



**COMPETITIVE AND SUSTAINABLE
GROWTH PROGRAMME**

**Comune di Genova
U.O.M.T.P.**



PRoGR•SS

Pricing ROads use for Greater Responsibility, Efficiency and Sustainability in cities

PROGRESS

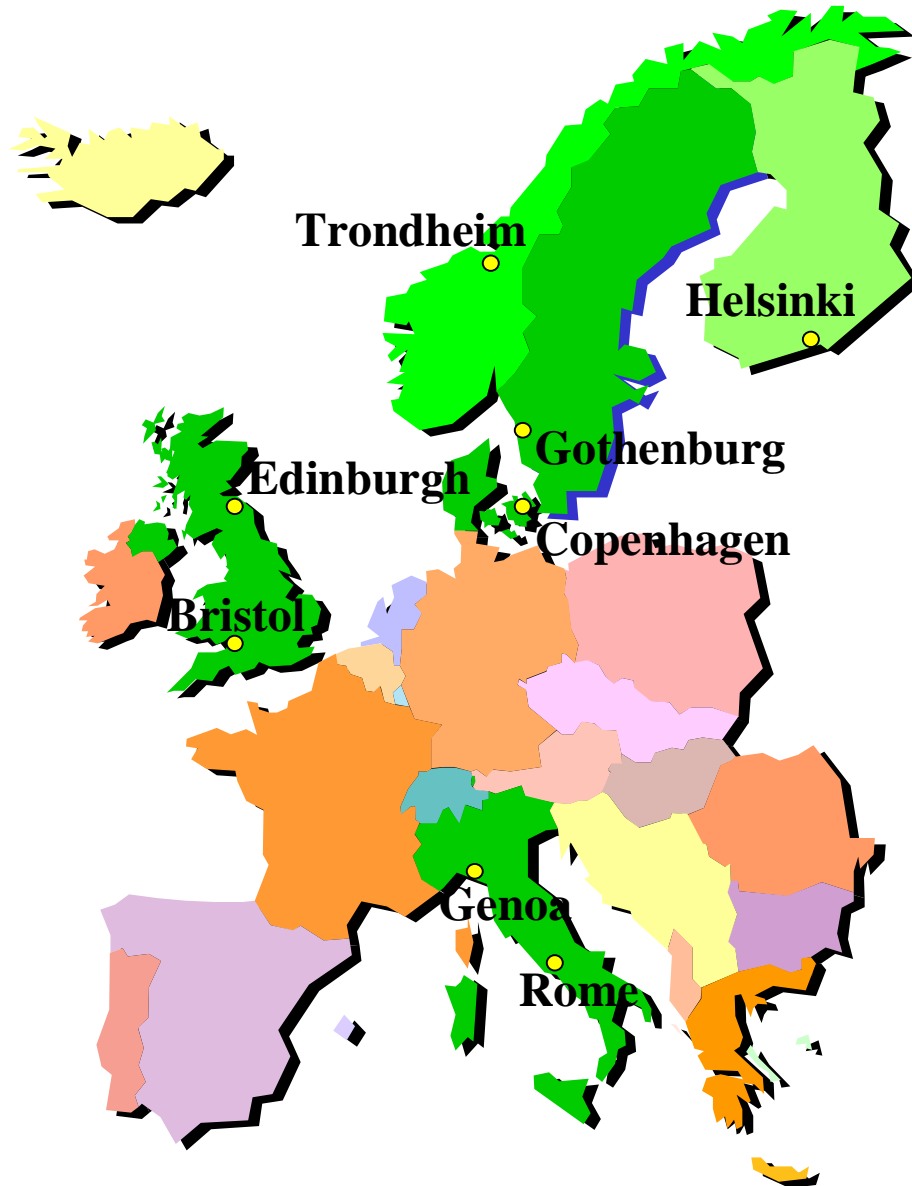
6th BESTUFS Workshop, Genoa, 8th-9th November 2001

V.M. Contursi – U.O.M.T.P.



