GOVERNMENT POLICIES ON AIR QUALITY AND CLIMATE CHANGE

LIFE15 IPE IT 013 PREPAIR - LAUNCH CONFERENCE

«Brenner Lower Emissions Corridor»

Project LIFE15-ENV-IT-000281

THE «BRENNER LOWER EMISSIONS CORRIDOR» PROJECT

Partners	A22 (coordinator) APPA - Provincia Autonoma di Bolzano APPA - Provincia Autonoma di Trento Università degli Studi di Trento CISMA IDM Südtirol / Alto Adige
Duration	01.09.2016 – 30.04.2021
Overall budget	€ 4.018.005
Eligible budget	€ 3.311.365
LIFE co-financing	€ 1.922.772 (approx. 60% of the eligible budget)

THE BRENNER MOTORWAY

ALPINE SECTION

BRENNER LEC
lower emissions corridor

Life

PLAIN SECTION

Length: 314 km
Difference in altitude: 50 - 1375 m above sea level

145 overpasses
131 bridges and viaducts
30 tunnels

DIFFERENT CLIMATIC AND MORPHOLOGICAL CONDITIONS

THE «BRENNER LOWER EMISSIONS CORRIDOR» PROJECT

To develop a **«Low Emissions Corridor»** concept to be applied to the A22 by means of the experimental and scientific study of an integrated set of dynamic policies to manage traffic on the basis of a proactive logic

To define the modalities to exploit the concept to the whole Alpine corridor **(«Alpine BLEC»)**

THE «BRENNER LOWER EMISSIONS CORRIDOR» PROJECT

BRENNER LEC lower emissions corridor

Life

maximum environmental benefits,

minimum inconvenience for users,

optimal use of the existent infrastructure,

maximum safety level

EXPERIMENTAL POLICIES APPLIED WITHIN THE PROJECT

- Under heavy traffic conditions: dynamic reduction of speed limits
- Under almost saturated conditions:

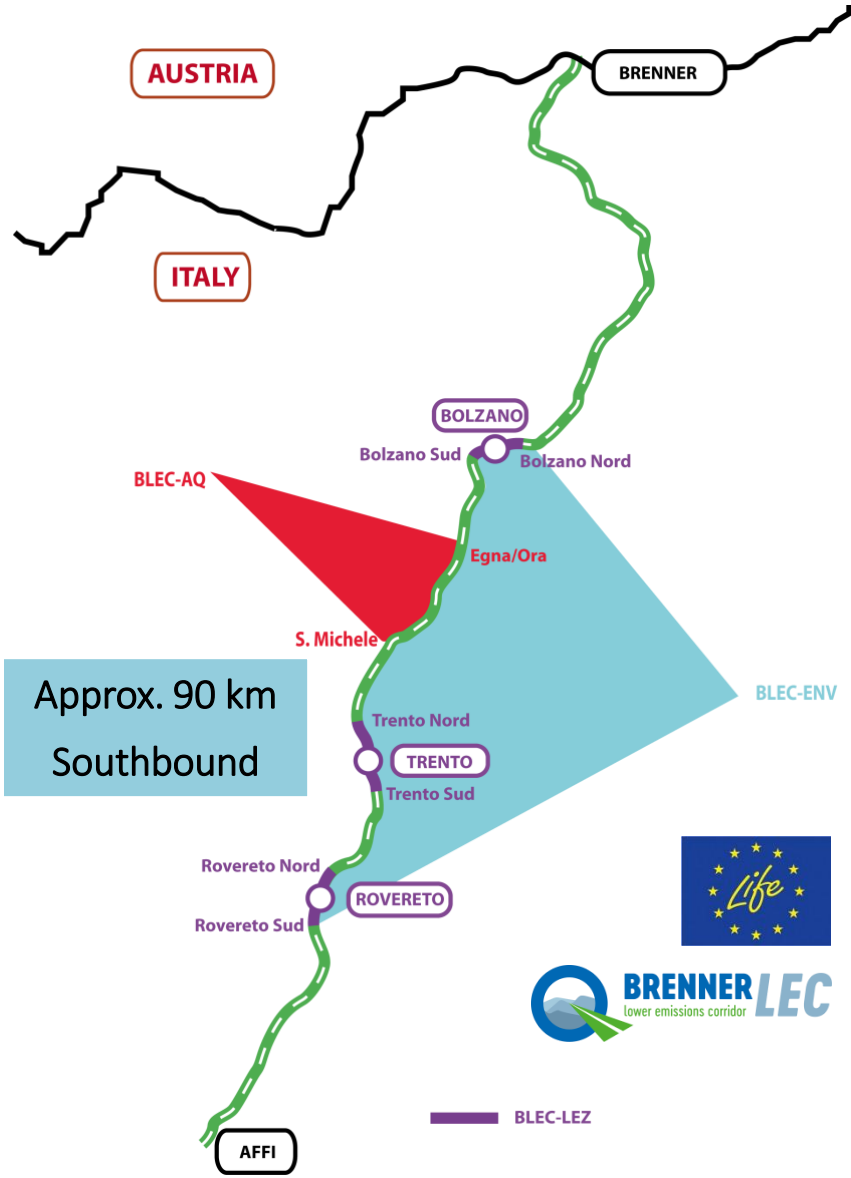
temporary use of the hard shoulder as additional transit lane

