

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

# The Convention on the Transboundary Effects of Industrial Accidents

Twenty years of prevention, preparedness and response



UNITED NATIONS

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Concept: Christina Stuhlberger

Interviews: Alex Kirby

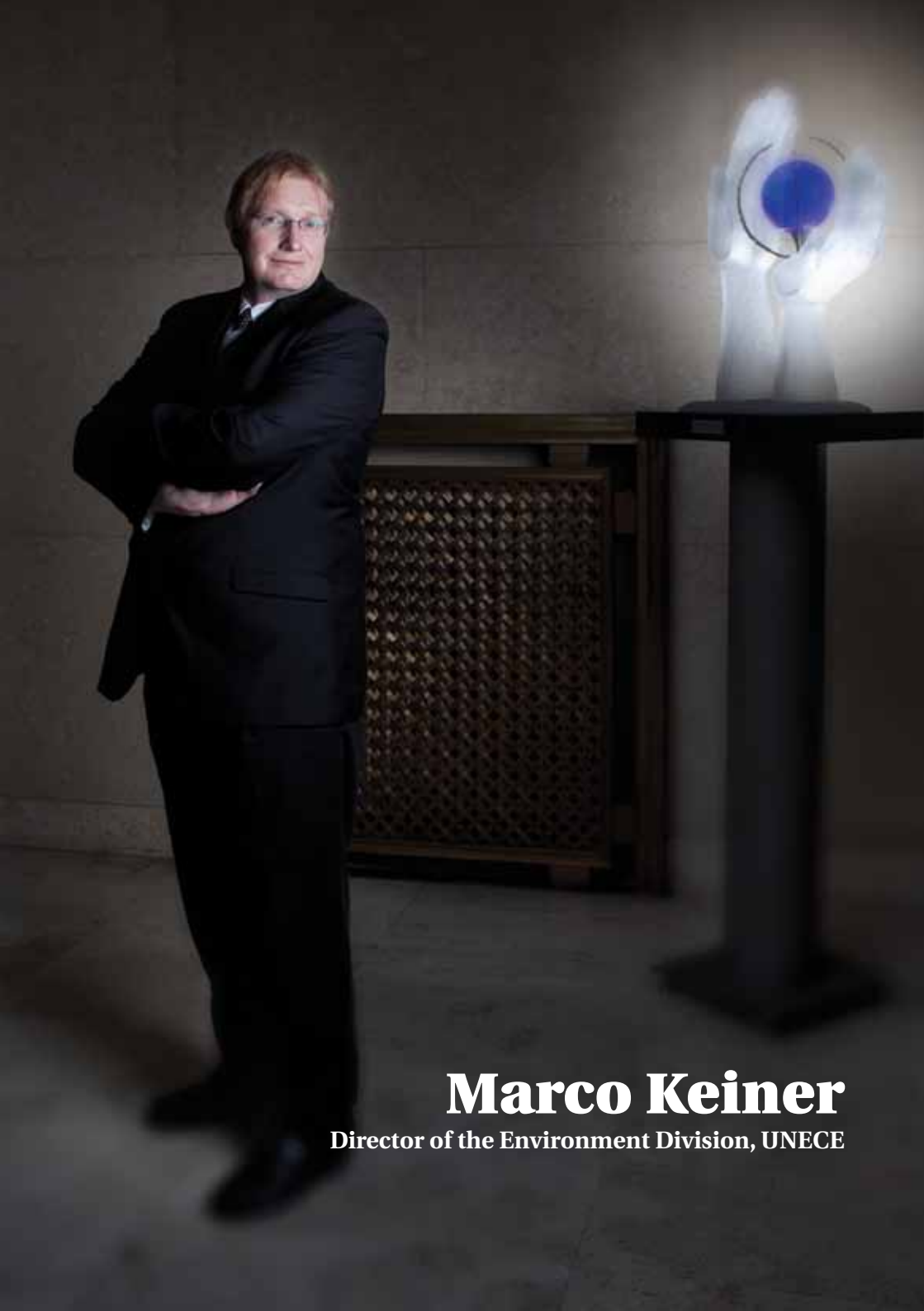
Photography: Alban Kakulya

Text, Editing: Geoff Hughes

Layout: Maria Libert

Cartography: Matthias Beilstein





## Marco Keiner

Director of the Environment Division, UNECE

## FOREWORD

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This year marks the twentieth anniversary of the adoption of the Convention on the Transboundary Effects of Industrial Accidents, and we at the United Nations Economic Commission for Europe have much to celebrate. Naturally, the Convention works to increase industrial safety and to help authorities and industry prevent, prepare for and respond to major industrial accidents. But it also contributes to cross-border cooperation and better environmental governance by increasing coordination among the authorities in different countries, both vertically — from central to local — and horizontally — cross-sectoral as well as transboundary.

In addition to improved cooperation among countries, the Convention also celebrates some notable achievements:

- An increased awareness of industrial safety across the region, including both European Union member States and countries with economies in transition
- The adoption of the Convention's Assistance Programme to respond to the demand for technical assistance created by this awareness
- Fact-finding missions to 15 countries and implementation activities, including inspections and workshops in 10 countries, under the Assistance Programme
- A growing sense of solidarity, especially between upstream and downstream countries
- Enhanced enforcement and better legislation
- The creation of an operational, Internet-based Industrial Accidents Notification System
- The codification of good practices and practical tools, resulting in the Convention's safety guidelines — on pipelines, tailing management facilities and, soon, oil terminals — and safety checklists, needed to respond to growing awareness of industrial safety
- The initiation of discussions across the region on land-use planning and the siting of hazardous activities



**Sergiusz Ludwiczak**  
Deputy Director of the Environment Division, UNECE

By providing the basis for regional and inter-agency cooperation for industrial safety, the Convention promotes the use of the cleaner and safer technology that is so important to the transition to a green economy. The United Nations Economic Commission for Europe stands ready to take a leading role in this crucial work. As we move ahead into our next 20 years, we take this opportunity to reflect on the last 20. Here we present an overview of the Convention through the voices of some of the people who have contributed to the Convention's success.

**Marco Keiner**  
Director

**Sergiusz Ludwiczak**  
Deputy Director

Environment Division, United Nations Economic Commission for Europe



# INTRODUCTION

Since the early 1990s the United Nations Economic Commission for Europe (UNECE) has concentrated its efforts on preventing industrial accidents and especially their transboundary effects in its region, which stretches from Canada and the United States of America in the west to the Russian Federation in the east. Its work led to the adoption of the 1992 Convention on the Transboundary Effects of Industrial Accidents. The Convention was signed by 26 UNECE member countries and by the European Union, and entered into force on 19 April 2000.

The Convention is designed to protect people and the environment against industrial accidents by preventing accidents from occurring, or by reducing their frequency and severity and by mitigating their effects if necessary. The Convention promotes active international cooperation between countries, before, during and after an industrial accident, and encourages its Parties to help each other in the event of an accident, to cooperate on research and development and to share information and technology.

In 1976 an industrial accident at a chemical plant in Seveso, Italy, caused the release of dioxin, which contaminated some 25 square kilometres of land and vegetation and poisoned local residents. More than 600 people had to be evacuated from their homes and as many as 2 000 were treated for dioxin poisoning. The Seveso accident prompted the Council of the European Union to adopt the first piece of multilateral legislation to prevent and control such accidents — the Seveso Directive of 1982.

Ten years after the Seveso accident, a fire at an agrochemical plant at the Sandoz site in the Schweizerhalle industrial area of Basel, Switzerland, caused the worst environmental disaster in Western Europe in decades. The acrid cloud of smoke from the fire soon dissipated, but the large volumes of water used by firefighters drained into the Rhine River and created a red toxic trail 70 kilometres long flowing through Switzerland, France, Germany and the Netherlands.

While industry itself had been trying to make its operations safer, these two accidents demonstrated that industrial accidents can be far-reaching and transboundary, and can have severe consequences for human health and the environment, as well as for property. The Convention acknowledges these risks, and establishes a framework for responding to them.



