

Urban Access Restrictions (ARS)

TREN/A4/103-2/2009

Introduction to the study
Summary of the State-of-the-Art

Brussels, 28th September 2010

This presentation

- Outline of the study
 - ❑ Background and objectives
 - ❑ Work plan and Task description
 - ❑ Outcomes and deliverables
 - ❑ Timeline
- State of the Art: results
 - ❑ The facts finding phase
 - ❑ Information
 - ❑ Impact assessment
 - ❑ Legal assessment

Background and objectives

- ARS concept is spreading fast

BUT

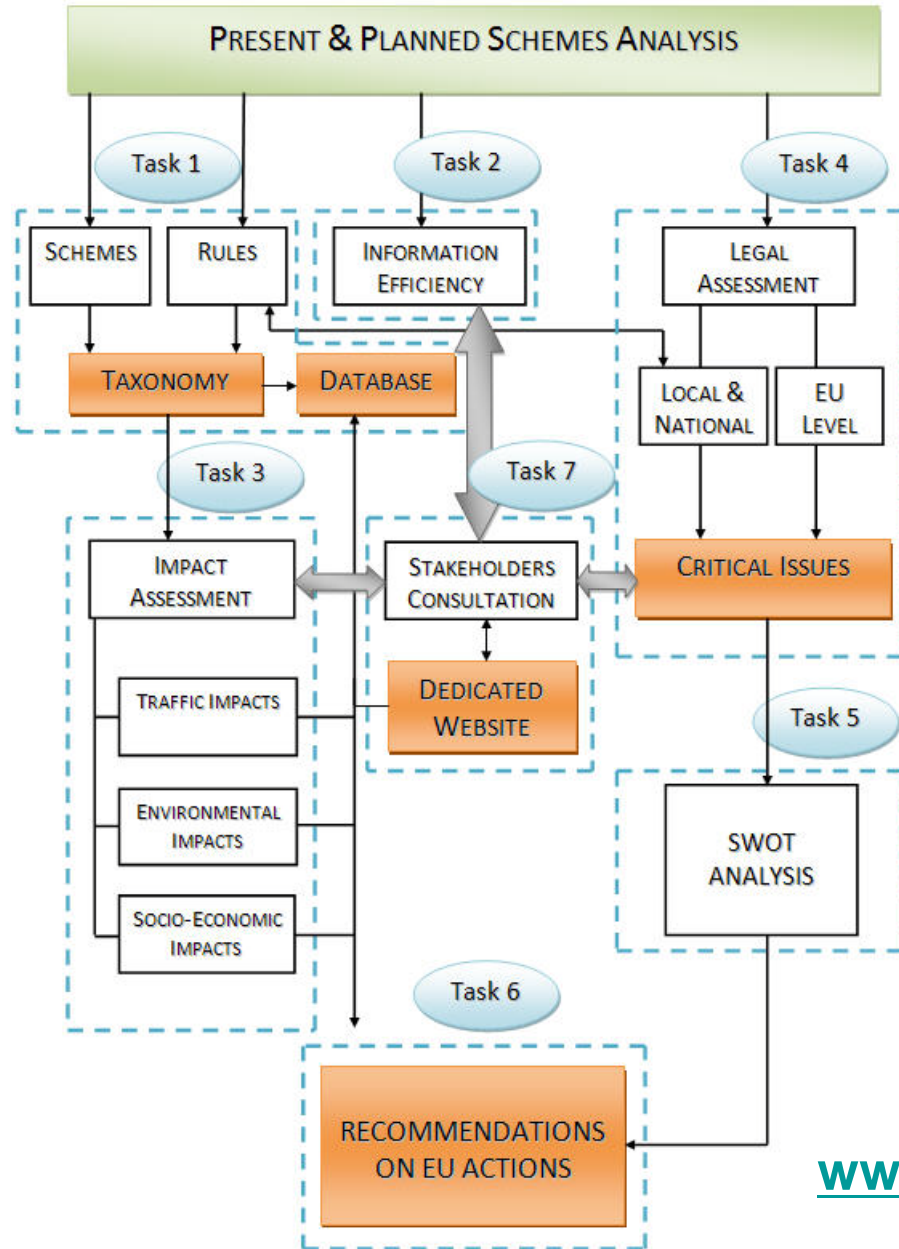
- High variety of heterogeneous approaches:
 - ☐ *aims* (air quality, efficiency, revenue generation, but also economic growth, health, safety, equity)
 - ☐ *type of restriction* (passengers Vs freight, vehicle technology, time slots)
 - ☐ *instruments* (regulatory/prescriptive, market based, information based)
 - ☐ *technologies* (ANPR, DSRC, GNSS/CN)

Background and objectives (2)

- Drawbacks (of heterogeneity):
 - ☐ High costs (no standardized approach)
 - ☐ Undesired discrimination



- Way forward
 - ☐ Facilitation of exchange of best practices
 - ☐ Promoting shared approaches and technological options (technical/organizational level)
 - ☐ Harmonization?



Workplan and Tasks

www.accessrestriction.eu

Timeline

- Inception Report: November 2009
- Interim Report: June 2010 – revised version July 2010
- Draft Final Report: November 2010
- Final Report: December 2010

The Interim Report

- Illustrates the results of the fact finding phase of the study
 - ❑ documenting existing ARS (including schemes that have been planned but have not, or not yet, been implemented)
 - ❑ organizing and interpreting the available information
 - ❑ setting the basis for possible generalization and transferability

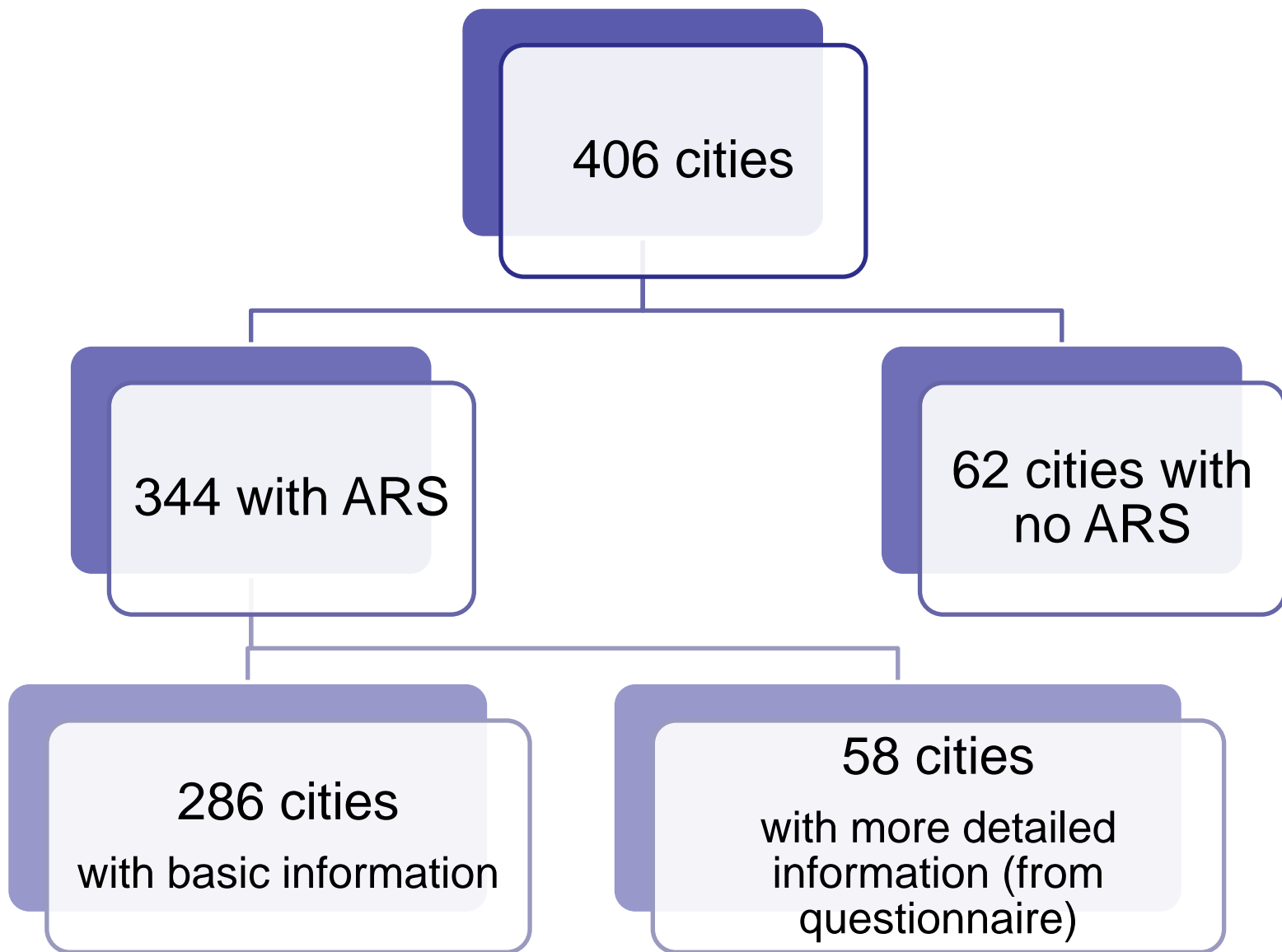
Access Restriction Schemes: Information Gathering