REDUCING SPEED LIMITS WITH HEAVY TRAFFIC…

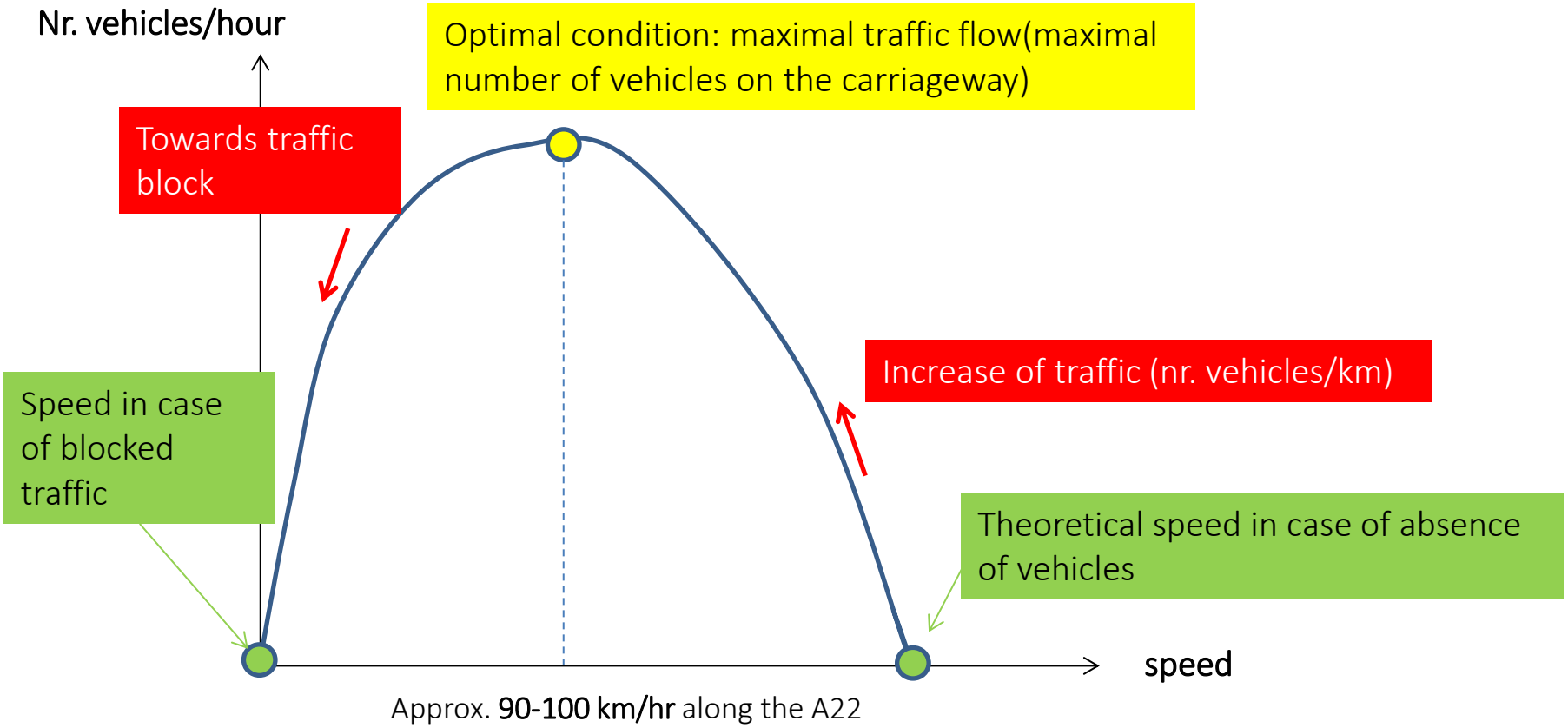
… to increase the motorway capacity

… to smoothen traffic

… to reduce pollution