## Major industrial accidents in the UNECE region

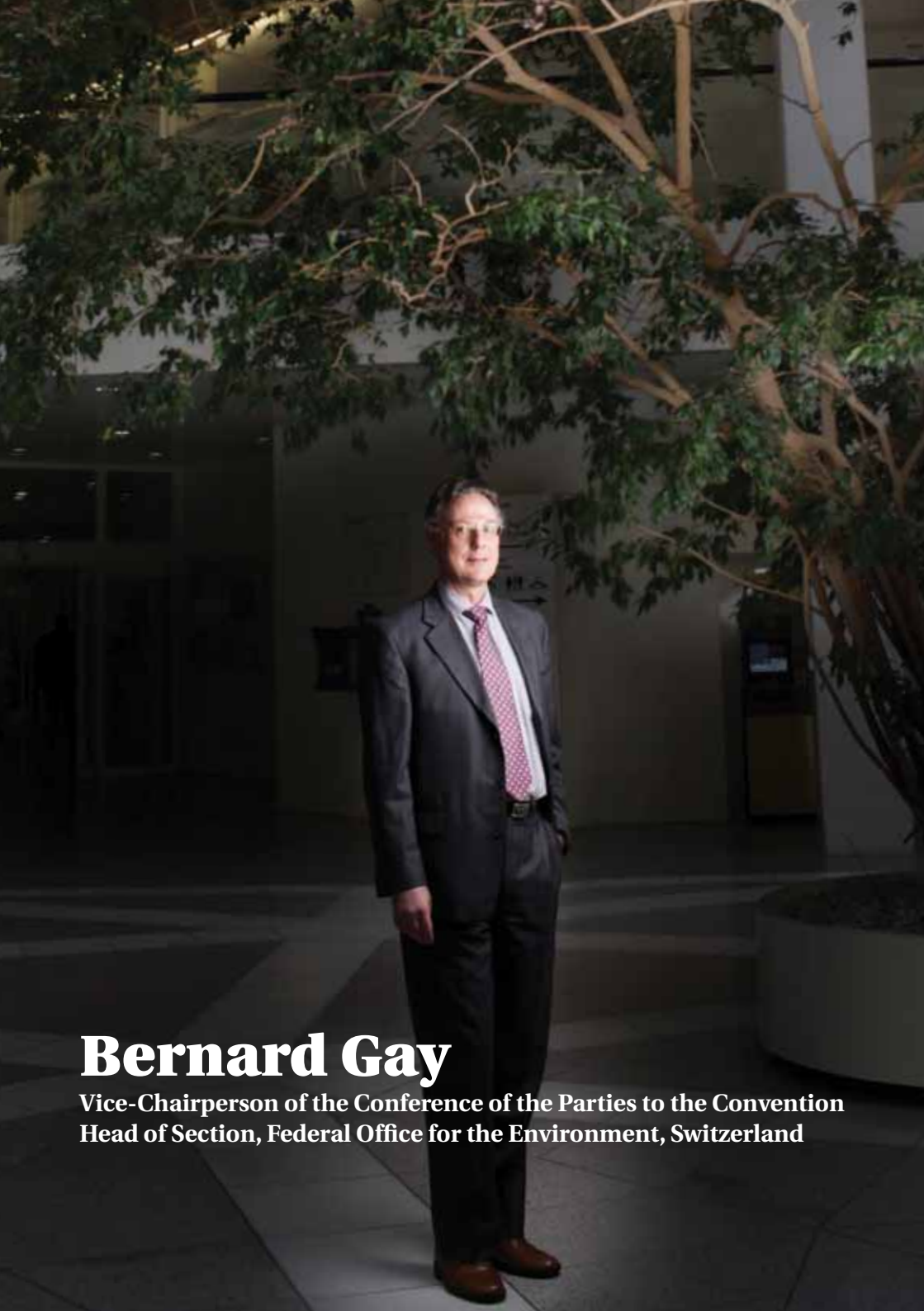
- Members of the 1992 Convention on the Transboundary Effects of Industrial Accidents
- UNECE members but not of the Convention (Canada and United States of America not shown)

## Major industrial disasters since 1950

- Mining
- Energy
- Chemical
- Oil spill

Source: UNECE (→ <http://www.unece.org/env/teia/parties-map.html>); Wikipedia article "List of industrial disasters" retrieved on 07 June 2012 (→ [http://en.wikipedia.org/wiki/List\\_of\\_industrial\\_disasters](http://en.wikipedia.org/wiki/List_of_industrial_disasters))

Just months prior to the date the Convention entered into force, another major industrial accident occurred — this time at Baia Mare in north-west Romania. A break in a dam encircling a tailings pond at a mining facility resulted in a spill of about 100 000 cubic metres of liquid and suspended waste containing about 50–100 tonnes of cyanide, as well as copper and other heavy metals. The spill contaminated the Ssar, Lapus, Someş, Tisza and Danube Rivers before reaching the Black Sea. The spill threatened drinking water supplies and devastated fish stocks in downstream countries.



## **Bernard Gay**

**Vice-Chairperson of the Conference of the Parties to the Convention  
Head of Section, Federal Office for the Environment, Switzerland**

**What happened in 1986 in Switzerland must have had a huge impact on the country.**

The Sandoz Schweizerhalle accident caused a lot of damage to the Rhine River. But on the other hand this accident also prompted the launch of many activities in favour of the Rhine and in Switzerland generally in support of major accident prevention.

**Would you say Switzerland feels better protected against the possibility of anything like that ever happening again now because of the Convention?**

It's difficult to say. We also have an ordinance on major accidents that was born as a consequence of this accident at Schweizerhalle. When we signed the Convention, our ordinance was already enforced. But what I think is that the process of ratifying the Convention helped us to assess what we really want to be in the Convention. That allowed us to take a fresh look at what we were doing, whether it was in line with international requirements. It also opened the doors for closer cooperation with some of our neighbours.

**Your neighbours are at the mercy of Switzerland rather than the other way around?**

Yes, a little bit. In Germany there are a few installations that could in the worst case have an influence on us, but not to the same extent that Switzerland could cause damage as in Schweizerhalle. Although Schweizerhalle can hardly be repeated today.

**Do you think Europe has learned the lessons of Schweizerhalle and Seveso?**

In a way, but the fact is that something else could happen that could have repercussions. That's the challenge: you always have to think about what could happen that has not yet happened. Perhaps Schweizerhalle as it happened will not happen again because there are retention basins and things like that now, but perhaps something will happen we haven't thought of yet.

**The unexpected can always happen.**

Exactly.

**Do you see a risk of complacency? I am not talking about Switzerland specifically but more generally.**

I think the risks exist, but we are aware of these risks and we are trying to find ways to act against this complacency.

**Is cost very much a factor and making the Convention's work more difficult?**

It can certainly be. Especially in countries that have financial problems or that haven't reached yet the economic level of Western Europe, it is certainly a factor.

**You say that goodwill is the thing that stands out from your experience with the Convention. Have there been instances where people were unwilling to work with you?**

People not, perhaps there are governments who are not very involved in this Convention although they should be. That's also a reason why we try to involve as many countries and parties as possible.

**When you look back, what makes you think "thank heaven for the Convention, I am really glad for being part of it"?**

That's really the goodwill from all parties to work together, to find solutions to common problems and to help others to find solutions to their problems. The Convention doesn't have a lot of money but is trying to support countries in the Assistance Programme, which I find is very interesting. And for me, it has always been very interesting. We Western countries keep on saying "you should do this or that" and while we are saying such things, we are reflecting "are we doing this exactly like we are telling them to do things?" And here we always have things that we have to improve.

## IN CASE OF ACCIDENT

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The Convention takes the position that the first line of defence against industrial accidents is to prevent them from occurring at all, and spells out what its Parties have to do to reduce risks to the extent possible. Their first obligation is to identify the hazardous operations that take place within their borders but that could have a transboundary effect if an accident were to occur. The Convention therefore requires Parties to take preventive measures, including measures to be carried out by Parties, competent authorities, and operators or through joint efforts. As part of Parties' obligations with regard to prevention, the Convention also requires that the operators of any hazardous activity provide an analysis and evaluation of the activity.

