REPORT OF THE TRANSPORT SAFETY STANDARDS COMMITTEE (TRANSSC) – NINETEENTH MEETING

5-9 October 2009
2nd Floor M Building IAEA, Vienna

1.0 OPENING SESSION

Ms Eliana Amaral, Director, Division Nuclear Safety Radiation and Waste

TRANSSC 19 was formally opened by Ms Eliana Amaral, Director, Division Nuclear Safety Radiation and Waste. She recognized that the meeting was concentrating on the review of the 2009 Edition of TS-R-1 (requirements) and TS-G-1.1 (advisory material) and requested active involvement from all to reach consensus on important issues. TRANSSC must decide at this meeting whether a revised edition of TS-R-1 was warranted on safety related grounds. She stressed the importance of producing a high quality document and emphasized that any recommendation is based on safety as the fundamental driving criteria for a new edition of the TS-R-1. She asked all TRANSSC members to have a positive approach to work together in the review of TS-R-1.

She referred to the recent Board of Governors and the General Conference meetings, where transport again featured high on the list of importance. She requested that particular attention be given to the General Conference resolution related to transport. The actions in the resolution are for Member States and the Secretariat and it is important that progress be achieved by both parties working together. Geological disposal, the assurance of supply of medical isotopes, the effect of denial of shipment, the Senior Regulators meeting and the long term strategy for the management of disused radioactive sources were also addressed at these meetings.

She asked the meeting to spend some time considering the latest updates to the Basic Safety Standards. TRANSSC’s previous major concern on the BSS involving the links between the tables in TS-R-1 and the BSS has been taken into account. This may entail some additional work related to the revision of TS-R-1 and TS-G-1.1. She requested that TRANSSC’s comment on the BSS be communicated to RASSC in time to support RASSC consideration at their November meeting. A full copy of her comments is attached at Annex 1.

Mr. Bill Brach, TRANSSC Chair

Mr Brach, TRANSSC Chair welcomed the attendees. He drew attention to challenges faced by this meeting and highlighted the agenda item on review and decision on revision of TS-R-1. The meeting is mandated to review and discuss all member state issues and identified problems received by the Secretariat. In accordance with decision criteria as developed by TRANSSC, the meeting will have to reach consensus as whether a revision of the regulations is necessary.

He summarized the feedback received from a number of TRANSSC members on the Joint Safety Standards Committee meeting (RASSC/WASSC/TRANSSC) held on 29 June. With over 200 participants, the physical meeting arrangements were not conducive to good dialogue and interaction among and between Committee members.
However, he noted that the combined meeting provided resource efficiency for the IAEA secretariat. No additional combined meetings for TRANSSC are scheduled.

The TRANSSC/WASSC meeting was beneficial and he briefly commented on the outcome of the meeting. The WASSC and TRANSSC Chairs have asked the Secretariat to form a small sub-group of a few WASSC and TRANSSC members to focus on common issues of interest to both waste management and transportation. The intent of this sub-group is to discuss issues of common interest and provide common recommendations to their respective Committees. The formation of subgroups to work on specific subject area was an excellent concept and will be taken forward as a matter of priority.

He informed the meeting of apologies of nine TRANSSC members and attendees who advised the Secretariat that they would not be able to attend the TRANSSC 19 meeting.

2.0 ADMINISTRATIVE ITEMS

2.1 Conduct of the meeting

The provisional agenda was reviewed. Due to temporary limitations of the meeting room facilities some agenda items were re-scheduled for later in the week. Comments from the floor were addressed. The final agreed meeting agenda, Rev 0 was distributed. This is attached as Annex 2. The chair noted that the terms of reference as available on the TRANSSC website were unchanged; they were endorsed by the meeting.

2.2 Administration

Mr Stewart re-iterated the meeting times as stated in the agenda. He informed members of plans for a TRANSSC member/attendee and spouse dinner on Wednesday evening, 7 October. He noted that the M building was newly opened. This was the first IAEA meeting in the room, and he described issues related to the event of an emergency. He indicated that a feedback form would be provided to allow people to provide comments.

2.3 REVIEW OF PREVIOUS MEETINGS

2.3.1 TRANSSC 18 Meeting Report

Mr Brach presented the TRANSSC 18 report was accepted by the committee.

Mr Brach presented the joint TRANSSC/RASSC/WASSC report – no comments were made. TRANSSC’s acceptance would be communicated to the other committees. The meeting report for the combined WASSC/TRANSSC meeting was not yet available and will be provided to TRANSSC members as soon as it is available.

2.3.2 General Conference
J Stewart gave a brief overview of the outcome of the General Conference. He noted that the 2009 General Conference resolution on transportation again called for a change to the requirements for fissile material exceptions in TS-R-1.

3.0 SPECIAL REPORTS

3.1 Japan TranSAS
A report was made by Mr. Hanaki regarding the follow up actions to the TranSAS mission to Japan. The presentation also addressed the objective of the mission, scope, the review team, findings and the pros and cons of the mission. Background information on annual energy production, nuclear power plants, nuclear fuel cycle, and the increased levels of transport in Japan was provided. He explained the actions taken in response to each item in the original TranSAS report. Overall Mr Hanaki concluded that the TranSAS to Japan had all outstanding issues closed. He concluded that the TranSAS had been beneficial.

A query on the present status of TranSAS was raised. Mr Stewart confirmed that TranSAS missions were still a valid part of the agency process and that there are several options that are presently available, for example, the latest being Self Assessments and IRRS missions which can be narrowly or more broadly focused related to transport, but are limited to regulatory issues.

**Action 1: The Secretariat will provide feedback on TranSAS missions by TRANSSC 20**

3.2 Recording incidents in France
A comprehensive presentation by Mr Sert provided in-depth information on 900 transport related incidents/events from 1999-2007. Parameters are recorded from the analysis of the notifications and reports of the events, including for example, type of event, type of package and level on the INES scale. The lessons learnt from these incidents were mentioned.

In response to a query, the meeting was informed that the information is available on the IRSN web site.

A query noted the value of Mr Sert’s presentation and suggested that the Secretariat consider organizing a workshop to address such incidents and to share broadly the lessons learnt with other member states. TRANSSC agreed with the suggestion.

**Action 2: The Secretariat to investigate organizing a workshop for member states to share information and experiences related to recorded incidents/events, and lessons learnt from such experiences**.

3.3 Report on $A_1/A_2$ exemption values
Review of the methodologies and development of software to calculate exemption and $A_1$ and $A_2$ values was presented by Mr Cabianca. The exemption levels in schedule 1 of the International Basic Safety Standards (BSS) define practices and sources within practices, which may be exempted from the requirements of these standards. The same values were also adopted for the International Atomic Energy Agency (IAEA) transport regulations although the exposure scenarios and pathways used to calculate the exemption values did not explicitly address the transport of radioactive material.
There are five types of packages for transporting radioactive material; in order of increasing robustness they are: Excepted; Industrial; Type A; Type B; and Type C. There are two limits for the activity of Type A packages, one for special form material ($A_1$) and the second for other material ($A_2$). The limits for Type A packages are used as a basis for limiting the activities transported in Excepted packages and for specifying allowable leakage rates from Type B.

The purpose of this two year project is to carry out a review of the methodologies used to determine the exemption and $A_1$ and $A_2$ values and to develop a software application that will generate these values using the various scenarios and data sets.

Initially, the original data and the previously used scenarios and methodologies will be used to recalculate the values that are currently listed in the IAEA Basic Safety Standards. The software application will then be further developed so that alternate parameters can be used, such as the revised International Commission on Radiological Protection (ICRP) radioactive decay data and additional scenarios can also be introduced, for example specifically addressing transport scenarios.

Thus when the revised IAEA Basic Safety Standards and the new ICRP dose coefficients are published the application could be used to calculate new exemption and $A_1$ and $A_2$ values as an input into international discussions on such topics. The software was being developed for the UK Department for Transport.

4.0 THE DEVELOPMENT OF DOCUMENTS/PRODUCTS

4.1 Transport Requirements

Mr Bruno provided information on the current status of the transport standards, including the translated editions.