WHY REDUCING SPEED LIMITS WITH HEAVY TRAFFIC?



Approx. **90-100 km/hr** along the A22

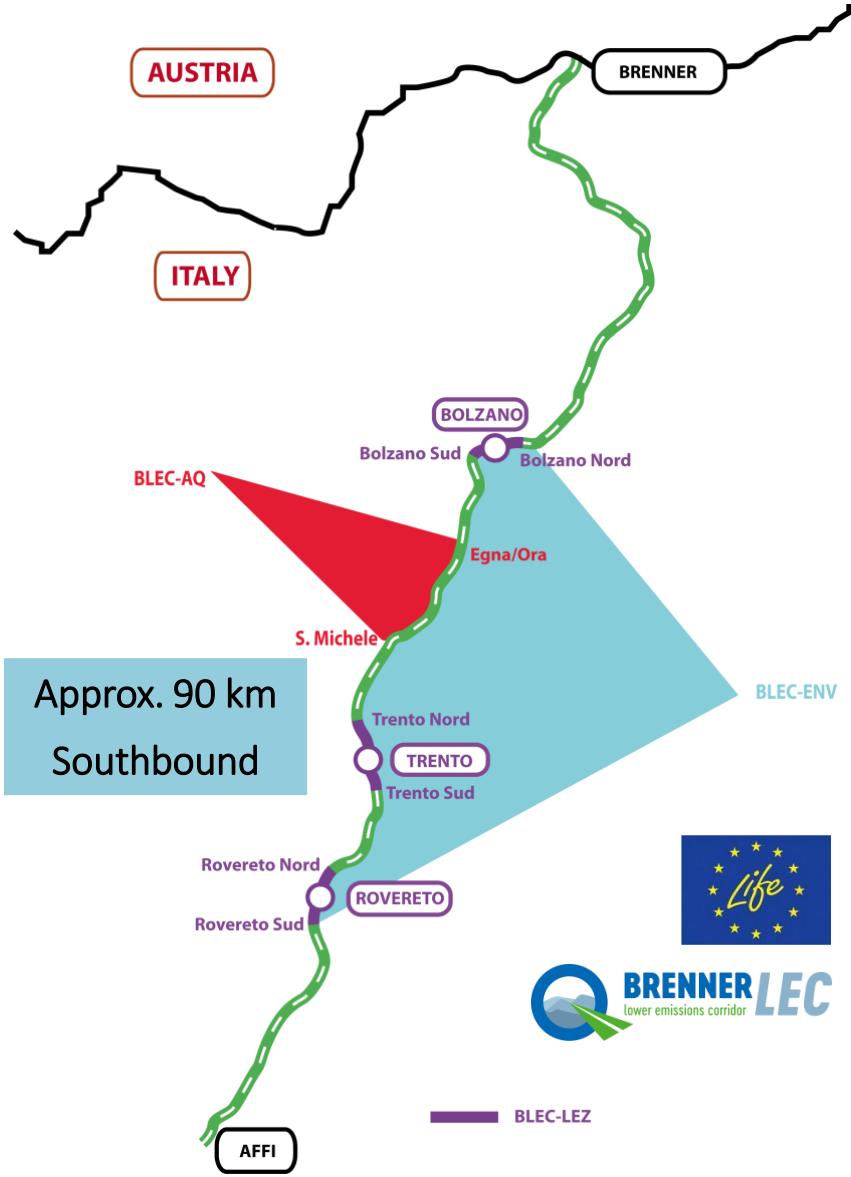
EXPERIMENTAL POLICY APPLIED WITHIN THE PROJECT - BLEC-ENV

