

# **Study on pan-European market for premium rate services for the European Commission**

**Public workshop  
Brussels, June 8, 2005**

## Introduction

### 2 objectives:

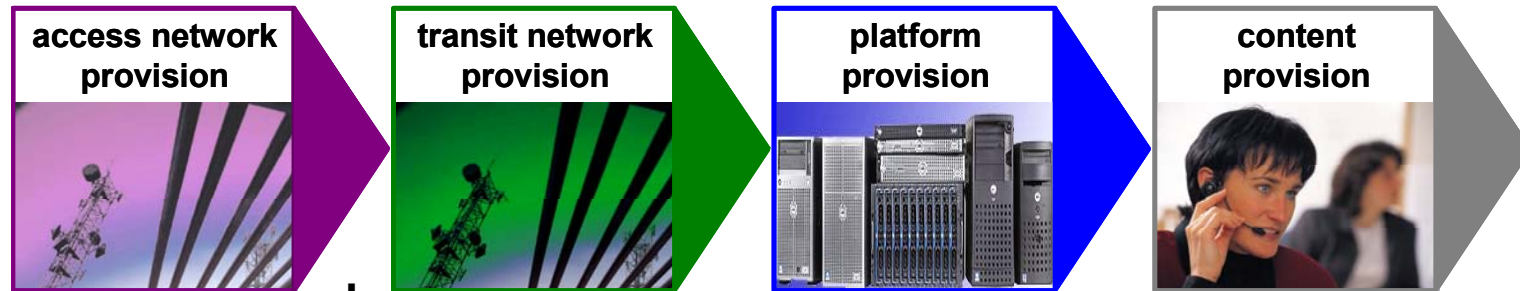
- **Recommendations for a pan-European PRS market**
  - **main part of this workshop**
- **Atlas of EU implementation practices**
  - **annex to the main report**
  - **background information for the recommendations**

## This presentation will cover:

- **Basic concepts**
- **Market potential**
- **Basic scenarios for pan-European markets**
- **Evaluation of scenarios**
  
- **EU regulatory frameworks**
- **National PRS environments**
  
- **Building blocks:**
  - **Fraud prevention and consumer protection**
  - **Commercial aspects**
- **Summary of recommendations**

# Basic concepts

## Value chain for the provision of PRS



### Access network provision

- connect the end user to a telco network (“last mile”)

### Transit network provision

- conveyance of calls between different telco networks

### Platform provision

- technical operation of a PRS platform
- provision of intelligent network features and audiotex platforms
- setting up of access numbers for PRS

### Content provision

- creation and packaging of content

# Market potential

## Examples of cross-border PRS (1)

### Outsourcing of platform functionalities

- **Example: service provider in UK to a platform provider in Germany**
- **National PRS calls in UK**
- **Not visible to end users in UK**
- **Mainly related to wholesale services**

### Hosting of content on platforms abroad

- **Example: platform provider in Ireland, content hosting in UK**
- **National PRS calls in Ireland**
- **Number translation to UK number by intermediary in Ireland**
- **Not visible to end users in Ireland**

## Examples of cross-border PRS (2)

### Offering of directory enquiry services in several countries

- **Example: German service provider offers subscriber data from Germany and Austria in both countries**
- **Same national telephone number in both countries**
- **Single service platform and single call centre (in Germany)**
- **Location of service platform and call centre not visible to end users in Austria**

### Cross-border participation in interactive game show using PRS

- **Example: German TV broadcaster addressing customers in Austria and Switzerland, too**
- **Country-specific PRS numbers and prices**
- **National regulations are applied**
- **Single service platform in Germany**
- **Foreign intermediaries pass domestic calls directly to the service platform**
- **Location of service platform not visible to end users**

## Content for pan-EU PRS

- **Directory enquiry services**
- **News broadcasting**
- **Single point of contact for customer care, particularly for multi-national companies**
- **Support hotlines for technical trouble or breakdown, particularly for multi-national companies**
- **Information hotlines, particularly for travel purposes and pan-European events**
- **Multi-country advertising in the fast moving consumer goods industry**
- **Fund-raising campaigns and donations**
- **Interactive television and televoting**
- **Gaming**
- **Adult services**
- **...**

## Perspectives of players regarding pan-EU PRS (1)

### Content providers

- **Two strategic options**
  - **Extend existing service portfolio by addressing new customers abroad**
  - **Adapt existing content formats or create new formats for use abroad**
- **Economies of scale and scope**
- **Preference for uniform access number to enable efficient marketing**
- **Preference for choice between unique end user price and country-specific price differentiation; the higher the value content the more likely is preference for price differentiation**

## Perspectives of players regarding pan-EU PRS (2)

### Platform providers

- Economies of scale
- Choice regarding location in Europe
- Potential new business activity: “agent” of platform providers in other countries

### Transit network providers

- Economies of scale, i.e. additional traffic at low marginal cost
- Opportunities especially for providers of trans-national traffic exchange

