Eva Kšicová

Trendline project. Report on KPI Safety belt

Version: v3

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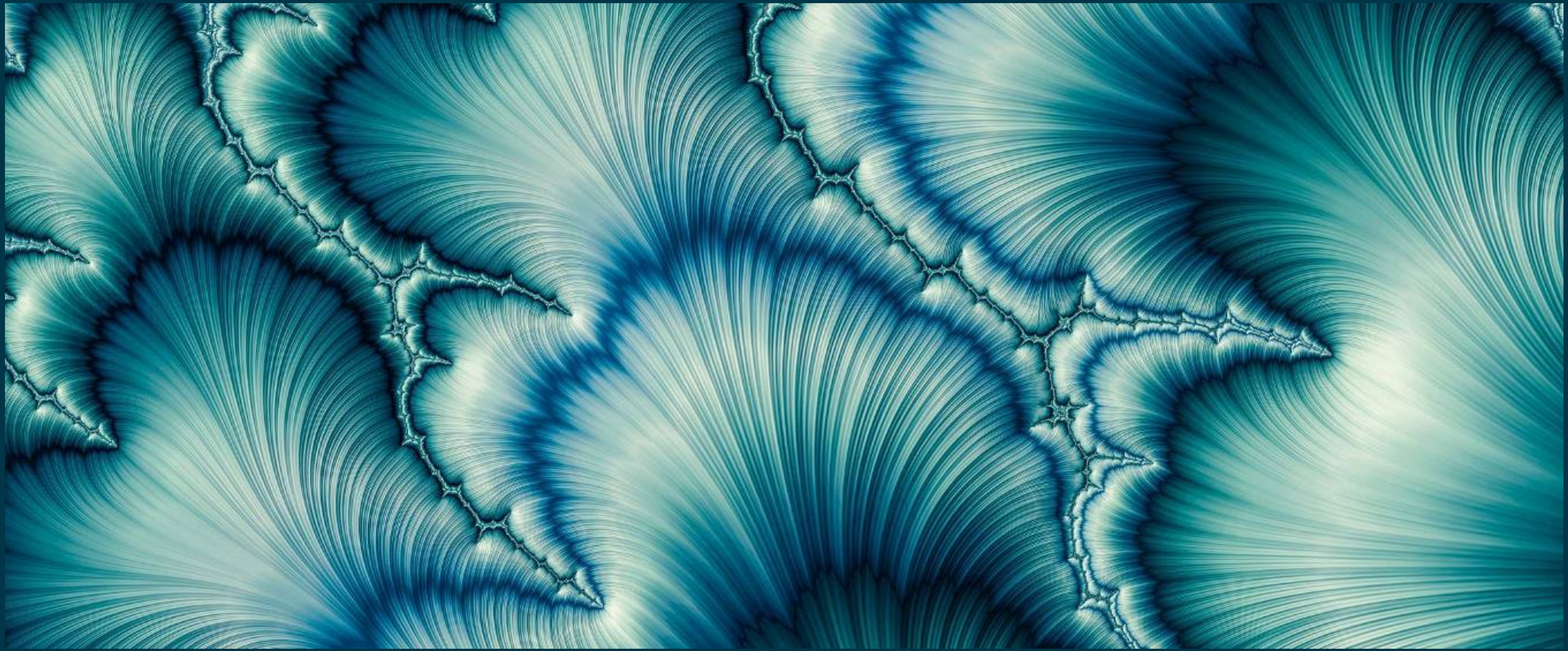
Co-funded by the European Union

Content

Trendline

Context



Purpose and objectives of Trendline

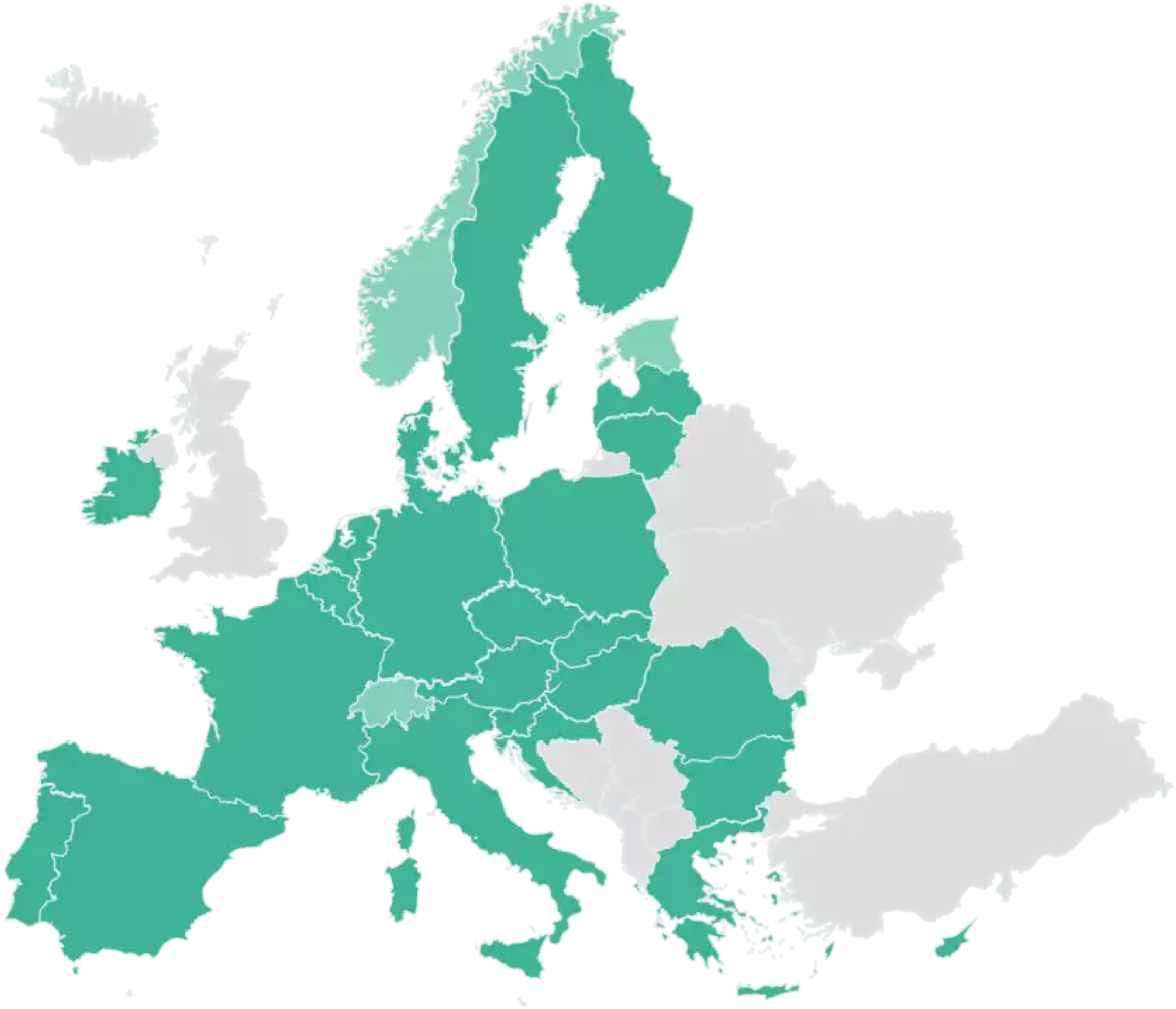
- The purpose of the Trendline project (2022-2025) is to promote the use of road safety KPIs (Key Performance Indicators) within the European Union.
- Collecting such KPI data on a regular basis will underpin and support road safety policies and interventions.
- By using common methodologies, the KPI values of countries can be compared with those of other countries.
- Trendline is supported by the European Commission, who funds 100% of the coordination costs and up to 50% of the costs for data collection and analysis in the EU Member States.
- Trendline is the successor project of “Baseline” (2020-2022).

Main components of Trendline

- 8 — Data collection and analysis for the 8 initial KPIs
- Define and test methodologies for 10 experimental indicators
- Promote the use of road safety KPIs in road safety policies

Countries participating in Trendline

- 25 EU countries (out of 27)
- 4 observers: Estonia, Malta, Norway and Switzerland



Trendline

The eight initial KPIs in Trendline

Speeding	Safety belt	Helmets
Drink driving	Distraction	Vehicle safety
*Infrastructure**	Post-crash	

Trend line

** Trendline did only support methodological development; no funding was available for data collection and analysis*

KPI Expert Group (KEG) for each initial KPI

- Purpose of the KEGs
  - to review and adapt the methodological guidelines developed within the Baseline project
  - to advice on the interpretation and possible deviations of the common guidelines
  - to verify the quality of the data collected
  - to draft and review the report on the KPI

- Members of the KEG Safety belt:
  - Kšicová, E., (CDV), Czech Republic- Chair
  - Forsman, Å., (VTI) Sweden
  - Areal, A., (PRP), Portugal
  - Laiou, A., (NTUA) Greece
  - Valentová, V., (CDV), Czech Republic
  - Temmerman, P., (Vias institute), Belgium
  - Boets, S. (Vias institute), Belgium

Trendline

Ten ‘experimental’ indicators

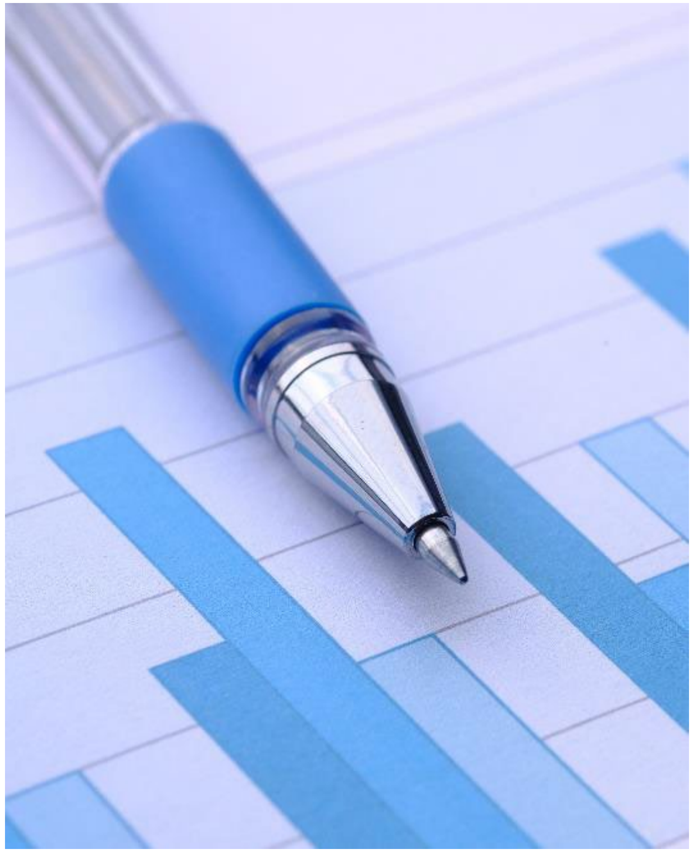
- Purpose: to examine whether the standard set of European indicators should be larger:
    - by extending the scope of existing indicators, or
    - by accepting alternative definitions, or
    - by extending the range of acceptable methodologies, or
    - by addressing new topics.

- Status
    - 10 possible new indicators have been selected.
    - KEGs (Key Expert Groups) have established methodological guidelines.
    - Pilots and tests have been conducted for each indicator in several Member States,
    - Final output are methodological guidelines, lessons learned, and recommendations.

Trend line

The ten experimental indicators

- Driving under the influence of drugs
- The part of 30km/h roads in urban zones
- Red-light negations by road users
- Compliance with traffic rules at intersections
- Helmet wearing by PMD riders (e.g., e-steps)
- Self-reported risky behaviour
- Attitudes towards risky behaviour
- Use of lights by cyclists in the dark
- Enforcement of traffic regulations
- Speed variation



Trend line

Methodology and participants

Definition and scope

- Definition: ***Percentage of vehicle occupants***
  - ***using the safety belt or child restraint system – part A and***
  - ***using the safety belt or child restraint system correctly – part B***

- ***In method (A) this implies that observation of the "use" of safety belts may also include the incorrect use of safety belts, for example a belt under the arm, incorrect height adjustment of the upper safety belt guide, using "foreign objects" such as clothespins to deflect the safety belt or reduce its tension, etc.***
- ***In-vehicle inspection of CRS (B) should lead to one of the following statements (per child observed): "Correct use", "Misuse", or "No use".***
- Each section also includes optional supplementary methodological recommendations. Member States can decide whether to follow the minimum requirements only or to extend (part of) their methodology, depending on available means and own research questions.
- The target audience of this document are the persons in the participating Member States that will collect and/or analyse the data to deliver this KPI.

