UR Z7.1 "Hull Surveys for General Dry Cargo Ships"

Part A. Revision History

Version no.	Approval date	Implementation date when applicable
Rev.8 (Oct 2011)	19 October 2011	1 January 2013
Rev.7 (July 2011)	27 July 2011	1 July 2012
Rev.6 (Mar 2009)	18 March 2009	1 July 2010
Rev.5 (Nov 2007)	15 November 2007	1 January 2009
Rev.4 (Aug 2006)	17 August 2006	1 July 2007
Rev.3 (Jan 2006)	04 January 2006	1 January 2007
Rev.2 (June 2005)	27 June 2005	1 July 2006
Rev.1 (June 2003)	18 June 2003	-
New (June 2002)	No record	-

- **Rev.8 (Oct 2011)**

.1 Origin of Change:

☑ Suggestion by an IACS member

.2 Main Reason for Change:

The design of General Dry Cargo Ships has evolved significantly in recent years. Many of these modern multi-purpose ships are now with a double side-skin extending for the entire length and height of the cargo-carrying area, with in-built container-carrying capability.
The traditional general dry cargo ship was of single-skin construction with tween decks, as indicated in Figures 1 and 2 of UR Z7.1, and it is for this structural configuration that the need was perceived to enhance surveys to include Close-Up Surveys.
IMO Resolution MSC 277(85) Para 1.6.1 also makes the distinction that double-skin general dry cargo ships are of significantly different construction from conventional general dry cargo ships.
The double-skin construction ship is afforded significantly more protection to cargo spaces than the traditional single skin design, and is akin to a container ship in configuration. For these reasons it was considered correct to exclude double-skin general cargo ships, with the double skin extending over the entire length and height (to the upper deck) of the cargo carrying area from the requirements of IACS UR Z7.1.

.3 List of non-IACS Member classification societies contributing through the TC Forum and/or participating in IACS Working Group:

None

.4 History of Decisions Made:

The matter was raised by a member and agreed by the majority of panel members under job PSU 10051. Some detail discussion ensued on wording, implementation

dates and definitions, both by correspondence and at the Spring Meeting of the Panel 2011.

One member did not agree with the proposal, citing concerns with specific types of damages, including grab damages and other aspects associated with the carriage of bulk cargoes on double skin general dry cargo ships, and most particularly river/sea navigation type ships.

.5 Other Resolutions Changes

None

.6 Dates:

Original Proposal: *17 November 2010 Made by a Member*
Panel Approval: *02 March 2011*
GPG Approval: *19 October 2011 (Ref: 11153_IGb)*

- **Rev.7 (July 2011)**

.1 Origin of Change:

☑ Suggestion by an IACS member

.2 Main Reason for Change:

Following external audit a member was advised that a small temporary doubler on a cross-deck strip of a bulk carrier should have been promptly and thoroughly repaired at the time of survey. The member carried out an investigation and found that the actions of the surveyor were fully justifiable, the temporary repair and short term Condition of Class imposed were an appropriate method of dealing with such a situation. The member advised that the current requirements for 'Prompt and Thorough Repair' stipulated under the UR 7 and UR 10 series do not give any leeway for carrying out temporary repairs (and imposing a Recommendation/Condition of Class in accordance PR 35) where the damage in question is isolated and localised, and in which the ship's structural integrity is not impaired.

The Survey Panel discussed the matter and agreed that under carefully defined circumstances a temporary repair and short term Recommendation/Condition of Class would be an appropriate course of action.

.3 List of non-IACS Member classification societies contributing through the TC Forum and/or participating in IACS Working Group:

None

.4 History of Decisions Made:

The matter was discussed by correspondence within the Survey Panel and at the Autumn 2010 Panel Meeting. Following discussion at which the possibility of a Unified Interpretation being raised was considered, it was eventually decided to make direct amendment to the relevant Unified Requirements.

The wording of the new paragraph to be inserted as Para 1.3.3 in all relevant Unified Requirements was extensively discussed prior to agreement.

The proposal was unanimously agreed by Survey Panel Members.