No matter how stringent the safety standards, accidents will occur and countries must be prepared to deal with the consequences. The Convention outlines the preparedness and response requirements in the case of an industrial accident, especially if its effects spill over into another country. Hazardous operations must have on-site and off-site contingency plans, and where several Parties might be affected by a hazardous operation, they are expected to work together to ease its effects by making their plans compatible or by drawing up joint off-site contingency plans, and by helping one another if asked to do so.

A prompt response to an industrial accident is crucial in reducing its effects on communities and the environment, and requires that emergency services personnel be mobilized and coordinated across local, regional and national authorities. In addition, Parties should maintain procedures to inform the public in the event of an industrial accident or a threat thereof. When an industrial accident has possible transboundary effects, Parties must inform their neighbouring countries of the risks and must share all available information necessary for an effective response.

Article 10 of the Convention creates the Industrial Accident Notification System whereby in the event or imminent threat of an industrial accident with potential transboundary effects, "the Party of origin shall ensure that affected Parties are, without delay, notified at appropriate levels through the industrial accident notification". The designated points of contact use this Web-based system to notify Parties, to transmit information necessary to counteract transboundary effects and to ask for mutual assistance. The concerned Parties are responsible for activating the contingency plans required by Article 8 as soon as possible.



**Alexander Moskalenko**

G.C.E. Group

**You work on expert assessments of industrial safety of technical devices. How good is the technology for assessing industrial safety, not just in the Russian Federation but also in Europe?**

In different countries the solutions are very different. In my view, the fact that we are all looking at this problem and trying to deal with it is already a good result. In the last 25 years both Europe and the Russian Federation made a big step forward. We now share common technologies based on environmental principles that used to be different not so long ago. Nowadays, we don't see as much of the terrible things that we saw 25 years ago. As an expert I am very much concerned about the numbers and I can say that our technological world is now safer, 100 times safer. We assess this regularly and can see the progress. But there are still some gaps that no one looked at before.

One of the areas is transport. And I haven't seen any reduction in hazard in this area. Maybe we should look at accidents involving tankers in the North Sea and the Biscay. There are also many incidents in railway transport. We should have a specific look at corridors and transport terminals. These are cross points where the loading and unloading happens. These points entail a complex set of problems including a financial one.

**One big difference between now and 1986 is that globalization has happened. If you look back to 1986, states were much more powerful players. Now, the private sector is more powerful. A lot of your clients are in the private sector. Do you think they are as aware as states when it comes to industrial safety? Does the private sector need the help of the Convention in a way the states perhaps didn't need it?**

In most cases the industry understands what do but they don't know how. It's a general thought that the management and staff of a company know the company better than anyone else. But my experience from the safety side shows that the company usually does not know its own facilities that well. So the assistance of the safety experts is very much needed indeed. All our engineers know how to make the process work but they were never encouraged to look carefully at safety so it is not their priority.





## **Hrvoje Buljan**

**Member of the Convention's Working Group on Implementation  
Ministry of Environmental Protection,  
Physical Planning and Construction, Croatia**

## **Suzana Milutinovic**

**Member of the Convention's Bureau  
Department for Risk Management and Accident Response,  
Ministry of Environment and Spatial Planning, Serbia**

### **What does the Convention offer to your countries?**

Suzana Milutinovic — The Convention gave us the opportunity to assess the level of industrial safety in our country and helps us find out what we need to improve it. Serbia adopted the Convention in 2009. During the same period we introduced the procedure for safety reporting via relevant legislation. Activities under the Convention gave us possibilities to improve our knowledge about the requirements of the Convention and about how to implement the Convention in our country. Activities comprised trainings and workshops organized under the Assistance Programme. These have been highly useful. Together with our experts we improved our knowledge on the identification of hazardous activities and the implementation of safety measures, and we learn about best practices and experiences of other countries. Further, the Convention facilitates horizontal and vertical cooperation as well as cooperation with neighbouring countries.

Hrvoje Buljan — Croatia ratified the Convention in 1999, which facilitates cooperation between competent authorities and our neighbouring countries. We have implemented the Convention by adopting corresponding national legislation. All documents related to the Convention have been approved, which has been a great achievement for Croatia.

### **What are the main concerns for you in both Croatia and Serbia about the areas covered by the Convention? What gives you sleepless nights when you think about the areas covered by the Convention, both in your countries and your neighbours'?**

Suzana Milutinovic — In Serbia we need to improve existing procedures for safety reporting and the procedures for other reports required during and after accidents. Also we need to define overlapping responsibilities within our ministries and make our procedures more efficient. There is good cooperation at the moment but there is no formalized framework for this cooperation. We hope that by introducing an integrated approach we become more effective.

**In 20 years what changes would you like to have seen to meet the needs of your countries?  
How do you think the Convention could be improved?**

Hrvoje Buljan — Cooperation and communication on both national and international levels is key to the Convention and its main structure. In Croatia the network for the different competent authorities has very much improved. I also hope that international cooperation will further improve in the future.

Suzana Milutinovic — I agree with my colleague on this. We put a lot of effort in improving our cooperation with the neighbours mainly by signing bilateral agreements and organizing joint exercises. I consider it highly important to exchange more information with advanced countries on these issues. It is a good opportunity within the Convention to move forward on these things.

**In the time you both have been involved in the Convention, do you have any personal experience that might stand out that made you think, “I am so glad we are part of this Convention”?**

Hrvoje Buljan — We composed guidelines for the implementation of the Convention according to national law and according to Convention. This has been a very successful and satisfying experience.

Suzana Milutinovic — My personal work under this Convention is a very positive and pleasant experience and I am very glad that I am a member of the Bureau. I am proud that I can make my contribution to the goal of the Convention. Hopefully, we can help make the world a cleaner and safer place for our children.



# COOPERATION ACROSS THE REGION

The Convention promotes cooperation among the countries in the region. Article 4, for example, clarifies the responsibilities of a Party for identifying hazardous activities within its jurisdiction and for notifying potentially affected Parties. Article 15 requires the Parties, consistent with their laws, regulations and practices, to facilitate the exchange of technology related to prevention, preparedness and response, and emphasizes the promotion of:

- The exchange of available technology
- Direct industrial contacts and cooperation
- The exchange of information and experience
- The provision of technical assistance

