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Swiss Federal Nuclear Safety Inspectorate ENSI

## *Symposium*

*«Current and Future Challenges for Nuclear Power Regulators»  
on the occasion of Ulrich Schmocker's retirement*



Ulrich Schmocker, former Director of the Swiss Federal Nuclear Safety Inspectorate (ENSI), has shaped developments in nuclear safety in Switzerland and made a significant contribution to the international harmonisation of safety standards. To mark his retirement, ENSI is organising a symposium on the subject of «Current and Future Challenges for Nuclear Power Regulators». The all-day symposium will be held on

**Thursday, 20 January 2011**  
**at the University of Applied Sciences Northwestern Switzerland in Brugg.**

We cordially invite you to attend and would ask that you to confirm your participation by 20 December 2010 by email to *Annaroes.Schneider@ensi.ch*

We look forward to welcoming you in Brugg.

With best regards,  
ENSI Board and Management

## Ulrich Schmocker



Ulrich Schmocker was Director of the Swiss Federal Nuclear Safety Inspectorate ENSI from 2002 to 2010.

He started his career in 1976 with research work at the Paul Scherrer Institute's Proteus Reactor. In 1981 he joined ENSI where he from 1990 held in turn the positions of Head of the sections for «Reactor, Fuel and Systems Engineering» and «Probabilistic Safety Assessment and Accident Management», before becoming the Head of the Division for Reactor Safety in 1996. His contributions to promoting comprehensive, quantitative risk analysis were instrumental in establishing integrated, risk-informed regulation in Switzerland.

Dr. Schmocker was a member of the IAEA Commission on Safety Standards CSS, of the Western European Nuclear Regulators' Association WENRA and of the OECD Committee on the Safety of Nuclear Installations' working group on risk assessment for several years. He was also a member of the OECD Committee on Nuclear Regulatory Activities (CNRA), chairing several working groups who developed «green booklets» on different nuclear safety issues.

Ulrich Schmocker graduated in physics at the University of Zürich and completed his academic education with a doctorate in nuclear physics from the University of Würzburg.

## «Current and Future Challenges for Nuclear Power Regulators», 20 January 2011

Schedule	Topic	Speakers	Page
9 h00	Welcome Coffee, Registration		
9 h30	Address of Welcome	<i>Peter Hufschmied</i> <i>André-Claude Lacoste</i> <i>(Chairman of the Symposium)</i>	6 6
	<b>Long-Term Operation</b>		
9 h45	Selected Technical Issues for Long-Term Operations	<i>R. William Borchartd</i>	7
	Modernisation and Human Factors Issues for Long-Term Operations	<i>Lennart Carlsson</i>	7
10 h45	Coffee Break		
	<b>Long-Term Operation</b>		
11 h 15	Aging Risk Assessment Issues	<i>Mohsen Khatib-Rahbar</i>	8
	<b>Disposal of Radioactive Waste – the Development of Disposal Facilities</b>		
11 h45	Role of the Implementer and his Expectations towards the Regulator	<i>Piet Zuidema</i>	8
	Role of the Regulator and his Expectations towards the Implementer	<i>Hans Wanner</i>	9

<b>Schedule</b>	<b>Topic</b>	<b>Speakers</b>	<b>Page</b>
<b>12 h 45</b>	Walking Buffet		
<b>14 h 00</b>	IAEA Regulatory Activities and Challenges	<i>Gustavo Caruso</i>	9
	<b>Nuclear New Build</b>		
<b>14 h 30</b>	Lessons for the Next NPP Projects from the Olkiluoto 3 Construction Experiences	<i>Jukka Laaksonen</i>	10
	Multinational Design Evaluation Programme: Working towards Regulatory Harmonisation	<i>Javier Reig</i>	10
	Nuclear Regulators – fit for the Future	<i>Mike Weightman</i>	11
<b>16 h 00</b>	Coffee Break		
		<i>André-Claude Lacoste</i>	
<b>16 h 15</b>	<b>Conclusions and Final Remarks</b>	<i>Hans Wanner</i>	
		<i>Ulrich Schmocker</i>	
<b>17 h 00</b>	Aperitif		

➔ Please confirm your participation by email to [Annaroes.Schneider@ensi.ch](mailto:Annaroes.Schneider@ensi.ch) by 20 December 2010.

## André-Claude Lacoste (Chairman of the Symposium)



André-Claude Lacoste is Chairman of the French Nuclear Safety Authority (ASN). After graduation from the Ecole Polytechnique and the Ecole Nationale Supérieure des Mines, engineering school of Paris, he began his career in the Nord Pas-de-Calais region at the regional offices of the Ministry for Industry. From 1978 to 1990, he headed several departments at the Ministry's central administration in charge of inspecting industrial facilities. From 1990

to 1993, André-Claude Lacoste was Deputy Director General for Industry, and from 1993 to 2002 Head of the Nuclear Installation Safety Direc-

torate (DSIN). In 2002, he was appointed Head of the new French Nuclear Safety Authority in charge of nuclear safety and radiation protection. In 2006, he was appointed, for a period of six years, as Chairman of the Board of five Commissioners heading the ASN.