4.2 TRANSSC Review of Proposed Resolution of MS Comments and Issues

4.2.1 Process for developing TS-R-1

Mr Stewart provided an information paper on the TS-R-1 review process. Discussion with respect the quality plan, consultancies’ meeting reports, ongoing issues, new issues and overlapping issues ensued. The initial quality plan for this cycle will be revised accordingly following the outcome of this meeting. He indicated that, in line with the plan, the overall approach would be reviewed at the appropriate time.

4.2.2 Timeline for TS-R-1 Revision (if required)

A proposed timeline for TS-R-1 revision (if required) was presented by Mr Zhao. There were some discussions on the presentation regarding the proposed dates, resolution of member state comment, proposed consultancies, acceptability by the UN Committee of Experts and the IAEA in house approval process.

4.2.3 Review of Member State Issues and Comments

Mr Zhao presented details of proposals from Member States and International Organizations. This addressed errors
records for TS-R-1, TS-G-1.1, new proposals, comments on proposed text and proposals for on-going issues. **4.2.4 Reports of Pre-TRANSSC Consultancies**
The output from the pre-TRANSSC consultancies were made available to TRANSSC based on working papers on the TRANSSC web site and a presentation by Mr Reiche, Chair of the criticality consultancy held the week before TRANSSC 19.

**4.2.5 Process for TRANSSC 19**
Mr Stewart re-iterated the earlier presentation and described stepping through the review of the TS-R-1 proposed changes and Member State comments in the following order:

i) Errors
ii) Comments on proposed text
iii) Ongoing Issues
iv) New Issues

**4.2.6 TS-R-1 Review**
A summary of the outcomes of the review is attached as Annex 2. TRANSSC used the previously approved “Decision Criteria” to determine if the TRANSSC accepted, proposed changes/issues, individually or collectively were significant enough to warrant a new edition of TS-R-1. TRANSSC first considered the proposed changes and issues for the fissile exception requirements and concluded that the issue met the decision criteria to start a new revision cycle for TS-R-1. With this conclusion, TRANSSC consensus was to enter a revision cycle.

*Action 3: The secretariat to initiate a revision cycle for TS-R-1*

**4.2.7 DPP for TS-R-1**
TRANSSC approved a slightly amended DPP to initiate a revision cycle for TS-R-1 (attached at Annex 3)

**4.3 Transport Guides**

**4.3.1 Advisory Material DPP DS 425, Rev 0 Advisory Material TS-G-1.1**
With the decision to initiate a new revision cycle for TS-R-1, TRANSSC concluded that the associated advisory material in TS-G-1.1 should also be revised. TRANSSC approved the DPP for DS 425 updated to match the DPP for TS-R-1 (attached at Annex 3)

**4.3.2 Emergencies in Transport**
Ms Varley introduced the initial steps in producing guidance for responding to maritime emergencies related to the transport of radioactive material. No action was requested of TRANSSC in this informational presentation.

**4.3.3 E-Schedules**
Mr Zhao presented the options for preparing an electronic version of the transport schedules (E-Schedules) and moving the development forward. TRANSSC suggested
that the current project should go forward as a trial developmental effort. In the future TRANSSC may consider possibly approving the E-Schedules as an attachment to TS-G-1.6. The Secretariat will continue to pursue within the IAEA clarification on the process for approval of electronic documents and processes.

4.4 Future work programme on Standards
Subsumed under 4.2

4.5 Basic Safety Standards (BSS)

Mr Colgan provided the status of the current DS 379 on the BSS. Information related to the timetable, issues raised by TRANSSC and feedback mechanisms were given. Draft 2.5 was posted on the RASSC website on 2nd October and Committee member comments are to be provided by 1st November. The seven issues previously raised by TRANSSC were discussed by Mr Colgan and the issue resolution was presented. Given the very late posting of the revised BSS on the IAEA web site, TRANSSC members’ comments are to be sent to the TRANSSC Chair and the Secretariat by 31st October.

**Action 4: TRANSSC to provide BSS comments to TRANSSC Chair and the Secretariat by 31st October**

4.6 Proposed Standards

The following three draft safety standards documents were received by TRANSSC too late for TRANSSC member review before the meeting. Therefore TRANSSC members were requested to provide comments/approval by email correspondence to Mr Stewart and Mr Brach by October 31.

DS 413 Safety of Nuclear Power Plants: Commissioning and Operation - DRAFT SAFETY REQUIREMENT FOR APPROVAL BY EMAIL TO SEND TO CSS
M Kearney presented an overview of the current status.

**Action 5: TRANSSC to provide comments/approval on DS 413 Safety of Nuclear Power Plants: Commissioning and Operation - Draft Safety Requirement to send to CSS by email correspondence to Mr Stewart and Mr Brach by October 31.**

DS434 - Radiation Safety of Radioisotope Production Facilities DPP FOR APPROVAL BY EMAIL
E Reber presented the DPP for DS434.

**Action 6: TRANSSC to provide comments/approval on DPP for DS434, Radiation Safety of Radioisotope Production Facilities by email correspondence to Mr Stewart and Mr Brach by October 31.**
DS 435 - Safety of Small/Medium, Transportable and Floating Nuclear Power Plants DPP
FOR APPROVAL BY EMAIL

The member for Russia noted that they believed it was too early for such a document. It was requested that close integration with transport should be maintained, and that transport should be included as a subject in the safety guide.

**Action 7:** TRANSSC to provide comments/approval on DPP for DS435, Safety of Small/Medium, Transportable and Floating Nuclear Power Plants by email correspondence to Mr Stewart and Mr Brach by October 31.

### 4.7 Other Transport Requirements

**International Organization for Standardization (ISO)**

Mr Malesys noted that ISO 7195 will be revised starting early 2010.

**Tantalum-Niobium International Study Center (TIC)**

Mr Schwela mentioned that the current main interest and focus of TIC related to transport was the shipment of NORM, and the issue of denial of shipments.

**World Nuclear Association (WNA)**

Mr Gorlin commented that the WNA transport working group has met three times this year. The current issue and focus of the working group is still on the stability of supply. The economic downturn was offering opportunities for addressing denial of shipment in specific ports.

### 4.8 Process for developing standards

Mr Delattre gave an update on the development of SPESS and how it related to the timeline for publication of TS-R-1. He indicated that there were options for extending the revision time till later this year without delaying eventual approval and publication. He also noted that TS-R-1 would be allowed to include a definitions section.

He noted that the new format was only required for IAEA thematic safety requirements documents, but that the new format was only encouraged for facility and activity specific safety requirements documents such as TS-R-1. TRANSSC was very accepting of this clarification that the new format is not mandatory for TS-R-1.

**Action 8:** Subsequent to the close of TRANSSC 19, the TRANSSC Chair was informed that all the Safety Standards Committees will be allowed to provide specific comments on the draft SPESS by December 31, 2009. Subsequent to this the TRANSSC Chair was informed that this would include the step by step manual. TRANSSC members will be informed of this additional opportunity for comment. TRANSSC members to comment on draft SPESS and step by step manual by December 31, 2009.

### 4.9 Stakeholder involvement

Mr Delattre gave a presentation on the current draft paper on stakeholder involvement. He emphasized the importance of the paper in relation to the future development of safety standards. He asked for feedback in order to prepare for a meeting with the chairs when a more detailed paper would be developed.
He noted that involvement at approval stages of safety standards was proposed to be member state only, but that other stakeholders would be welcome at the drafting stage if they had a broad, global interest in the subject and should be able to contribute to the process. TRANSSC agreed with importance of the document.

**Action 9: TRANSSC to comment on the current draft paper on stakeholder involvement by end of December**

### 4.10 Feedback to CSS on questions

Mr Brach gave a brief overview of his proposed feedback to the CSS based on TRANSSC 18 input on the three questions CSS tasked the TRANSSC Chair to discuss with TRANSSC. The three questions concerned the frequency of revision of TS-R-1, parallel development of safety guides to support revisions of TS-R-1, and views on the new format for safety requirement documents. The presentation to CSS was provided on the TRANSSC 19 web site, no changes to the presentation were suggested by TRANSSC.

### 5.0 THE DEVELOPMENT OF IAEA SECURITY DOCUMENTS

Ms Eriksson-Eklund provided information regarding the IAEA Nuclear Security Series documents. There have not been many developments since her report at TRANSSC 18, July 2009. Some training courses have been conducted and four regional courses are being scheduled. A national course for Serbia has been requested. Ms Eriksson-Eklund also provided an update and status on the Recommendations for the Physical Protection of Nuclear Material in Storage, Use and Transport, Recommendations for Security of Radioactive Material in Storage, Use and Transport, and Recommendations Detection and Response.

