

Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods

Bern, 13–17 March 2017

Item 2 of the provisional agenda

Tanks

20 February 2017

Tanks: Informal Working Group on the inspection and certification of tanks

Transmitted by the Government of the United Kingdom

Summary

1. ECE/TRANS/WP.15/AC.1/2017/22, the report of the informal working group on the inspection and certification of tanks, gave notice of the Group's intention to submit an information paper presenting the results from a questionnaire. It was used to gather information on how contracting states/parties authorise bodies or approve experts for tank inspection and certification purposes, the controls placed on their activities and how their activities are monitored.
2. The informal working group is grateful to all of the competent authorities who were able to complete the questionnaire. They were sufficient in number to demonstrate that Contracting Parties and States do not yet have a common approach in these areas. Some commentary is provided against the numerical results in the following pages.
3. Subject to the Joint Meeting agreeing that a more common approach to tank inspection and certification is desirable, the informal working group will continue with its attempts to improve the situation.

QUESTIONNAIRE ON TANK INSPECTION

RID/ADR requires that tanks are constructed to an approved design. They must be inspected and tested before entering service for the first time and at intervals thereafter, by an expert approved by the competent authority or its authorised body. Following a decision of the RID/ADR informal working group on the inspection and certification of tanks, this survey has been prepared by the competent authority of the United Kingdom in order to gather information on how contracting states/parties authorise bodies or approve experts for this purpose, what controls are placed on their activities and how they are monitored.

The following questions concern the arrangements that exist in participating countries for examining and certifying just those tanks covered by RID/ADR Chapter 6.8, EXCLUDING battery wagons, battery vehicles, MEGCs and TPED tanks. The questionnaire does not concern the inspection of tanks constructed in accordance with Chapters 6.7, 6.9 or 6.10, nor the vehicles which tanks are mounted on.

Those familiar with the questionnaire will have noted that certain explanatory text such as additional remarks, have been excluded from the analysis where it might be used to identify individual countries.

1. Name of person responding:
2. Email:
3. Responding on behalf of the competent authority of (country):
4. Which government department or agency is your national competent authority responsible for inspecting and certifying chapter 6.8 tanks or approving bodies to inspect and certify them under?
 - a ADR
 - b RID

PART 1. - INSPECTION

5. Who is permitted to assess the conformity of tanks in your country?
 - a) The national competent authority or another government agency
Yes 4 No 9 No reply 4
 - b) Inspection bodies approved by the national competent authority
Yes 15 No 2 No reply 0
 - c) Inspection bodies approved by the competent authority of another country
Yes 4 No 8 No reply 5
 - d) Some other body
Yes 1 n/a 1 No reply 15

Commentary

Few national competent authorities perform conformity assessment themselves and in most cases it is delegated to inspection bodies (IBs) the competent authority has itself approved. Almost half the respondents do not permit conformity assessment to be done in their country by IBs approved only by another country but a small number do recognise such IBs, perhaps because no suitable nationally approved body is available. For some this recognition is confined to the assessment of Rail Wagons.

6. **Who is permitted to perform the initial inspection of new tanks in your country?**

- a) The national competent authority or another government agency
Yes 3 No 10 No reply 4
- b) Inspection bodies approved by the national competent authority
Yes 16 No 1
- c) Inspection bodies approved by the competent authority of another country
Yes&No 1 Yes 4 No 8 No reply 4
- d) Some other body
Yes 1 No reply 16

Commentary:

Initial inspection is almost exclusively delegated to inspection bodies (IBs) approved by the national competent authority. A small number of countries allow this task to be done by IBs approved by another country but almost half of those responding do not do this.

7. Who is permitted to perform periodic inspections of tanks in your country?

- a) The national competent authority or another government agency
Yes 3 No 12 No reply 2
- b) Inspection bodies approved by the national competent authority
Yes 16 No 1
- c) Inspection bodies approved by the competent authority of another country
Yes&No 1 Yes 3 No 11 No reply 2
- d) Some other body (please provide details below)
Yes 2 n/a 1 No reply 14

8. Who is permitted to perform intermediate inspections of tanks in your country?

- a) The national competent authority or another government agency
Yes 3 No 10 No reply 4
- b) Inspection bodies approved by the national competent authority
Yes 15 No 1 No reply 1
- c) Inspection bodies approved by the competent authority of another country
Yes&No 1 Yes 3 No 9 No reply 4
- d) Some other body
Yes 2 n/a 1 No reply 14

9. Who is permitted to perform exceptional checks on tanks to in your country?

- a) The national competent authority or another government agency
Yes 5 No 9 No reply 3
- b) Inspection bodies approved by the national competent authority
Yes 16 No 1

- c) Inspection bodies approved by the competent authority of another country
 Yes&No 1 Yes 4 No 9 No reply 3
- d) Some other body
 Yes 1 No reply 16

Commentary:

In all but one case, periodic and intermediate inspections and exceptional checks are delegated to approved IBs. In several countries the competent authority could perform these tasks themselves but in practice they do not. A little over half the respondents indicated these inspections could only be done by nationally approved IBs.

