EU Regulation in International Roaming and MVNOs

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1. BEREC IR EWG AND GENERAL VIEW ON THE REGULATION IN THE EU
• Experts from several EU NRAs with background in different areas (technical, economical and regulatory)

• BEREC Role in International Roaming:
  ✓ Provide advice to the EC, Euro Parliament, EU Council and NRAs about the regulation of international roaming in the EU
  ✓ Provide guidelines for operators on the application of the International Roaming regulation in the EU
  ✓ Periodical benchmarking of prices, volumes and evolution of the market for international roaming

• Documentation available at berec.europa.eu
EU ROAMING REGULATION ROADMAP

- **Roaming I**
  - August 2007
  - Price cap:
    - Voice (Wholesale and Retail)

- **Roaming II**
  - July 2010
  - Price cap:
    - Voice (Wholesale and Retail)
    - SMS (Wholesale and Retail)
    - Data (Wholesale)
  - Billshock measure (EU)

- **Roaming III**
  - July 2012
  - Separate sale of regulated services
  - July 2014
  - June 2016
  - Review
  - Price cap:
    - Voice (Wholesale and Retail)
    - SMS (Wholesale and Retail)
    - Data (Wholesale and Retail)
  - Billshock measure (EU and rest of the world)
  - Reference offer wholesale (January 2013)

- June 2022
  - Expiry of the regulation
MAIN ISSUES IN ROAMING III REGULATION

- Longer than roaming I and II: 10 years (2012-2022, with review on 2016)
- Wholesale Access: Reference offer to be produced by all MNOs.
- Wholesale cap price:
  - Very relevant reduction of cap prices for all services.
  - Wholesale resale access: cap price regulation for services provided to MVNOs by their hosts.
- Retail cap price:
  - Maintenance of cap price regulation for voice and SMS eurotariff, lowering the caps.
  - Introduction of a new cap price regulation for data services eurotariff
- Separate sale of international roaming:
  - New provisions to allow consumers to contract international roaming services with an alternative roaming provider, maintaining the domestic provider and SIM card.
2. HOW ROAMING WORKS
Regulated incoming call charges

Traffic flow

Cash flow

MTR1

MTR2

Customer abroad

Domestic Network

Visited Network

Retail

Retail covers 1) Transit & 2) MTR Difference

MTR ≈ 0.01

Roaming I

Roaming II

Roaming III

0.30
0.25
0.20
0.15
0.10
0.05
0.00

0.24
0.22
0.19
0.15
0.11
0.08
0.07
0.05

2007 Aug. 30
2008 Aug. 30
2009 July 1
2010 July 1
2011 July 1
2012 July 1
2013 July 1
2014 July 1
2015 July 1
2016 July 1
2017 July 1
2018 July 1
2019 July 1
2020 July 1
2021 July 1
2022 July 1
Regulated Outgoing call charges
Regulated data connection charges
Regulated SMS charges

Traffic flow
Cash flow

SMS TR

Domestic Network

Only apply to outgoing SMS
Incoming SMS are free

Visited Network

Retail

SMS Wholesale (regulated)

It must cover SMS TR & SMS Wholesale access

CNMC
COMISIÓN NACIONAL DE LOS MERCADOS Y LA COMPETENCIA
HOW ROAMING WORKS IN MVNOS

- Light MVNOs and resellers:
  - In general, they are using all the infrastructure of the hosting MNO including, both, network and billing (both postpaid and prepaid) systems.
  - Tariffs are supported by the hosting MNO.
  - They reach a commercial agreement with the hosting MNO where all prices and conditions for international roaming are included.
  - In general, no roaming agreements with other actors, just with the hosting MNO.
HOW ROAMING WORKS IN MVNOS

- Full MVNOs:
  - The situation may be more complex, as they have their own switching, signalling and billing systems.
  - Option 1) To use wholesale roaming services from the hosting MNO.
  - Option 2) To use wholesale roaming services from a roaming hub.
  - Option 3) Use wholesale services from other MNO. This is for example, the case for full MVNOs that are part of a large group having their own roaming agreements.

- Under any of the options full MVNOs apply a dual IMSI approach: they use an IMSI associated domestic traffic at home and a second IMSI (registered also in the SIM card) when travelling abroad.
3. WHOLESALE ACCESS (ART 3)
ART 3: WHOLESALE ROAMING ACCESS

- **(1) Direct roaming:** An EU operator (Orange) seeks a roaming agreement with any other EU operator (TeliaSonera) in a specific country (unidirectional agreements).