PHASE 1 (da marzo 2017 a maggio 2018)
Tests with dynamic speed limits and temporary use of the hard shoulder on a short experimental section (Trento South – Rovereto South)

Speed limit reduction:
12 days / year (almost 40% of all critical events)
Dynamic lane activation:
3 days / year

PHASE 2 (from March 2018 to December 2019)
Assessment of dynamic speed limits on the whole project section

PHASE 3 (from October 2019 to April 2021)
Optimization of combined policies

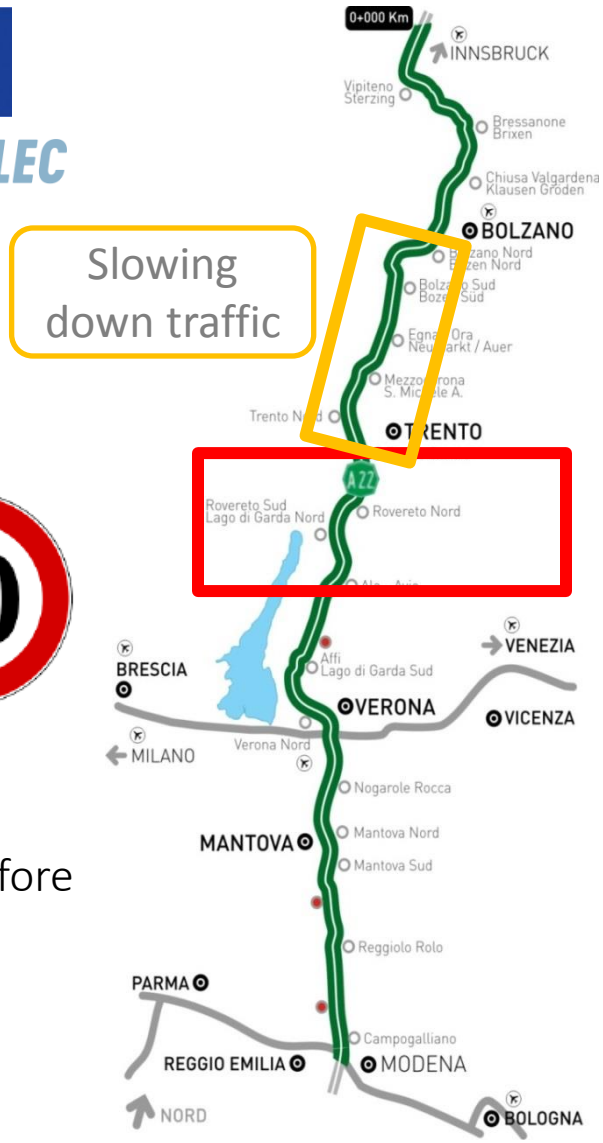


HOW ARE SPEED REDUCTION MEASURES APPLIED?

BRENNER LEC lower emissions corridor

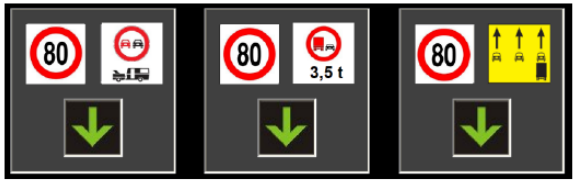
Speed reduction to 90 km/h (maximal motorway capacity) in two steps