10. Which of the following requirements must an inspection body meet in order to be approved by your competent authority to inspect tanks in your country?

- a) Must have a registered office in your country
 Yes 14 No 1 No reply 2
- b) Must be accredited to ISO 17020 to inspect tanks
 Yes&No 1 Yes 10 No 2 No reply 4
- c) Must be audited by you as the competent authority
 Yes 7 No 5 No reply 5
- D9 Must meet some other requirement

[Excluded for the purpose this analysis only]

Commentary:

Most competent authorities require IBs to have a legal identity in their country in order to gain approval. The majority of competent authorities require IB's to be accredited to ISO 17020 or at least meet the basic requirements of that standard; others audit IBs themselves to assess their competence. A few do both. Several competent authorities seem to impose no form of supervision on bodies they have approved to inspect tanks.

11. Do you publish a list of the inspection bodies who are approved to inspect and certify tanks in your country?

Yes 15 No 2

12. If you publish a list of inspection bodies, where can a copy be obtained from? (Please provide details below)

[Excluded for the purpose of this analysis only]

Commentary:

With one exception, lists of approved inspection bodies are published on the internet.

PART 2. ISSUING CERTIFICATES

13. Who issues certificates of type approval in your country?

- a) The national competent authority or another government agency
 Yes&No 1 Yes 3 No 8 No reply 5
- b) Inspection bodies approved by the national competent authority
 Yes 15 No 2
- c) Some other body (please provide details below)

Commentary:

In most cases the issue of type approval certificates is delegated to approved inspection bodies. In several countries, procedures differ depending on tank type, e.g. tank-vehicles certified by competent authority, tank containers by IBs. One country issues no type approval certificates.

14. Who issues certificates of initial inspection in your country?

- a) The national competent authority or another government agency
 Yes 2 No 10 No reply 5
- b) Inspection bodies approved by the national competent authority
 Yes 16 No reply 1
- c) Some other body (please provide details below)

15. Who issues certificates of periodic inspection in your country?

- a) The national competent authority or another government agency
 Yes 1 No 10 No reply 6
- b) Inspection bodies approved by the national competent authority
 Yes 16 No 1
- c) Some other body (please provide details below)
 Yes 1 n.a; 2 No reply 14

16. Who issues certificates of intermediate inspection in your country?

- a) The national competent authority or another government agency
 Yes 2 No 10 No reply 5
- b) Inspection bodies approved by the national competent authority
 Yes 16 No reply 1
- c) Some other body (please provide details below)
 Yes 1 n.a: 2 No reply 14

17. Who issues certificates following an exceptional check in your country?

- a) The national competent authority or another government agency
 Yes 2 No 10 No reply 5

- b) Inspection bodies approved by the national competent authority

Yes 16 No reply 1

- c) Some other body (please provide details below)

Yes: 1 No reply 16

Commentary:

In all but one case, certificates for initial, periodic and intermediate inspections and exceptional checks are issued by approved inspection bodies. In several countries, procedures differ depending on tank type, e.g. tank-vehicles certified by competent authority, tank containers by IBs. Several competent authorities who allow foreign inspection bodies to inspect tanks in their country will issue their own national certificates, based on those issued by the foreign competent authority or the body approved by that authority.

PART 3. - STATISTICS

18. Do you gather statistics on the number and type of tank certificates that are issued in the name of your competent authority, including those issued by approved bodies?

Yes&No 1 Yes 6 No 8 No reply 2

If the answer to Question 18 is NO, skip to Question 21

19. How are your statistics gathered?

- a) Data is recorded in a central database whenever a certificate is issued

Yes 3 No 5 No reply 9

- b) Approved inspection bodies provide statistics to the competent authority:

Yes 5 No 2 No reply 10

If the answer to b. above is yes, how often is the data provided

Every 12 months 5 No reply 12

- c) Data is gathered by another method (please provide details)

[Excluded for the purpose of this analysis only]

Commentary:

Relatively few countries actively collect data on the number and type of certificates issued under their authority. Of those that do, the most common means of gathering data is via an annual report made by each inspection body. Several of the competent authorities have noted that data is only kept by their approved bodies. Three competent authorities maintain a real-time database of inspections and certificates. Two competent authorities gather statistics only on RID tanks.

