Members Past & Present

ALMAR Packaging (Pty) Ltd.
ASSURATOME Ltd.
Advanced Nuclear Fuels GmbH (ANF) Ltd.
Anglo Blackwells Ltd.
BHP Billiton Ltd.
BUREAU VERTIAS UK Ltd.
CAMECO Corporation Ltd.
CISNAV Ltd.
CMA CGM Logistics Ltd.
CROFT ASSOCIATES Ltd.
Columbiana Hi-Tech Ltd.
Converdyn Ltd.
Croft Associates Ltd.
DAHER -Nuclear Cargo & Service GmbH (NCS) Ltd.
DLA Piper UK LLP Ltd.
Direct Rail Services Ltd. (DRSL)
Électricité de France (EDF)
ELINI Ltd.
ENUSA Industrias Avanzadas, S.A. Ltd.
Edlow International Ltd.
EnLog Strategic Services Ltd.
F.S.U.E Atomic Fleet 'Atomflot' Ltd.
FSUE "Atomspetstrans" Ltd.
GEODIS Wilson / STSI Ltd.
GNS Gesellschaft für Nuklear-Service mbH Ltd.
GTS Group Ltd.
General Atomics Ltd.
Grand ISS Ltd.
Hitachi Zosen Corporation Ltd.
International Nuclear Services Ltd.
Itochu Corporation Ltd.
JSC Engineering Center for Nuclear Containers Ltd.
JSC "Techsnabexport" (TENEX) Ltd.
James Fisher & Sons plc. Ltd.
Japan Nuclear Fuel Ltd. (JNFL) Ltd.
Japan Nuclear Security Systems Ltd.
Joint Stock Company National Atomic Ltd.
Company Kazatomprom Ltd.
Joint Stock Company Saint Petersburg "IZOTOP" Ltd.
Korea Hydro & Nuclear Power Co. Ltd.
LLWR Ltd.
Low Level Waste Repository Ltd.
Marubeni Corporation Ltd.
Mitsubishi Corporation Ltd.
Mitsui & Co., Ltd.
NTP Logistics (Pty) Ltd.
NUFCOR International Ltd.
Nantong CIMC Tank Equipment CO., LTD.
Nuclear Fuel Industries Ltd. (NFI)
Nuclear Fuel Transport Co., Ltd (NFT)
Nuclear Insurance Pools c/o Nuclear Risk Insurers Ltd.
Nuclear Risk Insurers Ltd. (NRI)
Nuclear Waste Management Organization (NWMO) Ltd.
OAO "Techsnabexport Ltd.
OCL Corporation Ltd.
PAC TEC Engineering Packaging Solutions (EPS) Ltd.
Pacific Nuclear Transport Ltd (PNTL) Ltd.
Paladin Energy Ltd.
Pebble Bed Modular Reactor (Pty) Ltd. (PBMR)
REVISS Services (UK) Ltd.
RSB Logistic Projektspedition GmbH Ltd.
RWE Nukem Inc. Ltd.
RWM Ltd.
Rio Tinto Uranium Ltd.
SKB Ltd.
SUMITOMO CORPORATION Ltd.
Sellafield Ltd.
Shipcraft Group Ltd.
Sojitz Corporation Ltd.
Spiroflow Ltd.
Studsvik AB Ltd.
Sumitomo Corporation Ltd.
Svensk Kärnbränslehantering AB (SKB) Ltd.
Swiss Nuclear Fuel Commission Ltd.
TAM International Ltd.
TN International Ltd.
TRANSING Ltd.
TRANSRAD Ltd.
The Federation of Electric Power Companies of Japan (FEPC) Ltd.
Timeline Logistic Ltd.
Transnuclear Ltd.
UCU LLC Ltd.
Uranium Companies United L.L.C Ltd.
URENCO Enrichment Company Ltd.
USEC Inc.
Uti International Ltd.
Worthington Industries Ltd.

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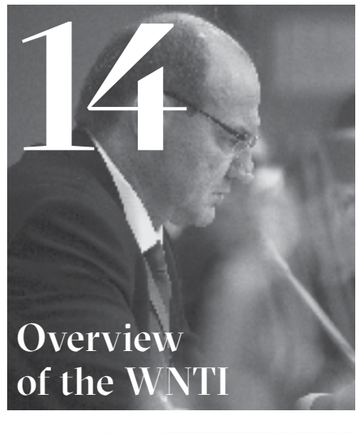

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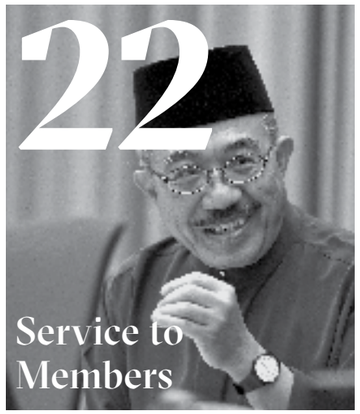

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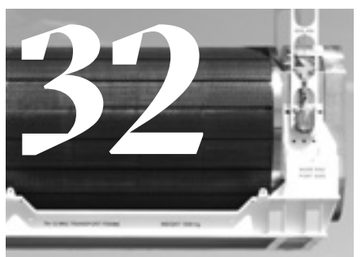

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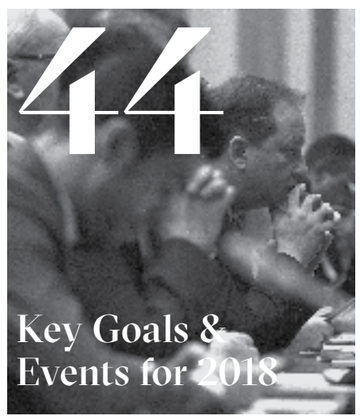


46 Member's Voice

DAVID OHAYON

Chairman's Message

It seems like only a few weeks ago we published WNTI Today 2017 and already it is time for the next version – our industry moves rapidly and we are all challenged to keep up with these changes.

As an example, WNTI continues to increase its areas of influence. New companies are joining the Institute and the scope of our activities and our global presence is developing in accordance with our Members' expectations and the changing markets.

Supporting our members to ensure that the excellent safety record of the nuclear transport industry is maintained has continued to be the highest priority for the WNTI. Our objective is to facilitate the development and adoption of the best and most efficient technical and operational practices, together with strict compliance to the regulatory requirements throughout the nuclear transport industry supply chain. WNTI was deeply engaged in 2017 in representing the collective interests of our members through our observer status at the IAEA. WNTI represented our members for 82 days of meetings at the IAEA, 72 days at the IMO and ICAO meetings in 2017. This last year has been an interesting time for us, with a new Secretary General and Chairman. We have identified WNTI's 20th Anniversary as a good time to reflect on what has been achieved but also as a time to refresh our strategy for the coming years. We are not expecting major changes but it seems an appropriate time to Review and Refresh our plans. This will include confirming our preparations for moving office in 2019 (still in London) and full implementation of the new Full Member Category which will allow members to participate and contribute to the WNTI Advisory Committee and board meetings. Over the next year we will be expanding our communications strategy, making information more accessible and clearer to our members. We will continue to build our international outreach to emerging markets and align ourselves further with our collaborative organisations.

"Our objective is to facilitate the development and adoption of the best and most efficient technical and operational practices, together with strict compliance to the regulatory requirements throughout the nuclear transport industry supply chain."

From my perspective, with the introduction of Full Member Representatives, the Board will be pleased to see some new faces and ideas in the meetings, to complement the existing Board members. This will allow WNTI to keep up with the pace of our changing Industry and its challenges.

A special mention must go to Captain Trevor Dixon who retired in March 2018. Originally seconded for 3 years to WNTI as a Specialist Advisor, Trevor served 19 years at our institute, bringing with him detailed expertise from all aspects of maritime transport.

"With the introduction of Full Member Representatives, the Board will be pleased to see some new faces and ideas in the meetings, to complement the existing Board members."

I look forward to continuing to work with the WNTI team and its members to ensure that we meet the expectations of our members in an ever more demanding environment. We will also continue to work closely with our Stakeholders such as IMO, IAEA and others, to ensure the Transport industry is well represented. The SAMM meetings give us a chance to exchange views. I very much look forward to this and to meeting you at our upcoming 20th Anniversary event in London.

Days spent at IAEA meetings	Days spent at IMO meetings	Working Groups	Years of service for Trevor Dixon
82	72	5	19

2018 CHALLENGES
Projects and Priorities

01

WNTI will maintain, on behalf of and with its Members, its strong engagement in promoting effective safety and security standards and practices for the packaging and transport of radioactive materials.

02

This will be achieved through close cooperation with the key UN bodies setting the regulatory framework for radioactive materials transport, IAEA, IMO, ICAO and the UN Sub-Committee of Experts on the Transport of Dangerous Goods.

03

Transport security is an important issue. The follow-up to the IAEA activity on security, the 36th meeting of IAEA TRANSSC, the next IAEA Security Conference and Ramtransport meeting, will become high priorities for WNTI.

04

The WNTI will coordinate the feedback and lessons learnt from its industry membership to identify and promote the most effective way to operate radioactive transport activities within the regulatory regime.

05

As more countries depend on the international packaging and transport of radioactive materials, the WNTI will reinforce its global reputation as the voice of the industry, through its active participation in conferences and meetings.

06

PATRAM 2019 will be an opportunity for the packaging and transport industry. WNTI will provide an industry view and will feedback from PATRAM 2016. WNTI will be working with INMM to ensure that an effective conference will be delivered.