A list of 406 EU cities has been established based on:

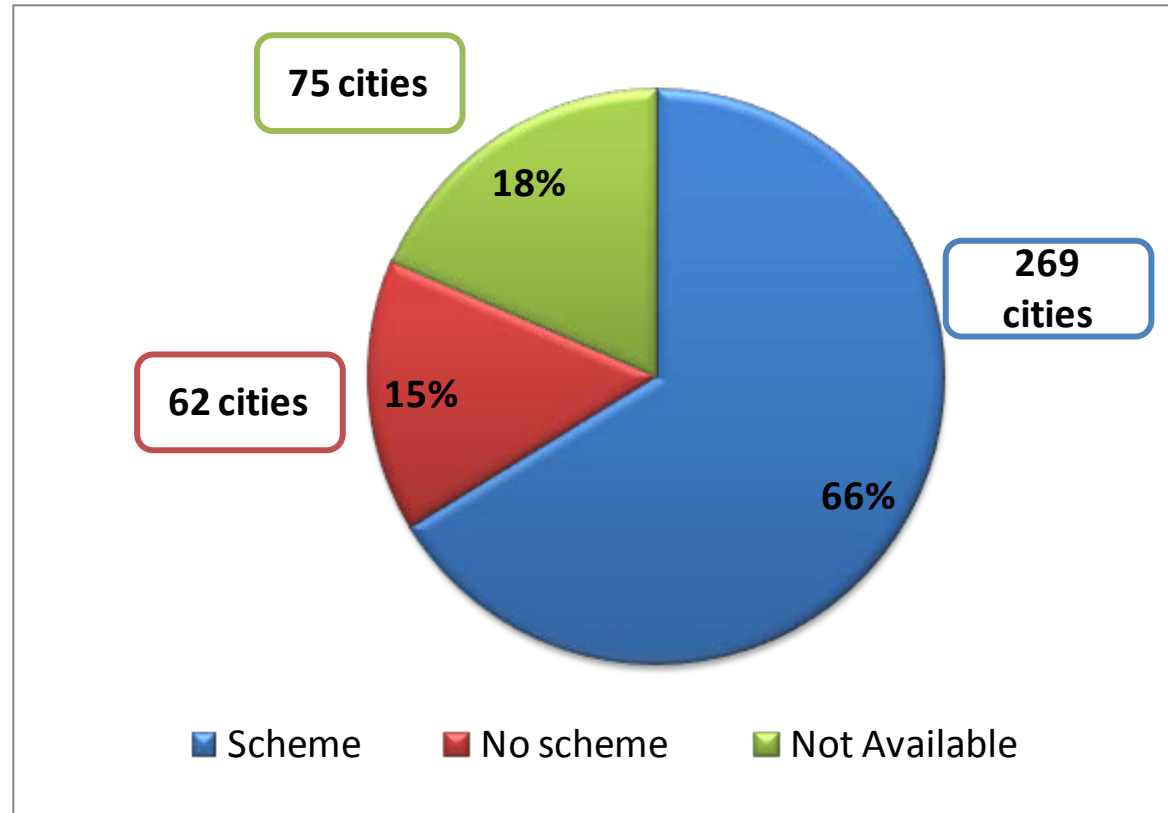
- ✓ Inputs from POLIS, EUROCITIES and CCRE networks
- ✓ CIVITAS and CURACAO European projects' list of referenced partners
- ✓ personal contacts and past experiences
- ✓ other relevant sources (e.g. workshops proceedings, EU projects final reports, factsheets, websites, literature)

From the information collected we know that:

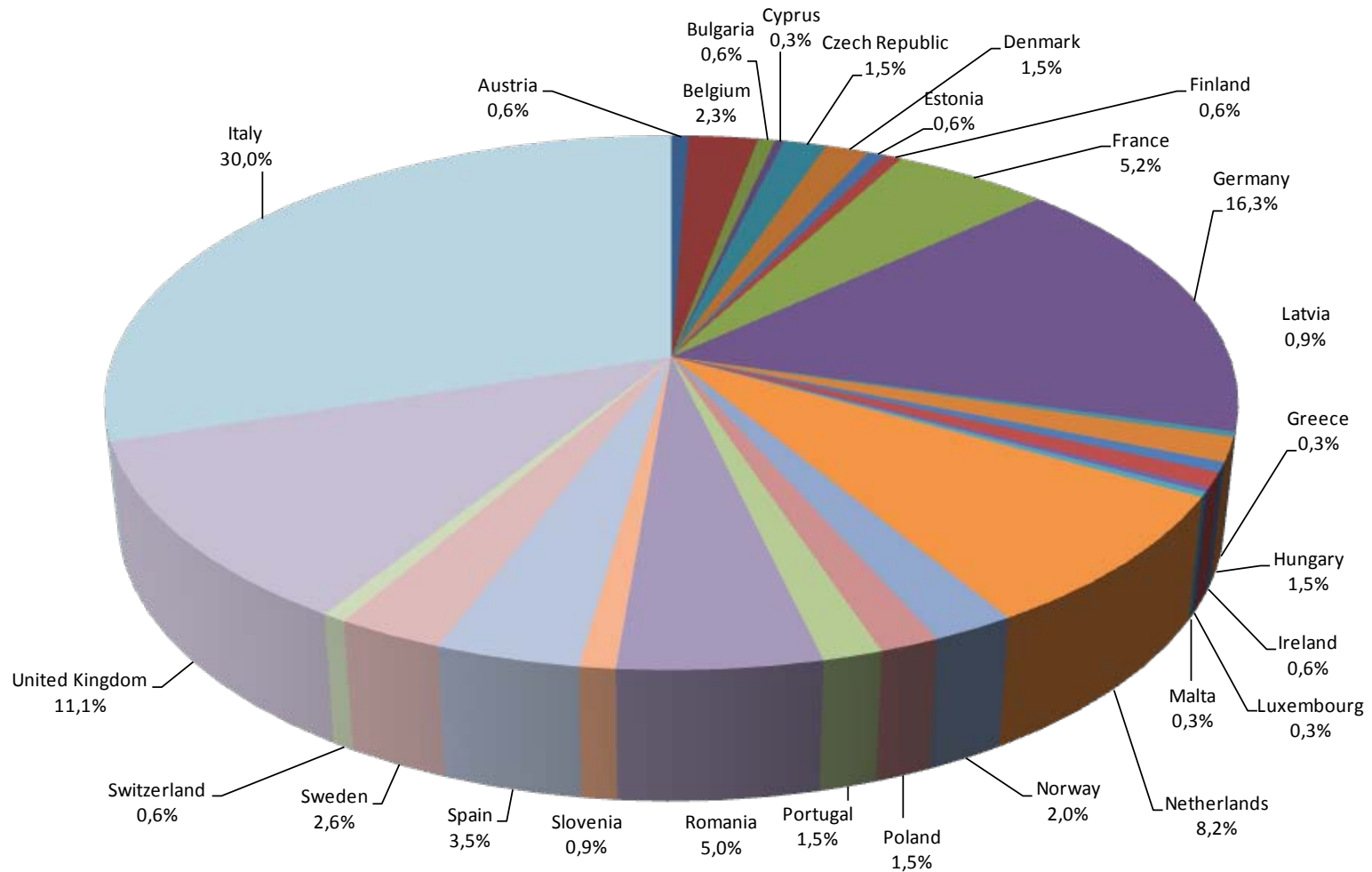
- ✓ 62 cities out of the 406 do not have any access restriction scheme



