

# **BEREC Report on Western Balkan Roaming**

**October 2024 – September 2025**

12 March 2026

## Contents

<b>Table of Figures .....</b>	<b>2</b>
<b>1. Introduction .....</b>	<b>5</b>
<b>2. Analysis of subscribers and those that use roaming services .....</b>	<b>6</b>
2.1. Domestic average retail revenue per user (ARRPU).....	6
2.2. Share of roaming enabled subscribers.....	11
<b>3. Consumption patterns for domestic mobile retail services .....</b>	<b>12</b>
3.1. Domestic voice minutes: average number of domestic minutes (actual minutes) per subscriber per month 12	
3.2. Domestic SMS: average number of domestic SMS per subscriber per month.....	15
3.3. Domestic data: average consumption of domestic data (GB) per subscriber per month.....	17
<b>4. Consumption patterns for roaming services (voice, SMS and data) .....</b>	<b>19</b>
4.1. Roaming voice services, calls made: average number of regional roaming minutes per roaming-enabled subscriber per month.....	19
4.2. Roaming voice services, calls received: average number of roaming minutes per regional roaming enabled subscriber per month.....	24
4.3. Roaming SMS services: average number of roaming SMS per regional roaming enabled subscriber per month.....	27
4.4. Roaming data services: average data roaming consumption in GB per regional roaming-enabled subscriber per month .....	31
<b>5. The development of retail roaming services: retail revenues per unit .....</b>	<b>35</b>
5.1. Average retail roaming revenues per minute, calls made .....	35
5.2. Average retail roaming revenues per minute, calls received .....	40
5.3. Average retail roaming revenues per SMS .....	44
5.4. Average retail roaming revenues per GB .....	48
<b>6. The development of wholesale roaming services: wholesale revenues per unit .....</b>	<b>52</b>
6.1. Wholesale voice roaming services: wholesale revenues per minute (group and non-group).....	52
6.2. Wholesale SMS roaming services: wholesale revenues per SMS (group and non-group) .....	56
6.3. Wholesale data roaming services: wholesale revenues per GB.....	59
<b>7. Annex .....</b>	<b>62</b>

## Table of Figures

Figure 1: Domestic average retail mobile revenue (voice + SMS + Data) per subscriber per month, in Euro, metered only .....	7
Figure 2: Domestic average retail mobile revenue (voice+SMS+Data) per subscriber per month, in Euro, including bundles .....	8
Figure 3: Domestic average retail revenue (voice+SMS+data) per subscriber per month for the whole WB region, by quarter, metered only .....	9
Figure 4: Domestic average retail revenue (voice+SMS+data) per subscriber per month for the whole WB region, by quarter, including bundles .....	10
Figure 5: Share of roaming enabled subscribers .....	11
Figure 6: Average number of domestic minutes (actual minutes) per subscriber per month .....	13
Figure 7: Average number of domestic minutes (actual minutes) per subscriber per month for the whole WB region, by quarter .....	14
Figure 8: Average number of domestic SMS per subscriber per month .....	15
Figure 9: Average number of domestic SMS per subscriber per month for the whole WB region, by quarter .....	16
Figure 10: Average consumption of domestic data (GB) per subscriber per month .....	17
Figure 11: Average consumption of domestic data (GB) per subscriber per month for the whole WB region, by quarter .....	18
Figure 12: Average number of roaming minutes within the WB region (from alternative, RLAH+ and RLAH tariffs) per subscriber roaming at least once in the concerned quarter and region per month .....	20
Figure 13: Average number of roaming minutes within the WB region (from alternative, RLAH+ and RLAH tariffs) per subscriber per month for the whole WB region, by quarter .....	21
Figure 14: Average number of roaming minutes within the WB region from RLAH+ and RLAH tariffs per RLAH+ and RLAH subscriber roaming at least once in the concerned quarter and region per month .....	22
Figure 15: Average number of roaming minutes within the EEA region per subscriber roaming at least once in the concerned quarter and region per month .....	23
Figure 16: Average number of roaming minutes within the WB region (from alternative, RLAH+ and RLAH tariffs) per subscriber roaming at least once in the concerned quarter and region per month .....	24
Figure 17: Average number of roaming minutes within the WB region from RLAH+ and RLAH tariffs per RLAH+ and RLAH subscriber roaming at least once in the concerned quarter and region per month .....	25
Figure 18: Average number of roaming minutes within the EEA region per number of subscribers roaming at least once in the concerned quarter and region per month .....	26
Figure 19: Average number of roaming SMS (from alternative, RLAH+ and RLAH tariffs) within the WB region per subscriber roaming at least once in the concerned quarter and region per month .....	27

Figure 20: Average number of roaming SMS (from alternative, RLAH+ and RLAH tariffs) within the WB region per subscriber roaming at least once in the concerned quarter and region per month for the whole WB region, by quarter .....	28
Figure 21: Average number of roaming SMS within the WB region (from RLAH+ and RLAH tariffs) per subscriber roaming at least once in the concerned quarter and region per month .....	29
Figure 22: Average number of roaming SMS within the EEA region per subscriber roaming at least once in the concerned quarter and region per month.....	30
Figure 23: Average data roaming consumption in GB (from alternative, RLAH+ & RLAH tariffs) within the WB region per subscriber roaming at least once in the concerned quarter and region per month.....	31
Figure 24: Average data roaming consumption in GB (from alternative, RLAH+ & RLAH tariffs) within the WB region per subscriber roaming at least once in the concerned quarter and region per month for the whole WB region, by quarter .....	32
Figure 25: Average data roaming consumption in GB within the WB region from RLAH+ and RLAH tariffs per RLAH+ and RLAH subscriber roaming at least once in the concerned quarter and region per month .....	33
Figure 26: Average data roaming consumption in GB within the EEA region subscriber roaming at least once in the concerned quarter and region per month .....	34
Figure 27: Average retail roaming revenues per alternative WB roaming minute, calls made (actual minutes), in Eurocent (within WB).....	36
Figure 28: Average retail roaming revenues per WB RLAH+ and RLAH roaming minute, calls made (actual minutes), in Eurocent (within WB) .....	37
Figure 29: Average retail roaming revenues per minute, calls made (actual minutes), in Euro (within EEA countries).....	38
Figure 30: Average retail roaming revenues per minute, calls made (actual minutes), in Euro (within RoW countries) .....	39
Figure 31: Average retail roaming revenues per alternative WB roaming minute, calls received (actual minutes), in Eurocent (within WB).....	40
Figure 32: Average retail roaming revenues per WB RLAH+ and RLAH roaming minute, calls received (actual minutes), in Eurocent (within WB) .....	41
Figure 33: Average retail roaming revenues per minute, calls received (actual minutes), in Euro (within EEA countries) .....	42
Figure 34: Average retail roaming revenues per minute, calls received (actual minutes), in Euro (within RoW countries).....	43
Figure 35: Average retail roaming revenues per alternative WB roaming SMS, in Eurocent (within WB) .....	44
Figure 36: Average retail roaming revenues per WB RLAH+ and RLAH roaming SMS, in Eurocent (within WB) .....	45
Figure 37: Average retail roaming revenues per SMS, in Euro (within EEA countries) .....	46
Figure 38: Average retail roaming revenues per SMS, in Euro (within RoW countries) .....	47
Figure 39: Average retail roaming revenues per alternative WB roaming GB, in Euro.....	48
Figure 40: Average retail roaming revenues per WB RLAH+ and RLAH roaming GB, in Euro .....	49

Figure 41: Average retail roaming revenues per GB, in Euro (within EEA countries).....	50
Figure 42: Average retail roaming revenues per GB, in Euro (within RoW countries) .....	51
Figure 43: Wholesale revenues per minute (group and non-group) in Eurocent, within WB region.....	53
Figure 44: Wholesale revenues per minute (group and non-group) in Eurocent, from EEA countries .....	54
Figure 45: Wholesale revenues per minute (group and non-group) in Eurocent, from RoW countries .....	55
Figure 46: Wholesale revenues per SMS (group and non-group) in Eurocent, within WB region .....	56
Figure 47: Wholesale revenues per SMS (group and non-group) in Eurocent, from EEA countries .....	57
Figure 48: Wholesale revenues per SMS (group and non-group) in Eurocent, from RoW countries .....	58
Figure 49: Wholesale revenues per GB in Euro, within WB region .....	59
Figure 50: Wholesale revenues per GB in Euro, from EEA countries .....	60
Figure 51: Wholesale revenues per GB in Euro, from RoW countries .....	61

# 1. Introduction

The BEREC Report on Western Balkan Roaming presents the results of the 10th round of data collection on international roaming services in the Western Balkans (WB) region including the economies Albania, Bosnia and Herzegovina, Kosovo\*, Montenegro, North Macedonia, and Serbia. This Report covers the period from 1 October 2024 – 30 September 2025, i.e. from the 4th quarter 2024 until the 3rd quarter 2025.

The applicable regulatory framework for this data collection is the Agreement on the price reduction of the roaming services in public mobile communication networks in the Western Balkans region, signed on 4 April 2019. According to this agreement, a transitional regime for roaming services shall apply from 1 July 2019 and allow adjustments of the price level of roaming services towards a “home-like” rule. As of 1 July 2021, the Roam Like at Home (RLAH) regime in the region was successfully achieved, meaning that currently, WB consumers do not pay extra charges for calls, SMS and mobile data while in roaming in the region, compared to what they pay at home.

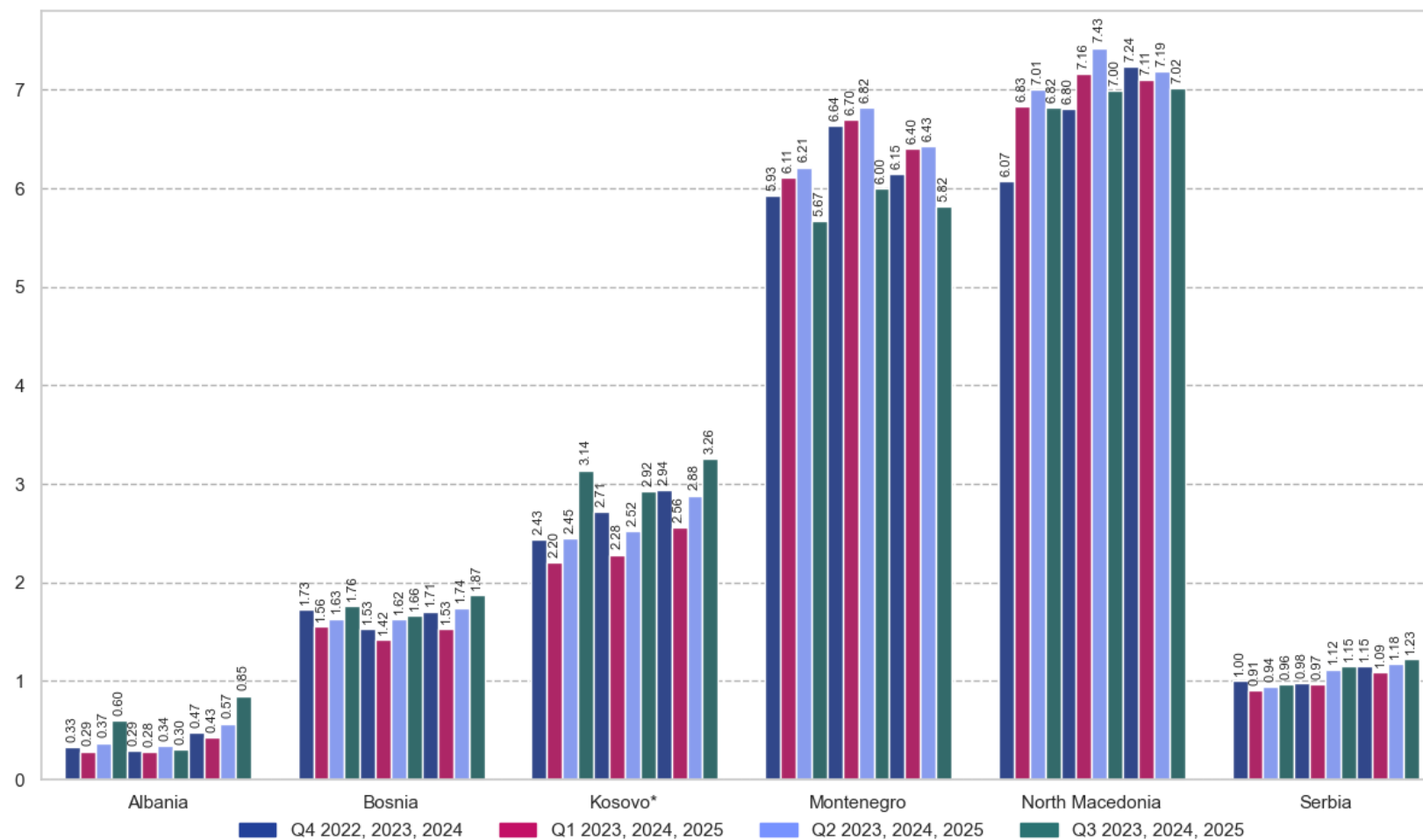
The consumption of data services, weighted by roaming subscribers that have been roaming in the respective period, have significantly increased in the past 3 years, showing a 20 % growth of data traffic within the WB region just in the last year (Figure 24). This growth is slightly less pronounced than the domestic data usage growth (26%). Between Q3 2024 and Q3 2025, roaming SMS consumption within the WB region has decreased by 29% (Figure 20). Voice calls consumption within the WB region decreased in the same direction, with a decrease of 9% between Q3 2024 and Q3 2025 (Figure 13). The quarter-by-quarter average data usage per roaming subscriber increased in all countries except Kosovo between Q3 2024 and Q3 2025 (Figure 23).

Roaming agreements are keystones of international cooperation in the telecommunications sector and this agreement therefore marks a milestone in the cooperation not only between all six Western Balkan signatories, but also with the European Union. Even at the early stage of the transitional regime, the average prices for roaming have been reduced significantly in all six WB signatories, in some cases by over 90 %. In December 2022, an agreement was reached between EU and WB telecommunications providers to reduce roaming prices between EU and WB signatories, providing benefits to consumers in the WB and EU region alike. This agreement came into effect on 1 October 2023.

This Report aims to provide information about consumption and price developments and to monitor the implementation of the roaming agreement. The first chapter contains information on subscribers in each of the WB signatories (Chapter 2), followed by an analysis of retail domestic consumption patterns in Chapter 3. Chapter 4 is focused on retail roaming consumption patterns. Chapter 5 offers information on retail roaming revenues, complemented by a chapter on wholesale roaming revenues (Chapter 6). A full list of operators that submitted data may be found in the Annex.

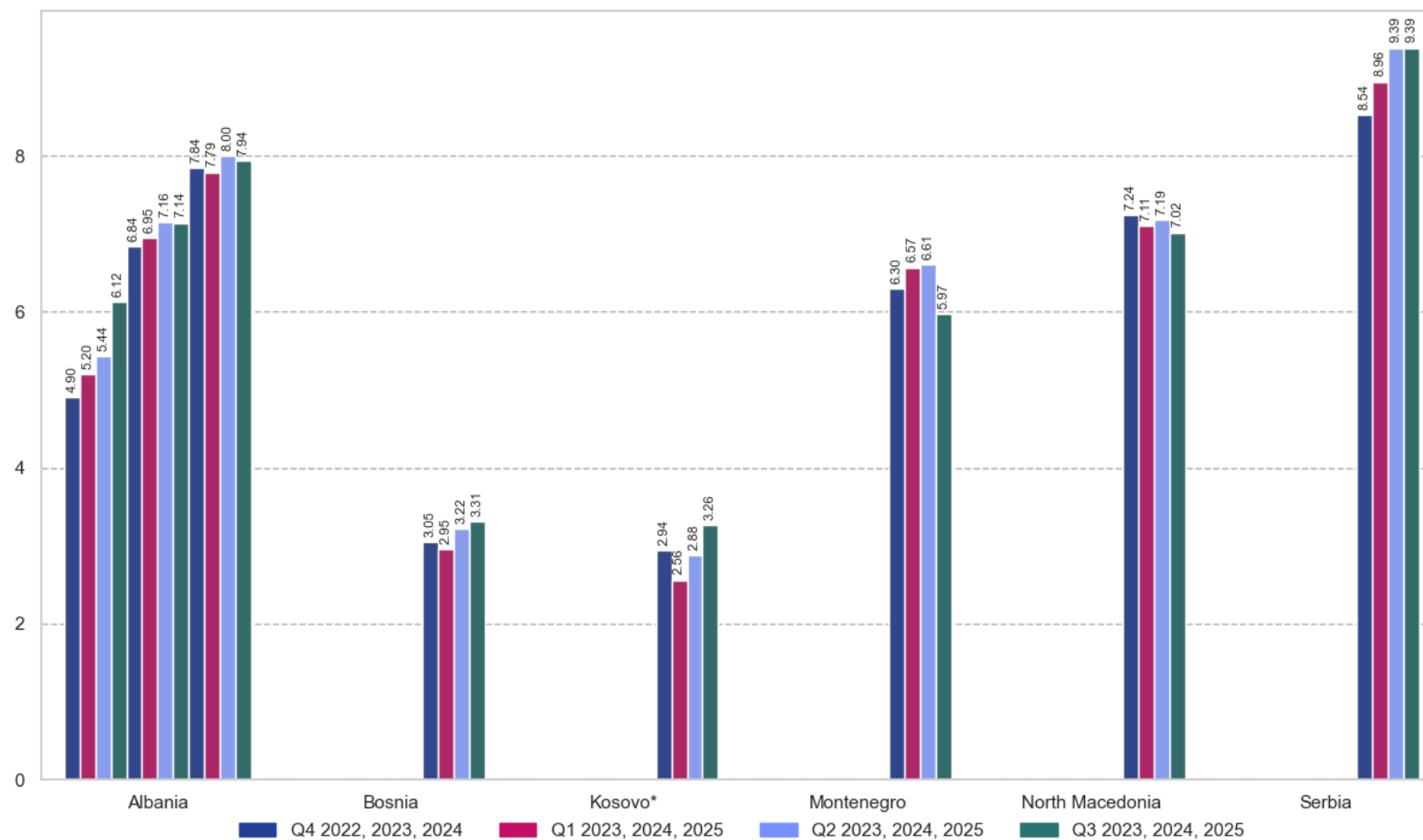
## **2. Analysis of subscribers and those that use roaming services**

### **2.1. Domestic average retail revenue per user (ARRPU)**

Figure 1: Domestic average retail mobile revenue (voice + SMS + Data) per subscriber per month, in Euro, metered only<sup>1</sup>

<sup>1</sup> This figure only reports metered consumption. Given high prevalence of domestic bundles in some markets, ARRPUs considering both metered services and bundles is represented in Figure 2.



Figure 2: Domestic average retail mobile revenue (voice+SMS+Data) per subscriber per month, in Euro, including bundles<sup>2</sup>

<sup>2</sup> Information on bundles has only been systematically gathered since the collection in 2025, therefore previous values for countries other than Albania are missing. High bundle revenues for Serbia have been confirmed.

Figure 3: Domestic average retail revenue (voice+SMS+data) per subscriber per month for the whole WB region, by quarter, metered only

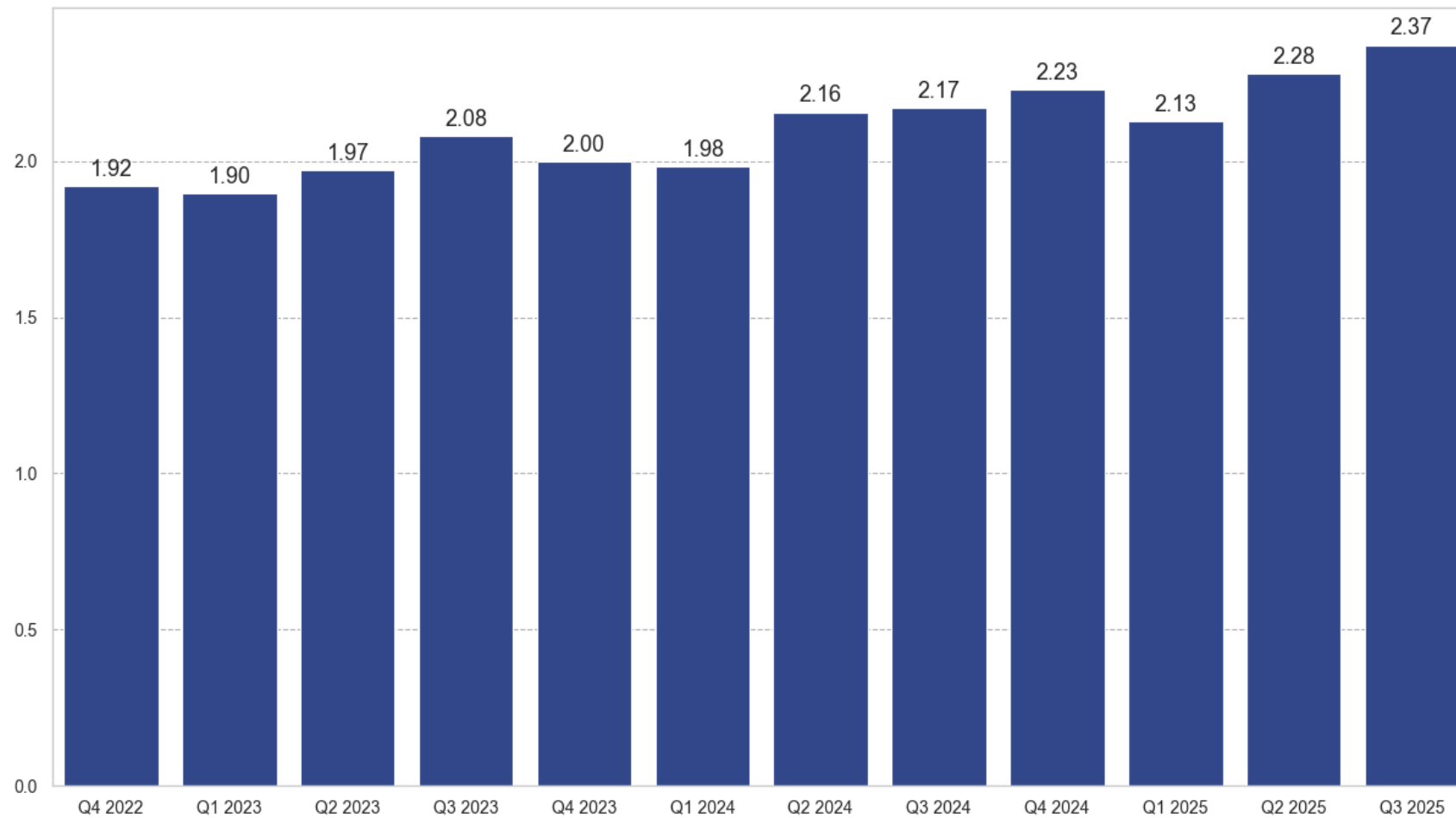
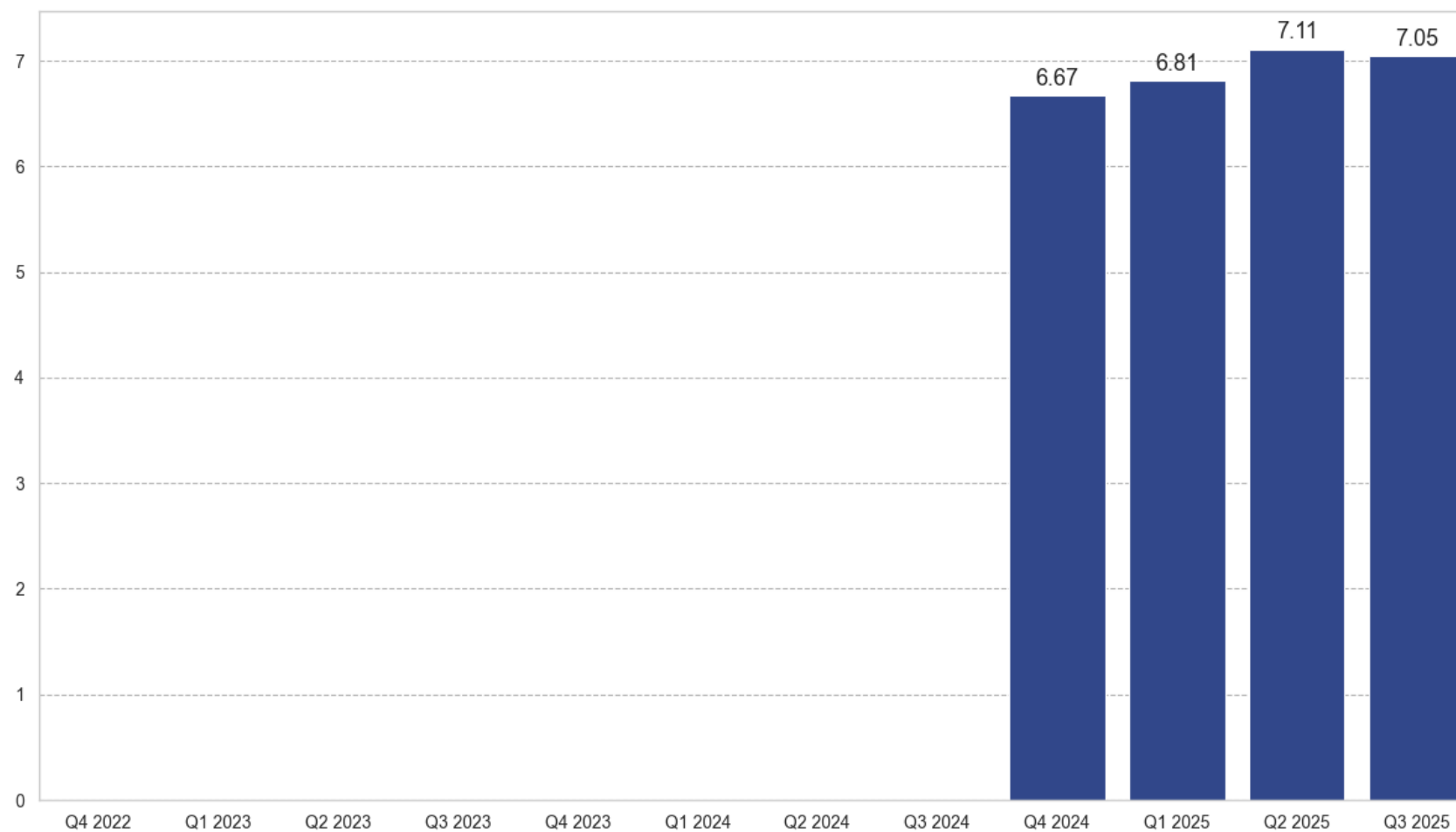


