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PROPOSALS FOR AMENDMENTS TO ANNEXES A AND B OF ADR

Remarks on document ECE/TRANS/WP.15/2008/4

Transmitted by the Government of Switzerland

Introduction

Unfortunatly Switzerland could only participate in two of the meetings of the Working group so that not all of the texts proposed in the report of the group are clear to us. It is not clear for example for what containment systems the proposed rules apply. Although at one moment a list of possible products was presented, this list is no more present in the final report. So it is extremely difficult to see the consequences of this rules when they apply for any entry of the table A in Chapter 3.2. Many of the reasonings of the Group and the result in the report are thought for only few products. However the texts are drafted in an open way so that it is difficult to see the consequences of this set of new rules. We have tried to explain this concerns in the questions, remarks and proposals we have presented hereafter. We hope this points will be solved during this session of WP.15.

Remarks

Part 1

Chapter 1.2

1.2.1 The definition in 1.2.1 is not precise enough. MEMUs should be dedicated units and they should not be used for other carriages which do not concern the production of explosives. However, for the moment being the proposed texts do not precise this important feature. So in principle a MEMU could be used for any carriage of any dangerous good. We think it was not the scope of the working group to create a new category of article of transport which could eventually be used instead of the existing containment systems. Given the relatively broad range of prescriptions which these units are supposed not to fulfil for the same entries of

Table A in Chapter 3.2 as for example in the case of tanks, we believe necessary to restrain the use of these units only for the purpose they were constructed, that is for production of explosives. We propose to complete the definition as follows.

""Mobile explosives manufacturing unit" (MEMU), means a unit, or a vehicle mounted with a unit, with the only purpose of for manufacturing and charging explosives from dangerous goods that are not explosives. The unit consists of various tanks and bulk containers and process equipment as well as pumps and related equipment, all fixed on the unit. The MEMU may have special compartments for packaged explosives. The use of MEMU's only for the carriage of dangerous goods is not allowed.

We feel necessary to precise that the whole set of possible containment systems (packages, portable tanks, fixed tanks, demountable tanks, tank containers or tank swap bodies, fibre-reinforced plastics (FRP) tanks, bulk containers, are fixed in the MEMU unit. It should be avoided to have all the kind of possible containment systems being simply put on a load compartment of a vehicle and not constituting an assembly. The addition of the words ", all fixed on the unit" should avoid possible misunderstanding. The use of MEMU as simple transport system should be excluded.

"CHAPTER 4.7

USE OF MOBILE EXPLOSIVES MANUFACTURING UNITS (MEMUs)

NOTE 2:

The way the NOTE 2 has been drafted is only right in the context of the chapters actually in ADR. With the last version of chapter 6.12 it is no more possible to write the references to the different chapters in this way. The scope of Chapter 6.12 is drafted in such a way that it doesn't seem to be a complement to what appears in other chapters of ADR. Instead of saying, as for vacuum-operated waste tanks under 6.10.1.2.1 "The special provisions of 6.12.X to 6.12.Y complete or modify Chapter 6.8 and are applied to MEMUs.", in 6.12.1 it is said:

"6.12.1 Scope

The requirements of this Chapter are applicable to tanks, bulk containers and special compartments intended for the carriage of dangerous goods on MEMUs."

This is a fully different philosophy which doesn't allow to write the NOTE 2 as the NOTES for other containment systems, for example Chapter 4.5 for vacuum-operated waste tanks.

If however the intention of the group was to draft provisions complementary to those existing in other parts of ADR, then Chapter 6.12 has to be redrafted introducing again the text mentioned above, like in Chapter 6.10.

Another question which has to be answered is why there is no reference to Chapters 6.1 for packagings and 6.5 for IBC. Are the ADR conforming packagings not allowed on MEMUs? Why should it be so?