### 6.0 DENIAL OF SHIPMENTS

Mr Bruno gave an update on the status of denial, including the positive response on actions and status on this matter at the General Conference. He noted that National Focal Points were now able to input data on denials to the database. He identified that the coordinated series of meetings in Feb 2010 including a meeting for all National Focal Points.

**Action 10: The secretariat to notify the ISCDOS of the TRANSSC recommendation to re-issue the invite to nominate the national focal points.**

### 7.0 OTHER BUSINESS

**Databases**

The topic was revisited and TRANSSC interest in PACKTRAM was re-iterated.

**Action 11: The secretariat to invite input on B (U) and SFC, requesting certificate ID, issue date and expiry date. Members are requested to provide this information to the Secretariat before TRANSSC 20.**
8.0 AGENDA FOR TRANSSC 20

No suggested topics were offered for next meeting, TRANSSC 20 in June 2010. TRANSSC members were asked to provide any input to the secretariat, recognizing that the next meeting is nine months away.

9.0 REVIEW OF DRAFT MEETING REPORT OF TRANSSC 19
TRANSSC 19 – Meeting Report Rev. 0 DRAFT

The Actions recorded in the preliminary draft TRANSSC 19 meeting report were reviewed by TRANSSC and accepted as the actions agreed to during the meeting.

Action record sheet

Ms Varley presented the Action Record Sheet which was accepted.

10.0 CLOSE OF MEETING
Closing comments – E. Amaral

E Amaral noted that TRANSSC had concluded that a new revision of TS-R-1 and TS-G-1.1 was required. She noted the positive engagement of more members, but also suggested that it would be good to consider means of improving the input from some of the under-represented regions. She asked TRANSSC to consider the option for regional meetings or some other means of regional engagement.

She noted that TRANSSC should also focus on problems experienced by Members States and focus on ways to assist with practical implementation issues. As an example, some colleagues came with issues and have no answer to help them solve these issues. She noted the option to introduce workshops on “Implementation issues”, which will have the responsibility of resolving such issues. This could be greatly enhanced if there was a Technical Safety Area for transport within the technical cooperation programme, which she asked the Secretariat to examine as a possibility.

She thanked TRANSSC for the hard work and thanked the chair for his hard work.

*Action 12: Secretariat to progress the creation of a TSA for transport.*

*Action 13: TRANSSC members to inform Board representatives of the importance of a TSA for transport*
Good Morning Ladies and Gentlemen,

I am pleased to welcome each of you here to Vienna today, and to formally open the nineteenth meeting of the Transport Safety Standards Committee (TRANSSC).

You will be aware that the Agenda for this meeting concentrates on the review of TS-R-1 and TS-G-1.1.

It is important for us that you all take part in this meeting because its purpose is to collect your consensus views on important issues.

We have provided you with reference papers in advance, but since this review process now takes into account years of hard work we will be relying on the experience gained in this time as well. It is important to stay positive and work to improve the solutions that have been developed over the past years in response to problems faced by the transport community.

In the last few weeks we have had two important meetings, one is the Board of Governors, the other the General Conference. Transport again featured high on the list of importance at these meetings and we will give you specific feedback later. I would like to ask you to pay particular attention to the resolution related to transport. There are actions there for both the Member States and the Secretariat. It is important that we work together to respond.

Several events took place at the General Conference which my division were involved in, some of which had a particular relevance to transport.

One of the events considered geological disposal – and transport is an important issue here.

Another event looked at the assurance of supply of medical isotopes. Here the effect of denial of shipment was mentioned, as well as the imminent need to ship more materials longer distances.

And the Senior Regulators meeting considered the issue of the long term strategy for the management of disused radioactive sources, an issue which TRANSSC members have been aware of and interested in for some time.
As far as the work of this meeting is concerned I am going to single out the work on the transport standards, TS-R-1 and TS-G-1.1, as being particularly important. You will be making decisions as to whether TS-R-1 will be revised, and how TS-G-1.1 will be revised.

If there are issues of safety significance that have been raised then you should take the decision to revise TS-R-1. This is the criteria you should use to advise us. At this time you should not be concerned whether the issues are fully resolved, you should consider whether safety issues exist that need to be solved.

However, I note that there are significant numbers of editorial comments on this document in every review, and with that in mind I would ask you to be realistic in assessing how long it will take to ensure the revised document is of a high quality. Based on your assessment we will extend or contract the timetable in the draft DPP. It is senseless to rush to produce a document to the extent that more errors are produced than are solved.

In addition I ask you to spend some time considering the latest updates to the Basic Safety Standards. You will be informed that your major concern – that of the links between the tables in TS-R-1 and the BSS are retained and strengthened – has been taken into account. Even though the existing numbers will be retained this will cause some additional work related to the revision of TS-R-1 and TS-G-1.1.

I hope you will be in a position to advise RASSC that you are content to move forward with the latest revision.

Denial continues to be important ongoing issue. While significant advances have been made in some areas we still see several potential problems. You will have a short report on this, but following on from recent reports we would hope to be able to find time for you to examine some regulatory issues related to this, either here or in working groups.

Now I would like to introduce Mr. William Brach of the United States of America, the chair of TRANSSC, and to thank him for carrying out this challenging task. You have a very heavy workload ahead of you this week and I am confident that under the leadership of Mr. Brach, it will be possible to achieve the intended results.
Before I hand you over to Mr. Brach, once again, welcome to Vienna. I hope that you are able to attend our hospitality at a local Vienna restaurant. This is the season to visit the vineyards, and you will be going to this area.

I wish you all a very productive meeting. I hope you will not only take the time to work hard, but you will spend time in the events we have organised getting to know each other.

Thank you.
Annex 2

Errors
TS-R-1 error table accepted unchanged from consultancy
TS-G-1.1 error table accepted unchanged from consultancy
Rev2 proposals from error for TS-R-1 – accepted as new issues – later rejected
Rev 1 proposals from error for TS-G-1.1 – accepted as new issues – later rejected

NOTE Secretariat to review these last two documents to determine safety critical issues.

Criticality General issues

Check and clarify “defined” terms and terminology. This does not mean add a
definition of fissile excepted material.
Try to group issues around para 417.
Look at a more risk informed approach.
Consider that there is a need for continuity of use.
There needs to be a clear understanding of what “control” is.
There needs to be consideration of the appropriate marking and documentation of
packages.
There needs to be consideration of unpackaged material.
For each option there should be an assessment of the potential for criticality.

The de-minimis value

The need for a low value below which there should be no need for control during
transport related to criticality was a consensus view.
Consideration should be given to adding a higher limit elsewhere should this figure be
very low.

Material excepted from the requirements applying to fissile material irrespective
of the quantity.

Work is still required to consider homogeneity. Technical issues require further work,
but the general concept was proposed by the consultants. In particular the need to
specify material requirements that allowed harmony of application under option (e).
This was the consensus view.

Material subject to accumulation control but excepted from some of the
regulatory requirements.

There was consensus that this was an appropriate way forward. There should be
consideration of whether certification is required to assure package requirements.
Package testing

This will be dealt with under ongoing issues.

Radiation protection – surface contamination.

The surface contamination issue is not accepted for regulatory change at this time, the current regulations are considered to provide adequate safety. The work carried out so far will be transmitted to the BSS secretariat and the October 2010 TM on the basis for TS-R-1.

UF6

To be taken forward. There is clear need to improve the situation – there is an identified problem which needs resolution, either through introduction of a new UN number or as guidance to the current provisions which require carriage under the two current UN numbers.