Trendline

Methodological requirements

- Vehicle types to be considered (only vehicles in motion):
  - passenger cars as a minimum
  - goods vehicles where possible.
- Part A – roadside observations:

  • A minimum of 2000 observed vehicles overall for safety belt use, with a minimum of 500 observations per road type and per week period;

- Part B – in-vehicle inspection:

  • A minimum of 200 observed vehicles with children among the occupants for detailed in-vehicle inspection of child restraint system use, with a minimum of 50 observed vehicles per road type and per week period

Trend line

Methodological requirements

- For seatbelts and CRS the roads to be sampled include:
    - Motorways,
    - Roads outside built-up areas,
    - Roads inside built-up areas.
- Observations: Late spring, early autumn.
- Methods allowed within Trendline
    - Part A: Direct observation on the road (if appropriate, using cameras, from moving vehicles...) for use of safety belts and of CRS.
    - Part B: In-vehicle inspection for correct use of CRS.

Countries collecting data on safety belt – part A

Country	Age groups observed	Data collection period (m/y)
Austria	01/05/2023 - 30/07/2023	0-17, 18-24, 25-64, 65+, all ages
Bulgaria	27/04/2024 - 30/06/2024, 1/09/2024 - 26/11/2024	uncategorized
Croatia	01/03/2023 - 01/12/2024	uncategorized
Cyprus	05/06/2025 - 29/06/2025	uncategorized
Czechia	01/03/2024 - 30/10/2024	0-14, 15+, all ages
Finland	16/05/2024 - 12/08/2024	uncategorized
France	01/03/2023 - 31/05/2023, 01/09/2023 - 30/11/2023	uncategorized
Greece	28/03/25 - 09/04/25	uncategorized
Hungary	09/2024 - 10/2024	0-14, 15+
Ireland	03/10/2024 - 12/11/2024	0-17, 65+, all ages
Italy	12/05/2024 - 21/10/2024	25-64, 65+
Latvia	04/09/23 - 02/10/23	uncategorized
Lithuania	05/04/2023 - 07/10/2023	uncategorized
Netherlands	21/05/2024 - 30/06/2024 (urban roads and motorways), 02/09/2024 - 25/09/2024 (rural roads)	0-17, 18-24, 25-64, 65+, all ages
Poland	10/04 - 19/06/2024	0-17, 18-24, 25-64, 65+, all ages
Portugal	12/10/2024 - 23/11/2024	0-14, 15+, all ages
Slovakia	05/04/24 - 27/10/24	uncategorized
Slovenia	1. April - 30. June	0-17, 18-24, 25-64, 65+, all ages
Spain	01/10/2023-23/10/2023	0-14, 15+
Sweden	13/09/23 - 01/10/23	uncategorized

Denmark, Germany and Romania do not have data according to the methodology - the results are in a separate chapter Add data.

Trendline

Countries collecting data on CRS – part B

Country	Related laws, regulations and procedures	Data collection period (m/y)
Austria	Mandatory for children up to 14 and under 135cm	01/05/2024 - 30/10/2024
Belgium	Children under 18 years of age and less than 135 cm tall must be carried in a child restraint system	02/10/2023 - 16/12/2023
Bulgaria	Children are required to use restraint systems till age of 12 (not exceeding 150 cm of height)	11/05/24 - 07/06/24
Italy	No infromation	12/05/2024 - 21/10/2024
Latvia	No infromation	12/03/2023 - 02/10/2023
Lithuania	Children under 135 cm in height shall be transported with child restraint systems	24/05/2023 - 13/10/2023 (summer excluded)
Poland	Children are required to use restraint systems till age of 12 (not exceeding 150 cm of height)	10/04 - 19/06/2024
Portugal	The CRS is mandatory for children under 12 years old and less than 135cm height.	12/10/2024 - 23/11/2024
Slovenia	Mandatory for kids under 140 cm height and 36 kg weight.	5. April - 15. June

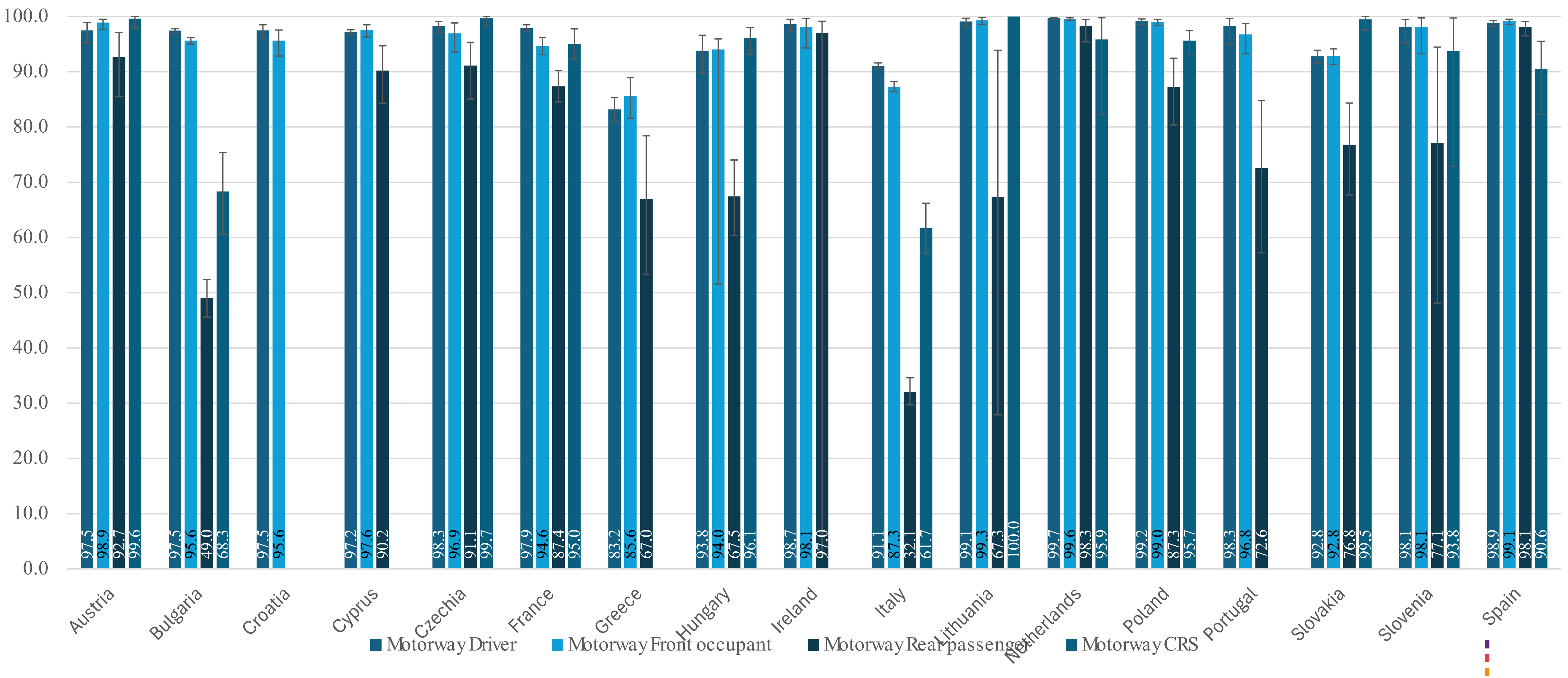
Trend line

Ireland and Romania do not have data according to the methodology - the results are in a separate chapter Add data.

Key results – part A

For Part A, the CRS is intended for the use of belts by children (both in the seat and in the CRS).

Using safety belt on motorway



For Part A, the CRS is intended for the use of belts by children (both in the seat and in the CRS).

- **Drivers**: The highest rates of seat belt use by drivers are in the Netherlands (99.7%), Poland (99.2%), Lithuania (99.1%). The lowest rates are in Greece (83.2%), Italy (91.1%), Slovakia (92.8%). Other members' data ranged from 93.8% to 98.9%. 13 out of 17 members used a seat belt on the driver's seat on the highway 97% or more (8 out of 17 more than 98%).

- **Front passengers**: The highest use of front passenger seat belts on motorways is in the Netherlands (99.6%), Lithuania (99.3%), Spain (99.1%) and Poland (99.0%). The lowest use is in Greece (85.6%) and Italy (87.30%). The other members' figures ranged from 92.8% to 98.9%. In 8 out of 17 members, seat belts were used in front seats other than the driver's seat on motorways in 97% or more (and in 12 out of 17 cases in more than 95%).

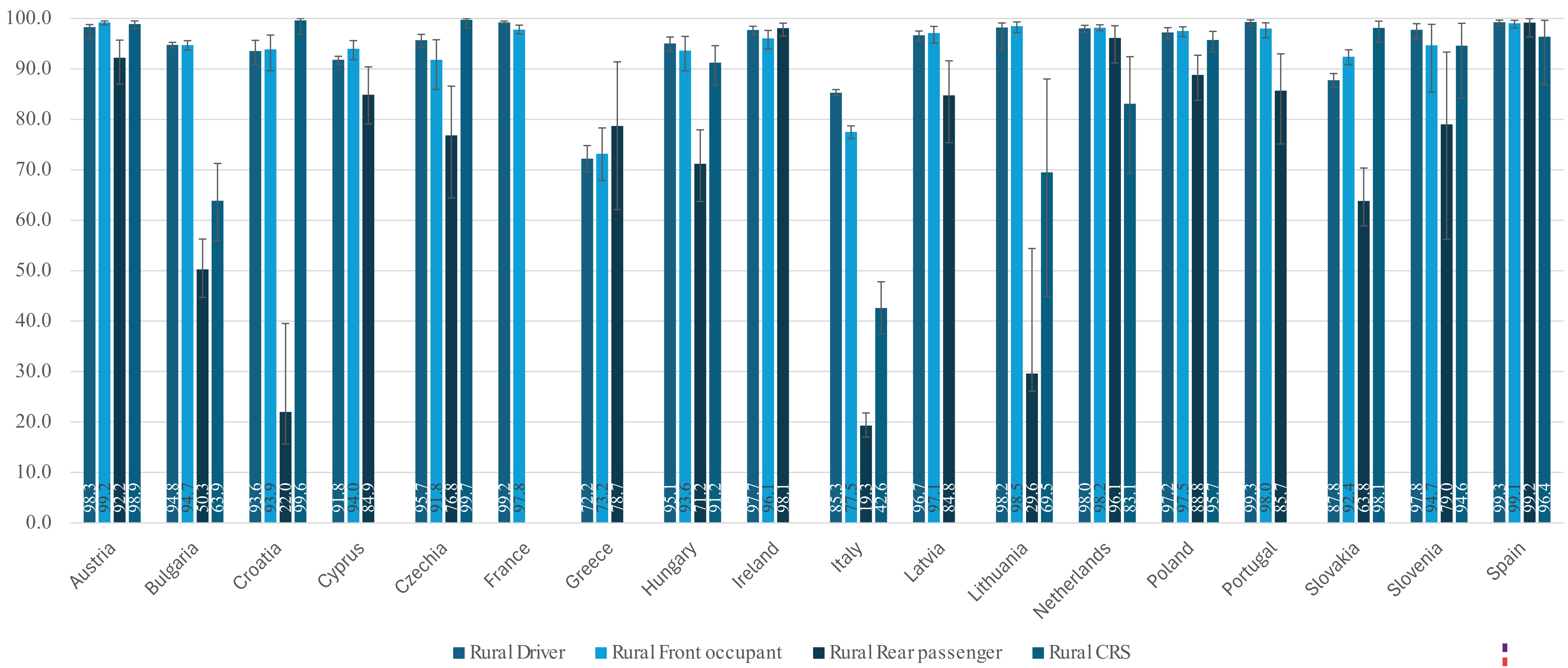
- **Rear passengers**: The highest use of rear seat belts on motorways is in the Netherlands (98.3%), Spain (98.1%) and Ireland (97.0%). The lowest use is in Italy (32.1%) and Bulgaria (49.0%). The figures for the other Member States ranged from 67.3% to 92.7%. In 4 out of 16 Member States, the use of rear seat belts on motorways was 90% or more.