### Access network provider

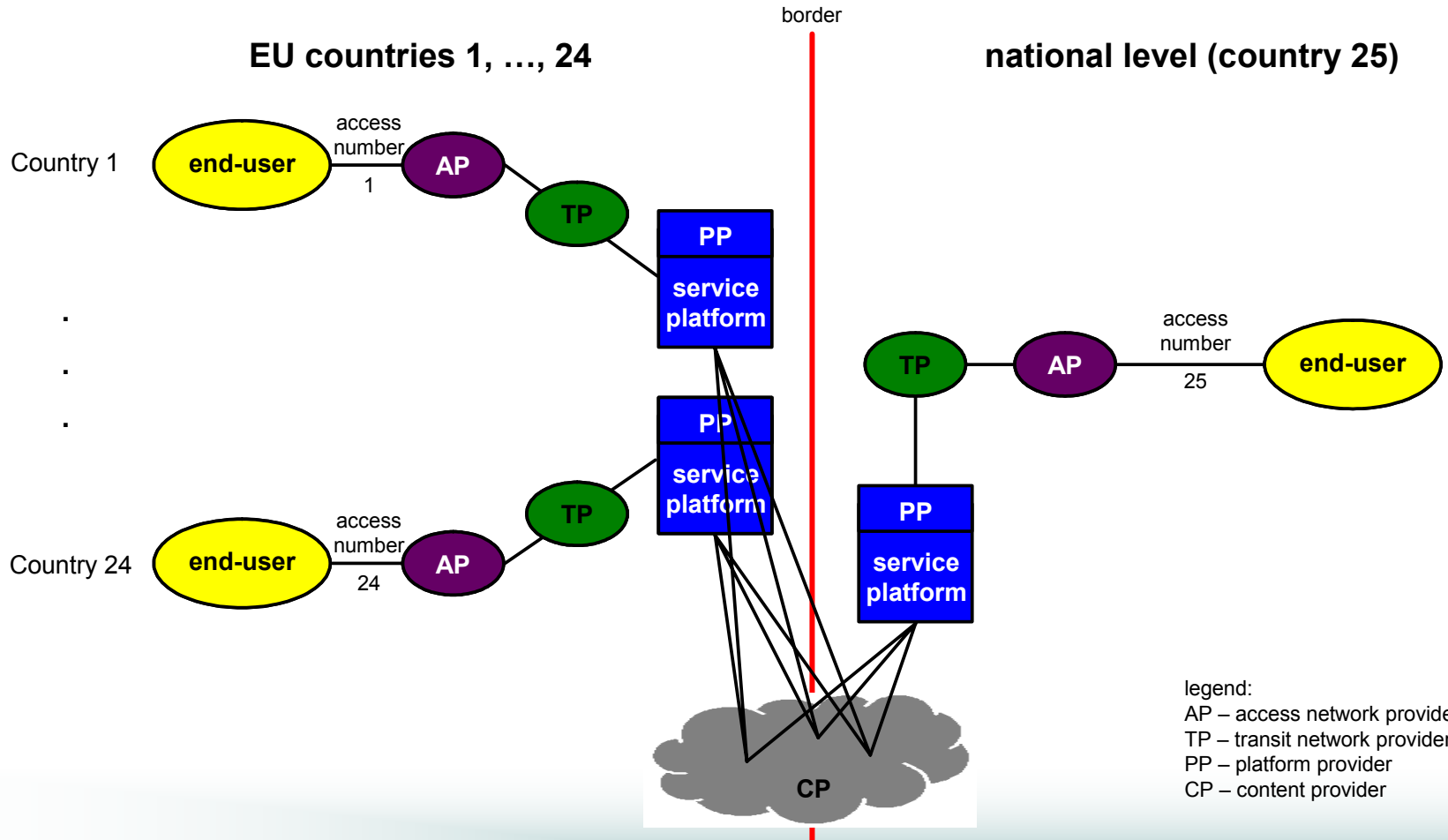
- Opportunity to enlarge end user product portfolio
- Product differentiation (services tailored to specific customer groups)
- Billing, marketing etc. as additional wholesale services