Other issues accepted as noted in table
Agree in final column – this means agree with consultants proposals

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<td>426bis</td>
<td>X</td>
<td>Take forward as an issue</td>
</tr>
<tr>
<td>SPA/09/06</td>
<td>Excepted packages</td>
<td>514</td>
<td>X</td>
<td>Agree</td>
</tr>
<tr>
<td>CAN/09/43</td>
<td>Exclusive use</td>
<td>580</td>
<td>X</td>
<td>Agree</td>
</tr>
<tr>
<td>FR/09/39</td>
<td>Exclusive use</td>
<td>580</td>
<td>X</td>
<td>Agree</td>
</tr>
<tr>
<td>CAN/09/38</td>
<td>Exclusive Use</td>
<td>581</td>
<td>X</td>
<td>Agree</td>
</tr>
<tr>
<td>CAN/09/22</td>
<td>Exclusive use</td>
<td>580</td>
<td>X</td>
<td>Agree</td>
</tr>
<tr>
<td>CAN/09/23</td>
<td>Exclusive use</td>
<td>581</td>
<td>X</td>
<td>Agree</td>
</tr>
<tr>
<td>GER/09/10</td>
<td>exclusive use (UK/07/08)</td>
<td>221</td>
<td>X</td>
<td>Text to be consolidated in an annex</td>
</tr>
<tr>
<td>GER/09/10</td>
<td>exclusive use (UK/07/08)</td>
<td>580</td>
<td>X</td>
<td>Text to be consolidated in an annex</td>
</tr>
<tr>
<td>GER/09/10</td>
<td>exclusive use (UK/07/08)</td>
<td>581</td>
<td>X</td>
<td>Text to be consolidated in an annex</td>
</tr>
<tr>
<td>CAN/09/21</td>
<td>Freight container</td>
<td>527(e)</td>
<td>X</td>
<td>Agree</td>
</tr>
<tr>
<td>SW/09/85</td>
<td>Ir-192</td>
<td>Table 2 footnote (c)</td>
<td>X</td>
<td>Agree</td>
</tr>
<tr>
<td>CAN/09/29</td>
<td>Management system</td>
<td>815, 816, 817, 818</td>
<td>Change “mandatory programme of management system” to “mandatory management system”</td>
<td>Agree</td>
</tr>
<tr>
<td>CAN/09/39</td>
<td>Maximum radioactive contents</td>
<td>615 bis</td>
<td>X</td>
<td>Agree</td>
</tr>
<tr>
<td>CAN/09/25</td>
<td>Maximum radioactive contents</td>
<td>615bis</td>
<td>X</td>
<td>Agree</td>
</tr>
<tr>
<td>CAN/09/24</td>
<td>Maximum radioactive contents</td>
<td>615bis</td>
<td>X</td>
<td>See GER/09/11 Agree</td>
</tr>
<tr>
<td>SPA/09/07</td>
<td>Maximum radioactive contents</td>
<td>615 bis</td>
<td>X</td>
<td>See GER/09/11 Agree</td>
</tr>
<tr>
<td>GER/09/11</td>
<td>Maximum radioactive contents</td>
<td>615bis</td>
<td>X</td>
<td>agree</td>
</tr>
<tr>
<td>CAN/09/44</td>
<td>Maximum radioactive contents</td>
<td>615 bis</td>
<td>X</td>
<td>Agree</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------</td>
<td>---------</td>
<td>---</td>
<td>-------</td>
</tr>
<tr>
<td>Ongoing issue (USA/07/01)</td>
<td>NORM</td>
<td>107(e) X</td>
<td>To be addressed under ongoing issues</td>
<td></td>
</tr>
<tr>
<td>SW/09/91</td>
<td>Overpack</td>
<td>504</td>
<td>Freight containers, IBCs, overpacks and tanks, as well as other packagings …</td>
<td>Agree</td>
</tr>
<tr>
<td>GER/09/06</td>
<td>Small quantities</td>
<td>Table 10</td>
<td>X</td>
<td>Agree</td>
</tr>
<tr>
<td>GER/09/09</td>
<td>Small quantity</td>
<td>514(a)</td>
<td>X</td>
<td>Accept and look at format of 544</td>
</tr>
<tr>
<td>JAP/09/197</td>
<td>Surface Contaminatio n - 07</td>
<td>Table 2</td>
<td>Agree to scientific notation, rounding method to be reviewed</td>
<td>The current regulations are acceptable – work to be passed to BSS</td>
</tr>
<tr>
<td>JAP/09/191</td>
<td>Surface Contaminatio n - 01</td>
<td>TABLE 2 Column 6</td>
<td>Agree to scientific notation, rounding method to be reviewed</td>
<td>The current regulations are acceptable – work to be passed to BSS</td>
</tr>
<tr>
<td>JAP/09/192</td>
<td>Surface Contaminatio n - 02</td>
<td>TABLE 2 Column 6</td>
<td>Agree to scientific notation, rounding method to be reviewed</td>
<td>The current regulations are acceptable – work to be passed to BSS</td>
</tr>
<tr>
<td>JAP/09/193</td>
<td>Surface Contaminatio n - 03</td>
<td>TABLE 3 Row 4 Column 6</td>
<td>Values are being reviewed by HPA, UK, and will be amended as necessary.</td>
<td>The current regulations are acceptable – work to be passed to BSS</td>
</tr>
<tr>
<td>JAP/09/194</td>
<td>Surface Contaminatio n - 04</td>
<td>425(c) X</td>
<td></td>
<td>The current regulations are acceptable – work to be passed to BSS</td>
</tr>
<tr>
<td>JAP/09/195</td>
<td>Surface Contaminatio n - 05</td>
<td>507(b)</td>
<td>Changing irradiated nuclear fuel to spent fuel, for consistence with the glossary, is</td>
<td>The current regulations are acceptable – work to be passed to BSS</td>
</tr>
<tr>
<td>Document Code</td>
<td>Description</td>
<td>Regulations</td>
<td>Decision</td>
<td>Note</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>-------------</td>
<td>----------</td>
<td>------</td>
</tr>
<tr>
<td>JAP/09/196</td>
<td>Surface Contamination - 06</td>
<td>507.11 TS-G-1.1</td>
<td>X</td>
<td>The current regulations are acceptable – work to be passed to BSS</td>
</tr>
<tr>
<td>JAP/09/198</td>
<td>Surface Contamination - 08</td>
<td>822(d)</td>
<td>X</td>
<td>The current regulations are acceptable – work to be passed to BSS</td>
</tr>
<tr>
<td>JAP/09/200</td>
<td>Surface Contamination – 10</td>
<td>832(1)(j)(bis)</td>
<td>X</td>
<td>The current regulations are acceptable – work to be passed to BSS</td>
</tr>
<tr>
<td>JAP/09/199</td>
<td>Surface Contamination - 09</td>
<td>832(1)(j)(bis)</td>
<td>X</td>
<td>The current regulations are acceptable – work to be passed to BSS</td>
</tr>
<tr>
<td>CAN/09/14</td>
<td>Surface contamination</td>
<td>Table 2</td>
<td>Revised values are being calculated.</td>
<td>The current regulations are acceptable – work to be passed to BSS</td>
</tr>
<tr>
<td>SW/09/84</td>
<td>Surface Contamination</td>
<td>Table 2</td>
<td>Revised values are being calculated.</td>
<td>The current regulations are acceptable – work to be passed to BSS</td>
</tr>
<tr>
<td>FR/09/12</td>
<td>Surface contamination</td>
<td>402, 405, 507, 822</td>
<td>X</td>
<td>The current regulations are acceptable – work to be passed to BSS</td>
</tr>
<tr>
<td>GER/09/07</td>
<td>surface contamination (UK/07/01, FR/07/23)</td>
<td>402(d), Table 2, column on surface contamination limits, 405, 405bis, Table 3, column on surface contamination , 507(b), 508, 512, 820(e), 822(d), 832(k)</td>
<td>X</td>
<td>The current regulations are acceptable – work to be passed to BSS</td>
</tr>
<tr>
<td>JAP/09/201</td>
<td>TI - Large Package - 01</td>
<td>521(b)</td>
<td>X</td>
<td>To be raised by Japan if TM in autumn 2010 provides new evidence, or earlier</td>
</tr>
<tr>
<td>Reference</td>
<td>Type</td>
<td>Page</td>
<td>Table</td>
<td>Content</td>
</tr>
<tr>
<td>-----------</td>
<td>------</td>
<td>------</td>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td>JAP/09/202</td>
<td>TI - Large Package - 02</td>
<td>TABLE 8</td>
<td>Title</td>
<td>To be raised by Japan if TM in autumn 2010 provides new evidence, or earlier</td>
</tr>
<tr>
<td>JAP/09/203</td>
<td>TI - Large Package - 03</td>
<td>521.2</td>
<td>TS-G-1.1</td>
<td>X</td>
</tr>
<tr>
<td>GER/09/05</td>
<td>UF6 (FR/07/08, UNECE/07/01, WNTI/07/07)</td>
<td>Table 1</td>
<td></td>
<td>To be taken forward. There is clear need to improve the situation – there is an identified problem which needs resolution, either through introduction of a new UN number or as guidance to the current provisions which require carriage under the two current UN numbers.</td>
</tr>
<tr>
<td>GER/09/05</td>
<td>UF6 (FR/07/08, UNECE/07/01, WNTI/07/07)</td>
<td>419</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>SPA/09/04</td>
<td>Uranium Hexafluoride</td>
<td>419</td>
<td></td>
<td>To be taken forward. There is clear need to improve the situation – there is an identified problem which needs resolution, either through introduction of a new UN number or as guidance to the current provisions which require carriage under the two current UN numbers.</td>
</tr>
</tbody>
</table>
Ongoing Issues

