Corrigendum

Corrigendum to “Lagrangian Relaxation for the Multiple Constrained Robust Shortest Path Problem”

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In the article titled “Lagrangian Relaxation for the Multiple Constrained Robust Shortest Path Problem” [1], there were errors in Tables 5, 6, and 8, as follows:

- (i) In Table 5, the values included in its first and last columns, except for the first cell in the latter, were incorrect.

- (ii) In Table 6, the values included in the last two cells in its last column were incorrect.

- (iii) In Table 8, the value included in the second cell in its last column was incorrect.

The corrected tables are shown below.

TABLE 5: Computational results of the upper bound, lower bound, and relation gap with respect to the different OD pairs.

OD	U	L	ε	Optimal path
1 – 24	41.32	40.45	2.10	1 – 3 – 12 – 11 – 14 – 23 – 24
2 – 23	61.94	58.87	4.95	2 – 6 – 8 – 7 – 18 – 20 – 22 – 23
5 – 20	57.31	55.6	2.98	5 – 4 – 11 – 10 – 17 – 19 – 20
8 – 13	56.43	55.5	1.64	8 – 16 – 10 – 11 – 12 – 13
3 – 19	59.24	57.91	2.24	3 – 12 – 11 – 10 – 17 – 19
6 – 23	51.66	50.02	3.17	6 – 8 – 7 – 18 – 20 – 22 – 23
12 – 19	40.60	40.60	0.00	12 – 11 – 10 – 17 – 19
13 – 16	49.13	46.89	4.55	13 – 12 – 11 – 10 – 16
4 – 20	49.08	49.08	0.00	4 – 11 – 10 – 17 – 19 – 20
13 – 8	52.14	51.23	1.74	13 – 12 – 11 – 10 – 16 – 8

TABLE 6: Computational results of the upper bound, lower bound, and relation gap with respect to the different constraints (1 – 24).

W	U	L	ε	Optimal path
20	No	No	No	No
50	41.32	40.45	2.10	1 – 3 – 12 – 11 – 14 – 23 – 24
60	37.56	36.12	3.83	1 – 3 – 12 – 13 – 24
$+\infty$	37.56	37.56	0.00	1 – 3 – 12 – 13 – 24

TABLE 8: Computational results of the upper bound, lower bound, and relation gap with respect to the different constraints (2 – 23).

W	U	L	ε	Optimal path
40	72.44	70.39	2.83	2 – 6 – 5 – 4 – 11 – 14 – 23
50	61.94	58.87	4.95	2 – 6 – 8 – 7 – 18 – 20 – 22 – 23
55	57.12	54.39	4.77	2 – 1 – 3 – 12 – 11 – 14 – 23
$+\infty$	53.20	53.20	0.00	2 – 1 – 3 – 12 – 13 – 24 – 23

References

- [1] Y. Pan, “Lagrangian relaxation for the multiple constrained robust shortest path problem,” *Mathematical Problems in Engineering*, vol. 2019, Article ID 3987278, 13 pages, 2019.