07

The WNTI will build on its successful workshops such as those in Namibia and China. These enable regional Competent Authorities, governmental bodies and industry representatives, to share operational experiences.

08

The WNTI's industry-led Working Groups will remain a primary resource for fulfilling these goals, consolidating views on important issues, to feed into the regulatory process, to enable best practice.

JOHN MULKERN

Secretary General

Firstly, from a personal perspective, it has been great to meet so many of our members over the last 12 months, either in the SAMM meetings, bilateral meetings or other fora.

Whilst I have met many of you previously, the context has been very different, thank you for the friendly and constructive discussions.

2017 was an extremely interesting but very fast moving year, and I now feel I have a much deeper understanding of what WNTI does and how it goes about it. Myself and the WNTI team are very encouraged by the SAMM and other feedback and that new members continue to join the WNTI. However, we are not resting on our laurels and are continuing to look to 'Review and Refresh' the things we do for our members and how we do them. More about our strategy review later but please be assured that we will continue to have 'meeting our members needs' at the centre of what we do.

"The WNTI has strengthened its long-established role as the interface between regulator and industry, reacting to technical, operational or regulatory issues its Members may face."

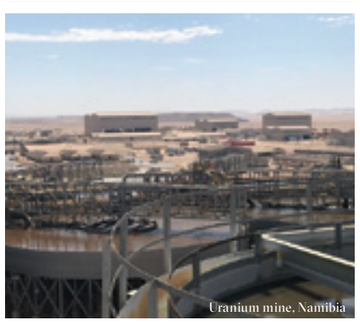
WNTI continues to embrace its role as the authoritative voice of the nuclear transport industry. Effective links between the WNTI and the National and Regulatory Authorities, Government officials and appropriate International Organisations and Associations continue to be developed to ensure that the know-how and the 50 plus years of operational experience from the transport industry support regulatory developments and public confidence.

This has been strengthened by WNTI presenting the industrial perspective to International Organisations, providing keynote speakers for major conferences and producing Information Papers, Fact Sheets and Good Practice Guides, all of which are available to the broader transport community through the WNTI website. In the recent months we have set up a robust process to regularly review this growing library of important information.

WNTI has strengthened its long-established role as the interface between regulator and industry, reacting to technical, operational or regulatory issues its Members may face. Through its ad-hoc members' meetings, provides the required forum for consultation, information exchanges and risk management in order to form the industry position and response.

"we will continue to have meeting our members needs at the centre of what we do."

The topical seminars in recent years have brought together specialists, operators and other stakeholders to discuss the latest developments and current and potential issues in the nuclear transport area. These have often led to the publication of WNTI Fact Sheets, Good Practice Guides and Information Papers, which are of value to nuclear transport operators. Such seminars will continue. In addition, the regional seminars in some of the so-called emerging markets have continued, with a lot of interest. The most recent of these involved WNTI and some of the members at a Seminar in Namibia. This was very well attended.



Uranium mine, Namibia

WNTI continues to maintain and develop its links with educational establishments, particularly those with interests relevant to the nuclear and transport industries. WNTI continues to be invited to deliver lectures at the World Maritime University in Malmo, Sweden to students who are involved in sea transport which is important to industries dependent on the transport of nuclear materials. We are looking to further integrate these students into our Industry work via WNTI, so expect to see some of these students more directly involved throughout their courses and after.

WNTI has also been invited to introduce and present the challenges of the transport of radioactive materials to students from over 25 countries participating in the Summer Institute of the World Nuclear University. This work will continue in 2018 in South Korea.

WNTI has a competent, dedicated and motivated team. Their responses to the WNTI and its members have always been of great value to the transport community. I would like to again acknowledge their efforts and enthusiasm to make the WNTI voice the most efficient in promoting a sound, stable and harmonised regulatory regime, fit for purpose to guarantee safe and secure transport operations. We have had a few changes in recent months - Takeru returning to Japan after his secondment and Hirotaka arriving from Japan; Amy leaving for pastures new and Isabel arriving as the new Membership executive and Francesca arriving as the new Communications officer. It would of course be remiss of me not to make a specific mention of one person. Captain Trevor Dixon, after over 18 years with WNTI, retired in early April. Trevor initially arrived some 19 years ago on a 3 year secondment, and he has certainly seen many changes over the years – several offices, several SG's and many different members and staff. In that time, he has become well known to many of you and I would like to record our thanks for his significant contribution. Trevor has been replaced by Captain Simon Chaplin, who joined at the end of March from PNTL. I know you will welcome Simon over the coming months.

"The WNTI has also been invited to introduce and present the challenges of the transport of radioactive materials to students from over 25 countries"

20

WE ARE 20

WNTI will reach its 20th Birthday on 28th April 2018 and we look forward to celebrating this milestone with our members, partners and key stakeholders on 31st May in London. By the time this is published, I am confident that the finer details will be in place. I very much hope you enjoy the day and evening.

WNTI: 20 Years Young

EST. 1998

WNTI's history began on 28th April 1998 in London. Three members, British Nuclear Fuels Limited (now INS), Cogema (since Areva and more recently Orano) and the Federation of Electric Power Companies of Japan, founded the institute together.

Having initially established WNTI Regional offices in Washington and Tokyo, the three founder members set 6 objectives:

01

To promote the continued development and worldwide use of nuclear power

02

To ensure that nuclear materials are transported by sea, land and air in a safe, secure and efficient manner

03

To support and participate in the work of appropriate Governmental and Non-Governmental bodies, relating to safe and secure transport

04

To consult with Governmental and Non-Governmental bodies to support the safe and secure transport of radioactive material

05

To establish a forum for the exchange of views on the foregoing

06

To support research, development and testing of systems and components for the transport of radioactive materials

In its first year, WNTI promptly gained provisional Consultative and Observer status with the IMO, IAEA and ICAO respectively, established its first 'Working Groups' (HEXT and ST-1) and published its first document: 'The International Safety Regime'. By 1999, the institute had nearly over 30 member companies and held its first members meeting outside the UK, in Ottawa, Canada. At this stage the WNTI office was in Old Park Lane

WNTI continued progressing as a member organisation and by 2006, the WNTI website launched. With the Working Groups well established, the institute could coordinate industry proposals with the different regulators. A typical example included the proposal accepted by the IMO in 2002, to allow vessels to switch off their Automatic Identification System (AIS), provided that other arrangements protecting navigational information were in place. In 2006 WNTI moved to its current home in Remo House, Regent Street.

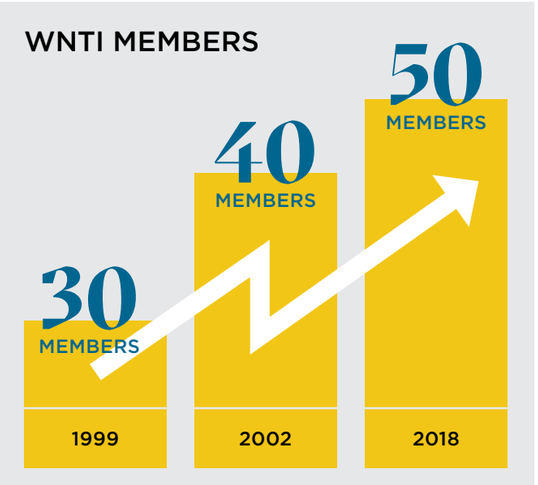
In its role as the industry voice regarding safe and secure transport, WNTI was soon recognised as a Transport Security key stakeholder. WNTI participated in several international Nuclear Security Summits, was a key participant of the important series of IAEA security meetings. By 2010, a strong partnership had developed with the Vienna based WINS (World Institute for Nuclear Security) which resulted in the co-organisation with WINS of important Transport Security governmental seminars hosted in South Korea and Japan.

As the years progressed, WNTI's role expanded to include sponsorship of students at the World Maritime University. By 2009, two WNTI sponsored students became IMO delegates for their respective countries. In 2010 WNTI played a major role in the organisation of Patram 2010. From 2011, WNTI extended its transport educational role, delivering transport lectures on a regular basis in appropriate universities in the USA and Europe.

In order to support the safe and secure maritime transport of radioactive front-end materials, WNTI organised the appropriate seminars, training and courses in different parts of the world, mainly in the Southern region of Africa (Namibia, Mozambique), resulting in the maritime transport acceptance of class 7 materials through the African port of Naccala in 2016.

As we reach our 20th anniversary, WNTI and its members continue to be a major voice in the transport industry and WNTI is looking forward to continuing its role as a member organisation that focuses on safe, secure, efficient and reliable transport, alongside its key Stakeholders, regulators and partners. We hope many of you will be able to join us in London on 31st May to celebrate our anniversary. Congratulations to all the member companies on a successful first two decades.