Fr/07/09, Ger/07/02 — Excepted packages with subsidiary risk
German lead
Brought to conclusion – text included in WM

ICAO/07/02 — TS-R-1 requirement for consignee cannot be taken over to the modal regulations.
To be dealt with at inter agency meeting in December

Fr/07/20, Fr/07/21, WNTI/07/19 — Transport frame & aux equipment
Discussion to be continued. WNTI not included in discussion at present. New proposal from WNTI included this year. UK request inclusion. Japan request inclusion

Fr/04/32 — Allowable activity release in accident conditions
Complete – submitted as a new issue
Proposal not acceptable to resolve issue in consensus manner.

France to arrange an expert group in November and a consensus proposal prepared by the end of November – including transitional arrangements for this proposal. Japan, UK, WNTI interested

Russia/07/07 — Thermal protection for B(U)
Withdrawn – new proposal will be submitted

Canada/07/02 — Clarification of paragraph 578 of TS-R-1 (2005)
Withdrawn

USA/07/05, USA/07/16 — Clarification required on treatment of decay products in Table 1 of TS-R-1
Software being developed by HPA, UK to submit at a later date, no longer an issue

FR/07/12 — Range of temperature for testing
New proposal submitted – no longer an issue
To be classified as an ongoing issue – there is a clear difference in views. To be included in a TM in October 2010.

Fr/07/29 — Updating transitional arrangements (TS-R-1 paragraph 825)
Two new proposals submitted. Consultancy to be held to produce consensus prior to the Jan 2010 TM

USA/07/07, UK/07/03, CANADA/07/03 — Air transport of high activity radioactive material
Three meetings have taken place. A discussion paper will be distributed by the UK with a view to informing TRANSSC and developing consensus.

USA/07/11 — Increasing number of shipments of large components with surface contamination
There has been some exchange of email, including work in Canada. A request was made by USA to include this as a TM topic.
FR/07/25 — Accumulated loss of radioactive contents (10-6 A2/hour and 1A2/week for Kr-85)
New text developed – retain as an ongoing issue with the aim of developing consensus in an
upcoming TM

Pakistan/07/01 — There is a need to clearly specify the dose limits for transport workers
Now covered by RPP – issues closed

Belgium/07/03 — The meaning of multilateral approval by validation
New proposal from Germany, further correspondence to achieve consensus within GER/09/13
Belgium (lead), Germany, UK, Spain, USA, Sweden, Netherlands, France, Canada, Russia,
WNTI

Belgium/07/04 — Inconsistency in the CA following the regulations
New proposal from Germany, further correspondence to achieve consensus within GER/09/13
Belgium (lead), Germany, UK, Spain, USA, Sweden, Netherlands, France, Canada, Russia,
WNTI

Fr/07/04 — More information needs to be available to CA in event of emergency
Closed – work being carried out on development of TS-G-1.2 in response to a GC resolution

USA/07/18 — Marking of some excepted packages and objects
Updated proposal to be supplied by USA by end November – TRANSSC requires a TM to
consider them

UK/07/07 — Shipment under Special Agreement
TRANSSC requires a TM to consider this

USA/07/04 — Table 1 (TS-R-1)
Part of ongoing project. Remains as an ongoing issue.

USA/07/01, Australia/07/01, Germany/07/01
Output of NORM CRP should provide text. This should be input to a TM, with input from
secretariat on recent NORM issues.
**New Issues**
FR/09/13 — Testing cut-off frequency
Withdrawn

FR/09/15 — Radiation level criterion of 20%
Withdrawn, France would welcome guidance material. Secretariat to assist by discussing with technical editor

FR/09/17 — Increase of durations of water immersion tests
Withdrawn

FR/09/19 — Requirements before shipment – check the closure of all the packages except excepted packages
TRANSSC rejected the proposal on the basis that the requirement change was not justified.

FR/09/28 — Explanation of “loss or dispersal of the radioactive contents” for non approved packages
Accept as an ongoing Issue, France to lead, others involved: Germany, UK, WNTI, Canada, Japan

FR/09/33 — Extension of the notification of competent authorities for international shipments
Incorporated within work on replacing TS-G-1.2, rejected.

FR/09/38 — Acceleration factor for package stowage
Ongoing issue: France to lead a research project.
(WNTI/09/05 also refers)

JAP/09/01 — Quality assurance” to “Management system
Accept as an issue and deal with in editorial review with appropriate expert input.

JAP/09/02 — Largest cross-sectional area of freight containers
Accept as an issue and improved guidance is required. Add to a TM.

JAP/09/03 — Reconsideration of nuclides listed in Table 2
Agreed – will be incorporated in HPA work.

USA/09/01 — Table 2 Values for Ir-193m, Ba-135m, and Ge-69
Agreed – will be incorporated in HPA work.

USA/09/02 — Large component transport
There has been some exchange of email, including work in Canada. A request was made by USA to include this as a TM topic

Accept as part of transition discussion
IAEA/09/01 — Clarity and consistency
Accepted as an issue for ongoing consideration, but changes to the next Edition should be limited to where paragraphs are required to change.

SW/09/01 — Exclusion of some natural and depleted uranium as fissile materials
To be included in consultancy on fissile issues, taking into account the potential impact on the transport of natural uranium

WNTI/09/01 — Fissile exception for beryllium
Ongoing issue WNTI to lead with UK, France, Sweden and USA involvement

WNTI/09/02 —Containment requirements for packages that do not require approval
Related to France/09/28 – to be worked on together

WNTI/09/03 — Simplification of paragraph 671
Criticality consultancy recommended rejection – agreed by TRANSSC

WNTI/09/04 — Deletion of paragraph 611 related to features added to the package
Related to ongoing issue – to be incorporated.

WNTI/09/05 — Acceleration for package stowage
To be included in expert discussion for potential inclusion in research work.

WNTI/09/06 — Acceleration for package stowage for air transport
To be included in expert discussion for potential inclusion in research work.

WNTI/09/07 — Clarification for the application of paragraph 643
Rejected

WNTI/09/08 — Long lasting of the package design approval for transport
Proposal not acceptable, but some aspects to be discussed under transitional arrangement

BEL/09/01 — Exclusion of fissile material definition: fissile nuclide up to 0.25 g
To be included in the fissile consultants work.

Reclassified errors
None

Reclassified working material improvements
FRANCE/09/34
Proposal not acceptable to resolve issue in consensus manner.

France to arrange an expert group in November and a consensus proposal prepared by the end of November – including transitional arrangements for this proposal.
Japan, UK, WNTI interested
FR/09/24
To be classified as an ongoing issue – there is a clear difference in views. To be included in a TM in October 2010.

CAN/09/52, FR/09/05
To be passed to a CS to input to a TM in January

NOTES BY SECRETARIAT FOR FUTURE WORK

Secretariat work:
1. Check names of UN orgs. In WM
2. Check methods for rounding used in TS-R-1 with HPA assistance
3. Initiate a safety report on cleaning flasks – cleanliness techniques to avoid contamination.