- **CRS**: The highest use of CRS on motorways is in Lithuania (100%), Czech Republic (99.7%), Austria (99.6%) and Slovakia (99.5%). The lowest use is in Italy (61.7%) and Bulgaria (68.3%). The data of other members was from 90.6% to 96.1%. In 8 Member States out of 12, CRS was used in 95% or more.

Trendline

For Part A, the CRS is intended for the use of belts by children (both in the seat and in the CRS).

Using safety belt on rural road



Trend line

For Part A, the CRS is intended for the use of belts by children (both in the seat and in the CRS).

- **Drivers**: The highest rates of seat belt use by drivers on rural roads are in Portugal (99.3%), Spain (99.3%) and France (99.2%). The lowest rates are in Greece (72.2%), Italy (85.3%) and Slovakia (87.8%). The figures for the other Member States ranged from 91.8% to 98.3%. In 9 out of 18 Member States, the rate of seat belt use by drivers on rural roads was 97% or higher (12 out of 18 above 95%).

- **Front occupants**: The highest use of seat belts on front seats (excluding the driver) on rural roads is in Austria (99.2%) and Spain (99.1%). The lowest use is in Greece (73.2%) and Italy (77.5%). The figures for the other Member States ranged from 91.8% to 98.5%. 9 out of 18 Member States had a seat belt use rate of 96% or more.

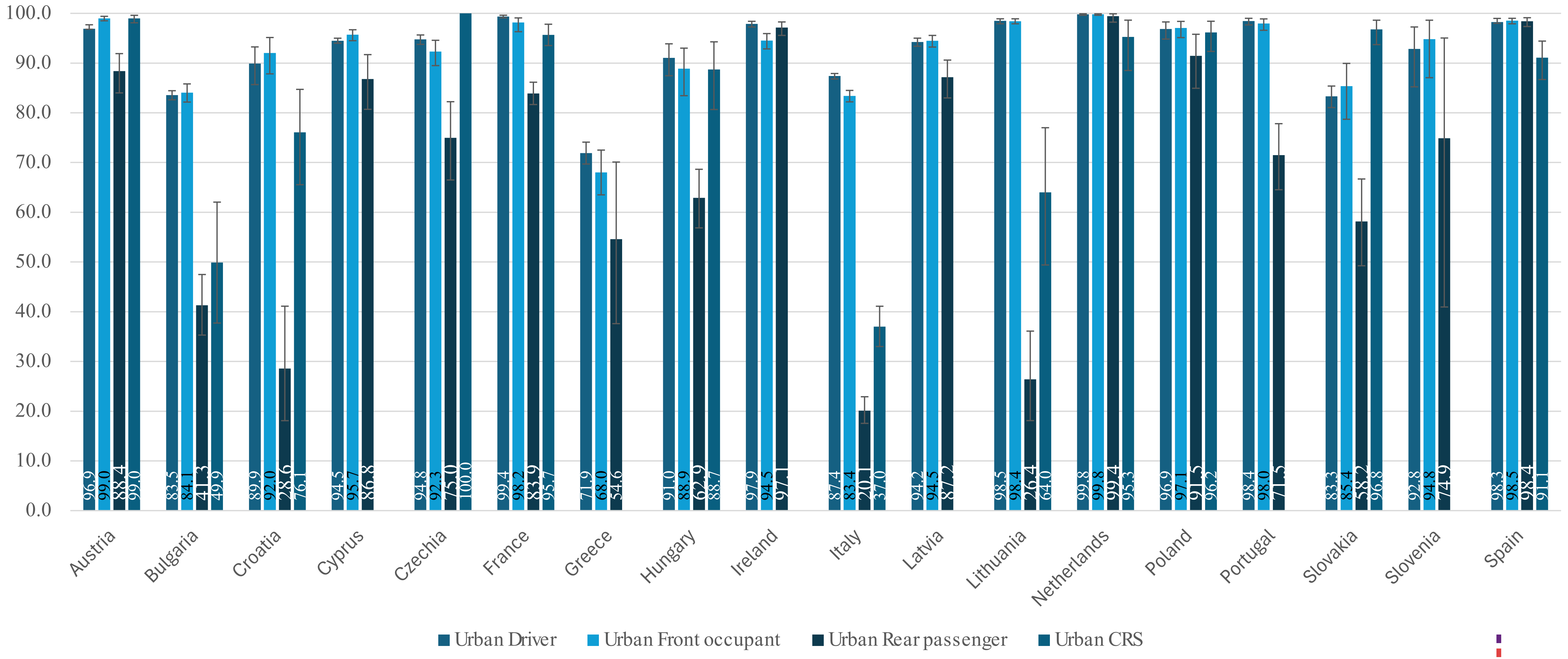
- **Rear passengers**: The highest use of rear seat belts on rural roads is in Spain (99. 2%), Ireland (98.1%) and the Netherlands (96.1%). The lowest use is in Italy (19.3%), Croatia (22.0%), and Lithuania (29.6%). The figures for the other Member States ranged from 50.3% to 92.2%. In 4 Member States out of 17, seat belt use was 90% or more (in 8 out of 17 more than 84%).

- **CRS**: The highest use of CRS on rural roads is in the Czech Republic (99.7%) and Croatia (99.6%). The lowest use is in Italy (42.6%), Bulgaria (63.9%) and Lithuania (69.5%). The data from other members ranged from 83.1% to 98.9%. In 7 out of 12 Member States, CRS was used at 94% or more.

Trend line

For Part A, the CRS is intended for the use of belts by children (both in the seat and in the CRS).

Using safety belt on urban road



Trendline

For Part A, the CRS is intended for the use of belts by children (both in the seat and in the CRS).

- **Drivers**:The highest rates of seat belt use by drivers on urban roads are in the Netherlands (99.8%) and France (99.4%). The lowest rates are in Greece (71.9%), Slovakia (83.3%) and Bulgaria (83.5%). The figures for the other Member States ranged from 87.4% to 98.5%. In 8 out of 18 Member States, the driver's seat belt use rate on urban roads was 96% or higher.

- **Front occupants**: The highest use of seat belts in front seats (excluding the driver) on urban roads is in the Netherlands (99.8%) and Austria (99.0%). The lowest use is in Greece (68.0%). The data for other Member States ranged from 83.4% to 98.5%. In 8 out of 18 Member States had a seat belt use rate of 95% or more.

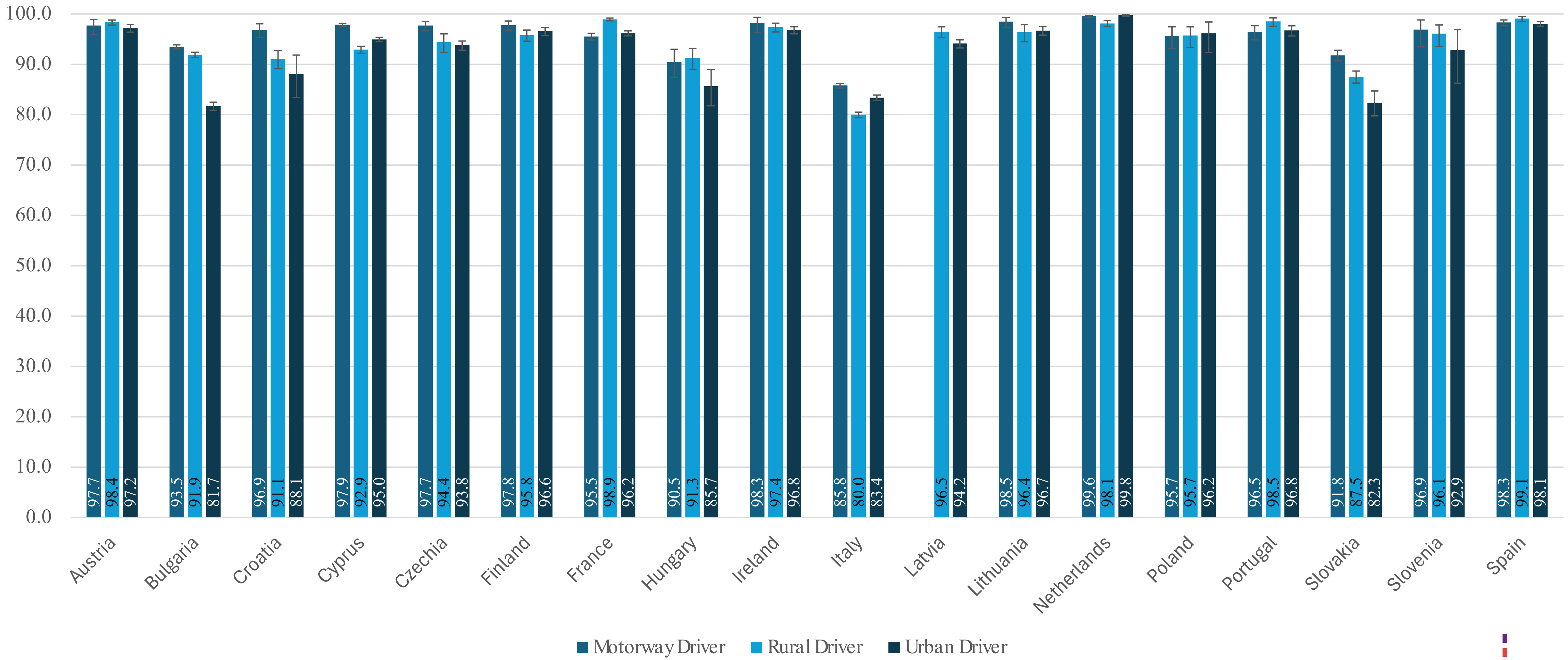
- **Rear passengers**:The highest use of rear seat belts on urban roads is in the Netherlands (99.4%) and Spain (98.4%). The lowest use is in Italy (20.1%), Lithuania (26.4%) and Croatia (28.6%). The figures for other Member States ranged from 41.3% to 97.1%. In 4 Member States out of 18, seat belt use was 90% or higher (in 8 out of 18, it was 83% or higher).

- **CRS**: The highest CRS usage on urban roads is in the Czech Republic (100%) and Austria (99.0%). The lowest usage is in Italy (37.0%), Bulgaria (49.9%) and Lithuania (64.0%). The other members' data ranged from 76.1% to 96.8%. In 6 out of 12 member states had CRS usage of 95% or more.

Trend line

For Part A, the CRS is intended for the use of belts by children (both in the seat and in the CRS).

Using safety belt by roads - total



Trendline

Motorways:

- The highest use of seat belts on motorways is in the Netherlands (99.6%), Lithuania (98.5%), Spain (98.3%) and Ireland (98.3%).
- The lowest use is in Italy (85.8%).
- Other members' data ranged from 90.5% to 97.9%.