20. Approximately how many certificates per year are issued by you and by bodies operating under your approval for?

- | | |
|--------------------------------|-----------------------------|
| a) ADR type approval | RID type approval |
| b) ADR initial inspection | RID initial inspection |
| c) ADR intermediate inspection | RID intermediate inspection |

- | | | |
|----|-------------------------|-------------------------|
| d) | ADR periodic inspection | RID periodic inspection |
| e) | ADR exceptional check | RID exceptional check |

Commentary:

Only 6 countries were able to indicate the number of certificates issued under their authority. Total numbers range between a few hundred and many thousands. Some data appears unreliable, e.g. one country claims to issue over 10,000 RID initial inspection certificates a year.

21. How many people are authorised to operate as tank inspectors under the approval of your national competent authorities:

- a) for ADR tanks?
- b) for RID tanks?

Commentary:

Responses to this question indicate that a significant number of competent authorities do not know how many persons are inspecting tanks under their authority. Several responses suggest that only the number of approved bodies is known, and consequently it is not possible to estimate whether resourcing is reasonable for the number of tanks inspected. Where the number of inspectors has been given, it can, in most cases, be reconciled with the number of tanks inspected. However, in one case, the data provided suggests that each inspector would need to examine more than 10 tanks per week which some would consider unlikely.

22. Are any of these inspectors allowed to inspect tanks at locations beyond your national borders?

Yes 10 No 3 No reply 4

Commentary:

A significant number of countries allow their inspectors to operate beyond national borders despite the lack of information about them. One competent authority will permit inspection beyond their national border only of tanks that are registered in their country.

PART 4. - RECOGNITION

23. If a NEW Chapter 6.8 tank is constructed in another country and mounted on a road vehicle that is to be registered and operated in your country, what would you accept as evidence of its type approval and initial inspection?

- a) Certificates issued by your national competent authority or a body approved by them
Yes 12 No 2 No reply 3
- b) Certificates issued by or on behalf of the competent authority of the country the tank was built in, providing it is an EU or EEA member state
Yes 10 No 4 No reply 3
- c) Certificates issued by or on behalf of the competent authority of the country the tank was built in, if it is an ADR contracting party, even if it is not an EU or EEA member state.
Yes 10 No 3 No reply 4

- d) Certificates issued by or on behalf of the competent authority of the country the tank was built in, if it is known to be applying ADR, even if it is not a formally contracting party
Yes 1 No 11 No reply 5
- e) Certificates issued by or on behalf of any ADR competent authority even if it was not the competent authority of the country the tank was built in
Yes 5 No 7 No reply 5

Commentary:

The responses suggest that the majority of countries will accept certificates issued by or on behalf of the country in which the tank is constructed, providing it is an ADR contracting party. Three countries will only accept certificates issued by a body they have approved. A small number of countries accept certificates issued by an ADR country other than the country in which the tank is constructed (a third party) and this is likely to happen when the tank is constructed in a non-ADR country. It is assumed that the countries who would not accept a third party certificate will require inspection to be done by their own approved bodies in this case.

24. If a USED Chapter 6.8 tank, mounted on a road vehicle, which has been in service in another country is to be imported and registered your country, what would you accept as evidence of its type approval and initial inspection?

- a) Certificates issued by your national competent authority or a body approved by them
Yes 11 No 2 No reply 4
- b) Certificates issued by or on behalf of the competent authority of the country the tank was built in, providing it is an EU or EEA member state
Yes 12 No 3 No reply 2
- c) Certificates issued by or on behalf of the competent authority of the country the tank was built in, if it is an ADR contracting party, even if it is not an EU or EEA member state.
Yes 10 No 3 No reply 4
- d) Certificates issued by or on behalf of the competent authority of the country the tank was built in, if it is known to be applying ADR, even if it is not a formally contracting party
Yes 1 No 10 No reply 6
- e) Certificates issued by or on behalf of any ADR competent authority even if it was not the competent authority of the country the tank was built in
Yes 5 No 6 No reply 6

Commentary:

The majority of those responding will accept certificates issued by the country in which the tank had previously been in service providing it is an ADR contracting party. Two countries require imported used tanks to be certified by a body approved by them, although in one case, certification may be based upon an existing foreign certificate.

