

STATISTICAL REPORT

iWiM s.r.l.

Bison weigh-in-motion system

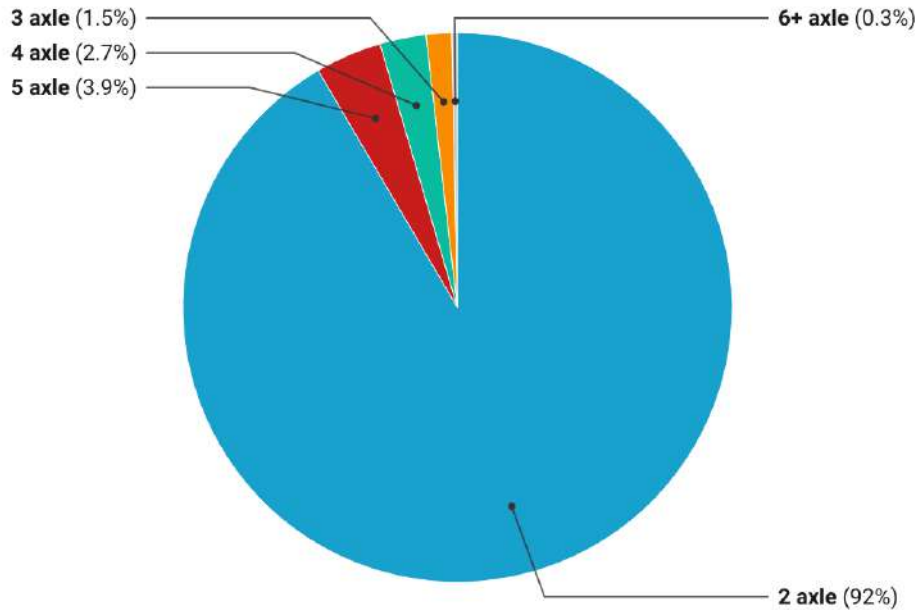
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A. Traffic composition statistics

A total of 536,353 vehicles was recorded by the system in the selected time interval, of which 54,191 were HGVs (mass > 7500 kg) corresponding to 10.1% of the total number of vehicles, for a total weight of 2,462,125 tons.

Records by vehicle type



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Vehicle type	Records
2 axle	491,021
3 axle	8,065
4 axle	14,575
5 axle	20,969
6+ axle	1,723

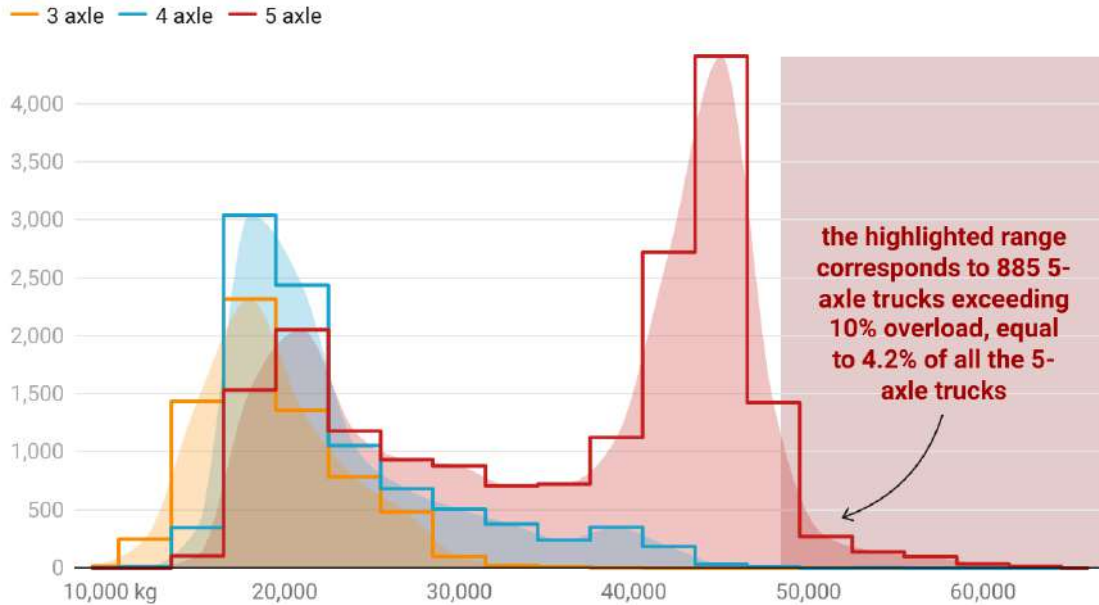
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WIM system serial: #DEMO

Timeframe: 1-31 december 2021

The following plot represents an estimate of the weight distribution of each vehicle category: the proportion of loaded and unloaded vehicles can therefore be evaluated. Dashed vertical lines represent the maximum allowed weight for each vehicle category.