- **(2) Wholesale resale roaming:** An EU operator without international footprint (Simyo) asks for the provision of roaming in the whole EU to another EU operator (Orange) at regulated prices.
ART 3: WHOLESALE ROAMING ACCESS

- **1st July 2012**
  - MNOs shall meet all reasonable requests for wholesale roaming access
  - Refusal of request only on the basis of objective criteria
  - Access covers all network elements and associated facilities, relevant services, software and information systems, necessary for the provision of roaming services
  - Prices for the provisions laid down in Articles 7, 9 and 12 shall apply
  - For additional services operators are allowed to charge fair and reasonable prices

- **30th September 2012**
  - BEREC have published Guidelines after consulting stakeholders

- **1st January 2013**
  - Operators have to publish reference offer on their web-site taking into account BEREC Guidelines. In the meanwhile, art 3 regulation applies from July, 2012.
WHOLESALE ROAMING ACCESS AND MVNOS

- Wholesale resale access is especially designed for its use by MVNOs.
- The previous situation in the EU was that MVNOs had to apply retail caps, but there was no limitation for wholesale charges by MNOs.
  - Margin squeeze situations reported by MVNOs.
- Situation now:
  - In general, commercial agreements have not been updated to apply wholesale roaming access cap prices.
  - Some MVNOs have reported threads by MNOs on charging more for domestic prices if wholesale roaming access conditions are applied.
  - The problem on having one part of the agreement subjected to the regulation and other part not subjected.
  - Medium-long term: it is expected that wholesale roaming access will be applied for new agreements and it may be applied also when renewing existing ones.
4. SEPARATE SALE OF ROAMING (ARTS 4 AND 5)
SEPARATE SALE OF REGULATED ROAMING SERVICES: OBJECTIVES

- These articles introduce a new approach oriented to solve competition problems at the retail level: decoupling of the international roaming service provided in the EU and domestic services (July 2014).

- The idea is that consumers will be able to contract international roaming services provided in the EU with a different operator than the one that is supplying domestic services:
  - Consumers maintain their SIM Card and terminal
  - Two different contracts: domestic services (domestic provider) and roaming services (alternative roaming provider)
  - Roaming services are billed by the alternative roaming provider

- Competition from alternative roaming providers is supposed to lower prices for international roaming in the EU.
ART. 5: MODALITIES FOR DECOUPLING (SINGLE IMSI) (I)

- ARP acts as a MVNO specialized on roaming in the EU. MNOs act as host provider for ARPs.
- No need to change SIM card.
- New billing interfaces to be developed.
- Portability → Users may lose the ARP service (new user provision in the receipt operator).
ART. 5: MODALITIES FOR DECOUPLING (SINGLE IMSI) (II)

New interface
OCS interconnection (on IMSI basis)

Subscriber’s tariff definition
Control of Recharges

CDR: Call detail Record
OCS: Online Charging System
IMSI: International Mobile Subscriber Identity
ARP: Alternative Roaming Provider
ART. 5: MODALITIES FOR DECOUPLING (LBO)

- Local data services provided directly by the Visited Network and voice and SMS/MMS to be supplied by domestic provider.
- To be contracted in the moment (scratch cards, captive portals, activation SMS,...)
- The customer must select the desired network and change the APN to EUInternet (or any other agreed) manually or by means of a specialized app.
- There may arise problems related to network disconnections, dedicated services (blackberry mail or corporate VPN with specific APN) or restoration of home APN.
# Summary of obligations for decoupling methods (BEREC Opinion on Art.5)

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<tr>
<th>Decoupling method</th>
<th>Domestic mobile provider</th>
<th>Alternative roaming provider (ARP)</th>
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| **Local Break-out** | • Add the universal APN in their database  
  • Allow manual network selection  
  • Obligation to conclude a roaming agreements with LBO providers  
  • No barring or blocking of LBO providers (except for justified reasons) | • Customer has right to quit LBO roaming at any time  
  • Provide information on tariffs, terms and conditions  
  • Provide bill shock measures  
  • Obligation to inform customers how to restore APNs manually |
| **Single IMSI** | • Free of charge:  
  1) OCS interconnection (online charging system)  
  2) Customer provision  
  3) Support for bill shock measures  
  • Excluded: services that it does not have available itself  
  • Extra charges: Call termination  
  • Fair and reasonable: extra-EEA roaming | Not applicable |
ART. 4: SEPARATE SALE OF REGULATED ROAMING SERVICES