Issues for TM:
1. The potential conflict between design requirements and operational requirements

Issues for CS:
1. Fissile material, including package marking
2. Excepted packages (contents limits, subsidiary risk, para 514(a))
1. IDENTIFICATION

Document Category: Safety Requirements

Working ID: DS 437

Proposed Title: Regulations for the Safe Transport of Radioactive Material, 20XX Edition

Proposed Action: revision of a document


Review Committee(s) or Group: TRANSSC, RASSC, NUSSC and WASSC

Technical Officer(s): Jim Stewart, Y.K. Zhao, NSRW

2. BACKGROUND/RATIONALE

In 1961 the International Atomic Energy Agency, within the framework of its statutory functions and in accordance with recommendations made by its Preparatory Commission and by the Economic and Social Council of the United Nations, published safety regulations that could be applied to the national and international transport of radioactive material by all means of transport. These requirements were published as “Regulations for the Safe Transport of Radioactive Material”, Safety Series No. 6, 1961 edition. At the same time, the Director General of the Agency indicated that these regulations would be revised at appropriate intervals in consultation with Member States and the organizations concerned and invited suggestions for their improvement in the light of experience and increased knowledge. This has been an on-going task in the Agency’s budget since that time.

The Secretariat has been encouraged by recent General Conferences to provide a continuous review process for the TS-R-1. In May 2005 the Board of Governors approved the new policy for reviewing and revising the Agency’s Regulations for the Transport of Radioactive Material. According to this policy the Secretariat will continue to review the Transport Regulations at intervals consistent with the schedules of the United Nations Subcommittee of Experts on the Transport of Dangerous Goods and of the relevant international modal organizations in order to remain in step with the review cycles of the other relevant international bodies. Subsequently, it will submit its findings to TRANSSC for review. Should TRANSSC consider that a proposal for change stemming from a review cycle is sufficiently important for safety to necessitate publication as soon as possible, the Secretariat will initiate the revision process for the Transport Regulations and will submit all of the changes approved by TRANSSC to the CSS for endorsement.

3. OBJECTIVE

The primary objective of the revision of TS-R-1 is to take into account the TRANSSC 19 decisions on the issues requiring regulatory change (a summary of
the key issues agreed are in the Annex) and to update TS-R-1 accordingly. One of the key issues leading TRANSSC to decide a revision of TS-R-1 was the need to revise the fissile exception requirements. This action was also recommended in the September 2009 General Conference safety resolution.

TS-R-1 has been developed in part paragraphs for around 10 years. There is substantial cross referencing. It is becoming harder to translate and identify the applicable paragraphs. In the last consultant meeting in July 2009 addressing the comments from Member States and International Organizations, experts found that many issues identified by MS as editorial errors are in nature the wording problem which are likely to lead to ambiguity. These wording issues need to make clear in the next revision of TS-R-1. At present we CANNOT have the same document in all languages because of the poor English in some places. We are getting an increasing number of editorial issues raised as the document is reviewed each time. In the last review cycle, although no safety significant issues were found, around 30 paragraphs changes have been suggested and two new approaches were introduced for the purpose of optimization and efficiency of the Regulations.

The proposal is to make the Regulation readily comprehended or more intelligible by re-writing the paragraphs requiring revision in clear English (English which has a very obvious and unambiguous meaning - but not "plain" English). The experts who are not only familiar with regulations on transport of dangerous goods, but also experienced in clear English will be invited to work on it. We would also look to the UN Orange book for concepts we can borrow to gain more harmony. We would identify the parts of TS-R-1 that are IAEA competence and the parts that are UN competence. We would insert an Annex that sets out key concepts (umbrella paragraphs) that should be used as guides for future development of the document.

4. JUSTIFICATION

To remain consistent with the review cycles of the UN Committee of Experts (which produces “model regulations” for the transport of all dangerous goods) and the various international modal organizations (which produce mode-specific dangerous goods regulations), a new review cycle began 2009, with a view to publishing TS-R-1 in 20XX.

To align with the new policy for publishing of Transport Regulations, TRANSSC developed and approved decision criteria to determine if proposals for changes are sufficiently important to recommend the publication of a new edition of Transport Regulations. Six principles were identified to be used in evaluating proposed changes to the regulations stemming from the review cycle: Optimization, Efficiency, Practicality, Regulatory Stability, Compliance with Dose Limits, Socio-Economic Considerations, Harmonization with Regulations from Other International Organizations, and Clarification.

5. PLACE IN THE OVERALL STRUCTURE OF THE RELEVANT SERIES AND INTERFACES WITH EXISTING AND/OR PLANNED PUBLICATIONS

TRANSSC will co-ordinate the revision process and any resulting document preparation, including approving the draft of the revised document and the progress made will be reported to the other Safety Committees. Other Safety Series and Safety Standards Series documents that have a direct interface with TS-R-1 are:

- TS-G-1.1 “Advisory Material for the Regulations for the Safe Transport of Radioactive Material”
- TS-G-1.2 “Emergency Response Planning and Preparedness for Transport Accidents Involving Radioactive Material”
- TS-G-1.3 “Radiation Protection Programmes for the Safe Transport of Radioactive Material”
- TS-G-1.4 “Management Systems for the Safe Transport of Radioactive Material”
- TS-G-1.5 “Compliance Assurance for the Safe Transport of Radioactive Material”
- TS-G-1.6 “Schedules of Provisions of the IAEA Regulations for the Safe Transport of Radioactive Material” – currently DS 387

Interfaces also exist with all Member States and with involved international organizations.

- Member States: Requests for proposals for change, and a summary of proposed changes are sent to all Member States. The Member States then have the opportunity to participate in the revision process through TRANSSC and provide further support through related Technical Meetings, Co-ordinated Research Projects and Consultant Services Meetings.

- International Organizations: Liaison with other organizations for the development of TS-R-1 include:
  - United Nations Economic and Social Council (UN/ECOSOC)
  - International Civil Aviation Organization (ICAO)
  - International Maritime Organization (IMO)
  - UN/ECE/Inland Transport Committee’s International Regulations Concerning the Carriage of Dangerous Goods by Rail (RID), European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR), and the Regulations for Carriage of Dangerous Goods on the Rhine (ADNR)
  - MERCOSUR/MERCOSUL Agreement of Partial Reach to Facilitate the Transport of Dangerous Goods - Signed by the Governments of Argentina, Brazil, Paraguay and Uruguay.
  - International Federation of Airline Pilots Associations (IFALPA)
  - International Air Transport Association (IATA)
  - International Standards Organization (ISO)
  - European Commission (EC)
  - Universal Postal Union (UPU)
  - World Nuclear Transport Institute (WNTI)
  - International Source Suppliers and Producers Association (ISSPA)
  - Tantalum-Niobium International Study Center (TIC)
Transport of radioactive material (routine, normal and accidents conditions) embraces the carriage of radioisotopes for industrial, medical, and research uses, as well as the shipment of radioactive waste, and consignments of nuclear fuel cycle material. The purpose of TS-R-1 is to establish standards of safety that provide an acceptable level of control of the radiation hazards to persons, property and the environment that are associated with the transport of radioactive material. These Regulations apply to the transport of radioactive material by all modes of transport, including transport that is incidental to the use of the radioactive material. Transport is deemed to comprise all operations and conditions associated with and involved in the movement of radioactive material; these include the design, fabrication and maintenance of packaging, and the preparation, consigning, handling, carrying, storing in transit and receiving at the final destination of packages, as well as source strength and contamination limits in the context of transport safety. These items are reviewed in each review cycle for their necessity, and radiological adequacy.

The proposed scope of the 20XX edition of TS-R-1, if determined to be needed, would be the same as the scope of the 2009 editions of TS-R-1. The Table of Contents of the 2009 Edition of TS-R-1 will serve as the basis for the 20XX edition should its development be determined necessary according to the criteria outlined above. The current Table of Contents is as follows:

I. Introduction
II. Definitions
III. General Provisions
IV. Activity Limits and Classification
V. Requirements and Controls for Transport
VI. Requirements for Radioactive Materials and for Packagings and Packages
VII. Test Procedures
VIII. Approval and Administrative Requirements

References
Annex I: Summary of Approval and Prior Notification Requirements
Annex II: Conversion Factors and Prefixes
Annex III: Guiding Principles Underlying the IAEA Transport Regulations

Contributors to Drafting and Review

 Bodies for the Endorsement of Safety Standards

Index

7. PRODUCTION SCHEDULE: Provisional schedule for preparation of the document, outlining realistic expected dates for:

Approval of DPP by the Coordination Committee

August 2009
DPP approved by TRANSSC

DPP approved by NUSSC, WASSC and RASSC to be submitted to CSS

Approval of the DPP by the CSS

1st Draft TS-R-1 prepared by Secretariat

Approval of draft by the Coordination Committee

NUSSC, RASSC and WASSC review of the 1st Draft TS-R-1 and approval for submission to 120 day Member State comment

TRANSSC 20 review of the 1st Draft TS-R-1 and approval for 120 day Member State comment, if appropriate

2nd Draft TS-R-1 prepared by incorporating comments by Secretariat

Approval of the revised draft by the Coordination Committee

Send draft to UNECE

NUSSC, RASSC and WASSC review of the 2nd Draft TS-R-1 and approval for submission to CSS, if appropriate

TRANSSC 22 review of the 2nd Draft TS-R-1 and approval for submission to CSS, if appropriate.