HGV weight distribution



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Overload thresholds reported in the following table refer to the italian maximum allowed weight limits for each vehicle category.

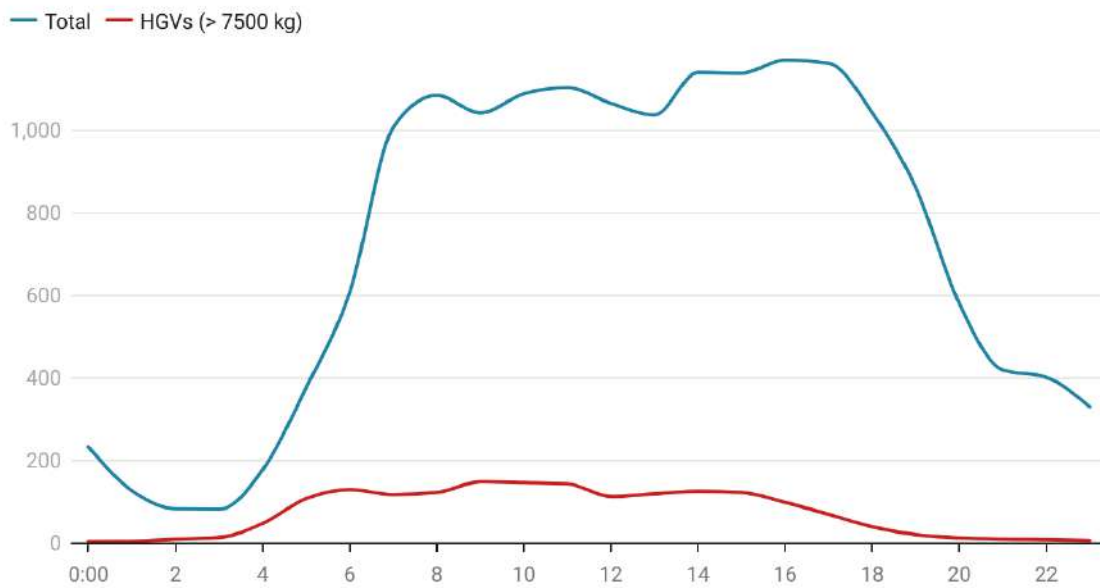
Vehicle type	Maximum allowed weight
2 axle	18,000 kg
3 axle	30,000 kg
4 axle	40,000 kg
5+ axle	44,000 kg

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B. Traffic intensity statistics

The following graphs show the average traffic flow in the selected time frame and its average hourly speed distribution. If average speed is sufficiently high during traffic intensity peaks then the road infrastructure can be considered adequate to its vehicle flow.