WNTI Head Office, London



1998

WNTI established by COGEMA, BNFL and FEPC as strong regulatory technical institute

1999

Gains provisional Consultative and Observer status with IMO, IAEA, ICAO. Establishes first 'Working Groups' (HEX-T& St-1) and publishes first document: 'The International Safety Regime'

2000

Attends first TRANSSC meeting and thereafter, constantly attends IAEA revision meetings on Transport Regulations, including TRANSSC, Revision Panel, Technical Meetings & Consultant Services Meetings

2001

WNTI TS-R-1 Industry Working Group established

2002

New international Transport Safety Regulatory Regime (TS-R-1) effective and Industry accumulates experiences operating in it

2003

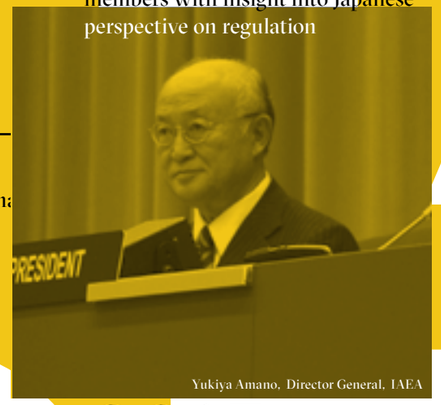
WNTI industrial site visit programme begins and singled out for praise by President of 2003 IAEA International Transport Safety Conference (programme on-going)

2004

WNTI participates in PATRAM in Berlin in September

2005

WNTI co-organises Institution of Nuclear Engineers Radioactive Materials Transport Conference in Cambridge. WNTI's Technical and Communication Japanese Advisory Groups meet, providing our members with insight into Japanese perspective on regulation



Yukiya Amano, Director General, IAEA

2006

WNTI moves to Remo House in Regent Street, London

Membership increases to over 40

2007

WNTI Knowledge Base launches on Members web site

2008

WNTI 1st International Ship-Port-Interface Conference (ISPIC 2008)

WNTI Workshop on Emergency Exercises in Russia

2009

Two WNTI sponsored students become IMO delegates of Panama and Jamaica

2010

WNTI co-hosts 16th PATRAM in London and wins AOKI AWARD for organisational long-term contribution at PATRAM 2010

2011

WNTI presents at IAEA Conference on Safe and Secure Transport of Radioactive Material: The Next Fifty Years, coinciding with 50th Anniversary of the first publication of the IAEA Transport Regulations

2012

WNTI hosts Uranium Concentrate (UC) Workshop in Kazakhstan

2013

WNTI workshop: Front End of the Operation - Uranium Imports, in China

2014

WNTI is instrumental in consulting on the opening of a port in Mozambique

2015

WNTI participates in 1st IAEA EPReSC in Vienna

2016

WNTI co-hosts 18th PATRAM in Kobe, Japan

2017

WNTI participates in Transport table top exercice (TTX) organised in the framework of the Coastal and Shipping State dialogue initiative

WNTI SG presents at World Nuclear Fuel Cycle conference, Toronto

2018

WNTI holds its SAMM board meeting and celebrates 20th Anniversary at Houses Of Parliament in London in May

20 YEARS OF WNTI

Overview of Radioactive Material Transport

Each day, around the world, thousands of shipments of radioactive materials are transported.

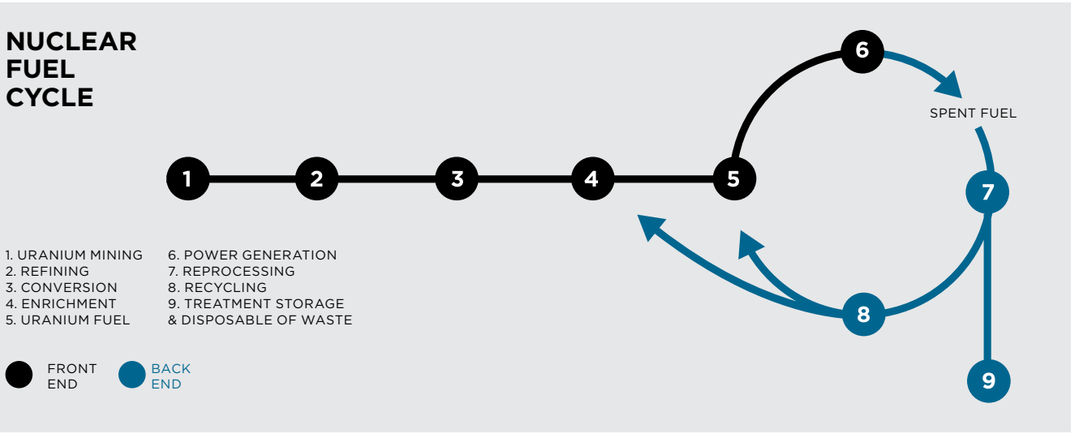
These consignments which are carried by road, rail, sea and inland waterways can range from smoke detectors, cobalt sources for medical uses, to nuclear fuel cycle materials for electricity generation.

The transport of radioactive materials has a long history spanning several decades. Over this period a stringent regulatory regime has been developed at both international and national levels. The safety record of these shipments is impressive, in over 50 years there has never been a transport incident involving nuclear materials that has caused significant radiological damage to people or the environment.

To sustain this important source of energy, nuclear utilities around the world depend on safe, efficient and reliable transport of the full range of nuclear fuel cycle materials.

The international transport of radioactive materials is governed by a stringent regulatory regime, which includes standards, codes and regulations which have been continuously revised and updated over the past decades to keep abreast of the latest technologies, environmental concerns and political views.

© Orano, Larrayadieu Eric



Every year around the world, 20 million transports of radioactive materials

20,000,000

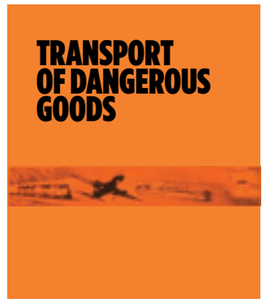
The radioactive materials transport industry has established an enviable, international safety record. This impressive record is backed by a stringent regulatory regime that has been in place and under continuous review for several decades.

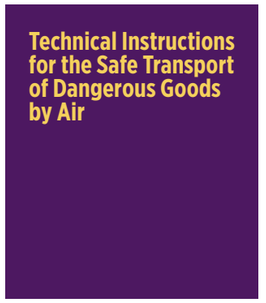
The International Atomic Energy Agency (IAEA) Safety Standards Series Regulations for the Safe Transport of Radioactive Material The IAEA Regulations are based on the fundamental principle that radioactive material being transported should be packaged adequately to provide protection against the various hazards of the material under both normal and potential accident conditions.

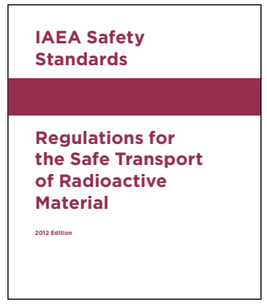
Safety, therefore, relies on the packaging adapting to its radioactive contents, whatever the transport mode. As safety depends primarily on the packaging, the Regulations set out several performance standards for each type of packaging used for the transport of radioactive material. They provide for five different primary packages, (Excepted, Industrial, Type A, Type B and Type C) and set the criteria for their design according to both the activity and the physical form of the radioactive material they may contain. The IAEA Regulations lay down corresponding test procedures to demonstrate compliance with the required performance standards.

The provisions of the IAEA Regulations are not only reflected in the national requirements of Member States, but also in the regulation relative to each mode of transport as issued by international or regional bodies.

PUBLICATIONS







Overview of the WNTI

Dedicated to the safe, secure, efficient and reliable transport of radioactive materials – the voice of the Radioactive Material Transport Industry

Through the WNTI, members are working together to promote a sound international framework for the future by helping to build international consensus, co-operation and understanding.

In 1998, the World Nuclear Transport Institute (WNTI), a Non-Governmental Organisation, was founded by International Nuclear Services Ltd (United Kingdom), Orano (France) and the Federation of Electric Power Companies (FEPC, Japan) to represent the collective interests of the nuclear and radioactive materials transport industry and those who rely on the safe, secure, and reliable packaging and efficient regulations that can be implemented by industry. Through the WNTI, they are working together to promote a sound international framework for the future by helping to build international consensus, co-operation and understanding.

20 | **20 YEARS OBSERVER STATUS AT IAEA**

The WNTI publications are available on www.WNTI.co.uk

Developing Awareness

The WNTI produces technical and factual information to support a background for balanced policies and regulations. Scientific and other academic papers are published regularly and presented to key officials including regulators.

In the interest of enhancing communication and broadening understanding, by request, the WNTI runs site visits to nuclear industrial facilities subject to the international transport safety regulatory regime. The visits give an opportunity to many senior officials of the International Organisations and members of their national delegations, to see first-hand the practices, procedures and equipment involved in fuel cycle transport.

Technical Publications for the Industry

The WNTI members exchange good practices during the meetings of the Industry Working Groups and together develop Standards, Good Practice Guides, Fact Sheets and Information Papers based on these exchanges.

Forum for Exchange of Information and Views

The Semi-Annual Members Meetings bring together the WNTI Member companies in various locations worldwide to address challenges facing the nuclear transport industry and provide the opportunity to share information and ideas.

In addition to this, the WNTI Industry-led Working Groups meet to provide a more technical forum for the exchange of information, with a view to developing consolidated industry positions.

WNTI Organisational Structure and Team

WNTI involves a team of 24 people, each with their own expertise and experience, who are dedicated to WNTI's core objectives and work to provide the best knowledge and service to our members.

