Chapter 8.5  Additional requirements in S1(6), S16 and S21

Transmitted by the Government of Sweden

Summary

Executive summary: Clarify the provision on supervision in S1(6), S16 and S21 in Chapter 8.5.

Action to be taken: Consider the proposals.

Related documents: INF.7 from the 103rd session of WP.15, ECE/TRANS/WP.15/239 (report from the 103rd session), paras. 61-65, INF.16 from the 104th session, ECE/TRANS/WP.15/242 (report from the 104th session), paras. 55-57, INF.14 from the 105th session of WP.15 and ECE/TRANS/WP.15/244 (report from the 105th session), paras. 65-68.

Introduction

1. During several sessions of the Working Party, Sweden has raised questions in relation to the supervision of vehicles. These have concerned Chapter 8.5 and what is intended when the additional requirements in S1(6), S16 and S21 state that a vehicle shall be “supervised at all times”.

* In accordance with the programme of work of the Inland Transport Committee for 2018-2019, (ECE/TRANS/WP.15/237, annex V, (9.1)).
2. In Summer 2018, Sweden sent out a questionnaire to gather information concerning the specific situation within each Contracting Party. The result served as a base for the discussions at the 105th session of the Working Party. Even though many countries has showed an interest in clarifying the provisions, the discussions have proven the matter to be difficult, probably due to the number of surrounding factors that must be taken into account, which also varies between the countries.

3. Nevertheless, Sweden is of the opinion that it must be clear how the provisions in ADR should be applied. Unclear provisions will not only mean different applications between the Contracting Parties, but will in many cases result in no application at all. This is not an acceptable situation and we should clarify what measures are expected to be taken in relation to the supervision of vehicles.

Background

Chapter 8.4

4. According to our understanding, chapter 8.4 primarily deals with supervision in relation to safety. The text generally describes measures that aims to reduce the risk of accidents. Even though we find these provisions quite vague, we cannot see how more precise or stringent requirements could be introduced. The reason is the current situation concerning the very limited number of safe and/or secure parking areas, which looks more or less the same in a majority of the Contracting Parties, Sweden included.

Chapter 8.5

5. With the answers on the questionnaire and the discussion at the last meeting of WP.15 in mind, we have examined the text in S1(6), S16 and S21 further. The first sentence in these additional requirements makes a clear reference to chapter 8.4 (see text reproduced below) – consequently, this sentence mainly relates to supervision in the context of safety.

6. The succeeding text in all three S-provisions contains supervision requirements primarily related to security. Below is an extract from Chapter 8.5:

"S1(6) The requirements of Chapter 8.4 shall be applicable only when substances and articles of Class 1 having a total net mass of explosive substance above the limits set below are carried in a vehicle:

... In addition, these substances and articles shall be supervised at all times in order to prevent any malicious act and to alert the driver and the competent authorities in the event of loss or fire.

Empty uncleaned packagings are exempted."

"S16: The provisions of Chapter 8.4 concerning the supervision of vehicles shall apply when the total mass of these substances in the vehicle exceeds 500 kg.

In addition, vehicles carrying more than 500 kg of these substances shall be subject at all times to supervision to prevent any malicious act and to alert the driver and competent authorities in the event of loss or fire."
“S21: The provisions of Chapter 8.4 concerning the supervision of vehicles shall apply to all material, in whatever mass. In addition, these goods shall be subject at all times to supervision to prevent any malicious act and to alert the driver and the competent authorities in the event of loss or fire. However, the provisions of Chapter 8.4 need not be applied where:

(a) The loaded compartment is locked or the packages carried are otherwise protected against illicit unloading; and

(b) The dose rate does not exceed 5 μSv/h at any accessible point on the outer surface of the vehicle.”

7. We note that the text in S21 refers to Chapter 8.4 twice, which makes the provision quite confusing. Sweden believes that the text concerning 8.4 should be kept together to make the reasoning in the S-provision easier to follow (see “Proposals”).

Chapter 8.5 in relation to Chapter 1.10

8. As explained above, Sweden interprets the additional requirements S1(6), S16 and S21 as to contain two “separate” provisions concerning supervision; one mainly related to safety and one mainly related to security. This makes sense, in our view, since ADR originally has strived to achieve safety during transport and the security provisions were introduced much later.

9. When comparing the limits in S1(6), S16 and S21 with the limits in the table in 1.10.3.1.2, these are in many cases harmonized, but not completely:

<table>
<thead>
<tr>
<th></th>
<th>S1(6) applies from</th>
<th>1.10.3 applies from</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division 1.1</td>
<td>0 kg</td>
<td>0 kg</td>
</tr>
<tr>
<td>Division 1.2</td>
<td>0 kg</td>
<td>0 kg</td>
</tr>
<tr>
<td>Division 1.3</td>
<td>50 kg</td>
<td>Not valid*</td>
</tr>
<tr>
<td>Division 1.4</td>
<td>50 kg</td>
<td>Not valid*</td>
</tr>
<tr>
<td>Division 1.5</td>
<td>0 kg</td>
<td>0 kg</td>
</tr>
<tr>
<td>Division 1.6</td>
<td>50 kg</td>
<td>0 kg as from 2021**</td>
</tr>
</tbody>
</table>

Substances and articles of Division 1.4 belonging to UN numbers 0104, 0237, 0255, 0267, 0289, 0361, 0365, 0366, 0440, 0441, 0455 and 0500

|                      | 0 kg               | 0 kg                |

*Including the divisions/specific UN number in the high consequence dg list have been discussed by the TDG Sub-Committee. No decision taken so far.