## Actual PRS-market volume and pan-EU PRS market potential

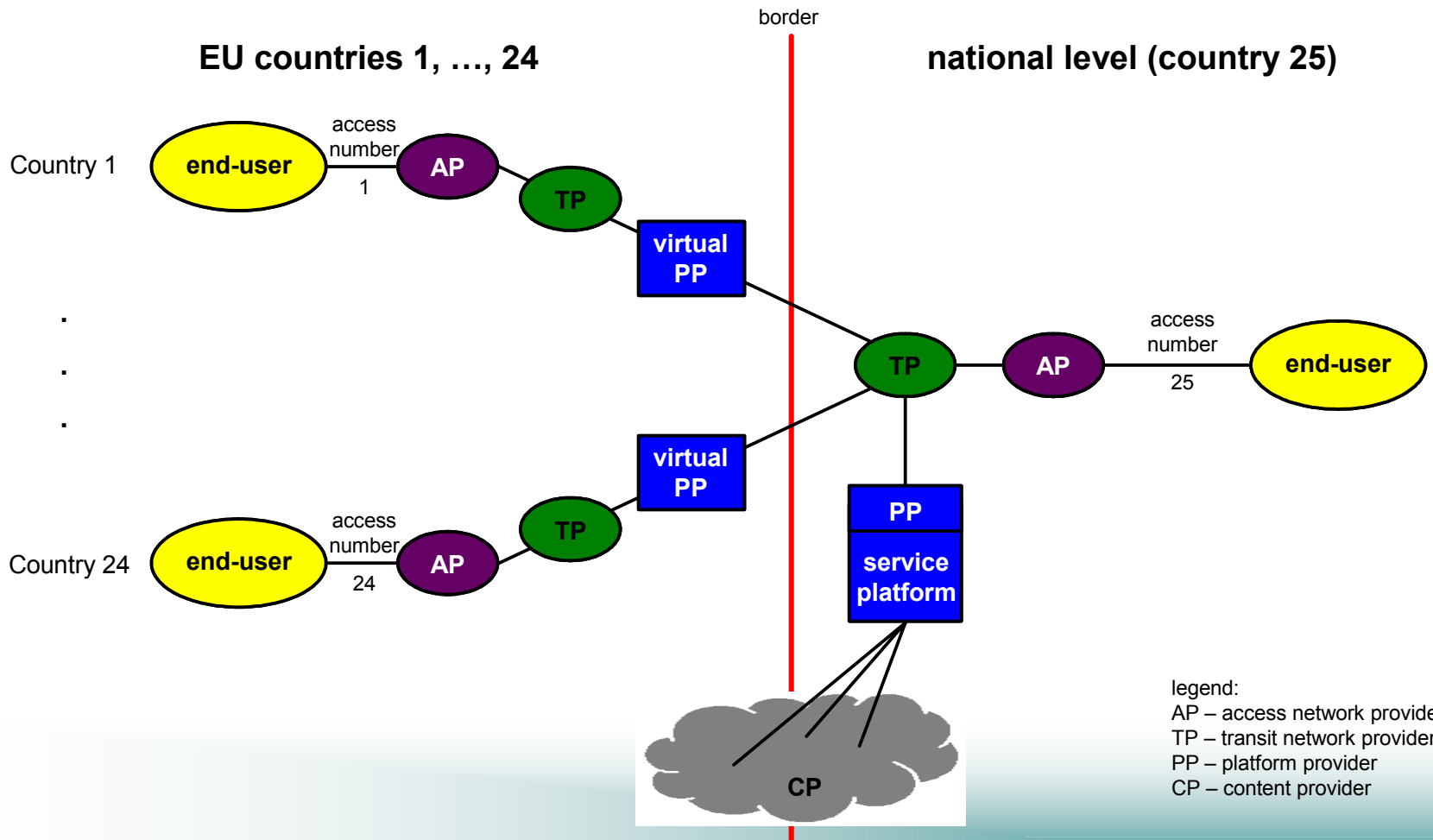
- **Lack of reliable and consistent empirical information on PRS revenues in Europe**
- **Share of PRS revenues in the total fixed voice telephony market varies considerably across Europe**
  - **up to 15% (UK, F)**
  - **about 3% (E, D)**
  - **on average: 5 - 7%**
- **Estimated aggregated PRS market volume (2004): 4.5 - 6.5 bill. Euro**
- **Estimated market potential for pan-EU PRS in the short to medium term: 0.5 - 1 bill. Euro**