.5 Other Resolutions Changes

The identical amendment affects UR Z7, UR Z7.1, UR Z7.2, UR Z10.1, UR Z10.2, UR Z10.3, UR Z10.4 and UR Z 10.5.

.6 Dates:

Original Proposal: *September 2010 Made by a Member*
Panel Approval: *March 2011*
GPG Approval: *27 July 2011 (Ref: 11118_IGb)*

- **Rev.6 (March 2009)**

Survey Panel Task 62 - Harmonization of UR Z10s to UR Z10.3(Rev.10) – GPG Subject No: 7718b

See TB document in Part B.

- **Rev.5 (Nov 2007)**

Survey Panel Task 1 – Concurrent crediting of tanks- GPG Subject No: 7690

See TB document in Part B.

- **Rev.4 (Aug 2006)**

GPG Subject No: 5031f

See TB document in Part B.

- **Rev.3 (Jan 2006)**

GPG Subject No: 5066

See TB document in Part B.

- **Rev.2 (June 2005)**

GPG Subject No: 1060g

WP/SRC Task 102 - harmonization of UR Zs (also some substantive amendments). Subject nos 4072c WP/SRC Task 114 re TM report. WP/SRC harmonisation Task 102 outcome submitted to GPG 13/10/04 by 10/10/04 by 1060gNVl and as GPG57/6.1/WP-1.

- **Rev.1 (June 2003)**

Previously Z10.6.

See TB document in Part B.

- **NEW (June 2002)**

No TB document available.

Part B. Technical Background

List of Technical Background (TB) documents for UR Z7.1:

Annex 1. **TB for Rev.1 (June 2003)**

See separate TB document in Annex 1.

◄▼►

Annex 2. **TB for Rev.2 (June 2005)**

See separate TB document in Annex 2.

◄▼►

Annex 3. **TB for Rev.3 (Jan 2006)**

See separate TB document in Annex 3.

◄▼►

Annex 4. **TB for Rev.4 (Aug 2006)**

See separate TB document in Annex 4.

◄▲►

Annex 5. **TB for Rev.5 (Nov 2007)**

See separate TB document in Annex 5.

◄▼►

Annex 6. **TB for Rev.6 (Mar 2009)**

See separate TB document in Annex 6.

◄▼►

Annex 7. **TB for Rev.7 (July 2011)**

See separate TB document in Annex 7.

◄▼►

Annex 8. **TB for Rev.8 (Oct 2011)**

See separate TB document in Annex 8.

◄▼►

Note: *There are no separate Technical Background (TB) documents for the original resolution (June 2002)*

UR Z7.1 (Rev.1)

(Re-categorization of Z10.6 as Z7.1, June 2003)

Technical background

1. Objective

WP/SRC in its Progress Report to GPG 54 reported that under their Task "Harmonization of UR Z10s" WP agreed that Z10.6 should be re-categorized as Z7.1 since it did not contain the whole of essential ESP requirements such as survey planning document and executive hull summary.

GPG agreed.

2. Points of discussion

At GPG 53 meeting, DNV raised a concern that ships whose tonnage is in excess of 500 GRT but exempted from SOLAS requirements may fall under the scope of application of UR ex-Z10.6. DNV suggested to change the application scheme in Z7.1.1.1 from "500 grt" to "ships having SOLAS SC certificate".

DnV further clarified that IACS Members are not always the organizations issuing the SAFCON certificate and therefore the issue on whether or not a ship is issued with a SAFCON is not evident. Finally, the application scheme remains unchanged.

BV suggested that livestock carriers and deck/dock ships be excluded from the application of UR Z7.1. Agreed. See 1.1.1 and a footnote of the UR 7.1.

***

submitted by the Permanent Secretariat

30 June 2003

WP/SRC Task 102
HARMONIZATION OF UR Z7s AND Z10s

Technical Background
UR Z7 (Rev. 11)
UR Z7.1 (Rev. 2)
UR Z10.1 (Rev. 12)
UR Z10.2 (Rev. 17)
UR Z10.3 (Rev. 7)
UR Z10.4 (Rev. 2)
UR Z10.5 (Rev. 1)

Contents:

1. Objective

To amend UR Z7s and Z10s in order to make the texts of the above-mentioned URs consistent eliminating all the differences both in substance and in wording (WP/SRC Task 102).