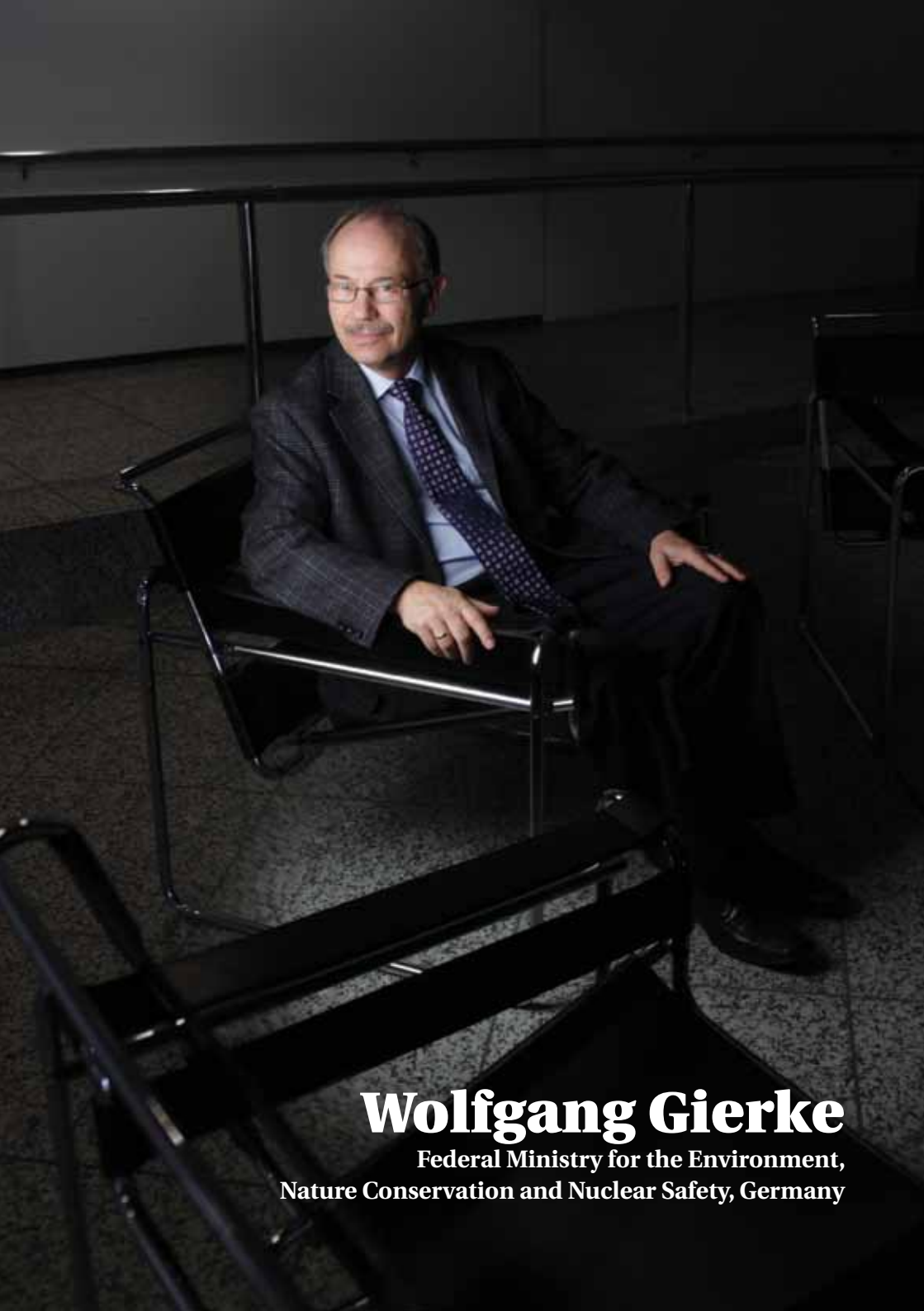
In the event of an industrial accident, a Party may ask other Parties for assistance under the provisions of Article 12. A Party receiving a request for assistance is responsible for making a prompt determination of whether it is in a position to render assistance, and for informing the requesting Party of the scope and terms of the assistance to be rendered. The concerned Parties then cooperate on the provision of assistance, including on any actions necessary to minimize the consequences of the accident.

The Convention further encourages Parties to cooperate in research and development and the sharing of information and technology. The Convention aims to provide a platform for cooperation within and between countries and for the exchange of experience and good practices.

An essential part of regional cooperation is the promotion of the awareness of the importance of industrial safety at the ECE level. The Convention recognizes that the safety measures it covers — those capable of causing transboundary effects — could be adopted by individual countries and applied to all the hazardous installations within their territories. Such an approach perfectly complements the Seveso Directive, which can serve as a guide to the countries where legislation related to industrial accidents is still under development.

Solidarity among the Parties and UNECE countries is a key component to the success of the Convention. One manifestation of this attitude of solidarity is the Assistance Programme, which supports not only Parties but also other countries with economies in transition to increase industrial safety through the implementation of the Convention. Countries with more advanced implementation support other countries through financial aid and such in-kind assistance as the sharing of expertise. These collaborative efforts include examples of both East-West and upstream-downstream cooperation.

One of the ways the Convention supports collaboration is through joint seminars. A recent joint effort with the UNECE Committee on Housing and Land Management focused on the relationship between the prevention of industrial accidents and land-use planning. The purpose of the seminar was to facilitate a dialogue among stakeholders at the international level regarding ways of ensuring safe neighbourhoods near major hazardous industrial facilities. The participants included safety authorities and land-use planners from throughout the region, and the seminar included presentations from experts, an interactive, multimedia simulation and the sharing of good practices and instruments and policies for the development of safe neighbourhoods in proximity to industrial facilities.



**Wolfgang Gierke**  
Federal Ministry for the Environment,  
Nature Conservation and Nuclear Safety, Germany

**Do you think the Convention has reached its full development or are there areas that you would like to see developed further?**

From my point of view the problem is that the Convention serves primarily countries in [South-Eastern Europe, Eastern Europe, the Caucasus and Central Asia]. It does not serve so much EU member countries. So [the countries of South-Eastern Europe, Eastern Europe, the Caucasus and Central Asia] are the ones that really benefit from the Convention and its activities. They should identify their real needs and how they can improve. I would say it is up to them to develop the Convention further. For me being a German and as well a member of the EU I think the main goal is to achieve a maximum accord between the EU legislation and the Convention, that is, the Seveso Directive, especially regarding the scope. We cannot afford to cover very similar areas of need with completely different instruments. We already had some activities to adapt the scope of the Convention to the scope of the EU legislation and for the time being we are in a very extensive amendment phase for the Seveso Directive — which will be finalized in the middle of 2012 — and I would like to see that once we have finalized our amendment and the scope of EU legislation, the parties of the Convention consider the need to adapt the Convention once again to the EU legislation.

**I am surprised to hear you say that the Convention offers more to the countries of South-Eastern Europe, Eastern Europe, the Caucasus and Central Asia than it does to the EU countries.**

**Why is that?**

We have very extensive legislation covering accident prevention, emergency response and even covering the matter of transboundary effects. I think all that we find in the Convention is already set legally in the EU. In fact the member states of the EU have jointly declared that the way they implement the Convention will be to follow the Seveso Directive.

**Do you find German taxpayers maybe saying “Why should we be paying to belong to this Convention and really paying other people to make sure they don’t cause transboundary accidents when there’s nothing in it for us?”**

Well, that’s an interesting question, of course, but I have to say that our commitment to the Convention and our support of the activities under the Convention are not aimed at preventing our contamination by other countries. We do it because we feel committed to pass on to other countries

the experience we gained over years and decades, in particular to countries with economies in transition and we do it also, to the extent possible, to help other countries keep from repeating the mistakes we made in the past. We already have a quite demanding level of industrial safety in Germany and in Central Europe so we are in a situation that even very high financial investments in safety often result in very small additional improvements. But often you find that much bigger improvements of safety can be achieved with much less money in, for example, countries with economies in transition, and therefore I believe our taxpayers really understand that there is a good number of reasons to care not only for industrial safety at home but also to support other countries in their effort.

**Looking back over the years of your involvement with the Convention, what gives you the greatest satisfaction, what makes you the happiest?**

What makes me the happiest is that I see that the longer we talk with each other, the more we become familiar with each other and we gain trust in each other. It is a process and not a single achievement. The journey is the reward. Most of the people know each other and we meet at other occasions — not only in the UNECE business — such as EU meetings. When there is a problem it's a short way to make a call or send an e-mail asking for each other's advice. This is a process that becomes easier over time and I think that is really one of the major achievements of the Convention as such. People gain trust in each other and talk openly and that makes things much easier in the process.



# THE ASSISTANCE PROGRAMME

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The Assistance Programme — a needs-based effort developed to enhance the capacities of countries of Eastern Europe, the Caucasus, Central Asia and South-Eastern Europe in implementing the Convention — is founded on the principle that assistance can be effective only if a recipient country is willing and able to receive it. The first (preparatory) phase of the Assistance Programme requires countries to demonstrate their willingness and commitment to the Convention through the expression of a high-level commitment, and by the implementation of the basic tasks and the presentation of the results to a fact-finding mission.

When a country lacks the capacity to implement the basic tasks under the Convention, the Assistance Programme organizes an awareness-raising mission to provide additional support. Teams of four people with substantial expertise on prevention, preparedness and response carry out these missions, after which the mission-hosting country prepares an action plan for the implementation of the basic tasks and reports to the Bureau of the Conference of the Parties when the tasks are completed. A positive evaluation of the implementation of the basic tasks is a precondition for participation in the second (implementation) phase of the Programme, and for receiving assistance on complex tasks.

Since the Assistance Programme began in 2004, Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Croatia, Georgia, Kazakhstan, the former Yugoslav Republic of Macedonia, the Republic of Moldova, Romania, Serbia, Ukraine and Uzbekistan have successfully completed the preparatory phase and joined the implementation phase.