WNTI Board of Directors

David Ohayon (Chairman)
Orano TN International

Peter Buchan
International Nuclear Services

Christopher Watson
International Nuclear Services

Frederic de Agostini
Orano TN International

Akihiko Hara
Overseas Reprocessing Committee (ORC)

Masahiro Takasugi
Nuclear Fuel Transport Co. Ltd

Chris Chen
Company Secretary / Finance & Operations Manager

WNTI Advisory Committee

John Mulkern
AC Chairman

Chris Chen
Company Secretary / Finance & Operations Manager

Franck Bimet
Orano TN International

Catherine Shelton
Orano TN International

Ko Sugiura
Overseas Reprocessing Committee (ORC)

Yukihiko Fukaya
Nuclear Fuel Transport Co. Ltd

Jennifer Nugent
International Nuclear Services

Graham Rose
International Nuclear Services

Secretariat Headquarters, London

Chris Chen
Company Secretary / Finance & Operations Manager

Rosie Uzunova
Finance & Admin Assistant

Isabel Stewart
Membership & Events Executive

Francesca Houslander
Communications Officer

John Mulkern
Secretary General

Hirotaka Nojima
Specialist Advisor

Anne Presta
Specialist Advisor

Simon Chaplin
Specialist Advisor

Regional Representation

Tokyo office
Principal Representative
Ko Sugiura

Washington office
Principal Representative
Eileen Supko

Australasia office
Regional Representative
Frank Boulton

China office
Regional Representative
Steven Shi

Southern Africa office
Regional Representative
Captain Sanjoy Sen

WNTI Membership

Our growing worldwide membership is open to all companies involved in nuclear transport including generators, suppliers, uranium producers, fuel cycle and other nuclear supply chain companies

AUSTRALIA

- BHP Billiton

BELGIUM

- ELINI – European Liability for the Nuclear Industry
- NV TRANSRAD SA

CANADA

- TAM International Inc.
- Nuclear Waste Management Organization (NWMO)
- Commonwealth Independent States Navigation Inc
- Cameco Corporation

CHINA

- Nantong CIMC Tank Equipment Co, Ltd

DENMARK

- Maersk Line

FRANCE

- Orano
- Assuratome
- CMA CGM Logistics
- Descote s.a.s
- Électricité de France (EDF)
- GEODIS Wilson/STSI
- TN International

GERMANY

- DAHER Nuclear Technologies (Nuclear Cargo & Service GmbH)
- GNS Gesellschaft für Nuklear-Service GmbH
- RSB LOGISTIC Projektspedition GmbH

JAPAN

- The Federation of Electric Power Companies of Japan (FEPC)
- Hitachi Zosen Corporation
- Japan Nuclear Fuel Ltd. (JNFL)
- Marubeni Corporation
- Nuclear Fuel Industries, Ltd. (NFI)
- Nuclear Fuel Transport Co., Ltd. (NFT)
- Sojitz Corporation
- Sumitomo Corporation

RUSSIA

- J.S.C Saint Petersburg "IZOTOP"
- J.S.C Techsnabexport (TENEX)

SOUTH AFRICA

- NTP Logistics (Pty) Ltd

SPAIN

- ENUSA Industrias Avanzadas S.A.

SWITZERLAND

- Axpo

UK

- International Nuclear Services Ltd
- Bureau Veritas UK Ltd.
- Croft Associates LTD
- Direct Rail Services Ltd. (DRS)
- Low Level Waste Repository (LLWR)
- Nuclear Risk Insurers Ltd. (NRI)
- Pacific Nuclear Transport Ltd. (PNTL)
- Rio Tinto Uranium Ltd.
- Radioactive Waste Management (RWM).
- Sellafield Ltd.
- URENCO Ltd.
- Nuclear Insurance Pools/General Purposes Committee (GPC)

USA

- Westinghouse Electric Company
- Pac Tec Inc.
- ConverDyn
- Centrus Energy Corp (Formerly USEC Inc.)
- Alara Logistics Group (Formerly EnLog Strategic Services)

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1

To promote the safe, secure, efficient and reliable transport of nuclear and other radioactive materials by sea, land and air through the harmonised application of national and international standards, regulations and procedures

2

To consult with governmental and non-governmental bodies to support balanced international standards, regulations, guidelines and procedures through the preparation of industry position papers, technical briefs, standards and scientific research

3

To develop industry good practices

4

To provide factual information on the safe transport of nuclear and other radioactive materials

5

To act as a catalyst and facilitator bringing Members together to exchange views on nuclear and other radioactive materials transport issues and to participate in appropriate meetings, conferences and media briefings

6

To support the research, development and testing of packaging and systems for the transport of nuclear and other radioactive materials

7

To provide a collective voice for the industry and a forum to share information and ideas

8

For further information about becoming a WNTI Member, please contact the WNTI Membership Secretary:

Tel: +44 (0)20 7580 1144
Email: isabels@WNTI.co.uk

Service to Members

Industry Representative in Intergovernmental Organisations

IAEA set up	Transsc materials signed in	Director General Yukiya Amano since	Transport EPR committee since
1957	1980	2009	2015

International Atomic Energy Agency (IAEA), Vienna

The International Atomic Energy Agency (IAEA) is widely known as the world's "Atoms for Peace" organisation within the United Nations family. Set up in 1957 as the world's centre for cooperation in the nuclear field, the Agency works with its Member States and multiple partners worldwide to promote the safe, secure and peaceful use of nuclear technologies.

To enable the Agency to secure expert information or advice from Organisations having special competence in the field in which such information or advice is required; to promote knowledge of the principles and activities of the Agency, enabling organisations which represent important groups whose work is relevant to that of the Agency, to express their views. In order to achieve the objectives above, the Agency considers to grant observer status to non-governmental organisations such as WNTI.

WNTI is invited by the Deputy Director General, Head of the Department of Nuclear Safety and Security, to participate in the Transport Safety Standards Committee meetings (TRANSSC), the Emergency Preparedness and Response Standards Committee (EPReSC) and the Nuclear Security Guidance Committee (NSGC). WNTI contributes to the committees as an expert and can deliver Industry's opinions for safe, secure, efficient and reliable transport.

61st IAEA General Conference, Vienna 2017

WNTI contributes to the committees as an expert and can deliver Industry's opinions for safe secure efficient and reliable transport.

TRANSSC

Security has always been at the forefront of the IAEA, with the development of the Convention on Physical Protection of Nuclear Material signed in 1980, INFCIRC 225 and the Code of Conduct on the Safety and Security of Radioactive Sources.

The Director General of IAEA has now elevated the security section to a Division with a standalone "Nuclear Security Guidance Committee" (NSGC) that oversees all security related issues throughout the IAEA which will also bring together transport security developments. WNTI has observer status at the NSGC and has been invited continuously in a series of IAEA meetings relating with Transport Security.

NSGC

The purpose of the Emergency Preparedness and Response Standards Committee (EPReSC) operating Guidelines is to describe how the EPReSC will conduct its business in a manner that is consistent with its terms of reference.

The chair of the EPReSC may, from time to time call for extraordinary meetings. Once per year, at the discretion of the Chair and in cooperation with the other Safety Standards Committees (SSC) and Nuclear Security Guidance Committee (NSGC), the meeting of the EPReSC may, in part, be conducted jointly with one of the other SSCs and NSGC. WNTI has been invited to a series of IAEA meetings relating with Transport EPR since the committee started in 2015.

61st IAEA General Conference, Vienna 2017

International Maritime Organization (IMO), London

The International Maritime Organization (IMO) is the specialised agency of the United Nations Organization providing the mechanism for Member States to develop regulations and codes of practice to preserve safety of life at sea, ensure maritime security, and protect the marine environment from pollution by shipping. The IMO provisions for radioactive materials are based on the IAEA Transport Safety Regulations and are incorporated into the IMO International Maritime Dangerous Goods Code (IMDG Code).

In 1999 WNTI was granted a consultative status by the IMO Assembly. WNTI follows and contributes to the development of Class 7 (radioactive material) regulations of the IMDG code and International Nuclear Fuel Code (INF Code), and can deliver Industry's opinion on other issues of concern to the Class 7 transport community.

UN ECOSOC Sub-Committee of Experts on the Transport of Dangerous Goods (UNSCETDG), New York

Goods (also known as the "Orange Book") in the 1950's. In 2001, the UN Economic and Social Council (ECOSOC) agreed the UN Committee of Experts should be reconfigured as the "Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonised System of Classification and Labelling of Chemicals". Two sub-committees were established, one being the UN Sub-Committee of Experts on the Transport of Dangerous Goods (UNSCETDG). The UNSCETDG updates and amends the UN Recommendations every two years. This biennial revision cycle allows the Experts to keep the Orange Book up to date with the latest developments in dangerous goods transport.