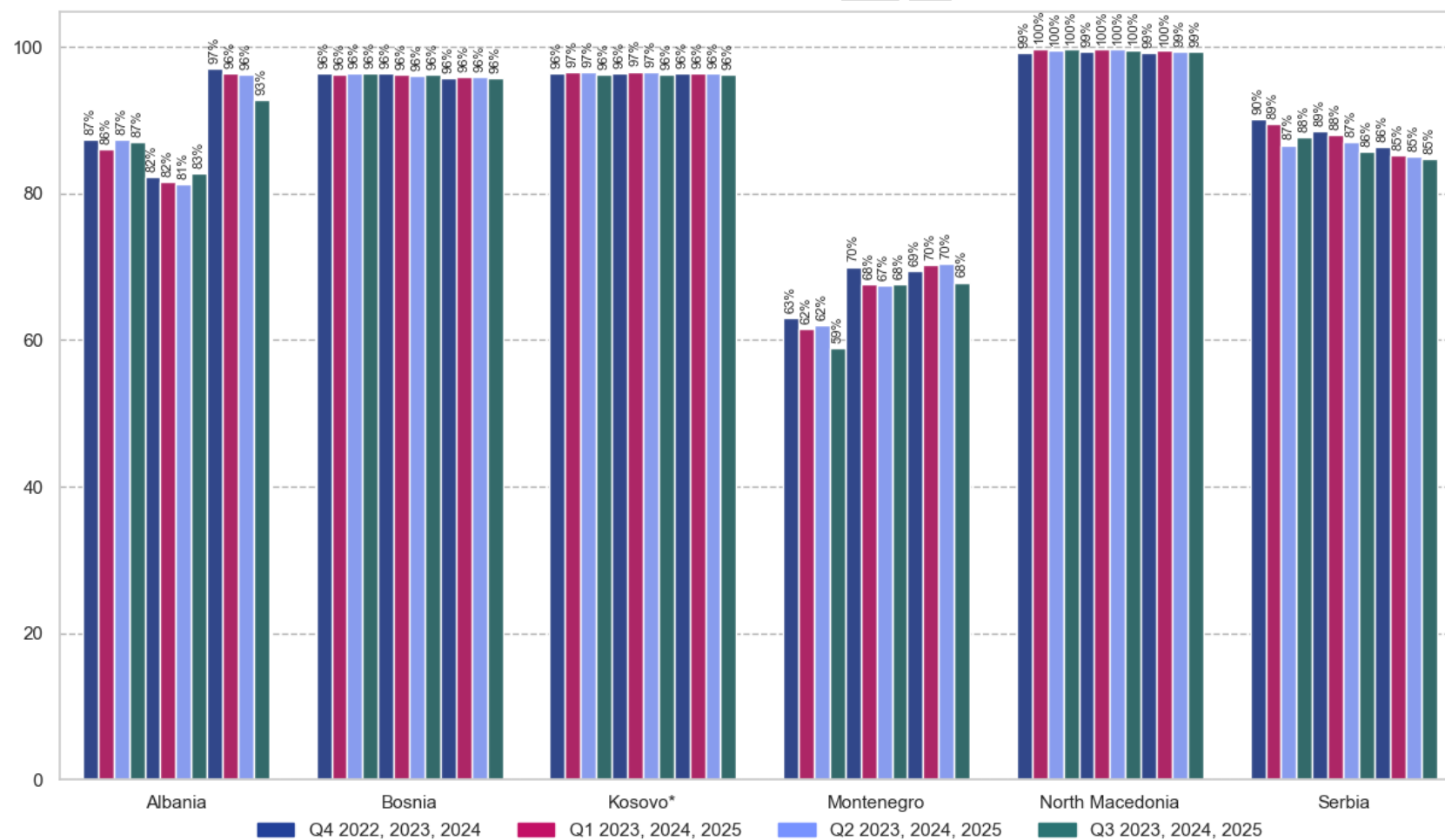
Figure 4: Domestic average retail revenue (voice+SMS+data) per subscriber per month for the whole WB region, by quarter, including bundles<sup>3</sup>



<sup>3</sup> Information on bundles has only been systematically gathered since the collection in 2025, therefore values before Q4 2024 are missing.

## 2.2. Share of roaming enabled subscribers

Figure 5: Share of roaming enabled subscribers



### **3. Consumption patterns for domestic mobile retail services**

#### **3.1. Domestic voice minutes: average number of domestic minutes (actual minutes) per subscriber per month**

Figure 6: Average number of domestic minutes (actual minutes) per subscriber per month

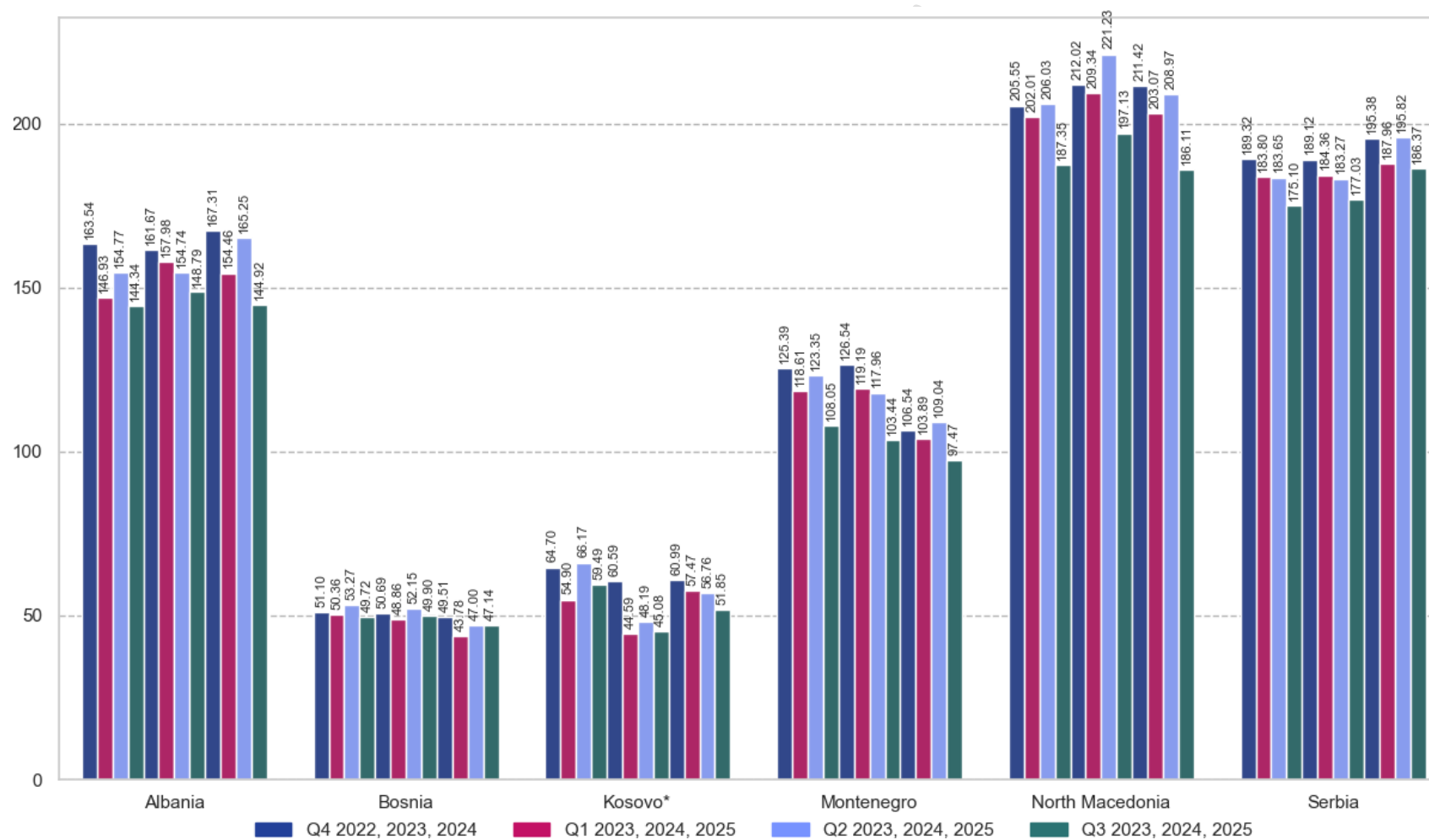
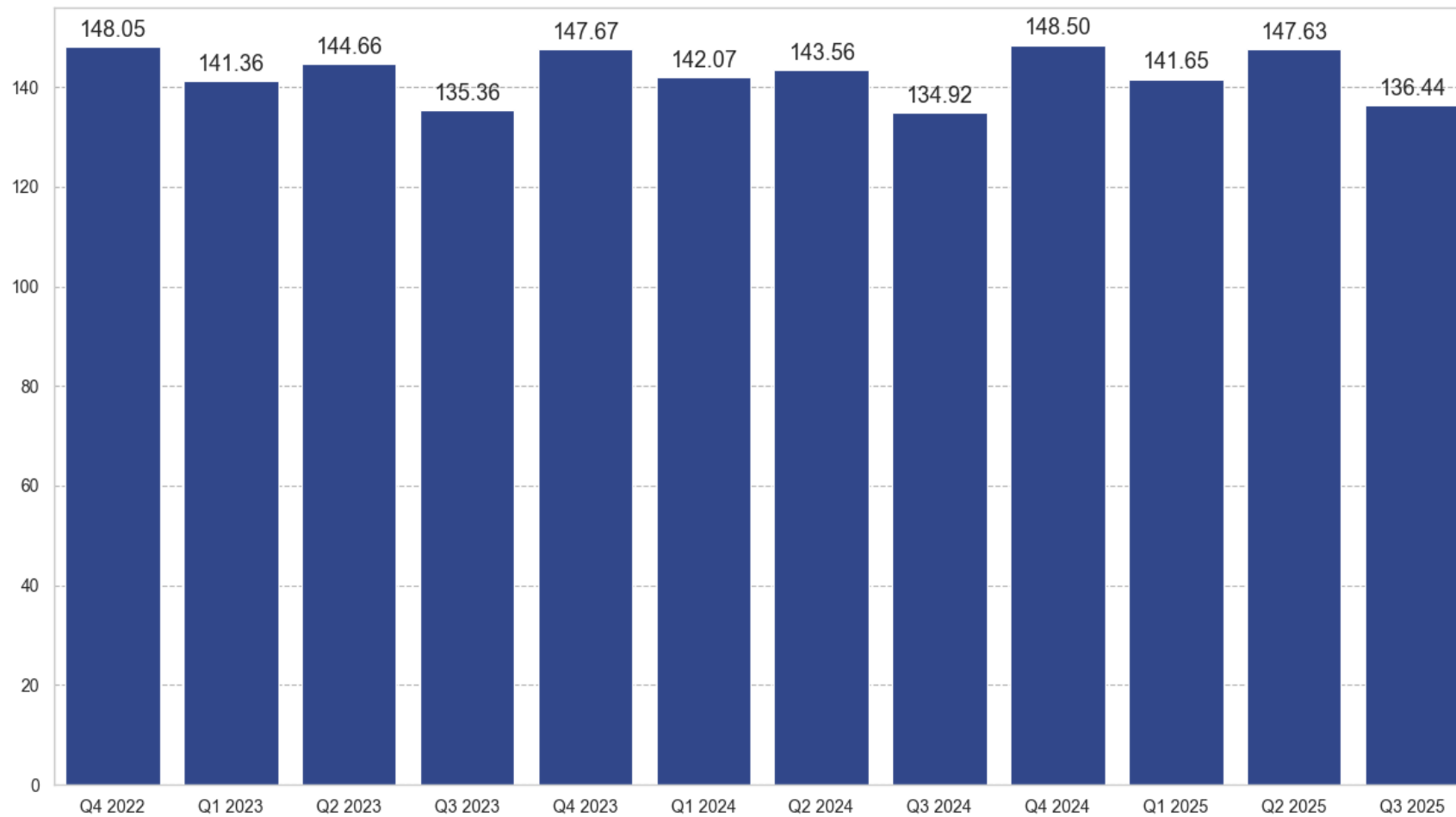


Figure 7: Average number of domestic minutes (actual minutes) per subscriber per month for the whole WB region, by quarter



### 3.2. Domestic SMS: average number of domestic SMS per subscriber per month

Figure 8: Average number of domestic SMS per subscriber per month

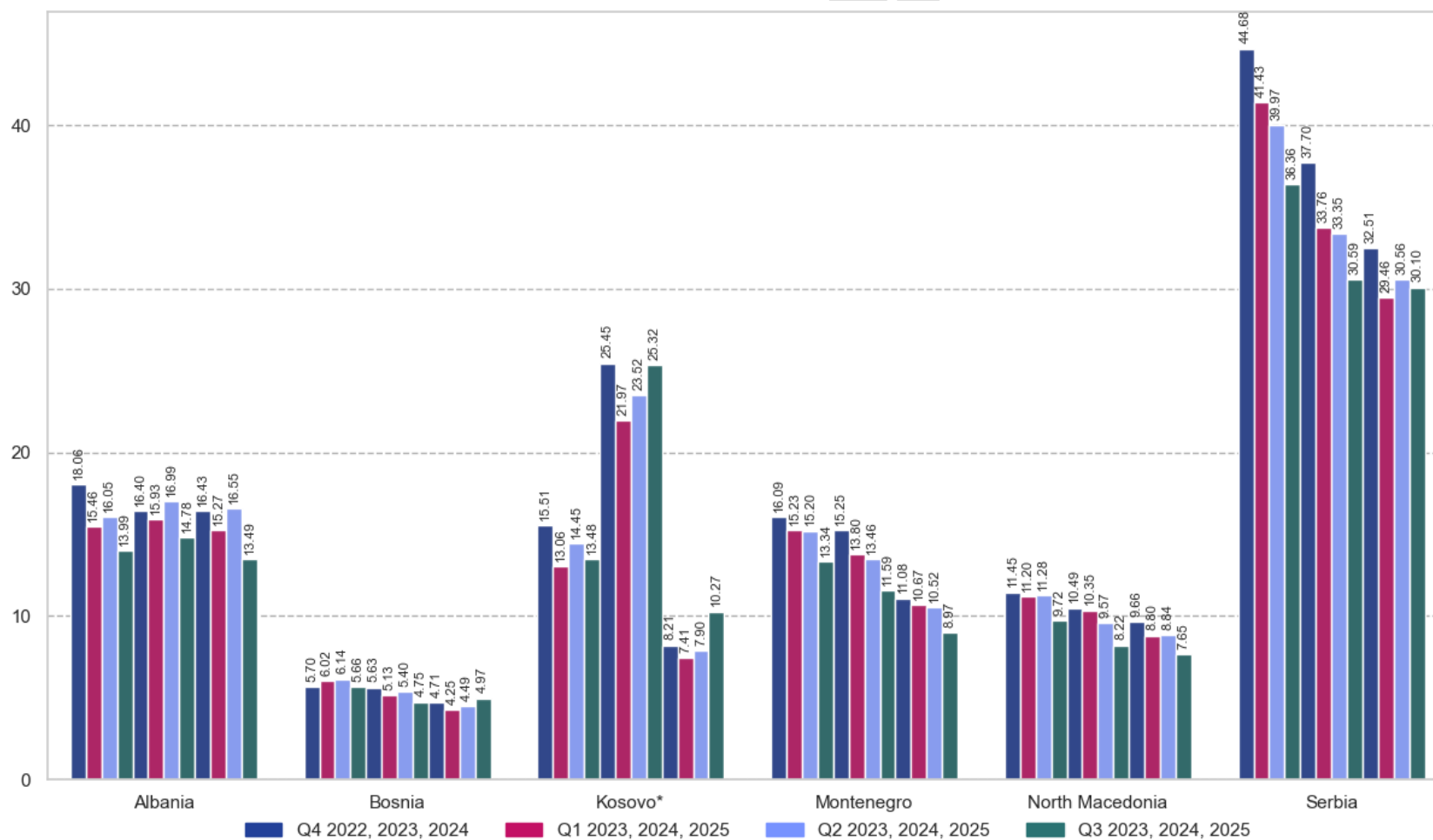
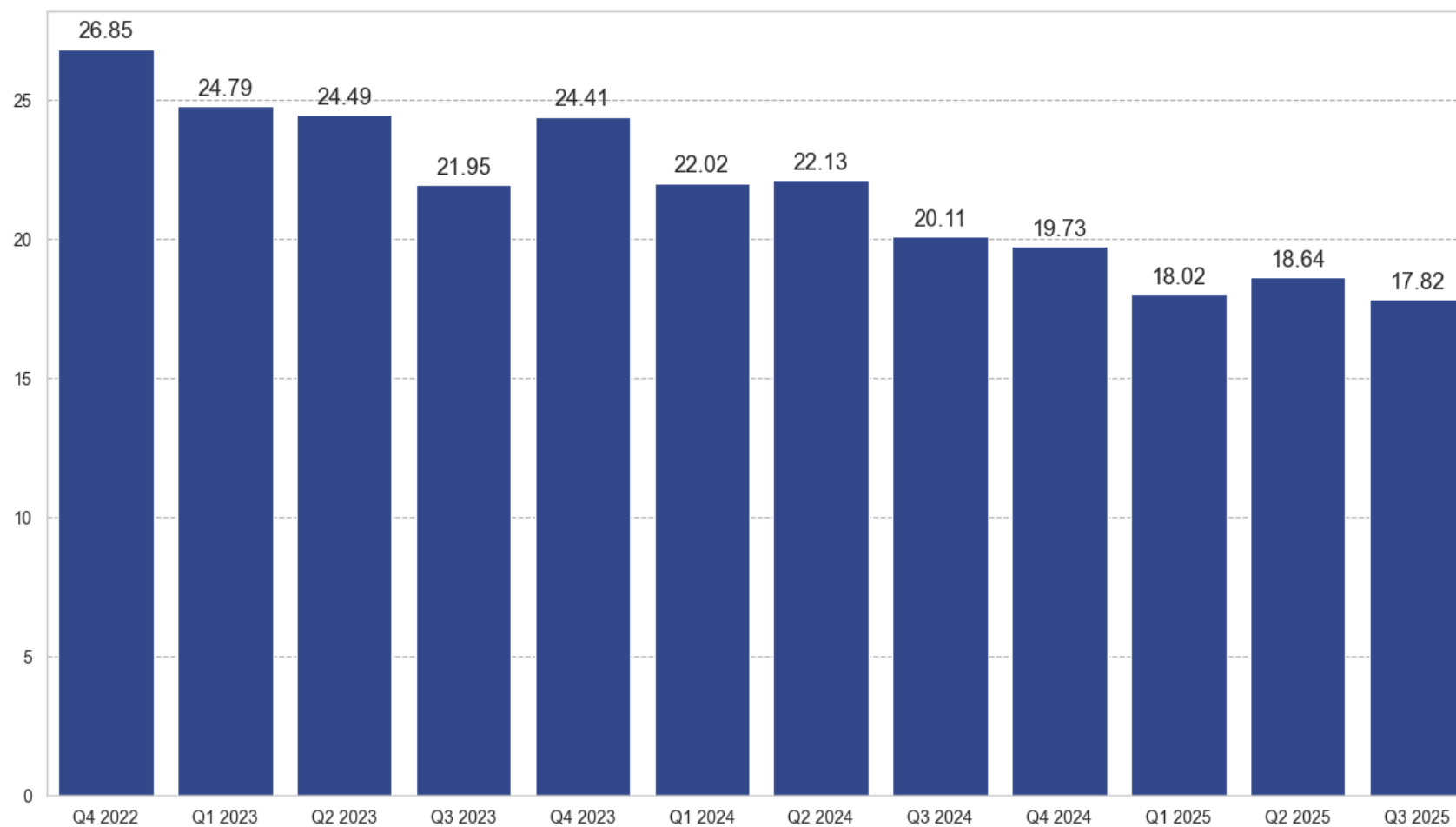




Figure 9: Average number of domestic SMS per subscriber per month for the whole WB region, by quarter



### 3.3. Domestic data: average consumption of domestic data (GB) per subscriber per month

Figure 10: Average consumption of domestic data (GB) per subscriber per month

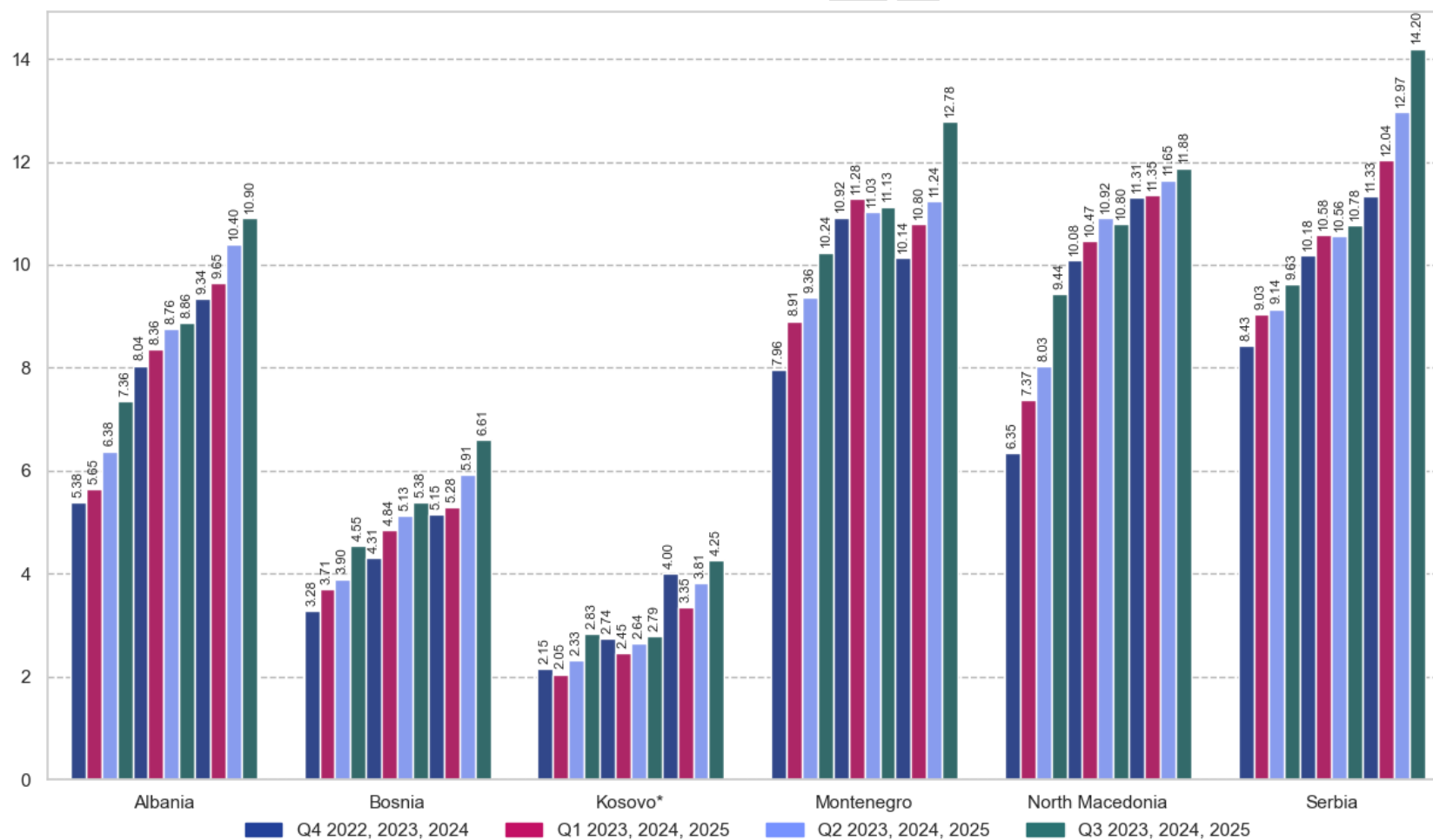
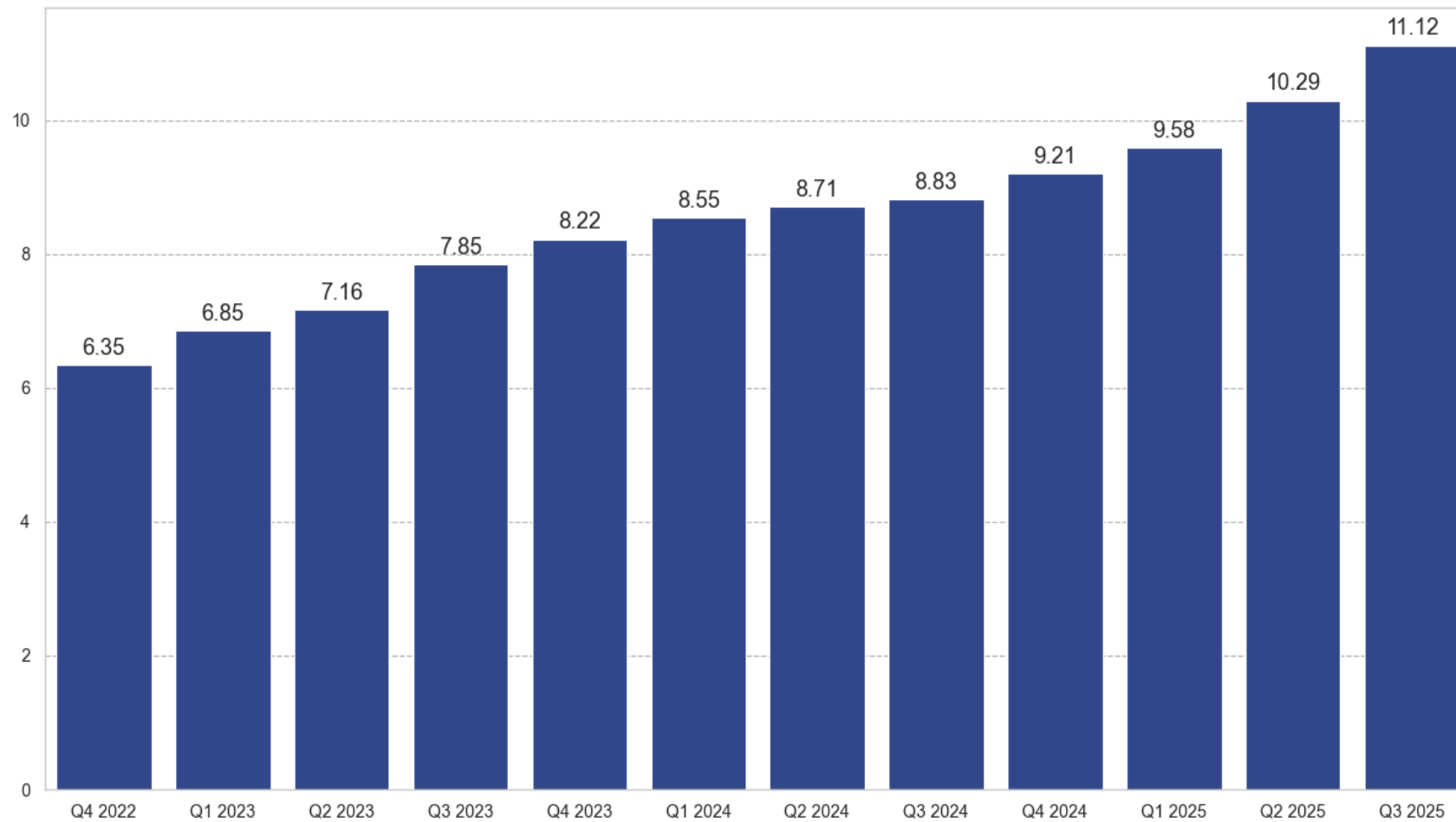


