhanden

Notes:

- In the first cycle, the old abbreviations (OG-M / OG-C) may also be used alongside the current abbreviations.
- OG may also be used in the first cycle; the tool will interpret this as OGM if OGM was also specified in the 2nd cycle, otherwise it will interpret OG as OGC.
- COM is not a valid entry in the first cycle. Please filter out such measures from the list of individual measures beforehand.
- -9999 is **not** a valid entry in the APSFR code column (in Germany this may be used as a synonym for nationwide measures, i.e. those occurring in every APSFR). These individual measures must be multiplied **in advance** according to the number of affected APSFRs and set up for each APSFR.
- All measures may be copied in a single operation from a spreadsheet into the list (for a maximum of 60,000 individual measure rows; if more rows are needed, please refer to "Technical requirements").
- Only measures 301-308 and 310-328 are evaluated; other measures (e.g. 309; 329; 500 series) will be ignored.

Complete the APSFR list worksheet

Each APSFR belonging to an area/RBD which is to be evaluated (as specified in the basic data) must be listed in the 'APSFR list' worksheet.
 Please use the same title/code as in the list of individual measures, otherwise it cannot be allocated.
 There are 500 APSFR rows available. If this is not sufficient, instructions on how to extend the number of rows can be found in the "Technical requirements" (see below).

	B
1	
2	
3	APSFR Code
7	DEBY_RG_21_BOD_PE01
8	DEBY_RG_24_OMN_PE01
9	DEBY_RG_2414_OMN_PE03

The worksheet also contains an **optional "Expert section"**:
 Under the standard procedure for meeting LAWA objectives, indicators (=LAWA measures) without a specified individual measure are classed as "irrelevant" if:
 - they are the sole indicators for one objective or, - if all other indicators for the same objective likewise contain no individual measures.

The expert section allows you to manually specify other individual indicators (=LAWA measures) for individual APSFRs as "irrelevant", so that these are ignored when calculating the mean target achievement. This setting should be used when LAWA measures are not required in the individual APSFR (for example, because no action is needed).

B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
	Expertenauswahl: Falls Maßnahme "nicht relevant" bitte ankreuzen (=x oder X)																	
	Legende		"nicht relevant" = nicht möglich															
	Zellfarbe:																	
APSFR Code	301	303	305	307	308	310	311	312	313	314	315	316	317	318	319	320	322	323
DEBY_RG_21_BOD_PE01																		
DEBY_RG_24_OMN_PE01																		
DEBY_RG_2414_OMN_PE03																		

Requirements:

There should be an orange-coloured box with a drop-down selection option "X". This is only the case if

- The corresponding LAWA measure (row 3) does not have a single individual measure in the APSFR (relevant row) **AND**

- The LAWA measure **cannot** be assigned **1:1** to an objective (in such cases, these LAWA measures will not appear in this area of the spreadsheet because they are automatically classed as “irrelevant”) OR
- Some of the LAWA measures assigned to the same objective as the LAWA measure in question (row 3) do not have any individual measures (because these are then automatically classed as “irrelevant”)

Forwarding the Länder evaluation to the river basin communities (RBCs)

The easiest option is to forward the completed workbook to the RBCs.

If it is not possible to forward the workbook of individual measures, there is another option for evaluation with this tool. (Where applicable, other agreed evaluations may nevertheless require full data records for individual measures):

As a minimum requirement, the following data from the ‘APSFR list’ should be forwarded:

- All rows with an entered APSFR
- Columns B to BX (up to the note column at the end of the range being transferred)
- Plus, where applicable, the title rows for easier legibility (not mandatory)

B	BS	BT	BU	BV	BW	BX	BY
	Anzahl relevante Maßnahmen in OZ3/OZ4						Hier endet der zu kopierende Bereich Spalten rechts von hier werden für eine APSFR-Übertragung in eine andere Tabelle nicht benötigt. Daten Links von hier kopieren und als WERTE einfügen!!!
	Ziel 3.2	Ziel 3.3	Ziel 4.1	Ziel 4.2	Ziel 4.3	Ziel 4.4	
APSFR Code	324	325	327	327	328	326	
DEBY_RG_21_BOD_PE01	214	356	41	41	172	0	
DEBY_RG_24_OMN_PE01	0	0	0	0	0	0	
DEBY_RG_2414_OMN_PE03	0	0	0	0	0	0	