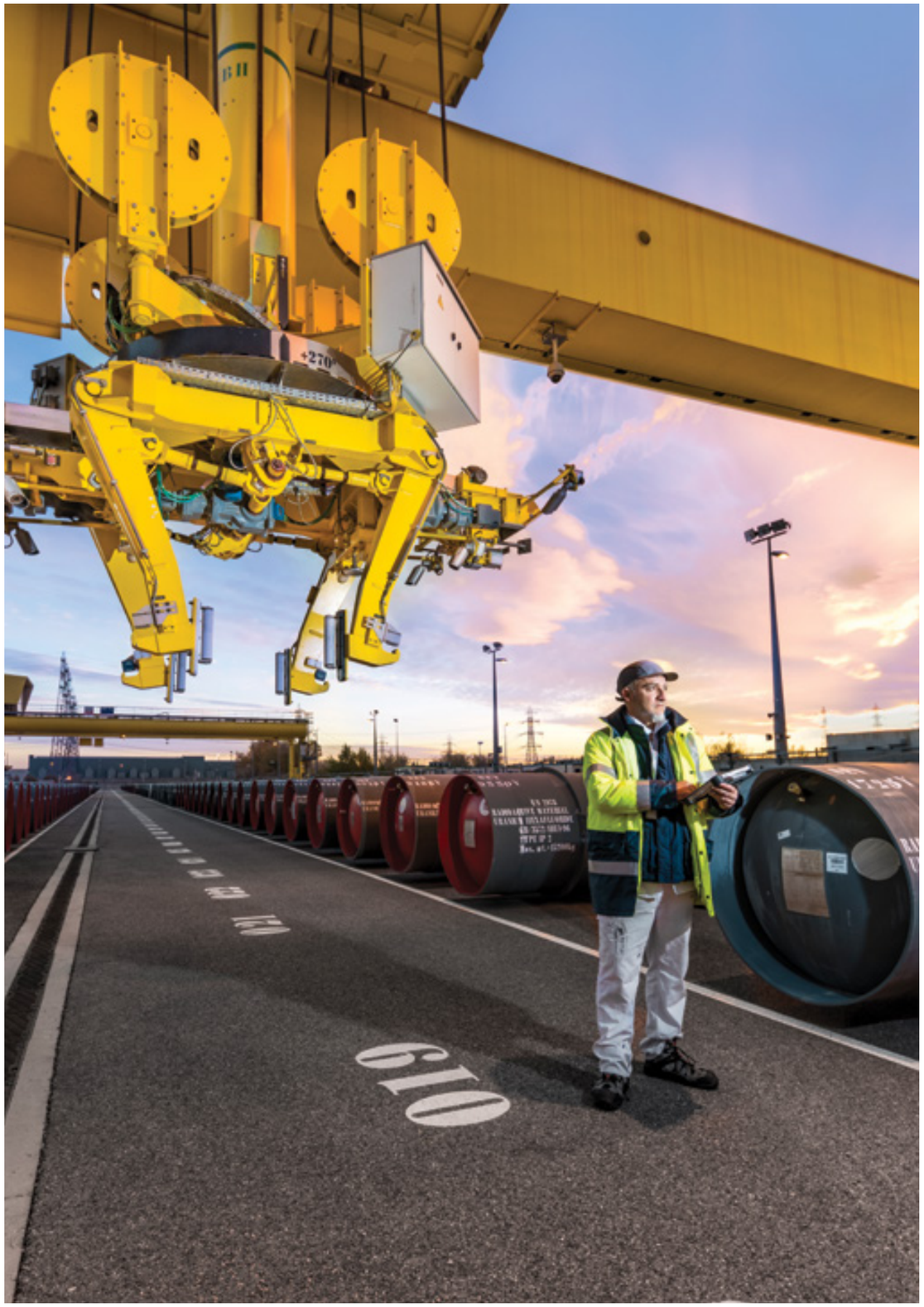
WNTI has observer status to the Sub-Committees with relevance to the transport of radioactive material.

International Civil Aviation Organization (ICAO), Montreal

The International Civil Aviation Organization (ICAO), a United Nations Specialized Agency, established by States in 1944 to manage the administration and governance of the Convention on International Civil Aviation (Chicago Convention). ICAO works to achieve its vision of safe, secure and sustainable development of civil aviation through cooperation amongst its Member States. The WNTI has observer status to the ICAO and is invited regularly to participate in their Dangerous Goods Panel Working Group meetings (DGP WG).

World Maritime University, Malmo

The World Maritime University (WMU), established by the IMO in 1983, and based in Malmö, Sweden, has as its prime objective to increase the number of highly trained specialist maritime personnel around the world. Over the past years, through a series of lectures the WNTI in partnership with the WMU has encouraged a fuller understanding of the issues surrounding the transport of radioactive materials, including packaging and the need for such transports.



In Cooperation with International Organisations

Non-governmental international organisations play a pivotal role in collecting and sharing information on areas of concern within the industry, in order to improve transport safety standards worldwide.

International Organization for Standardization (ISO)

The International Organization for Standardization (ISO) is a non-governmental body with a mission to promote the development of standardization and related activities worldwide.

A Technical Committee (TC85) deals with nuclear energy, nuclear technologies, and radiological protection; standards relating to the transport of radioactive materials are included in the activities of Sub-Committee 5 (nuclear fuel cycle).

Three standards, which we focus on, ISO 12807, 'Leakage testing on packages', ISO 7195, 'Packaging of Uranium Hexafluoride (UF6) for transport' and ISO 10276 'Trunnions for packages used to transport radioactive material' are dealt with the ISO Working Group 4 (transportation of nuclear and other radioactive material).

WNTI makes an effective contribution to ISO as a Category A Liaison Organisation and can deliver Industry's opinions via its participation in ISO Working Group 4, as an expert.

Cargo Incident Notification System (CINS), London

Cargo Incident Notification System (CINS) was established in 2011 to share information on all cargo related incidents. CINS are an industry organisation which comprises of the major Containers Shipping Companies, with several of them operating the maritime transport of radioactive materials (Class 7 materials).

Their main purpose and aim is to:

- Collect information on operational cargo-related accidents and incidents from seaborne carriers (relevant information, excluding any commercial information, is entered into the CINS database)
- Analyse global operational information on all cargo and container related accidents
- Establish areas of concern and trends in order to improve safety in the transport chain

WNTI also has long and beneficial association with other International Organisations:

WNTI Fellowship Programme

As part of our commitment to future generations, WNTI sponsors a student at the World Maritime University (WMU) in Sweden. The students undertake an MSc level programme over a period of just over 1 year.

Esther Cecilia Derrick
Maritime Law & Policy,
World Maritime University,
2018

Esther Cecilia Derrick of St. Vincent and the Grenadines joined the World Maritime Univeristy (WMU) in September 2017, funded by the WNTI Fellowship. She is the 8th student to be funded by WNTI.

Esther has worked for the Government of St Vincent in various roles since 1987. In 2011, she joined the Department of Maritime Administration, as the Assistant Registrar of Ships. She follows in the footsteps of two previous WMU graduates – both the former and the current heads of the St. Vincent and the Grenadines Maritime Administration, David Robin and Hyrone Johnson are WMU alumni.

Esther is enrolled on WMU's Master of Science in Maritime Administration programme, and is specialising in Maritime Law & Policy. She holds a Bachelor's degree in Management from the University of the West Indies, and a Postgraduate Diploma in Project Planning from the University of Bradford, UK. The Maritime Law & Policy specialization has been designed for people working in policy formulation at an executive level, and offers students advanced knowledge of current law and policy related to international maritime transport.

Esther explained why she is a WMU student:

"I sought to enrol at WMU because I believe that it will greatly enhance my personal contribution to the improvement of maritime safety, environmental protection and ocean affairs in St. Vincent and the Grenadines (SVG) and by extension within the global community. I believe that the specialized training offered by WMU is an essential platform for my personal development, as well as the development of maritime and ocean affairs in SVG. With the knowledge and experience I am gaining at WMU, my organization and my country as a whole will benefit by moving a step closer to addressing the issues and reducing the problems we are currently facing - one being the lack of suitably qualified personnel - to assist in the development of the maritime industry. This is in keeping with the mission of my organization, "to efficiently administer and manage the maritime affairs of Saint Vincent and the Grenadines in keeping with national economic, safety, security and marine environmental protection interests through competent staff.

St. Vincent and the Grenadines, like other Small Island Developing States (SIDS), share similar sustainable development challenges which includes small but growing populations, limited resources, fragile environments, susceptibility to natural disasters and dependence on international trade. In addition most of these islands are highly dependent on their maritime resources for their sustainability. Therefore it is of vital important that we (SIDS) strive to continue to educate and develop our people in the maritime Industry.

I would like to thank the World Nuclear Transport Institute (WNTI) for their generous assistance that has allowed me the opportunity to be part of this prestigious university – WMU."

Lectures and Courses

In addition to the student sponsorship, WNTI is also invited to provide a lecture on transport of radioactive materials of World Nuclear University Summer Institute, held each year in Sweden.

SAMM

The WNTI hosts its Semi-Annual Members Meetings (SAMM) twice a year. Generally, one meeting is hosted in June, whilst the second takes place in December.

These meetings are organised to provide all WNTI members with the opportunity to come together to discuss in-depth current issues and challenges the industry faces, along with occurrences that have transpired throughout the year, with the aim to put in place resolutions and potential future plans.

WNTI WASHINGTON SAMM
27th – 28th June, 2017

Members headed to Washington DC to take part in WNTI's first SAMM of 2017. Attendees congregated at the Compton, Mason & Rooke hotel whilst listening to expert speakers from a variety of industry areas, such as Cameco, BHP Billiton Australia and Savannah River National Lab. Discussions throughout the day covered an array of issues, such as the Transport of Tantalum ores to processing facilities and a Technical Division Overview of Packaging and Transportation. WNTI hosted a tour for its members of the US Regulatory Commission, providing an opportunity to have an insight into the premises.


WNTI SAMM 2017

TWO
Semi-Annual Members Meetings

FIVE
Working Groups


WNTI SAMM 2017

WNTI LONDON SAMM
6th – 7th December, 2017.
Amba March Hotel, London

It was a busy start to WNTI's Winter SAMM, with the first day committed to Working Groups. The schedule opened with a Hext Working Group discussion on the transportation of UF6 and relevant regulatory developments, whilst the Back End Transport Working Group included a Sellafield presentation on Cask Maintenance & Decommissioning and highlighted issues surrounding LSA & Waste Packaging and Nuclear Liability Insurance.

The Uranium Concentrates Working Group discussed Good Practice Guides for packaging and a request for experts to participate on in IAEA consultant meeting to develop a document for Nuclear Security Management for Front-End Nuclear Fuel Cycle Facilities. The Transport Security Working Group followed, with presentations from the WNA and IAEA. The final SSR-6 Working group featured interpretations of US CFR 49 and SSR-6 revision cycle.