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Project goals:

- to develop and demonstrate integrated urban transport, based on the concept of marginal-cost pricing, in real urban situations
- to develop and assess the political, economical and social framework required for the implementation of urban transport pricing
- to evaluate the effectiveness and impact of these demonstrations
- to produce a series of policy recommendations and exploitation plans for urban pricing schemes based on the experiences of the cities



P.Ro.G.R.E.S.S. consortium

Site	Scheme concept	Demonstration technology
Bristol	Cordon (per trip)	Electronic tag
Copenhagen	Cordon (per trip), Zone (per trip), Time based, Distance based	GPS
Edinburgh	Cordon (per trip)	Video
Genoa	Cordon (per trip)	Video
Gothenburg	Cordon (per trip), Zone (per trip), Time based, Distance based	GPS
Helsinki	Modelling	
Rome	Cordon (per trip), Time based	Electronic tag
Trondheim	Zone (per trip)	Electronic tag



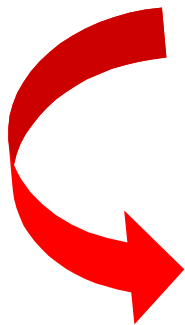
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Genoa goals

- Transport demand management
- Pollution reduction
- Improvement in the land use



National and european projects:

- Press
- Europrice
- Progress
- Europrice2
- Sutra
- Moses
- Mobility manager
- Revamping TCC



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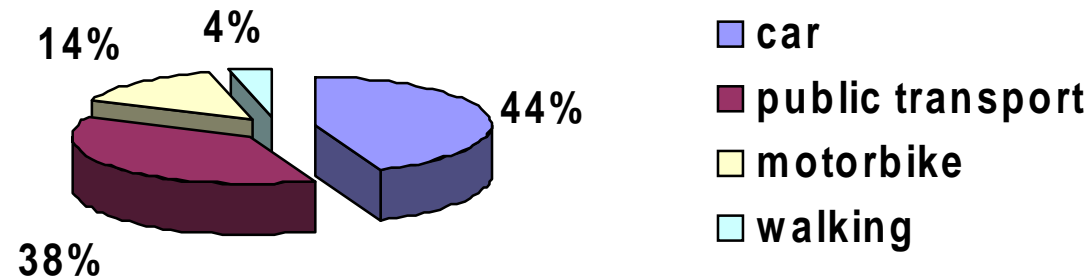
City of Genoa

Population: 650.000
 Municipality Area: 240 kmq
 Built up Area: 73 kmq
 Density: 8904 inhab/kmq