❑ **1st July 2014**

- Customers are entitled to contract all regulated services from an Alternative Roaming Provider (ARP)
- Domestic providers shall not prevent customers from accessing regulated services provided directly on a visited network (LBO)
- Switching to an ARP must be free of charge and shall be carried out without undue delay within the shortest possible period of time (not longer than 1 working day)
- Consumers must be informed on the possibility to opt out for an ARP
- Services not being decoupled shall be provided by domestic network at the same price and with the same quality as in traditional roaming.
All MVNOs are subjected to the decoupling obligation the same as MNOs (customers from MVNOs must also be able to contract separate sale of roaming).

This implies that they have also to provide decoupling interfaces for ARPs

- Light MVNOs/Resellers: need to contract interfaces implementation with hosting MNOs (reasonable prices).
- Full MVNOs: Need to develop in their own systems or contract it with a third party.

MVNOs claim that this a lot of burden is imposed by regulation on them regarding decoupling.

Full MVNOs are in a good position to act as a ARP.
Most interfaces for decoupling have been defined by stakeholders under the coordination of BEREC and request for these interfaces for supporting separate sale of roaming should start on January 2014 to be fully operative on July 2014.

New regulatory proposal from EC to be discussed in the Council and European Parliament:

- Operators may be exempted on decoupling measures if they gradually offer RLAH that should be completely applied on July 2016.
- Voluntary multilateral roaming agreements among operators to offer RLAH.
- The situation is uncertain as this may discourage potential ARPs to compete for the roaming market.
5. PRICE REGULATION
(ARTS 7 TO 13)
PRICE REGULATION: CAP PRICES

▪ Wholesale prices:
  - Wholesale cap price regulation is maintained for the next 10 years till the expiry of the regulation (June 2022).
  - Relevant reductions on wholesale prices for all services.
  - Still not cost-oriented, but very near to cost-orientated prices specially for outgoing voice.
  - Expected that will encourage competition from alternative providers and allow for significant reduction on retail prices (to be seen)

▪ Retail prices
  - New retail cap regulation for data services (eurotariff)
  - Cap prices for eurotariffs are to be maintained till June 2017 (5 years)
  - By default, cap price regulation will be lifted after June 2017 (review considered in June 2016)
  - Cap prices in retail are reduced, but still large margin to encourage competition among players.
Introduction of the decoupling measure

Review

Competition from ARPs expected to discipline retail prices
PRICE REGULATION: INCOMING CALLS (EUROTARIFF)

Introduction of the decoupling measure
Review
Competition from ARPs expected to discipline retail prices
PRICE REGULATION: SMS (EUROTARIFF)

Introduction of the decoupling measure

Review

Competition from ARPs expected to discipline retail prices
PRICE REGULATION: DATA SERVICES (EUROTARIFF)

- Retail charges in a per kByte basis
- Eurotariff provisions as already applied to voice and SMS
- MMS may be charged per unit
PRICE REGULATION: RETAIL CHARGES FOR REGULATED ROAMING CALLS

- Roaming providers must offer their customers a euro-voice tariff. This is the default tariff and consumers must explicitly opt-out for an alternative tariff. This tariff may be combined with any retail tariff.

- Roaming providers shall not levy any charge for the receipt of a roaming voicemail message.

- Charging intervals allowed:
  - Calls made: 30/1
  - Calls received: 1/1

- Switch between tariffs shall be made within one working day of receipt of the request, shall be free of charge and shall not entail conditions or restrictions pertaining to other elements of subscriptions.

Same as in Roaming II
PRICE REGULATION: RETAIL CHARGES FOR REGULATED ROAMING SMS

- Roaming providers must offer their customers a euro-SMS tariff. This is the default tariff and consumers must explicitly opt-out for an alternative tariff. This tariff may be combined with any retail tariff.

- Roaming providers shall not levy any charge for the receipt of a regulated roaming SMS message.

- Switch shall be made within one working day of receipt of the request, shall be free of charge and shall not entail conditions or restrictions pertaining to other elements of subscriptions.