Review in NS-SSCS

CSS endorsement for publication of the new edition of TS-R-1, if appropriate

Send CSS approved draft to UNECE

Approval by the Publications Committee

Board of Governors approval of the new edition of TS-R-1, if appropriate

Send final version to UNECE

Target publication date, if appropriate

• 8.

RESOURCES

Staff: 52 staff weeks

Member States: 10 Member States weeks for each Member State

Consultant: 16 consultants weeks
<table>
<thead>
<tr>
<th>Issue</th>
<th>Paragraph influenced in TS-R-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fissile</td>
<td>222 (c), 417, 539, 672, 672 bis1, 672 bis2</td>
</tr>
<tr>
<td>Package testing</td>
<td>619, 723 (a), 727, 735,</td>
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<tr>
<td>Radiation protection and surface contamination</td>
<td>TRANSSC DETERMINED THAT THE PACKAGE SURFACE CONTAMINATION LIMITS SHOULD NOT BE CHANGED; MEMBER STATES' STAKEHOLDER AND INDUSTRY INPUT IDENTIFIED THE PROPOSED CHANGES AS TOO COMPLEX, COSTLY, AND DIFFICULT TO IMPLEMENT.</td>
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<tr>
<td>Regulatory</td>
<td>223, 521 (b), 527(a), 606 (bis), 829, Table 8, 232, 306,</td>
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<tr>
<td>subsidiary risk, Small quantity, LDRM and exclusive use</td>
<td>419, 423 (b)(ii), 426 bis, 504, 514(a), 423, 424(b), 425, 580, 581, Table 2 Table 10</td>
</tr>
</tbody>
</table>
Annex 4 Agreed TRANSSC 19 Agenda

IAEA
International Atomic Energy Agency

TRANSSC 19

TM-37529 IAEA Headquarters, Vienna

5 to 9 October 2009

AGENDA
<table>
<thead>
<tr>
<th><strong>TRANSPORT SAFETY STANDARDS COMMITTEE (TRANSSC)</strong>&lt;br&gt;MEETING OF TRANSSC 19</th>
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</thead>
<tbody>
<tr>
<td>IAEA Board Room</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; FLOOR M BUILDING</td>
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</table>

**Agenda**

**Date:** 5-9 October 2009  
**Start:** 10:00

<table>
<thead>
<tr>
<th>1.0</th>
<th>OPENING SESSION</th>
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</table>
| **Purpose** | To Welcome Participants  
To provide TRANSSC Direction for the Meeting  
Opening Statement – E Amaral  
Opening Statement – B Brach |

<table>
<thead>
<tr>
<th>2.0</th>
<th>ADMINISTRATION ITEMS</th>
</tr>
</thead>
</table>
| **Purpose** | To establish a clear set of guidelines for the conduct of TRANSSC  
To adopt the agenda  
To inform TRANSSC of the Administrative arrangements  
To provide follow up to previous meetings |
| 2.1. Conduct of meeting | Agenda – B Brach  
Terms of Reference – B Brach |
| 2.2. Administration | Administrative Meeting Arrangements – J Stewart |
| 2.3. Review of previous meetings | Outcome of the General Conference  
TRANSSC 18 Report - B Brach |

**Output Required**  
Approved agenda  
Approved TRANSSC 18 Report

<table>
<thead>
<tr>
<th>3.0</th>
<th>SPECIAL REPORTS</th>
</tr>
</thead>
</table>
| **Purpose** | To raise awareness of activities in member states  
To assist newer authorities by providing information |
| 3.1. Japan TranSAS | Report of the follow up to the TranSAS in Japan |
| 3.2. Recording incidents in France | A report on the recording of incidents by the Competent Authority in France |
| 3.3. Report on A1/A2 exemption | HPA |
### Output Required
- A broader understanding of the type of activities that may be of benefit to Member States
- A clearer perspective of the significance of incidents involving radioactive material

### 4.0 THE DEVELOPMENT OF DOCUMENTS/PRODUCTS

#### Purpose
- To decide if a new revision cycle for TS-R-1 should be initiated
- To inform TRANSSC about the status of safety standards
- To approve and comment on documents sent to TRANSSC

<table>
<thead>
<tr>
<th>4.1.</th>
<th>Transport Requirements</th>
<th>Overview report</th>
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<tbody>
<tr>
<td></td>
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<td>Status of Transport standards – N Bruno</td>
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<tr>
<td></td>
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<td>Reports on TS-R-1</td>
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<td></td>
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<td>TS-R-1 as published</td>
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<td></td>
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<td>TS-G-1.2 (Spanish)</td>
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<td>TS-G-1.6</td>
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<thead>
<tr>
<th>4.2.</th>
<th>TRANSSC Review of proposed resolution of MS Comments and Issues</th>
<th>Process for developing TS-R-1 – J Stewart</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Timeline for TS-R-1 revision (if required) – Y Zhao</td>
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<tr>
<td></td>
<td></td>
<td>Review of Member State issues and comments – Y Zhao</td>
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<tr>
<td></td>
<td></td>
<td>Reports of pre-TRANSSC consultancies – Y Zhao</td>
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<tr>
<td></td>
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<td>Process for TRANSSC 19 – J Stewart</td>
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<tr>
<td></td>
<td></td>
<td>See Annex - TSR-1 Review</td>
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<td></td>
<td></td>
<td>DPP for TS-R-1 – J Stewart</td>
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</tbody>
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<thead>
<tr>
<th>4.3.</th>
<th>Transport Guides</th>
<th>Advisory Material</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>DPP DS425, Rev 0 Advisory Material TS-G-1.1 – N. Bruno</td>
</tr>
</tbody>
</table>

Emergencies in transport
- Outline of initial work – K Varley

<table>
<thead>
<tr>
<th>4.4.</th>
<th>Future work programme on standards</th>
<th>Status of ongoing issues on transport standards – Y Zhao</th>
</tr>
</thead>
</table>

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<thead>
<tr>
<th>4.5.</th>
<th>BSS</th>
<th>Papers to present</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>DS 379 BSS update – T Colgan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TRANSSC issues</td>
</tr>
</tbody>
</table>
### 4.6. Proposed Standards
- DS 413 Safety of Nuclear Power Plants: Commissioning and Operation - DRAFT SAFETY REQUIREMENT FOR APPROVAL BY EMAIL TO SEND TO CSS
- DS 434 - Radiation Safety of Radioisotope Production Facilities DPP FOR APPROVAL BY EMAIL
- DS 435 - Safety of Small/Medium, Transportable and Floating Nuclear Power Plants DPP FOR APPROVAL BY EMAIL

### 4.7. Other Transport Requirements
- Reports of modal bodies
- UN papers of significance

### 4.8. Process for developing standards
- SPESS – D Delattre

### 4.9. Stakeholder involvement
- Draft paper – D Delattre

### 4.10. Feedback to CSS on questions
- Proposed feedback – W Brach

#### Output Required
- A list of issues for input to a DPP
- Updated working material for TS-R-1 review/revision
- Updated working material for TS-G-1.1 review/revision
- Decision on need to revise TS-R-1 and/or TS-G-1.1
- Advice to RASSC on BSS
- A paper that can be used by the secretariat to communicate the views of TRANSSC on relevant proposals to the UN.
- Summary of views on SPESS to allow chair to represent TRANSSC effectively at CSS
- Summary of views on Stakeholder involvement to allow chair to represent TRANSSC effectively at CSS