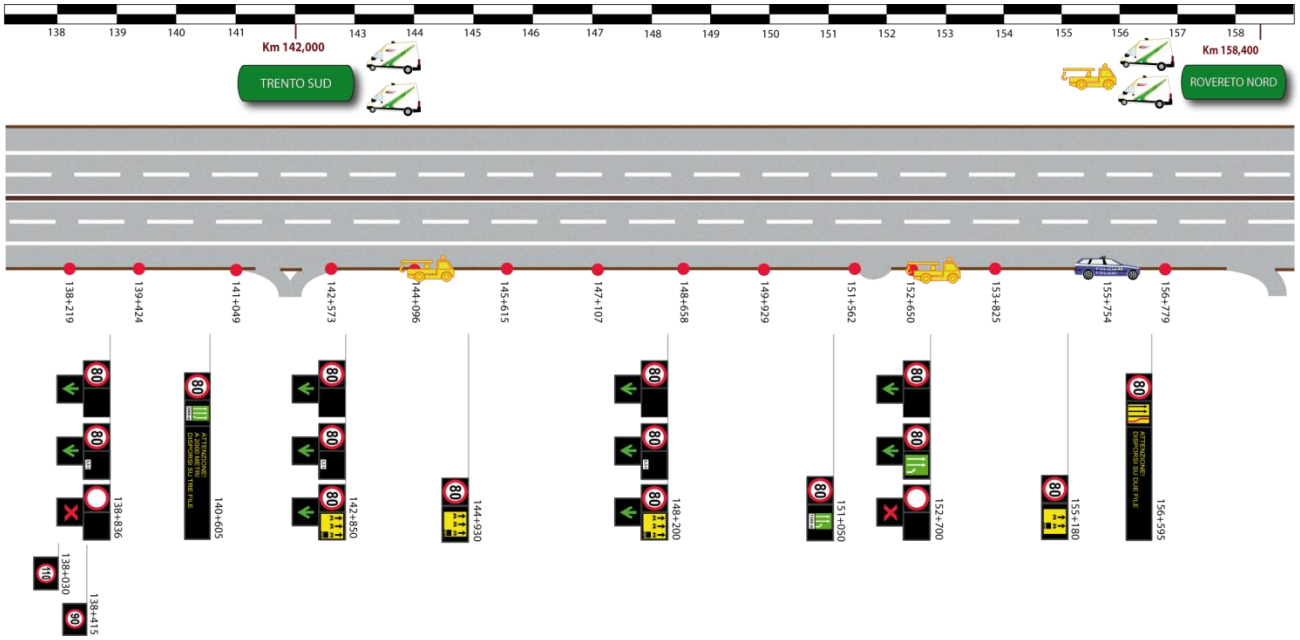
Tests start when traffic begins slowing down north of Trento – before traffic congestions take place – to smoothen traffic flows



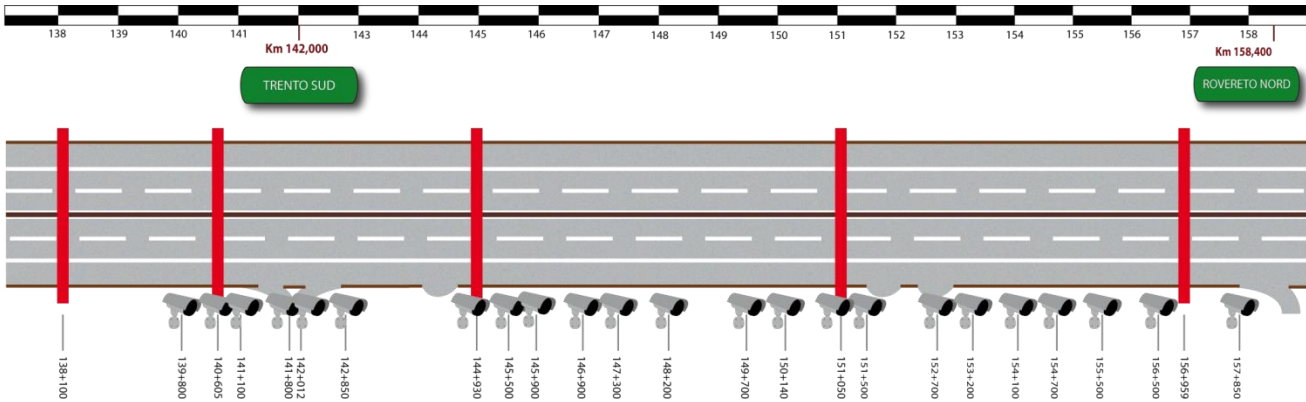
HOW IS DYNAMIC LANE ACTIVATION APPLIED?