Road network: 1402 km
 PT network: 903 km

<u>Area pricing</u>	
Surface:	~ 1 %
Population:	~ 4 %
Parking lots:	~ 5 %

modal split



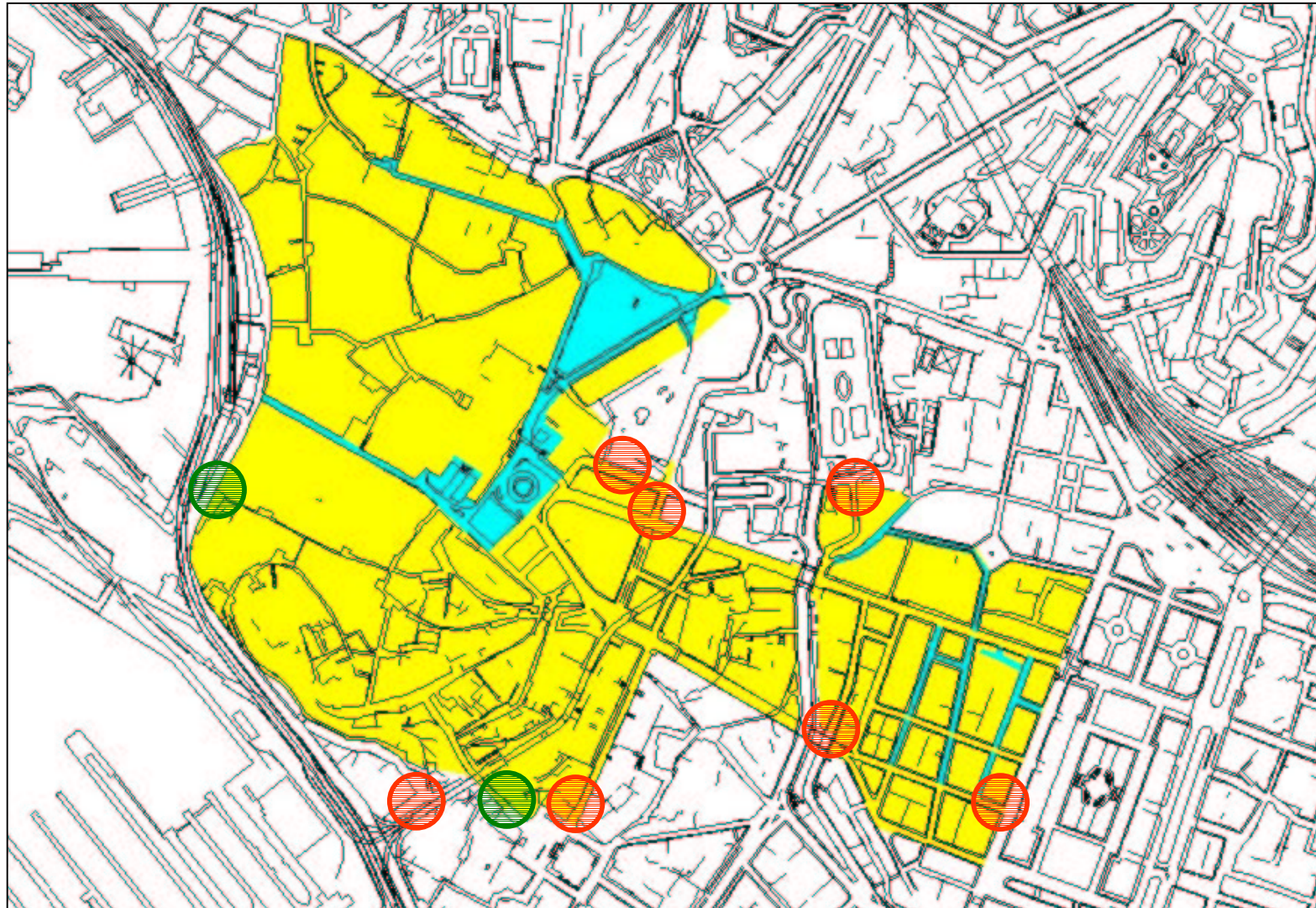


Genoa design tasks

- Pricing schemes design
- Communication activities to politicians and stakeholders, state preference survey to users
- Installation of OCR-based tolling technology
- Running of the demonstration
(**starting Autumn 2002**)
- Evaluation of results
- Dissemination to citizenship, verification of consensus and acceptability by users and stakeholders
- Design of a real full scale scheme



Design – (1/7) - Area pricing





Design – (2/7) – Pricing schemes

Demo period: starting Autumn 2002

	Scheme 1	Scheme 2	Fully operational system
Area	3 km ²		Possible enlargement
Technology	OCR system		OCR system and telepass integration In and out gates
Fare	1 •	0.5 •	TBD
Time	7:00 – 20:00		TBD
Integration measures	Shuttle service	Shuttle service and Park & Ride facilities	Park & ride Shuttle service on demand Updating of the PT network within the road pricing area
Parking fare	0.75 • (first hour)		TBD