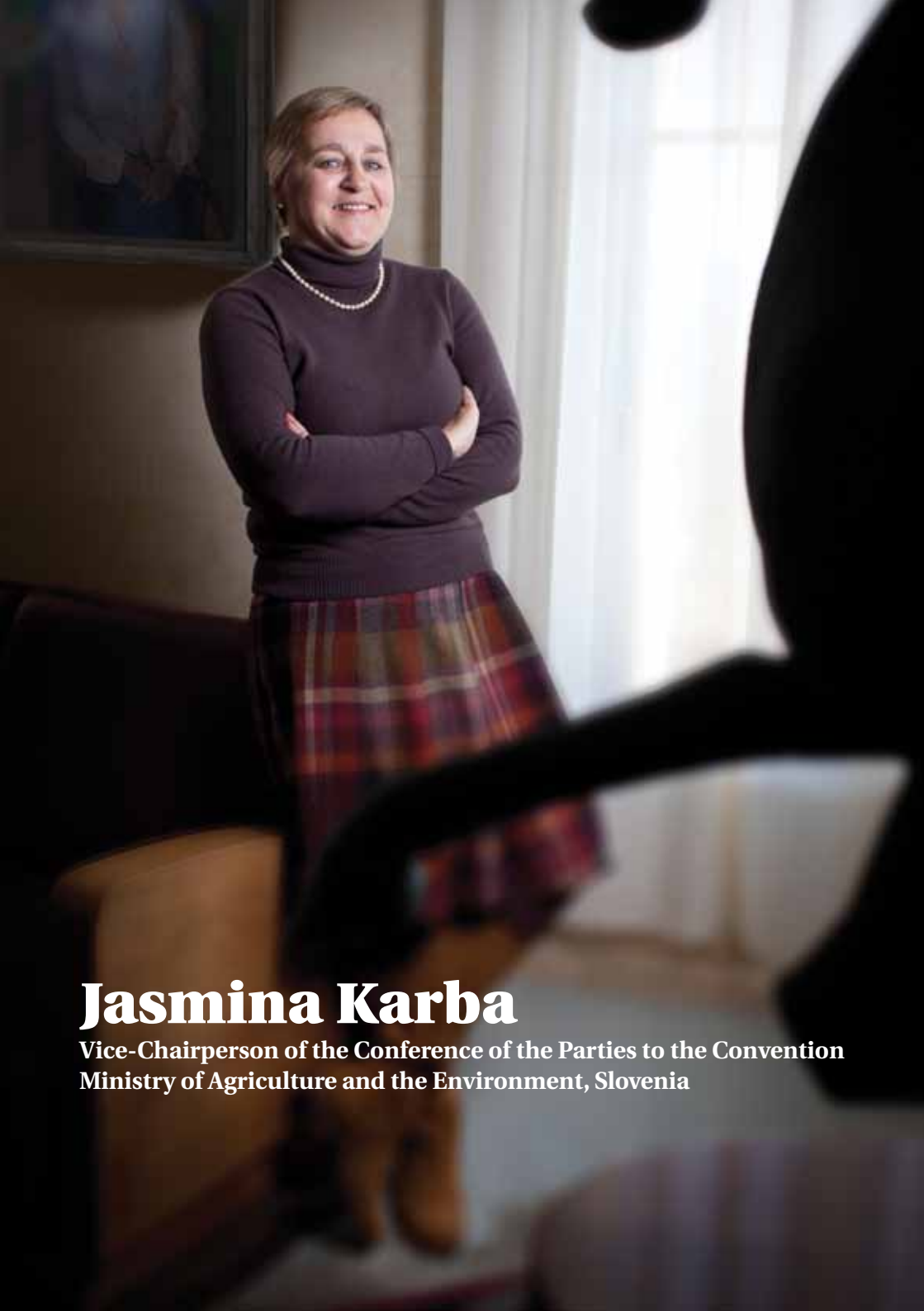
In the implementation phase, the Assistance Programme supports those countries that have successfully completed the preparatory phase with assessing their needs and enhancing their capacity to implement the Convention. The main activities undertaken in the implementation phase are training sessions, in-field exercises, advisory services and consultations. These activities are based on the individual needs of the countries or groups of countries involved, and are designed by the beneficiary countries with help from the Secretariat, if necessary.

The Assistance Programme takes a strategic approach that employs a cyclical mechanism to ensure that eventually no gaps exist in the implementation of the Convention. The beneficiary countries analyse the results of their activities, generate a report and design further activities as necessary. This mechanism ensures that the countries' ability to prevent an industrial accident is continually strengthened and improved.

The strategic approach for the Assistance Programme identifies the following specific objectives:

- To bring continuity to the implementation of the Convention
- To enable a robust and longer-term approach that provides guidance for flexible and/or tailored funding of the activities needed under the Assistance Programme, as well as for strengthening the implementation of the Convention
- To create an institutional sustainability and commitment of participating countries with respect to the Convention's implementation
- To provide participating countries with an instrument to measure the progress of the implementation of the Convention by periodic reviews
- To provide the Bureau and the Working Group on Implementation, and through them the Conference of the Parties, an instrument to measure, monitor and stimulate progress

The strategic approach identifies benchmarks across six priority work areas — identification of hazardous activities; notification of hazardous activities; prevention; preparedness; response and mutual assistance; and information to the public and public participation — and establishes a set of indicators for each area. Two additional work areas — the siting of hazardous activities and civil liability — are to be addressed after most of the shortcomings in the first six areas are handled.



## Jasmina Karba

Vice-Chairperson of the Conference of the Parties to the Convention  
Ministry of Agriculture and the Environment, Slovenia

### **In your view, is the strategic approach working as intended?**

My view is that strategic approach is not yet working as intended. While I think that the strategic approach is in itself an extremely useful tool for countries wishing to progress in the control of hazards of industrial accidents in a transparent and systematic manner, I also think that more effort needs to be devoted to raising awareness of this tool and to ensuring that it is really used in practice.

### **How does your work as a Vice-Chairperson of the Conference of the Parties relate to your work at home in the Ministry of Agriculture and the Environment?**

My responsibility within the Slovenian Ministry of Agriculture and the Environment relates closely with the work of a Vice-Chairperson of the Conference of the Parties. In both cases the focus is on hazards of industrial accidents. In Slovenia my responsibility is the design of a strategy to address hazards of major industrial accidents in a national context. As a Vice-Chair, by participating in the steering of activities undertaken under the Convention and in the design of its future development, I can contribute to the progress in the control of hazards of industrial accidents in a much wider context of the UNECE area.

### **Is Slovenia participating in the Assistance Programme?**

Slovenia has been supporting the Assistance Programme since it was launched in 2004 by contributing financial and in-kind support. It has also participated in the design of instruments and tools to steer the programme and to monitor its achievements.

### **In a presentation in The Hague in 2010, you characterized the issue of industrial accidents as a “hot potato”.**

**Is that how you would characterize the situation today?  
What has changed?**

The issue of industrial accidents had been perceived as a “hot potato” (to be understood in a way that delegating responsibility to cover the issue was not a straightforward task) when Slovenia was taking the first steps towards establishing a system for the control over hazards of industrial accidents in a systematic and transparent manner. This was more than 10 years ago and the situation is of course different nowadays. What has changed is that

the awareness of the issue and the competence to address it have increased on the side of industry and competent authorities. There are still elements of the national control system where improvements are needed — among them siting of industrial facilities — but the issue of industrial accidents is not perceived as a hot potato any more.

### **How has the Convention influenced Slovenia's handling of the potential for industrial accidents?**

The Convention has played an important role in Slovenia's handling of the hazards of industrial accidents. It was actually the Convention that first drew the attention of Slovenian authorities to the issue. Seminars and workshops organized under the Convention were the events where the first knowledge and information were made available to Slovenian authorities. Becoming a Party has given additional stimulation to study how certain provisions of Convention could be implemented in Slovenia, and this influenced and finally resulted in progress in handling the potential for industrial accidents. Still today the Convention is perceived as a framework where useful information on good practice and knowledge of new developments in the area of industrial accidents is exchanged. This exchange is one of the pillars to support the transboundary dimension of the Convention, striving towards enhanced management of industrial accidents' hazards by all the Parties.