The second day of the Winter SAMM included presentations from the Department for Business, Energy and Industrial Strategy, the IAEA presenting on Emergency Preparedness and Response to Emergencies during the Transport of Radioactive Material and of Risk Management Solutions on the Risk Assessment of Natural Hazards and Terrrorist activities to Transport of Radiactive Materials as well as a presentation from Foratom on the impact of Brexit on transport.

Working Groups

The Working Group consists of members from package designing, manufacturing and shipping companies.

© Orano, Larrayadieu

JAN VAN AARLE

The WNTI SSR-6 Industrial Working Group

The WNTI SSR-6 Industrial Working Group is an active party in addressing an industry perspective on the application of the Regulations and Guidelines on the national and international transportation of radioactive material.

The Working Group follows the review and revision process of the IAEA Regulations for the Safe Transport of Radioactive Material (SSR-6), associated Guidelines and the IAEA Recommendations on Transport Security.

Many members of the Working Group participate actively in the IAEA Transport Safety Standards Committee (TRANSSC) on the IAEA Regulations, as well as in dedicated Consultant Meetings (CM) and Technical Meetings (TM) established by the IAEA Transport Safety Unit, in order to present consolidated industry positions to specific developments of SSR-6.

The purpose of the Group

The purpose of the WNTI SSR-6 Industry Working Group is to achieve a consolidated industry position on the IAEA Regulations for the Safe Transport of Radioactive Material (SSR-6) review and implementation issues. The Working Group plays an important role in providing advice to support WNTI representatives at IAEA and other meetings.

The activities of the Group

The activities of the Working Group are focused on the development and implementation of SSR-6, the Advisory Material for the IAEA Regulations for the Transport of Radioactive Material (SSG-26) and related IAEA Guidelines, providing a consolidated industry position and feedback on the Transport Regulations.

The WNTI participates actively in Working Groups set up by the IAEA Transport Safety Standards Committee (TRANSSC) in order to contribute to specific topics of the SSR-6, such as new requirements for the testing of packages, particular issues with dedicated modes of transport and changes to the Regulations proposed during the review and revision of SSR-6 and accompanying guidelines.

The summary of 2017 Activities

In 2017, the SSR-6 Working Group has participated in the finalisation of SSR-6 for publication. The Working Group also contributed to the review and revision of the Advisory Material (SSG-26) and other Guidelines, e.g. Management Systems (TS-G 1.4), Compliance Assurance (TS-G 1.5) and the new Guideline on Package Design Safety Reports (PDSR).

The Working Group plays an important role in providing advice to support WNTI representatives at IAEA and other meetings.

The future challenges for the Group

- To accompany the development of Regulations and Guidelines for the Safe Transport of Radioactive Material as well as Security Recommendations set out by the IAEA and international Competent Authority Associations.
- To support its industry members regarding the application of transport regulations in terms of safety.
- To support the IAEA in developing their respective documents.

For more information, contact:

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MARC-ANDRE CHARETTE

Uranium Concentrates Industry Working Group

Uranium ore concentrates are transported internationally by road, rail and sea from the uranium producers to uranium converters. These international transport routes involved large distances and in some cases many jurisdictions.

To ensure the safe, secure and efficient transport of uranium ore concentrate the WNTI Uranium Concentrates Industry Working Group has been at work in developing standards, guidances and fact sheets. More recently the working group has reviewed and revised the Standard for Packaging and Transport of Uranium Concentrates and drafted a Generic Safety Data Sheet for Uranium Concentrate. Version 2 of the standard is now available on the WNTI website and the Generic Safety Data Sheet for Uranium Concentrate will soon be available on the WNTI website.

The purpose of the Group

To discuss and explore the following transport aspects for uranium concentrates:

- The packaging used
- The shipping process, for example the sea containers and package securing methods
- The requirements and controls for transport, such as safety marks, shipping document, safety data sheets and radiation protection
- The Working Group is also a forum for sharing experiences, issues and incidents so that the industry can learn from each other.

The activities of the Group

To develop publications and WNTI standards for the Uranium Concentrates Transport Industry particularly for ISO Containers in Multimodal Transport.

The summary of 2017 Activities

Completed the revision and published version 2 of the Standard for Packaging and Transport of Uranium Concentrates. Completed the drafting of a generic Safety Data Sheet (SDS) for U_3O_8, which is now in formatting for publishing in 2018. Reviewed the revised appendix IV of the IAEA SSG-26 which provides new acceleration values for the attachments points on packages.

Cigar Lake Uranium mine © Cameco

The requirements and controls for transport, such as safety marks, shipping document, safety data sheets and radiation protection

The future challenges for the Group

The group discussed the withdrawal or revision of the Good Practice for the Securing of Drums of Uranium Ore Concentrate in 20' ISO Containers and the need to include guidance for different packing techniques and bracing methods/layouts.

For more information, contact:

Chair: Marc-Andre Charette
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Secretary: Simon Chaplin
WNTI, Specialist Advisor
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BEN WHITTARD

Transport Security Industry Working Group

The profile of security in the nuclear sector continues to draw international attention and WNTI is committed to supporting its members in this important area.

The WNTI Transport Security Working Group (TSWG) offers a forum where WNTI members can come together to share and discuss security matters, with a view to developing a consolidated industry position where necessary.

Some recent TSWG themes include the cyber security of transport assets, understanding maritime threat assessments and supply chain security. Offering a collective voice for its members, the TSWG is an active participant at the IAEA and works closely with a number of competent authorities around the world. Drawing upon the expertise in its membership, the TSWG is able to share good practice amongst its community to help improve and strengthen the security of radioactive and nuclear materials in transport.

The TSWG is in the process of developing its new 3-year road map, and based on member's needs and requirements, these themes of work will continue to help share and promote good practice supporting the safe, secure, efficient and reliable transport of radioactive materials.

The purpose of the Group

- Assess the implications of security measures and State regulations on the transport of nuclear and other radioactive material
- Develop industry good practice publications
- Liaise with other non-governmental security organisations
- Be active in developments of transport-related IAEA security series publications
- Report to WNTI Members on security-related issues
- Evaluate consequent interaction between safety and safeguards; and be the voice of the industry on transport security-related issues
- Share best practices in transport security-related issues

The activities of the Group

- Early identification of issues and challenges
- To identify transport security issues affecting the transport of radioactive & nuclear material which are of importance to WNTI members and which need to be addressed to ensure the safe, secure and efficient transport of such material by WNTI members
- Develop consolidated industry positions
- Share useful information, collect and disseminate examples of good-practice
- Develop consolidated industry positions on transport security issues
- Liaise with other WNTI working groups where appropriate
- Develop a WNTI industry perspective on general and specific transport issues and feed these into the IAEA or other regulation review process as and when appropriate

The summary of 2017 Activities

The TSWG shared best practice and reviewed IAEA publications and meetings regarding security in transport. In particular the 9th and 10th meeting of the IAEA Nuclear Security Guidance Committee.
The TSWG engaged in a number of IAEA consultative and technical meetings on behalf of its members.

The TSWG supported the development and the delivery of the 2017 IAEA International Conference on the Physical Protection of Nuclear Materials and Facilities.
The TSWG discussed and shared good practice concerning a number of security related topics, including cyber security, supply chain security and insider threat.

The future challenges for the Group

- Assist the IAEA in developing a programme for the IAEA International Conference on the Security of Radioactive Material : The Way Forward for Prevention and Detection
- Work with its members to identify and take action on emerging security issues and challenges
- Support the IAEA in developing its guides and other publications

For more information, contact:

Chairman: Ben Whittard
INS, Senior Security Delivery Manager

Secretary: Simon Chaplin
WNTI, Specialist Advisor
simonc@wnti.co.uk

JOEL KRUEHLER

HEXT Industry Working Group

Uranium Hexafluoride (UF6) is a main component for the production of clean and low-carbon nuclear energy and it is transported internationally by road, rail and sea from the conversion to the enrichment and fuel production facilities. Like other nuclear products these international transport routes involve large distances and in some cases the packages may transit many jurisdictions on their way to the final destination.

To ensure the safe, secure and efficient transport of Uranium Hexafluoride, the WNTI HEXT Working Group has been working to develop fact sheets and transport guidance information for both the general public and the industry. These are especially developed by the industry to establish a common agreement on how these products are shipped safely around the world. The HEXT Working Group also interacts with - and plays an important role within - the WNTI SSR-6 working group in the development of the IAEA regulations for the safe transport of radioactive material.

The purpose of the Group

To consider transport and package requirements in transport safety regulations SSR-6 and other relevant dangerous goods regulations for the transport of UF6.

The activities of the Group

The Working Group provides a forum for WNTI Members to exchange information for a wide range of issues including package approvals, validations and specifications. Information also is shared on technical and operational solutions to satisfy regulatory requirements and on best practice for the safe handling and transportation of UF6.

The summary of 2017 Activities

The Working Group activity did also include closely related developments in applicable regulations, especially with regard to non-fissile, fissile-excepted and fissile UF6. In this context, the development regarding the H(U) approvals for 48 inch cylinders and B(U)F approvals for 30 inch cylinders requires special attention.