**See report from the TDG Sub-Committee:
### Table: S16 applies from 1.10.3 applies from

<table>
<thead>
<tr>
<th>UN 3111 and UN 3112 (Class 5.2)</th>
<th>500 kg</th>
<th>Not valid</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN 3231 and UN 3232 (Class 4.1)</td>
<td>500 kg</td>
<td>Not valid</td>
</tr>
</tbody>
</table>

*Note: The provisions differ. A separate proposal could deal with this if deemed necessary.*

### Table: S21 versus 1.10.3

<table>
<thead>
<tr>
<th>S21 applies to all Class 7 material in whatever mass.</th>
<th>The provisions on high consequence dg in section 1.10.3 apply to radioactive material that exceeds a specific activity given in 1.10.3.</th>
</tr>
</thead>
</table>

*Note: We cannot see any real disharmony between these two provisions.*

10. As illustrated above there are some differences between the limits in chapter 8.5 and the ones in section 1.10.3. This could of course be discussed, but we would prefer such a matter to be dealt with separately; partly to enable this already ongoing work to move forward, and partly since chapter 1.10 is concerned, about which a discussion initially should take place at the TDG Sub-committee. Instead, we suggest to introduce amendments that would not be dependent on any future amendments in the list in 1.10.3.

### Summary

11. Previous discussions together with the result from the questionnaire, indicates that it would be problematic to define what is meant with “supervision” by specifying fixed measures in S1(6), S16 and S21. For this reason, we believe that a provision that could be adapted to the unique circumstances of a transport would be a more suitable solution.

12. The purpose of the provisions in chapter 1.10 is to require security measures and that precautions are taken to minimise theft or misuse of dangerous goods that may endanger persons, property or the environment. The provision concerning security plans specifies, among other things, the following:

>“1.10.3.2 The security plan shall comprise at least the following elements:

(c) "Review of current operations and assessment of security risks, including any stops necessary to the transport operation, the keeping of dangerous goods in the vehicle, tank or container before, during and after the journey and the intermediate temporary storage of dangerous goods during the course of intermodal transfer or transhipment between units as appropriate;”

13. Based on the discussions and the facts that have emerged during this work together with the aforementioned reasoning, Sweden suggests that a reference to the security plans in sub-section 1.10.3.2 is inserted in relevant parts of the S-provisions in Chapter 8.5.
Proposals

14. Amend the text in the additional provision S1(6) in chapter 8.5 as follows (changes underlined):

“S1(6)  Supervision of vehicles

The requirements of Chapter 8.4 shall be applicable only when substances and articles of Class 1 having a total net mass of explosive substance above the limits set below are carried in a vehicle:

Division 1.1: 0 kg
Division 1.2: 0 kg
Division 1.3, compatibility group C: 0 kg
Division 1.3, other than compatibility group C: 50 kg
Division 1.4, other than those listed below: 50 kg
Division 1.5: 0 kg
Division 1.6: 50 kg

Substances and articles of Division 1.4 belonging to UN numbers 0104, 0237, 0255, 0267, 0289, 0361, 0365, 0366, 0440, 0441, 0455, 0456 and 0500: 0 kg

For mixed loads the lowest limit applicable to any of the substances or articles carried shall be used for the load as a whole.

In addition, these substances and articles, when subject to the provisions in Section 1.10.3, shall be supervised in accordance with the security plan 1.10.3.2 at all times in order to prevent any malicious act and to alert the driver and the competent authorities in the event of loss or fire.

Empty uncleaned packagings are exempted.”

15. Amend the text in the additional provision S16 in chapter 8.5 as follows (changes stricken through/underlined):

“S16: The provisions of Chapter 8.4 concerning the supervision of vehicles shall apply when the total mass of these substances in the vehicle exceeds 500 kg.

In addition, vehicles carrying more than [500] kg of these substances shall, when subject to the provisions in Section 1.10.3, be subject supervised in accordance with the security plan 1.10.3.2 at all times to supervision to prevent any malicious act and to alert the driver and competent authorities in the event of loss or fire.”

16. Amend the text in the additional provision S21 in chapter 8.5 as follows (changes stricken through/underlined):

“S21: The provisions of Chapter 8.4 concerning the supervision of vehicles shall apply to all material, in whatever mass. In addition, these goods shall be subject at all times to supervision to prevent any malicious act and to alert the driver and the competent authorities in the event of loss or fire. However, the provisions of Chapter 8.4 need not be applied where:

(a) The loaded compartment is locked or the packages carried are otherwise protected against illicit unloading; and

(b) The dose rate does not exceed 5 μSv/h at any accessible point on the outer surface of the vehicle.
In addition, these goods shall, when subject to the provisions in Section 1.10.3, be supervised in accordance with the security plan in sub-section 1.10.3.2 at all times to prevent any malicious act and to alert the driver and the competent authorities in the event of loss or fire.”

Justification

17. Chapter 1.10 deals with provisions concerning security. Work has been carried out, and is continuously ongoing, to evaluate which substances and articles that should be considered as high consequence dangerous goods and for which specific measures should be taken to minimise the risk of theft or misuse. Introducing a reference in chapter 8.5 to the security plans in chapter 1.10 would therefore make these provisions more consistent.

18. Furthermore, sub-section 1.10.3.3 requires that devices, equipment or arrangements to prevent the theft of the vehicle carrying high consequence dangerous goods and its cargo must be applied, and measures shall be taken to ensure that these are operational and effective at all times.