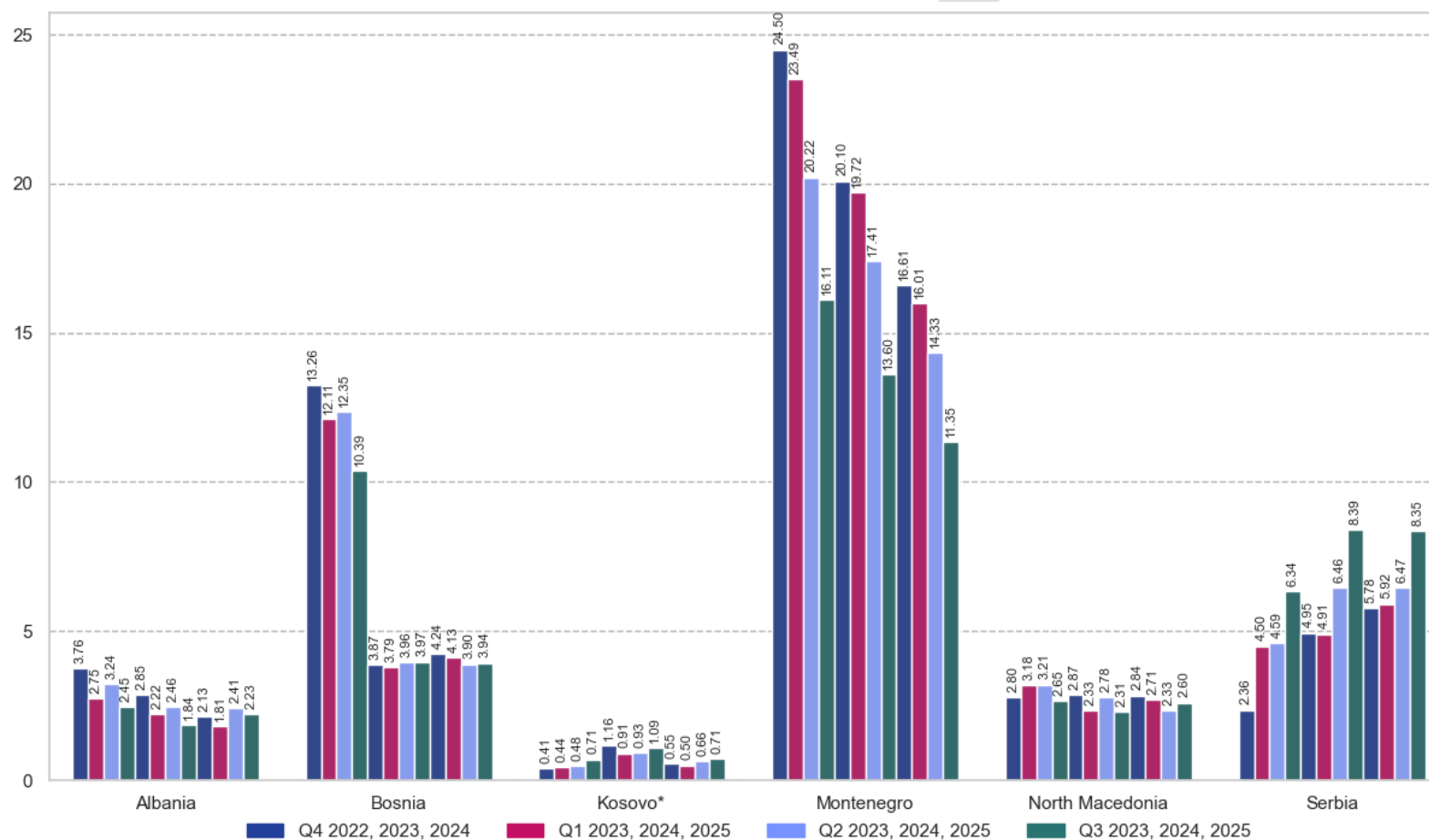
Figure 11: Average consumption of domestic data (GB) per subscriber per month for the whole WB region, by quarter



#### **4. Consumption patterns for roaming services (voice, SMS and data)**

**4.1. Roaming voice services, calls made: average number of regional roaming minutes per roaming-enabled subscriber per month**

Figure 12: Average number of roaming minutes within the WB region (from alternative, RLAH+ and RLAH tariffs) per subscriber roaming at least once in the concerned quarter and region per month<sup>4</sup>



<sup>4</sup> Roam Like at Home (RLAH) was successfully achieved and roaming free WB region was established as of 1 July 2021. RLAH+ is not being reported in the majority of countries as of this date.

Figure 13: Average number of roaming minutes within the WB region (from alternative, RLAH+ and RLAH tariffs) per subscriber per month for the whole WB region, by quarter

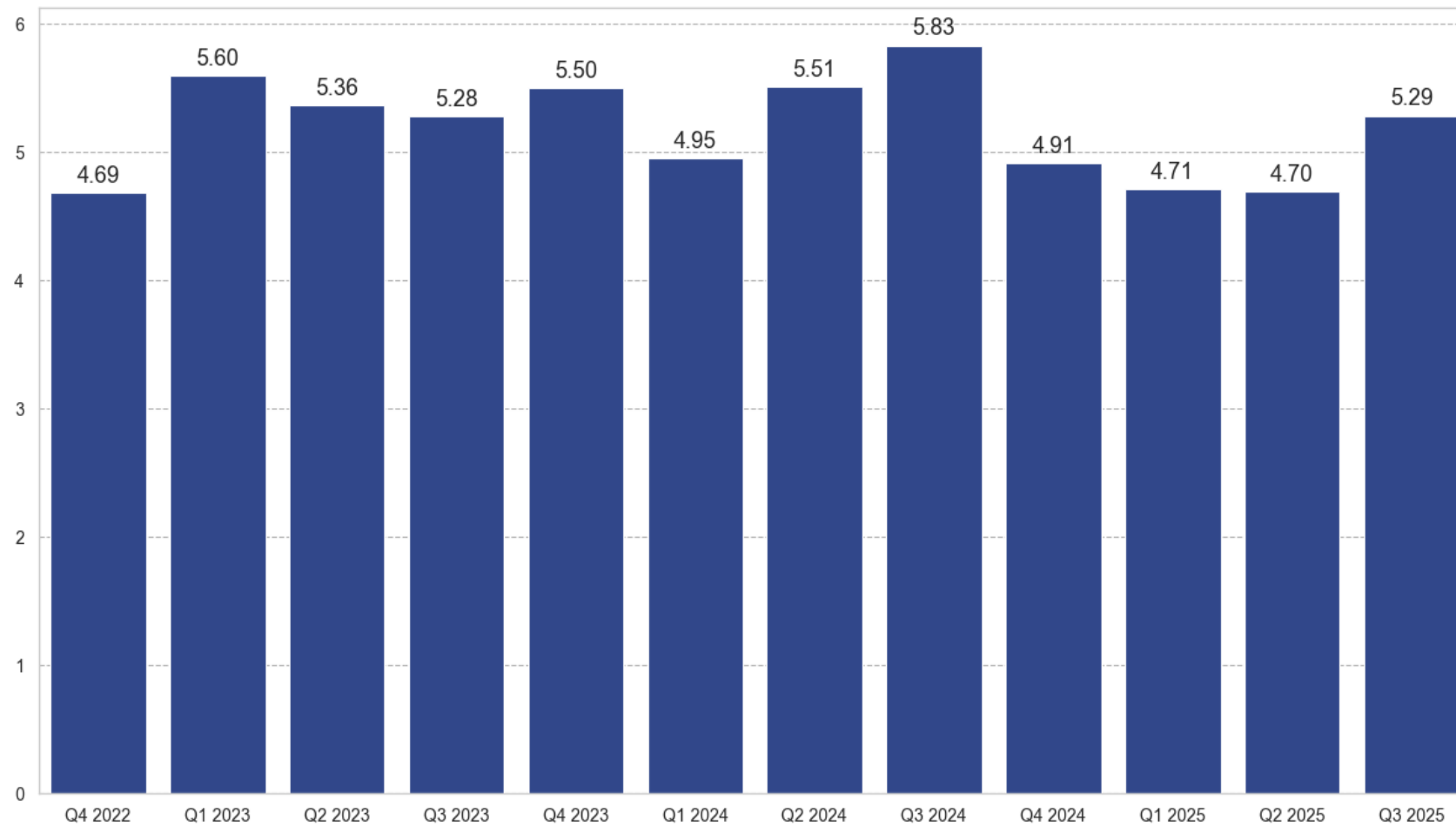


Figure 14: Average number of roaming minutes within the WB region from RLAH+ and RLAH tariffs per RLAH+ and RLAH subscriber roaming at least once in the concerned quarter and region per month

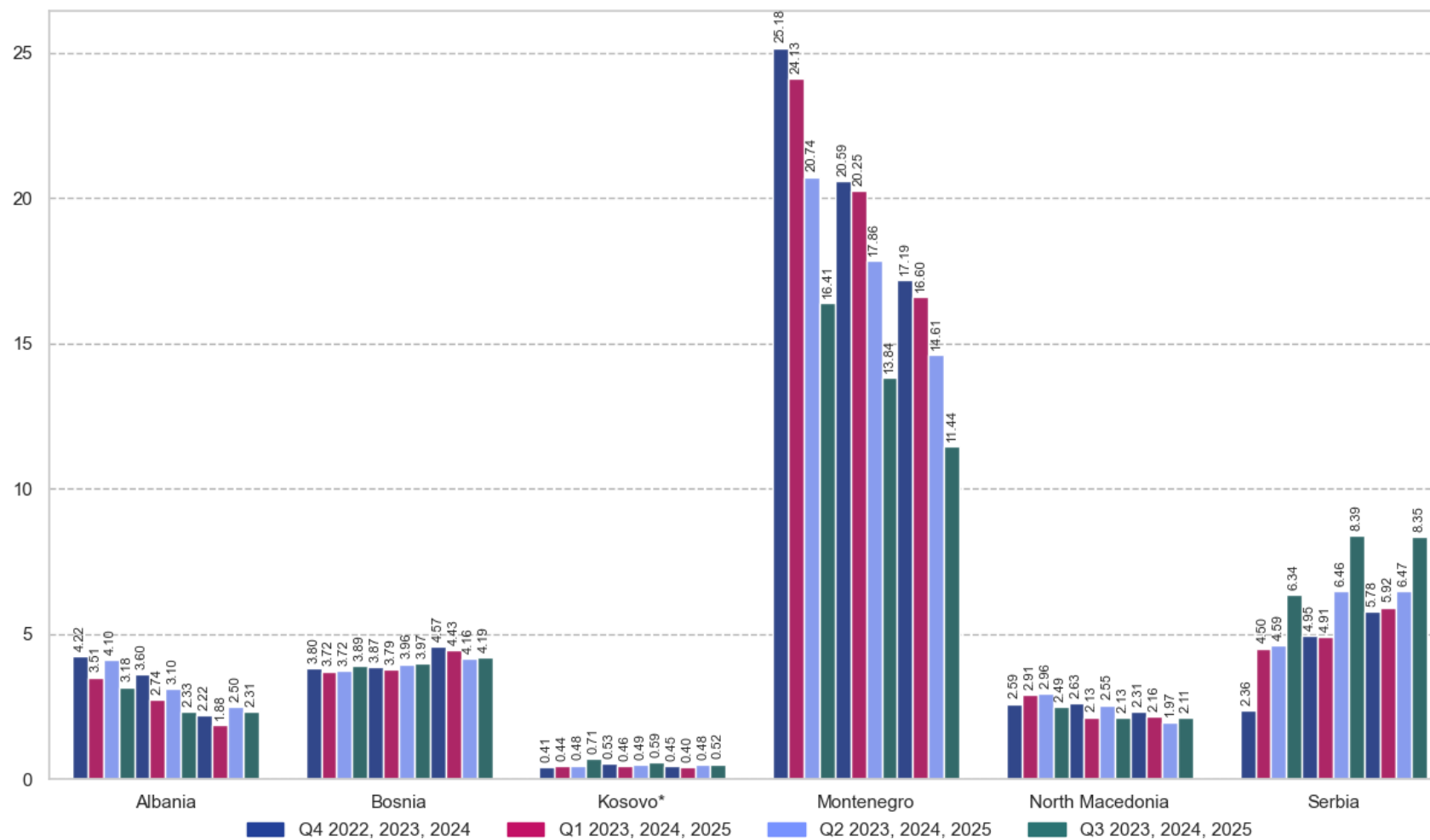
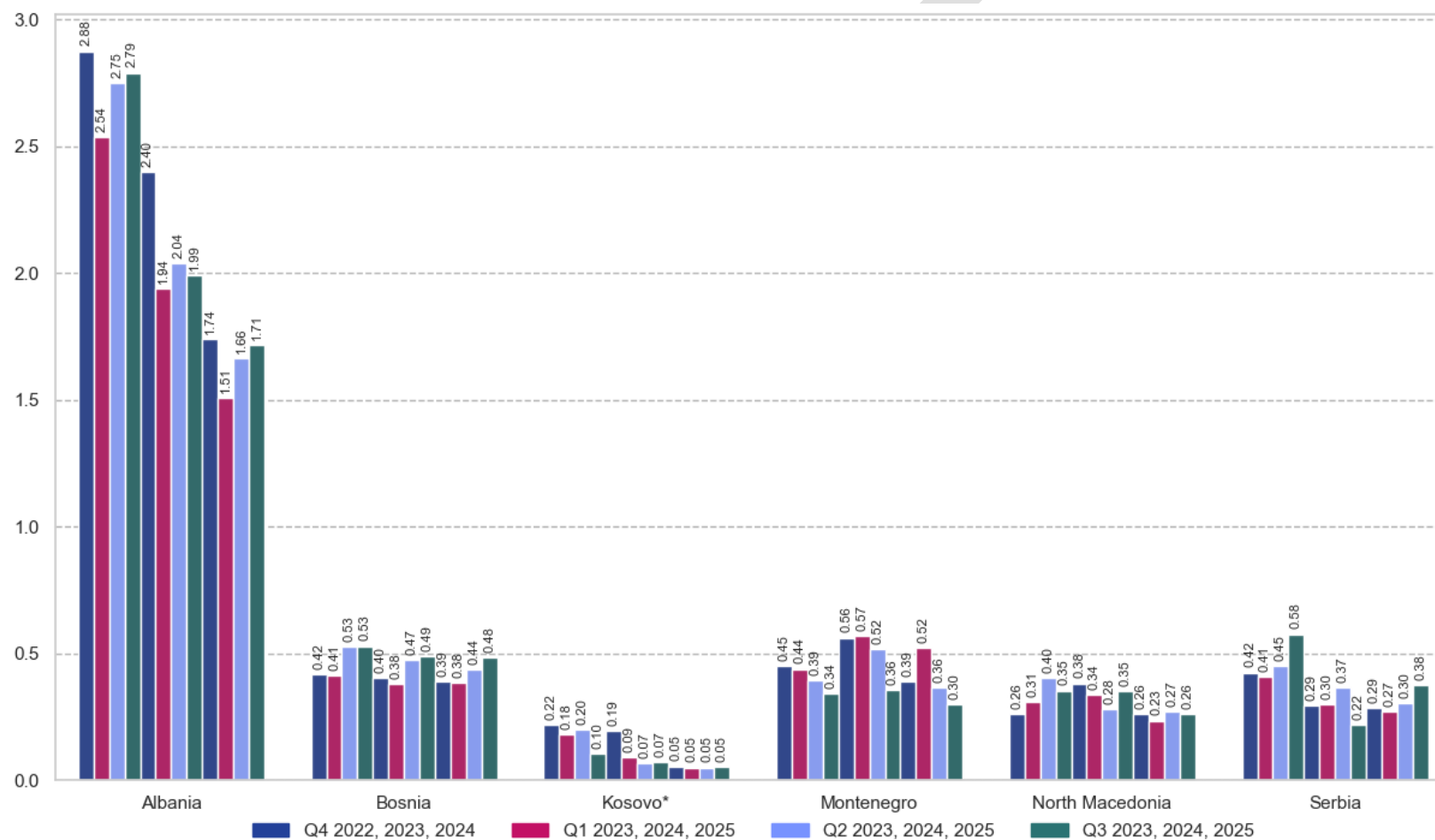


Figure 15: Average number of roaming minutes within the EEA region per subscriber roaming at least once in the concerned quarter and region per month<sup>5</sup>



<sup>5</sup> Some of the values for past periods have been corrected, therefore there are changes to previous reports.



## 4.2. Roaming voice services, calls received: average number of roaming minutes per regional roaming enabled subscriber per month

Figure 16: Average number of roaming minutes within the WB region (from alternative, RLAH+ and RLAH tariffs) per subscriber roaming at least once in the concerned quarter and region per month

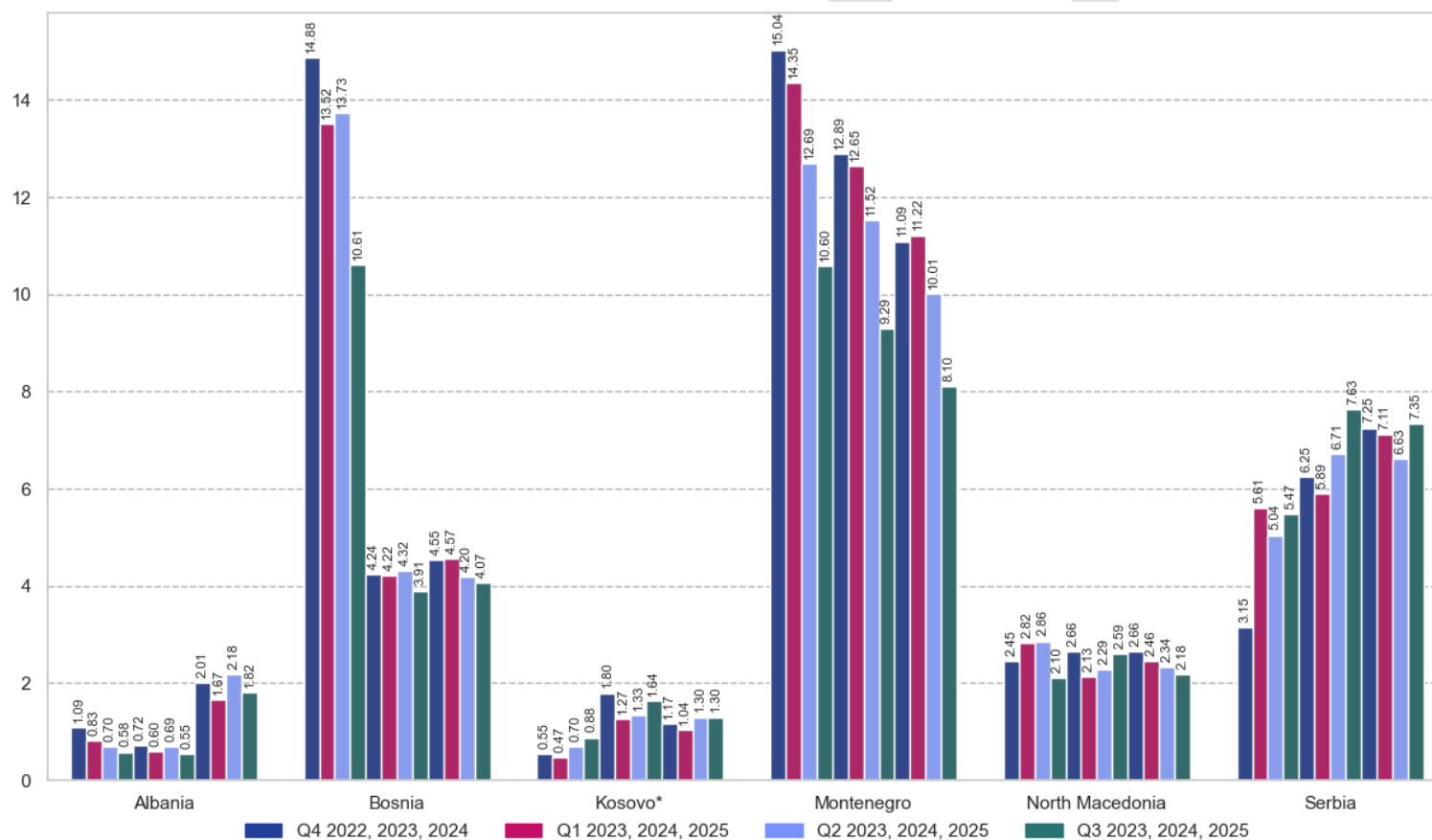
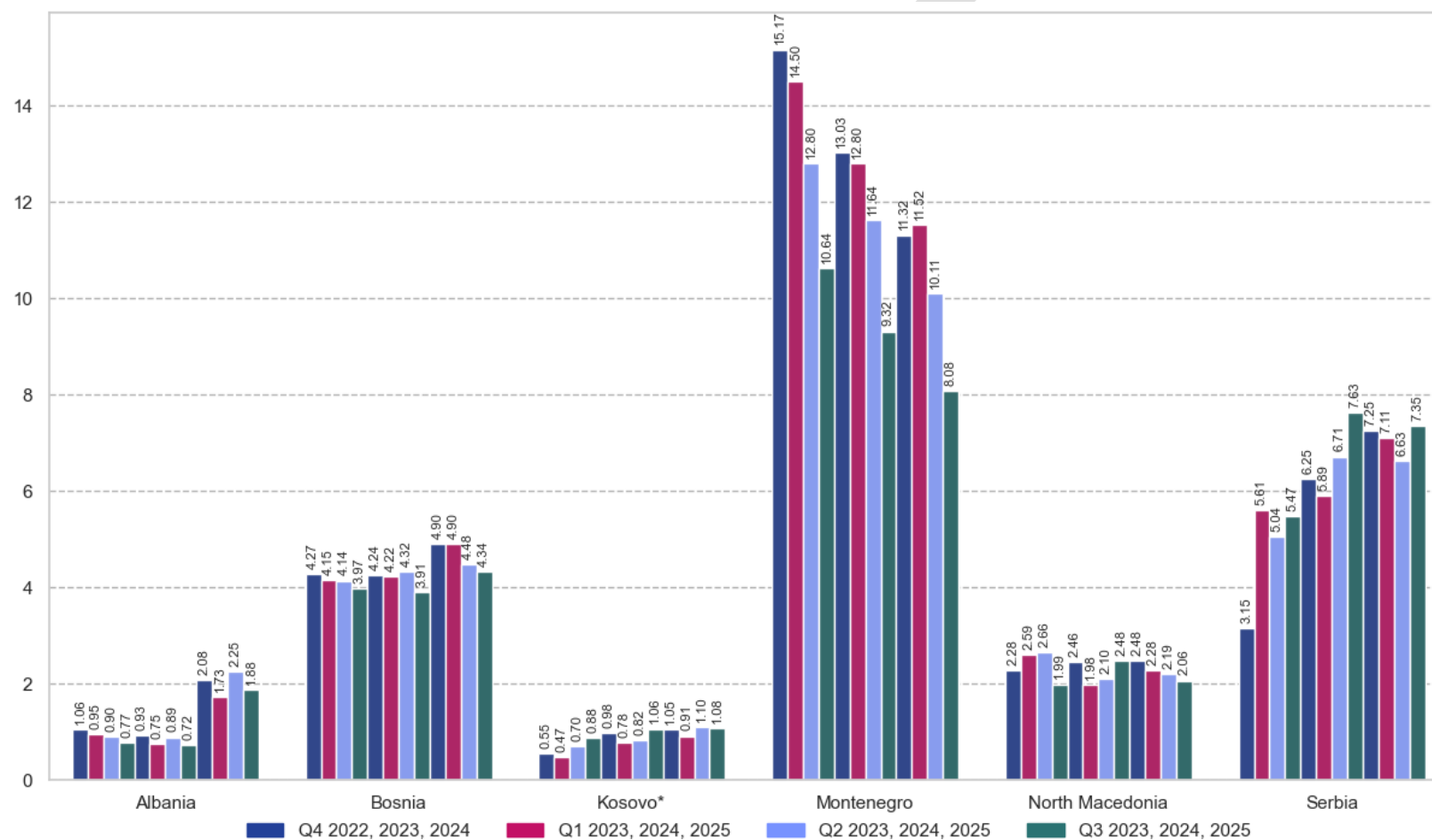
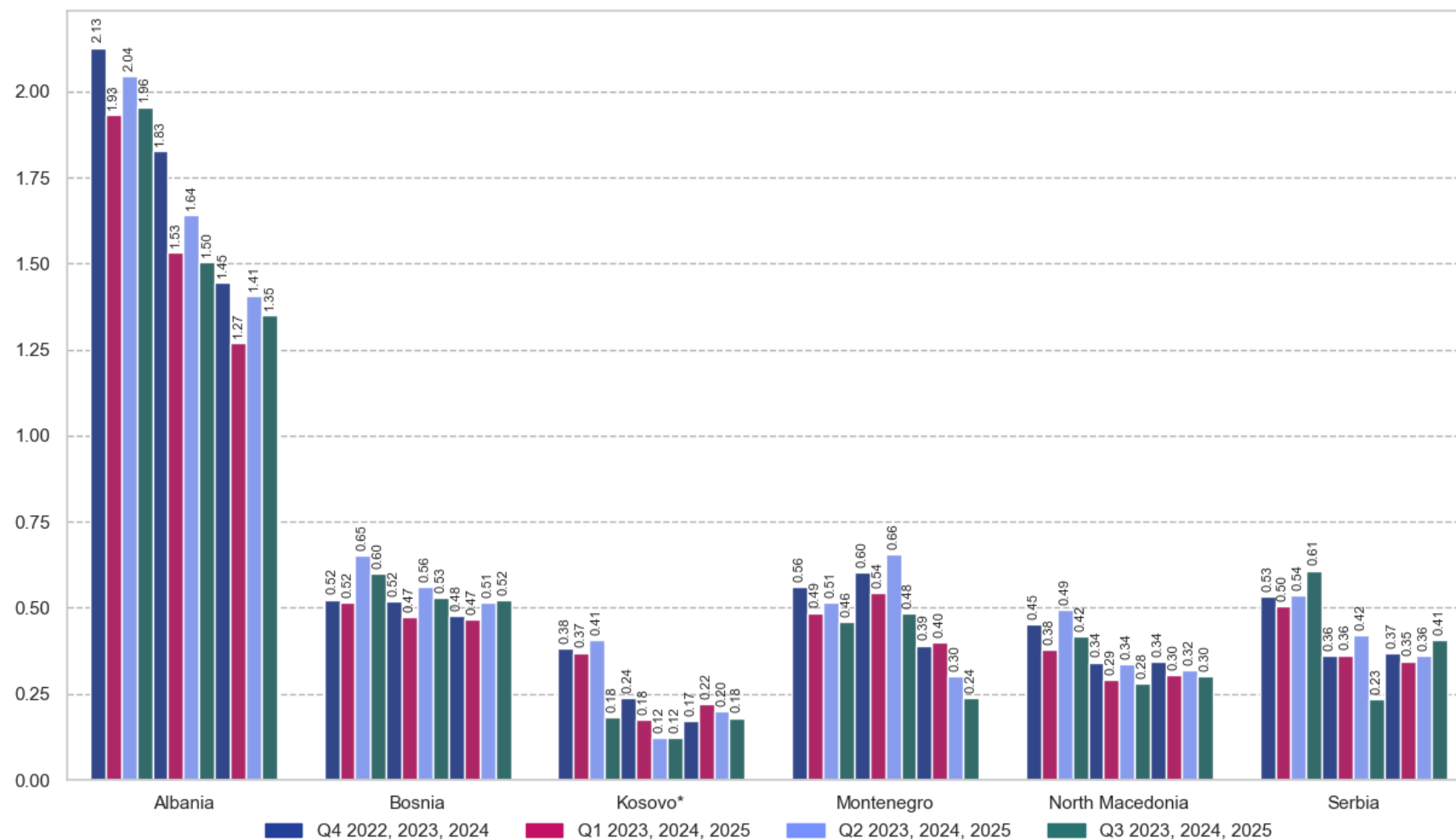


Figure 17: Average number of roaming minutes within the WB region from RLAH+ and RLAH tariffs per RLAH+ and RLAH subscriber roaming at least once in the concerned quarter and region per month<sup>6</sup>



<sup>6</sup> Roam Like at Home (RLAH) regime in the WB region was successfully achieved as of 1 July 2021. RLAH+ is not being reported as of this date.