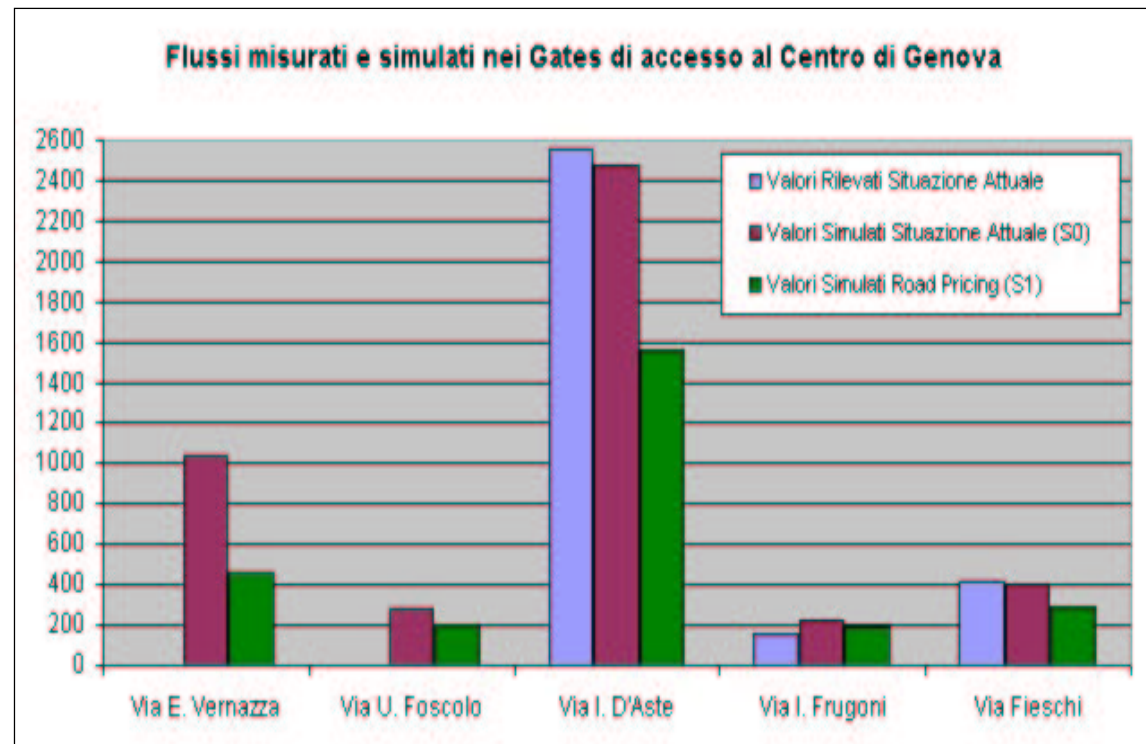
Design – (3/7) – Simulated scenarios

Scheme 1 (1 •)

- exp. entrances in peak hour:
3400 vehicles/hour (- 35%)
- exp. daily paying entrances
(7:00 – 20:00):
14500 vehicles/day

Scheme 2 (0.5 •)

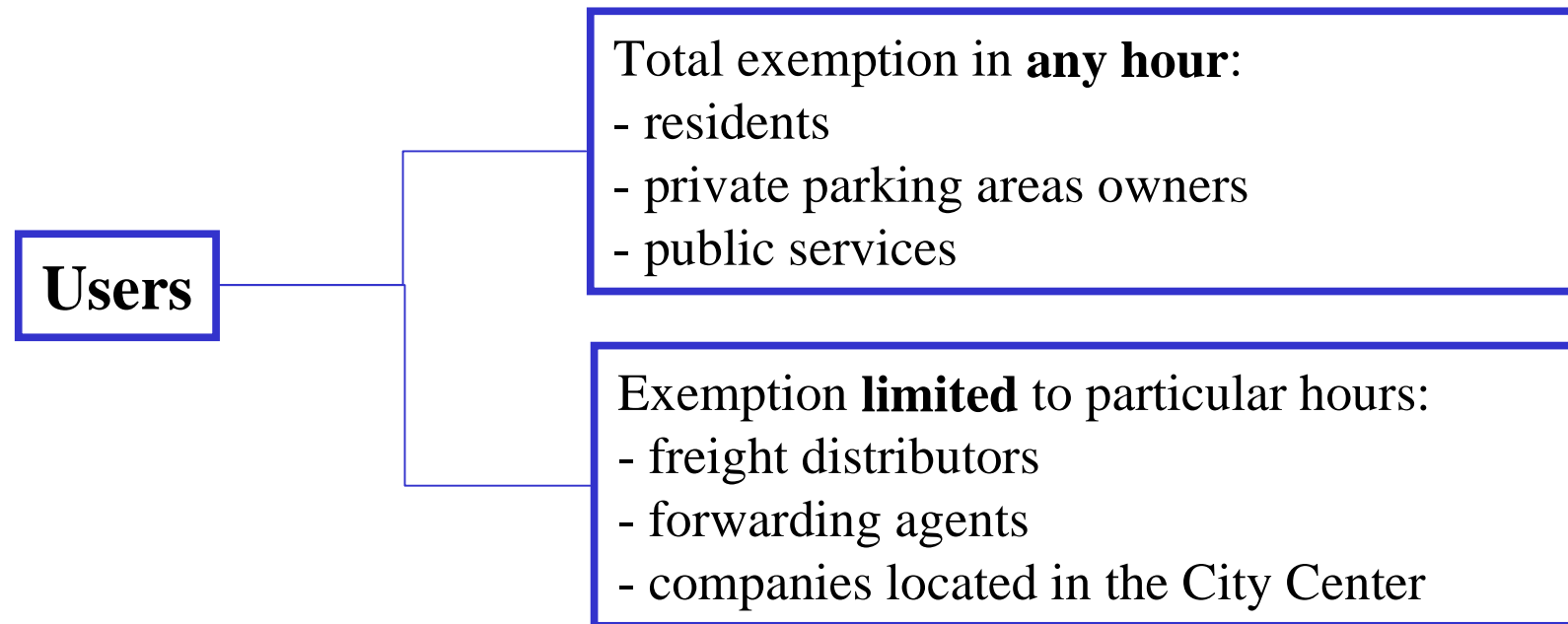
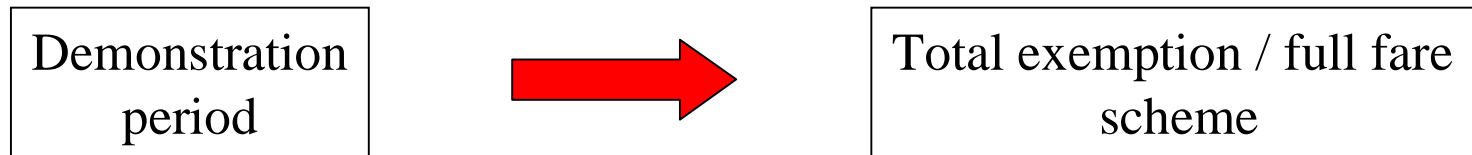
- exp. entrances in peak hour:
4100 vehicles/hour (- 22%)
- exp. daily paying entrances
(7:00 – 20:00):
21000 vehicles/day