Status of access restriction scheme in the investigated European cities



Geographical coverage of cities providing information on ARS

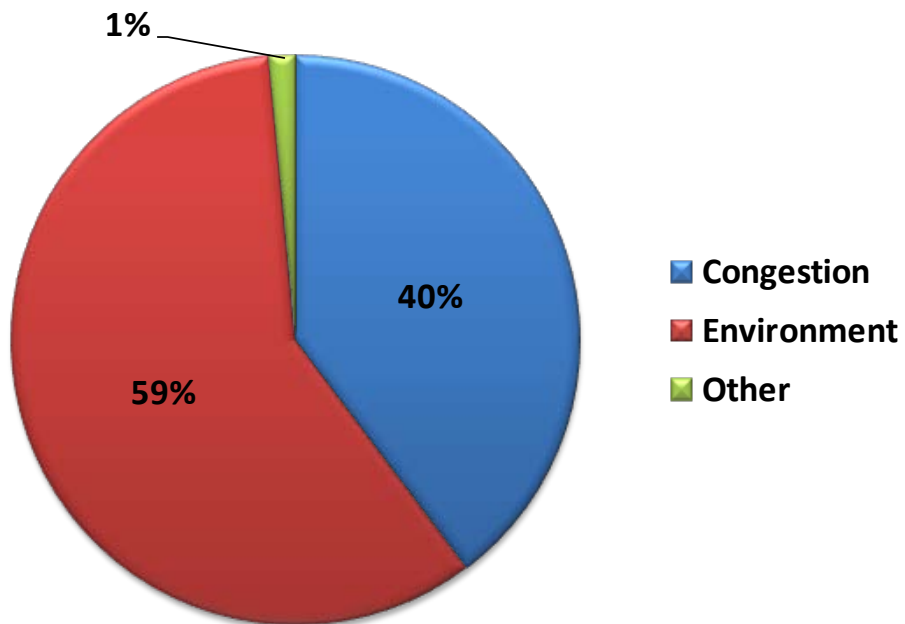
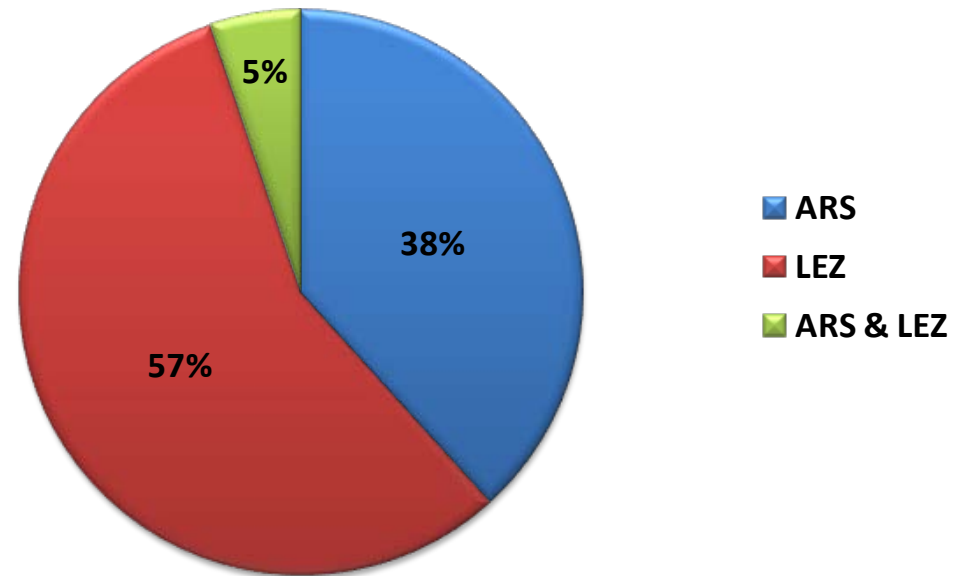


Basic indicators (extended coverage)

- **Type of scheme**
- **Primary objectives:**
 - ☐ Traffic congestion reduction
 - ☐ Environmental conditions improvement
 - ☐ Earning money to be invested in local transport enhancement
- **Vehicles Cities general information on ARS targeted:**
 - ☐ Private cars
 - ☐ Freight transport
 - ☐ Both of them
- **Presence of a charge**
- **Time slot of enforcement:**
 - ☐ 24/7
 - ☐ Day time
- **Identification of vehicles entering the restricted zone:**
 - ☐ Manual
 - ☐ Stickers
 - ☐ Technological

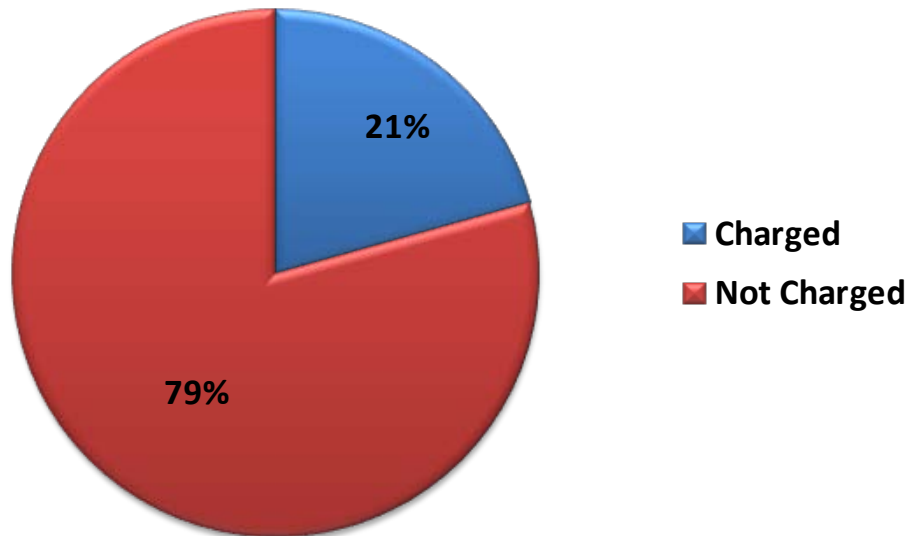
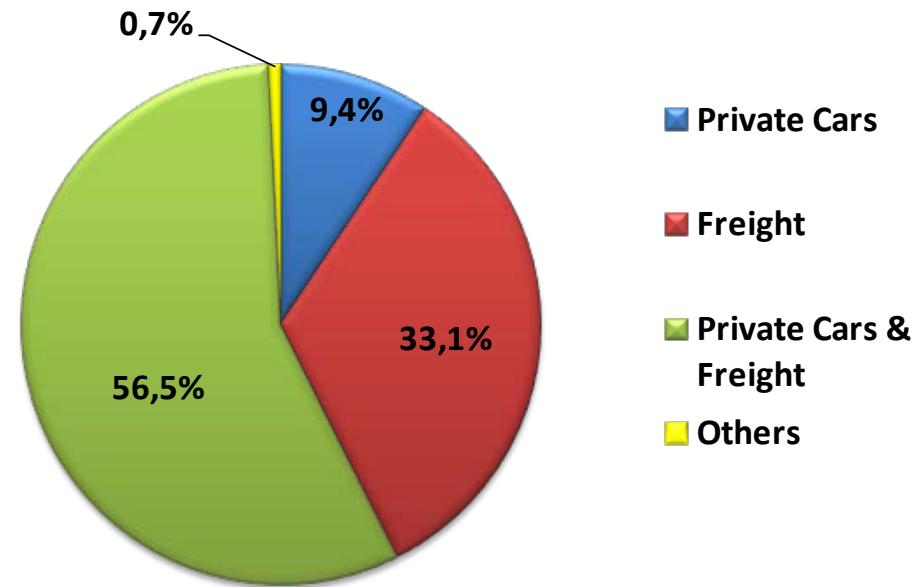
[Overview of the 344 cities](#)
(loaded on the website)