Rural roads:

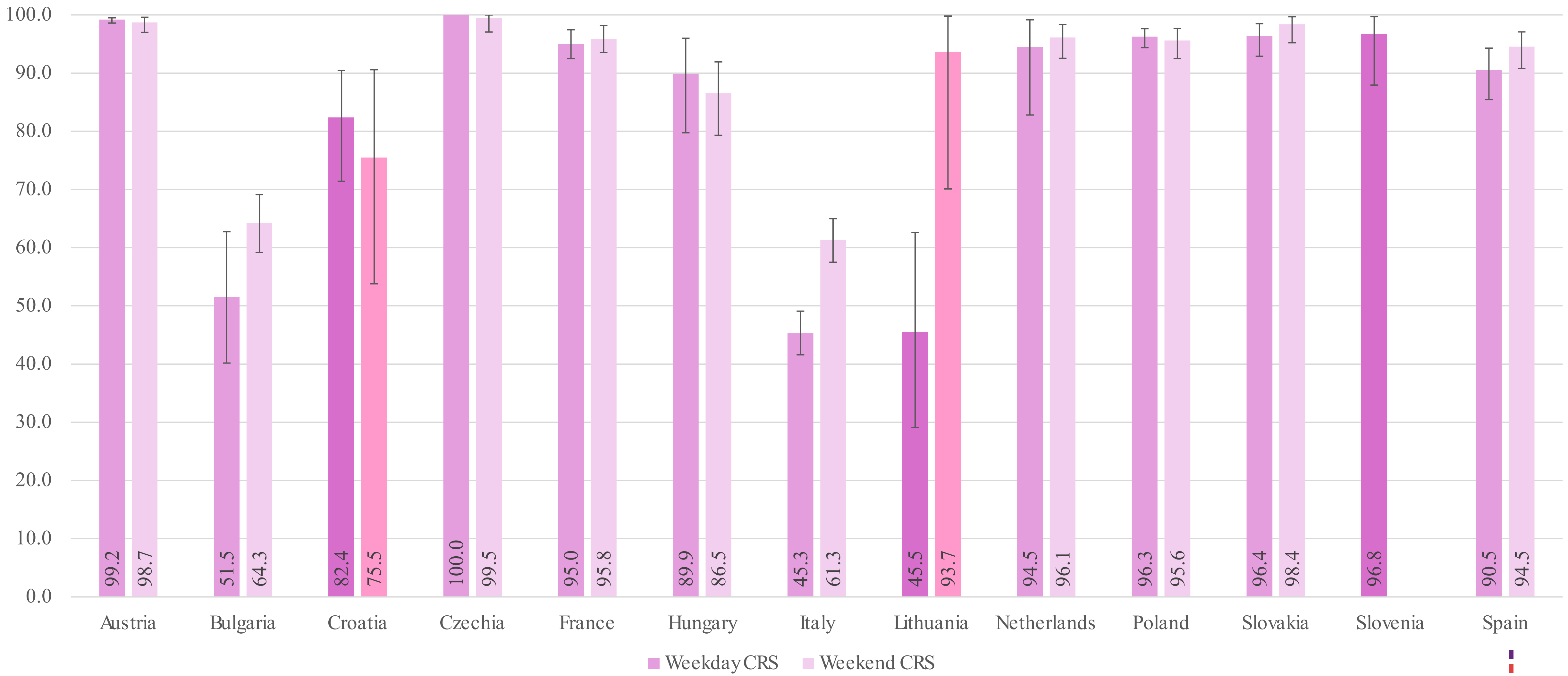
- The highest use of seat belts on rural roads is in Spain (99.1%), France (98.9%), Portugal (98.5%), Austria (98.4%) and the Netherlands (98.1%).
- The lowest use is in Italy (80.0%) and Slovakia (87.5%).
- The data of other members was from 91.1% to 97.4%.

Urban roads:

- The highest use of seat belts on urban roads is in the Netherlands (99.8%) and Spain (98.1%).
- The lowest use is in Bulgaria (81.7%), Slovakia (82.3%), Italy (83.4%), Hungary (85.7%) and Croatia (88.1%).
- The data of other members was from 92.9% to 97.2%.

Trend line

Seat belt use in children and CRS - Part A



Trend line

Fewer Number of observation (CRS, part A): Croatia, Lithuania, Slovenia.

Safety belt use in children and CRS(part A) on weekdays:

- The highest usage rates seat belts and CRS for children are in the Czech Republic (100%) and Austria (99.2%).
- The lowest usage rates seat belts and CRS for childrenare in Lithuania (45.5%), Italy (45.3%) and Bulgaria (51.5%).
- Other member states' data ranged from 82.4% to 96.8%.
- Only 7 out of 13 states had seat belts and CRS for children usage rates of 94% or higher.

Safety belt use in children and CRS (part A) on weekend:

- The highest usage seat belts and CRS for children is in the Czech Republic (99.5%), Austria (98.7%) and Slovakia (98.4%).
- The lowest usage seat belts and CRS for children is in Italy (61.3%), Bulgaria (64.3%) and Croatia (75.5%).
- The other members' data seat belts and CRS for children ranged from 86.5% to 96.1%.
- Only 8 out of 12 countries had seat belts and CRS for children usage above 93%.

Comparability of results across countries – part A

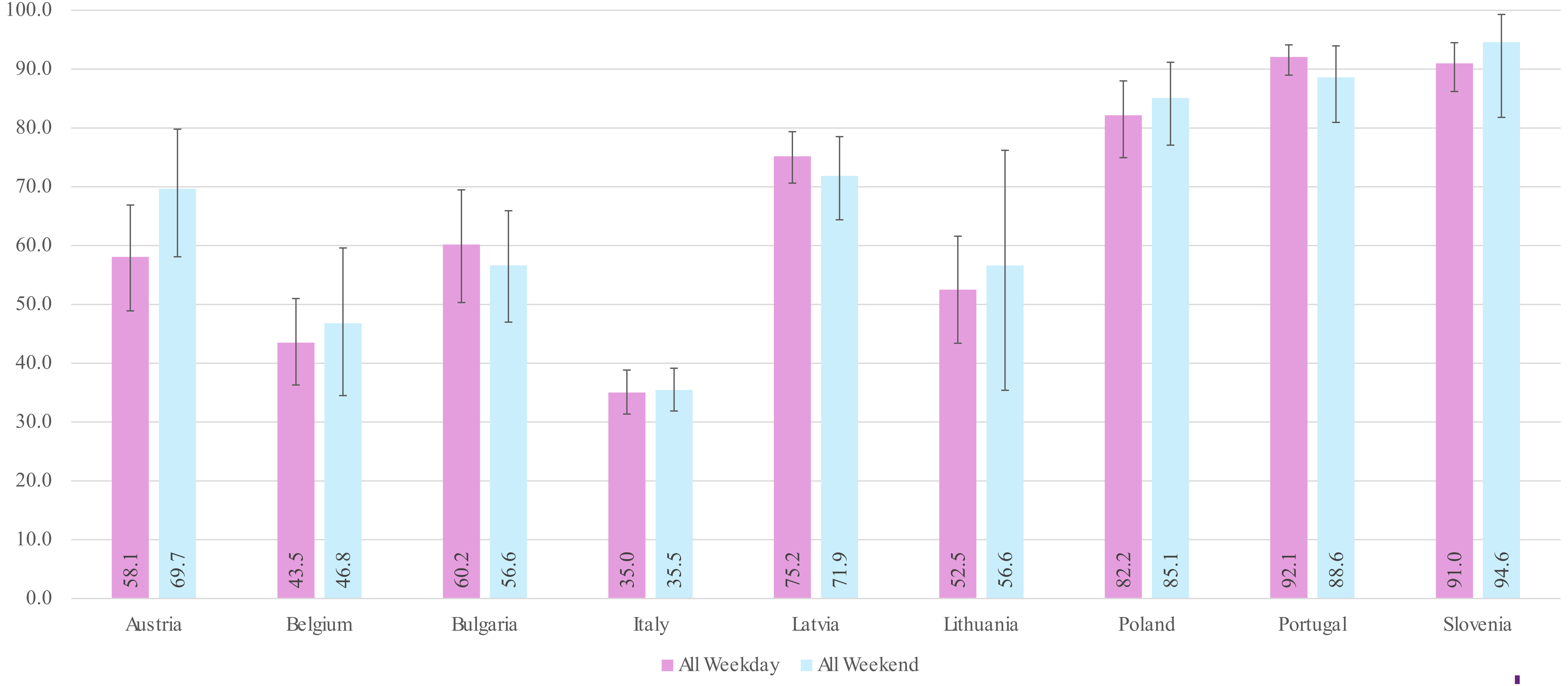
- From the data provided, it can be said that in a week out of 13 states, only 7 of them used a seat belt when using a **CRS** in 94% or more. From the data collected and presented above on weekends, it can be said that in 8 out of 12 countries, seat belts were used when using CRS in 93% or more.
- On the **motorways**, seatbelt use in the driver's seat was more than 98% in 8 of 17 states. In the front seats (excluding the driver's seat), seatbelt use was more than 97% in 8 of 17 states. Seatbelt use in the rear seats exceeded 90% in only 4 of 16 states. When using a child seat, seatbelt use was more than 95% in 8 of 12 states.
- The data obtained shows that **on rural roads**, seat belts were used in 97% or more of the driver's seat in 9 of the 18 states, in 9 of the 18 states, seat belts were used in 96% or more of the front occupants, in 4 of the 17 states, seat belts were used in 90% or more of the rural passengers, and in 7 of the 12 states, CRS was used in 94% or more of the rural passengers.
- **For urban roads** the data shows that in 8 of the 18 states, the driver's seat belt was used 96% or more of the time in the city; in 8 of the 18 states, the front seat belt (excluding the driver's seat) was used 95% or more of the time in the city; in 4 of the 18 states, the rear seat belt was used 90% or more of the time in the city; and in 6 of the 12 states, the belt was used 95% or more of the time when using a child seat.

Trend line

For Part A, the CRS is intended for the use of belts by children (both in the seat and in the CRS).

Key results – part B

Correct use of CRS by time period (part B)



Trend line

Weekdays:

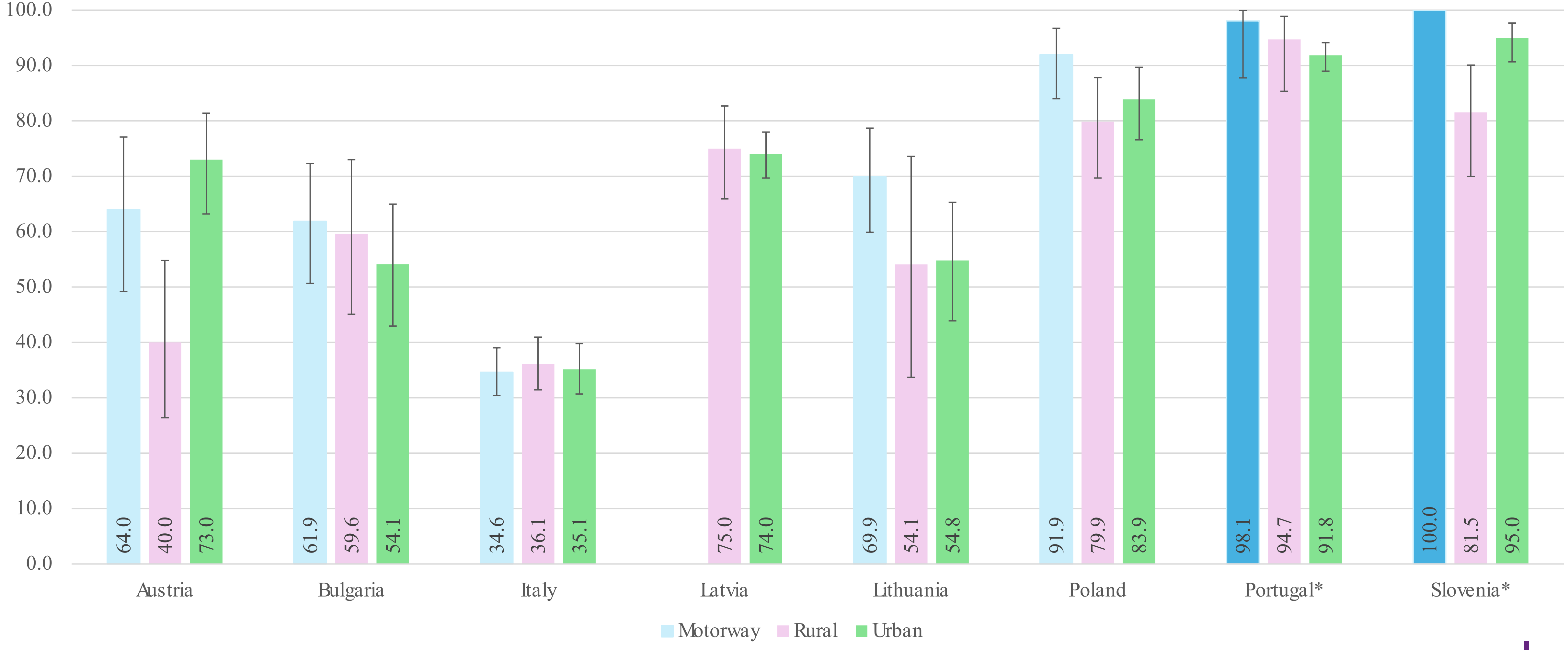
- The highest correct use of CRS is in Portugal (92.1%) and Slovenia (91.0%).
- The lowest correct use of CRS is in Italy (35.0%), Belgium (43.5%).
- For the other members, the percentage range of correct use of CRS ranged from 52.5% to 82.2%.
- Only 4 out of 9 respondents had correct use of CRS above 80%.

Weekends:

- The highest correct use of CRS is in Slovenia (94.6%).
- The lowest correct use of CRS is in Italy (35.5%) and Belgium (46.8%).
- The other data ranged from 56.6% to 88.6%.
- Only 4 out of 9 members had correct CRS usage above 85.0% during the weekend.

Except for Belgium, Lithuania and Portugal, in all other countries correct CRS usage was higher during the weekend than during the week.

Correct use of CRS by road type (part B)



Trendline

Fewer Number of observation (motorway, part B): Portugal, Slovenia.