4.7.1 Use

4.7.1.1

It is necessary to define here the exact use of the carried products in order to avoid the use of these units for other purposes than the one for what they have been agreed. One should bear in mind that these vehicles profit from many exemptions in the chapters 4.3, 6.12 and Part 9 in comparison to normal vehicles and tanks (other prescriptions for the approval of the vehicle, for material, construction, approval, marking and periodic controls of the tanks) and could eventually be used instead of the prescribed vehicles and tanks for the simple carriage of all entries of the mentioned classes, if nothing else is said. Without the precision proposed hereafter, nothing forbids any vehicle to be declared as a MEMU and to be used for any other purposes as the production of explosives. In doing so many of the safety and control rules applying usually in ADR for vehicles, tanks and receptacles will not be necessary fulfilled. We don't believe the intention of the the users of these MEMUs and of the working group was to create a new set of less restrictive rules for all kind of carriages with all kind of classes.

Another point to clarify is the reason why the use of packagings approved according to the ADR in chapter 4.1 are not allowed in MEMUs. We don't understand the reasons that could forbid their use.

Furthermore it is not clear from the text what is the purpose of this enumeration of possible confinement systems and classes. We don't believe that the intention was to carry any other dangerous goods of the mentioned classes next to the MEMU unit in portable tanks, demontable tank, tank container, tank swap body, fibre-reinforced plastic (FRP) tanks, bulk container, all possibly containing Classes 3, 5.1, 6.1 and 8 in the same transport unit and at the same time together with all the components needed to produce the explosive in a MEMU. We believe instead that the intention was to describe what kind of confinement systems are possible to be part of the MEMU unit. In that case some precisions seem to be necessary because, by definition, some of the listed containment systems are not supposed to be affixed on the vehicle or should even not be affixed on the vehicle because of their definition. It is necessary however to permit their use mounted in the MEMU unit, even if, based on their definition, they should not be affixed. We think that with the proposed wording the possibility to affix all these confinement systems on the vehicle is not given in Chapter 6.12 and at the end the use of some of the mentioned confinement system is not possible on MEMUs.

If the last assumption is right, the text should be drafted as follows:

"Substances classified in Classes 3, 5.1, 6.1 and 8 may be carried on MEMUs conforming to Chapter 6.12 only for their use in the production of explosives. The confinement systems mounted on the MEMU unit can consist of packagings if their carriage is permitted according to Chapter 4.1, portable tanks if their carriage is permitted according to Chapter 4.2; or in fixed tanks, demountable tanks, tank containers or tank swap bodies if their carriage is permitted according to Chapter 4.3; or in fibre-reinforced plastics (FRP) tanks if their carriage is permitted according to Chapter 4.4; or in bulk containers, if their carriage is permitted according to Chapter 7.3."

This wording allows to affix the confinment systems on the MEMU and allows the use of packagings (and IBC).

Another point that needs some clarification is for what dangerous goods the bulk-containers are supposed to be used. In fact only UN 1942 is allowed in bulk-container. It is however not self-evident that the definition of closed bulk container in chapter 6.11 can apply for the mixing device installed on the vehicle shown in the pictures. The reason is that closed bulk container need to have a floor (in French "plancher rigide"). This cannot be fulfilled by an endless screw as such mounted usually in the MEMU. This should be clarified by the working group. A solution could be what we have proposed hereafter in 6.12.4.1

4.7.1.2

The text in 4.7.1.2 is not an harmonized solution for MEMUS. It doesn't solve the international carriage of dangerous goods because in 7.5.5.2.3 only the carriage within the territory of the competent authority is allowed. This text is not in the scope of the ADR itself, which is the international carriage of dangerous goods. For this reason the 4.7.1.2 doesn't seem to be necessary in the scope of ADR. We understand however the reasons why such kind of written consent is necessary from the point of view of the Contracting Parties applying the EU-directive.

4.7.2 Operation

One fundamental question has to be answered, that is: is it possible or not to use other confinement systems instead of tanks in a MEMU, for example a bulk-container or an IBC? At least this seems to be possible by reading 4.7.1.1 and 5.3.1.4.2. If yes the rules of this section should also apply to those different confinement systems. In that case the word "tank(s)" should be replaced by "confinement system(s)" in the text.