Dynamic lane activation – in order to increase the motorway capacity from 3,000 vehicles/hr to 4,000-4,200 vehicles/hr



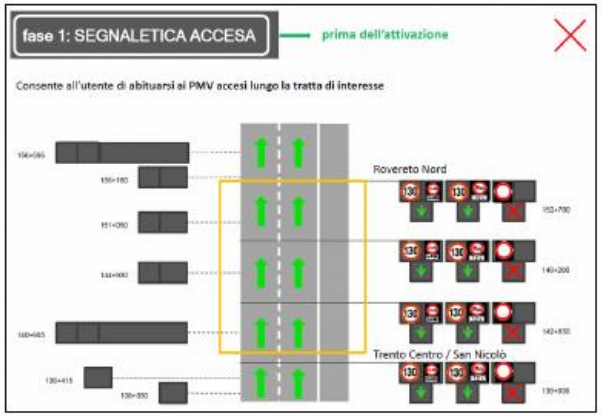


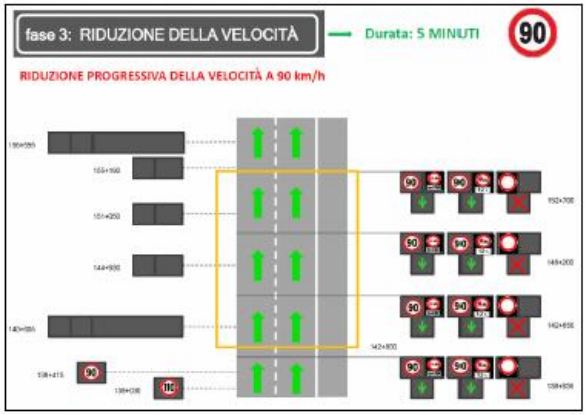
Already **infrastructured** motorway section

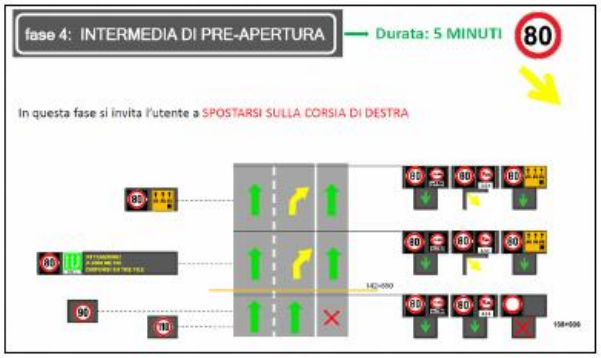


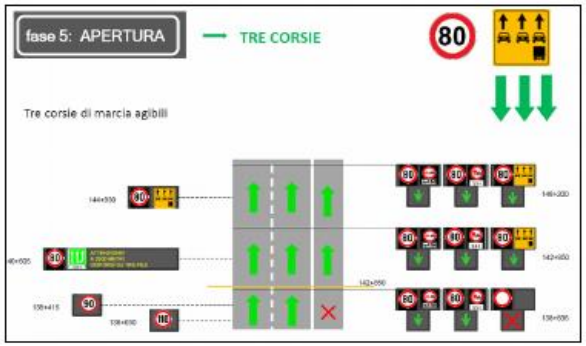
HOW IS DYNAMIC LANE ACTIVATION APPLIED?

According to a **special regulation**









EXPERIMENTAL POLICY APPLIED WITHIN THE PROJECT - BLEC-AQ

Under conditions of high pollution: dynamic reduction of speed limits for passengers cars