Type of scheme



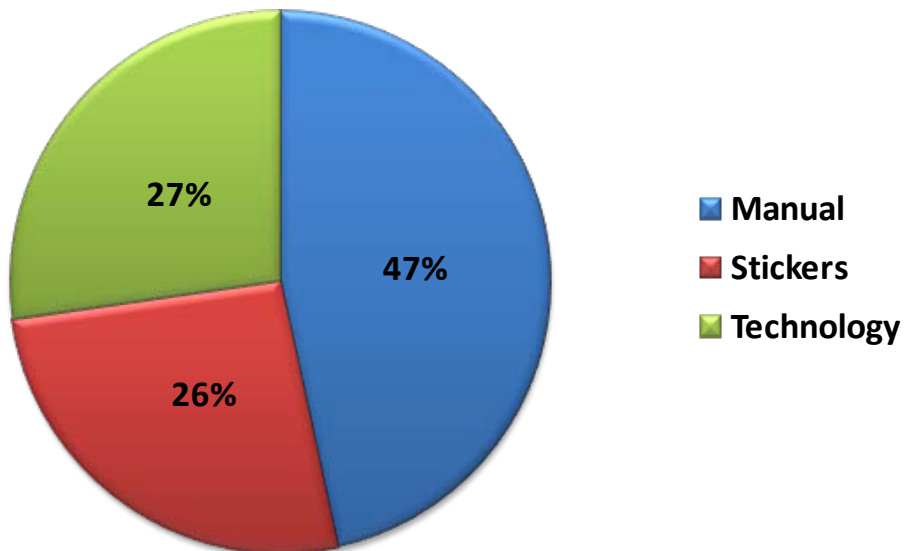
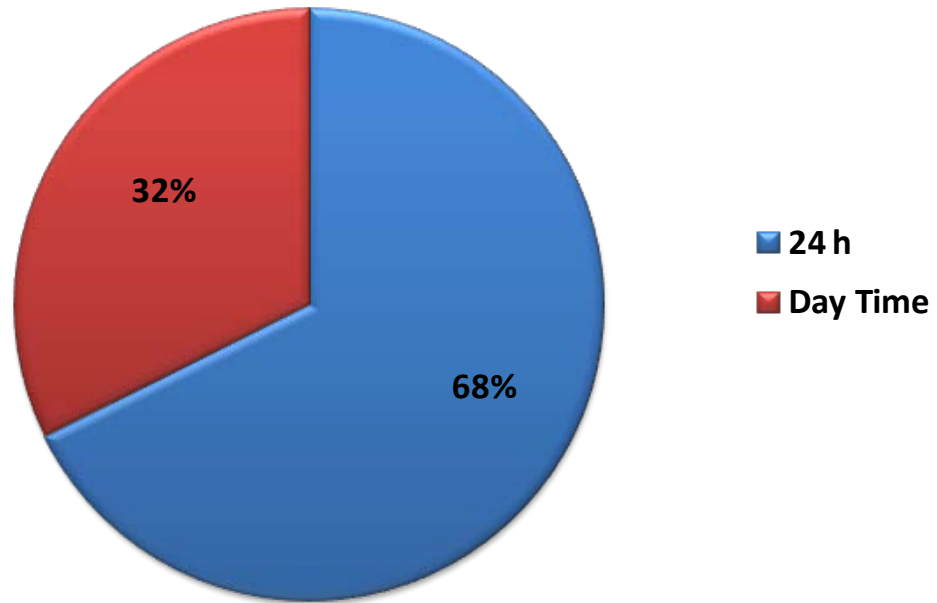
Primary Objectives

Presence of a charge



Vehicles targeted

Time slot of enforcement



Identification of vehicles entering the restricted zone (enforcement)

The Online Questionnaire

The key sessions of questionnaire template have covered:

✓ city profile	100%	Level of Completeness
✓ scheme objectives and typology	100%	
✓ targeted traffic	100%	
✓ encountered barriers and drivers	97%	
✓ information to users	86%	
✓ results achieved or expected	17%	

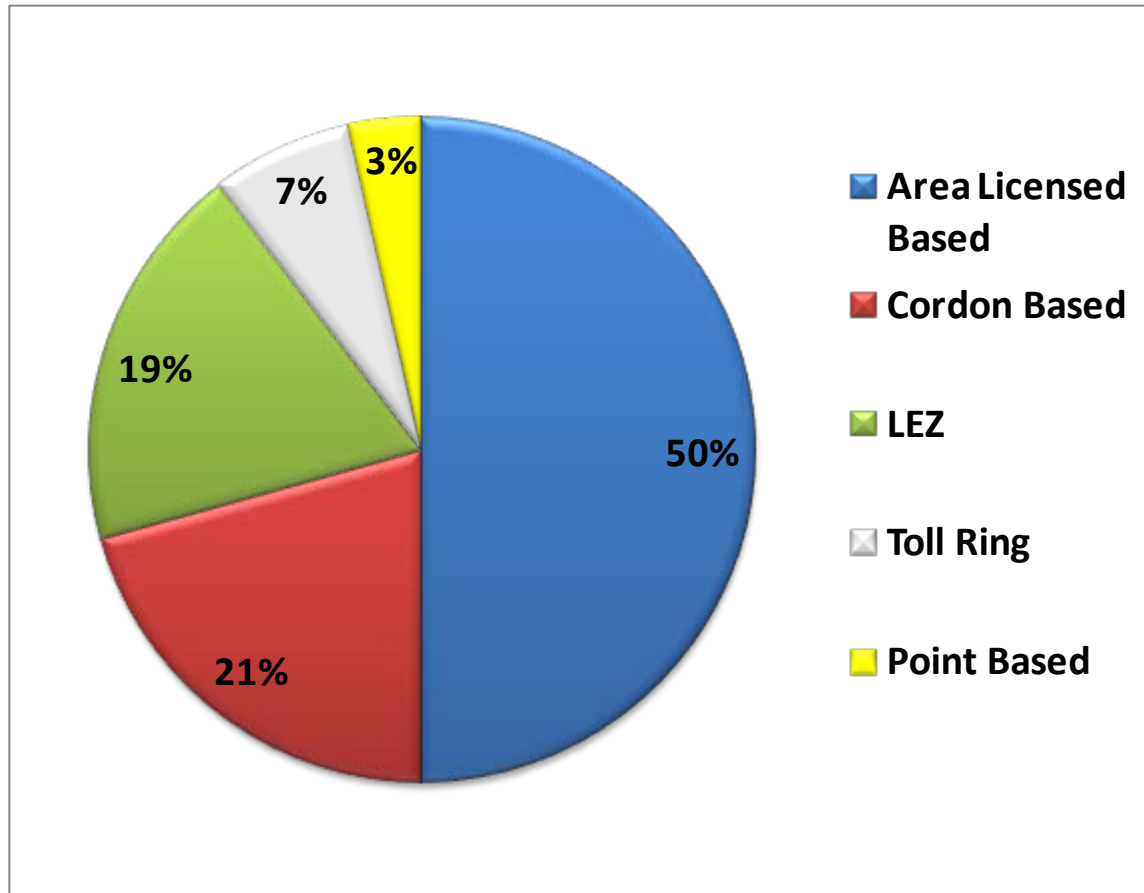
Online Questionnaire: city feedbacks

ARS Sample	Survey Responses	Cities just accessed the survey	TOT. ARS
274	58	34	91
100%	21%	12%	33%

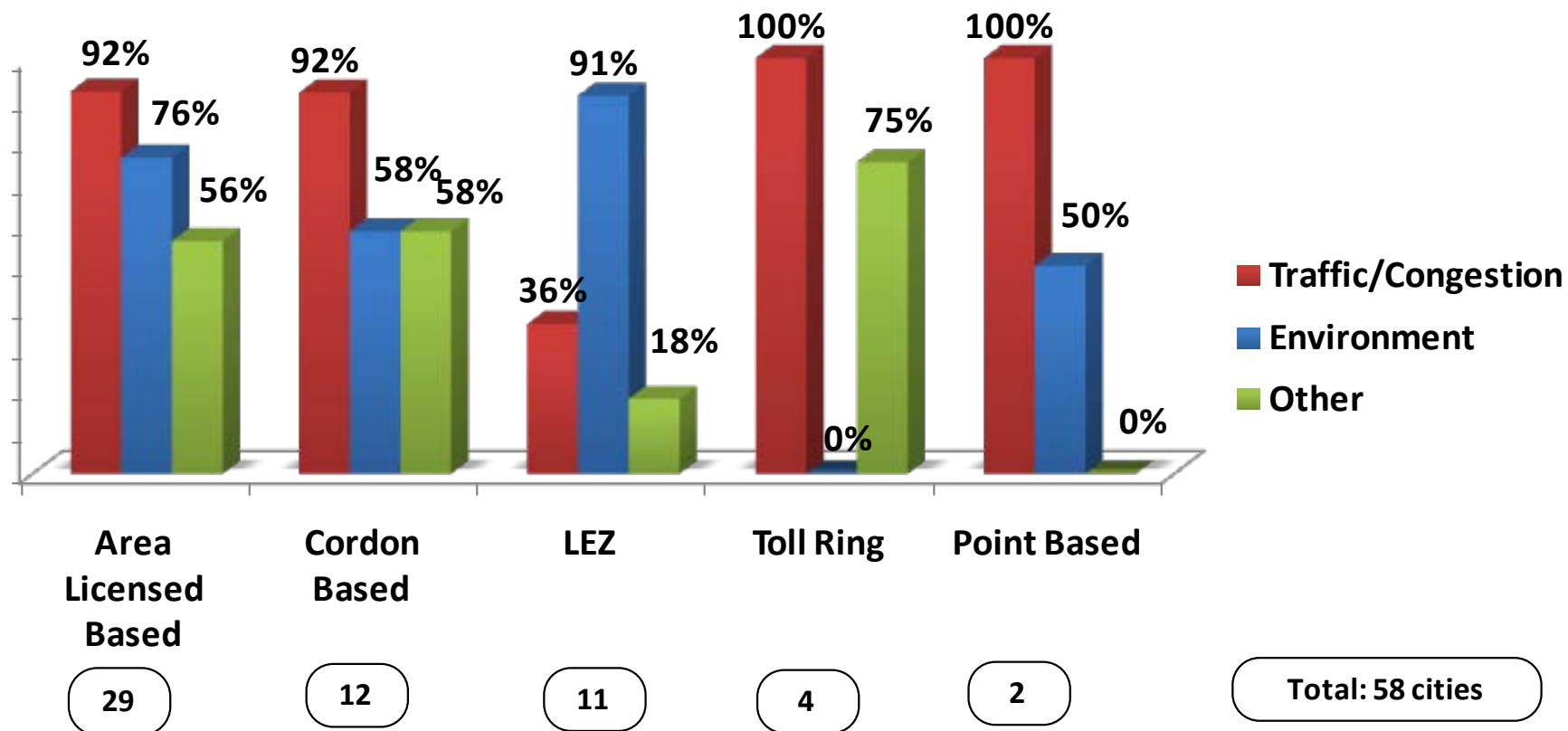
After e-mails rounds and phone direct contacts and assistance, 33% of city sample has **accessed** the online survey.