4.7.2.1 (a)

We are not sure if the rules in 4.7.2.5 have to be applied or not because in 4.7.2.1 (a) and (b) this sub-section is not mentionned.

Our undertanding of this text is that the following provisions do not apply for MEMUS:

- provisions concerning construction, equipment, type approval, tests and marking of chapter 6.8 (4.3.1.4),
- wallthickness (4.3.2.3.1) and
- those concerning special provisions to tanks applicable to Class 2 (4.3.3) and
- those applicable for other classes (4.3.4).

Such a set of exemptions produces some apprehension because, as already mentioned, if the purpose of the use of MEMUs is not strictly restricted to the production of explosives, one can simply carry any dangerous good without complying with the whole set of safety rules that usually apply. In a worst case one can carry UN Nos. 1873 perchloric acid, hydrogen peroxides 2015 and 2014, 3375 ammonium nitrate, hydrogen cyanides 1613 and 3294, hydrogen fluorides 1744 and 1790, 1791 hypochlorite solution, 1908 chlorite solution, without complying with the safety provisions fixed through the tank-codes.

The impression is that in case of tanks $> 1000 \, \mathrm{l}$ a simple approval of a vehicle as a MEMU will allow the carriage of these substances in tanks without complying the safety provisions in 4.3.4. For tanks $< 1000 \, \mathrm{l}$ the situation is even worse because no approval or marking (6.12.3.2.7) or control from a competent authority (6.12.3.2.6) is needed in order to do the same.

Would it be possible in the near future to declare a vehicle as MEMU and to carry the same products as before but now in tanks which are not constructed, tested, type approved, equiped and marked conforming to chapter 6.8 and which do not comply with the safety requirements in 4.3.4?

This should be avoided.

Furthermore we don't understand why tanks following chapter 4.3 are not necessarily subjet to the whole set of rules while portable tanks and MEGCs following chapter 4.2 are subject to the whole set of rules (design, construction, inspection and testing and marking). In fact, following 6.12.2.1 it appears that this tanks are even not allowed because they don't fulfil the requirements in Chapter 6.8.

Another inconsistency which should be solved by the Working group is that the exclusion of 4.3.1.4 is in contradiction with the requirement in 6.12.2.1 to fulfil the requirements of Chapter 6.8 as modified in 6.12.3. In 6.12.3 it is said that the provisions of section 6.8.2 shall be met. So in fact sub-sections 6.8.2.3 (type aproval), 6.8.2.4 (insepction and test) and 6.8.2.5 (marking) shall be fulfilled. At least for tanks > 1000 1. This contradiction needs to be clarified by the working group.

We are not convinced that a global exclusion of the rules laid down in 6.8 is the safe way to solve the question of MEMU. We believe that this was also not the intention of the group and it is confirmed in Chapter 6.12 where the same rules excluded here shall be applied again.

Finally the way the text is drafted is not satisfying. At the end we are not sure if the provisions in 4.3.1.4, 4.3.2.3.1, 4.3.3 and 4.3.4 are supplemented by the provisions of 4.7.2.2 or not. For this last point a solution could be to replace the text and bring all in a new 4.7.2.6 saying:

"4.7.2.6 Provisions 4.3.1.4, 4.3.2.3.1, 4.3.3 and 4.3.4 need not be applied."

4.7.2.1 (b)

The same comments apply in this case as in the case of tanks > 1000 l.

We also think that the text could be simplified by speaking simply about the general rule and adding afterwards the specific rule for tanks of $< 1000 \, l$.

Taking account of these remarks, the text in 4.7.2.1 could be drafted as follows:

"4.7.2.1 For [tanks][confinment systems] the provisions of Chapter 4.2 or 4.3, except 4.3.1.4, 4.3.2.3.1, 4.3.3 and 4.3.4, or Chapter 4.4 apply to the carriage on MEMUs, and are supplemented by the provisions of 4.7.2.2 and to 4.7.2.74 below.