Figure 18: Average number of roaming minutes within the EEA region per number of subscribers roaming at least once in the concerned quarter and region per month



### 4.3. Roaming SMS services: average number of roaming SMS per regional roaming enabled subscriber per month

Figure 19: Average number of roaming SMS (from alternative, RLAH+ and RLAH tariffs) within the WB region per subscriber roaming at least once in the concerned quarter and region per month

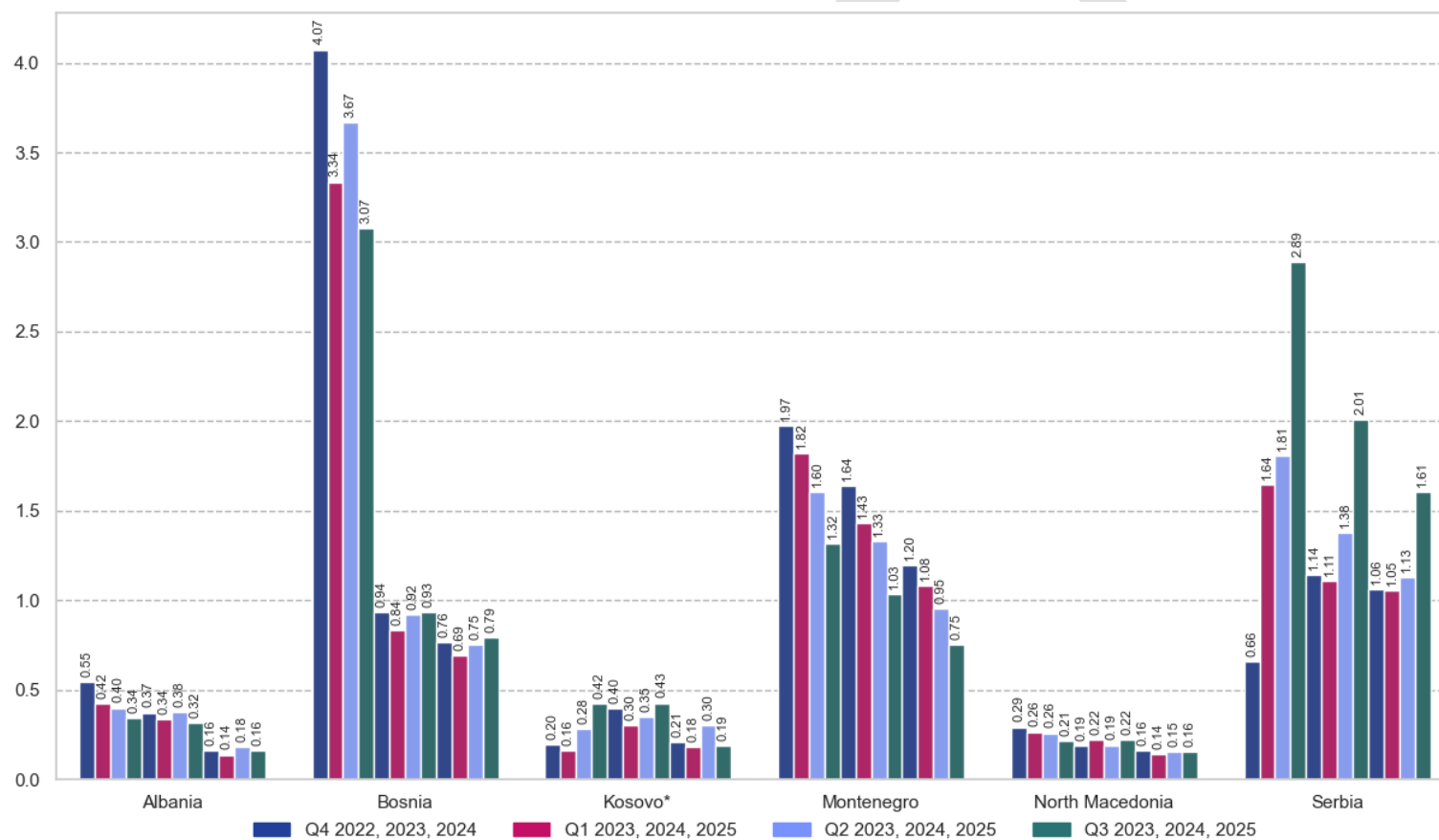


Figure 20: Average number of roaming SMS (from alternative, RLAH+ and RLAH tariffs) within the WB region per subscriber roaming at least once in the concerned quarter and region per month for the whole WB region, by quarter

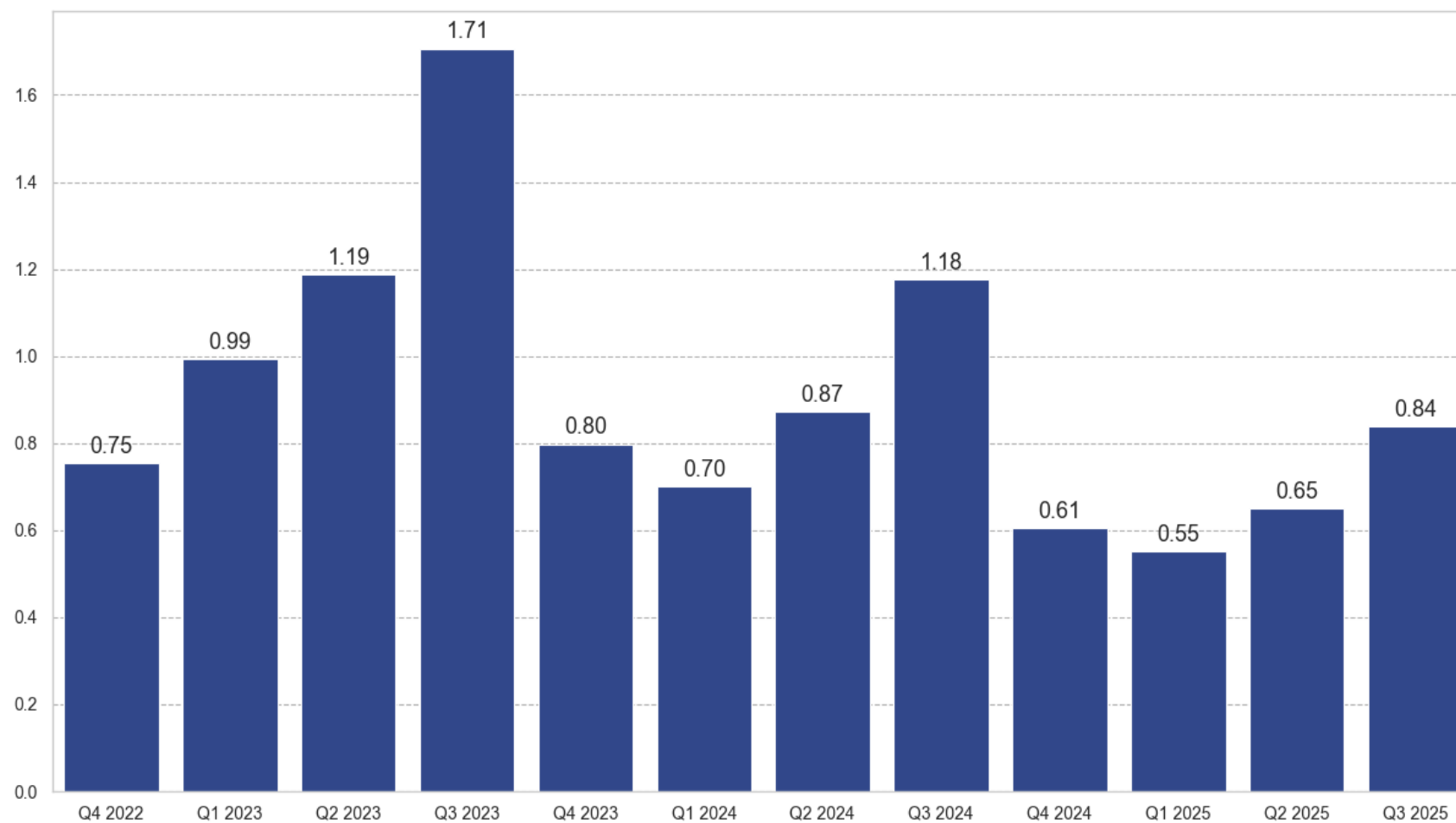


Figure 21: Average number of roaming SMS within the WB region (from RLAH+ and RLAH tariffs) per subscriber roaming at least once in the concerned quarter and region per month

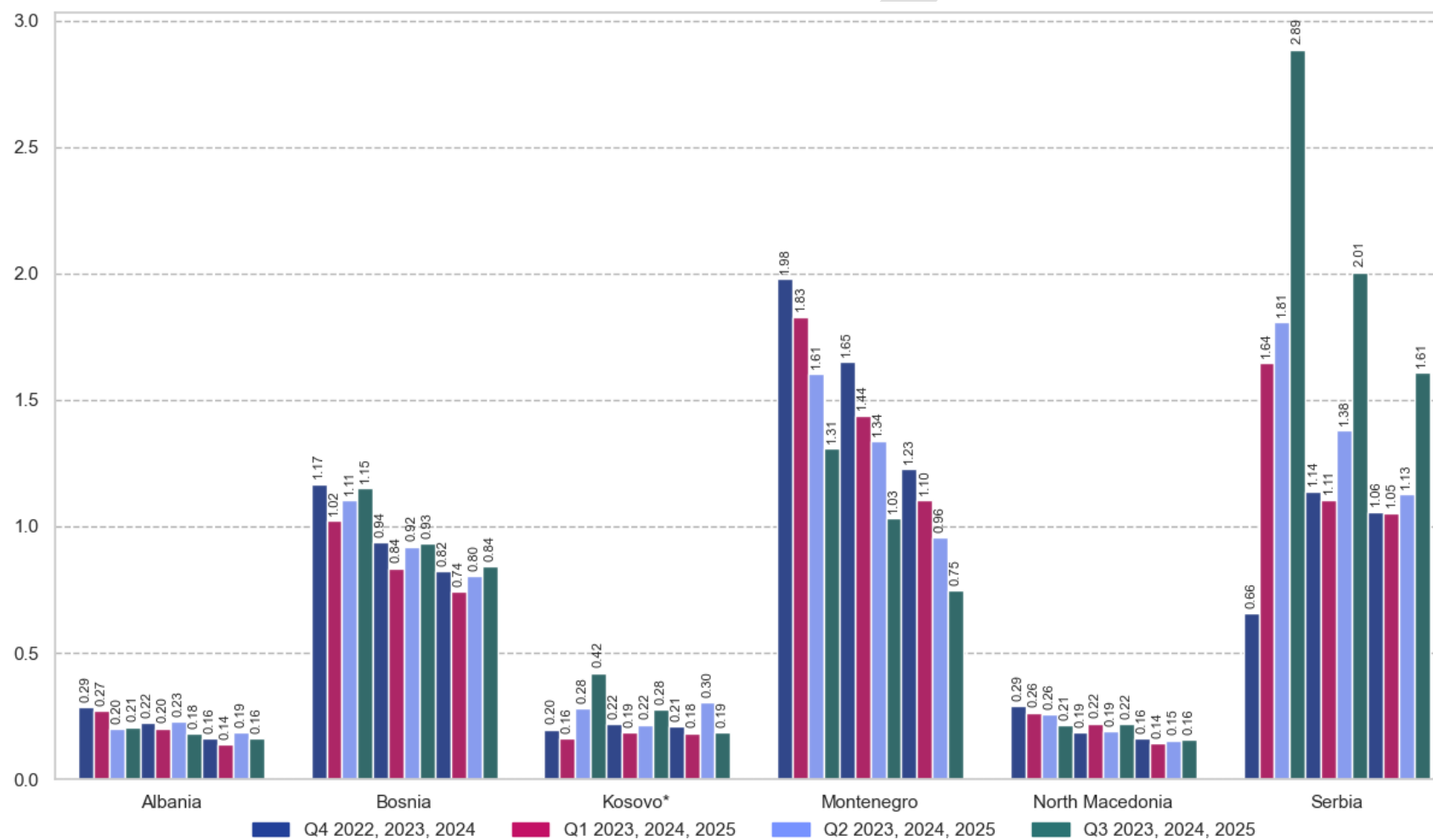
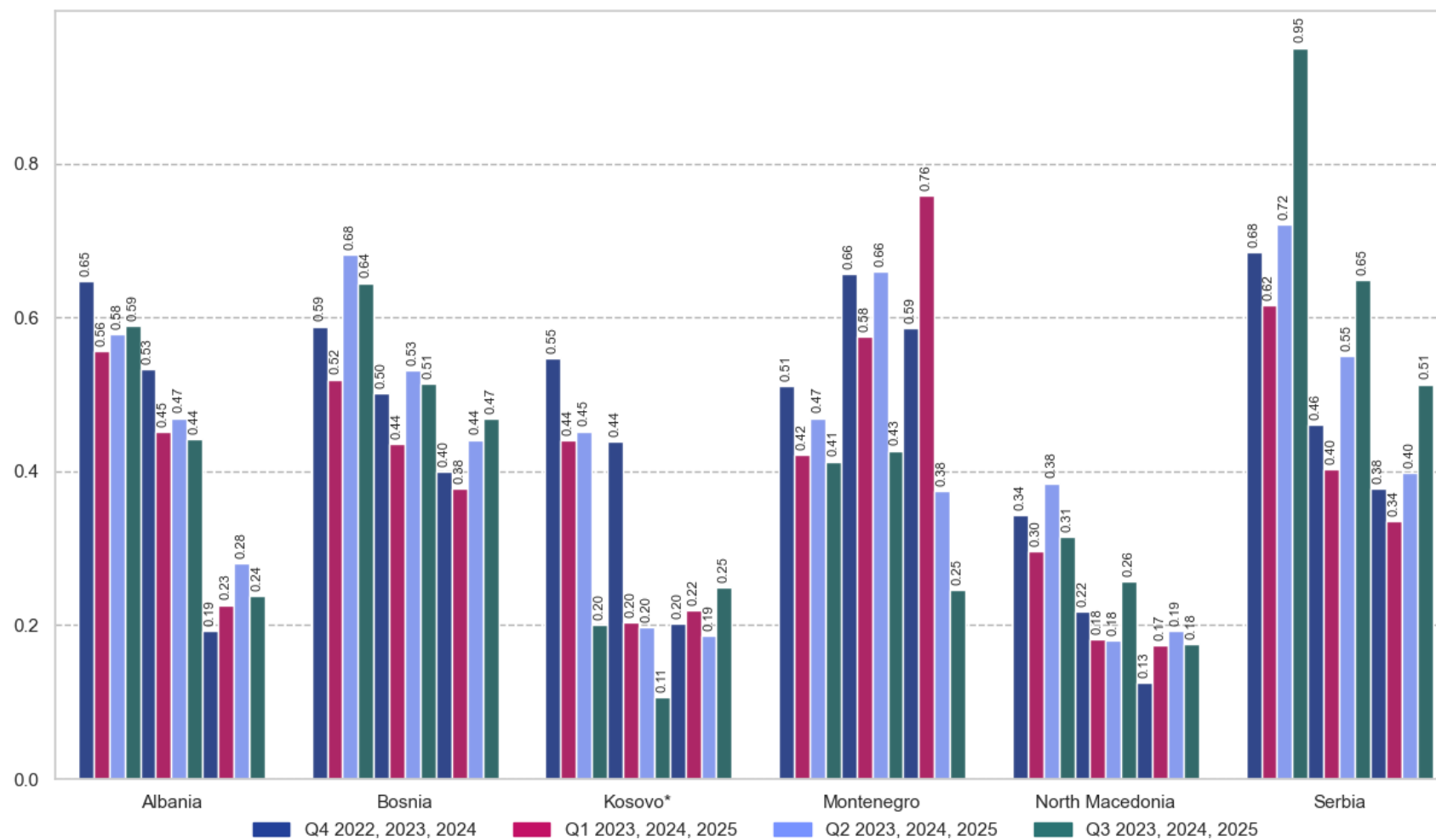


Figure 22: Average number of roaming SMS within the EEA region per subscriber roaming at least once in the concerned quarter and region per month



#### 4.4. Roaming data services: average data roaming consumption in GB per regional roaming-enabled subscriber per month

Figure 23: Average data roaming consumption in GB (from alternative, RLAH+ & RLAH tariffs) within the WB region per subscriber roaming at least once in the concerned quarter and region per month

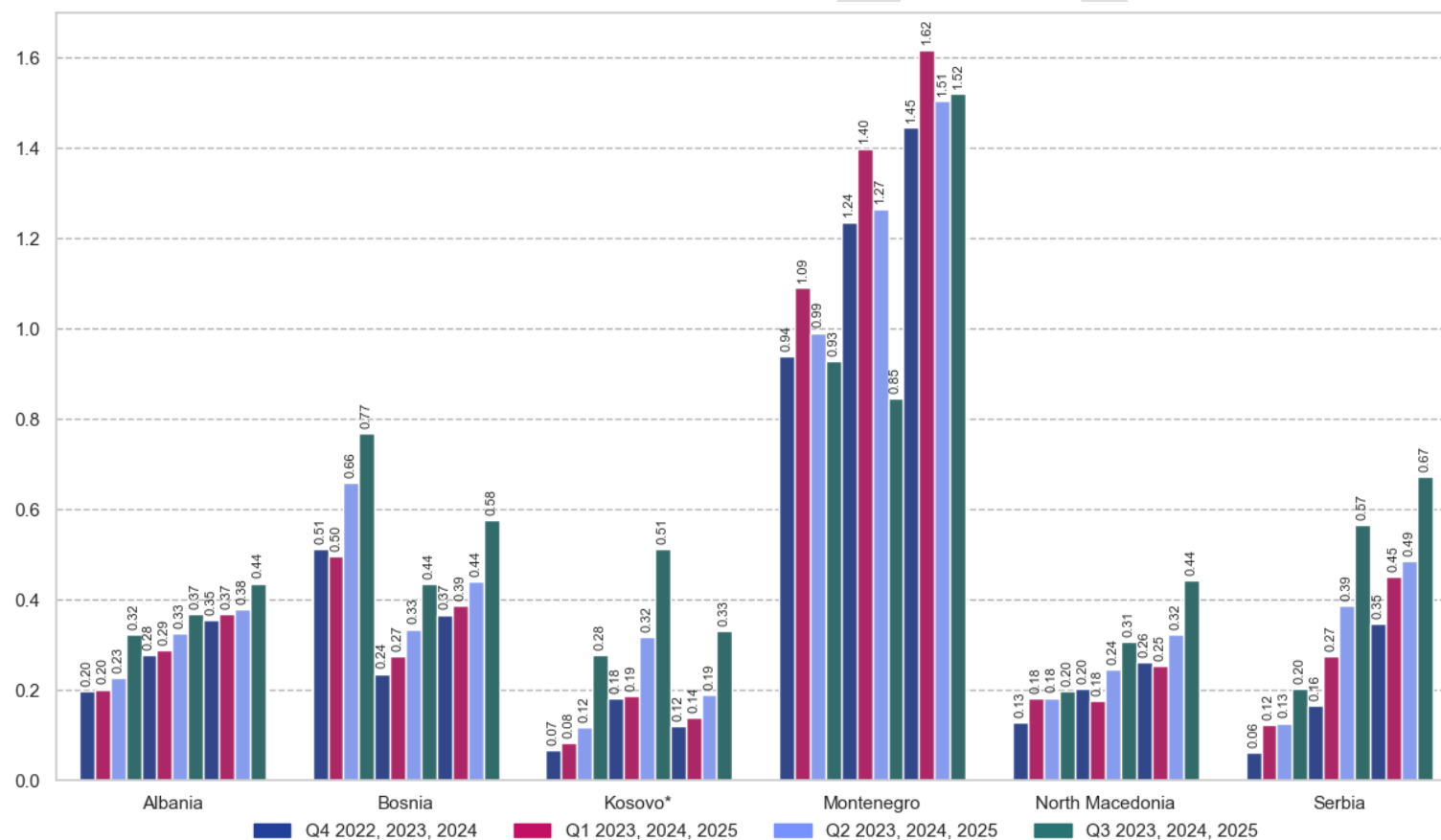




Figure 24: Average data roaming consumption in GB (from alternative, RLAH+ & RLAH tariffs) within the WB region per subscriber roaming at least once in the concerned quarter and region per month for the whole WB region, by quarter

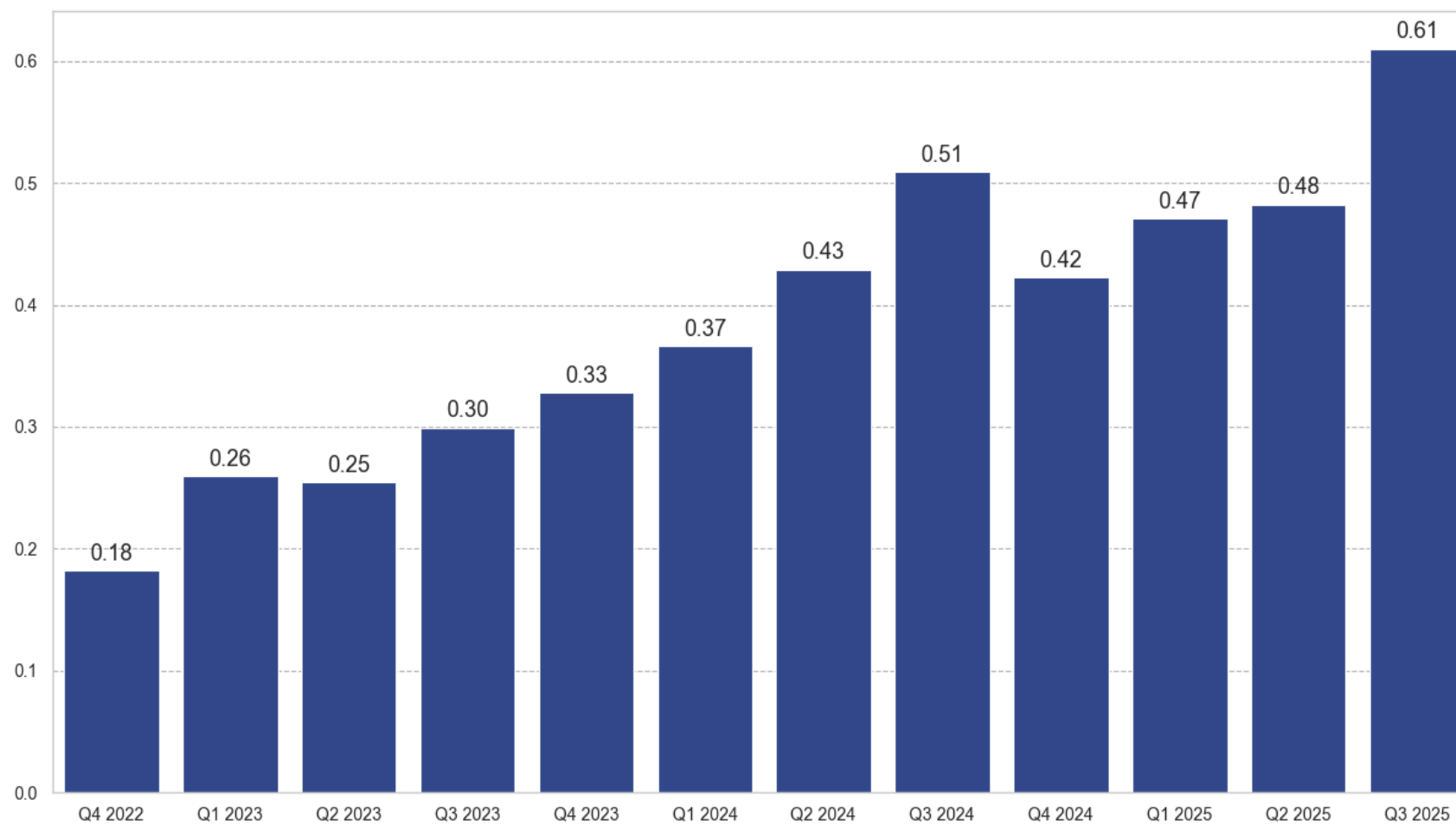


Figure 25: Average data roaming consumption in GB within the WB region from RLAH+ and RLAH tariffs per RLAH+ and RLAH subscriber roaming at least once in the concerned quarter and region per month

