

## Output factsheet: Strategies and action plans

Version 1

Project index number and acronym	CE69 INAIRO
Lead partner	National Public Health Center
Output number and title	O.T3.3 Indoor Air Quality Action Plan - Czech Republic
Responsible partner (PP name and number)	National Institute of Public Health / NIPH - PP7
Project website	<a href="http://www.interreg-central.eu/Content.Node/InAirQ/InAirQ.html">http://www.interreg-central.eu/Content.Node/InAirQ/InAirQ.html</a>
Delivery date	November 2018

### Summary description of the strategy/action plan (developed and/or implemented)

The Action Plan is a tool for preventing, identifying and solving indoor air quality (IAQ) problems in school buildings. It contributes to integrate activities that affect the indoor air quality issues into the system's normal use, management and maintenance. The aim is to provide a high quality indoor air by solving problems and by setting rules and preventive measures. The action plan was prepared for the Marjánka Primary School in Prague 6, which is located in an urban area with a significant traffic load. The building, external and internal potential sources of pollution were described. Subjective evaluation was performed within the questionnaire survey of children from the measured class and their class teacher. The performed measurement confirmed the previously selected parameters that they represent problem in the indoor environment of schools: increased concentrations of the coarse fraction of suspended particles, low relative humidity, increased concentrations of carbon dioxide and the negative impact of traffic around the school, especially on concentrations of nitrogen dioxide and suspended particles of the PM<sub>10</sub> fraction. It was suggested:

- Introduce regime measures for ventilation (regular interval, ventilation windows on the less loaded side of the building, according to the current situation in air pollution)
- Install CO<sub>2</sub> concentration detectors and consider the installation of controlled air exchange with recuperation in the long term.
- Install humidifiers and simple meters to check the humidity level.
- Remove carpets from classes. Increase the extent or frequency of thorough cleaning, including the removal of dust from the walls. Use dust-free painting materials.
- Development green areas around the school.

In cooperation with the City Hall it would be another option to influence the intensity of traffic in this locality. The situation and possible measures was discussed with the school management and functionality of selected measures has been tested in pilot study.

### NUTS region(s) concerned by the strategy/action plan (relevant NUTS level)

CZ01 Prague  
CZ010 Prague

### Expected impact and benefits of the strategy/action plan for the concerned territories and target groups

The action plan is a tool, which contribute to improve indoor air quality in schools. It clearly shows what possibilities and ways lead to achieve this aim. Although not all measures can be implemented immediately, the implementation of at least some of them is beneficial. The benefit is also that the action plan teaches school management and teachers to think about the school environment in a new way.

### Sustainability of the developed or implemented strategy/action plan and its transferability to other territories and stakeholders

School principals signed in the Declaration on Ensuring a Healthy Environment at School that they are aware that the school environment, especially indoor air quality, has an impact on children's health, well-being and productivity. With the help of indoor air quality action plans, they promised to ensure at least the fulfilment of the requirements set by national legislation or the recommendations of the World Health Organization. This is a good basis for future improvements.

The action plan addresses the problems of the indoor environment of schools, which are to some extent typical of most current school buildings. General principles of construction of the action plan even specific measures are transferable.

### Lessons learned from the development/implementation process of the strategy/action plan and added value of transnational cooperation

The development of the action plan has shown that there are reservations in the care of the quality of the indoor environment and that they can be described by a systematic approach. The real improvement depends on the willingness of the school management to comply with certain regime measures, i.e. on the human factor, but largely on the financial possibilities of the school and the understanding of the founder. Transnational cooperation gives a unique opportunity to be inspired and see if slightly different conditions do not give the possibility of better solutions.

### References to relevant deliverables and web-links If applicable, pictures or images to be provided as annex

The Czech action plan and other INAIRO related materials are available  
on the project official website: <https://www.interreg-central.eu/Content.Node/InAirQ.html>  
on the lead partners website: <https://www.nnk.gov.hu/index.php/nnk-projektek/inairq> and  
on the official national facebook site of the project: <https://www.facebook.com/InAirQCeska/>