## Basic scenarios

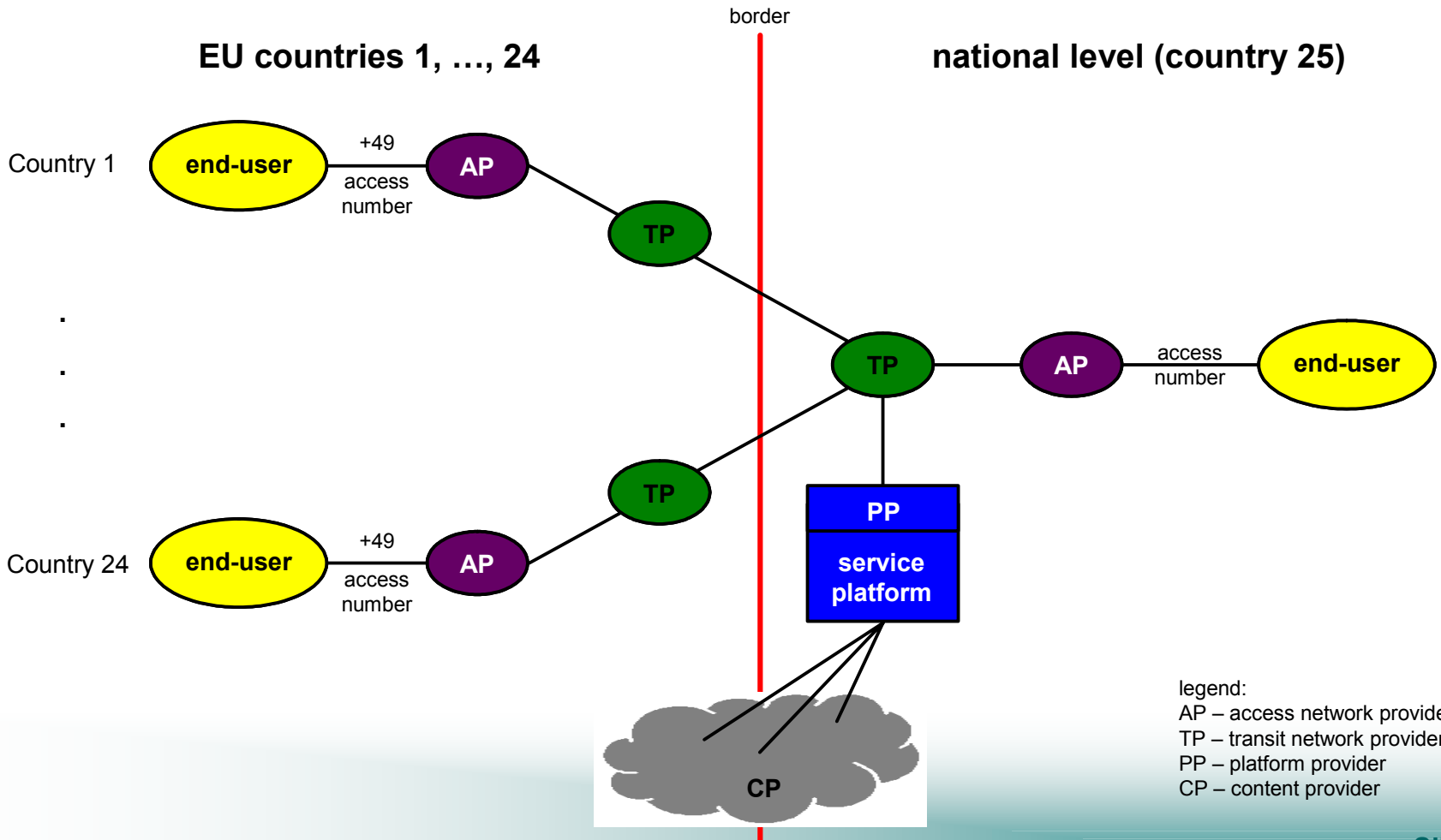
# Scenario A: Content provider offers its content on 25 country-specific PRS platforms, 25 country-specific access numbers



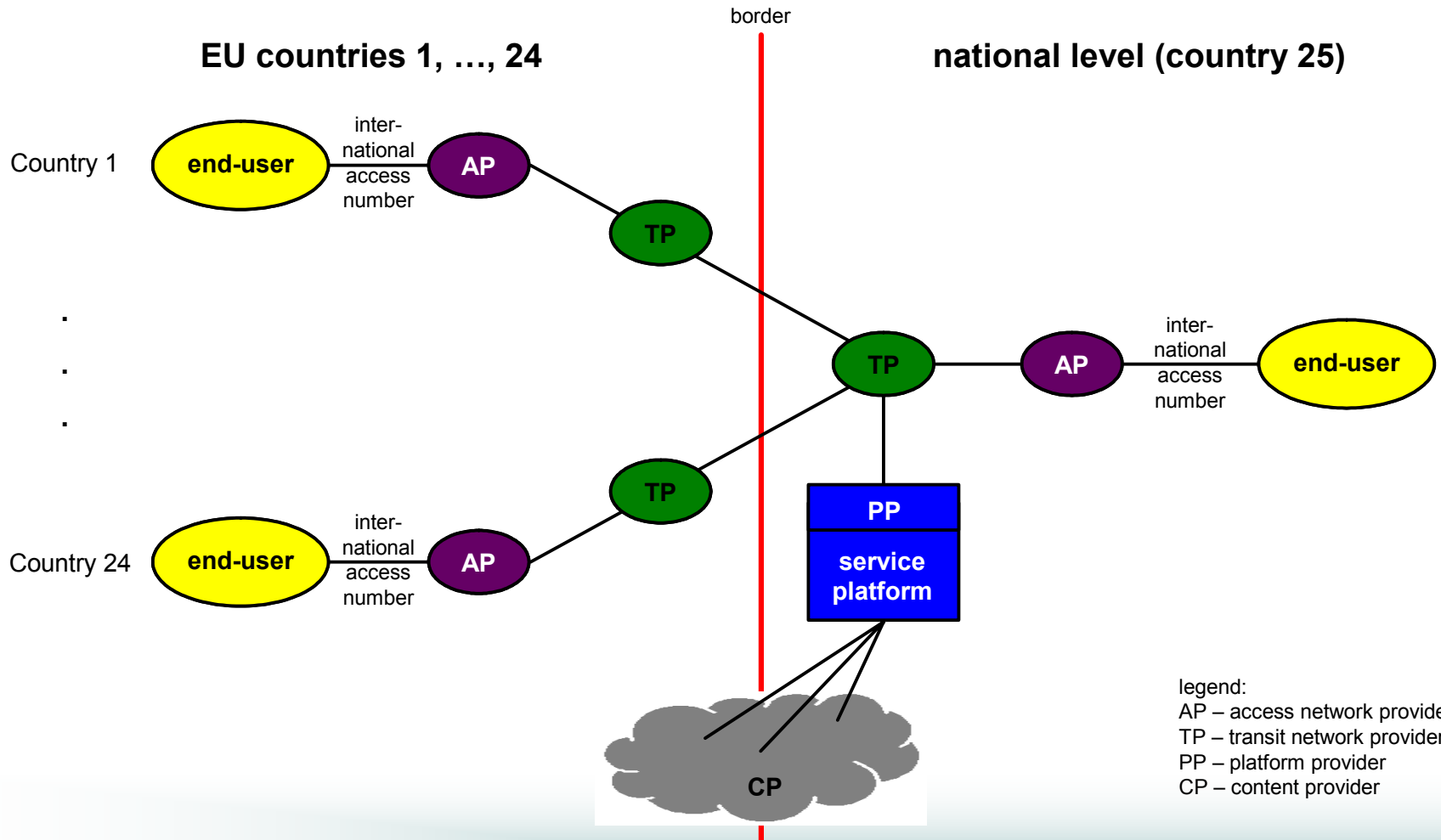
**Scenario B: Content provider offers its content on only one PRS platform; 25 country-specific access numbers; virtual service platforms in 24 countries, collecting the national calls and conveying them to the actual physical platform**