Motorways:

- The highest CRS usage rates are in Slovenia (100%) and Portugal (98.1%).
- The lowest CRS usage rates are in Italy (34.6%).
- The other members had a CRS usage rate ranging from 61.90% to 95.0%.
- In this category, 3 out of 7 respondents used CRS at rates above 90.0%.

Rural roads:

- The highest CRS usage rates are in Portugal (94.7%).
- The lowest CRS usage rates are in Italy (36.1%), Austria (40.0%), Lithuania (54.1%) and Bulgaria (59.6%).
- The other members had a CRS usage rate ranging from 75.0% to 81.5%.
- In this category, 4 respondents out of 8 use a car seat in more than 75.0%.

Urban roads:

- The highest percentage of CRS correct use is in Slovenia (95.0%), followed by Portugal (91.8%).
- The lowest percentage of CRS correct use is in Italy (35.1%), Bulgaria (54.1%) and Lithuania (54.8%).
- The data of other members ranged from 73% to 83.9%.
- In this category, 3 out of 8 respondents were above 83.0% or more.

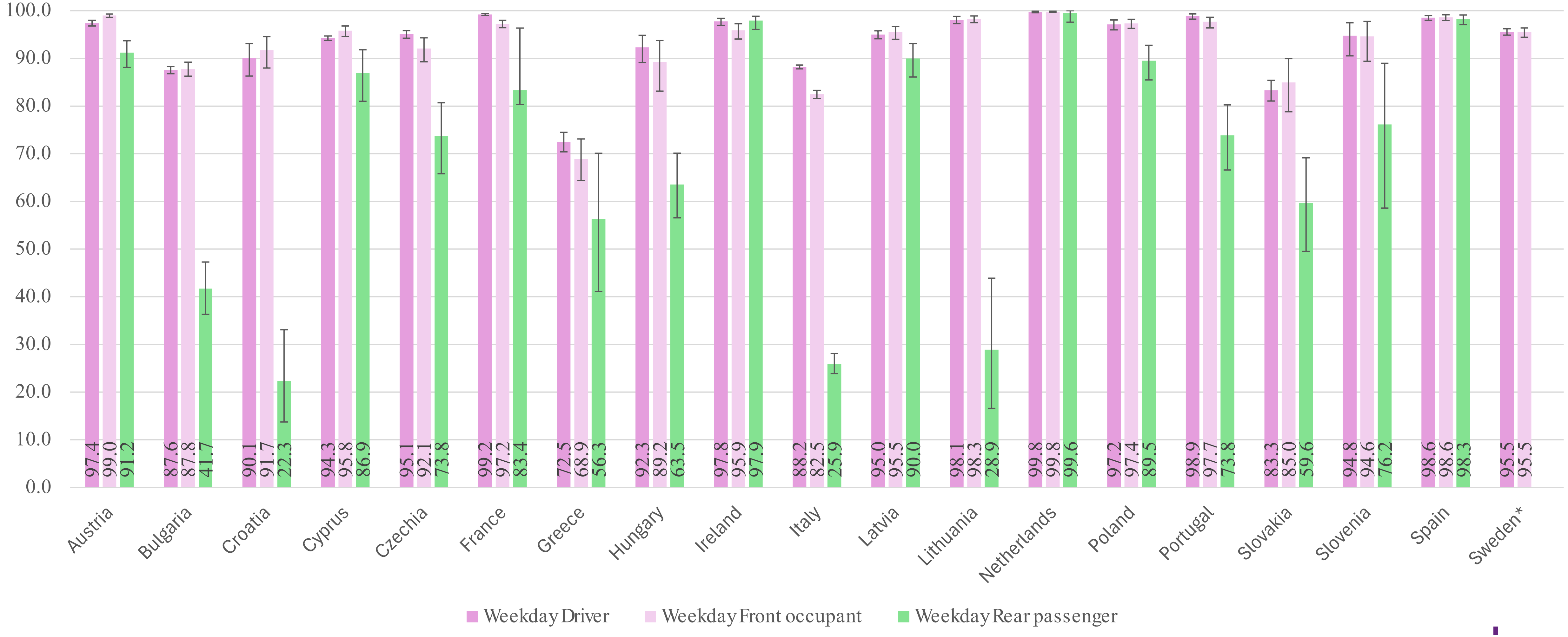
The highest percentage of correct CRS use was usually found on motorways, followed by urban roads, and on rural roads, the use was lower for most members.

Trend line

Additional results – part A

Trendline

Using safety belt during weekday/daytime



Trendline

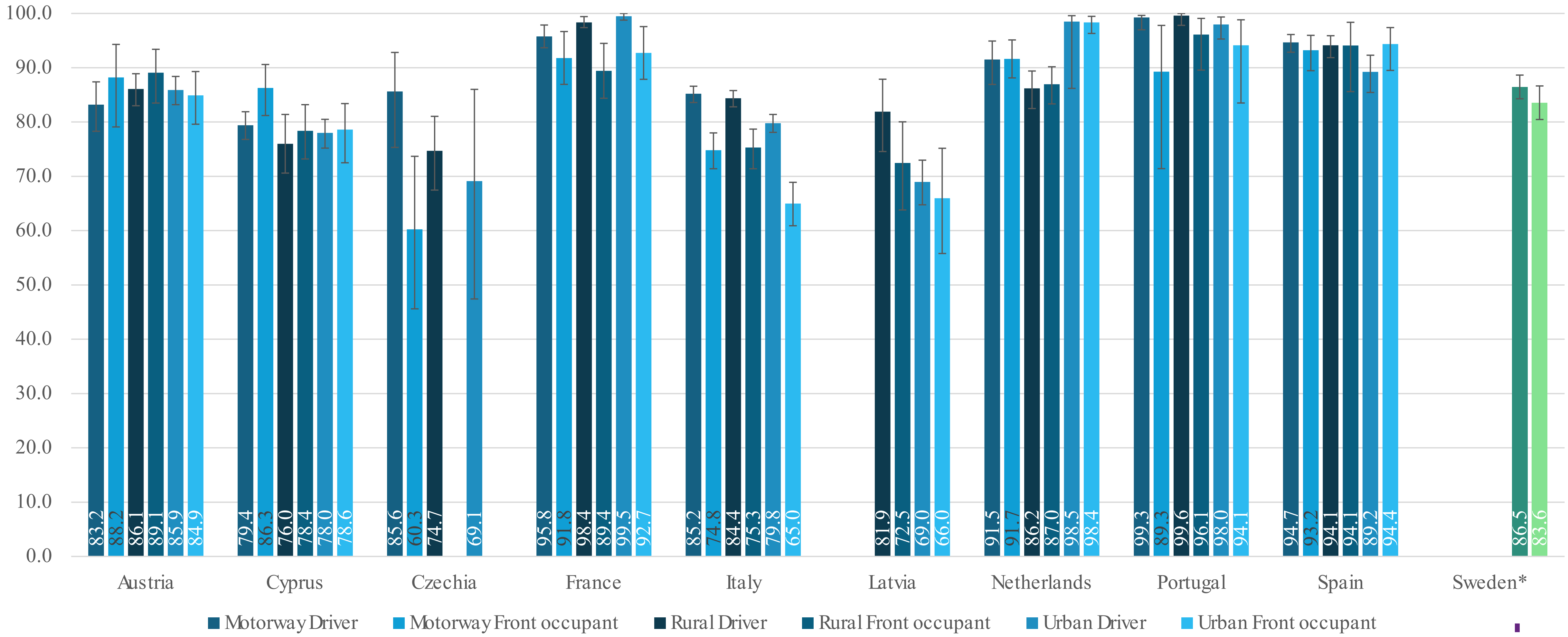
Using safety belt during weekend/daytime

*Fewer Number of location (weekend): Slovenia.

The data generally shows that seat belt use is more common on weekends than during the week.

Furthermore, the data shows that seat belt use is most common on motorways compared to rural and urban roads.

Using safety belt by roads - goods vehicle



Trendline

Collecting Weekday data only: Sweden.

Weekdays:

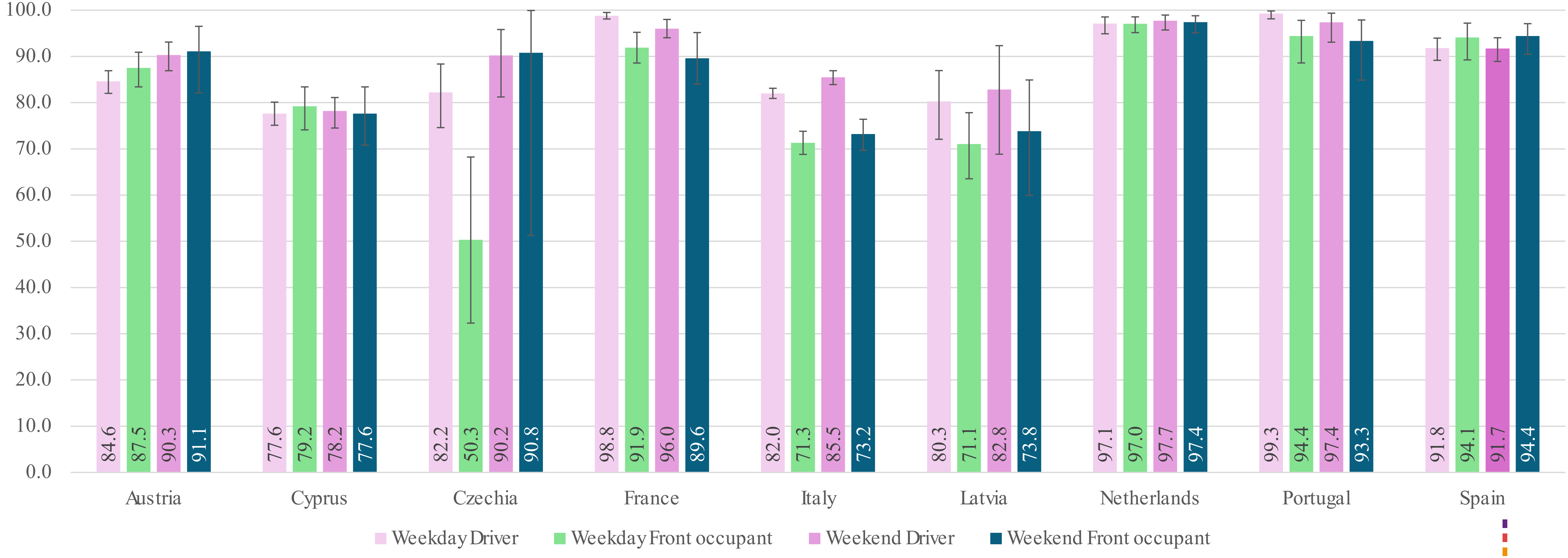
- \- The highest use of seat belts in the driver's seat on working days is in Portugal (99.3%), France (98.8%) and the Netherlands (97.1%). The lowest use is in Cyprus (77.6%). The data for the other members ranged from 80.3% to 91.8%. In 4 out of 9 Member States, the use of seat belts in the driver's seat on working days was 91% or more.
- The highest use of seat belts in other front seats other than the driver's seat on weekdays is in the following countries: the Netherlands (97.0%), Portugal (94.4%) and Spain (94.1%), the lowest use is in the Czech Republic (50.3%). The data for other Member States ranged from 71.06% to 91.9%. In 4 out of 9 Member States, the use of seat belts in front seats other than the driver's seat on weekdays was 91% or more.

Weekends:

- The highest use of seat belts on the driver's seat at weekends is in the following countries: the Netherlands (97.7%), Portugal (97.4%) and France (96.0%). The lowest use is in Cyprus (78.2%). The data for the other Member States ranged from 82.8% to 91.7%. In 6 out of 9 Member States, the seat belt use rate on the driver's seat was 90% or higher at weekends.
- The highest use of seat belts on other front seats, excluding the driver's seat, is in the following countries: the Netherlands (97.4%), Portugal (93.3%) and Spain (94.4%). The lowest use is in Italy (73.2%), Latvia (73.8%) and Cyprus (77.6%). The other members' data ranged from 89.6% to 91.1%. In 5 out of 9 Member States, seat belts were used in front seats other than the driver's seat on working days in 90% or more.

Trend line

Using safety belt during weekday/weekend (all roads) - goods vehicle



Trendline

Collecting Weekday data only: Sweden.