Responding cities belong to 17 EU countries plus Norway.

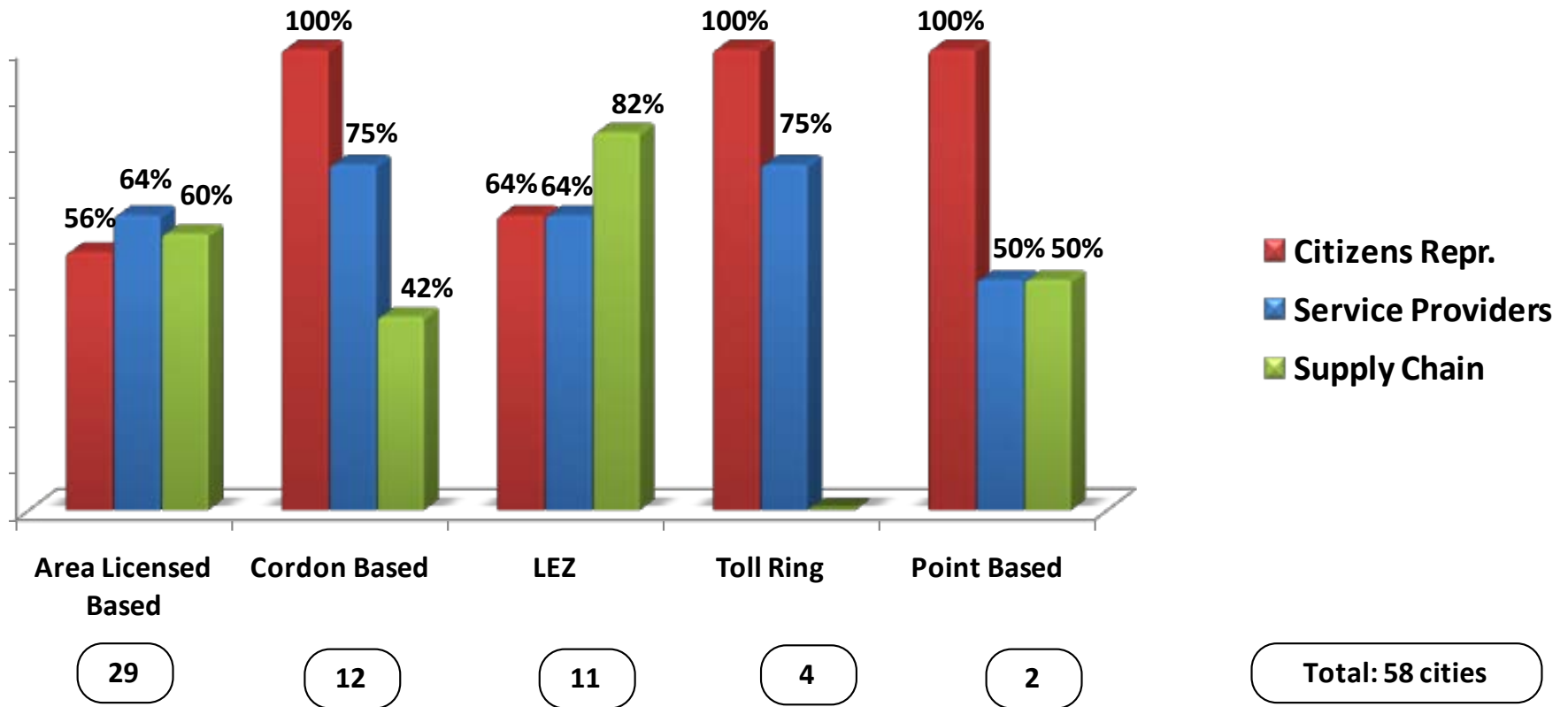
Online Questionnaire: city schemes



Scheme Objectives



Stakeholders involved during the ARS implementation phase



Accessibility of information

- For drivers the biggest challenge is knowing the local road laws and thus being sure to follow all the regulations to avoid any penalties. As a matter of fact, it is easy to be caught out by small variations, particularly on a journey that takes in a lot of countries.
- The facts finding phase highlighted that access restrictions have been quite widely implemented in various countries, but drivers are seldom aware of the features of the schemes that are in force in cities others than their own.

Facts finding overview of web information on ARS rules being present in different cities

Country	N. of cities with ARS	% of Cities with ARS having web info
Austria	No schemes found	-
Belgium	3	75%
Bulgaria	1	0%
Cyprus	1	0%
Czech Republic	3	33%
Denmark	3	0%
Estonia	2	50%
Finland	1	50%
France	5	50%

Germany	43	100%
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Hungary	4	0%
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Country	N. of cities with ARS	% of Cities with ARS having web info
Ireland	2	50%
Italy	103	45%







Lithuania	No schemes found	-
Luxembourg	1	100%
Malta	1	100%
Netherlands	14	75%
Poland	3	20%
Portugal	5	0%
Romania	10	0%

Spain	12	17%
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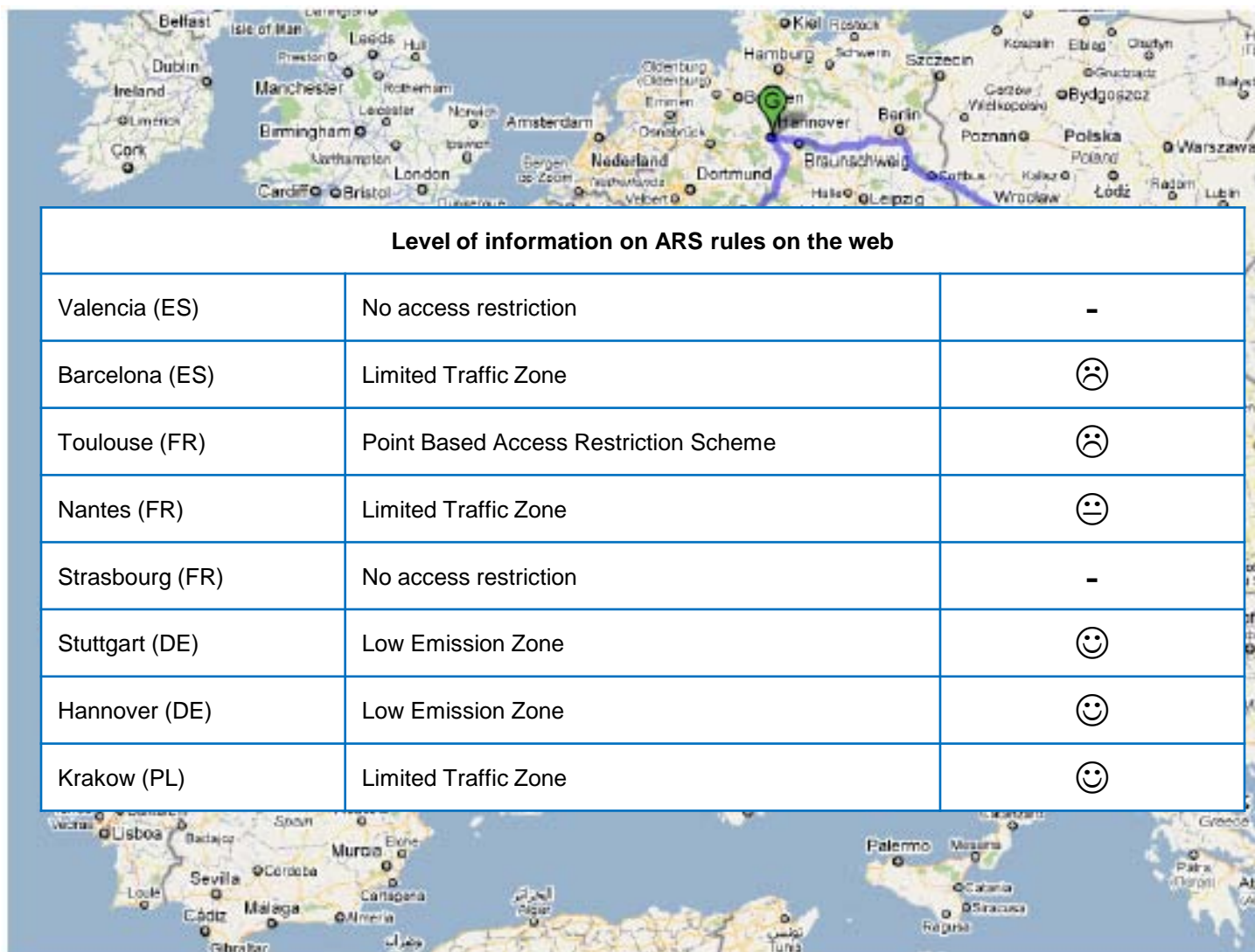
Spain	12	17%
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United Kingdom	13	67%
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Degree of homogeneity of ARS rules in different EU countries for a given type of vehicle entering city centers