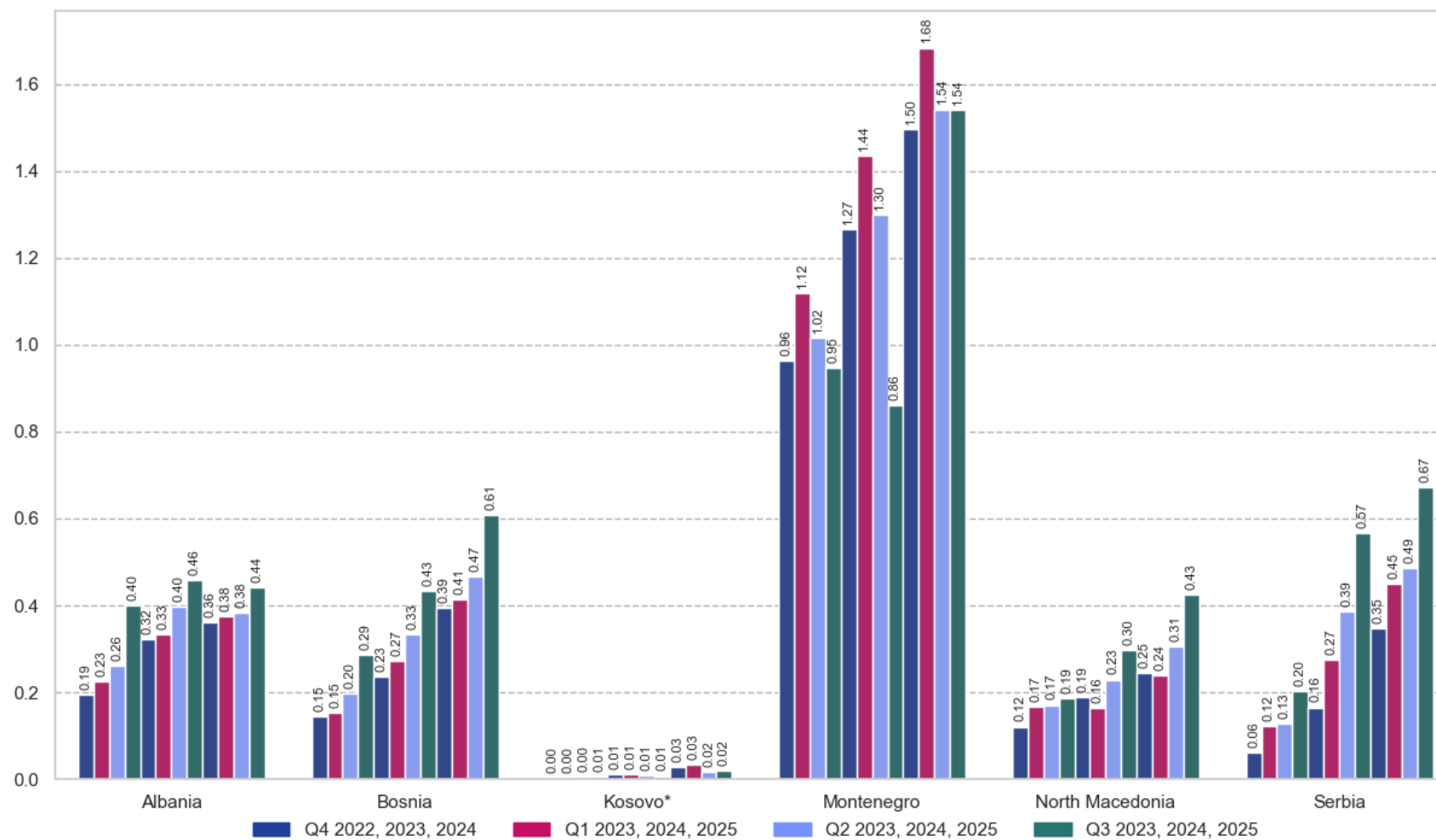
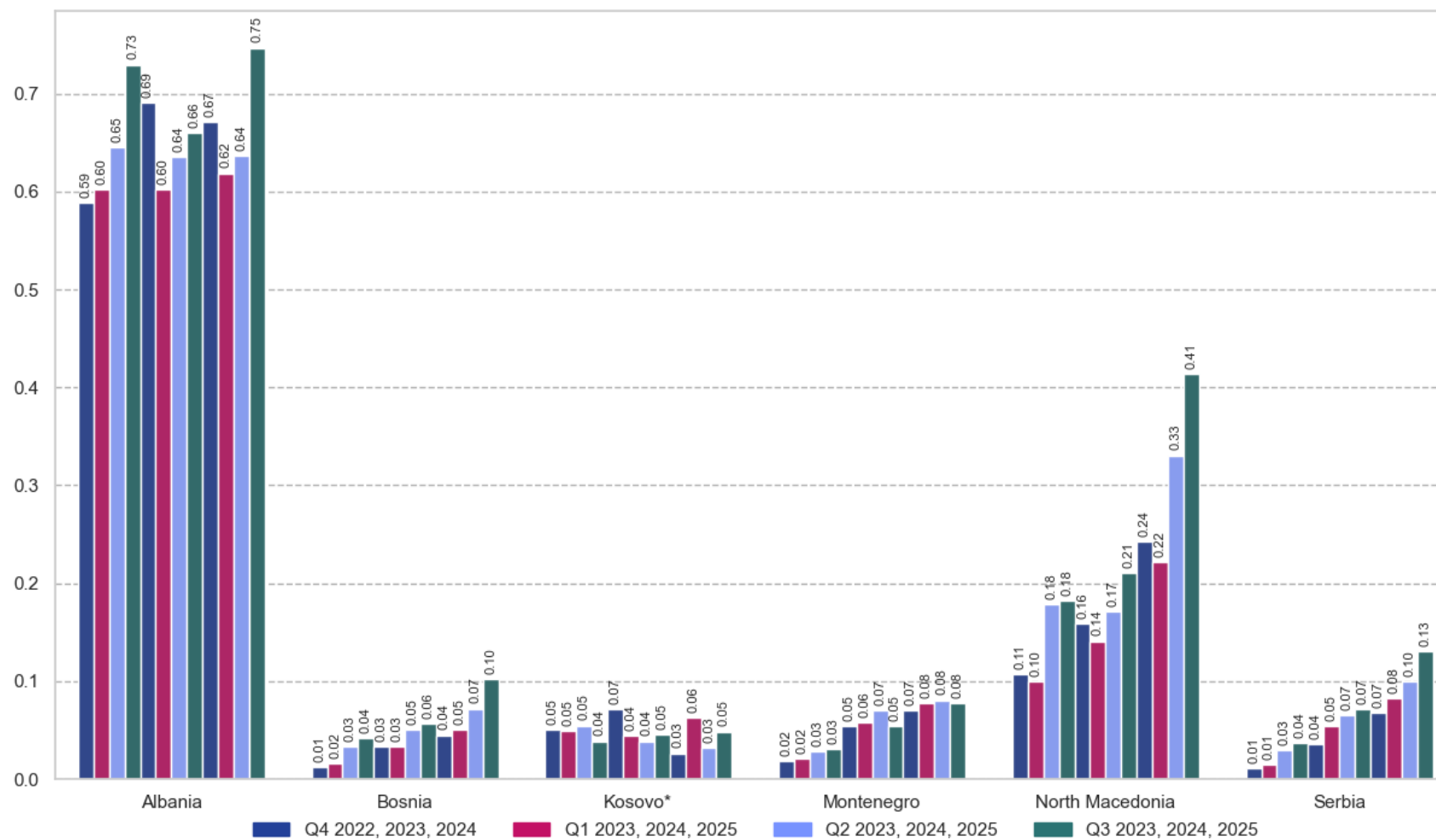
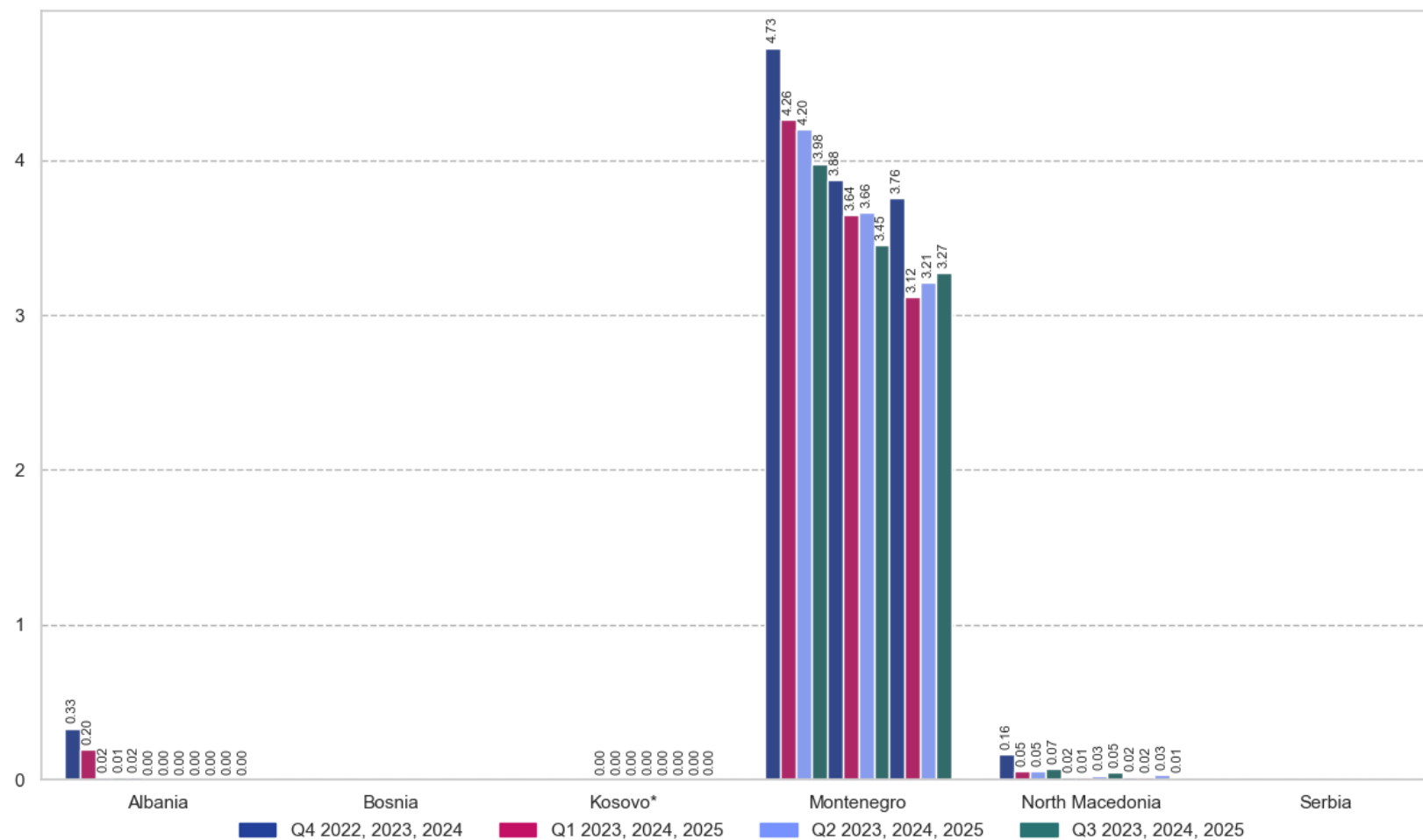


Figure 26: Average data roaming consumption in GB within the EEA region subscriber roaming at least once in the concerned quarter and region per month

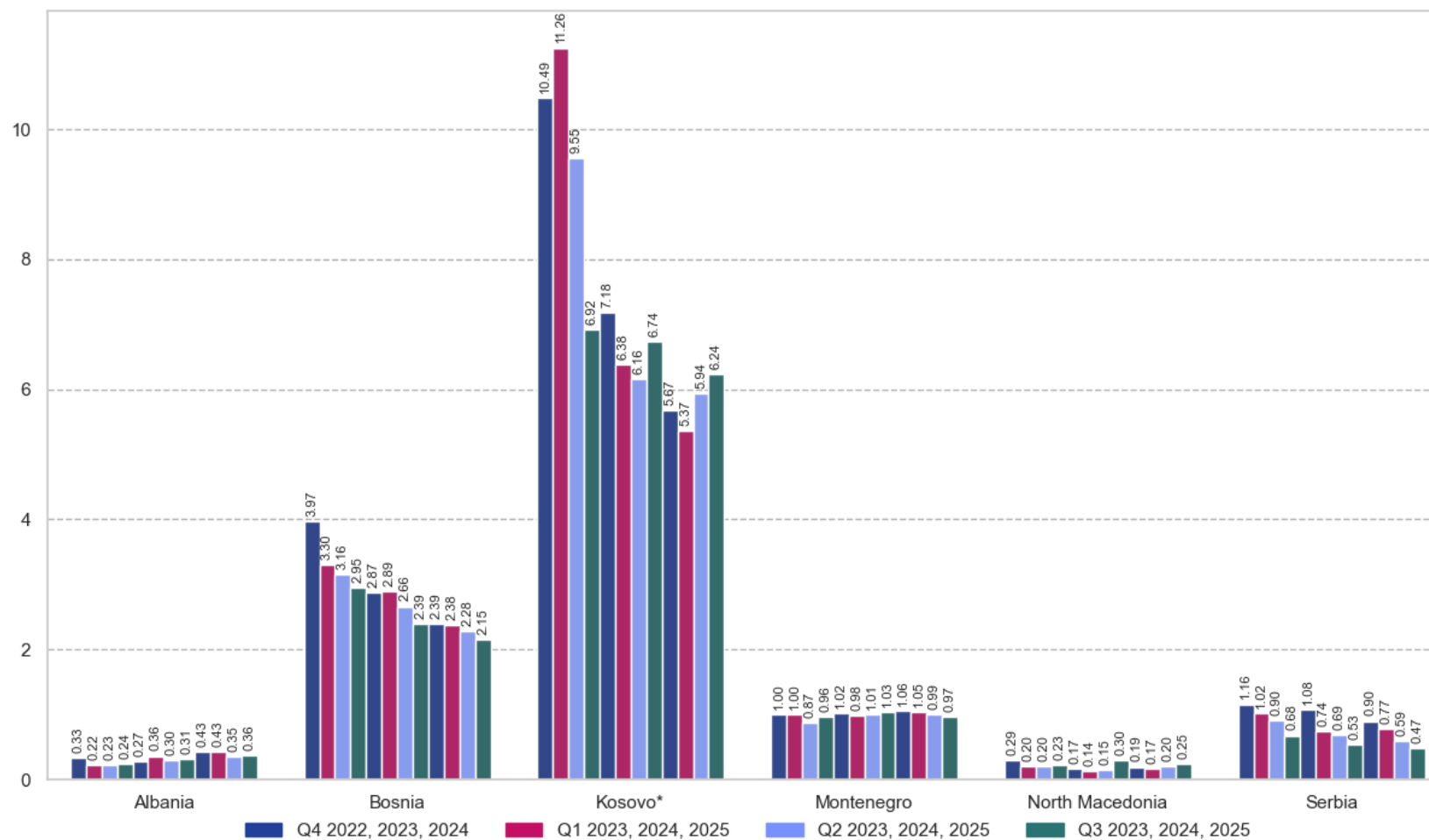


## **5. The development of retail roaming services: retail revenues per unit**

### **5.1. Average retail roaming revenues per minute, calls made**

Figure 27: Average retail roaming revenues per alternative WB roaming minute, calls made (actual minutes), in Eurocent (within WB)<sup>7</sup>

<sup>7</sup> Albania: "In the data submitted for the period Q4-2022 to Q3 2023 we haven't used drivers to calculate the average revenues for each unit i.e. minutes, data and SMS." Serbia: Only one out of four (2024) / three (2025) providers sent the relevant data.

Figure 28: Average retail roaming revenues per WB RLAH+ and RLAH roaming minute, calls made (actual minutes), in Eurocent (within WB)<sup>8</sup>

<sup>8</sup> Albania: "In the data submitted for the period Q4-2022 to Q3 2023 we haven't used drivers to calculate the average revenues for each unit i.e. minutes, data and SMS."

Figure 29: Average retail roaming revenues per minute, calls made (actual minutes), in Euro (within EEA countries)

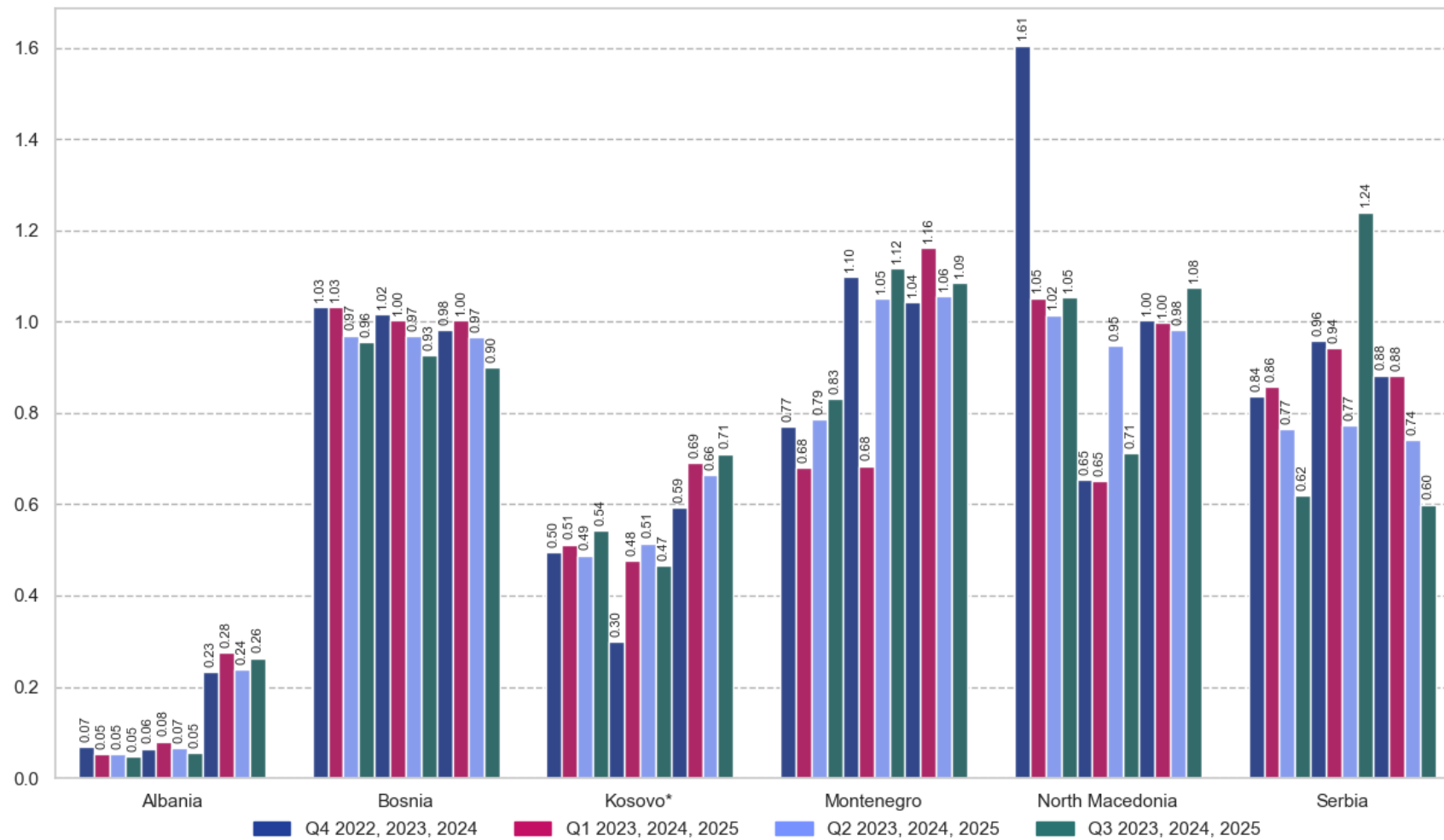
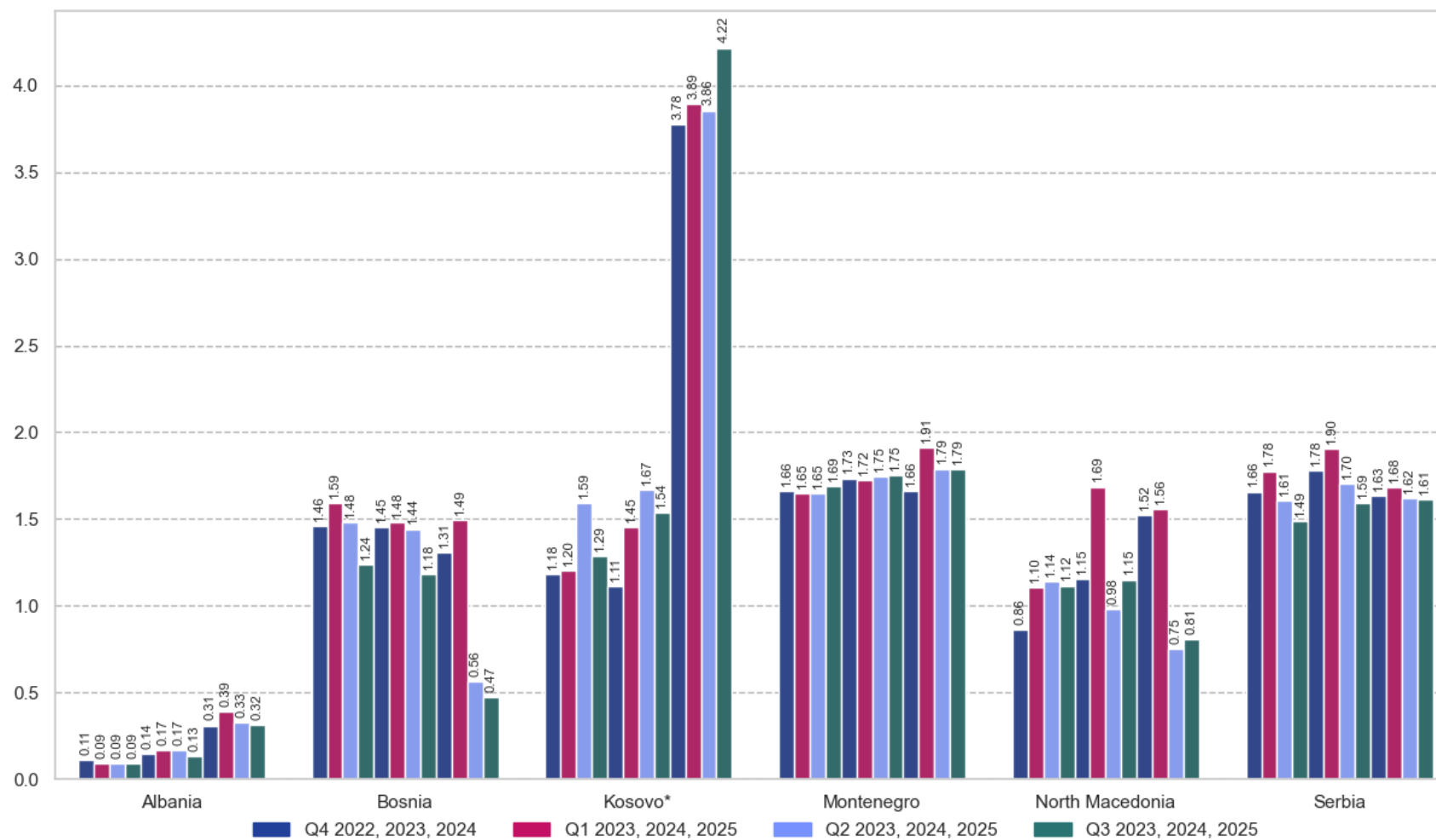


Figure 30: Average retail roaming revenues per minute, calls made (actual minutes), in Euro (within RoW countries)





## 5.2. Average retail roaming revenues per minute, calls received

Figure 31: Average retail roaming revenues per alternative WB roaming minute, calls received (actual minutes), in Eurocent (within WB)

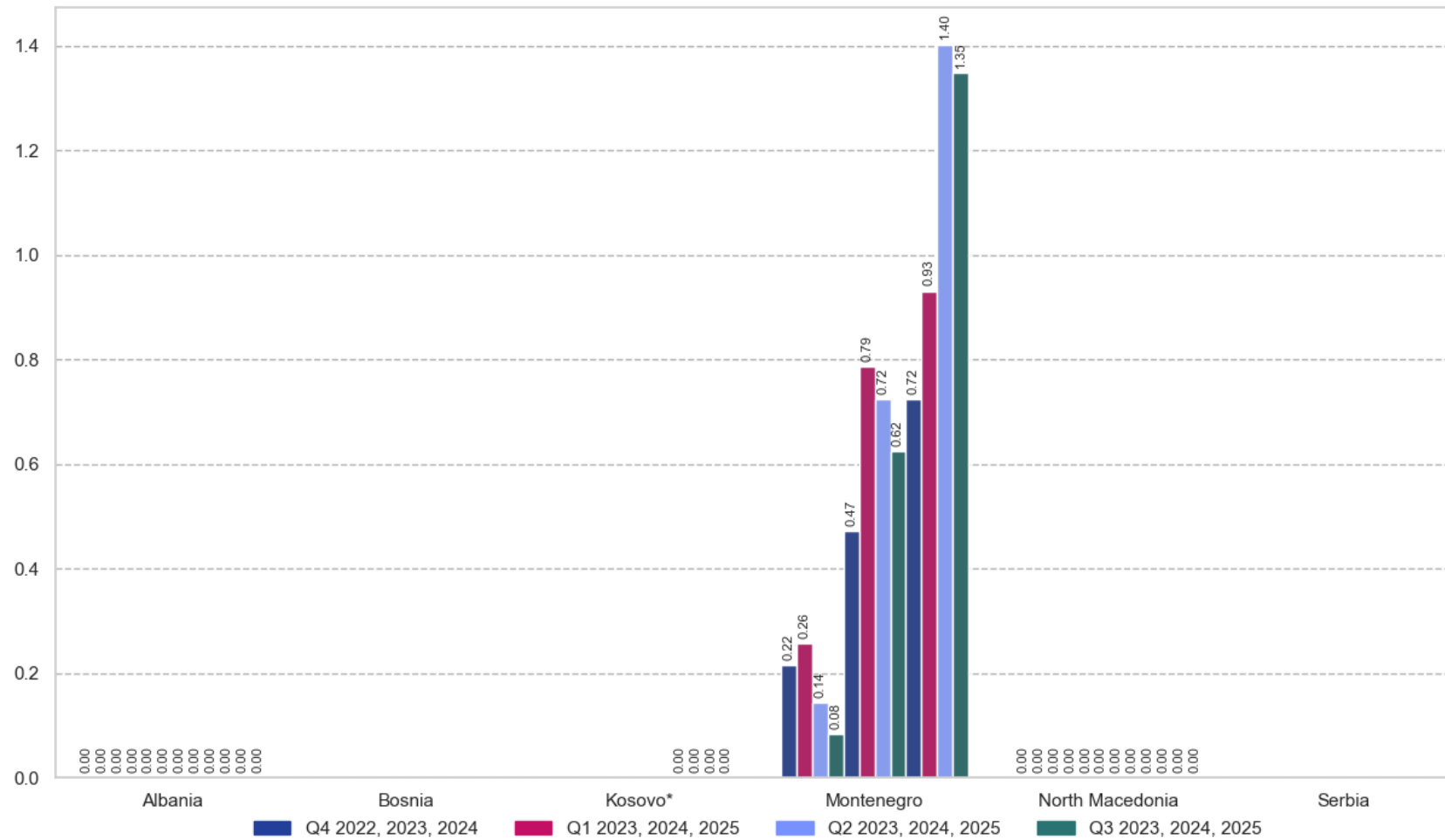


Figure 32: Average retail roaming revenues per WB RLAH+ and RLAH roaming minute, calls received (actual minutes), in Eurocent (within WB)