Motorways:

- The highest use of seat belts on motorways is in Portugal (99.3%). The lowest use is in Cyprus (79.4%). Other members' data ranged from 83.2% to 95.8%. In 4 out of 8 Member States, the use of seat belts on motorways was 91% or more.
- The highest use of seat belts on other front seats, excluding the driver, on motorways is in Spain (93.2%), France (91.8%) and the Netherlands (91.7%). The lowest use is in the Czech Republic (60.3%). Other members' data ranged from 74.80% to 89.3%. In 3 out of 8 Member States, seatbelt use on front seats other than the driver's seat on motorways was 91% or more.

Rural roads:

- The highest use of seat belts on the driver's seat on rural roads is in Portugal (99.6%) and France (98.4%). The lowest use is in the Czech Republic (74.7%) and Cyprus (76.0%). The data of other members ranged from 81.9% to 94.1%. In 3 Member States out of 9, the seat belt on the driver's seat was used 94% or more on rural roads.
- The highest use of seat belts on other front seats, excluding the driver's seat, on rural roads is in Portugal (96.10%) and Spain (94.10%). The lowest use is in Latvia (72.5%) and Italy (75.3%). The data of other members ranged from 78.4% to 89.4%. In 2 out of 8 Member States, the use of seat belts in front seats other than the driver's seat on rural roads was 94% or more (in 5 out of 8 of them 86%).

Urban roads:

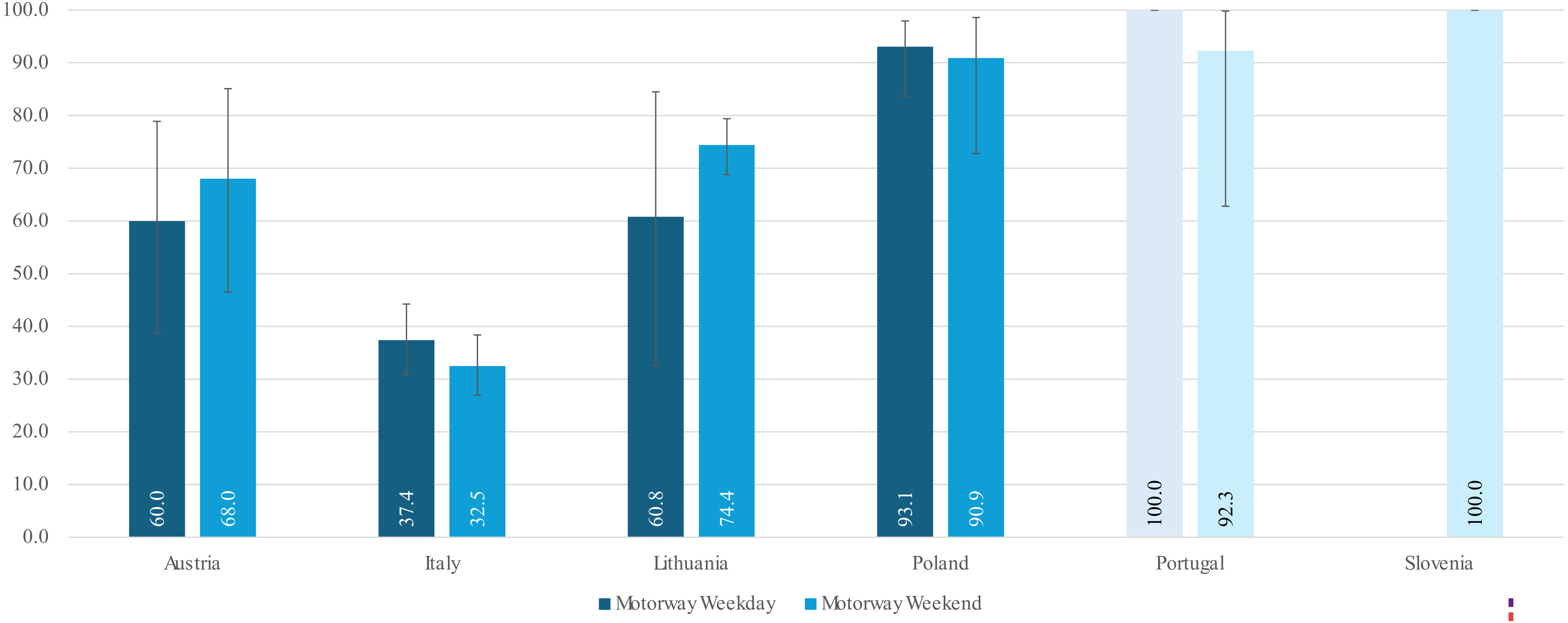
- The highest use of seat belts on the driver's seat on urban roads is in France (99.5%), the Netherlands (98.5%) and Portugal (98.0%). The lowest use is in Latvia (69.0%) and the Czech Republic (69.1%). The data of the other members ranged from 78.0% to 89.2%. In 3 out of 10 Member States, the seat belt on the driver's seat was used 97% or more on urban roads.
- The highest use of seat belts on other front seats, excluding the driver's seat, on urban roads is in the Netherlands (98.4%), Spain (94.4%) and Portugal (94.1%). The lowest use is in Italy (65.0%) and Latvia (66.0%). The data from other members ranged from 78.6% to 92.7%. In 4 out of 9 member states, the use of front seat restraints outside the driver's seat on urban roads was 92% or more.

Trendline

Additional results – part B

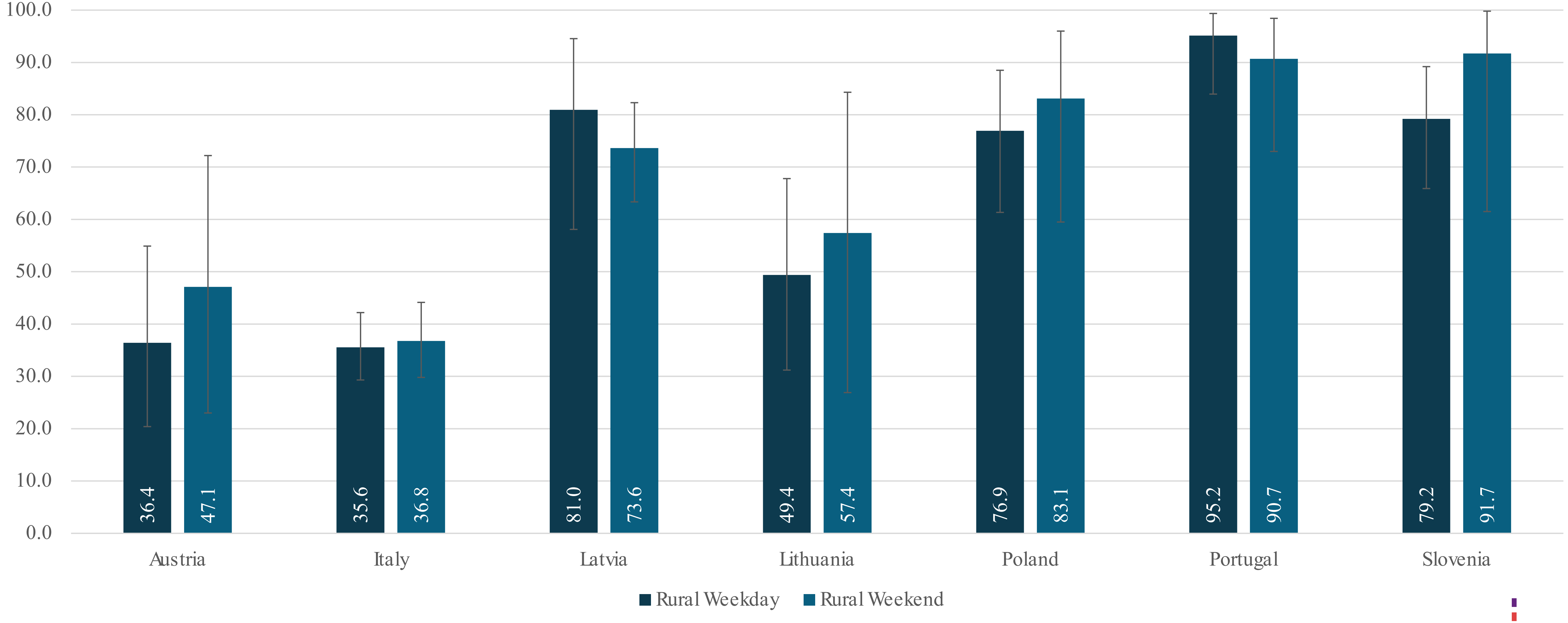
Trendline

Correct use of CRS by time period on Motorway (part B)



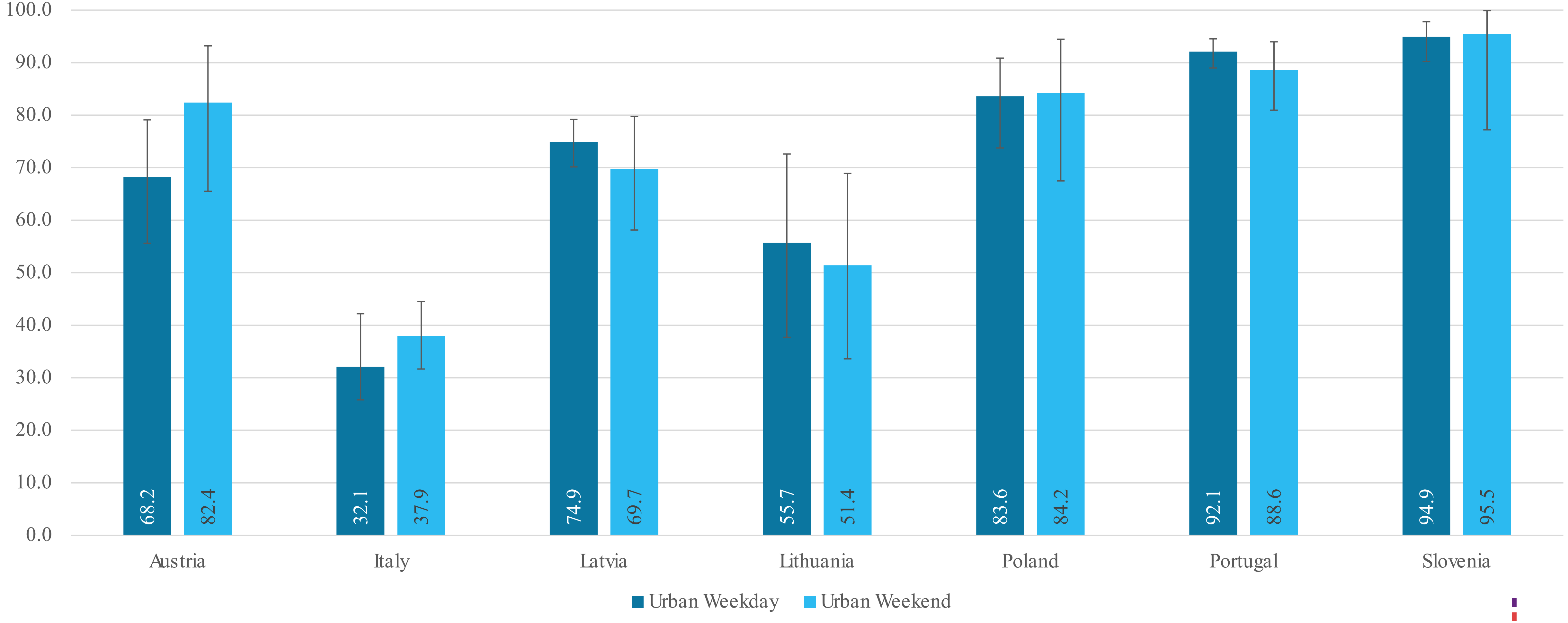
*Fewer Number of observation (motorway, part B): Portugal, Slovenia.