# Massimo Cozzone

Member of the Convention's Working Group on Implementation  
Senior Officer, Ministry for the Environment, Land and Sea, Italy

**You are very much involved in capacity-building.  
Why is this still necessary 25 years after Sandoz?**

I think this is one of the most important activities that we as a Ministry of Environment in Italy are taking forward in terms of international activities, especially we when talk about this UNECE region. I was heavily involved with Central Asian countries when we performed fact-finding missions and awareness-raising missions in order to promote the issues to the high-level environmental officials there. We found actually that there is a need to have these concepts promoted and disseminated there in terms of training and getting them to understand the implications both negative and positive. Sometimes they ask what it would imply for them to ratify this Convention in terms of obligations towards neighbouring countries. But then, yes, maybe there is some obligation, but they have to understand that this is in exchange for some other advantages, for example, that they can have in cooperation with neighbouring countries. So this is also an experience that we have to transfer to them because we have maybe the same in Europe on transboundary issues and we learned that only with building trust and cooperation could the problem be solved. Otherwise, it will only get worse.

**So you have to build trust before you can build  
technical capacity in the Convention?**

Yes, in certain regions of the UNECE, especially in Central Asia, maybe also in the Caucasus, I think we are at the level where it is most important to build trust. But at the same time, I would say that they have a very high level of academic and professional expertise because they used to study in Moscow and you don't find unprepared people there on the technical side. The problem is there has been a delay in which they were not updated on the latest technical developments. And secondly, the systems are also different on the technical side. So there is a need to exchange information on the compatibility of these systems and on working together. Otherwise there is no way to cooperate on the technical side.

**If the Convention had been enforced at the time of Seveso,  
how would Italy have benefitted and how would its neighbours  
have benefitted? What difference would it have made?**

Whether the accident would be possible under the regulations in place now is very difficult to say. On the one hand, the Seveso Directive and the UNECE Conventions have brought additional safeguards so of course we

have a situation where these accidents are much less likely than in the 1970s when Seveso occurred. On the other hand, risk assessment is something strange: you have to predict the future and nobody has the crystal ball to know what will happen. Even if you have the best mathematical, technical and physical models in the world to foresee any possible development, the risk cannot be brought to zero. There is always risk in human activities and in particular in industrial activities. Saying that Seveso would not be possible anymore is therefore not possible. I would say it is much less likely and I really hope that this possibility will be avoided forever, but maybe something could happen in a similar way that we cannot see right now.

**Is the UNECE region safer now than 25 years ago, and if so, is that thanks to the Convention?**

Since the adoption of the Convention in 1992, it has helped both to deal with issues at the border of the EU and the whole UNECE region to raise safety standards, because in particular in the former Soviet Union some standards on safety were very low. In some countries — like in Central Asian countries — there was sometimes very little concern about environmental effects and health and safety issues. In this the UNECE Convention has played quite a big role. The Convention has the opportunity to improve safety much further; we are not yet at the level of saturation. There is still much room for improvement, to which the Convention can contribute. Capacity-building is one component of that — to share the expertise we have and to work together so they can both understand and accept the principle of greater safety and put it into practice.

**What is the most important thing that the Convention has to do in the years ahead?**

There is an issue of information communication; every time a big accident occurs, there is some development. There is decision-making from the politicians, there is some new law maybe and there is some action and efforts in improving plant safety on the national and international level. But we don't want this to work like this. The Convention has to work more on trying to pass on the message that prevention is the main action. So for UNECE, information and communication are essential. People need to realize that they can do things before accidents occur and that this is an advantage for them. The issue is the perception of this advantage in terms of public opinion and politicians alike.



# Lukasz Wyrowski

Officer in charge for the Industrial Accidents Convention,  
UNECE (2007–2012)



**Among your other responsibilities you look after the Assistance Programme and capacity-building of the Convention. Would you find it a main need of the member States?**

In fact the main needs are not always clear. Member States often specify that they need financial support that can be invested in equipment, software and so on. We try to convince them that it's not the most important step in improving industrial safety. What is much more important is an exchange of good practice and having the opportunity to see how others do certain things. That is not to say that staff are not well educated in the countries where we work with the Assistance Programme, but they should have the possibility to look at different things from other perspectives that they might not be so used to. I am trying to convince them that they should look at good practice elsewhere and then take a look at their own practice in industrial safety. The question is how they can implement their own functioning system with the resources that they have. We often see lavish projects that invest millions, not within the Assistance Programme though, where after a few years, the only result of that project is that they had a project.

**One main need is perhaps to identify their needs and to find ways to meet them, no?**

That is true for many countries. For that reason we developed a number of tools under the Convention that try to teach the countries to think for themselves, which may sound silly but independent thinking is actually a very challenging task to convince people of. In some systems it is still difficult to depart from the old ways of implementing less efficient instructions from top to bottom rather than considering what would be the better approach. I have this example in which a local expert stated that if he would propose a different approach to his superior, he would not listen to him. If the information were communicated via the Convention, the same superior would be much more inclined to pay attention. In this we are supporting the local experts with technical knowledge and credibility to improve their system from the bottom up.

In the Convention we developed this structure for the strategic approach and we developed the indicators and criteria. In the strategic approach we want them to work in cycles. That means they take action, they assess the results achieved by the action and then they identify if there are remaining

gaps. With every new action they apply this cycle. The analysis and identification is not simple so we identified for them some indicators and criteria. Once the gaps are identified, we can help address these gaps but not by throwing money at it as that is not going to be a sustainable solution. Instead the idea is that we show good practice and together with the countries we can find out how this can be adopted in each of the countries according to their specific situations.

**From your knowledge of the Convention have you identified any gaps in it? When I say gaps, I mean ways the Convention could work differently.**