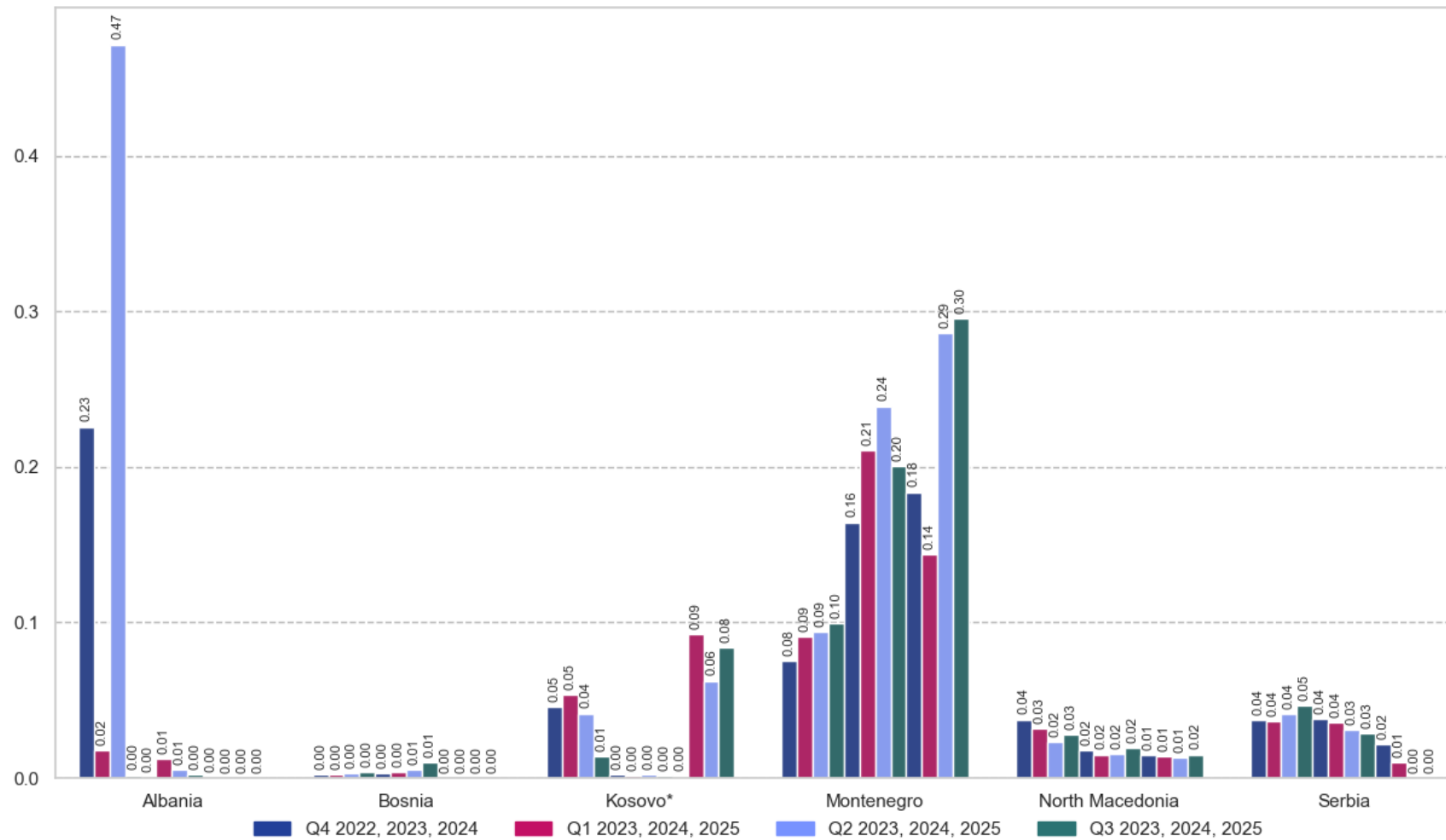


Figure 33: Average retail roaming revenues per minute, calls received (actual minutes), in Euro (within EEA countries)

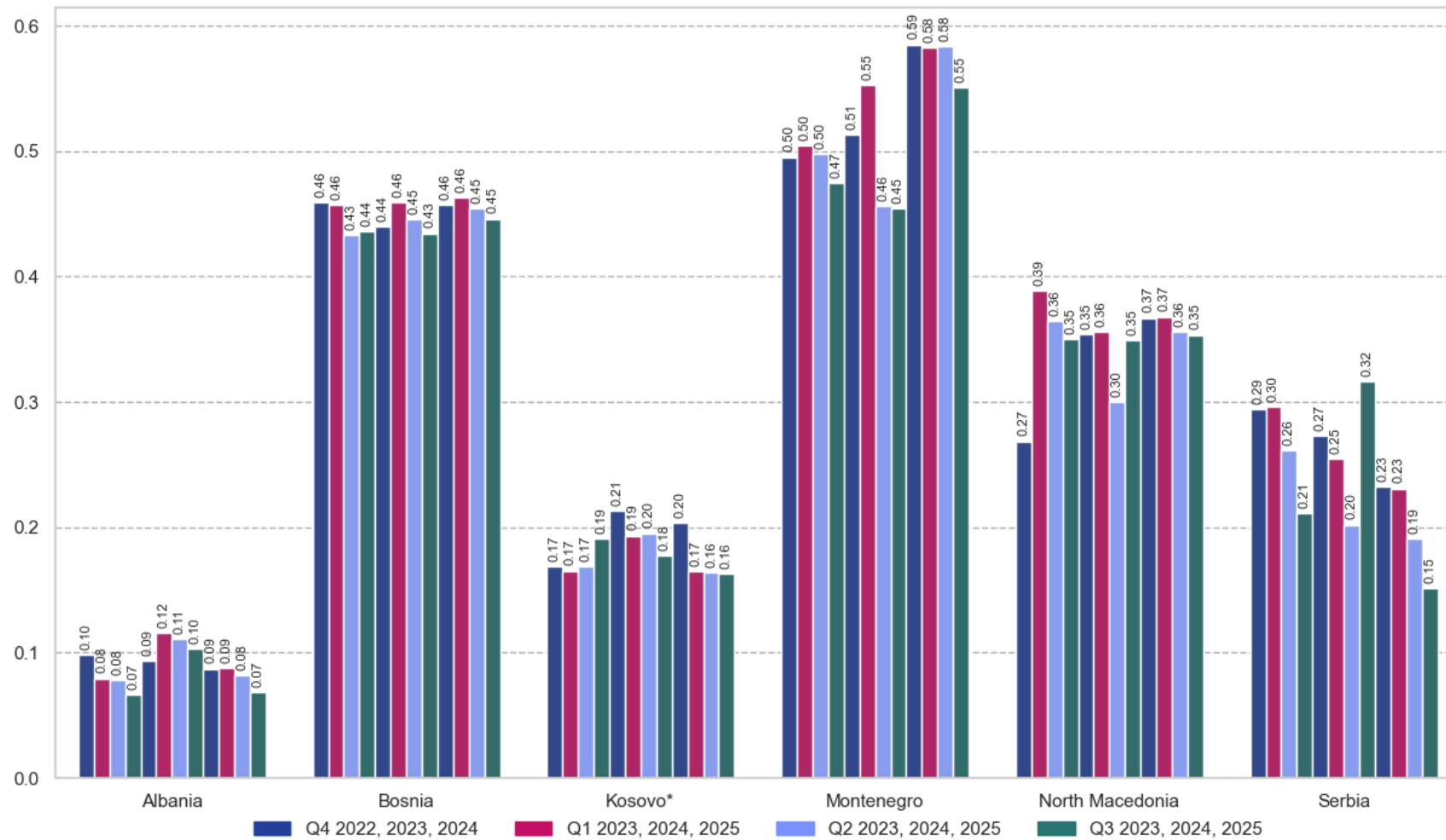
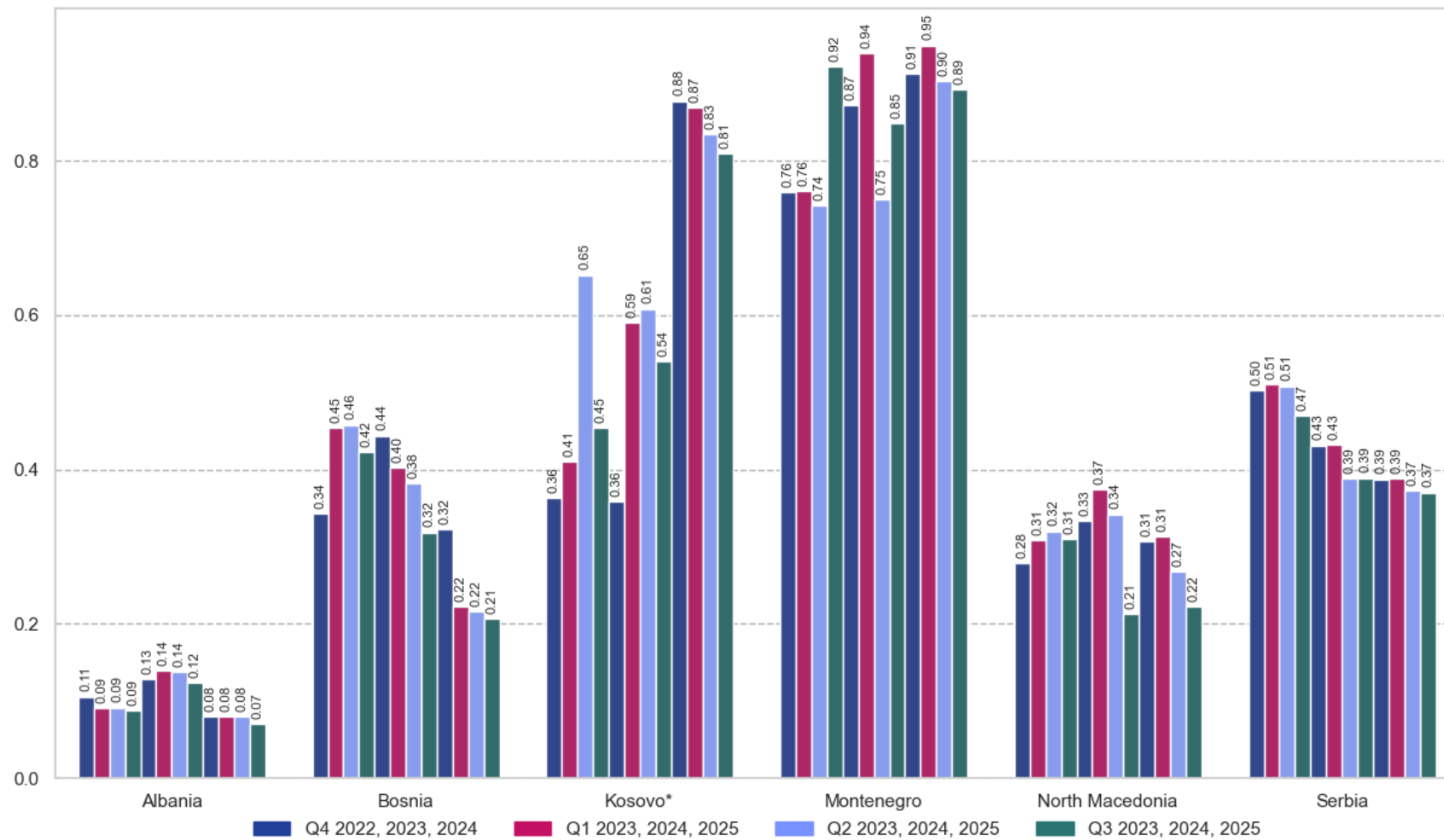


Figure 34: Average retail roaming revenues per minute, calls received (actual minutes), in Euro (within RoW countries)



### 5.3. Average retail roaming revenues per SMS

Figure 35: Average retail roaming revenues per alternative WB roaming SMS, in Eurocent (within WB)

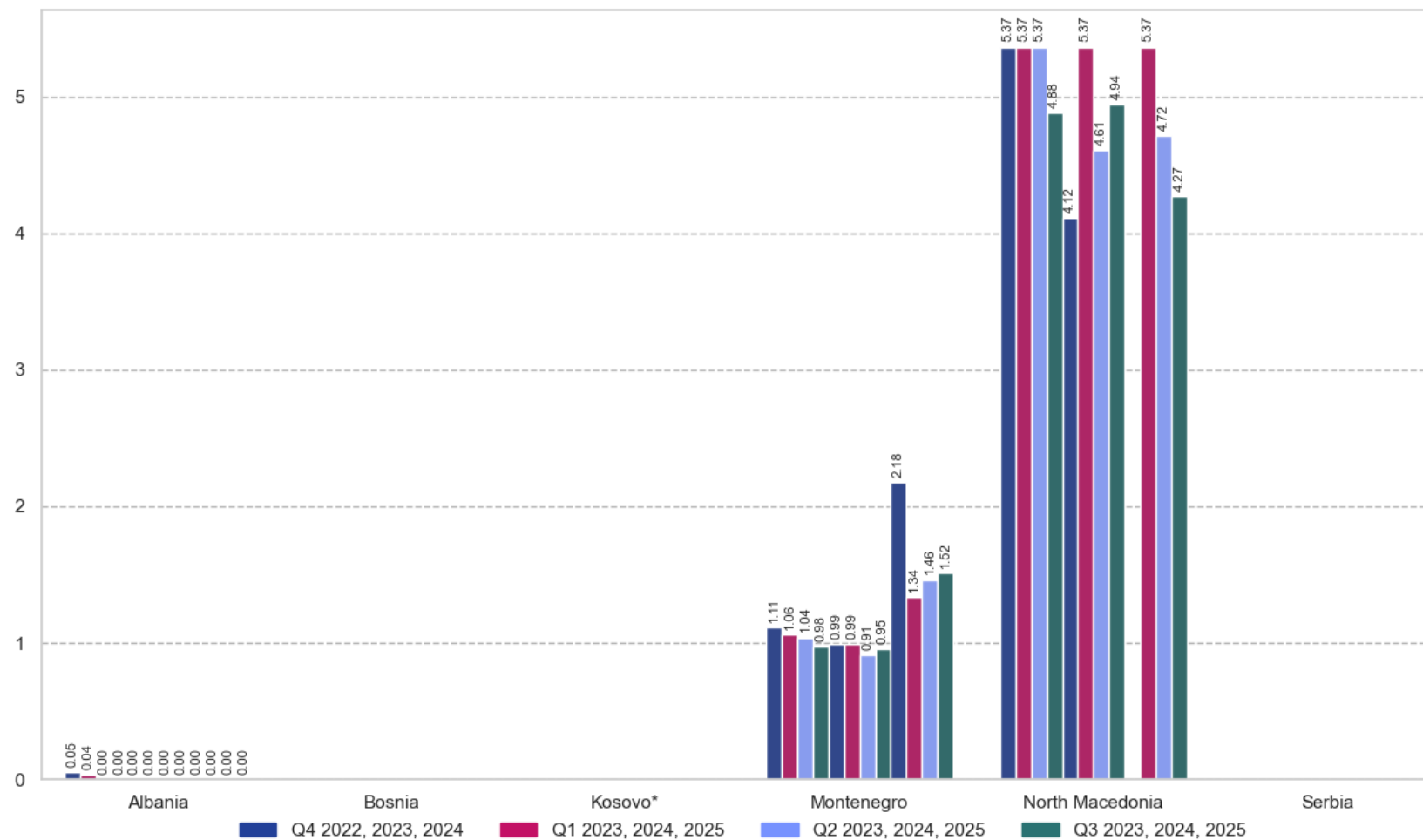


Figure 36: Average retail roaming revenues per WB RLAH+ and RLAH roaming SMS, in Eurocent (within WB)

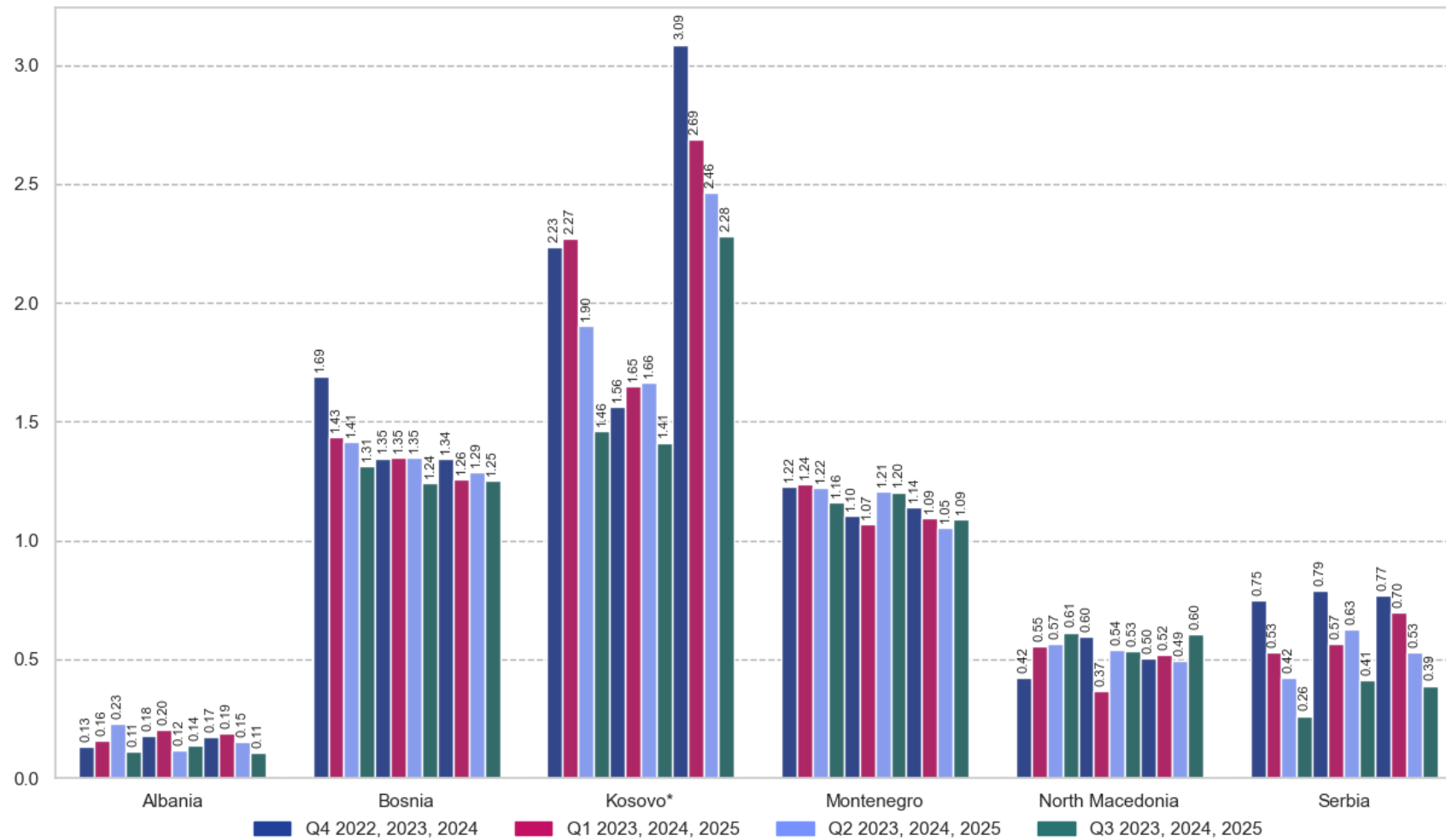


Figure 37: Average retail roaming revenues per SMS, in Euro (within EEA countries)

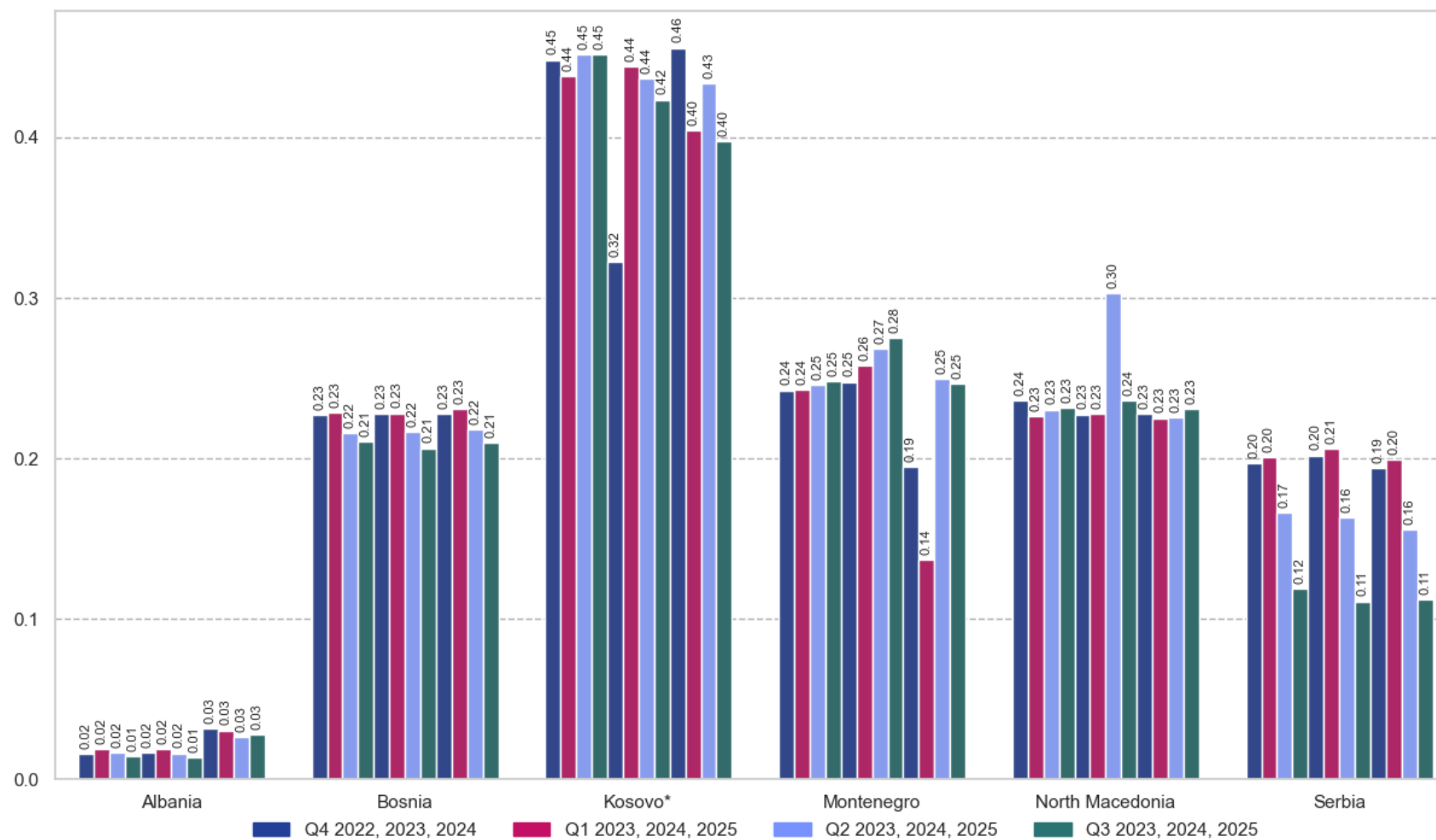
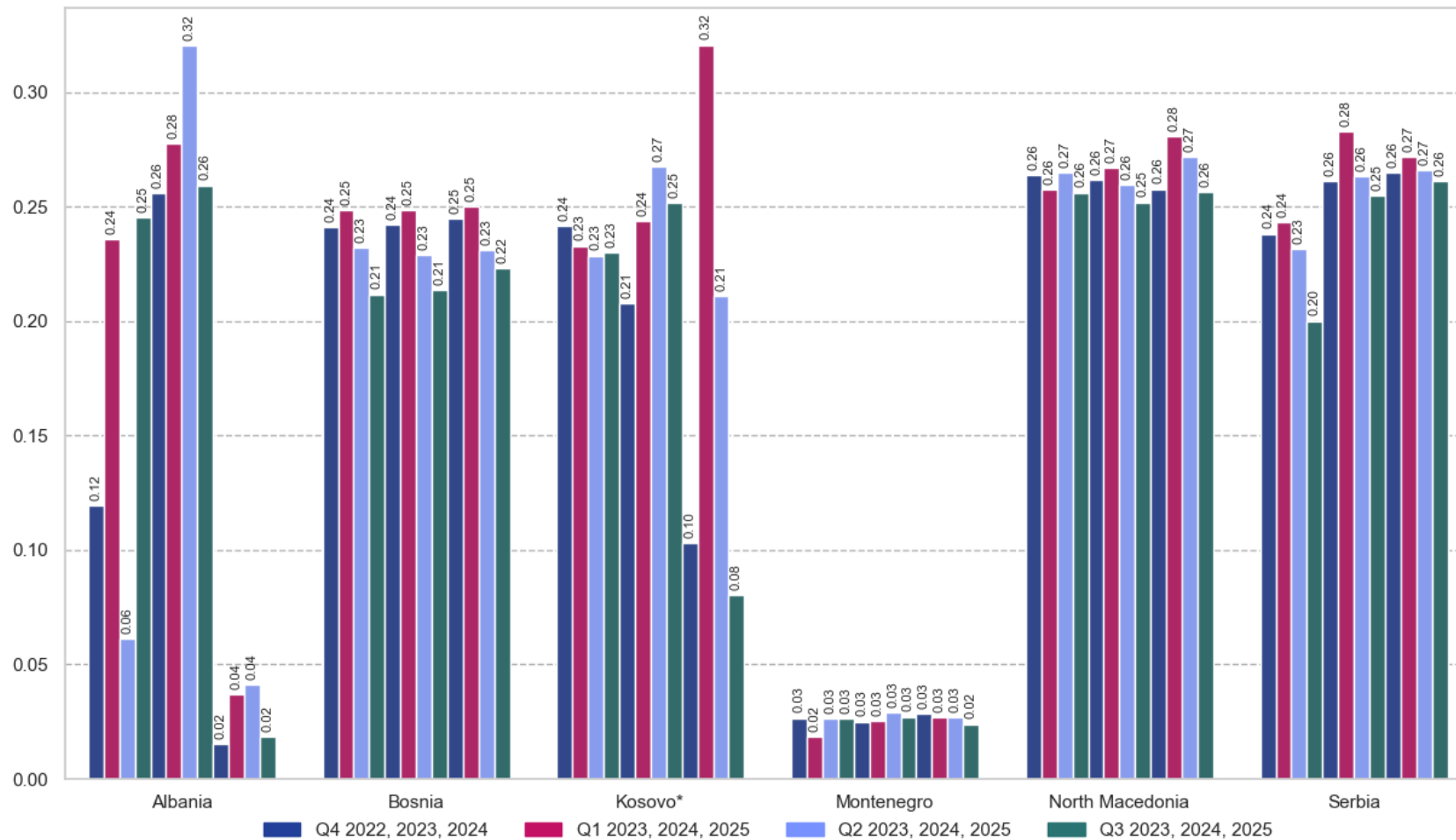


