Crossability - river width (A.1.2.3b)

Definition:

Crossability is measured in function of the width of the river: **[1] rarely bridged** above 400m; **[2] hard to bridge** between 50-400m; or **[3] easily bridged** below 50m.

Input data:

- Corridor segment boundary
- River polygon (OSM: nature=water + waterway=riverbank)[92]
- River centreline (OSM: waterway=river)[93]
- Disaggregation step for width assessment: 50 m

Implementation:

1 The tool *Fluvial Corridor* for ArcGIS[94] is used to calculate perpendicular distances from the river centreline to the edge of the river polygon. The distances are recorded in points on the river centreline with a disaggregation step of 50m (i.e. river widths are calculated every 50 meters).

2 Each point is then classified on the three-point scale of the indicator. If all values are in one of the three classes, the corridor segment is classified accordingly. If the points are not in the same class (variable river width), then the average width (MEAN) determines the class of the corridor segment.

Results for CS03:

- MEAN: **27,19 m**

92 If the river polygon is interrupted by bridges, the polygon needs to be completed and dissolved before it can be used as an input.

93 In some cases the definition waterway=stream may need to be added to the selection. The river line must be dissolved before used as an input.

94 The tool is available at http://umrevs-isig.fr/node/34 Source: Roux, C., Alber, A., Bertrand, M., Vaudor, L., Piegay, H., submitted. "FluvialCorridor" : A new ArcGIS package for multiscale riverscape exploration. Geomorphology

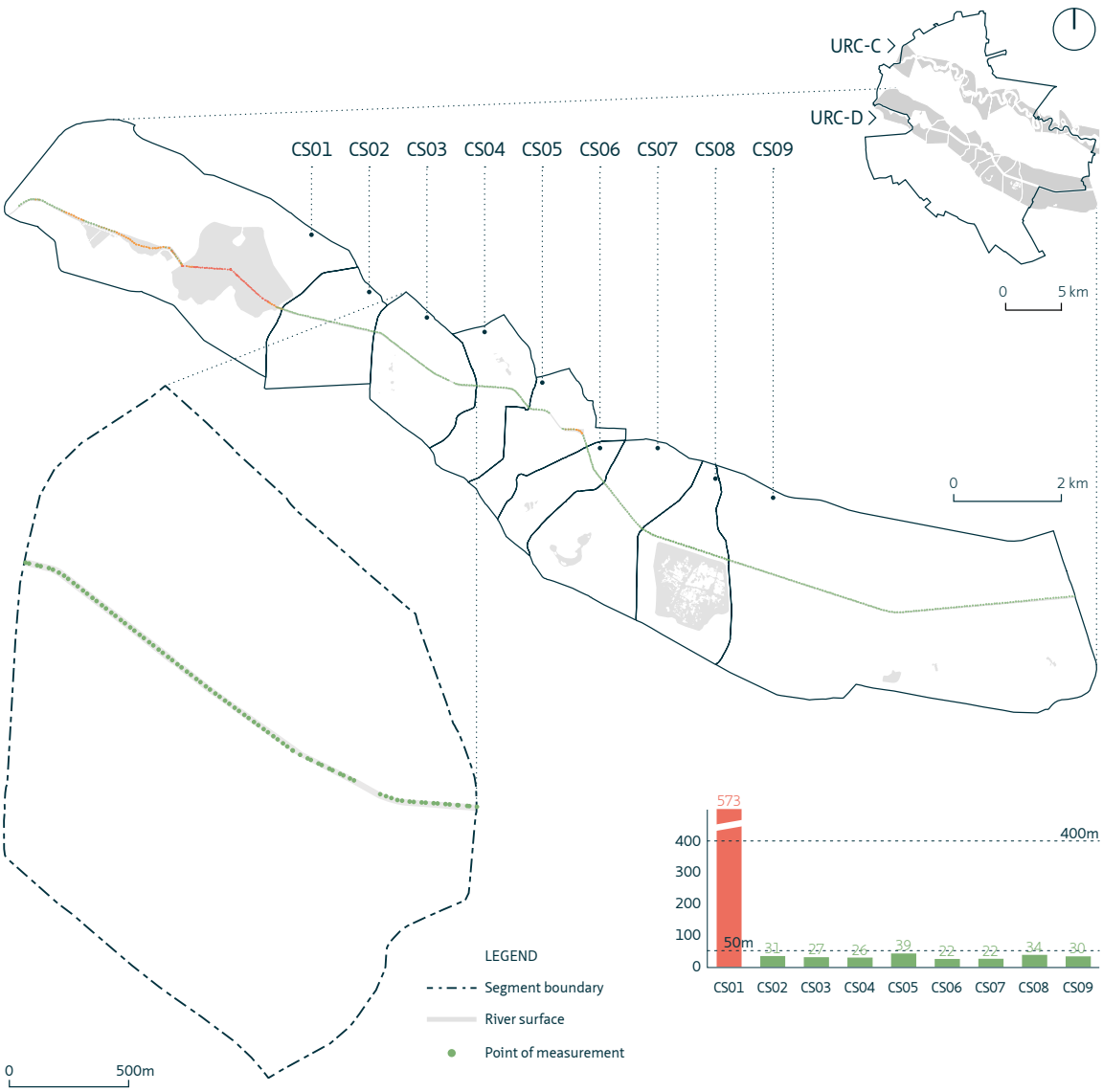

FIGURE APP.E.6 Crossability - river width along URC Dâmbovița, with detail of CS03.

SEGMENT	VALUE	INDEX
CS01	572.596	1
CS02	30.989	3
CS03	27.192	3
CS04	26.084	3
CS05	39.150	3
CS06	21.939	3
CS07	22.067	3
CS08	34.398	3
CS09	29.890	3

TABLE APP.E.7 Results of indicator A.1.2.3b.