**Scenario C: Content provider offers its content on only one PRS platform, single access number of a specific country, conveyance of calls from 24 countries to platform via E.164 country code of platform provider's home country**



# Scenario D: Content provider offers its content on only one PRS platform, uniform pan-EU access number



## Evaluation of scenarios

## Evaluation of scenarios

**Scenario A - 25 national numbers – 25 platforms**

**Scenario B - 25 national numbers – 1 platform**

**Scenario C - 1 national number – 1 platform**

**Scenario D - 1 supernational number – 1 platform**

	Scenario A and B	Scenario C and D
Regulatory differences	No regulatory adjustment needed	Significant regulatory effort
Access and transit providers	Fits well with existing operational environment	Significant commercial effort
Platform providers	<ul style="list-style-type: none"> <li>- agents in all countries</li> <li>- adaptation to each national regime</li> </ul>	<ul style="list-style-type: none"> <li>- direct marketing without agents</li> <li>- single number / single price across the EU</li> </ul>
Content providers	- facilitates market differentiation	- facilitates European advertising

## Evaluation of scenarios

**Scenario A - 25 national numbers – 25 platforms**

**Scenario B - 25 national numbers – 1 platform**

	Scenario A	Scenario B
Regulatory differences	None	None
Access and transit providers	None	None
Platform providers	- more duplication (25 platforms)	- less duplication (1 platform – 24 agents)
Content providers	- potentially higher cost	- potentially lower cost

**Conclusion: a preference for scenario B**

## Evaluation of scenarios

**Scenario C - 1 national number – 1 platform**

**Scenario D - 1 supernatural number – 1 platform**

	Scenario C	Scenario D
Regulatory differences	Call barring difficult Enabling regulation would interact with national regimes	Call barring achievable New enabling regulation possible without changing national regimes
Access and transit providers	Price and VAT communication between platform provider and access provider more difficult	Price and VAT communication between platform provider and access provider more achievable
Platform providers	Price and VAT communication between platform provider and access provider more difficult	Price and VAT communication between platform provider and access provider more achievable
Content providers	More country visibility	Less country visibility