Current flows in peak hour (7:30 – 8:30)
within the demo area: **5200** vehicles/hour



Design – (4/7) - Exemptions





Design – (5/7) – Complementary measures

Demonstration:

- 1 parking area at cordon
- Shuttle service connecting the City Center
- Park & Ride facilities
- Integration with parking fares

Full scale scheme:

- New parking areas at cordon
- Review of the Public Transport network
- Enlargement of the pricing area
- Implementation with exit gates
- Time based pricing schemes: one fare comprehensive of entry and parking

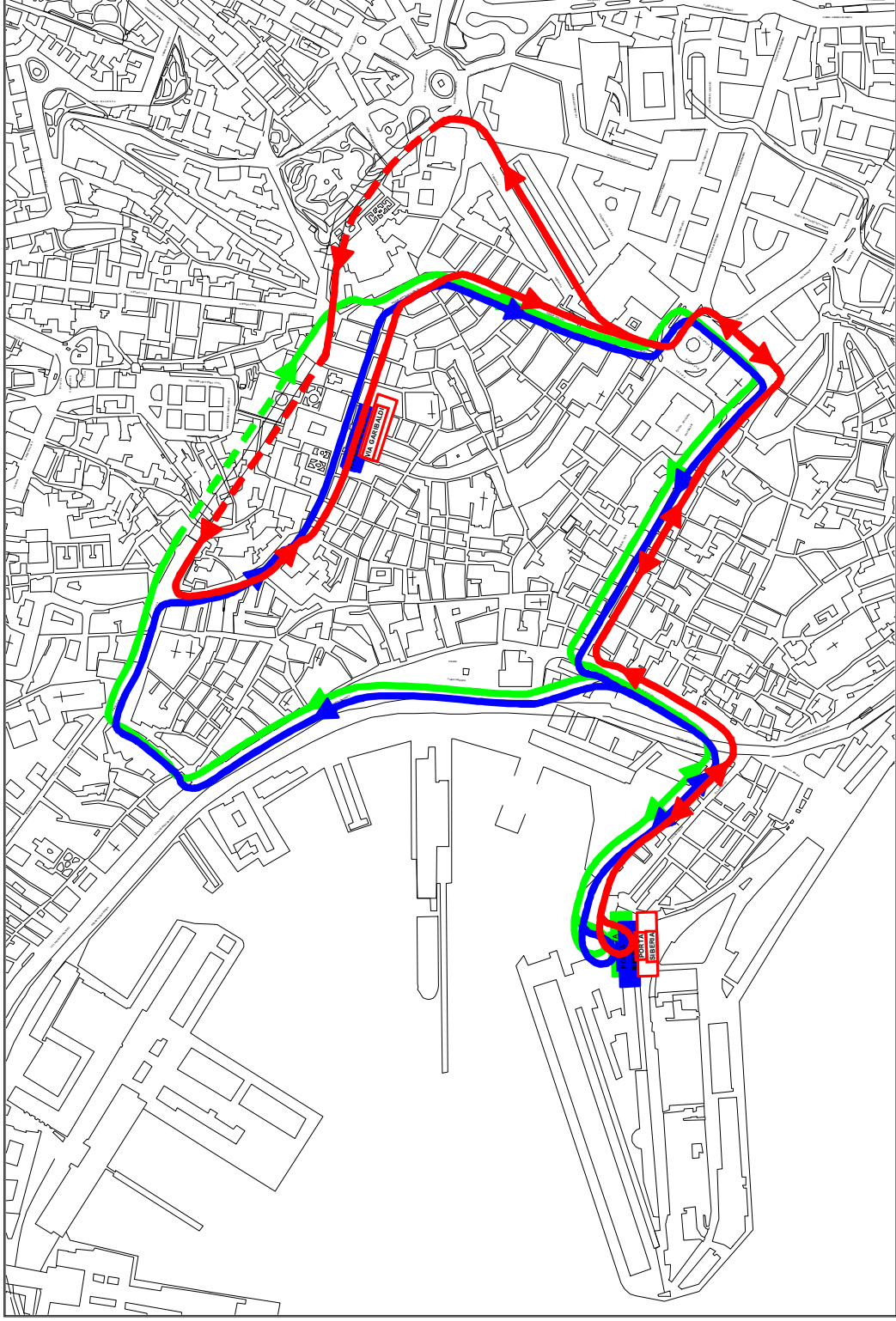


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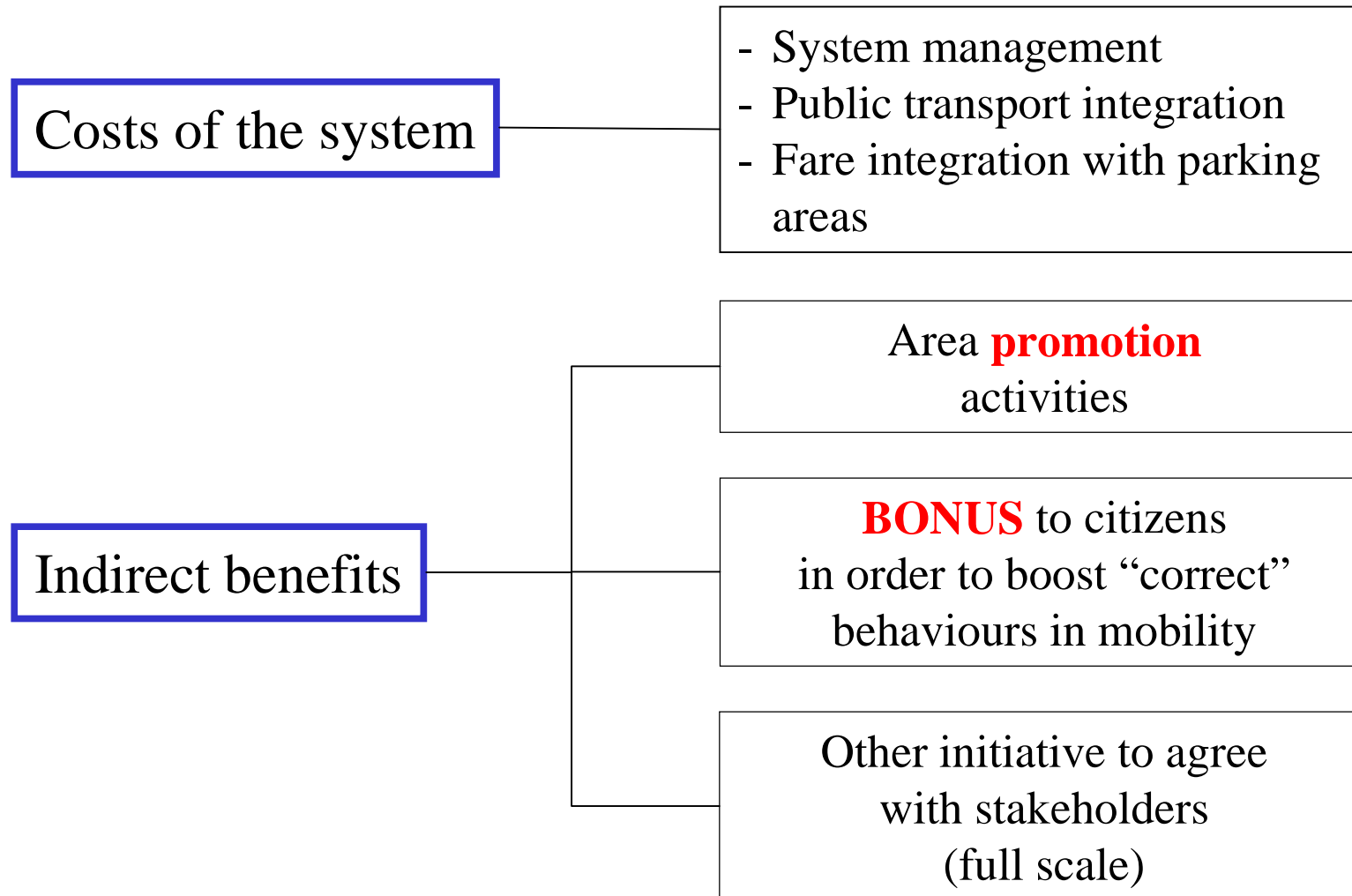
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Design – (6/7) – Shuttle service, possible alternatives