During 2017 the working group:

- Reviewed approvals for UF6 packages
- Reviewed and revised UF6 cylinder standards, e.g. ISO 7195 and ANSI N14.1
- Gave support during the revision process of SSR-6
- Considered changes on classification of UF6
- Supported the updating progess of USEC 651
- Amended a segregation provision for UF6
- Updated the UF6 fact sheet
- Considered regulatory developments
- Reviewed WNTI publications

On the margins of the HEXT group, the WNTI has been developing a Good Practice Guide for a Unique Identifier for UF6 cylinders. This guide is intended to provide a standardized format and application method for a global identifier for the uranium hexafluoride (UF6) cylinders most commonly used across the nuclear industry.

The Working Group provides a forum for WNTI Members to exchange information for a wide range of issues including package approvals, validations and specifications.

The future challenges for the Group

The future challenges are, amongst others, to monitor the regulatory developments especially with regard to the management of ageing packages. Against this background, especially the verification of long-term integrity of packages is coming more into focus and it is therefore one of the main objectives for the group. Also, as it has already been a major aim in the past, the ongoing improvement of guidance and operational procedures for the safe and secure handling of UF6 is further promoted.

For more information, contact:

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Secretary: Anne Presta
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MARTIN PORTER

Back End Transport Industry Working Group

Spent fuel and radioactive wastes from the nuclear power reactors, the decommissioning of nuclear facilities and a wide range of industrial and medical facilities vary greatly in their chemical, physical and radioactive properties. Radioactive wastes have to be processed and packaged, transported for storage and eventually for disposal.

The BETWG have developed a forward Workplan to workstream specific contemporary BET issues and drive the delivery of tangible outputs which further the objectives of the BETWG.

The current workstream themes are:

- Waste Characterisation
- Dual-Use (Transport & Storage) Casks
- Waste Transport Regulation Revision
- Cask Decommissioning
- Consignee Duty holding

The BETWG meet formally twice-yearly, coinciding with the broader WNTI Semi-Annual Members Meetings (SAMM's) to share best practice through pertinent presentations and to review the BETWG Workplan. In the intervening period, the BETWG hold two-monthly telephone conferences to progress the Workplan delivery.

The Working Group sets out to develop WNTI publications and to facilitate further discussions on relevant issues in the back-end sector of nuclear operations.

The purpose of the Group

The purpose of the Working Group is to develop discussion on back-end transport issues with the potential to affect radioactive materials transport in terms of safety requirements, costs, delays and any other aspects.

The activities of the Group

The activities of the Working Group involve the discussion and sharing of back-end transport issues in order to facilitate good practices in the packaging and transport of waste materials.

The summary of 2017 Activities

In 2017, the Working Group members discussed

- Waste Inventory Forecasting & Characterisation
- Cask Decommissioning
- Waste Transport Regulation Framework
- Dual Purpose Cask (DPC)
- Consignee Duty-Holding.

The future challenges for the Group

Moving forward, the Working Group sets out to develop WNTI publications and to facilitate further discussions on relevant issues in the back-end sector of nuclear operations.

For more information, contact:

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Public Communications & Publications

As part of the ongoing WNTI media relations programme, a network of contacts continues to be developed with the broader key industry publication companies. In addition, the WNTI is pursuing further opportunities outside the nuclear sector to raise awareness of the exacting standards of radioactive materials transport, the importance of radioactive materials to society, and the issues caused by delay and denial of shipments of these materials.

Number of website visits in 1 year

81,060

Website

The WNTI public website provides information on nuclear transport including the nuclear fuel cycle, non-fuel cycle transport, regulations and packages. It houses all of the WNTI publications, where some can also be found in Chinese, Spanish, Korean, French, Portuguese and Russian.

Further information on WNTI Member's products and services is available online whilst current news on industry events is regularly updated. There is also a Members' intranet which provides the latest developments on the packaging and transport of nuclear and other radioactive materials.

Publications

The WNTI suite of publications includes over 30 Standards, Good Practice Guides, Fact Sheets and Information Papers.

The WNTI publications are available on **www.WNTI.co.uk**

Publications Revision Process

WNTI has established a robust process dedicated to the revision of its Publications. This comprehensive process comprises, in accordance with the regulatory developments, update, review, revision, restructure or removal of the Publication.

The revision process is led by each WNTI Industry Working Groups involving experts. The process aims to ensure consistency between the publications and provide always more clarity, understanding and comprehensiveness of each document.

WNTI Standards

Uranium Concentrates Industry Good Practices for ISO Containers in Multimodal Transports – Revision 2

WNTI Standard – UF6 Cylinder Identification

WNTI Good Practice Guides

WNTI Transport Principles

Radiation Protection Programmes for Road Carriers, Sea Carriers and Port Handlers

Good Practice for the Securing of Drums of Uranium Ore Concentrate in 20' ISO Containers

Electronic Tracking for the Transport of Nuclear and other Radioactive Materials – Revision 1.0 – A WINS/WNTI International Best Practice Guide

WNTI Best Practice for Checking Shipping Containers Prior to Loading Drums of UOC and Before Dispatch

Nuclear Transport Security – Revision 1 – A WNTI/ WINS International Good Practice Guide

Communicating Radioactive Materials Transport

Good Practice Guide for the Transport of UN3507 by Air

Good Practice Guide for The Installation of Socket Head Plugs in UF6 Cylinders

WNTI Fact Sheets

Safety Regulations Governing Radioactive Materials Transport

Package Types used for Transporting Radioactive Materials

Nuclear Fuel Cycle Transport – Front-End Materials

Nuclear Fuel Cycle Transport – Back-End Materials

The INF Code and purpose-built vessels

Quick facts on the transport of Nuclear Fuel Cycle Transport

The Safe Transport of Uranium Ore Concentrates

Preparation of Natural Uranium Samples for Shipment in an Excepted Package

Transport of Large Objects and Special Arrangement

Uranium Hexafluoride (UF6)

Nuclear Liability for Transport)

Industry Interpretation of TI and CSI Limits for the transport of UF6 packages by Sea

WNTI Information Papers

Radioactive Materials Transport – Industry Experience

Nuclear Fuel Cycle Transport – The IAEA Regulations and their Relevance to Severe Accidents

Uranium Concentrates Industry Best Practice for avoiding contamination of Packages and Shipping Containers in Multimodal Transports

Radioactive Materials Transport the International Safety Regime – An Overview of Safety Regulations and the Organisations Responsible for their Development

Radiation Dose Assessment for the Transport of Nuclear Fuel Cycle Materials

WNTI Glossary

New Fissile Exception Provisions in the IAEA Transport Regulations (SSR-6)

Events 2017

January - March

IAEA

SSR-6 draft new edition - Technical Meeting (TM)

Emergency Preparedness and Response - TS-G-1.2 draft new edition CM No 4

INMM

33rd INMM Spent Fuel Seminar - Washington DC, USA

IMO

Sub-Committee On Pollution Prevention and Response (PPR) - 4th Session

Sub-Committee on Navigation, Communications and Search and Rescue (NCSR) - 4th Session

WNTI

NIATR Turkish Transport Workshop Side Event

OTHERS

PATRAM 2022 Steering Committee Meetings

FORATOM CTF Meeting

PIME Conference 2017

RAMTRANSPORT Conference 2018 Sterring Committee meeting

Waste Management Conference 2017

July - September

IAEA

34th Meeting of the Transport Safety Standards Committee (TRANSSC 34)

Emergency Preparedness and Response - TS-G-1.2 draft new edition CM No 6

61st General Conference

WNTI

Board Meeting

WNA-WNU Summer Institute

IMO

Marine Environment Protection Committee (MEPC) - 71st Session

Sub-Committee on Carriage of Cargos and Containers (CCC) - 4th Session

28th Meeting of the Editorial and Technical (E&T) Group (IMDG Code)

OTHERS

DOE Training

April - June

IAEA

NST 053

4th Meeting of the Emergency Preparedness and Response Standards Committee (EPReSC 4)

11th Meeting of the Nuclear Security Guidance Committee (NSGC 11)

Coastal and Shipping States Dialogue - Table Top Exercice

IMO

Facilitation Committee (FAL) - 41st Session

27th Meeting of the Editorial and Technical (E&T) Group

(IMDG Code)

ICAO

Pressure Differential in air carriage - WG of Experts

Dangerous Goods Panel WG 17

WNTI

WNU Lecture

Semi-Annual Members Meeting

Advisory Committee Meeting

OTHERS

WNFC Fuel Cycle Conference

October - December

IAEA

5th Meeting of the Emergency Preparedness and Response Standards Committee (EPReSC 5)

International Conference on Physical Protection of Nuclear Material and Nuclear Facilities

12th Meeting of the Nuclear Security Guidance Committee (NSGC 12)

35th Meeting of the Transport Safety Standards Committee (TRANSSC 35)

ISO

TC85 SC5 WG4 meeting

WNTI

China Transport Workshop

Advisory Committee Meeting

Semi-Annual Members Meeting

Board Meeting

OTHERS

PATRAM 2022 Committee

Coastal and Shipping States dialogue Meeting

IMO

29th extraordinary session

Assembly - 30th session

Key Goals & Events for 2018

WNTI will be involved in the preparation of and will participate in several important International Conferences and key events during 2018:

Ramtransport 2018

WNTI is one of the official Partners of the 11th International Conference on the Transport, Storage and Disposal of Radioactive Materials: RAMTRANSPORT 2018. The Conference will be held from 15th to 18th May 2018 in London.

WNTI will have a booth and will communicate with all RAMTRANSPORT 2018 attendees. The WNTI Secretary General and Specialist Advisors will be present during the conference:

- WNTI SA will give 1 presentation during technical sessions
- 1 technical session will be chaired by a WNTI Representative
- WNTI staff will attend all the technical sessions, to supply a structured report identifying the topics of interest, in order to improve our services to the Members.