André-Claude Lacoste is a founding member and former Chairman of the Western European Nuclear Regulators' Association WENRA, a founding member of the International Nuclear Regulators' Association INRA, Chairman of the IAEA Commission on Safety Standards CSS, and Chairman of the policy group of the Multinational Design Evaluation Program (MDEP). He is an Officer in the Legion of Honour and a Commander in the Order of Merit.

## Peter Hufschmied



Peter Hufschmied is Chairman of the ENSI Board since 2008. He studied civil engineering at the ETH Zürich and obtained his doctorate in 1983. After postgraduate studies at the MIT/Boston and an appointment as a project manager for safety analyses at Nagra, the Swiss National Cooperative for the Disposal of Radioactive Waste, he joined the engineering company Emch+Berger in 1991. He was Project Manager planning and Head of construction management for the Lötschberg base tunnel and became CEO of Emch+Berger in 2003. Since 2007, Peter Hufschmied runs his own com-

pany, ExTechNa GmbH, providing advice on the development, planning and management of complex projects like AlpTransit, infrastructure for the 2014 Winter Olympics at Sochi, deep geological disposal, and aquaculture (several fish farming projects). He is founder and Chairman of the board of the Tropenhaus Frutigen AG.

Dr. Peter Hufschmied was a member of various national commissions, including the Swiss Commission for Nuclear Waste Disposal (Chairman from 2004 to 2007), the Swiss Federal Commission of Geology, and the group of experts developing disposal concepts for radioactive waste EKRA. In 1997, he was awarded the Cross of Merit by the Land of Berlin for the design and construction of site logistics in central Berlin.

## R. William Borchardt

Bill Borchardt became the Executive Director for Operations at the U.S. Nuclear Regulatory Commission in May 2008.

Since joining the NRC in 1983, he has served as the senior site inspector at both pressurized and boiling water reactors, and has held several leadership positions in the areas of operating reactor licensing and inspection, enforcement, security and incident response, and new reactor licensing.

Mr. Borchardt graduated from the U.S. Naval Academy with a Bachelor of Science degree in Chemistry. After graduation, he spent five years in the nuclear submarine program.



## Lennart Carlsson

Lennart Carlsson is Director of the Department of Nuclear Power Plant Safety at the Swedish Radiation Safety Authority. After his graduation as nuclear engineer at the Chalmers University of Technology and his dissertation at the University of Arizona he was employed by the Swedish Nuclear Power Inspectorate from 1981 to 2008. He has also worked at a Safety Assessment Section of the IAEA in the late 80's and between

1997 and 2002 he was with the OECD/NEA serving – inter alia – the Working Group of Operating Experience. Since 2008 Dr. Carlsson heads the Department of Nuclear Power Plant Safety in the new merged agency for nuclear and radiation safety.



## Mohsen Khatib-Rahbar



Mohsen Khatib-Rahbar is the Director of Energy Research, Inc. (ERI), where he manages various programmes in regulatory research and regulatory technical support activities for operating and new reactors in the United States and Europe. He has served as a consultant to various organizations including the U.S. Nuclear Regulatory Commission, U.S. Department of Energy, European Space Agency (ESA), Eu-

ropean Commission, IAEA, ENSI, Spanish CSN, and EnBW, among others.

Before forming ERI in 1989, he managed programs in liquid metal and light water reactor accident analysis and risk assessment at Brookhaven National Laboratory. He was also a visiting scientist at GRS-Cologne in 1982, and NRC's Office of Research in 1988. Dr. Khatib-Rahbar received his Chemical Engineering degree from the University of Minnesota (in 1974), and his Ph.D. degree in Nuclear Science & Engineering from Cornell University (in 1978).

## Piet Zuidema



Piet Zuidema is a member of the executive board and responsible for the coordination and management of all the work related to science and technology at Nagra, the Swiss National Cooperative for the Disposal of Radioactive Waste. He joined Nagra in 1985 and was in charge of several major projects in the framework of the Swiss deep geological repository programme. He is responsible for Nagra's RD&D programme and supervises the acti-

vities in the fields of radioactive waste inventory, engineering of the repositories, the geoscience programme and safety analyses. Currently, he is also responsible for Nagra's scientific-technical work in connection with the Swiss site selection process for deep geological repositories for radioactive waste.