**Conclusion: a preference for scenario D**

# EU regulatory frameworks with relevance for PRS

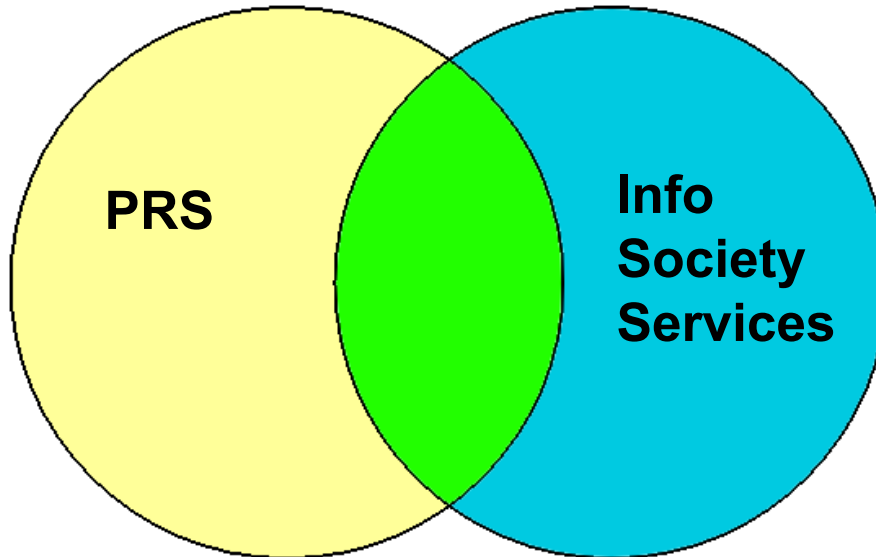
## Electronic communications

### **NRF does not apply to content – how does it apply to PRS?**

- **Definition of relevant markets**
  - **Call origination is relevant for a national market, but does not include international transit necessary for a functioning pan-European market**
- **Interconnection**
  - **Cross border access to non-geographic numbers**
  - **Otherwise, no particular guidance**
- **Numbering plans**
  - **European Telephony Numbering Space (ETNS)**
    - **Not used for PRS, little use otherwise**
  - **Price categories**
  - **Content categories?**
- **Third party billing**
  - **not included**
- **Consumer protection**
  - **Call barring required by USO providers**

## Electronic Commerce Directive

**Applies to Information Society Services**



**Applies (probably) to some, but not to all PRS**

## Electronic Commerce Directive

### Advantages for PRS

- Country of origin principle
- Tools to combat fraud
- Consumer protection - information requirements
- Limitation of liability for hosting services

### Drawbacks for PRS

- Consumer contracts excepted from country of origin
- Does not apply to gambling
- Unclear if electronic contracting rules apply to PRS

### Recommendation

- Country of origin should apply to all PRS
- Common information requirements for pan-EU PRS
- Limitation of liability for network operators clearly defined

## Distance Selling Directive

### Applies to PRS

- Consumer protection requirements

### Recommendation

- Clarification of how the directive shall be applied to PRS

## Unfair Commercial Practices Directive

### Applies to PRS

- Defines unfair commercial practices in general
- Facilitates handling of defined practices

### Recommendation:

**Establish a list of unfair practices relevant to PRS**

## Value added tax

### **Main rules for international provision of PRS:**

- **Business customers: VAT to be paid in country of user**
- **Consumers: VAT to be paid in country of supplier**
- **Many derogations and special cases**

**Current rules are under revision – proposal that VAT shall be paid in country of user also for consumers**

### **Recommendation:**

- **Clarification of VAT rules as they apply to international PRS**
- **Further standardisation work may be required for communication of VAT information for online billing**

# National PRS environments

## Common characteristics

**Very few!**

**PRS is a non-harmonised service**

**Significant national differences**

## Institutional structure

### **Relatively few countries have clearly defined PRS authorities**

- **some rely on the NRA for electronic communications**
- **some rely on normal consumer protection organisations or ministries**
- **responsibility may be spread among several bodies**

### **Complaint procedures not always defined**

- **Often use of generalised procedures for telecom complaints or consumer complaints**
- **Different procedures or bodies for different types of complaints in the same country**

### **Powers of sanction is sometimes missing**

- **in some countries court action is necessary in order to fine an operator for fraudulent activity**
- **stopping fraudulent activity may take months**
- **not always clear what is fraudulent activity**

## Interconnection – Termination vs. origination

### Call termination

- Implies a relationship between user and access provider
- Platform provider is “sub-contractor” to access provider
- Access provider (normally) bills for himself

### Call origination

- Implies a relationship between user and platform provider
- Access provider is “sub-contractor” to platform provider
- Access provider (normally) does third party billing
  - Under commercial arrangement, or
  - Under regulatory obligation
    - with or without bad debt responsibility