(a)

...

- 4.7.2.6 Provisions 4.3.1.4, 4.3.2.3.1, 4.3.3 and 4.3.4 need not be applied.
- 4.7.2.7 In addition to the exemption in 4.7.2.6, for [tanks][confinment systems] of less than 1000 litres the provisions 4.3.2.1 need not be applied."

The sub-section 4.7.2.5 is integrated in the rules which shall be applied and another advantage of this way of drafting the rules in 4.7.2.6 and 4.7.2.7 is that these doesn't preclude tanks which apply provisions 4.3.1.4, 4.3.2.1, 4.3.2.3.1, 4.3.3 and 4.3.4, which ought to be be the safest tanks.

4.7.2.2

We believe that the word "appropriate" doesn't say anything. What are these "appropriate" construction requirements? Instead the word "relevant" should be used.

4.7.2.4

Following 4.7.1.1 it seems possible to use other confinement systems and tanks. What are the rules when other confinement systems than tanks are used? Are the rules for tanks not to be used if, instead, a bulk-container or any other containment system is going to be used? If yes, the text should explain it as follows:

4.7.2.4 When applicable to the carr<u>ied substance</u>iage in tanks, the special provisions (TU) of 4.3.5 indicated in Column (13) of Table A in Chapter 3.2 shall also apply for any confinment system used as indicated in Column (13) of Table A in Chapter 3.2.

Part 5

The introduction at each position in Part 5 of MEMU reinforces the impression that MEMU is one option more to carry, and only to carry, dangerous goods. We don't believe this should be the case. For this reason we are not in favour to introduce the MEMU in the headings and in the different parts of Part 5 as proposed.

In order to avoid any possible confusion and misuse of MEMUs we believe they have to be treated completely separated from the other transport systems described elsewhere in ADR.

We prefere to have a separate chapter 5.6 saying what rules apply for MEMUs as shown hereafter:

"CHAPTER 5.6

PLACARDING AND MARKING OF MEMUS

5.6.1 General provisions

The provisions in 5.1.3.1 shall apply.

5.6.2 (Reserved)

5.6.3 Placarding

- 5.6.3.1 General provisions 5.3.1.1, 5.3.1.1.4, 5.3.1.4, 5.3.1.6 shall apply and are supplemented by the provisions in 5.6.3.2 and 5.6.3.3.
- 5.6.3.2 The provisions in 5.3.1.1.2 also apply to special compartments of MEMUs.
- 5.6.3.3 Special compartments for explosives shall be placarded in accordance with the provisions of 5.3.1.1.2. The last sentence of 5.3.1.1.2 does not apply."

In such a case, there is no need to take account of what was proposed in Part 5, chapters 5.1 and 5.3. Some of the proposed texts are not necessary for the following reasons:

5.3.1.4.2

Was the intention to take account only of the placarding of the tanks themselves? In that case the precision in 5.4.1.4.1 seems unnecessary for tanks because 5.3.1.7.3 already permits the use of labels for tanks of capacities of not more than 3 m³. As far as nothing else is said, 5.3.1.7.3 also applies for tanks on MEMUs. This applies for tanks under 3 m³, there is no need to rewrite it for tanks of less than 1000 l. Except if the idea was to submit tanks between 1000 and 3000 to have placards.

We believe that the second sentence " For tanks with a capacity of less ... " is not necessary.

If the intention was to introduce a relaxation for the vehicle itself, we wonder why this would not be also necessary in the case of other carriages not defined as MEMU. In our opinion it is not the tank which determines the size of the placard on the vehicle but the size of the vehicle itself. For example in the case of class 1 and 7 in 5.3.1.7.4, the size and construction of the vehicle determines the size of the placard.

The text in 5.3.1.4.2 seems unnecessary because this is already covered in 5.3.1.4.