PRE-PHASE (from February 2017 to April 2017)
Testing the correct functioning

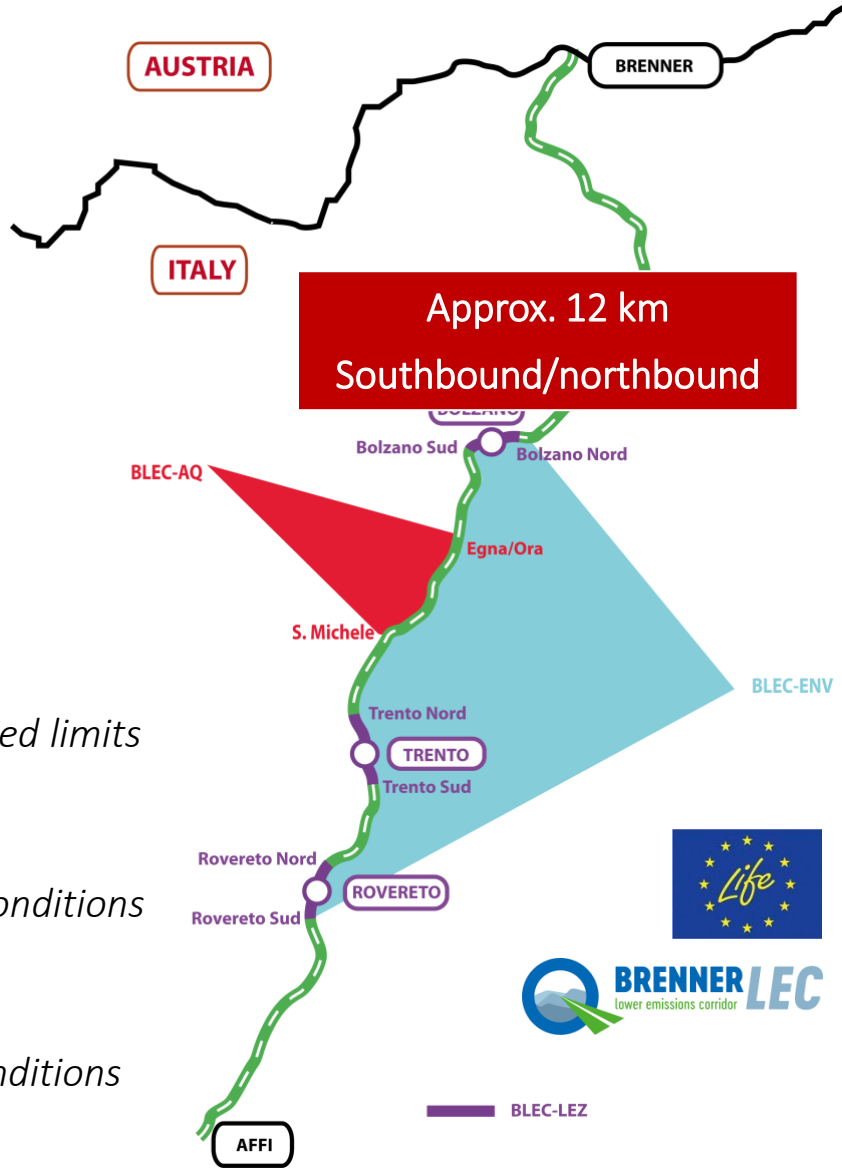
PHASE 1 (from May 2017 to April 2018)
Comparison of speed limits 130 km/h - 100 km/h

PHASE 2 (from May 2018 to April 2019)

Comparison of speed limits up to 90 km/h (even variable speed limits within the same motorway stretch)

PHASE 3 (from May 2019 to December 2019)
Speed management according to the measured air quality conditions (reactive system)

