Integration of DNEL into national regulations for occupational safety and health. The situation in the Slovak Republic

Eleonora Fabianova
Regional Authority of Public Health, Banská Bystrica Slovak Republic

Abstract

In the Slovak Republic the limit values of the exposure to chemical factors (OELs) are adopted by governmental order (most recently G.O. No 355/2006 Coll. On protection of workers from the risks related to exposure to chemical factors at work and G.O. No 356/2006 Coll. On health protection of workers from the risks related to exposure to carcinogens and mutagens at work) and are updated quite frequently. In the preparation of the OELs the criteria for transposition of the EU directives are followed simultaneously with the Methodology for the Derivation of occupational exposure limits issued by SCOEL, EU Commission in 1999. Beside national former traditional approaches in the limits setting, the experiences and approaches used in other EU countries esp. Germany, UK, Sweden have been taken into account. For the chemical substances we have recently in the list OELs (called NPEL – the highest acceptable exposure limit) for 280 chemicals. For the OELs the average value and the short term value are stated, if appropriate and available. Concerning exposure to carcinogens and mutagens classified in the category 1. or 2. by the EU classification system, the TSH (Technical guiding value) is stated instead of NPEL. Altogether TSH was stated for 35 chemicals.

The employers are obliged by legislative measures to comply with the adopted limit values and to assess the predictive and later also the real health risk for all exposed groups of workers, in case of changed or different conditions. The health risk assessment is required also as part of the operational order from all employers dealing with chemical substances. The operational order has to be approved by the public health authority (occupational health specialists). The exposure scenarios and DNELs required from producers and downstream users by the REACH fit very well to the philosophy of our legislation. The structure of the required informations under recent national regulations and the information provided via exposure scenarios and for DNELs calculation are very close related and welcomed. We have long tradition in the risk ranking for the occupationally exposed workers and we hope, that the new REACH legislation will enhance the range and quality of the health and safety needed data. We suppose to keep the OELs especialy for emitted pollutants. The DNELs will be in the first years expected as the preliminary assumption. We would like to accept the DNELs as indicative values and OELs as binding values. The international cooperation and effort is needed. From the point
of view of the small country, we appreciate the possibility to share the data and to have common ground for limits settings. The problems are expected on the side of obliged persons (producers, downstream users). The trainings, workshops and lot of consultancy will be needed.
Integration of DNEL into national regulations for occupational safety and health – the Slovak Republic

Eleonóra Fabianová,
Regional Authority of Public Health, Banská Bystrica

EU Conference: Occupational Limit Values for Hazardous Substances – Healthy working conditions in global economy
Place: Dortmund, Germany
Date: 7. – 8. 5. 2007

Integration of the OELs and DNELs into the legislation in the Slovak Republic

OELs are adopted by Governmental Order on protection of workers from the risks related to exposure to chemical factors at work.

TGV (TSH - technical guidance value) for carcinogens and mutagens at work by Governmental Order on protection of workers from the risks related to exposure carcinogens and mutagens

OELs: are binding values; adopted for 280 chemicals plus for 50 chemicals in dust form

TSH: for 35 carcinogens and mutagens

Limits are regularly updated (2 - 4 years period)

Values based on EU limits + for another chemicals– on review of toxicological, epidemiological literature.
Integration of the OELs and DNELs into the legislation in the Slovak Republic

Data compared with the limit values adopted in countries of the EU esp. Germany, UK, Sweden ...

The Criteria

- the health based OELs (NPLE for chemicals)
- the TGV for carcinogens to keep risk as low as reasonable achievable (but not elimination of risk absolutely)

On the use of DNELs in the national system

The exposure scenarios and DNELs required from producers and downstream users fit very well to the requirement of our legislation.

The employers are obligated to comply with adopted OELs

To assess the health risk by prediction of exposure and by real exposure (changes of exposure)

To prepare report on operational procedures including health risk assessment.

The RA is used in both approaches:
  in OELs derivation
  in DNELs derivation

NOAL – is key point for limits setting
Specific application and use of DNEL by Slovakian industry?

The industry will follow the REACH requirements for exposure scenarios and for DNEL (DMEL for carcinogens) preparation.

The workshops, trainings are organized by the Ministry of Economy to be able to comply with the requirements.

The big companies are in the preparation phase (financial calculations, search for specialists, identification of the toxicological services, consultations with Center for chemical substances and preparations and with public health authorities).

Problems, issues related to DNELs

We welcome the direct shift of the limit setting from the state authorities towards the industry.

More limits are needed for substances used, produced.

DNELs / DMELs will be accepted in first period as indicative values.

The BMD derivation seems as appropriate approach for policy on the protection from the risk related to exposure to carcinogens and mutagens.

The future development – changes in scope for the OELs derivation by state authorities – mostly for emitted substances, sensitizers, irritants, corrosive substances.

Capacity are limited (personnel, experts)
Problems, issues related to DNELs

Financial resources limited for state authorities
Coordination of activities in the country and on the EU level
Preparation of the technical guidance documents in national language will be necessary
IT tools have to be developed and checked
The flow of information on DNELs preparation and adoption on the EU level
The differences between OEL and DNEL for the same substances could be caused by access (lack of access) to the most recent scientific knowledge

Problems, issues related to DNELs

The need for creation of the new tripartite board on exposure limits adoption on country level
Broadening of the view of existing board members from the occupational to more comprehensive view on human exposure
Participation in the research activities is limited for the small countries; enhanced participation in the multicentric studies will be needed
Fabianová, E.: Integration of DNEL into national regulations for occupational safety and health - The Slovak Republic

Thank You For Your Attention!

Thank You For Your Attention!

Thank You For Your Attention!