25. Which of the following do you accept as evidence of the periodic and intermediate inspection of Chapter 6.8 tanks that are mounted on road vehicles registered in your country?

- a) Certificates issued by your national competent authority or a body approved by them
 Yes 14 No 1 No reply 2
- b) Certificates issued by or on behalf of the competent authority of the country the tank was built in, providing it is an EU or EEA member state
 Yes 4 No 8 No reply 5
- c) Certificates issued by or on behalf of the competent authority of the country the tank was built in, if it is an ADR contracting party, even if it is not an EU or EEA member state.
 Yes 4 No 8 No reply 5
- d) Certificates issued by or on behalf of the competent authority of the country the tank was built in, if it is known to be applying ADR, even if it is not a formally contracting party
 Yes 0 No 12 No reply 5
- e) Certificates issued by or on behalf of any ADR competent authority
 Yes 3 No 9 No reply 5

Commentary:

Most of those responding require in-service inspection of road tanks registered in their country to be certified by a body approved by them. A small number will accept certificates issued by another ADR contracting party but none accept certificates issued by non-contracting parties, even if they are known to be applying ADR.

26. Which of the following do you accept as evidence of the periodic and intermediate inspection of Chapter 6.8 tanks that are fixed to rail wagons based in your country?

- a) Certificates issued by your national competent authority or a body approved by them
 Yes 11 No No reply 6
- b) Certificates issued by or on behalf of the competent authority of the country the tank was built in, providing it is an EU or EEA member state
 Yes 8 No 1 No reply 8
- c) Certificates issued by or on behalf of the competent authority of the country the tank was built in, if it is an RID contracting state, even if it is not an EU or EEA member state.
 Yes 8 No 1 No reply 8
- d) Certificates issued by or on behalf of the competent authority of the country the tank was built in, if it is known to be applying RID, even if it is not a formally contracting party
 Yes 1 No 7 No reply 9
- e) Certificates issued by or on behalf of any RID competent authority
 Yes 5 No 3 No reply 9

Commentary:

For the in-service inspection of rail tanks, there is a wider recognition of certificates issued by or on behalf of another RID contracting state. One country will also accept certificates issued by countries who are not RID contracting states but are known to be applying ADR.

PART 5. OPERATION BEYOND NATIONAL BOUNDRIES

27. **Can an inspection body that has been approved by another competent authority, but not your national competent authority, examine and certify tanks in your country if:**

- a) The tanks are to be registered and based in your country?
Yes&No 1 Yes 3 No 11 No reply 2
- b) The tanks are to be exported to the country that approved the inspection body?
Yes 9 No 5 No reply 3
- c) The tanks are ADR tanks and are to be exported to a 3rd country, i.e. a country which is not the country that approved the inspection body?
Yes 7 No 6 No reply 4
- d) The tanks are RID tanks and are to be exported to a 3rd country, i.e. a country which is not the country that approved the inspection body?
Yes 6 No 2 No reply 9

Commentary:

Most competent authorities would not accept foreign approved IBs examining and certifying tanks based or registered in their country. Several have commented that there is no legal basis for permitting this. There appears to be greater acceptance where the foreign IB inspects new tanks that are to be exported and when that happens competent authorities would not normally be aware of it.

28. **Does your national competent authority approval allow an inspection body to examine and certify the following tanks in another RID/ADR country?**

- a) ADR Chapter 6.8 road tanks?
Yes 11 No 3 No reply 3
- b) RID Chapter 6.8 rail tanks?
Yes 7 No 4 No reply 6

Commentary:

Most countries who allow this apply certain restrictions, e.g. only for nationally registered tanks, or only when certification is issued and signed in the home country. Several countries neither specifically permit nor forbid their approved bodies from operating beyond national boundaries and it is assumed in those cases that no rules apply to such bodies.

29. **Does your national competent authority approval allow an inspection body to examine and certify the following tanks in a NON - RID/ADR country?**

- a) ADR Chapter 6.8 road tanks?
 Yes 8 No 4 No reply 5
- b) RID Chapter 6.8 rail tanks?
 Yes 4 No 4 No reply 9

Commentary:

It is not clear from the responses why fewer countries allow their approved bodies to operate in non-RID/ADR countries as this would appear to be necessary when tanks constructed there are destined for service in a country that does apply RID/ADR.