Design – (7/7) – Revenues management





Consultation – (1/3) – Communication activities

Politicians: Representatives of the majority parties
Chairmen of the Genoa districts

Stakeholders: Environmental Associations
Economic Operators
Private Parking Companies

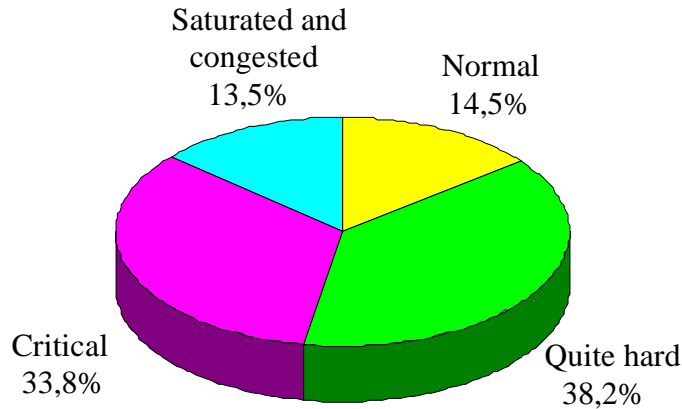
SPS: Citizens that usually cross and go to the city centre

- *easier accessibility to city centre (35.2 %)*
- *creation of RP area is a bad solution (34.3%)*
- *creation of RP area is to be tested (33.4%)*

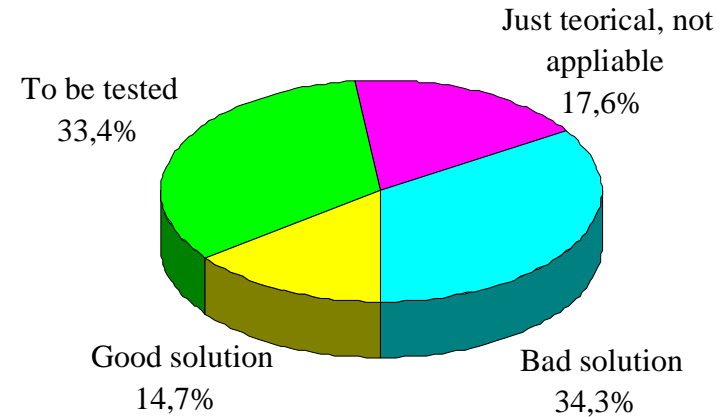


Consultation – (2/3) – SPS

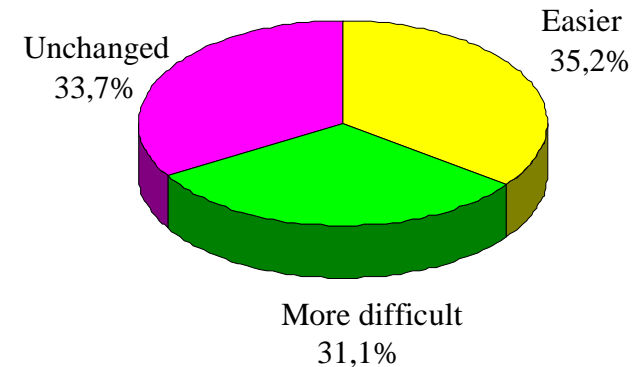
Opinion in the present situation of the City Center, considering traffic, pollution and quality of life levels