5.3.1.4.3

What is said in the first sentence of this paragraph is already said in 5.3.1.5.

The second sentence has already been introduced in 5.6.3.3.

Regarding 5.3.2.1.2 the following text shall replace it:

"5.6.4 Orange-coloured plate marking

- 5.6.4.1 The provisions 5.3.2 shall apply for MEMUs and are supplemented by the provisions in 5.6.4.2.
- 5.6.4.2 For MEMUs the requirements in 5.3.2.1.2 shall only apply to tanks with a capacity of more than 1 000 litres and bulk containers."

This takes account of the proposed text in 5.3.2.1.2 and 5.3.2.1.7.

Part 6

"CHAPTER 6.12

NOTE 1:

This NOTE has a sense in the context of other Chapters of Part 6 but this is no more the case for Chapter 6.12 because the way the scope and the provisions in this chapter are drafted is completely different to the way as other chapters are drafted. As mentioned earlier the text as drafted in 6.10.1.2.1 allows the reference to other Chapters in the NOTE. For 6.12 the scope and the General provisions in 6.12.2 precludes the use of tanks which do not conform to Chapter 6.8. Even a tank conforming 100% to Chapter 6.8 is not allowed because the drafting in 6.12.3.2.1, 6.12.3.2.6 and 6.12.3.2.7 forbids to follow the rules of Chapter 6.8. So the use of tanks totally conforming Chapters 6.7, 6.9, 6.8, 6.10 and 6.11 is not allowed in MEMUs. The reason why it should be so is not easy to understand. Possibly a new draft is needed to solve this inconsistency.

6.12.2 General provisions

6.12.2.1

The requirement in 6.12.2.1 to fulfil the requirements of Chapter 6.8 is in contradiction with the explicit exclusion of 4.3.1.4 made in 4.7.2.1. As already said this contradiction has to be eliminated.

Furthermore the requirement to be in conformity with 6.8 precludes the use of tanks fufilling requirements of Chapters 6.7, 6.9, 6.10. We don't know if the intention was really to exclude the use of those types of tanks. If yes the reference to them in the NOTES and elsewhere should be deleted.

6.12.2.2

Many entries in Table A of Chapter 3.2 are allowed to be carried in bulk container. For this reason the use of the MEMU should be restricted to the production of explosives. For the moment been it seems the only products concerned by the carriage in MEMUs are the ammonium nitrates (3373 and 1942). However the use of bulk container BK2 is only possible with UN 1942. As said earlier, it is not self-evident that a closed bulk container as defined in Chapter 6.11 can fulfil the construction mounted on the vehicle shown in the pictures in document ECE/TRANS/WP.15/2008/4. Instead of a floor the container has a hopper-type bottom which is not closed but opened towards a product mixer, a discharge pump or an auger. It is difficult do consider this bottom as a floor ("plancher rigide" in French) and we understand that the hopper-type bottom is a bottom which should avoid the product to flow down and not a simple opening in the bottom of the hopper-shaped container.

We believe that the same supplementary explanations as for tanks in 6.12.4.1 are necessary for bulk-containers. For this reason we believe the text should also read:

"6.12.2.2 Bulk containers intended for the carriage of dangerous goods on MEMUs shall comply with the requirements for bulk containers of type BK2- as modified by the special provisions of this Chapter."

To complete the set of rules the following text should be added in 6.12.4:

"6.12.4.1 Tanks <u>and bulk containers</u> with bottom discharge for UN 1942 and UN 3375 may have only two closures. One of these closures may be the product mixing or discharge pump or auger."

If the purpose was to allow only these two UN-Numbers in tanks and bulk containers why was this not said for example in the heading of the Chapter 6.12:

"CHAPTER 6.12

REQUIREMENTS FOR THE CONSTRUCTION, EQUIPMENT, TYPE APPROVAL, INSPECTIONS AND TESTS, AND MARKING OF TANKS, BULK CONTAINERS FOR UN 1942 AND UN 3373 AND SPECIAL COMPARTMENTS FOR EXPLOSIVES OF MOBILE EXPLOSIVE MANUFACTURING UNITS (MEMUS)"

If however the use of this tanks and bulk-containers for the production of explosives is not only for this two entries, then the problem arises with the undefined requirements laid down for these other products.