Average hourly traffic flow



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Hourly average speed



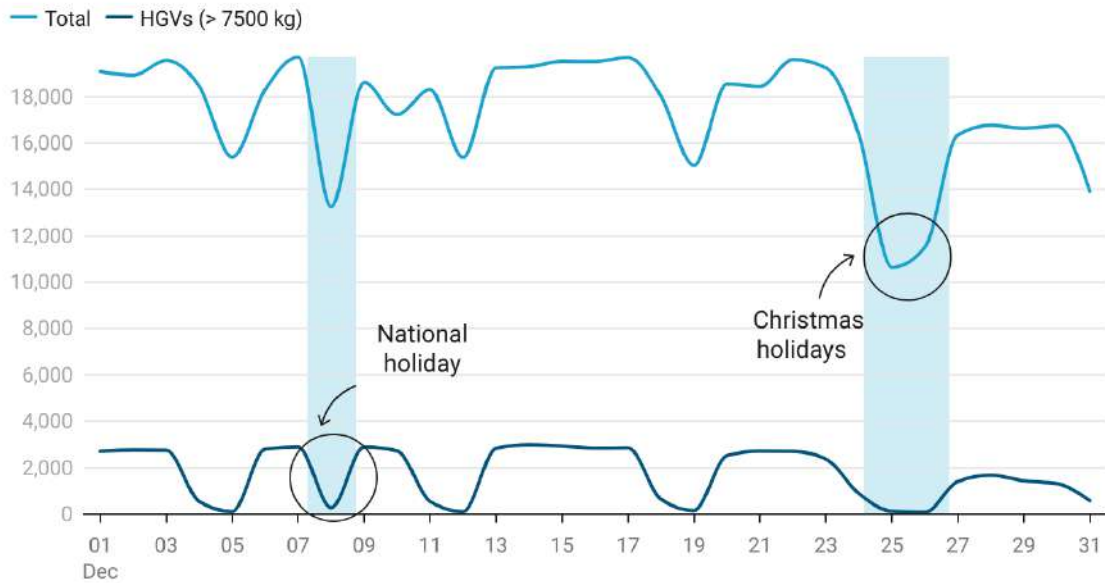
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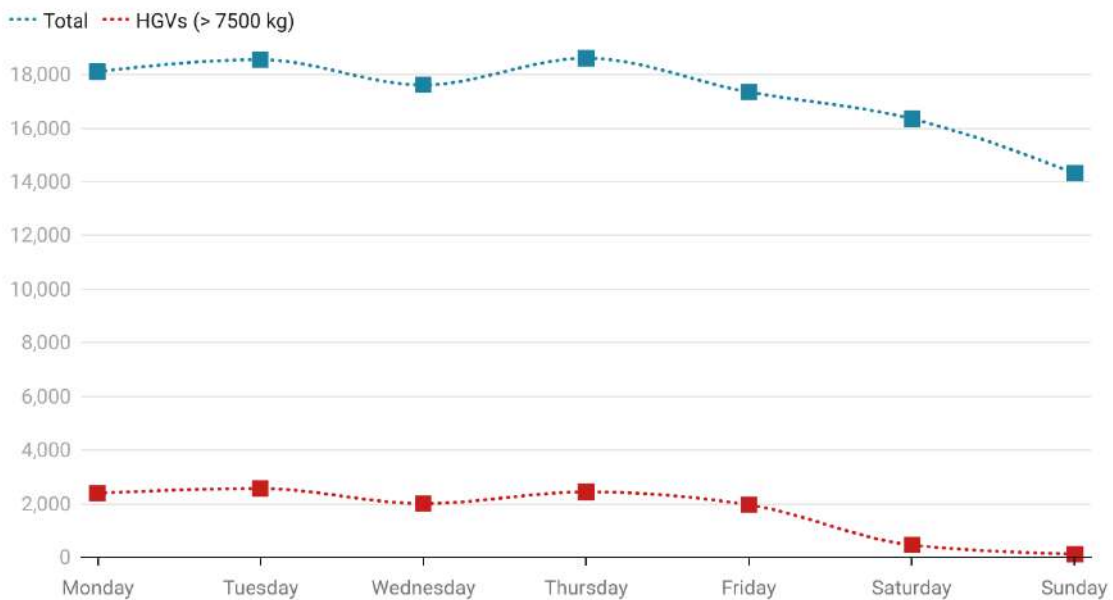
The following plots analyze the daily traffic flow recorded by the weighing system; upper: punctual daily traffic; lower: weekday average.

Daily vehicle flow



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Weekly average traffic flow



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C. Overload statistics

The following table records the highest overload percentages recorded in the selected time interval.