Same as in Roaming II
Roaming providers offer their customers a euro-data tariff. This is the default tariff and consumers must explicitly opt-out for an alternative tariff. This tariff may be combined with any retail tariff.

Billing interval:
- per-kilobyte
- except MMS: per-unit basis

Switch shall be made within one working day of receipt of the request, shall be free of charge and shall not entail conditions or restrictions pertaining to other elements of subscriptions.
6. TRANSPARENCY AND BILL-SHOCK MEASURES (ARTS 14 & 15)
TRANSPARENCY AND BILLSHOCK MEASURES

- Without undue delay roaming provider shall supply customers when roaming in another country with basic personalized pricing information on the roaming charges.
- Personalized pricing information shall also be provided to blind or partially-sighted customers.
- When roaming in Member States providers also have to include a free-of-charge number for obtaining more detailed information and information about the European emergency number 112.
- Customers shall be able to notice free of charge that they do not require this service.
- Roaming providers shall inform customers in reasonable intervals about the availability of Eurotariffs as well as information on how to avoid inadvertent roaming.

Same as in Roaming II
TRANSPARENCY AND BILLSHOCK MEASURES

- Roaming providers must inform customers about the financial consequences when using data roaming services.

- Roaming providers shall inform customers either by SMS message, e-mail or pop-up window that they use roaming services and of the charges applied for the provision of roaming services.

- Customers shall be able to notify free of charge that he does not require this service.

Same as in Roaming II
TRANSPARENCY AND BILLSHOCK MEASURES

- **Cut-off-limit (art 15)**
  - Operators grant their customers a facility which provides information on the accumulated consumption and guarantees that the accumulated expenditure over a specified period of use, excl MMS billed on a per-unit basis, does not exceed the limit (default 50 Euros)
  - When data roaming services have reached 80% of the agreed limit, operators have to notify the customer either per SMS/Pop-up or E-Mail
  - When the limit would be exceeded a notification shall be sent to the customer’s device. It shall indicate the procedure to be followed if the customer wishes to continue using data roaming services and the costs associated with each unit consumed. If the customer does not respond, the provider shall immediately cease to provide the service
  - Exceptions: M2M services
  - Customers shall be able to notice free of charge that he does not require this service
TRANSPARENCY AND BILLSHOCK MEASURES

- **Transparency**
  - Obligation on SMS sending informing about prices when entering on a visited country is maintained
  - Operators must inform customers on how to avoid inadverted roaming.

- **Billshock measure and cut-off limit**
  - The billshock measure and cut-off limit for data services provided in the EU and introduced in the 2009 regulation (roaming II) is maintained.
  - **New in Roaming III**: Billshock measure and cut-off limit extended to the rest of the world (exception when the visited network outside the EU cannot monitor customer’s usage in real time, in this case, SMS to be sent to the customer notifying that the billshock measure and cut-off limit is not available)
7. SUPERVISION, ENFORCEMENT AND DISPUTE RESOLUTION (ARTS 16, 17 & 18)
SUPERVISION, ENFORCEMENT AND DISPUTES RESOLUTION

- **Supervision and enforcement**
  - NRAs to monitor compliance with the regulation in their territory.
  - NRAs shall monitor developments in charges, inadvertent roaming and steering practices, taking appropriate measures.
  - NRAs may intervene in their own initiative to ensure compliance with the regulation.

- **Penalties**
  - MSs shall lay down rules on penalties applicable to infringements of the regulation (to be notified to the EC on 30 June 2013 at the latest)

- **Dispute resolution**
  - Dispute resolution procedures laid down in arts 20 and 21 of the framework directive shall apply.
  - MSs shall ensure that the out-of-court dispute resolution procedures laid down in art 34 of the USD are available for unresolved disputes involving consumer and concerning an issue in the scope of the roaming regulation.
8. REVIEW (ART 19)
ISSUES TO BE ANALYSED

- Competition on retail
- Competition on wholesale
- QoS and prices
- Consumer benefits
- Availability of offers
- Competitive situation of small actors
- Implementation of structural measures

BEREC benchmarking on prices, competition, etc.

Review (June 2016)
European Commission

Enough competition and prices approaching to national tariffs?

YES

No changes in regulation

NO

Proposal to EP and Council to:
- Lay down additional structural measures
- Modify existing structural measure
- Revise duration and level of wholesale and/or retail caps
- Any other requirement as RLAH

Additional reports monitoring Evolution each two years from 2018