Vehicle used	Euro 3 Diesel car		
City A	Rome (IT)	Zonal Based restriction	 Against the request of a temporary permit to be issued by the hotel where the foreign tourist will stay.
City B	Florence (IT)	Limited Traffic Zone	 Against the request of a temporary permit to be issued by the hotel where the foreign tourist will stay.
City C	Milan (IT)	Area Licensed based	 Entrance allowed against payment of 5 Euros
City D	Munich (DE)	Low Emission Zone	 Since the vehicle used is a Euro 3 Diesel a yellow sticker will be issued.
City E	Prague (CZ)	Limited Traffic zone	 No information on hypothetical access restriction scheme could be found. Czech access restriction rules cannot be easily appraised.
City F	Berlin (DE)	Low Emission Zone	 Since the vehicle used is a Euro 3 Diesel a yellow sticker will be issued.

Level of accessibility of information regarding different ARS a traveler could encounter along a EU itinerary

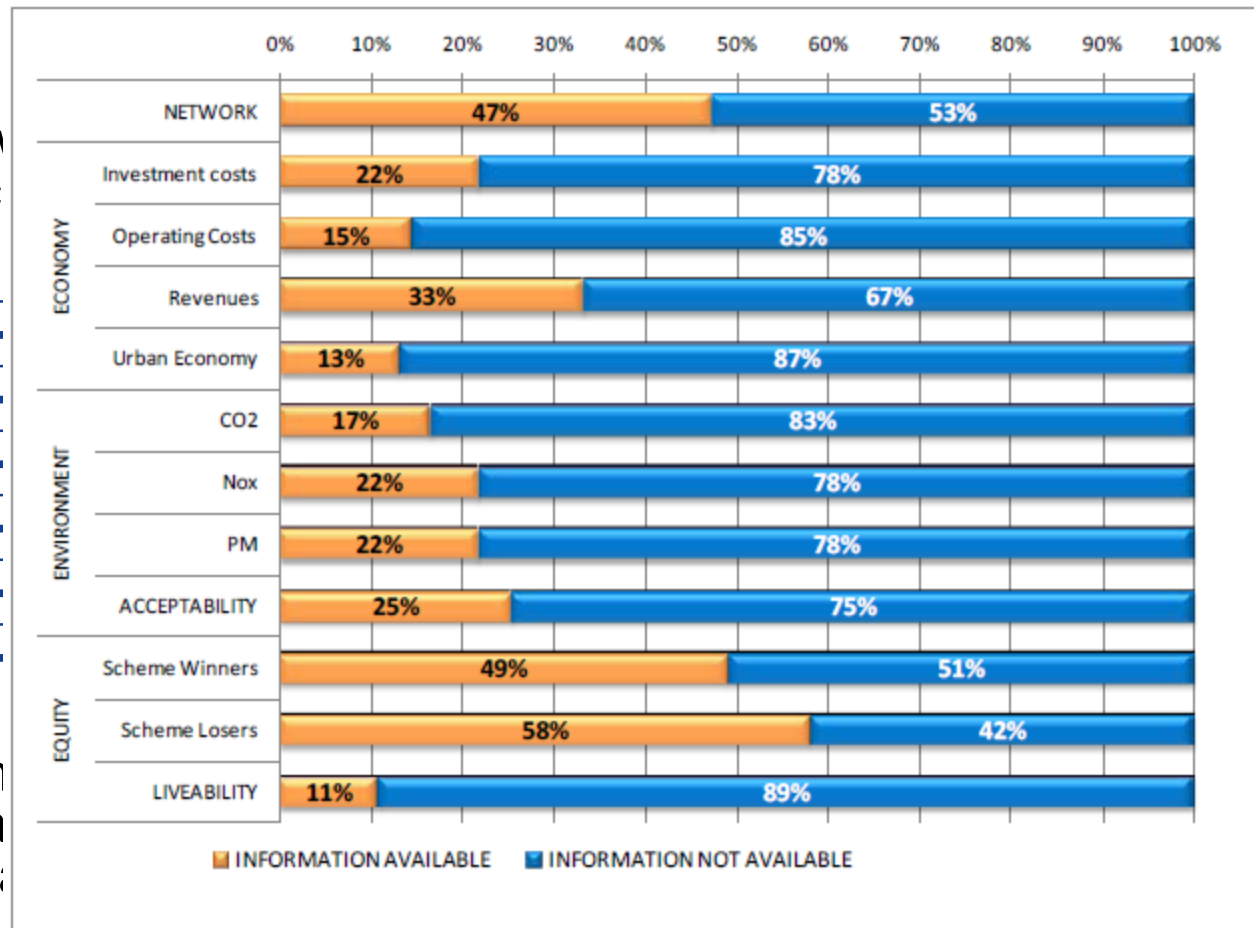


Identification and assessment of environmental and socio-economic impacts

- All SC



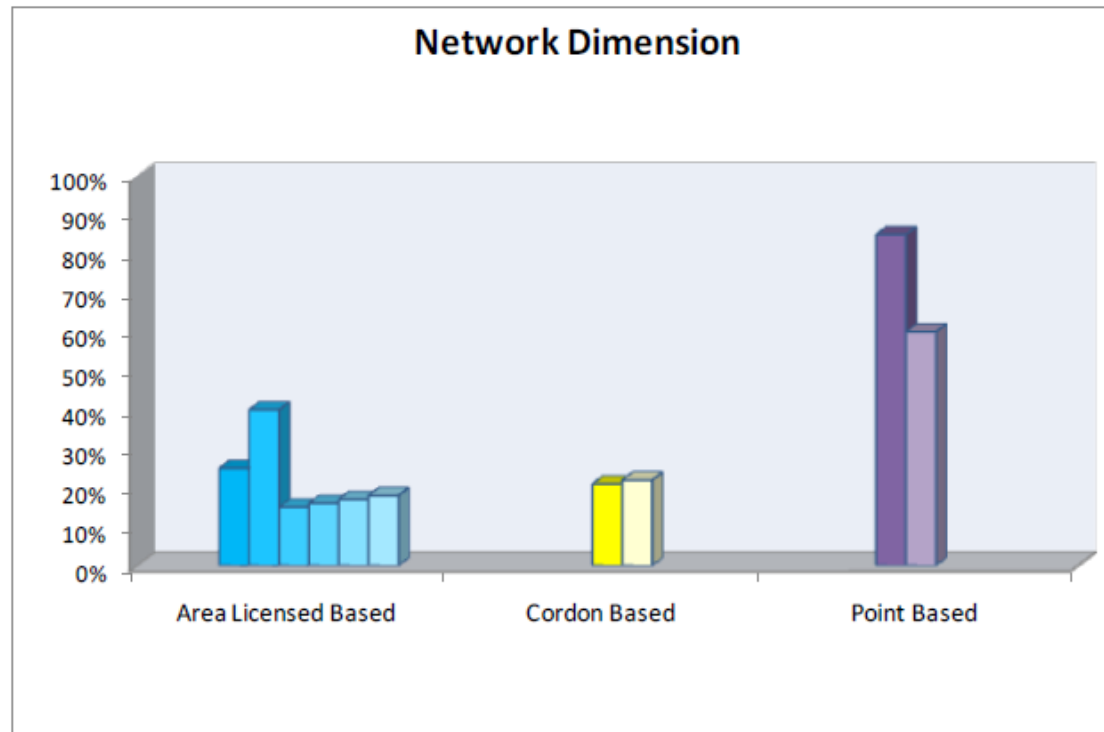
- The public



each

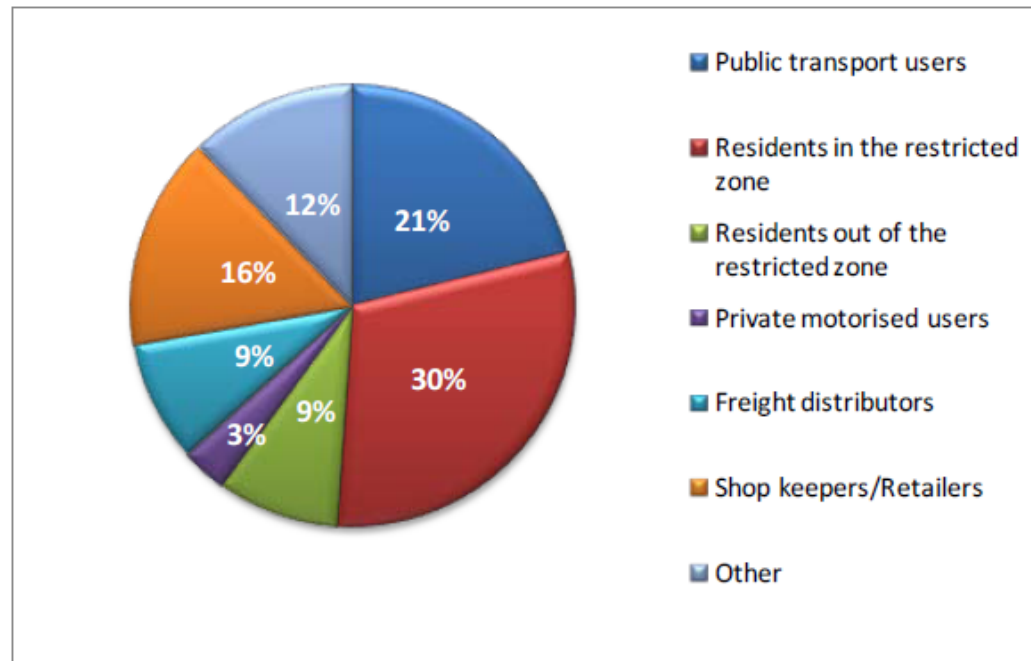
most and

Distribution of decrease in vehicles entering the restricted zone in percentage terms