Opinion on road pricing implementation in Genoa

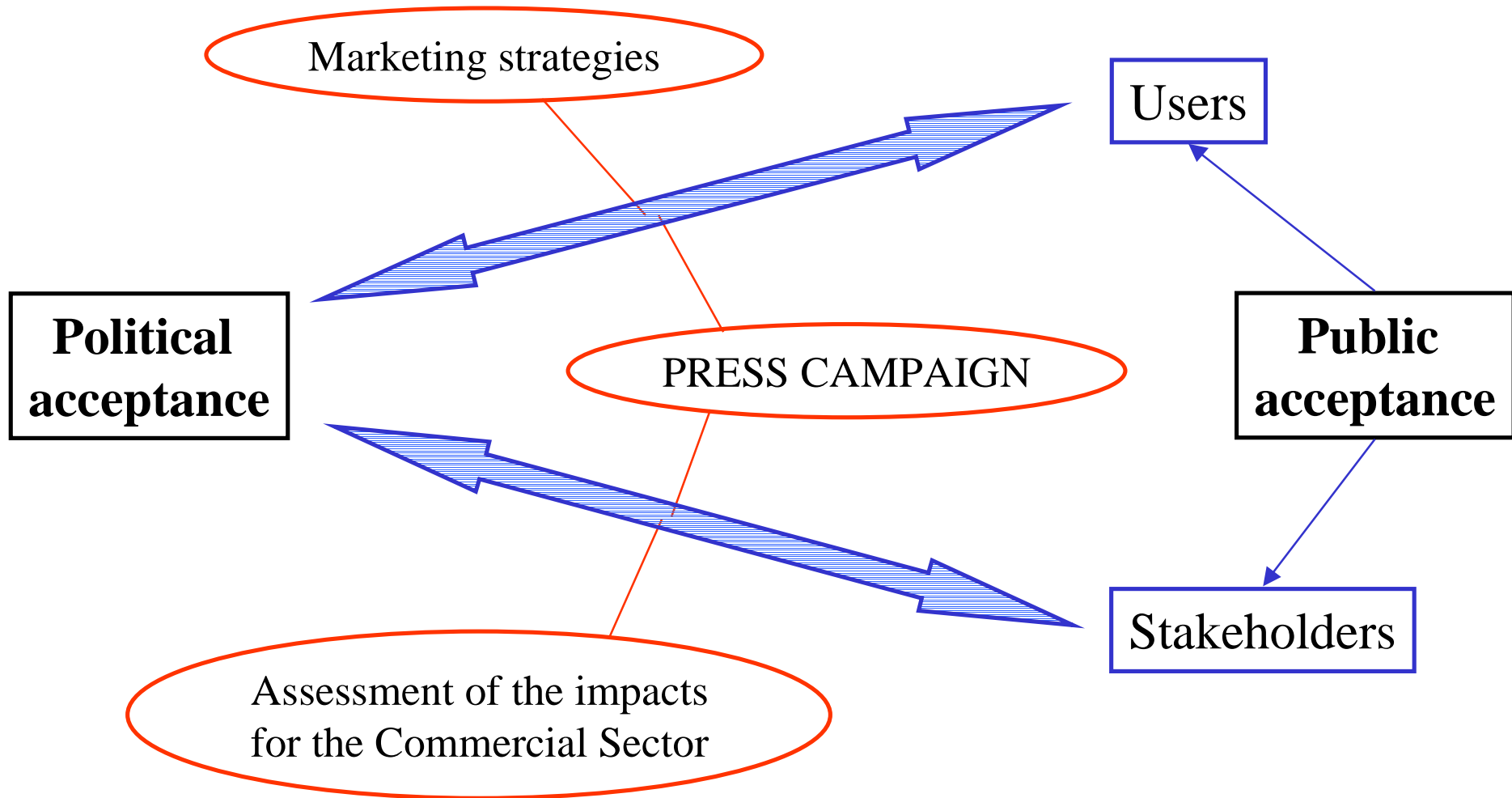


Opinion on the ease of going into the City Center after the introduction of road pricing





Consultation – (2/3) – Public and political acceptance





Tolling technology

The system can:

- manage white lists up to 200.000 plates
- manage, in white list, italian and european plates
- have a recognition time less than 2 seconds → 1800 veic/h per lane
- record, at local level, 25000 images