Figure 38: Average retail roaming revenues per SMS, in Euro (within RoW countries)





## 5.4. Average retail roaming revenues per GB

Figure 39: Average retail roaming revenues per alternative WB roaming GB, in Euro

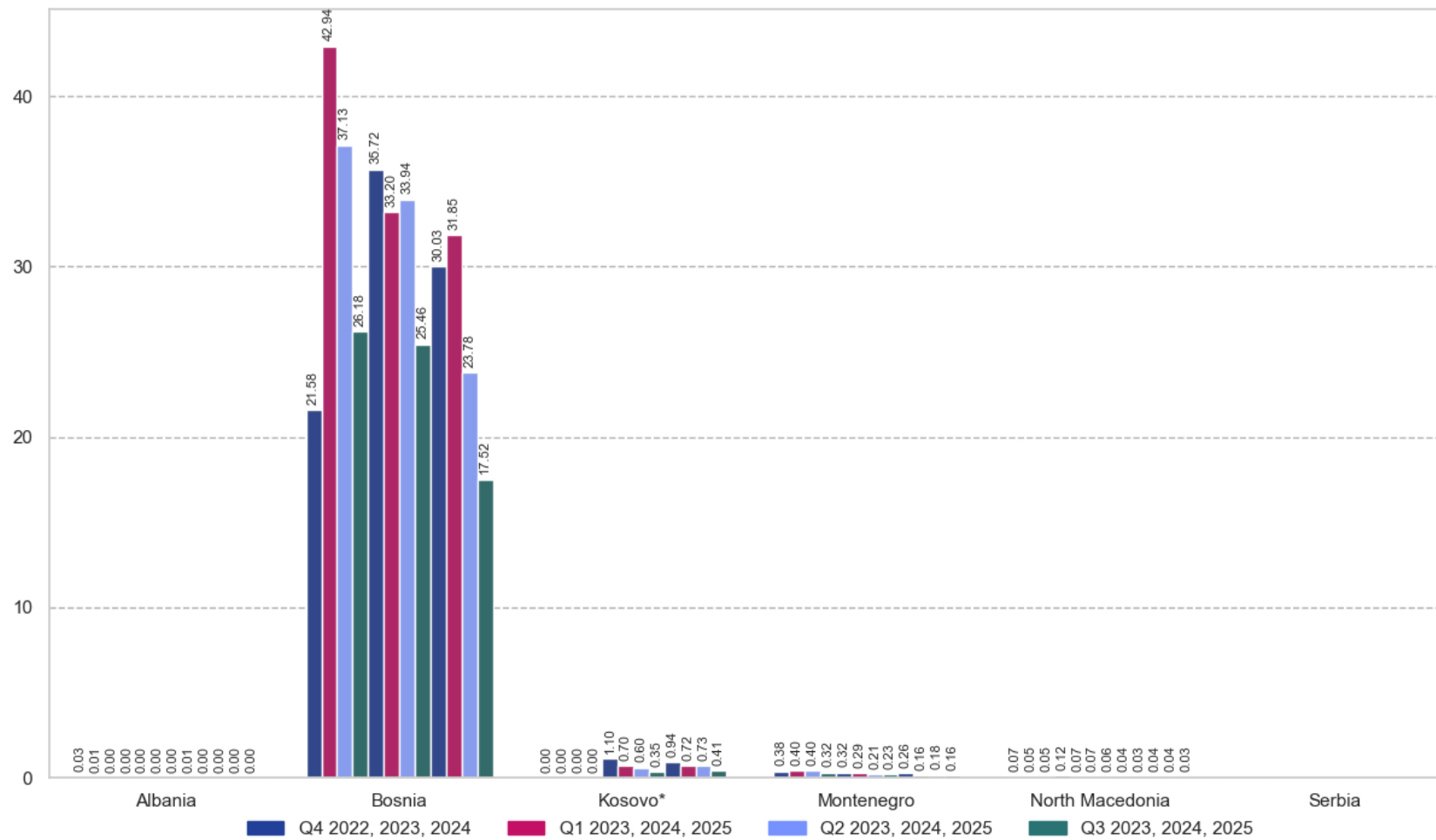


Figure 40: Average retail roaming revenues per WB RLAH+ and RLAH roaming GB, in Euro

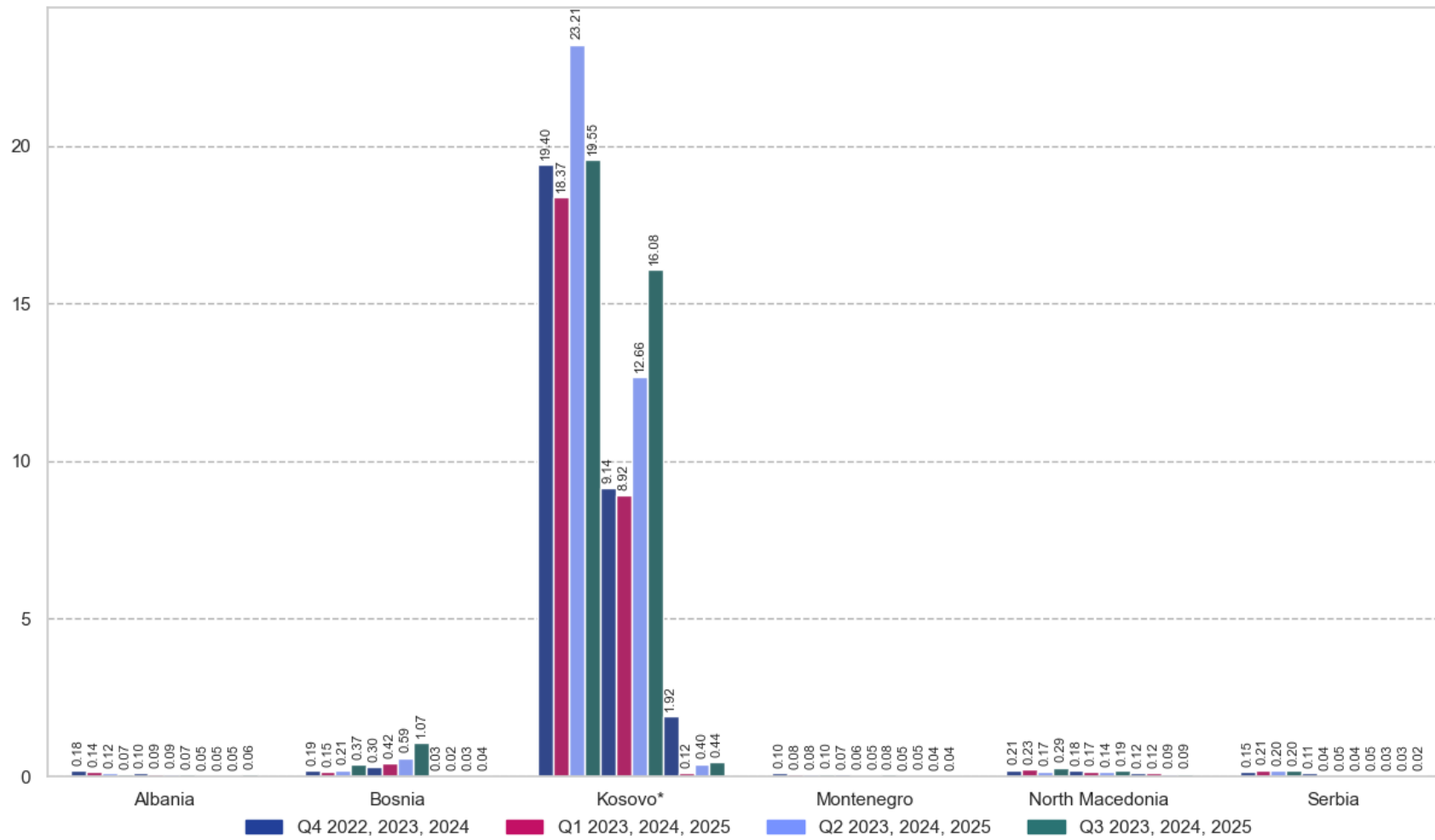


Figure 41: Average retail roaming revenues per GB, in Euro (within EEA countries)

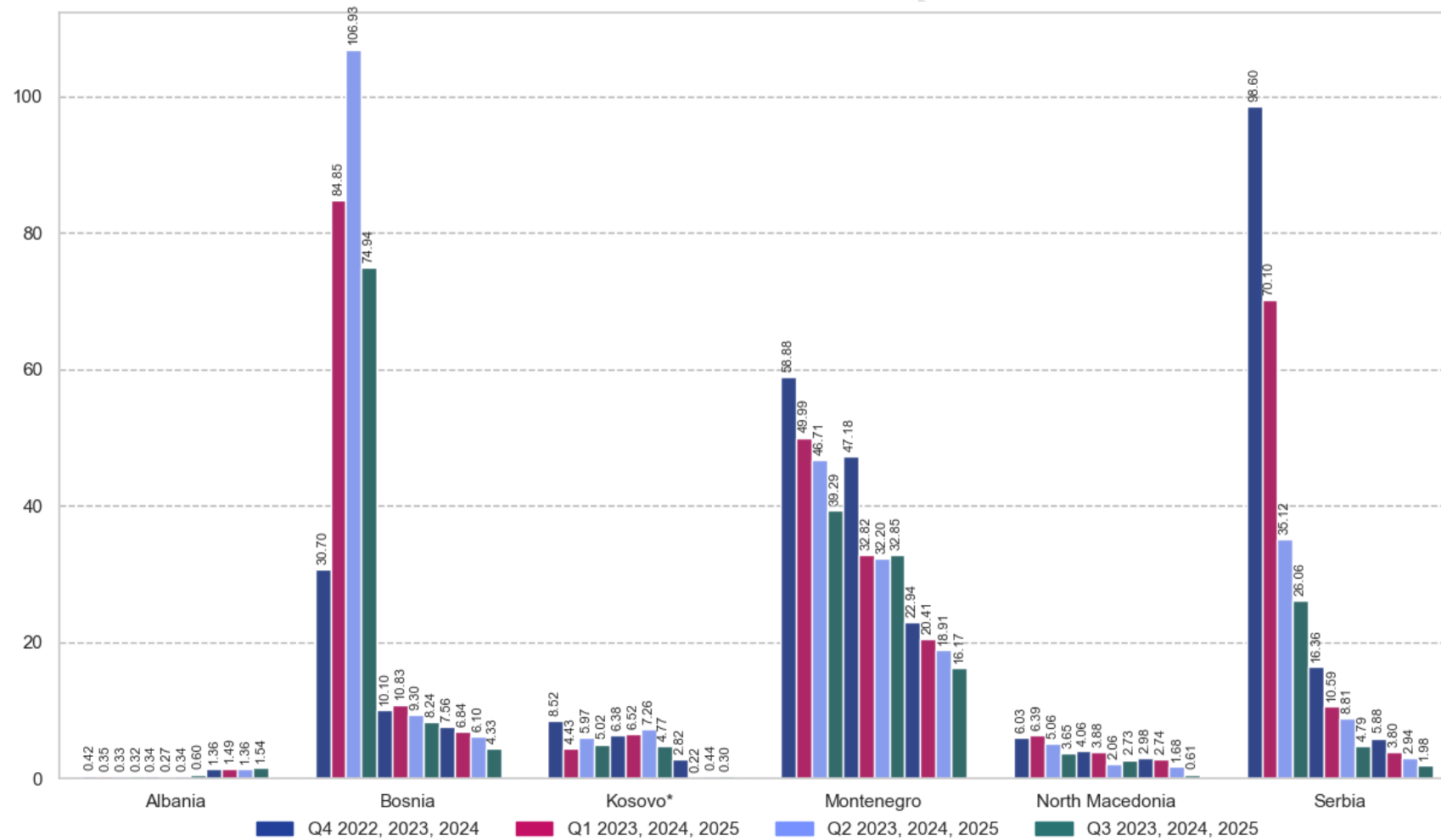
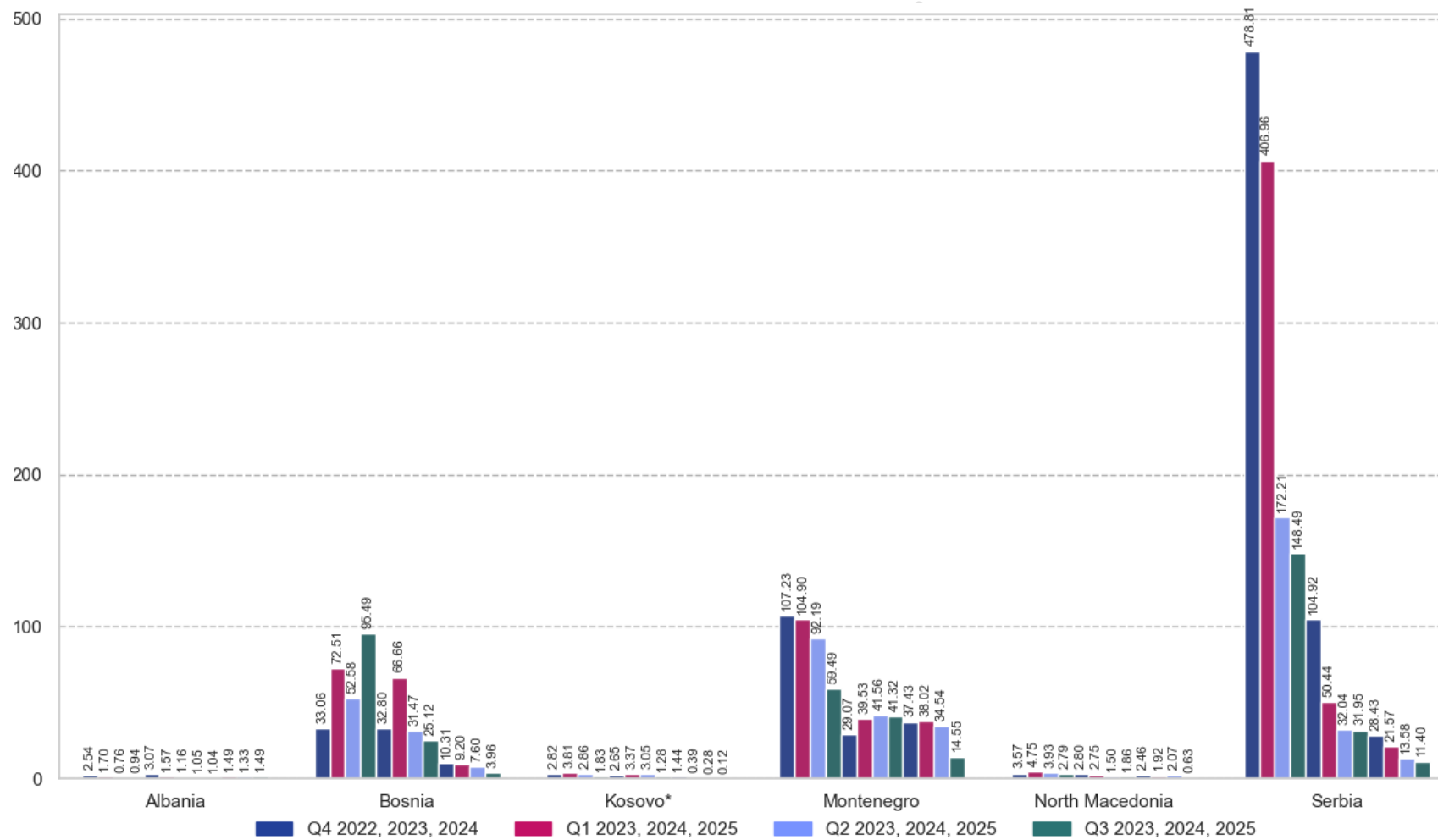


Figure 42: Average retail roaming revenues per GB, in Euro (within RoW countries)



## **6. The development of wholesale roaming services: wholesale revenues per unit**

### **6.1. Wholesale voice roaming services: wholesale revenues per minute (group and non-group)**

Figure 43: Wholesale revenues per minute (group and non-group) in Eurocent, within WB region

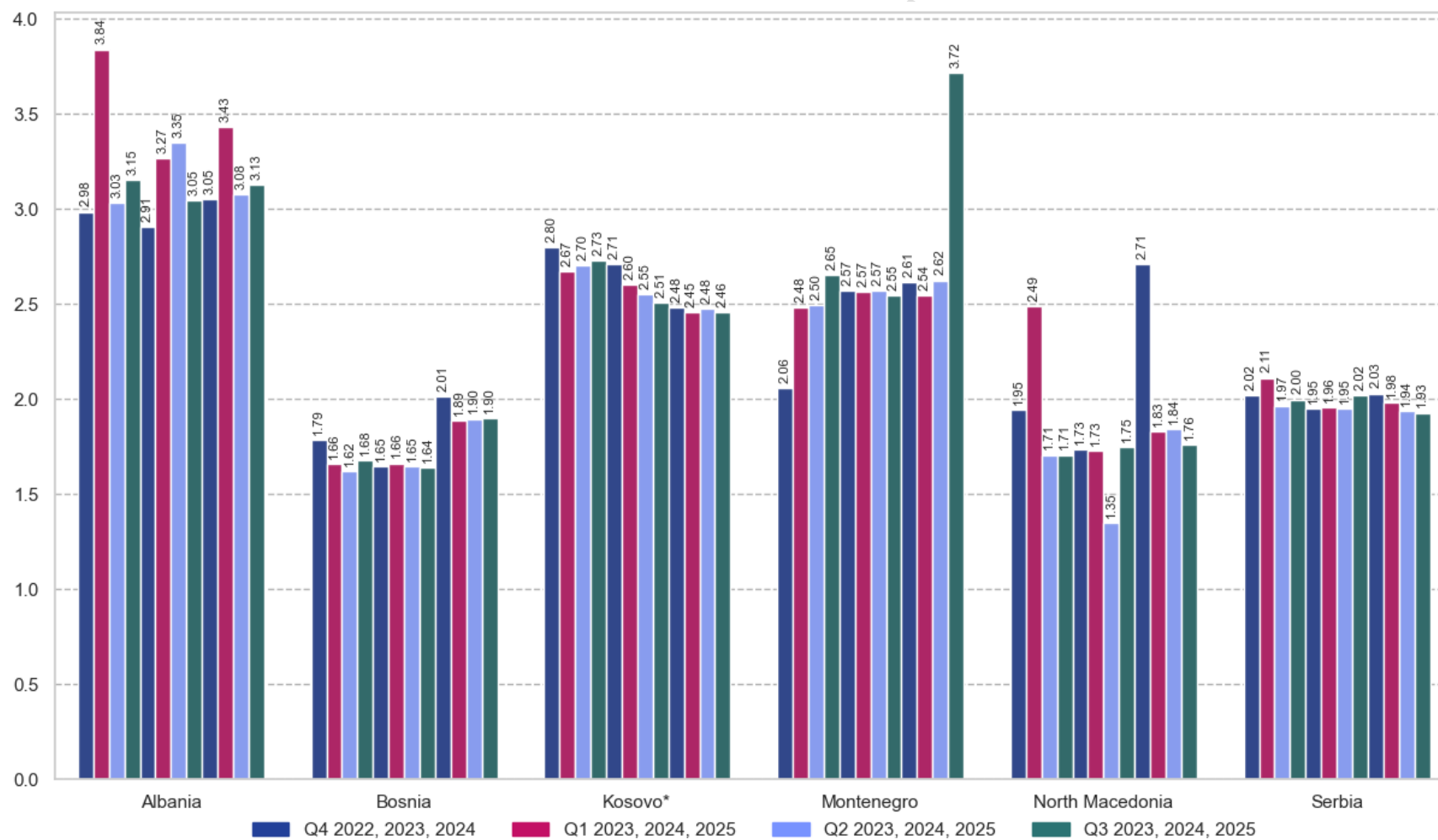


Figure 44: Wholesale revenues per minute (group and non-group) in Eurocent, from EEA countries

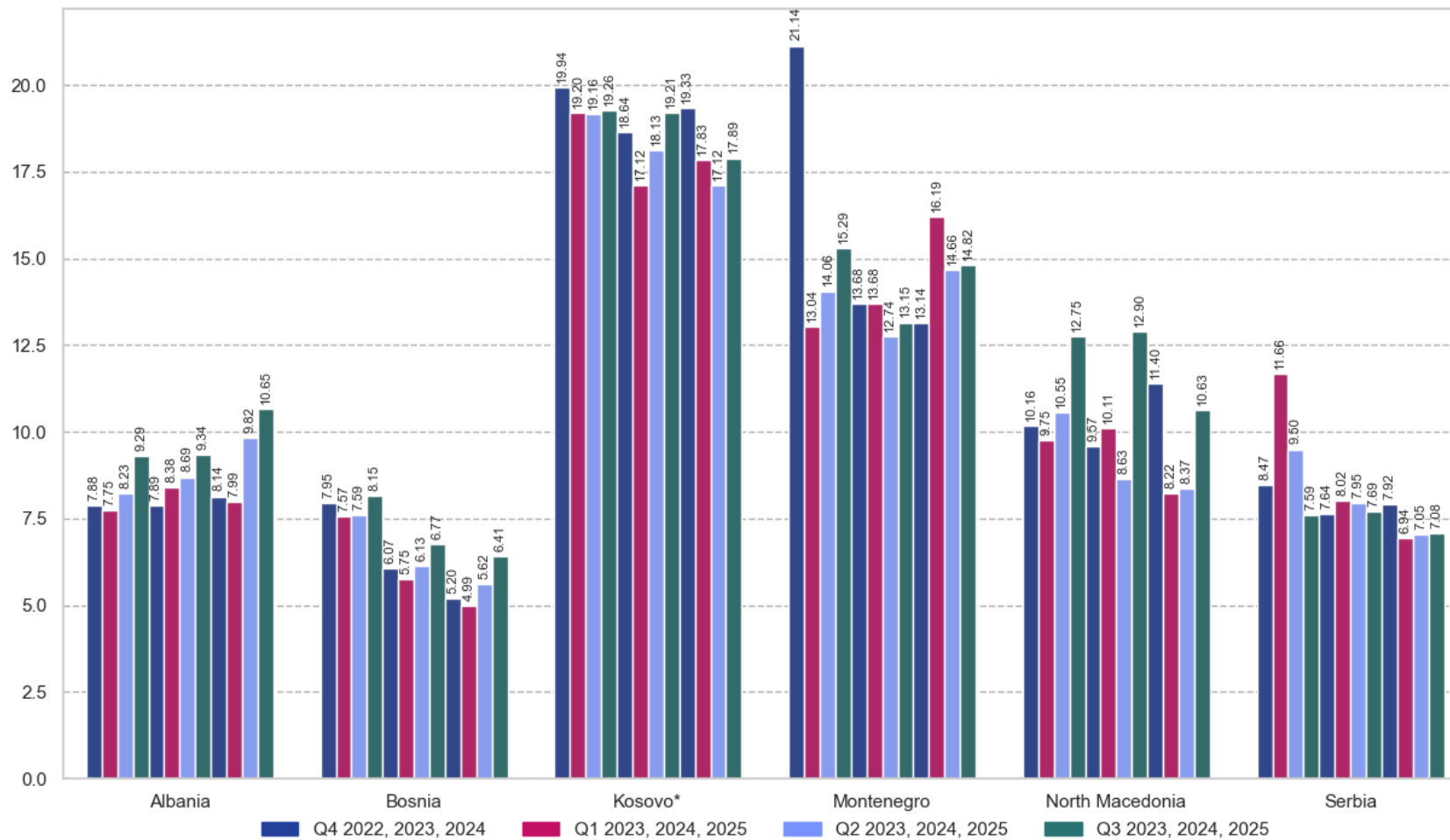
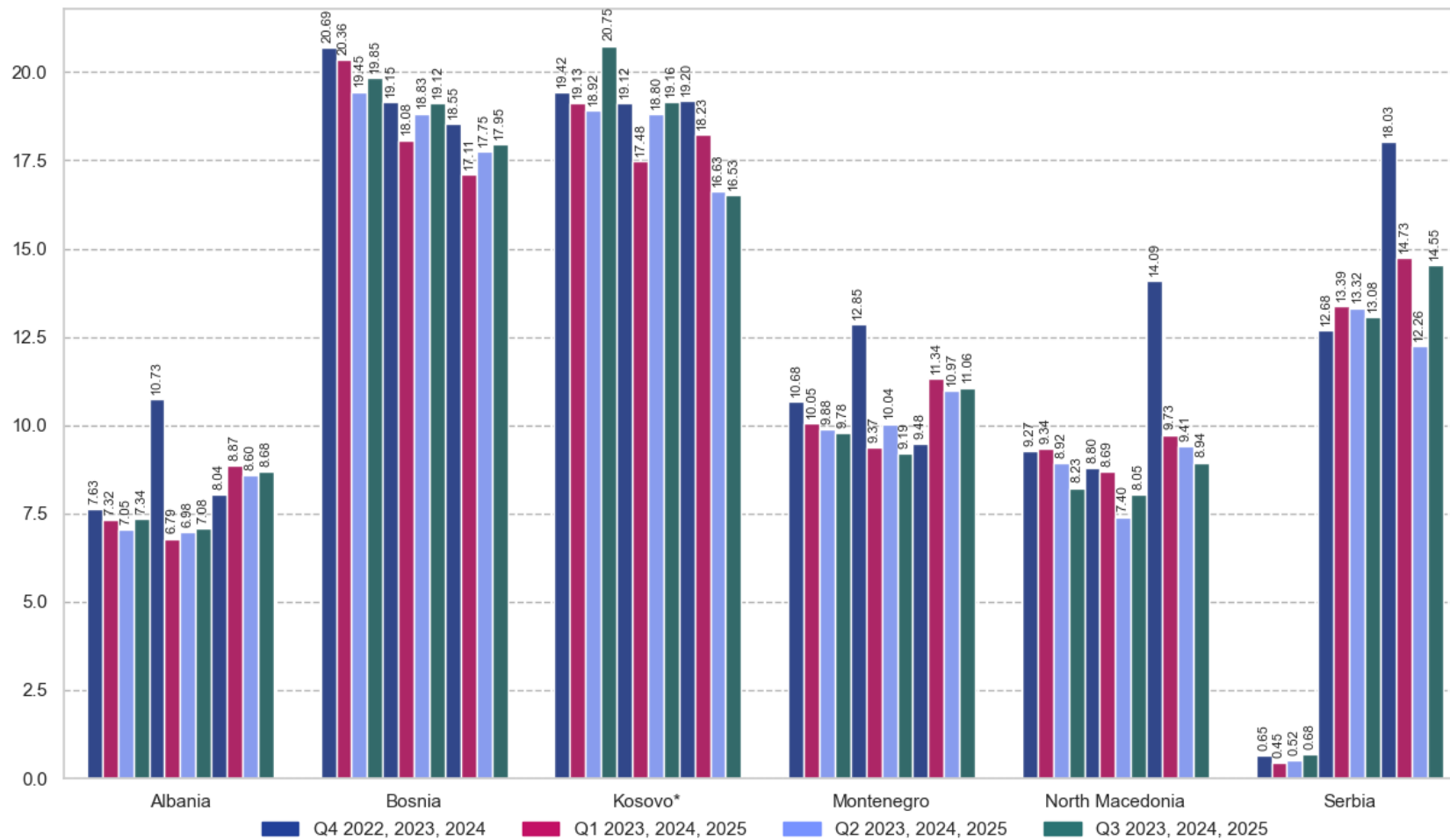