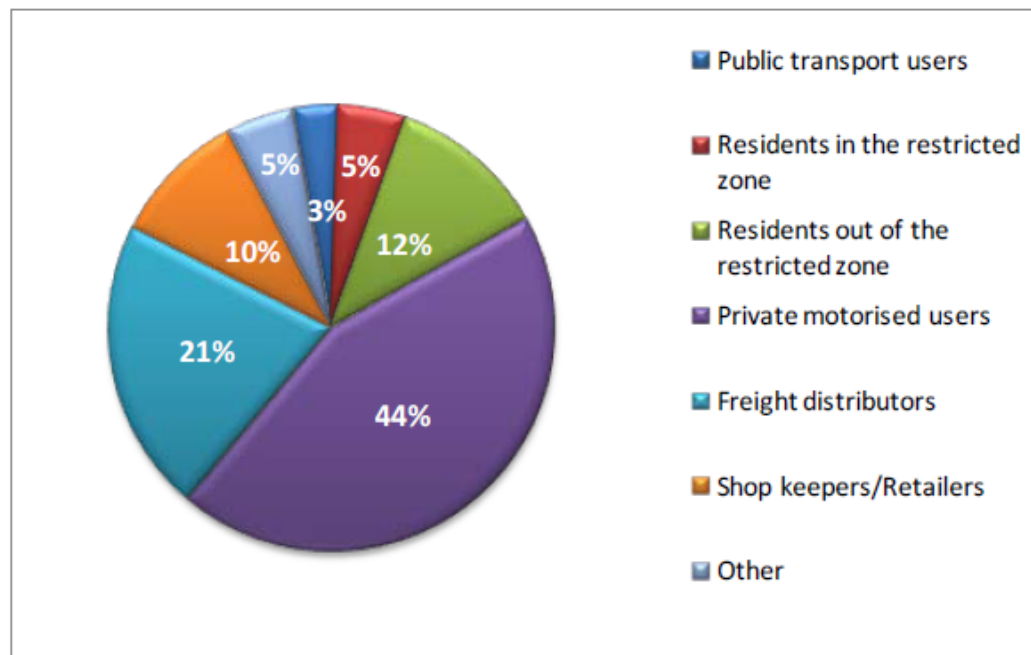
The area licensed based schemes together with the cordon based ones exhibit a mean value decrease of 23%, while the point based schemes, that are generally limited to specific small locations and not spread across the network, can achieve percentages of decrease in vehicles crossing the charging points definitely more significant – in the cases considered close to 73% on average.

The Equity Dimension: Scheme Winners



In the analyzed access restriction schemes, the top-three groups of 'winners' are the residents in the restricted zone (30%), the public transport users (21%) and the shop keepers/retailers (16%). It is worth noting that the "other" group (12%) encompasses several categories such as shoppers, pedestrians, cyclists and tourists.

The Equity Dimension: Scheme Losers



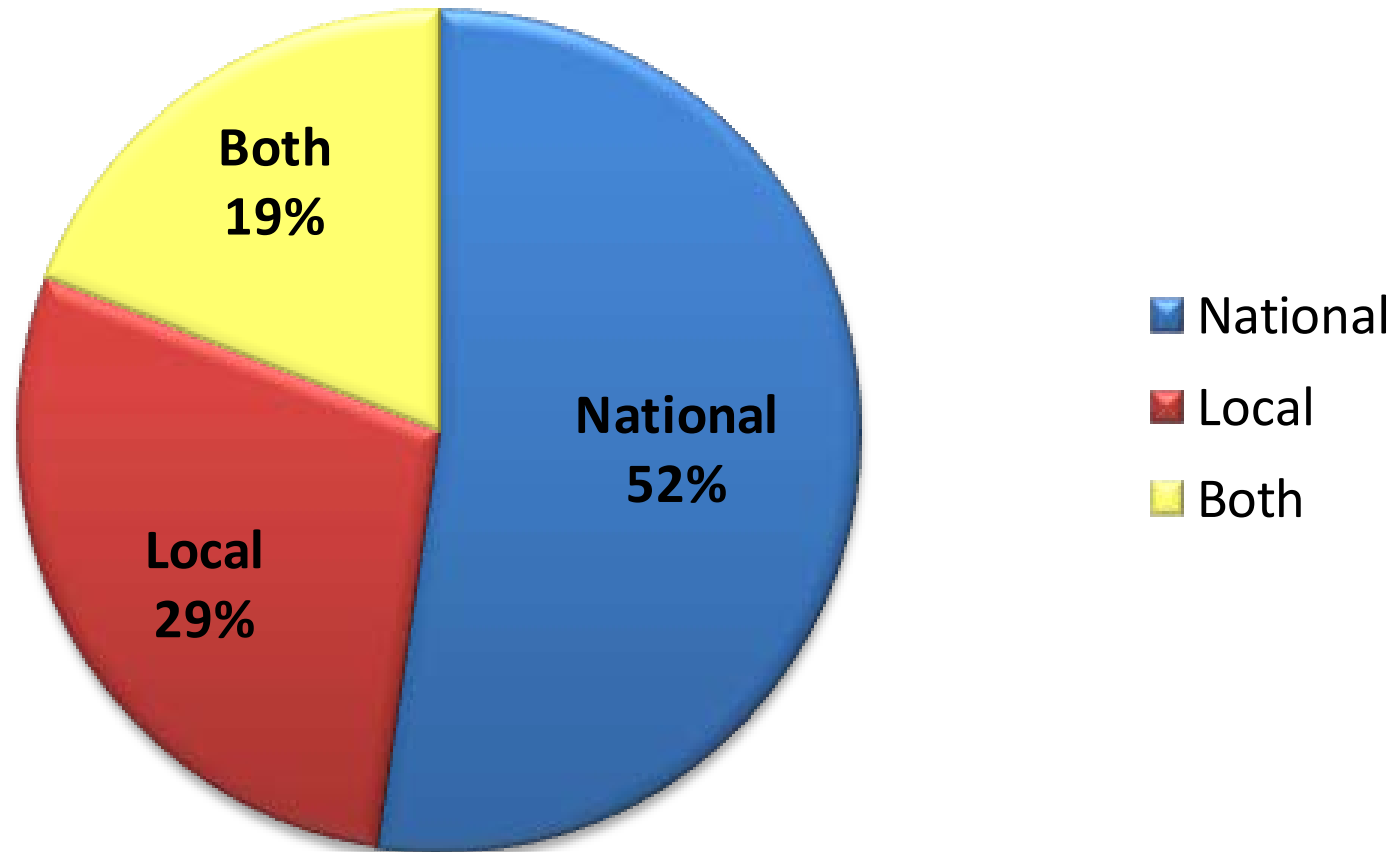
On the opposite side, private motorized users represent the primary scheme 'losers' (44%), followed by freight distributors (21%) and residents out of the restricted zone (11%). Concerning the latter category, the 'loser' condition cannot be attributed to a specific type of scheme and the related features.