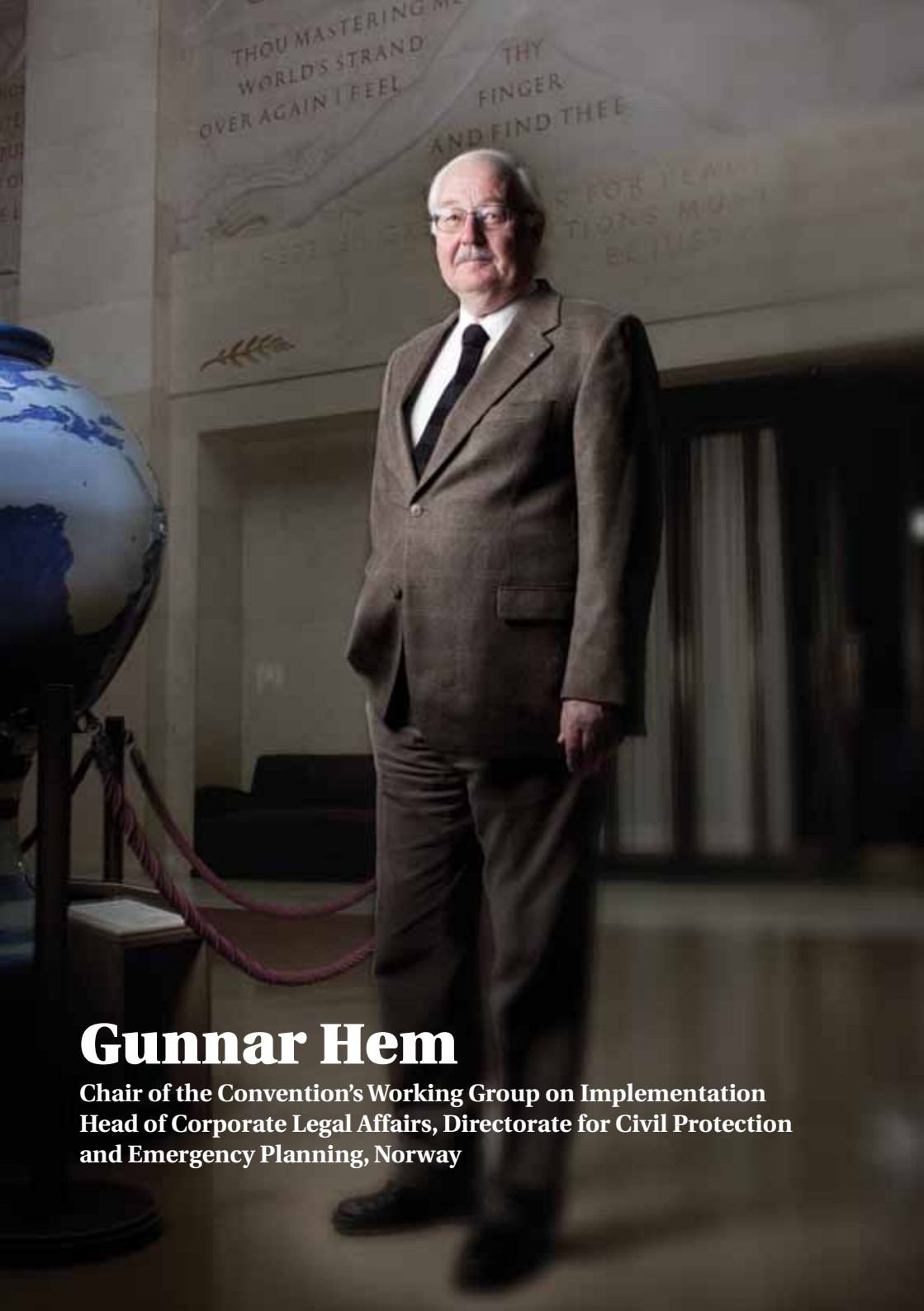
The good thing about the Convention is that it is a general framework. Sometimes this is too general because there are not enough details so people have difficulties working with it, but that also gives us the opportunity to develop additional tools like the strategic approach and the indicators and criteria. With that it becomes easier to understand the underlying principles. Also the Convention is not totally different from other instruments. There is the Seveso Directive in the EU, which we can refer to and through the Convention framework we can provide the development of the instruments for implementation in other countries. The most important thing is that we have our three pillars: prevention, preparedness and response. Of course, we want to push for prevention and preparedness.

**Are there any particular achievements of the Convention that you have not mentioned so far that stand out in your mind?**

I would like to say that it's not just because of the Convention that industrial safety has improved in various places. The Convention is a contributor to certain improvements but it's not the only instrument tackling industrial safety. But I think overall it is playing an important role and it's an achievement, which is known in the UNECE region. I often hear people asking if we need accidents so that the issue of industrial safety gets attention, and many people say it's sad but we really do. After accidents, money is mobilized to improve something until a few years after when nobody even wants to remember anymore. We think everything is fine and there is no attention by the politicians. When budget cuts have to be made, you do them in areas that are not really visible. And prevention is not that visible until an accident happens. So what is good about the Convention is that we contribute to maintaining attention on prevention.

**From your time with the Convention, is there one recollection that makes you the happiest when you think of it?**

I would link it with the Assistance Programme and the number of projects we have there. Seeing how the experts understand and appreciate the practical projects and their appreciation for the help provided by these modest but effective activities makes me very happy as this is exactly what we want to achieve with the means that we have.



## Gunnar Hem

Chair of the Convention's Working Group on Implementation  
Head of Corporate Legal Affairs, Directorate for Civil Protection  
and Emergency Planning, Norway

### **One of your areas of expertise is public participation. How important to the success of the Convention is providing information to the public and having the public participate in decision-making?**

In a complete major hazards control regime the communication and participation aspects are very important elements. There are many reasons for this: Basically, the public has a right to all relevant information so that they can be aware of hazards and risks and be able to act appropriately in case of accidents. But additionally, creating and maintaining an open and honest communication between the authorities, industry and the public is essential to develop confidence in the public authorities, industry and the regulatory and control framework.

It is also very important that information to the public is a continuous process that covers all phases of an industrial activity, and that information is tailored to the four different stages of an industrial activity — the pre-installation phase, the pre-accident stage, the accident stage and finally, the stage following an accident. These concerns have been reflected in Article 9 of the Convention, and information and public participation thereby constitute a separate “working area” of the Convention. The wording of the article is a bit complicated, but in short the message is: Give adequate information to the public, give the public opportunity to participate before taking any decisions and provide equal legal rights for exposed subjects both in country of origin and affected countries.

### **How effective are the indicators and criteria in helping countries meet their obligations under the Convention?**

It is my belief that the systematic approach that you are forced to apply when making use of the indicators and criteria is a very good way of identifying national strengths and weaknesses in a systematic way. The results are supposed to be used as a foundation for establishing action plans to improve the situation, including proposals for tailored assistance activities either under the UNECE Assistance Programme or under the auspices of other organizations.

Having said that, I must also emphasize that the evaluation based on indicators and criteria is not an easy exercise with simple solutions. A proper application of the indicators and criteria necessitates an intense, dedicated and unbiased job that must be a cooperative effort of a number of stakeholders so that the results do not stand out as the opinion of only

one person or one organization. Furthermore, the results must be accepted by the relevant authorities and presented to UNECE as an official document on behalf of the relevant countries.

We have relatively recently finished the first round of self-evaluations based on the indicators and criteria, following a special workshop on the performance of the system. The first round showed that many countries encountered problems in performing the exercise despite the special workshop. All countries except for one were therefore requested to prepare an improved assessment based on concrete recommendations from the group that evaluated the contributions.

Some countries have also applied the indicators and criteria as a basis for the biannual reporting on the implementation of the Convention, to be reviewed by the meeting of the Conference of the Parties. These countries state that the approach was very useful in responding to the questions posed by the Working Group on Implementation.

**In what direction would you like to see the Convention move in the years ahead?**

The Conference of the Parties in 2010 adopted a long-term strategy for the coming years. It indicates five priority areas for further work — involvement of parties and stakeholders, the exchange of information, the Assistance Programme, strategic partnerships and financing.

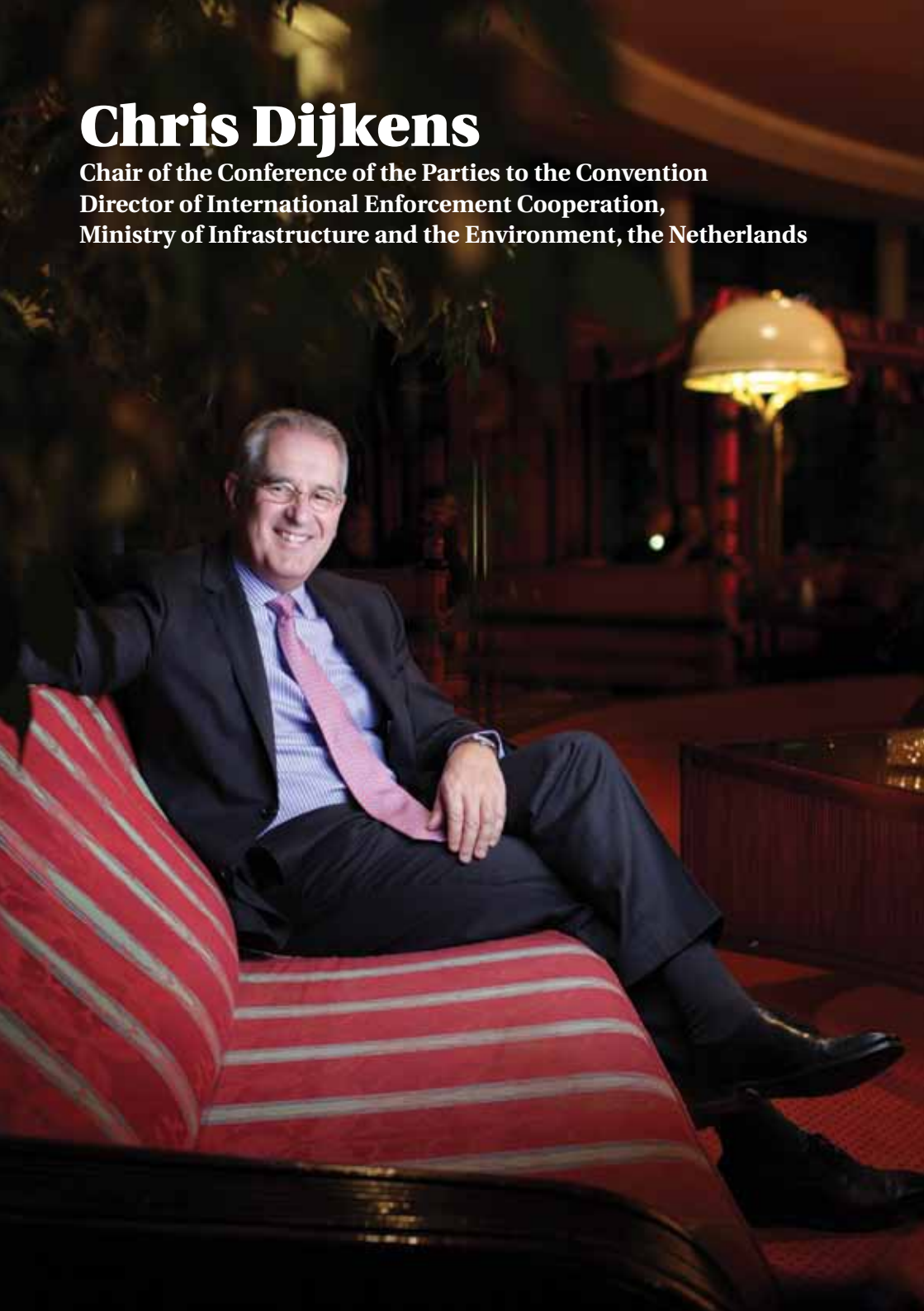
I would like to stress that for the fulfilment of the ambitious work plans it is essential to secure a robust way of financing the activities. A model for such robust financing is presently being elaborated in a task force on which I take part. I really hope that this new model will be accepted and adhered to by countries. Also it is of vital importance to have the necessary funding to keep up a dynamic and competent Secretariat, like we are used to.