Figure 45: Wholesale revenues per minute (group and non-group) in Eurocent, from RoW countries





## 6.2. Wholesale SMS roaming services: wholesale revenues per SMS (group and non-group)

Figure 46: Wholesale revenues per SMS (group and non-group) in Eurocent, within WB region

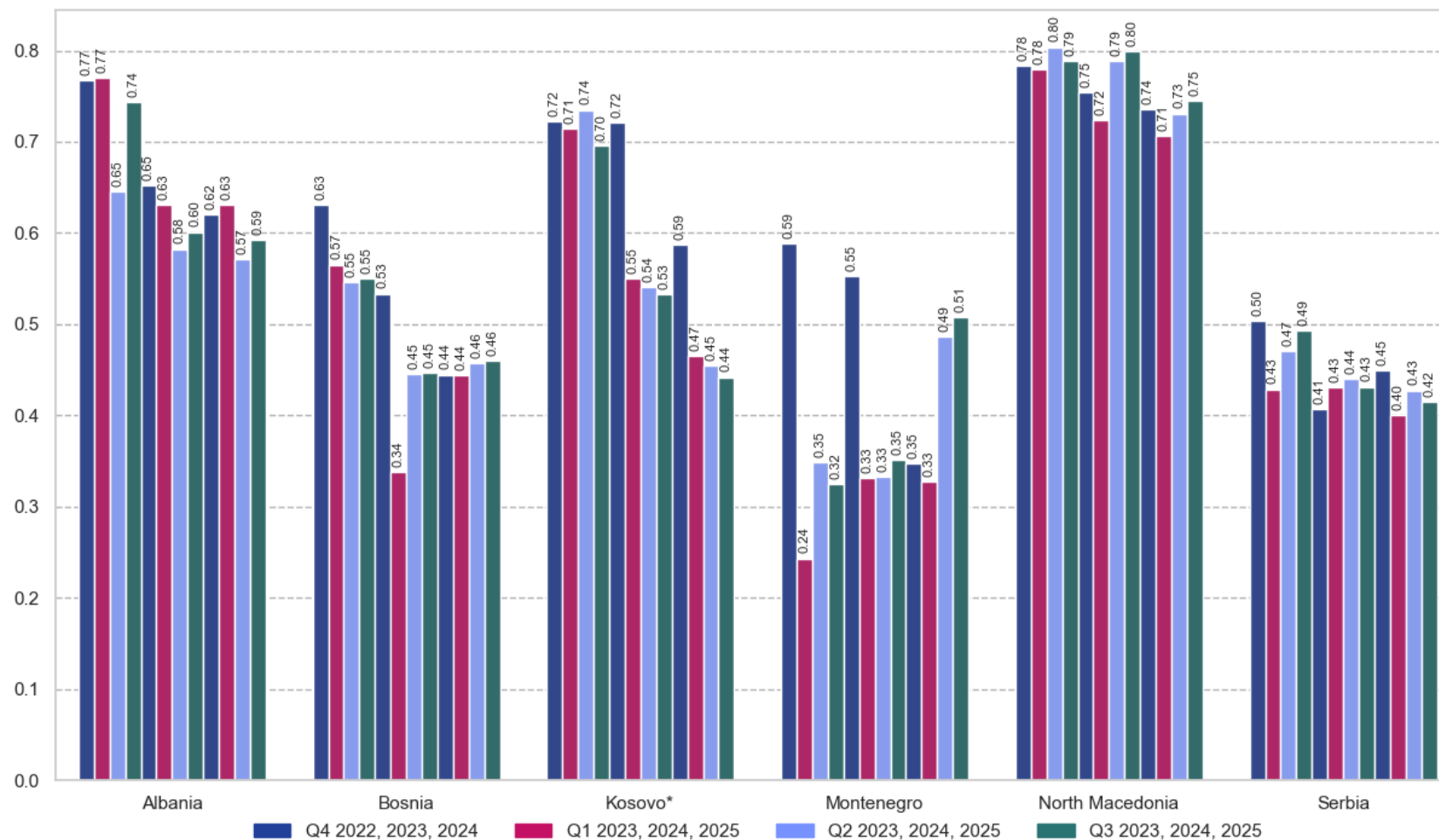


Figure 47: Wholesale revenues per SMS (group and non-group) in Eurocent, from EEA countries

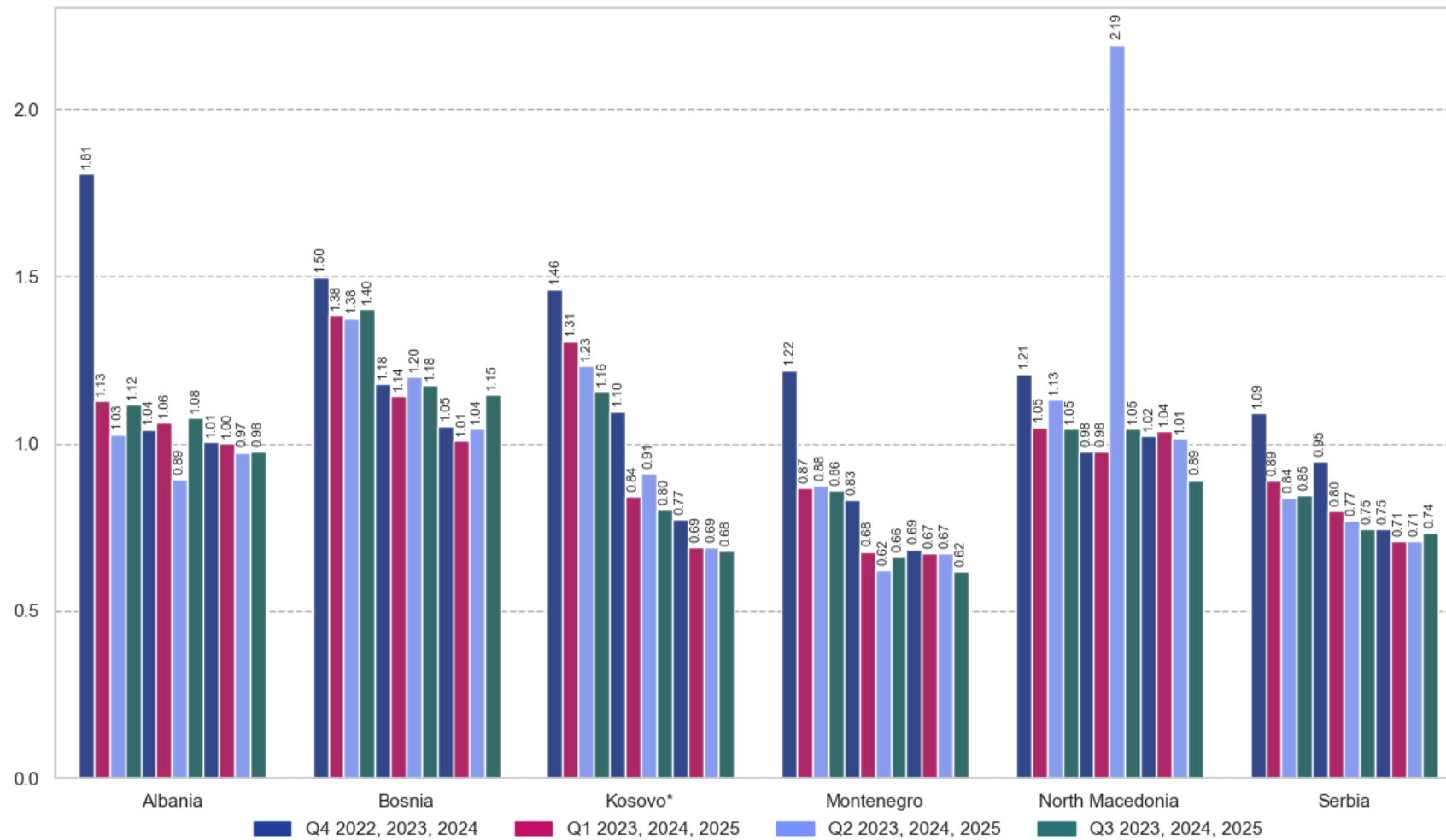
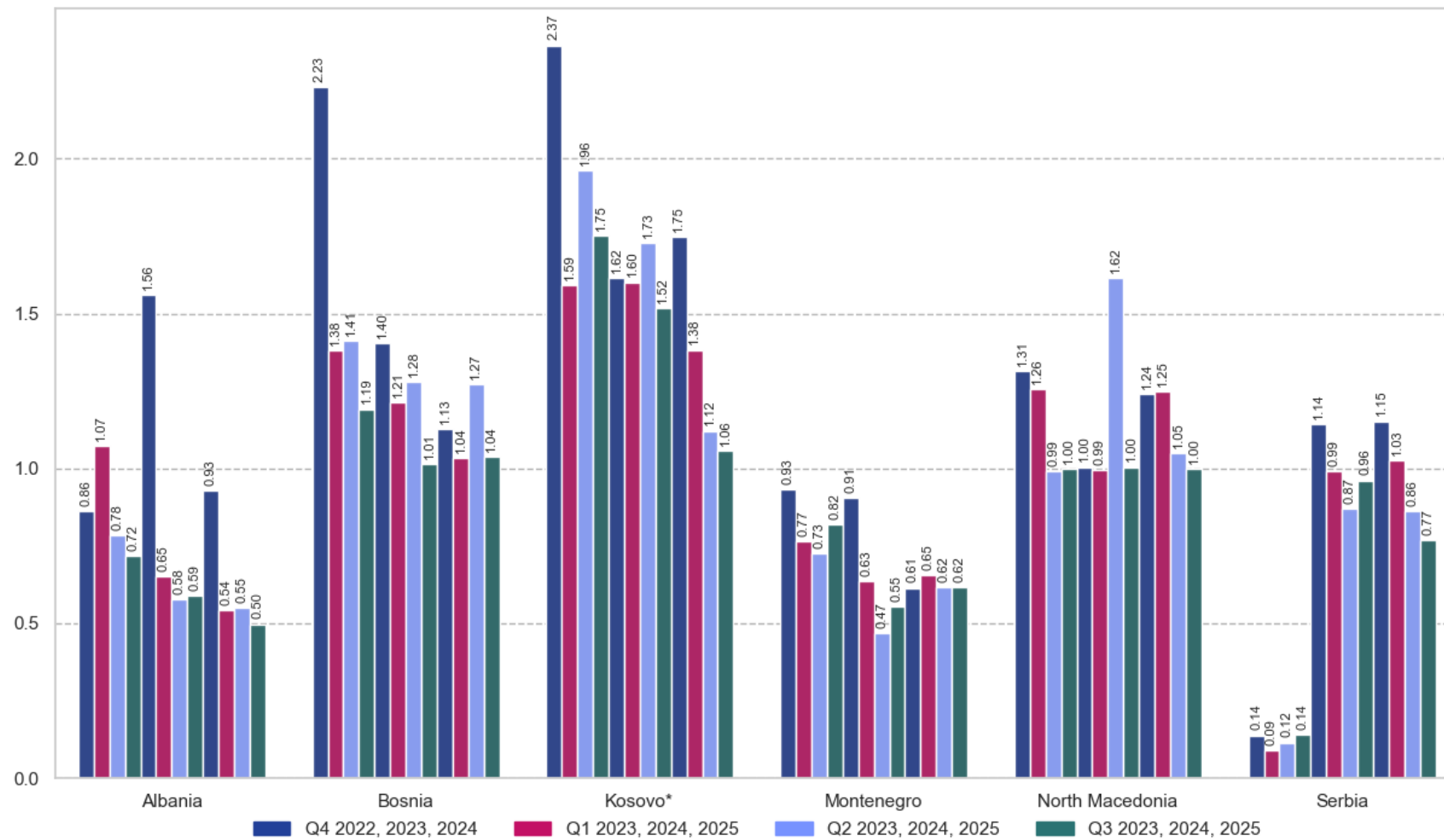


Figure 48: Wholesale revenues per SMS (group and non-group) in Eurocent, from RoW countries



### 6.3. Wholesale data roaming services: wholesale revenues per GB

Figure 49: Wholesale revenues per GB in Euro, within WB region

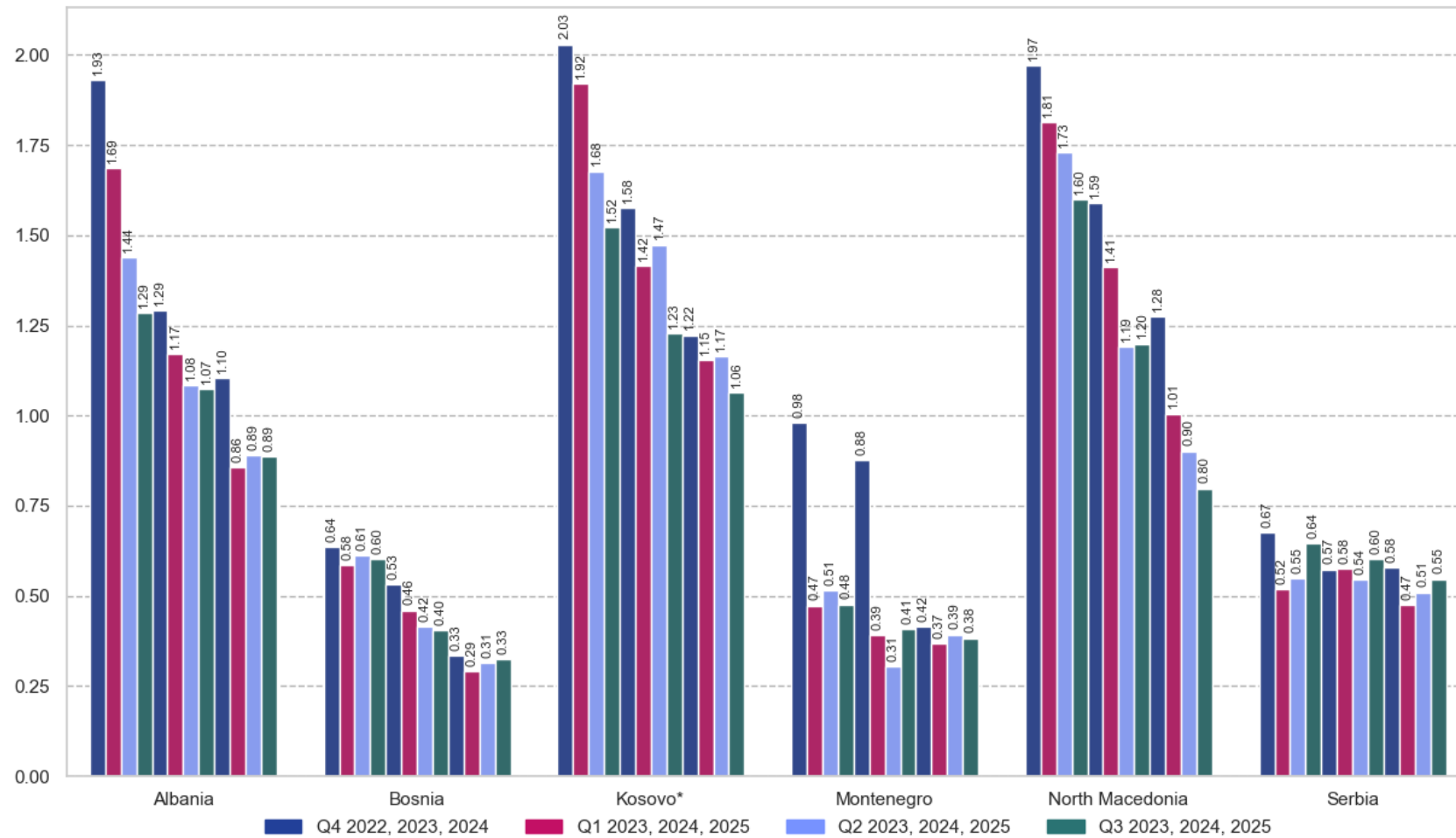


Figure 50: Wholesale revenues per GB in Euro, from EEA countries

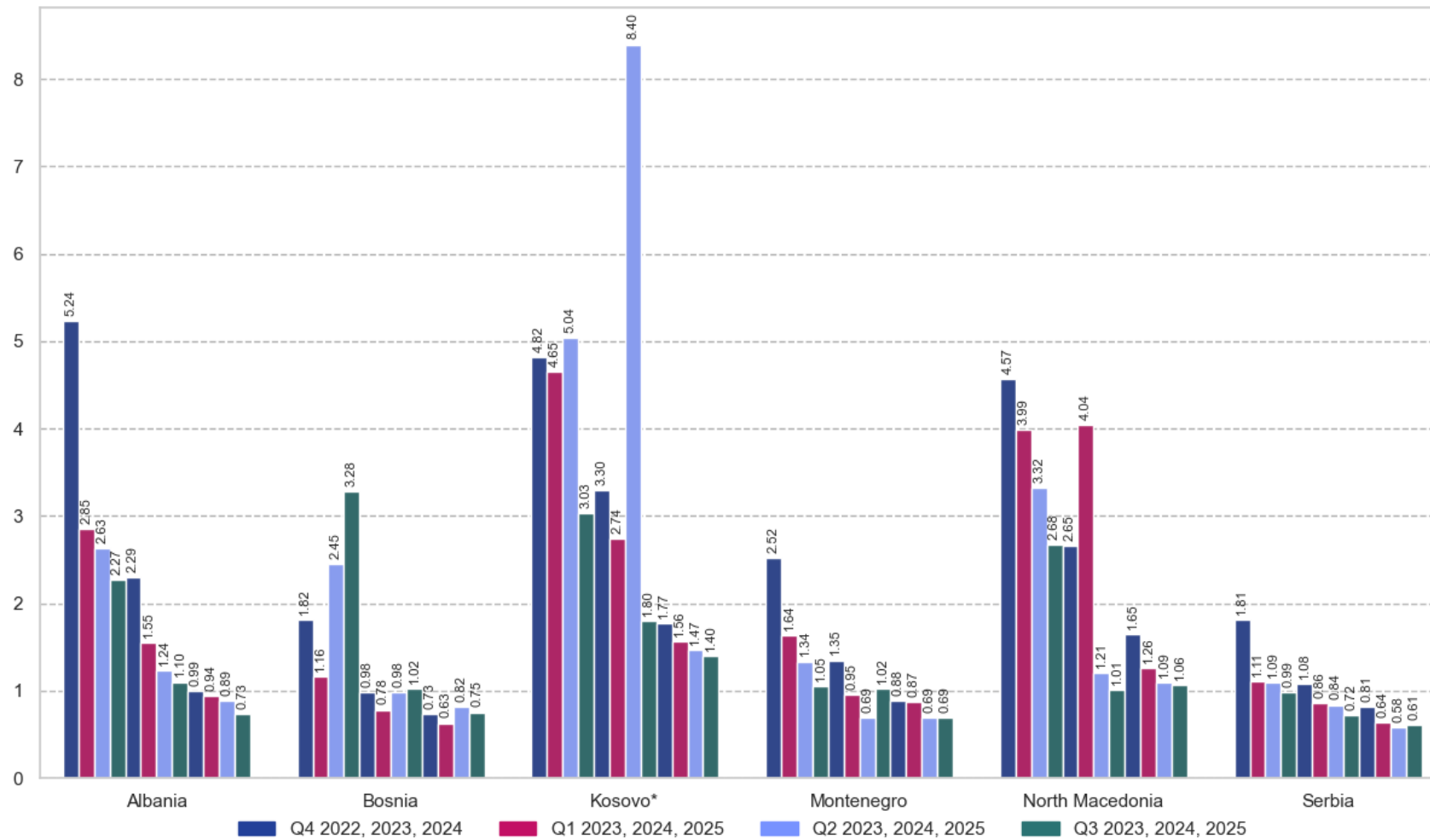
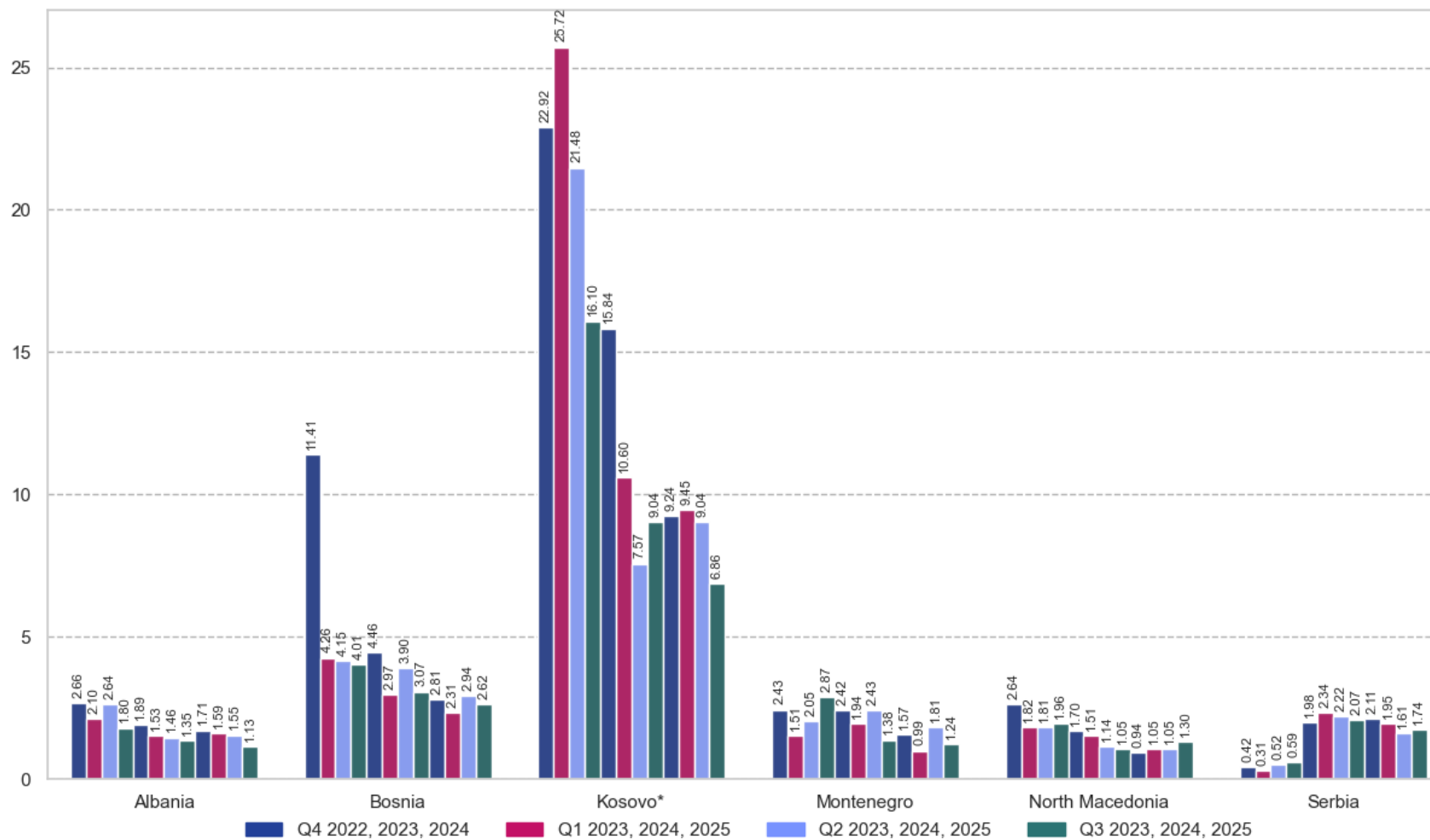


Figure 51: Wholesale revenues per GB in Euro, from RoW countries



## 7. Annex

The annex contains a list of national operators who submitted data during the data collection exercise. The data submitted by the operators has been aggregated for this report.

### **Albania**

One Albania

Vodafone Albania

### **Bosnia and Herzegovina**

BH Telecom d.d. Sarajevo

Telekom Srpske a.d. Banja Luka

HT d.o.o. Mostar

### **Kosovo\***

IPKO Telecommunications LL.C

Telecom of Kosovo Sh.A

### **Montenegro**

Crnogorski Telekom AD

ONE Crna Gora

Mtel D.O.O

### **North Macedonia**

Makednoski Telekom

A1 Macedonia

Mtel

Telekabel

### **Serbia**

Telekom Srbija AD

Yettel doo

A1 doo