The range tool used for Art 17 reporting

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Range – a parameter of the assessment of conservation

- Range is one of the four parameters used to assess the conservation status

- Range is defined as 'the outer limits of the overall area in which a habitat or species is found at present'; it can be considered as an **envelope around the distribution**
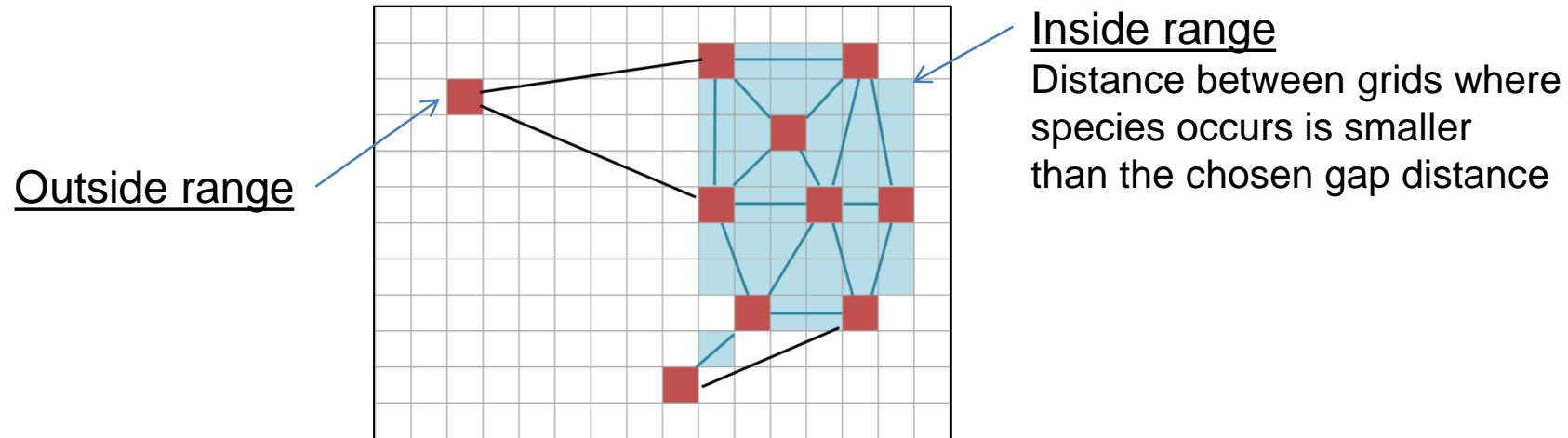
Parameters for the conservation status assessment of species	Parameters for the conservation status assessment of habitat types
Range	Range
Population	Area
Habitat for the species	Structure and functions
Future prospects	Future prospects

Source: Art17 report guidelines, page 8

- The range should be calculated based on the map of the actual distribution using a standardised algorithm

- Range is <u>not</u> a way to show ecologically meaningful spatial representation of a distribution. It is a means to identify large scale changes.
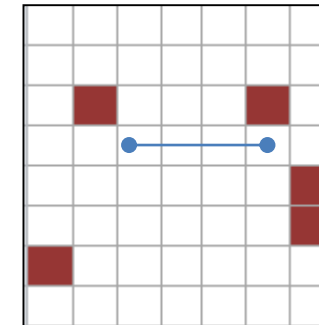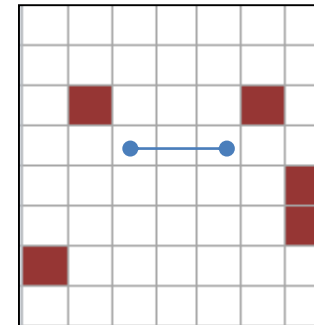
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How range is calculated

Outside range

<u>Inside range</u>
Distance between grids where species occurs is smaller than the chosen gap distance

The gap distance is calculated from the center point of one grid cell to the center point of the next grid cell

This means that the gap distance entered needs to be increased by one grid cell unit (i.e. if 10x10 km grid is used the gap distance entered needs to be increased by 10000 (so 30000 should be entered as 40000 etc).

Excluding unsuitable areas

The tool identifies the following unsuitable areas that should be excluded from the calculated range:

- marine areas automatically included in the range of terrestrial species;
- terrestrial areas automatically included in the range of marine species;
- areas beyond national boundaries;
- areas identified by the range tool as part of the range falling in the adjacent biogeographical or marine regions for which the species is not noted on the checklist;

N.B the tool works currently for 10x10 km resolution (the option to use 1x1 km resolution is under preparation).

Online demo

http://discomap.eea.europa.eu/App/RangeToolTest/Job/SubmissionSummary?idChain=281

Online demo

Login

EIONET user name

Password

Login

EEA Range tool

Quickstart

Create a new transformation job by uploading one or more **(zipped) shapefiles**.
Remember to include its companion files inside the zip (.dbf, .shx, etc).
Please bear in mind that **only 10x10km grid cells** are supported in the uploaded files.

Choose File No file chosen Start

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Online demo

Online demo

Result

. Shp file with calculated range

Xy_file_range_filtered.csv

Xy_file_range_full.csv

FID	Shape	Code	ALP	ATL	BLS	BOR	CON	MAC	MED	PAN	STE	MATL	MBAL	MBLS	MMAC	MMED	REGION_CHK	CNTRY_CHK
270	Polygon	91E0	0	100	0	0	0	0	0	0	0	100	0	0	0	0	keep	keep
271	Polygon	91E0	0	100	0	0	0	0	0	0	0	100	0	0	0	0	keep	keep
272	Polygon	91E0	0	100	0	0	0	0	0	0	0	100	0	0	0	0	keep	keep
273	Polygon	91E0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	keep	keep
274	Polygon	91E0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	keep	keep
275	Polygon	91E0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	remove	keep
276	Polygon	91E0	0	100	0	0	0	0	0	0	0	100	0	0	0	0	keep	keep
277	Polygon	91E0	0	100	0	0	0	0	0	0	0	100	0	0	0	0	keep	keep

Map shows the resulting range for a terrestrial species

The cells marked in blue might be deleted, as they are located in the ocean

However take care for very small islands