WNTI 20th Year Anniversary

- 11th RAMTRANSPORT Conference
- World Maritime University Lecture (WMU)
- World Nuclear Fuel Cycle Conference (WNFC)
- US DOE National Transportation Stakeholder Forum
- IAEA International Conference on Physical protection of Nuclear materials
- INMM Annual Meeting

Material and Nuclear Facilities

WNTI will continue to develop its close cooperation with UN Bodies (IAEA, IMO, ICAO and the UN Sub-Committee of Experts on the Transport of Dangerous Goods) through strong involvement and participation at major transport related events throughout the year – these being:

IAEA

62nd General Conference, Transport Safety Standards Committee (TRANSSC No 36 and No 37), Emergency Preparedness and Response Standards Committee (EPReSC No 6 and No 7), Nuclear Security Guidance Committee (NSGC) and associated Consultancy and Technical Meetings dedicated to IAEA Publications revision.

IMO

Assembly
Maritime Safety and Technical Co-operation
Reinforce the WNTI and IMO relations.

ICAO

Dangerous Goods Panel Working Group
WNTI is also continuing to strengthen its cooperation with other Industry Organisations:

ISO, CINS, FORATOM, INMM, NEI, WANO, WNA

On behalf of and with its Members, WNTI will maintain its strong engagement for promoting effective safety and security standards for the packaging and transport of radioactive materials in participating

35 Events 7 Cities

January

- IMO Ship Design and Construction (SDC), London
- IAEA 6th Consultancy Meeting on EPR TS-G-1.2 revision, Vienna
- 33rd INMM Spend Fuel Seminar, Washington
- RAMTRANSPORT 2018 Steering Committee, London
- IAEA Consultancy meeting on SSG-26 draft revision, Vienna
- IAEA 4th Consultancy on Safety Security Interface, Vienna

Feburary

- EC ENER Study, Brussels
- IMO Sub-Committee on Pollution Prevention and Response (PPR), London
- PATRAM 2022 – Steering Committee No 8, Paris
- IMO Sub-Committee on Navigation, Communications and Search and Rescue (NCSR), London

March

- FORATOM Communication Task Force meeting, Brussels
- IMO Sub-Committee on Ship Systems and Equipment (SSE), London
- OECD/NEA – Nuclear Liability – WPNLT, Paris

April

- IMO Marine Environment Protection Committee (MEPC), London
- RAMTRANSPORTS 2018 Steering Committee 5, London
- WNA – Transport Working Group- WNFC, Madrid
- IMO LEGAL 105th Session, London
- WNTI Advisory Committee No 40, London

May

- ISO SC 5/WG 4, Helsinki
- 11TH RAMTRANSPORT Conference, London
- IMO Maritime Safety Committee, London
- WNTI SAMM, London
- PATRAM 2019 Preperations

June

- IAEA TRANSSC 36, Vienna
- IMO Facilitation Committee, London
- IAEA EPReSC 6, Vienna
- IAEA NSGC 13, Vienna

July

- IMO Council, London
- IAEA Transport Security TM, Vienna
- IMO Sub-Committee on human Element Training and Watchkeeping (HTW)
- INMM Annual Meeting

September

- IMO Carriage of Cargoes and Containers, London
- IAEA General Conference – 62nd Session
- IMO Sub-Committee on small implementation of IMO instruments

October

- IMO Marine Environment Protection Committee (MEPC), London
- IAEA EPReSC 7, Vienna

November

- IAEA TRANSSC 37, Vienna
- IMO Council, London
- WNTI AC No 41, London

December

- IMO Maritime Safety Committee, London
- WNTI SAMM, London

Members' & Stakeholders' Voice

"WNTI provides a valuable and appreciated contribution to IAEA work in the field of transport safety and security in the committees that develop IAEA safety standards and security series documents, as well as involvement in developing training material and capacity building programmes."

Stephen Whittingham
IAEA
Head of the Transport Safety Unit

What WNTI means for you?
The International Atomic Energy Agency is the international centre for cooperation in the nuclear field. The Agency, an independent intergovernmental, science and technology-based organization in the United Nations family, works with its Member States and multiple partners worldwide to promote the safe, secure and peaceful use of nuclear technologies.

IAEA safety and security documents, including the IAEA safety standards, offer support to Member States as they develop or strengthen their infrastructure for nuclear and radiation safety and security. Nuclear safety and nuclear security culture are essential components of such infrastructure, as are sound relationships between regulators and operators based on mutually recognized roles and responsibilities.

WNTI provides a valuable and appreciated contribution to IAEA work in the field of transport safety and security in the committees that develop IAEA safety standards and security series documents, as well as involvement in developing training material and capacity building programmes.

This is an example of how industry sector organisations can help the IAEA ensure that it is up-to-date on technical and operational developments and experience, which is crucial for its work to share good practices in the implementation of its safety and security documents.

"WNTI can provide opportunities to convey industry voices based on our actual operational experiences to international communities"

Daiichiro Ito
Nuclear Fuel Transport Co., Ltd.
Group Manager

What WNTI means for you?
WNTI is a window to international communities for us. Although NFT (Nuclear Fuel Transport) transports nuclear materials domestically, we have to watch international regulations continuously because domestic transport regulations are directly linked to international modal regulations based on the IAEA regulations.

These days, the regulations or recommendations for safety and security are getting stricter and stricter and we are afraid that it is difficult to ease a requirement once it is added to the regulations, even if it is unreasonable or contributes little to enhancing safety or security. Therefore, we should respond properly before the regulations are established.

WNTI can provide opportunities to convey industry voices based on our actual operational experiences to international communities. Furthermore, for NFT, it is very beneficial to participate in IAEA TRANSSC and related consultancy meetings with a WNTI hat. We can contribute to developing rational and effective international regulations through the WNTI's window.

What are your expectations for WNTI for the future?
WNTI is the unique community for radioactive material transport and NFT expects WNTI strengthens a function to share experiences and expertise from its members. Competent authorities strengthen their global cooperation recently. Therefore, industries should also gather our expertise to response to the CA's requirements appropriately. The IAEA regulations were estabalished around 60 years ago and some of the requirements seem out of date. The security requirements or recommendations seem to increase rapidly. The industry should have the initiative to improve the regulations with balance.

WNTI members may be competitors for each other but safe, secure and sustainable transport is a crucial goal for us. NFT would like WNTI to provide a good platform to pursue the goal.

"WNTI is a leading platform of nuclear transportation industry, so WNTI will mean our home and we can share all information with other family members."

Steve Luo
Nantong CIMC Energy Equipment Co., Ltd
Deputy General Manager

NSSC was founded in 1990 and later joined the China International Marine Container (Group) Co. Ltd, which has headquarters in Shenzhen in 1994. NSSC boasts a 134,000 square metres and the area of structure of 59,000 square metres. The capacity is 150,000 TEU of ISO containers per year.

NSSC treats product quality as its life and insists on a company policy of 'Quality First, Performance First and Customer Oriented', as well as the values of 'Honesty is our policy, quality is our morality' and aims at 'zero defect'. It has been ISO9001-2008 accredited and has built great reputation among our customers for outstanding quality in the industry.

What does WNTI mean for you?
CIMC is a manufacturer of nuclear transportation equipment, and WNTI is a leading platform of nuclear transportation industry, so WNTI will mean our home and we can share all information with other family members.

We may get the feedback from customers & suppliers and exchange our ideas, this will make us improve and develop more valuable technique and equipment for the nuclear industry.

What are your expectations for WNTI for the future?
Keep going as before, and develop more Chinese nuclear companies or organizations join us in near future. At current situation, China is one of few countries strive to develop nuclear power construction which need more communication and advices on international nuclear transportation issues. I believe we would make more contribution to working group and development of WNTI family.

"WNTI is a very important 'platform', which allows for all technical and transport members and participants to discuss all general issues together.

Elena Dvoychenkova
TENEX

TENEX is one of the world's major suppliers of NFC products, which provides a significant share of the uranium enrichment services required for western type nuclear reactors. TENEX is the main organisation in the Russian nuclear industry in promotion of NFC products, generated by ROSATOM entities, to the global market – uranium conversion and enrichment services and enriched uranium product.

Since 2015 TENEX has been acting as the industry-wide integrator of international sales of back-end reference products, works and services, spent nuclear fuel (SNF) and radioactive wastes (RAW) management, decommissioning of nuclear and radiation hazardous facilities.

TENEX operates to promote the interests of the Russian nuclear industry while making the best possible use of its export potential and competitive advantages in strict compliance with applicable legislation, standards for quality, safety and social responsibility. Tenex resumed its membership with the WNTI in 2012.

What WNTI means for you?
We think that WNTI is a very important 'platform', which allows for all technical and transport members and participants to discuss all general issues together. All indicated sessions and Working Groups, meeting face –to- face between members and participants, gives very positive results in future cooperation and communication

What are your expectations for WNTI for the future?
We hope to finalise matters regarding becoming a Full member of the WNTI. We are glad to be involved in all of the WNTI's Working Groups, sessions and discussions. We are aware that all important issues should be present as instructions and recommendations from the WNTI as well as some issues about changes in regulated documents and other important information from WNTI WG, after WNTI creates its minutes (to mail to members and participants).

In conclusion, we really wish WNTI all the best and ready for any support from TENEX's side.

© Orano, Larrayadieu Eric

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Images courtesy of World Nuclear Transport Institute Members

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SO9001

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