30. **If your national competent authority approval allows an inspection body to perform initial inspection of tanks in an RID/ADR country can the inspection be done by:**

- a) Inspectors employed by the approved body and based in your country, who travel to the country where inspection takes place?
 Yes 11 No 1 No reply 5
- b) Inspectors employed directly by the approved body and based in the country where inspection takes place?
 Yes 8 No 2 No reply 7
- c) An inspection body based in the country where inspection takes place, which is a branch or wholly owned subsidiary of the approved body?
 Yes 5 No 5 No reply 7
- d) An inspection body based in the country where inspection takes place and is part of the same group as the approved body but has separate legal identity?
 Yes 4 No 6 No reply 7
- e) An inspection body which is unrelated to the approved body, but is approved by the competent authority of the country where the inspection takes place?
 Yes&No 1 Yes 3 No 6 No reply 7
- f) A tank manufacturer's in-house inspection service if they are considered competent by the approved body?
 Yes 1 No 9 No reply 7

31. **If your national competent authority approval allows an inspection body to perform initial inspection of tanks in a NON - RID/ADR country can the inspection be done by;**

- a) Inspectors employed by the approved body and based in your country, who travel to the country where inspection takes place?
 Yes 9 No 2 No reply 6
- b) Inspectors employed directly by the approved body and based in the country where inspection takes place?
 Yes 6 No 5 No reply 6
- c) An inspection body based in the country where inspection takes place, which is a branch or wholly owned subsidiary of the approved body?

- | | | | | | | |
|----|--|---|----|----|----------|---|
| | Yes | 3 | No | 8 | No reply | 6 |
| d) | An inspection body based in the country where inspection takes place and is part of the same group as the approved body but has separate legal identity? | | | | | |
| | Yes | | No | 11 | No reply | 6 |
| e) | An inspection body which is unrelated to the approved body, but is approved by the competent authority of the country where the inspection takes place? | | | | | |
| | Yes | | No | 11 | No reply | 6 |
| f) | A tank manufacturer's in-house inspection service if they are considered competent by the approved body? | | | | | |
| | Yes | | No | 11 | No reply | 6 |

Commentary:

The responses to this and the previous question highlight differences between countries when it comes to inspection beyond national borders. The majority of respondees agree that inspectors employed by the approved body and based in the approving country should travel to the country where inspection takes place. Fewer believe it acceptable to delegate the work to a local agency based in the country where inspection takes place. It can be argued that delegating inspection in that manner constitutes sub-contracting even when that agency is a branch or subsidiary of the approved body so the responses may be taken to indicate the level of sub-contracting which competent authorities are content to allow when inspections undertaken in their name.

32. What steps would you expect an approved inspection body should take to establish the competence and monitor performance of a body based in the country in which inspection takes place (a 'local' body) whose services they use? (Please try to answer this question, even if you do not permit approved bodies to use the services of 'local' inspection bodies)

- | | | | | | | |
|----|--|----|----------|---|----------|----|
| a) | The local body must be accredited to ISO 17020 for the type of tank to be inspected | | | | | |
| | Yes | 13 | No | | No reply | 4 |
| b) | The local body must be accredited to ISO 17025 | | | | | |
| | Yes | 6 | No | 5 | No reply | 6 |
| c) | The local body must be audited annually by the national accreditation body as part of the approved inspection body's accreditation process | | | | | |
| | Yes | 11 | No | 2 | No reply | 4 |
| d) | Local body must be audited annually by the approved inspection body | | | | | |
| | Yes | 10 | No | | No reply | 7 |
| e) | By another method (please provide details) | | | | | |
| | n/a | 1 | No reply | | | 16 |

Commentary:

Thirteen countries believe the local body should be accredited to ISO 17020. This is two more than the number that apply accreditation as a requirement for approval in their own country (Q.10). A substantial number of countries believe the local body should be audited by the national accreditation body as part of the approved inspection body's accreditation process, which is the practice currently required under 1.8.6.4.1, but only for tanks carrying substances for which Special Provisions TA4 and TT9 of Chapter 6.8 apply.

33. If the local body is accredited to ISO 17020, do you believe the cross-border accreditation rules should apply?

- | | | | | | |
|-----|----|----|---|----------|---|
| Yes | 13 | No | 1 | No reply | 3 |
|-----|----|----|---|----------|---|

Commentary:

Cross border accreditation rules are in many cases necessary by virtue of the mutual recognition agreements between various national accreditation bodies

Note:

1. n/a means not applicable
-