### 5.0 THE DEVELOPMENT OF IAEA SECURITY DOCUMENTS

#### Purpose
- To inform TRANSSC about the status of security standards

#### Presentation
- IAEA Nuclear Security Series– A-M Eriksson-Eklund

### 6.0 DENIAL OF SHIPMENTS

#### Purpose
- To inform TRANSSC on the work of the steering committee on delay and denial
- To provide TRANSSC input to the work of the Steering Committee on Denial

#### Papers to present
- Update on Denial and Delay – N Bruno
7.0 OTHER BUSINESS

Late agenda items:

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Working groups on compliance (time permitting)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Databases</td>
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8.0 AGENDA FOR TRANSSC 20

<table>
<thead>
<tr>
<th>Purpose</th>
<th>To develop a draft agenda for the next TRANSSC meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papers to present</td>
<td>None</td>
</tr>
<tr>
<td>Discussion</td>
<td></td>
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<tr>
<td>Output Required</td>
<td>A TRANSSC paper containing a draft agenda for the next meeting</td>
</tr>
</tbody>
</table>

9.0 REVIEW OF DRAFT MEETING REPORT OF TRANSSC 19

<table>
<thead>
<tr>
<th>Purpose</th>
<th>To approve the report of TRANSSC 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papers to present</td>
<td>TRANSSC 19 – Meeting Report Rev. 0 DRAFT</td>
</tr>
<tr>
<td></td>
<td>Action record sheet – K Varley</td>
</tr>
<tr>
<td>Discussion</td>
<td></td>
</tr>
<tr>
<td>Output Required</td>
<td>TRANSSC 19 – Meeting Report Rev. 0</td>
</tr>
<tr>
<td></td>
<td>Updated action record sheet</td>
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</tbody>
</table>

10.0 CLOSE OF MEETING

Closing comments – E. Amaral

A. The dates of the meeting are 5-9 October 2009
B. Plenary will convene in the IAEA Boardroom (M0237).
C. The working times for the meeting will be: 10:00 to 17:00 Monday, 0900 to 1700 Tuesday to Friday
D. Breaks will be taken mid-morning (around 1030) and mid-afternoon (around 1530) each day. Coffee bars are located on both the ground and first floors of M Building.
E. Lunch will be from 1200 hours to 1330 hours each day or at alternate times at the discretion of the Meeting Chair.
F. A special dinner event for participants and accompanying persons will be held Wednesday evening.
G. The following rooms have been reserved for use of the meeting: M0E60, M0E61, M0E67, M0E68 and M0E69.
H. You are kindly requested to be at Checkpoint 1 of the Vienna International Centre (VIC) at least one hour before the meeting starts to allow adequate time for our Pass Office to issue your photo badge. The Pass Office opens at 08:00.
## ANNEX - TSR-1 REVIEW

<table>
<thead>
<tr>
<th>TRANSSC Review of proposed resolution of MS Comments and Issues</th>
<th>Errors</th>
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<tbody>
<tr>
<td></td>
<td>- Objections to resolution of errors</td>
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<td></td>
<td>- Consideration of objections</td>
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<tr>
<td></td>
<td>- Consideration of reclassification of error reports</td>
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<td></td>
<td>- Approval of error corrections</td>
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</table>

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<thead>
<tr>
<th>Working Material Improvements</th>
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<tbody>
<tr>
<td></td>
<td>- Consideration of reclassification of working material improvements</td>
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<td>- Criticality</td>
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<td></td>
<td>- Package Testing</td>
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<td>- Radiation Protection and Surface Contamination</td>
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<td></td>
<td>- Regulatory Issues</td>
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<td></td>
<td>- UF6, subsidiary risk, small quantities, LDRM and exclusive use</td>
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<tr>
<td>Ongoing issues</td>
<td></td>
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<tr>
<td>-------------------------------------------------------------------------------</td>
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<tr>
<td>• Fr/07/09, Ger/07/02 — Excepted packages with subsidiary risk</td>
<td></td>
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<tr>
<td>• ICAO/07/02 — TS-R-1 requirement for consignee cannot be taken over to the modal regulations.</td>
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<tr>
<td>• Fr/07/20, Fr/07/21, WNTI/07/19 — Transport frame &amp; aux equipment</td>
<td></td>
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<td>• Fr/04/32 — Allowable activity release in accident conditions</td>
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<td>• Russia/07/07 — Thermal protection for B(U)</td>
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<tr>
<td>• Canada/07/02 — Clarification of paragraph 578 of TS-R-1 (2005)</td>
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<tr>
<td>• USA/07/05, USA/07/16 — Clarification required on treatment of decay products in Table 1 of TS-R-1</td>
<td></td>
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<td>• FR/07/12 — Range of temperature for testing</td>
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<td>• Fr/07/29 — Updating transitional arrangements (TS-R-1 paragraph 825)</td>
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<tr>
<td>• USA/07/07, UK/07/03, CANADA/07/03 — Air transport of high activity radioactive material</td>
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<td>• USA/07/11 — Increasing number of shipments of large components with surface contamination</td>
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<tr>
<td>• FR/07/25 — Accumulated loss of radioactive contents (10^-6 A2/hour and 1A2/week for Kr-85)</td>
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<tr>
<td>• Pakistan/07/01 — There is a need to clearly specify the dose limits for transport workers mentioned in paragraphs 301 and 303 of TS-R-1, 2005 Edition.</td>
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<tr>
<td>• Belgium/07/03 — The meaning of multilateral approval by validation</td>
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<tr>
<td>• Belgium/07/04 — Inconsistency in the CA following the regulations</td>
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<tr>
<td>• Fr/07/04 — More information needs to be available to CA in event of emergency</td>
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<tr>
<td>• USA/07/18 — Marking of some excepted packages and objects</td>
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<td>• UK/07/07 — Shipment under Special Agreement</td>
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<tr>
<td>• USA/07/04 — Table 1 (TS-R-1)</td>
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<tr>
<td>New Issues</td>
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<td>-----------------------------------------------</td>
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<td>• FR/09/13 — Testing cut-off frequency</td>
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<td>• FR/09/15 — Radiation level criterion of 20%</td>
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<td>• FR/09/17 — Increase of durations of water immersion tests</td>
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<tr>
<td>• FR/09/19 — Requirements before shipment – check the closure of all the packages except excepted packages</td>
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<tr>
<td>• FR/09/28 — Explanation of “loss or dispersal of the radioactive contents” for non approved packages</td>
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<td>• FR/09/33 — Extension of the notification of competent authorities for international shipments</td>
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<tr>
<td>• FR/09/38 — Acceleration factor for package stowage</td>
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<tr>
<td>• JAP/09/01 — Quality assurance” to “Management system</td>
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<tr>
<td>• JAP/09/02 — Largest cross-sectional area of freight containers</td>
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<tr>
<td>• JAP/09/03 — Reconsideration of nuclides listed in Table 2</td>
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<tr>
<td>• USA/09/01 — Table 2 Values for Ir-193m, Ba-135m, and Ge-69</td>
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<td>• USA/09/02 — Large component transport</td>
<td></td>
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<tr>
<td>• IAEA/09/01 — Clarity and consistency</td>
<td></td>
</tr>
<tr>
<td>• SW/09/01 — Exclusion of some natural and depleted uranium as fissile materials</td>
<td></td>
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<tr>
<td>• WNTI/09/01 — Fissile exception for beryllium</td>
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<tr>
<td>• WNTI/09/02 — Containment requirements for packages that do not require approval</td>
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<tr>
<td>• WNTI/09/03 — Simplification of paragraph 671</td>
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<td>• WNTI/09/04 — Deletion of paragraph 611 related to features added to the package</td>
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<td>• WNTI/09/05 — Acceleration for package stowage</td>
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<td>• WNTI/09/06 — Acceleration for package stowage for air transport</td>
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<tr>
<td>• WNTI/09/07 — Clarification for the application of paragraph 643</td>
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<td>• WNTI/09/08 — Long lasting of the package design approval for transport</td>
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<tr>
<td>• BEL/09/01 — Exclusion of fissile material definition: fissile nuclide up to 0.25 g</td>
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<tr>
<td>• Reclassified errors</td>
<td></td>
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<td>• Reclassified working material improvements</td>
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<td>• Late submissions</td>
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