6.12.3 Tanks

6.12.3.1 Tanks with a capacity of at least 1 000 litres

6.12.3.1.1

We don't understand the sense of the affirmation in this paragraph. Does it mean that the tanks don't need to fulfil the provisions 6.8.1, 6.8.3, 6.8.4 and 6.8.5? It seems so because in 6.12.2.1 it is said that all the provisions of Chapter 6.8 sall be met and 6.12.3.1.1 is a restriction to the set of rules of Chapter 6.8.

If so it should be said in that way, that is:

"6.12.3.1.1 These tanks don't need to meet the requirements of sections 6.8.1, 6.8.3, 6.8.4 and 6.8.5."

However we wonder why the provisions in 6.8.1 could not be fulfilled.

Furthermore, given that for the moment being the use of the tanks is not exclusively dedicated to the two UN entries 3373 and 1942, we also don't agree with the exclusion of the provisions laid down in 6.8.4. Many of them are safety measures which should never be circumvent. Even for the two mentioned entries (UN3375 and 1942). Particularly those regarding UN 3375. We don't see any big difficulties to fulfil the provisions laid down in 6.8.4 for this entry. Even without applying strictly the use of a tank-code (see 6.12.3.1.4 hereafter) in the case of TA3 we believe necessary to maintain the requirement of tank-code SGAV and LGAV, that is a tank with 2 closures and the presence of a venting device or the use of a non-explosion-pressure proof tank. This important prescription has simply disappeared in the proposed text.

The question is that if no reference is made to provisions in Section 6.8.4 none of these very useful safety provisions are applicable. Many of them are not difficult to apply and should not be circumvent for a safe carriage.

6.12.3.1.2

We are not sure for what purpose this text has been introduced. What are the products supposed to be carried in tanks bearing a safety valve? Usually these tanks are hermetically closed tanks. The only products supposed to be carried in amounts over 1000 l for the production of explosives are the ammonium nitrates UN 3375 and UN 1942. Following the rules of ADR and the tank-codes for these two products a venting system or a non-explosion pressure proof tank is required. We do not believe that this could be achieved with an hermetically closed tank even equipped with a bursting disc. In 6.12.4.4 the use of a venting system has been even mentioned for UN 3375. So it seems obvious from the text that 6.12.3.1.2 has not been drafted for UN 3375.

6.12.3.1.3

The following sentence seems to be draft in the wrong way because it precludes the use of tanks conforming to 6.8.2.1.3, 6.8.2.1.4, 6.8.2.1.13 to 6.8.2.1.22 inclusive.

"These tanks shall meet the requirements of sub-section 6.8.2.1 other than 6.8.2.1.3, 6.8.2.1.4, 6.8.2.1.13 to 6.8.2.1.22 inclusive."

Why should it be mandatory not to fulfil the requirements on wall thickness (6.8.2.1.3), the use of a technical code (6.8.2.1.4), calculation of the shell thickness (6.8.2.1.13 to 6.8.2.1.22). It should not be forbidden to do so.

Shouldn't we write instead:

"These tanks shall meet the requirements of sub-section 6.8.2.1. It is however not necessary that these tanks are in conformity with the provisions in 6.8.2.1.3, 6.8.2.1.4, 6.8.2.1.13 to 6.8.2.1.22."

Furthermore, in 9.8.3 it is asked that the vehicle fulfils the provisions 6.8.2.1.2, 6.8.2.1.11 to 6.8.2.1.16. The exclusion here seems in contradiction with the expected stresses and the requirements for the vehicle. At least for provisions 6.8.2.1.11 to 6.8.2.1.16.