2. Background

In the process of approving UR Z10.4, GPG found it necessary to amend the other existing URs Z10.1, Z10.2, Z10.3, Z10.6 and Z7 in order to eliminate any inconsistencies existing among them.

3. Methodology of work

The WP has progressed its work through many sessions, both during the periodical meetings and dedicated meetings restricted to a Small Group of Members (BV, DNV, GL, LR, RINA) who developed the work in order to be more efficient. All the proposed amendments of the Small Group have regularly been circulated to all Members for comment and agreement.

4. Discussion

4.1 The WP/SRC has completed a comprehensive comparative review of UR Z7 and Z10s, and identified inconsistencies which existed among them. During this review, attention was given to the severity of the requirements applicable to the same spaces/structural areas on different types of ESP ships. As a result, the inconsistencies were eliminated making the URZs harmonized. However, there has been no change to the scope and extent of the survey requirements.

4.2 The starting point for each UR was the most updated version available at the time of commencement. Any revision to the URZs, which were introduced during this task, was taken into account. As for instance, the UR Z10.1 was initially amended based on Rev. 9, while the last amendments are based on Rev. 11 and the UR Z10.2 was initially amended based on Rev. 13, while the last amendments are based on Rev. 16. The proposed revisions of URs Z10.1 and Z10.4 have not been numbered, as there will be revisions to those URs before the revisions introduced by the Task 102 are adopted. In fact, GPG is currently developing a Revision 12 of Z10.1 with the view to introducing significant improvements in the survey regime for ballast tanks (including combined cargo/ballast tanks) of oil tankers and UR Z10s applicable to oil tankers will also have to be revised by incorporating the amendments to A.744(18) contained in Resolution MSC 144(77), which enter into force 1 January 2005 (see 4.3 below).

4.3 Also, in harmonizing UR Z10.1 and Z10.2 care has been taken to align the corresponding text with that of IMO Res. A.744(18). However, it has been noted that the amendments to A.744(18) contained in Resolution MSC 144(77), which enter into force 1 January 2005, have not been incorporated into the IACS UR Z10s applicable to oil tankers. It seems that the updating of the above-said UR Z10s will be done by the Perm Sec and reviewed by the WP/SRC Chairman and then circulated for adoption by GPG with concurrence of Council Members for uniform application from 1 January 2005. It is understood that the revisions of the UR Z10s affected by those amendments will not include the changes introduced by the Task 102, as the implementation date proposed for those changes is 1 January 2006 (see below **6. Implementation**).

4.4 In the course of the work the WP has been developing for more than two years, several additional Tasks were assigned to the WP by GPG which affected the development of Task 102. The additional tasks which have been taken into account are the following:

1) In the course of Council discussion on UR Z10.6 (General Cargo Ships), certain inconsistencies were identified between Z10.6 and other Z10s. WP was instructed to expedite Task 102 (1060gIAa, 12 June 2002);
2) WP was instructed to include “Survey Planning for Intermediate Survey” into harmonization work (2108_IAa, 12 July 2002);
3) GPG instructed WP to consider whether Z10.6 should be re-assigned as Z7.1, in connection with the harmonization work. 1060gIAb, 20 Sept 2002.

Z7.1 developed;

4) Partial outcome (Z7 and Z7.1) was submitted to GPG on 17 July 2003(1060g). Council decided that approval of Z7(Rev.10) and Z7.1(Rev.2) is postponed until the harmonization is completed (1060gICb, 6 April 2004);
   Council Chairman instructed WP/SRC to Members' comments on the draft revision of UR Z7 and Z7.1 (collected under s/n 1060g, 1060gNKi (30/03/2004) in particular) on 6 April 2004.