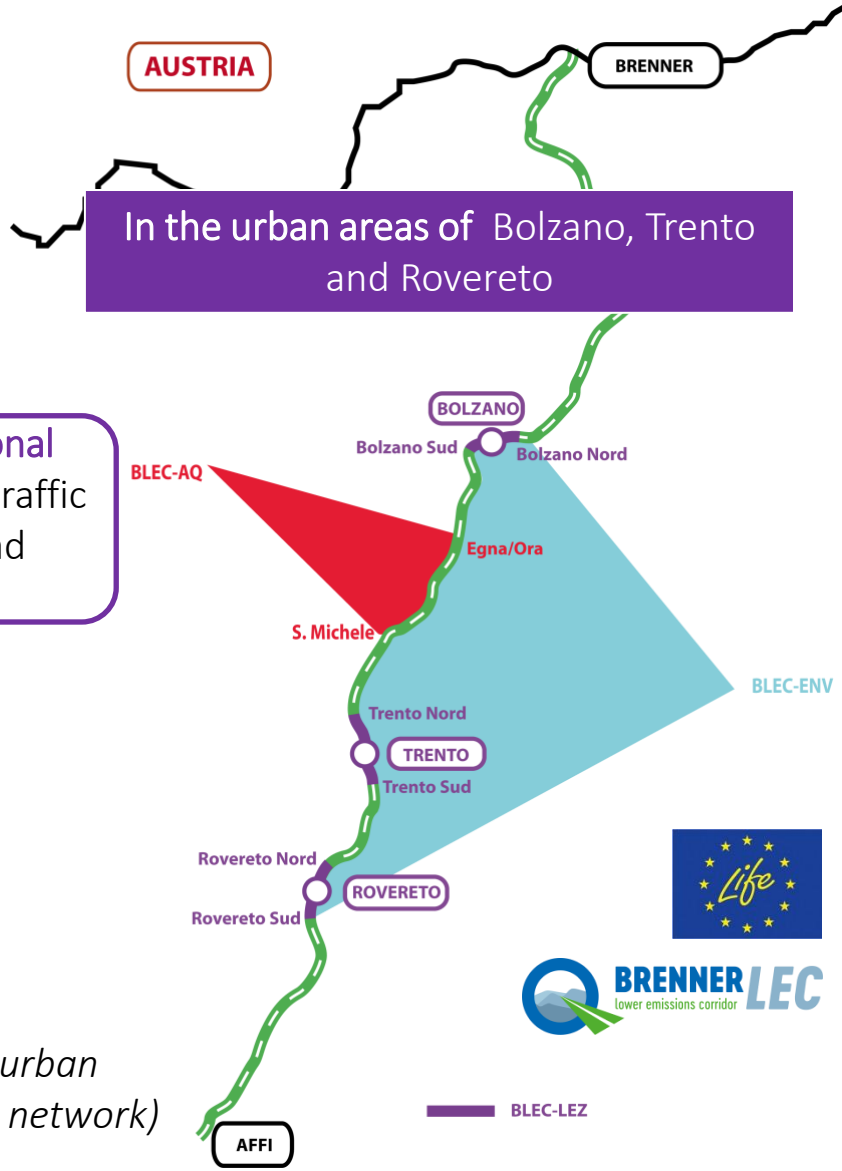
PHASE 4 (from October 2019 to April 2021)
Speed management according to the foreseen air quality conditions (proactive system)



EXPERIMENTAL POLICY APPLIED WITHIN THE PROJECT - BLEC-LEZ

Under <u>traffic conditions in urban areas</u>:
integrated use of information channels (VMS, apps, etc.)

Real-time analysis of travel times along the National Road 12 and monitoring possible dangers of high traffic flows from the motorwsay to the suburban road network



PHASE 1 (from September 2017 to March 2018)
Operative *interaction between traffic management centers*

PHASE 2 (from April 2018 to October 2019)
Technological *integration of traffic management centers*

PHASE 3 (from November 2019 to April 2021)
Creation of joint dynamic corridors for traffic flows crossing urban areas (optimized use of the motorway, urban and suburban network)

ACTIONS PLAN – technical part

Forecasting models development

Dynamic traffic-induced policies calibration (BLEC-ENV)

Dynamic air pollution-induced policies calibration(BLEC-AQ)

Integrated highway-urban policies calibration (BLEC-LEZ)

Evaluation on how to exploit the policies adopted on other road stretches

Technological components development

Air quality, noise and traffic monitoring

Environmental improvements monitoring

Socio-economic impact assessment

STAKEHOLDERS INVOLVEMENT

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WG «Communication»

WG «Urban traffic management»

WG «Suburban traffic management »

WG «Enforcement»

Technical support for the implementation of the experimentations foreseen

BrennerLEC project

WG «Environmental Sustainability»

Examination of environmental impacts

WG «Social-Economical Monitoring»

Examination of social-economical impacts

WG «Alpine-BLEC»

Best practice exchange with Austrian actors (Tyrol)

USERS' INVOLVEMENT

28.11.2016
Press conference

FAQ

Questionnaire

Project page on the A22 web site
http://www.autobrennero.it/it/la-rete-autostradale/ricerca-tecnologica/brennerlec/

USERS' INVOLVEMENT

hell MARKETING & PUBBLICITÀ

Life

BRENNER LEC lower emissions corridor

www.brennerlec.life

USERS' INVOLVEMENT

Posters

Flyers

Large-scale dissemination

- Notice boards
- Web site
- Media activities and public events
- Dissemination material
- Advanced Traveller Information Services + questionnaires for users
- Short technical reports

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