The last sentence of the paragraph asks the following:

"Protection shall be provided according to 6.8.2.1.20 or the competent authority shall approve alternative protection measures."

It is confusing to mention a paragraph which has been excluded from the scope a few lines before, namely 6.8.2.1.20. If this was the purpose, then the paragraph 6.8.2.1.20 should disappear form the enumeration "6.8.2.1.13 to 6.8.2.1.22". Instead one should read "6.8.2.1.13 to 6.8.2.1.19, 6.8.2.1.21 and 6.8.2.1.22"

6.12.3.2 Tanks with a capacity of less than 1 000 litres

6.12.3.2.1

As said before there is no reason why the exclusion of the provisions 6.8.2.1.3, 6.8.2.1.4, 6.8.2.1.6, 6.8.2.1.10 to 6.8.2.1.23 inclusive and 6.8.2.1.28 shall be mandatory.

For the same reasoning as before we should write instead the following:

"6.12.3.2.1 The construction of these tanks shall meet the requirements of sub-section 6.8.2.1. It is however not necessary that these tanks are in conformity with the provisions in 6.8.2.1.3, 6.8.2.1.4, 6.8.2.1.10 to 6.8.2.1.23 inclusive and 6.8.2.1.28".

6.12.3.2.6

We are not sure if it is correct to delegate to the user or owner the responsability of the initial inspection. This should be in the competence of the manufacturer of the MEMU.

6.12.4 Items of equipment

6.12.4.1

It seems necessary to define for what substances MEMU's are permitted. The mention of the entries UN 1942 and 3373 is understandable for the case of MEMU's. The precision of the necessity of the two closures is also justified. However this two closures are mandatory in ADR for these two products (code A) so that the "may" should be replaced by "shall". If the rules of 6.8.4 are applicable as proposed before, then there is no need to repeat this prescription here. The only text which seems us necessary in that case is the second sentence describing the product mixing (?) or discharge pump or auger as a closure.

However nothing is said for other entries because section 6.8.4 is not applying for MEMU's. As a consequence it is not forbidden to carry any dangerous good in MEMU without complying with the safety rules of 6.8.4 as well as the other provisions of agreement, construction and marking of tanks. If nothing is said everybody would have the right to use a MEMU for a simple carriage of any product of the allowed Classes defined in 4.7.1.1 without any necessity to fulfil all the set of rules for tanks of chapter 6.8, except the ones defined in chapter 6.12, and of vehicles of Part 9. The reason for that is the way the chapter has been structured. Contrary to other chapters of Part 6, chapter 6.12 says only what has to be fulfilled by MEMUs. All other provisions are not applying. The consequence is that what is not forbidden in 6.12 is allowed. So it is allowed to carry any entry with a vehicle declared as MEMU ongoing all other rules of ADR even if the purpose of the carried substance is not the production of explosives. Even if our proposed addition of the restriction in use under 4.7.1 is accepted, there are many other substances having the code "A" in the tank code which also require two bottom closures, Eventually, their could be carried in MEMU's without having the required 2 closures if nothing is said in chapter 6.12 about that and section 6.8.4 is not applying. There are three possible solutions:

- We restrict the use of the tanks to the two UN-Numbers (3375 and 1942) mentioned here;
- We determine what other entries could be carried in the tanks and define the relevant provisions for them; or
- We invert the chapter 6.12 and say only what differs from chapter 6.8 in it.

For the moment we have proposed the first solution.

Part 7

Chapter 7.5

(c) [MEMUs shall not be used for general (non specific) carriage of explosives as well as for other purposes as the production of explosives.]

As explained elsewhere this restriction seems necessary given the range of rules not applying and the structure chosen for chapter 6.12. It should however be introduced in the definition and in the scope of the MEMUs.

Chapter 9.8

9.8.3 Fastenings

Although tanks are not supposed to withstand the stresses as defined in 6.8.2.1.2, 6.8.2.1.11 to 6.8.2.1.16, vehicles carrying these tanks are supposed to do so. We don't undertstand the logic.