Legal assessment

- The legal basis analysis had been performed at country level for EU Member States plus Norway
- It covers to the countries having at least one ARS according to our findings at the date of July 2010, and for which legal information was available
- The main objective was to provide an overview on:
 - Type (e.g. road codes prescription, air quality legislation, others), level (national and/or local) and contents of the legal documents regulating the ARS
 - Whether the regulations are based on vehicles characteristics (e.g. Euro standards, vehicle age, etc.)
- In most of the analysed countries, national laws provide the opportunity for temporary and/or permanent traffic bans
- In some countries, legislations on traffic restrictions regulate only pedestrian areas

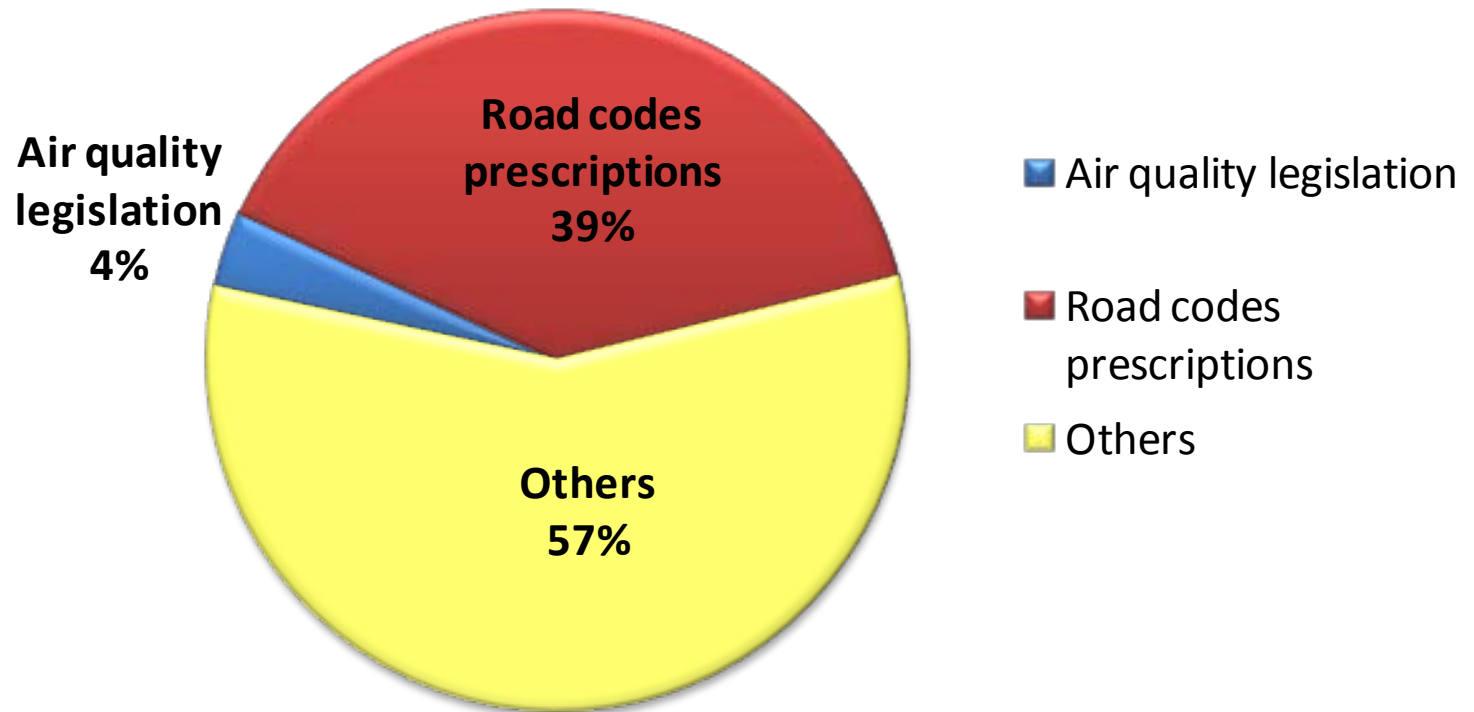
Legal analysis (1/4)

Level of the legal basis of ARS



Legal analysis (2/4)

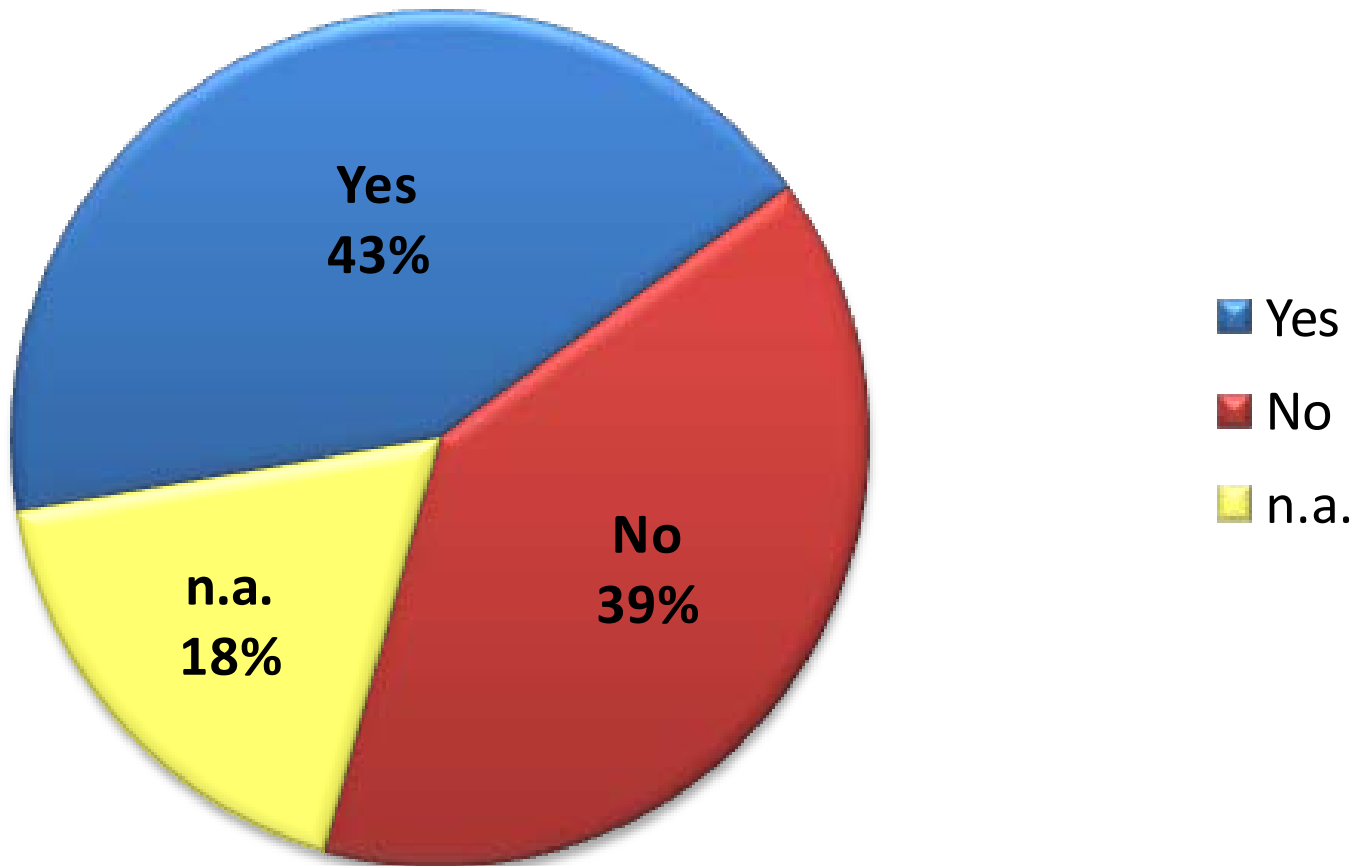
Type of legal basis



The Other types include: Municipality Council decree, Act on Environmental Zone, Marking Regulations, Environmental Zones Covenant, etc.

Legal analysis (3/4)

Legal basis considering vehicle characteristics



Legal analysis (4/4)

Specific content of the legal basis