Correct use of CRS by time period on Rural roads (part B)



Trendline

Correct use of CRS by time period on Urban roads (part B)



Trend line

Add data – part A

Data collection or evaluation is not in accordance with the methodology, so comparison with other countries was not possible

Trend line

Denmark

Seat belt usage	2021	2022	2023	2024
Percentage of drivers in personal cars using seat belt	-	97.50%	-	97.80%
Total number counted	-	35 285	-	29 935
with seat belt		34 402		29 275
without seat belt		883		660

Counts are carried out every second year.
Weekdays/weekends, morning/midday/afternoon, towns/cities/rural/motorways

Germany

						Driver			Front occupant			Rear passenger			CRS		
Road type	Time period	Vehicle type	Nr of sessions	Nr of locations	Traffic counts	N-driver	Nused-driver	KPI-driver	N-front	Nused-front	KPI-front	N-rear	Nused-rear	KPI-rear	N-CRS	Nused-CRS	KPI-CRS
motorway	**weekday/ daytime**	passenger car	2	6	N/A	4800	4744	98.83%	2131	2097	98.40%	1498	1422	94.93%	1448	1436	99.17%
rural road	**weekday/ daytime**	passenger car	2	6	N/A	4800	4736	98.67%	1715	1695	98.83%	1135	1079	95.07%	1588	1582	99.62%
urban road	**weekday/ daytime**	passenger car	2	40	N/A	9000	8855	98.39%	2947	2895	98.24%	478	446	93.31%	2738	2724	99.49%
all roads	**weekday/ daytime**	**passenger car**	2	52	N/A	18600	18348	98.65%	6793	6696	98.57%	3111	2943	94.60%	5774	2725	47.19%

KPIs Definition and Methodology	
Data collection method	Roadside observations by researchers
Sampling of locations	Simple random
Observation/ Survey period:	19/06/23 - 24/09/23

Trend line

Romania

					Driver (optional)			Front passenger (optional)			Rear passenger			Total - seat belt			CRS		
Road Type	Time period	Vehicle Type	Nr of Locations	Traffic Counts	N-driver	Nused-driver	KPI-driver	N-front pass	Nused-front pass	KPI-front pass	N-rear	Nused-rear	KPI-rear	Ntotal	Nused-total	KPI-total	N-children	Nused-CRS	KPI-CRS
motorways	*(all periods)*	passenger car-Total	6	22860	13523	9472	70.04	5665	3642	64.29	20645	14833	71.85	39833	27947	70.16	1327	611	46.04
rural roads	*(all periods)*	passenger car-Total	11	37517	27462	18873	51.75	9936	4392	51.75	4567	2035	51.75	41965	25300	51.75	2933	663	51.75
urban roads	*(all periods)*	passenger car-Total	11	50912	25668	16968	66.11	8037	5157	64.17	5232	2210	42.24	38937	24335	62.50	3561	2277	66.67
(all roads)	*(all periods)*	**passenger car-Total**	28	111289	66653	45313	18.,90	23638	13191	180.20	30444	19078	165.84	120735	77582	184.41	7821	3551	164.46

No methodological data

Add data – part B

Data collection or evaluation is not in accordance with the methodology, so comparison with other countries was not possible

Trend line

Ireland

The RSA runs the 'Check it Fits' service which is a full-time, nationwide, free service holding events around the country throughout the year. A team of experts check child car seats fitted in the vehicle (with or without the child present) to ensure they are fitted correctly and make adjustments as required.

On average, approximately 44 checks were conducted per event in 2023.

The types of adjustments that are required in non-compliant car seats are classified as minor or major. Minor include making adjustments related to adjusting handles, where the seatbelt is routed over the armrest, tensioner too loose, twisted seat belts, tethers too loose, tighten base, twisted buckles. Major adjustments include routing error, wrong way around, reverse routed, red clips not locked in, top tether not connected, not in the isofix, seat belt buckle disconnected, ERF tethers not structurally connected. In addition, there are times when the car seat is found to be incompatible where they are non-EU regulated, wrong size seat for child, buckle crunch, no isofix in car, no physical space for child seat.

2023 Results
Here are the results from the 2023 Check if Fits service.

In 2023, 44% of car seats checked were fitted in a compliant manner. There were 5,402 child car seats checked in 2023.

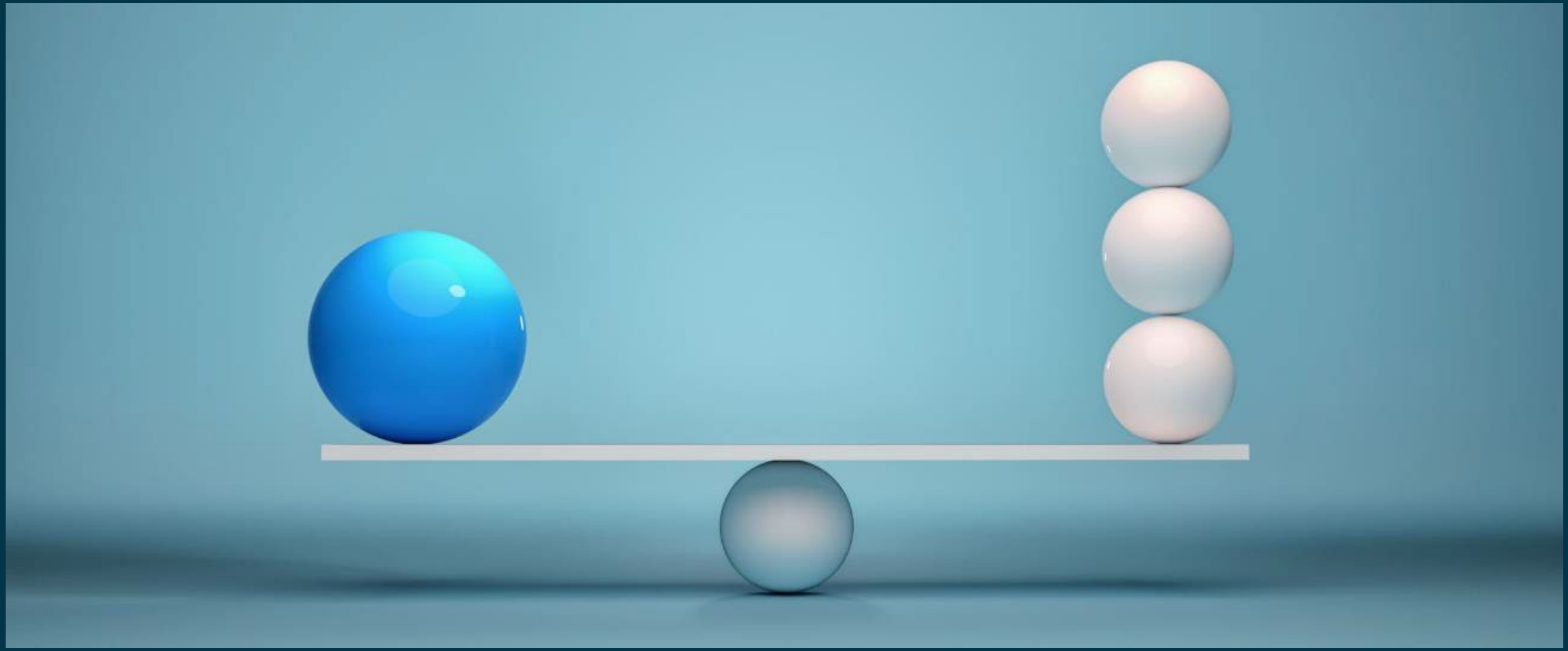
Romania

Road type	Time period	Nr of locations	N-CRS	Ncorrect	KPI-CRS
motorway	*all periods*	6	1372	896	65.31
rural road	*all periods*	10	1893	1200	63.39
urban road	*all periods*	12	2381	1480	62.16
all roads	**weekday/daytime**	28	5038	3193	63.38
all roads	**weekend/daytime**	3	608	383	62.99
all roads	*all periods*	28	5646	3576	63.33

Data collection method	Roadside observations by researchers
Sampling of locations	Simple random
Type of locations selected for in-vehicle inspections of CRS (e.g. parking lots, rest areas, etc.)	shopping parking area for all road types

No methodological data

Comparison with Baseline



Trend line

Comparison – safety belt – Part A

Using safetybelt - passenger cars

	Baseline				Trendline							
	Driver	Front occupant	Rear passenger	CRS	Driver		Front occupant		Rear passenger		CRS	
Austria	97.3	-	86.3	99.4	97.5	▲ 0.2	99.0	-	90.7	▲ 4	99.1	▼ -0.3
Bulgaria	83.3	-	32.2	50.0	88.7	▲ 5	89.0	-	45.5	▲ 13	55.5	▲ 5
Cyprus	91.1	91.2	61.4	87.3	94.3	▲ 3	95.6	▲ 4	86.8	▲ 25	-	-
Czechia	96.5	96.3	86.2	36.9	95.2	▼ -1	92.4	▼ -4	76.2	▼ -10	99.9	▲ 63
Hungary	88.5	-	57.1	60.9	91.7	▲ 3	89.7	-	64.0	▲ 7	88.9	▲ 28
Italy	87.2	87.2	32.1	50.6	87.8	▲ 1	83.1	▼ -4	24.9	▼ -7	51.7	▲ 1
Latvia	93.2	93.6	90.4	-	95.1	▲ 2	95.7	▲ 2	86.2	▼ -4	-	-
Lithuania	97.9	98.0	62.4	85.5	98.3	▲ 0.4	98.4	▲ 0	36.1	▼ -26	68.0	▼ -18
Netherlands	-	-	-	88.3	99.8	-	99.7	-	99.3	-	95.1	▲ 7
Poland	96.1	95.6	88.2	93.1	97.4	▲ 1	97.6	▲ 2	89.7	▲ 2	95.9	▲ 3
Portugal	98.5	98.0	78.3	-	98.8	▲ 0.3	97.8	▼ -0.2	76.8	▼ -2	-	-
Spain	96.0	95.9	92.8	36.4	98.4	▲ 2	98.6	▲ 3	98.5	▲ 6	91.7	▲ 55

For Part A, the CRS is intended for the use of belts by children (both in the seat and in the CRS).

Comparison – safety belt – Part A

Using safetybelt - good vehicles							
	Baseline		Trendline				
	Driver	Front occupant	Driver			Front occupant	
Austria	87.2	-	84.6	▼	-3	87.6	-
Cyprus	70.5	71.0	77.7	▲	7	79.1	▲ 8
Czechia	89.8	89.8	82.4	▼	-7	52.5	▼ -37
Portugal	89.7	89.3	99.0	▲	9	94.2	▲ 5

Trend line

Comparison - CRS – part A and B

State	Baseline		Trendline					
	Roadside observation Part A	In-vehicle inspection Part B	Roadside observation Part A			In-vehicle inspection Part B		
Austria	99.4	76.8	99.1	▼	-0.3	62.5	▼	-14
Bulgaria	50.0	60.8	55.5	▲	5	58.4	▼	-2
Italy	50.6	59.9	51.7	▲	1	35.2	▼	-25
Latvia	-	61.9	94.7		-	74.2	▲	12
Lithuania	85.5	68.6	68.0	▼	-18	54.4	▼	-14
Poland	93.1	-	95.9	▲	3	83.6		-
Portugal	-	90.7	-		-	91.8	▲	1

Recommendations
Conclusions

Recommendations

- Many member states did not provide information on trucks – likely due to small sample sizes – highlighting the importance of this key performance indicator (KPI) for all members.
- Different countries observe different ways of using CRS correctly, so it is not clear whether the data is comparable.
- Policy measures:
  - Set targets based on the KPI results
  - Extra focus on risk situations and groups based on the KPI results

Trend line

Recommendations on methodology

- For Safety belts – part A:
  - The number of CRS observations in the vehicle was lower in 3 of the 13 countries that provided data, so it is questionable whether these data are suitable for comparison or monitoring.
  - Of the 20 Member States that provided data, only 9 have data on trucks. In this respect, it is worth considering monitoring the use of seat belts in trucks. If this is to be monitored, we recommend that only drivers are observed.
  - In some cases, visibility in the rear of the vehicle is impaired due to tinting of the vehicle windows. Consider allowing data from questionnaire surveys to be supplemented.

- For CRS – part B:
  - Some countries collected data through questionnaire surveys or roadside observations, which is not in line with the methodology. The informative and comparative value of the data is not clear. We recommend collecting data only through in-depth vehicle inspections or from information from the Police.

Trend line

For Part A, the CRS is intended for the use of belts by children (both in the seat and in the CRS).

Recommendations on policy integration

- Policy measures:
  - Set targets based based on key performance indicators (KPI) results - focus primarily on rear passengers and CRS (for safety belt, part A).
  - Extra focus on risk situations and groups based on the KPI results - primarily on correct child restraint in CRS.

For Part A, the CRS is intended for the use of belts by children (both in the seat and in the CRS).

Conclusions

- In general, seatbelt use is more common on weekends than during the week.
- Seatbelt use in the driver's seat is most common on motorways compared to urban and rural roads.
- Seatbelt use in the passenger seat is the same on rural and urban roads compared to motorways.
- The lower percentage values of correct use of **CRS** in-depth vehicles inspection, around 50%, are alarming and cause for thought. Even values of around 70% are not sufficient from the point of view of child safety in car seats. Values above 85% can be considered good.
- The data shows that car seats are used more on the highway than on city and suburban roads, regardless of whether it is a weekend or a weekday.