**Some vehicles in this table may be authorized exceptional transports.*

Overloaded truck records

date	ID	Axles	Plate	Country	Weight	overload %
11 Dec 18:14	1064265	5	**4*8**	Italy	64,600 kg	<div style="width: 47%;"></div> 47%
13 Dec 12:49	1091555	6	**38**D	Italy	64,400 kg	<div style="width: 46%;"></div> 46%
10 Dec 15:31	1043510	5	FA**7EW	Italy	64,000 kg	<div style="width: 46%;"></div> 46%
13 Dec 08:40	1088742	5	****4**	Italy	63,200 kg	<div style="width: 44%;"></div> 44%
4 Dec 07:58	951912	3	DC*****	Italy	37,200 kg	<div style="width: 43%;"></div> 43%
11 Dec 13:55	1059060	5	***94**	Italy	62,400 kg	<div style="width: 42%;"></div> 42%
11 Dec 14:24	1059645	5	**2**G*	Italy	62,400 kg	<div style="width: 42%;"></div> 42%
10 Dec 13:25	1041034	5	*B21***	France	62,200 kg	<div style="width: 41%;"></div> 41%
3 Dec 14:20	942779	5	***1***	Italy	62,000 kg	<div style="width: 41%;"></div> 41%
10 Dec 14:43	1042539	5	**2*7G*	Italy	62,000 kg	<div style="width: 41%;"></div> 41%
11 Dec 09:36	1054449	5	*****F	Italy	61,800 kg	<div style="width: 41%;"></div> 41%
3 Dec 08:49	937362	5	****7**	Spain	61,600 kg	<div style="width: 40%;"></div> 40%
3 Dec 11:13	939751	5	DB*****	Italy	61,600 kg	<div style="width: 40%;"></div> 40%
3 Dec 13:07	941532	5	D*****	Poland	61,400 kg	<div style="width: 40%;"></div> 40%
20 Dec 16:06	1215475	6	F*****	Italy	61,400 kg	<div style="width: 40%;"></div> 40%

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WIM system serial: #DEMO

Timeframe: 1-31 december 2021

The following table records recurrent overload vehicles which have been repeatedly detected by the WIM system with a weight beyond the limits set by traffic laws.

**the highlighted record denotes the same truck that was highlighted in the previous table concerning highly overloaded trucks.*

Recurrent overloaded trucks

Plate	Axles	Country	# of overload records	Avg. weight	overload %
8*7	5	Italy	63	56,314 kg	28%
*C*7*M*	5	Italy	36	54,622 kg	24%
F**07**	5	Italy	28	55,550 kg	26%
*B*****	5	Italy	21	59,762 kg	36%
DM*****	5	Italy	19	53,737 kg	22%
****0**	5	Italy	14	54,371 kg	24%
0**	5	Italy	12	54,867 kg	25%
FE*****	5	Italy	11	50,455 kg	15%
F*6*9**	5	Italy	9	49,952 kg	14%
D***1**	5	Italy	9	52,111 kg	18%
****8**	6	Slovenia	7	51,600 kg	17%
*****X	5	Italy	7	60,257 kg	37%
2*1	5	Italy	6	49,967 kg	14%
****4**	5	Romania	6	55,300 kg	26%
ES*05**	5	Italy	6	55,733 kg	27%
















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D. Exceptional transport detection

The following table records potential exceptional transports that were detected by the weigh-in-motion system in the selected time frame.

*A record has been highlighted: the following page presents a focus on such vehicle.

Exceptional transports

date	ID	Axles	Plate	Country	Weight
28 Dec 06:58	848839	10	**3**M*	 Italy	156,400 kg
21 Dec 11:24	742557	9	*C***AR	 Italy	134,000 kg
21 Dec 12:22	743681	9	*N****V	 Italy	122,000 kg
28 Dec 09:28	851496	9	DH****C	 Italy	110,800 kg
27 Dec 18:15	844665	8	F****W*	 Italy	109,600 kg
30 Dec 07:20	882512	9	C****F*	 Italy	109,400 kg
30 Dec 07:16	882462	10	***2***	 Italy	109,400 kg
28 Dec 06:59	848854	9	C*2****	 Italy	108,200 kg
30 Dec 09:01	884330	9	DV*****	 Italy	106,800 kg
3 Dec 01:26	412493	8	***46N*	 Italy	106,800 kg
14 Dec 11:54	613591	8	**8**D*	 Italy	106,200 kg
30 Dec 09:22	884712	9	D***2**	 Italy	105,600 kg
29 Dec 07:47	866420	9	*M*****	 Italy	105,600 kg
27 Dec 20:37	846387	8	**0**W*	 Austria	105,200 kg
21 Dec 16:41	748832	8	F***5H*	 Italy	105,000 kg

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D2. Exceptional transport focus

As an example, the geometrical axle configuration and the context image detected by the BiSON system for the highlighted record in the previous table are reported in this page.



WIM system serial: #DEMO

Timeframe: 1-31 december 2021

BiSONTE BY **iWiM**

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