I also wish for more involvement of all member countries of UNECE. In the negotiations we had extensive involvement from among others the United States and Canada, but they disappeared from our work in the later years. I wish that we could bring these important countries as well as others back into the arena. I would also welcome an extension of the Convention beyond the present geographical UNECE area, particularly to include countries neighbours to the UNECE area.



# Chris Dijkens

Chair of the Conference of the Parties to the Convention  
Director of International Enforcement Cooperation,  
Ministry of Infrastructure and the Environment, the Netherlands



**You used to be in charge of crisis management. How does this job differ from that? Being chair of the Convention, is that crisis management as well?**

I feel my responsibility is to keep the countries on board and that we implement the Convention. I can make the distinction between countries that have really implemented the Convention and countries that are at the point of implementing it. There are many people, countries and cultures involved and you have to keep all the balls in gear. That indeed feels a little bit like crisis management every now and then. The challenge is to keep everyone active, that they do the right things at the right moment for the results we all desire.

**Someone earlier said a possible problem is complacency. Is that a great worry for you?**

Complacency is indeed a major risk. Another worry for me, in my role as Chair, is when people are not really active but on the other hand it's also a challenge because as a chair it's your responsibility to keep them involved and have them engaged. There, with the right approach, it's important to keep them enthusiastic so they are doing their things.

**Do people meet under the Convention and put their differences aside because they are united by a common interest to prevent industrial accidents?**

Yes, they do. But also, when a country is a [Party] of the Convention, it has the obligation to implement it. There are rules and the countries are aware of them. So I don't see any problems. Problems arise when it comes to details they don't understand or when they don't see the advantage of implementing it. Sometimes I feel there is a slight competition with other Conventions, which we need to avoid. Instead, we should create alliances and identify issues we can work together on.

**Do you see potential that the Convention still has to develop and realize?**

I think we are already doing that. We have a large number of countries that have ratified the Convention and that comply with their obligations. When we discuss the countries regarding implementation, there is not really a need to use the word "obligation" when we can show the benefits. Then people get enthusiastic. We have to help countries with economies in transition to move forward and we have made very good progress in that.

**Do you think the Convention should do more to help the countries in terms of capacity-building, projects, funding?**

All efforts must be tailored to the need and be demand-driven, based on good analysis of the actual needs in the country. Just pushing money into a country doesn't help. You must help them to see what they can gain from it. I am not a supporter of pushing heaps of money into a country. It is more efficient to adjust your support to the needs you identify together. When we identify a need for another country, we have to sell a product to a country and they probably don't want to buy because they did not invent it by themselves. So it must be a joint identification.

**Do you have a vision of the Convention you would like to hand on to your successor?**

A part of this vision is already under development. The vision involves a strategic approach. By using this approach, they can monitor themselves and to use the results to achieve a higher level step by step. The system is also very useful for reporting to others in the Convention on how they are doing. The results of the self-monitoring can also be shared and used by other industries and authorities. Through these iterations we then achieve a safer society, and that is working already. I am happy I could share this vision with rest of the bureau and the working group on implementation, which was hard work.

**What makes you happiest when you look at your work with the Convention?**

We as countries talk different languages and have different cultures, but when we work together, we speak the same language and we are improving our language. Thereby we obtain a higher level of awareness. It is a step-by-step advancement in which one country is faster than the other but there is an overall improvement that is visible.





## LOOKING FORWARD

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The Secretariat's vision for the Convention is that it supports countries in the UNECE region to make industrial accidents rarer and less severe. The Convention deepens cooperation between countries in preventing, preparing for and responding to industrial accidents, particularly but not exclusively those with transboundary effects. This cooperation becomes enshrined in agreements between countries, in joint contingency plans and in practical measures such as joint exercises and joint visits to the sites of hazardous activities, and is based on both solidarity and mutual benefits from addressing the risk of industrial accidents jointly.

The Convention also leads the way to high safety standards that are common across the region, and to appropriate transparency and accountability in the operation of hazardous activities, providing a free flow of relevant information to the competent authorities, to industry and to the public. The Convention helps countries establish and implement a comprehensive system that ensures that the public can easily participate in the decision-making process on prevention and preparedness, and reassures the public that industry is safe.

The Secretariat wishes to support all countries in the region to implement the Convention's provisions in their legislation and in their industry's operations. The Convention provides an effective and efficient framework for providing assistance to those countries that need it, tailored to each country and as a result of each country's own evaluation of its needs. The systems established under the Convention go a long way towards implementing such a framework, though insufficient resources continue to constrain such work.

The Secretariat hopes that all countries in the region will eventually join the Convention, but also that they will wish to share the Convention's benefits with other States by opening up the Convention to all Member States of the United Nations.

Finally, the Secretariat sees that a regional instrument that addresses civil liability is an essential complement to the Convention, and envisions that the Convention's Protocol on Civil Liability will enter into force and will benefit from broad membership and thorough implementation.



**Claudia Kamke**  
Associate Expert

**Virginia Fusé**  
Programme Support Officer

**Nick Bonvoisin**  
Secretary to the Convention



# The Convention on the Transboundary Effects of Industrial Accidents

The Convention was adopted 20 years ago, in 1992, to protect people and the environment against industrial accidents that can have transboundary effects. It aims to prevent accidents from occurring, or to reduce their frequency and severity and to mitigate their effects if they do occur.

The Convention promotes active international cooperation among countries before, during and after an industrial accident. The Convention also encourages its Parties to help each other in the event of an accident, to cooperate on research and development and to share information and technology.

The Convention's greatest achievements have been to increase awareness of industrial safety across the region of the United Nations Economic Commission for Europe, and to foster a growing sense of solidarity, especially between upstream and downstream countries.

Information Service  
United Nations Economic Commission for Europe

Palais des Nations  
CH - 1211 Geneva 10, Switzerland  
Telephone: +41(0)22 917 44 44  
Fax: +41(0)22 917 05 05  
E-mail: [info.ece@unece.org](mailto:info.ece@unece.org)  
Website: <http://www.unece.org/env/teia>