Annex 1 Meta data– safety belt – Part A

	Data collection method	Weather conditions	Indicators
Austria	Roadside observations	Good weather	Driver, front occupant, rear passenger, CRS
Bulgaria	No information	No information	Driver, front occupant, rear passenger, CRS
Croatia	Roadside observations	Good weather	Driver, front occupant, rear passenger, CRS
Cyprus	Roadside observations	Good weather	Driver, front occupant, rear passenger
Czechia	Roadside observations	Good weather	Driver, front occupant, rear passenger, CRS
Finland	Roadside observations	Not raining	total number only
France	Other (on roadside, OR from a rest area OR from a location near the motorway OR at toll booths)	Observations were conducted regardless of weather conditions, except in cases of extreme weather, which were excluded for safety reasons.	Driver, front occupant, rear passenger, CRS
Greece	Roadside observations	Good weather	Driver, front occupant, rear passenger
Hungary	Roadside observations	Good weather and visibility	Driver, front occupant, rear passenger, CRS
Ireland	Roadside observations	Good weather and visibility	Driver, front occupant, rear passenger
Italy	Roadside observations	Clear weather, cloudy weather, rain, fog	Driver, front occupant, rear passenger
Latvia	Roadside observations	Good weather and visibility	Driver, front occupant, rear passenger
Lithuania	Roadside observations	Good weather	Driver, front occupant, rear passenger, CRS
Netherlands	Roadside observations	Different weather conditions	Driver, front occupant, rear passenger, CRS
Poland	Roadside observations	Mostly sunny weather, some clouds and also wind, average temperature 12-23◦C	Driver, front occupant, front passenger, rear passenger, CRS
Portugal	Roadside observations	No restrictions	Driver, front occupant, rear passenger
Slovakia	Roadside observations	Mostly sunny or partly cloudy	Driver, front occupant, rear passenger, CRS
Slovenia	Roadside observations	Dry (rain periods excluded)	Driver, front occupant, rear passenger, CRS
Spain	Roadside observations	No infromation	Driver, front occupant, rear passenger, CRS
Sweden	Roadside observations	No extreme weather, early autumn. Weather conditions are often quite stable during this period in Sweden.	Driver, front occupant

For Part A, the CRS is intended for the use of belts by children (both in the seat and in the CRS).

Annex 1 Meta data – CRS – Part B

	Data collection method	Sampling of locations	Breakdowns	Survey Period
Austria	Indepth observations	Other (parking lots, rest areas)	Road type, time period	01/05/2024 - 30/10/2024
Belgium	In-vehicle inspections	Stratified random (parking lots)	Time period	02/10/2023 - 16/12/2023
Bulgaria	Combination of methods: Parking spaces and parking lots observation, Self-reported data (weight and height of children, airbag functioning etc.), In-vehicle inspections of child seats (mounting, seat belts tension, homologation label etc.)	Simple random rest areas, parking lots, kindergardens, schools, playgrounds, shopping malls (big and small)	Road type, time period	11/05/24 - 07/06/24
Italy	Roadside observations by researchers	Stratified random	Road type, time period	12/05/2024 - 21/10/2024
Latvia	No information	No information	Rural road and Urban road, time period	12/03/2023 - 02/10/2023
Lithuania	In-vehicle inspections	Stratified random (parking lots, rest areas, school parking lots)	Road type, time period	24/05/2023 - 13/10/2023 (summer excluded)
Poland	No information	Stratified random (parkings, rest areas, shopping centers, service stations, around schools etc.)	Road type, time period	10/04 - 19/06/2024
Portugal	Roadside observations (urban), assessed by questionnaire (rural, motorway)	Stratified random (parking lot of: schools, parks, and sport centers)	Road type, time period	12/10/2024 - 23/11/2024
Slovenia	Observations/measurements by the police	Other (parking lots near schools, kindergardens, child equipment shops, near touristic attractions)	Road type, time period	5. April - 15. June

No information about Data collection method: Latvia, Poland.
No information about Sampling of locations: Latvia.

Not collecting Motorway data: Belgium, Latvia.
Not collecting Rural road data: Belgium.
Not collecting Urban road data: Belgium.

Annex 2 Observation sessions and locations

Safety belt – passenger car – Part A

			Number of location	Number of observations			
	Time period	Road type		Driver	Front occupant	Rear passenger	CRS
Austria	Weekday	All	101	27776	7109	834	1426
	Weekend	All	35	6607	2818	369	541
	All periods	Motorway	23	6563	1928	242	378
	All periods	Rural road	36	10505	3246	369	790
	All periods	Urban road	55	17315	4753	592	799
Bulgaria	Time period	Road type					
	Weekday	All	30	14625	4976	1160	346
	Weekend	All	30	15592	7296	1949	779
	All periods	Motorway	10	10955	5733	1369	395
	All periods	Rural road	10	9136	3715	1071	367
	All periods	Urban road	10	10126	2824	769	363
Croatia	Time period	Road type					
	Weekday	All	34	11499	3667	469	72
	Weekend	All	28	7886	3788	613	104
	All periods	Motorway	10	3805	2079		1
	All periods	Rural road	13	5579	2269	388	51
	All periods	Urban road	19	10001	3107	694	124
Cyprus	Time period	Road type					
	Weekday	All	40	19161	3416	944	
	Weekend	All	41	13438	3304	740	
	All periods	Motorway	26	11756	2679	703	
	All periods	Rural road	27	7811	1673	409	
	All periods	Urban road	28	13032	2368	572	

			Number of location	Number of observations			
	Time period	Road type		Driver	Front occupant	Rear passenger	CRS
Czechia	Weekday	All	30	8974	2419	364	278
	Weekend	All	30	4414	2179	460	249
	All periods	Motorway	10	3566	1427	262	107
	All periods	Rural road	10	4399	1501	252	174
	All periods	Urban road	10	5042	1670	310	246
Finland	Time period	Road type					
	Weekday	All	37				
	Weekend	All	16				
	All periods	Motorway	16				
	All periods	Rural road	17				
	All periods	Urban road	38				
France	Time period	Road type					
	Weekday	All	73	6352	1692	589	298
	Weekend	All	42	3344	1163	965	289
	All periods	Motorway	21	2129	839	523	241
	All periods	Rural road	50	4157	1088		
	All periods	Urban road	44	3410	928	1031	346
Greece	Time period	Road type					
	Weekday	All	22	4523	1060	88	
	Weekend	All	13	3014	1136	165	
	All periods	Motorway	11	2304	924	109	
	All periods	Rural road	11	2362	503	48	
	All periods	Urban road	13	2871	769	69	

For Part A, the CRS is intended for the use of belts by children (both in the seat and in the CRS).

Country	Time period	Road type	Number of location	Number of observations: Driver	Front occupant	Rear passenger	CRS
Hungary	Weekday	All	48	9308	2888	2147	1297
	Weekend	All	47	7206	3976	2711	1588
	All periods	Motorway	16	3801	1834	953	342
	All periods	Rural road	17	6825	2764	1915	940
	All periods	Urban road	15	5888	2266	1990	1603
Ireland	Time period	Road type					
	Weekday	All	156	10494	4641	3728	
	Weekend	All	10	663	266	289	
	All periods	Motorway	12	2041	513	267	
	All periods	Rural road	63	3667	1317	975	
	All periods	Urban road	82	5422	3077	2785	
Italy	Time period	Road type					
	Weekday	All	54	23944	7823	885	648
	Weekend	All	37	15767	6559	872	691
	All periods	Motorway	18	12082	5721	846	488
	All periods	Rural road	18	14119	4756	450	410
	All periods	Urban road	18	13510	3905	461	441
Latvia	Time period	Road type					
	Weekday	All	55	14232	3357	302	
	Weekend	All	15	3576	1666	143	
	All periods	Motorway					
	All periods	Rural road	21	4035	1503	179	
	All periods	Urban road	46	13773	3520	366	
Lithuania	Time period	Road type					
	Weekday	All	34	9345	11722	295	58
	Weekend	All	30	5861	9059	346	76
	All periods	Motorway	12	1934	2830	65	4
	All periods	Rural road	12	4446	6487	267	66
	All periods	Urban road	12	8826	11464	309	64
Netherlands	Time period	Road type					
	Weekday	All	49	8489	10501	160	147
	Weekend	All	47	10017	14978	738	362
	All periods	Motorway	20	5736	7997	275	103
	All periods	Rural road	19	5997	8154	252	140
	All periods	Urban road	10	6782	9328	371	269

Country	Time period	Road type	Number of location	Number of observations: Driver	Front occupant	Rear passenger	CRS
Poland	Weekday	All	50	30916	39799	1461	1491
	Weekend	All	30	18937	27677	1622	1591
	All periods	Motorway	23	18571	26222	1031	904
	All periods	Rural road	28	18391	24345	1135	3741
	All periods	Urban road	18	12891	16909	917	2793
Portugal	Time period	Road type					
	Weekday	All	62	4293	1253	248	
	Weekend	All	35	2130	1089	314	
	All periods	Motorway	18	1023	416	119	
	All periods	Rural road	29	2041	731	119	
	All periods	Urban road	31	3359	1195	324	
Slovakia	Time period	Road type					
	Weekday	All	45	9863	3053	604	405
	Weekend	All	31	5034	2886	740	518
	All periods	Motorway	19	4027	1952	389	160
	All periods	Rural road	22	4473	1792	418	317
	All periods	Urban road	29	6397	2195	537	446
Slovenia	Time period	Road type					
	Weekday	All	23	1574	526	87	57
	Weekend	All	9	474	174	28	26
	All periods	Motorway	10	604	222	43	30
	All periods	Rural road	10	598	219	35	31
	All periods	Urban road	12	848	246	37	22
Spain	Time period	Road type					
	Weekday	All	130	7227	3073	1634	523
	Weekend	All	130	6751	3089	1608	573
	All periods	Motorway	40	3202	1584	700	389
	All periods	Rural road	25	2014	808	415	103
	All periods	Urban road	62	8762	3770	2127	614
Sweden	Time period	Road type					
	Weekday	All	295	336871	76106		
	Weekend	All					

For Part A, the CRS is intended for the use of belts by children (both in the seat and in the CRS).

Trendline

Annex 2 Number of observations – part B

State	Motorway	Rural	Urban	All
Austria	50	50	100	200
Belgium				1768
Bulgaria	84	52	85	221
Italy	488	410	441	1339
Latvia		112	450	562
Lithuania	120	154	216	490
Poland	149	149	143	441
Portugal * **	43	80	551	551
Slovenia*	3	53	170	226

*Fewer Number of observation (motorway, part B): Portugal, Slovenia.

** Data was only collected in urban roads. Data of motorways and rural roads refers to drivers who had driven in motorways and rural roads in the current trip - assessed by questionnaire

Trendline

Annex 3 Next information – Part A

- No information about Data collection method: Bulgaria
- No information about Weather Conditions: Bulgaria, Spain
- Collecting Total data only: Finland
- Not collecting Motorway data: Latvia, Sweden.
- Not collecting Rural road data: Sweden.
- Collecting Pasenger car only: Bulgaria, Croatia, Finland, Greece, Hungary, Ireland, Lithuania, Slovakia, Slovenia.
- Poland had data divided into light and heavy goods vehicles, making it impossible to compare it with data from other countries.
- Collecting Weekday data only: Sweden.
- Fewer Number of location (weekend): Slovenia.
- Fewer Number of observation (CRS, part A): Croatia, Lithuania, Slovenia.
- Country without a grant: Denmark, France, Greece, Sweden.
- The CRS is intended for the use of belts by children (both in the seat and in the CRS).
- Data collection or evaluation is not in accordance with the methodology, so comparison with other countries was not possible: Denmark, Germany, Romania.

Trendline

Annex 3 Next information – Part B

- No information about Data collection method: Latvia, Poland.
- No information about Sampling of locations: Latvia.
- Not collecting Motorway data: Belgium, Latvia.
- Not collecting Rural road data: Belgium.
- Not collecting Urban road data: Belgium.
- Country without a grant: Sweden.
- Data collection or evaluation is not in accordance with the methodology, so comparison with other countries was not possible: Ireland, Romania.

References and further reading

Key documents and links

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- Trendline Dashboard (+ link) https://trendlineproject.eu/

Trendline

Trendline

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