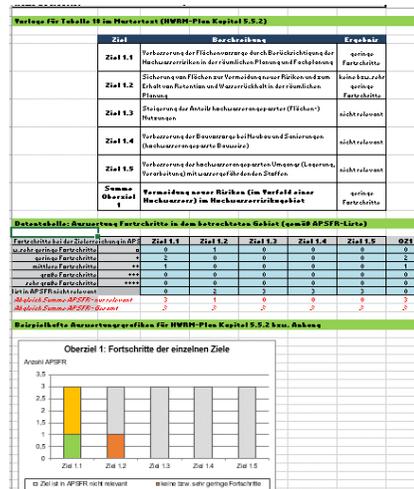
Approach:

- Copy the data block into the APSFR list
- Create a new Excel file
- Paste the data into cell A1 using the command “Paste values”
- To retain allocation, copy the data from the ‘Basic data’ worksheet into another worksheet
- Save and send

Results from the evaluation of individual overarching objectives

There is a worksheet with the results for each overarching objective. Each of these worksheets contains:

- Text module 1 “General text module for FRM plan chapter 5.5.2”
- Text module 2 “Supplementary text module for FRM plan chapter 5.5.2 (for significant to major progress only)”
- Template for Table 18 in sample text (FRM plan chapter 5.5.2) (evaluation of the result text per objective/overarching objective across the entire evaluation range)
- Data table: Evaluation of progress in the area under consideration (as per APSFR list) (the data source for the following illustrations)
- Bar chart showing the number of APSFRs with individual evaluations
- Pie chart showing the number of APSFRs with an evaluation of overarching objectives in the APSFR



Once data has been entered in full, both the text modules and charts should be copied into the FRM plan (Word document) and further modified there, for example:

- Remove superfluous data values (0) from the pie chart
- Text editing and additions

If individual text evaluations of the APSFR are required in tabular format for extended evaluations or representations (such as background documents), these can be taken from the columns CA to DD in the “APSFR list” worksheet for the individual overarching objectives.

Technical requirements

The Excel workbook does not need macros. The password for removing worksheet protection is **1234**.

Extend input range (more rows)

How to extend the input range to more than 60,000 individual measures

1. Unprotect the worksheet in 'Individual measures' (see above for password)
2. In the empty worksheet 'Individual measures', highlight whole rows within the range from row 2 to row 60001, right-click on the top highlighted row then copy and paste with 'Paste copied cells'.
3. Restore worksheet protection in 'Individual measures' (see above for password).

How to enlarge the APSFR list to more than 500 rows (*Don't forget to extend the 'Calculation' page as well, see below!*).

1. Unprotect the worksheet in 'APSFR list' and 'Calculation' (see above for password)
2. In the empty 'APSFR list' worksheet, highlight whole rows within the range from row 7 to row 506, right-click on the top highlighted row, then copy and paste with 'Paste copied cells'.
3. In the 'Calculation' worksheet, copy and paste rows from the prescribed range (rows required = number of new rows in APSFR list * 27). The number must be accurate! The APSFR-ID should go up to the last number in greyed out column A in the 'APSFR list' worksheet and should cover all measures up to 328. Any surplus rows should be deleted (identifiable as #NV in multiple columns).
4. Restore worksheet protection in 'APSFR list' and 'Calculation' (see above for password).

Publisher and legal notice

This Excel tool is used to implement the
"LAWA methodology for assessing progress towards the achievement of objectives"

Adopted at the 158th LAWA General Assembly

18/19 September 2019 in Jena

Modified on 13 February 2020 in line with the LAWA resolution, agenda item 5.5.1, 24th LAWA-AH

Edited on behalf of LAWA-AH

by the sub-group "Flood Risk Management Plans" chaired by Frank Nohme (HH).

Assistance with the design and technical implementation from

Dr.-Ing. Peter Heiland, Dr.-Ing. Sandra Pennekamp, Katrin Leuenberger
INFRASTRUKTUR & UMWELT Professor Böhm und Partner, Darmstadt

Jörn Dittfurth

Bavarian Environment Agency

Published by the Joint Water Commission of the German Länder (Bund/Länder – Arbeitsgemeinschaft Wasser, LAWA).

Ministry for the Environment, Energy and Nature Conservation of Thuringia

Beethovenstraße 3

99096 Erfurt

© Erfurt, 2019/2020

Reprinting and duplication, including extracts, shall require the publisher's prior consent.