App. half the countries use call origination

The other half use call termination

A few use both

## Online vs. offline billing

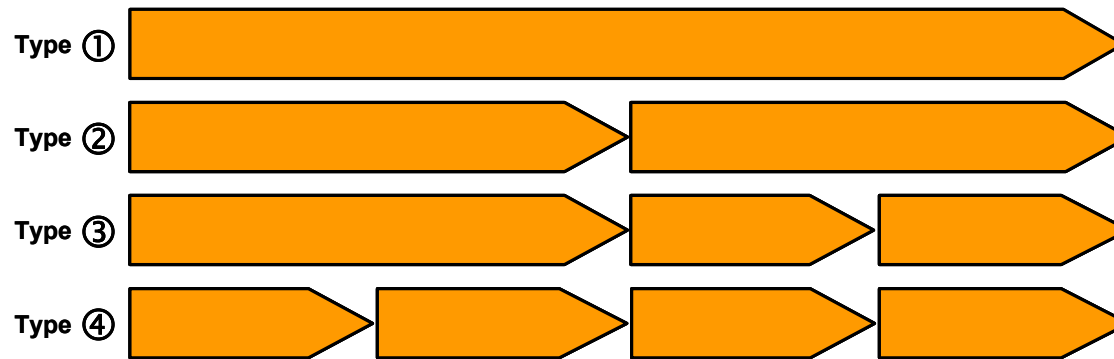
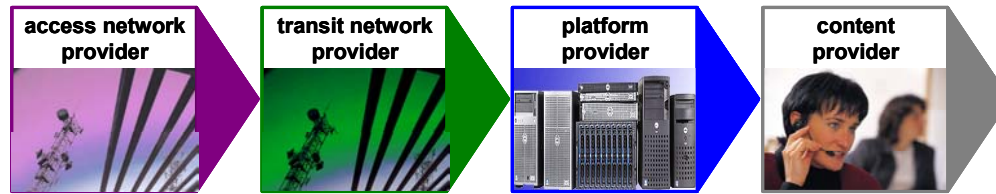
**All countries use online billing**

**Germany, in addition, uses offline billing**

**Important, because:**

- **conceptually, it enables billing for PRS separate from the telephone bill**
- **it raises a requirement of the provision of customer information by the access provider to the platform provider to enable billing**

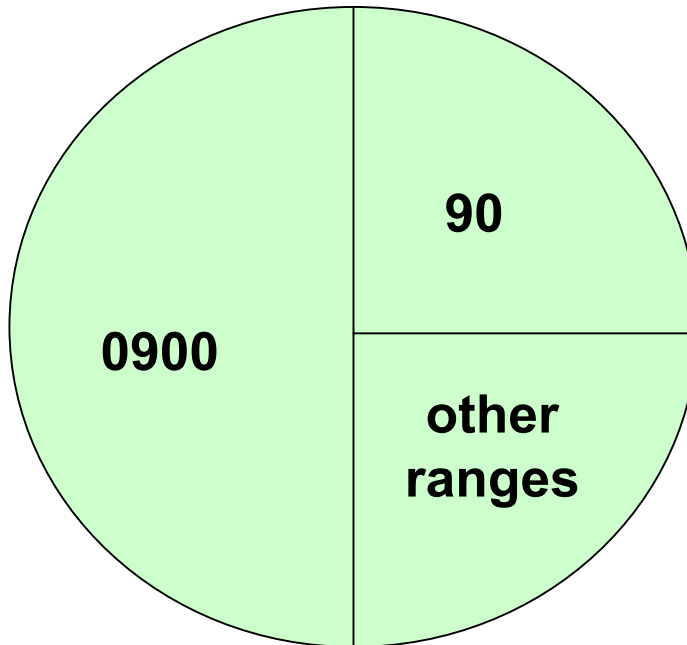
# Value chains



**All four types are found across the EU**

- Different national patterns
- Some types are normal in some countries, but not found in others

## PRS numbers in national numbering plan



**No commonality in numbering plans for different PRS categories**

**Implications for ability to implement call barring**

## National content regulations

**In many countries PRS content is essentially unregulated  
Some countries have specific restrictions, in particular:**

- **adult content**
- **gambling**
- **services aimed at children**

**A few countries require prior authorisation:**

- **live services**
- **expensive services**
- **competitions**
- **adult content**
- **etc.**

**A significant number of countries have no price regulation for PRS**

**Other countries:**

- **have regulated charge bands with**
  - **a specific price**
  - **a price range**
  - **a maximum price per minute and/or total cost**

**or**

- **maximum price per minute and/or total cost**

## **Building blocks – Consumer protection and fraud**

- **Fraud is a significant problem in some countries**
- **A small or non-existent issue in other countries**
- **An international PRS market will attract fraudulent operators to the countries with the weakest PRS regulators in terms of:**
  - **monitoring capability;**
  - **powers of sanction;**
  - **ability for prompt action**

## Fraud prevention

### Recommendations affecting regulators:

- **Designation of PRS authorities in all countries**
- **Minimum requirements for monitoring and sanctions:**
  - **Lower requirements for “user countries”**
  - **Higher requirements for “supplier countries”**
- **Catalogue of fraudulent practices**
- **Procedures for cross-border complaint handling**

### Recommendations affecting operators:

- **Code of conduct for pan-EU PRS**
- **Payment freezing**
- **(Non)-liability for cooperating platform providers**

## Consumer protection

### Consumer should have information on:

- price
- content
- content provider

### Recommendations:

- Clarification of information requirements applicable to PRS
- Call barring should be available for international PRS

## Country of origin principle

### Means that:

- Regulations of supplier country apply
- User country can block access under defined conditions

### Applies to:

- broadcasting services
- information society services
- PRS, if they are information society services