Dr. Zuidema has a degree in civil and environmental engineering from the ETH Zürich. He is a member of several international committees (e.g. of the OECD) and expert advisory groups of waste management organizations.



## Hans Wanner

Hans Wanner is Director of the Swiss Federal Nuclear Safety Inspectorate ENSI since September 2010. He studied chemistry at the ETH Zürich and obtained his doctorate in 1984. Following a research assignment at the Paul Scherrer Institute, he joined the Nuclear Energy Agency (NEA) of the OECD in Paris. He worked on the development of the Thermochemical Database (NEA-TDB) and quality standards for the verification of data by international experts. On his return to Switzerland, he joined MBT Environmental Engineering Ltd. and managed

projects in the field of deep geological disposal. In 1995, Hans Wanner joined ENSI as a geochemist in the geological disposal section. In 2007, he was appointed Head of the Transport and Waste Management Safety Division. Dr. Wanner represents ENSI and Switzerland in various national and international committees in the field of radioactive waste management.



## Gustavo Caruso

Gustavo Caruso is Head of the Regulatory Activities Section in the IAEA Department of Nuclear Safety and Security. After his graduation as an electrical engineer and post graduation in nuclear safety and radiation protection he joined the Nuclear Regulatory Authority of Argentina in 1980. He held a variety of positions in safety assessment, regulatory inspections of nuclear installations and licensing of nuclear power plants, before becoming the Executive Manager of the Reactor Regulation Department. He was a member of several regulatory forums and nuclear safety committees.

Mr. Caruso was appointed Section Head in 2005 and his duties at the IAEA are related to the regulation of nuclear installations, the strengthening of the regulatory framework of the Member States, the safety infrastructure of countries embarking on nuclear power, the Integrated Regulatory Review Service (IRRS) and the Convention on Nuclear Safety.



## Jukka Laaksonen



Jukka Laaksonen is Director General of the Radiation and Nuclear Safety Authority (STUK) of Finland since 1997. After his graduation as an engineer with a licentiate of technology degree from the Helsinki University of Technology he has worked in nuclear regulation since 1974, mostly at STUK but also as a visiting expert at the US NRC from 1981 to 1982 and as senior officer at the IAEA from 1987 to 1989.

Prof. Laaksonen has actively participated in international co-operation in the area of nuclear safety and safeguards since the 1970's and has held several chairmanships in international organisations. Currently he is Chairman of WENRA (Western European Nuclear Regulators' Association), Vice-Chairman of INSAG (International Nuclear Safety Group connected with the IAEA), member of the IAEA Commission on Safety Standards, and member of the International Advisory Board of the United Arab Emirates.

## Javier Reig



Javier Reig is Director of the Nuclear Safety Division of the OECD Nuclear Energy Agency NEA since 2004. After he finished his scientific education at the University of Madrid, the Atomic Energy Research Establishment in Harwell, UK, and the Stanford University, Javier Reig was a project manager at

the Nuclear Energy Board (JEN) in Madrid from 1977 to 1982. He then joined the Spanish Nuclear Safety Council (CSN), where he held several positions as Head of the Nuclear Systems Division, Director for International Relations and a member of the Cabinet of the Director for Environmental and Radiation Protection.

## Mike Weightman

Mike Weightman is Director of the Nuclear Directorate and Chief Inspector of Nuclear Installations of the United Kingdom. He is responsible for securing the nuclear safety and security of the civilian nuclear industry (nuclear power reactors, nuclear chemical sites, such as Sellafield and nuclear research sites), and the safety of the defence nuclear industry (refuelling of nuclear submarines and atomic weapons establishments at Aldermaston, Burghfield etc.). He acts on behalf of the UK Government at a variety of international forums and headed IAEA missions to review the nuclear regulatory systems of IAEA member countries. Over the last year he has been driving forward a transformation programme to prepare the Nuclear Directorate to be able to operate

as a more stand-alone integrated nuclear regulator, and to enable the nuclear regulator to better face the challenges of the future.

Before 1988 Dr. Weightman worked in the nuclear industry for 13 years fulfilling a number of management roles involved in research, operations and engineering projects. He also acted as a consultant for a major engineering consultancy and for the American Institute of Chemical Engineers. Mike Weightman is a Fellow of the Royal Academy of Engineering and of the Institute of Physics.



Brugg is easily reachable by public transport. From Zürich, Basel and Bern there are trains running every half-hour. Connections can be checked at [www.sbb.ch](http://www.sbb.ch) by entering your point of departure and the destination «Brugg AG».

The venue is a 5 minutes walk away from Brugg station: Follow the Steinackerstrasse up to the campus. The symposium will be in building 3.

Participants arriving by car are kindly requested to use the parking space «P» (for directions in [maps.google.ch](http://maps.google.ch) please enter «Gaswerkstrasse Windisch»).

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