### Recommendations:

- Country of origin principle should apply to pan-EU PRS
- Procedures for blocking access, in particular in case of fraud

## Call barring arrangements

**Call barring is offered in all countries**

- **Opt-out solutions are available in all countries**
- **A few countries require opt-in for certain PRS categories**

**Differences in implementation:**

- **USO operator vs. all operators**
- **granularity of call barring – all PRS vs. subset of PRS**

## **Building blocks – commercial aspects**

## Challenges regarding development of PRS content

### Content protected by intellectual property rights

- Example: music
- Secure all (copyright) authorisations for a pan-EU offer ...
- ... in view of collecting societies on a national basis

### Sports rights, mostly owned by sporting federations

- Usually long term exclusive agreements for delivery

### Pan-EU directory inquiry services

- No fundamental lack of access to relevant subscriber data ...
- ... but discrimination regarding terms and conditions for access
- No common understanding of „cost orientation“ of prices

### Recommendation

- Investigation of fulfilment of Universal Service Directive Article 5 with respect to directory inquiry services

## Price issues

### Different pricing rules for PRS across the Member States

- Number ranges with pre-determined prices as well as ...
- ... flexible pricing arrangements or no regulation on pricing

### Value chain for national PRS provision and pricing

- Decision about prices mostly by content provider in combination with platform provider
- Need for price information by access provider in order to calculate end user fee

### Recommendations regarding pan-EU PRS

- „Light“ ex-ante regulation for pricing
- Allow content provider in combination with platform provider to determine the end user price
- Link price information to pan-EU PRS numbering plan
- Consideration of an “International Advice of Charge“

## Interconnection

### **NRF no basis for ex-ante requirements for pan-EU PRS**

- **Cross-border interconnection for PRS not covered in the definitions of call origination and call termination**
- **Not suited for a new and innovative market like pan-EU PRS**
- **No legal foundation for third party billing of content**

### **Complexity of provision of pan-EU PRS**

- **Bilateral agreements between all of the players involved hardly possible**
- **“Hubbing provider” in each country similar to international calls in the PSTN**

### **Recommendations**

- **Unbundling between interconnection for conveyance and commercial agreements for content payment**
- **Make pan-EU PRS eligible for established interconnection regimes for conveyance**
- **Commercial freedom for agreements on content revenue sharing**

## Billing and collection

### Additional payment flow as a characteristic of PRS

- Calculation and communication of the end user fee
- Bad debt management indispensable
- Need for allocating the billing cost on the value chain

### PRS in the context of current market analysis

- No vital role, neither for retail nor for wholesale markets
- Retaining of national obligations for third party billing unclear

### Recommendations

- Rely on online-billing in the initial phase of market development, no discrimination of offline-billing
- Application and adaptation of existing billing regulations for PRS
- Examination of including PRS specific markets, e.g. third party billing, in the set of relevant markets

## Step-by-step market realisation

### Countries allowing the establishment of pan-EU PRS platforms ("Group 1")

- Decision by the Member State to fulfil requirements for allocating pan-EU PRS numbers to platform providers
  - Oversight of pan-EU PRS
  - Power to apply sanctions
  - Power to close down PRS in case of fraud

### Countries allowing customers to access pan-EU PRS ("Group 2")

- Need for Member State to fulfil minimum requirements for consumer protection in order to allow access to pan-EU PRS

### Overcoming the chicken and egg challenge

- Pragmatic approach for implementing pan-EU PRS
- Commercial incentives in the sense of first mover advantages

## Summary of recommendations

## Summary of recommendations (1)

### **Pan-EU PRS regulations – general principles**

- **Clarification of EU enabling provisions**
- **Country of origin principle**

### **PRS authorities**

- **Assignment of PRS authority within a Member State**
- **Minimum set of responsibilities in “Group 2”**
- **Broader set of responsibilities in “Group 1”**
- **Catalogue of sanctions**

### **Pan-EU PRS numbering**

- **Establish a pan-EU numbering plan**
- **Link price information to the pan-EU PRS numbering plan**
- **Acceptance of a code of conduct as prerequisite**

## Summary of recommendations (2)

### Consumer protection/consumer confidence

- Clarification of information requirements
- Call barring
- Consumer confidence building

### Fraud prevention/actions against fraud

- Catalogue of unfair practices
- Catalogue of sanctions
- Liability of different functions of the value chain
- Communication of identification data
- Power to close down fraudulent PRS
- Payment freezing

### Third party billing

- Assessment whether a relevant market in the context of the NRF

## Summary of recommendations (3)

### Commercial aspects

- Price aspects
- Interconnection regulations
- Billing regulations

### Content stimulation

- Non-discriminatory access to subscriber databases
- PRS related sales promotion services

### Criteria for the allocation of pan-EU PRS

- Step-by-step market realisation
- Non-discriminatory access to numbering resources

### Standardisation

- “International Advice of Charge”
- Applicability of VAT