5) GPG tasked WP to include the amendments to Z10.2 / Z11 (BCs with hybrid cargo hold arrangements), deleting sheets 15 and 16 for ore carriers, into the harmonized UR Z10s (2212aIGa, 19 Jan 2004);
6) GPG tasked WP to consider whether the requirements relevant to examination of Fuel Oil Tanks in the cargo area at each Special Survey should be put into Z 10s, and internal examination of FOT at Intermediate Survey after SS 2 is needed. (1060gIAf, 30 Jan 2004);
7) GPG tasked WP to harmonize tank testing requirements in Z7s and Z10s. (3006lIAa, 5 April 2004);
8) GPG tasked WP with Task 108 - Develop uniform survey requirements for air vent pipes including the welded connection to deck. Z22 developed. GPG instructed WP to incorporate Z22 into the harmonized Z10s;
9) GPG tasked WP with Task 114 - Verification and signature of TM reports. REC 77(Rev.1) developed and approved on 29 July 2004. Council approved parallel amendments to Z7.1 and Z10s (TM Forms included) and instructed WP to incorporate these into the harmonized Z10s:
   - Recommendation No.77 was revised (Rev.1, July 2004);
   - Z7.1 para.6.3.2 and Z10s para.7.3.2 so amended.
   - "Surveyor's signature" is deleted from all TM Forms in Z10s;
   - A note is added to Annex II(Z10s) declaring that Annex II is recommendatory.

   WP/SRC's investigation into Members' practice in dealing with verification and signature of TM reports is annexed for record keeping purpose. See Annex 2.

10) GPG tasked WP to consider the BV comments on "TM may be dispensed with…." and include the findings into the harmonized Z10s (2219iIAa, 7 April 2004).

5. Agreement within the WP/SRC

All Members have unanimously agreed the attached final versions of UR's.

6. Implementation

WP/SRC is of the view that the Members need 12 months from the adoption date to implement these amendments into their class rules. Assuming Council adoption in December 2004, WP/SRC would propose January 2006 as implementation date.

Annex 1: TB for UR Z10.1(Rev.12, C49 amendments, see Permsec's note 1 below)
Annex 2: WP/SRC Task 114, verification and signature of TM reports(see 9 above).
***Annex 3*:** TB for revision of UR Zs concerning "anodes".

Note by the Permanent Secretariat

1. Annex 1 to this TB contains background for amendments to UR Z 10.1(Rev.12) relating to FAIR/POOR/GOOD (C49 amendments). Council at its 49th meeting (June 2004) agreed/decided that comparable changes should be added to Z10.3 and Z10.4.

2. Appendix 3 "TM sampling method" has been added to UR Z10.1 and Z10.4 to keep them consistent with IMO Res.MSC.144(77). The amendments to A.744 contained in MSC.144(77) entered into force on 1 January 2005. *(GPG s/n 4181)*

Under s/n 4072g, paragraph **2.4.6** of UR Z10.1 and **2.4.6** and of UR Z10.4 (paragraph numbering is now harmonized) were amended in order to provide a link between the main text of the UR Z10.1 and 10.4 and the new Annex III Appendix 3 containing the MSC Res.144(77).

Further, it was agreed that the requirements for evaluation of longitudinal strength of the hull girder (as written in MSC.144(77)) should not be required for Intermediate Survey unless deemed necessary by the attending Surveyor. This is covered in 4.2.3.1 and 4.2.4.1 of Z10.1 and Z10.4.

3. GPG agreed that the amended UR Zs should be implemented from 1 July 2006 altogether.

4. DNV's proposed amendments to UR Z10.1, Z10.3 and Z10.4 concerning annual survey of ballast tanks were agreed by Council (1060gICq, 27 June 2005). See Appendix 2 to Annex 1.

5. Annex 3 contains a TB for revision of UR Zs concerning "anodes".

Date: September 2004
Prepared by the WP/SRC

– – –

Annex 1 to Technical Background
UR Z 10.1 (Rev.12, C49 amendments(coating-related))

1. Objective

To introduce significant improvements in the survey regime for ballast tanks (including combined/ballast tanks) of oil tankers as matter of strategic concern and urgency to IACS, given the aging of both the single and double hull tanker fleets and the problems encountered with corrosion of ballast tanks in several shipping casualties.

2. Background

Draft amendments to UR Z10.1 were submitted to Council 47 (June 2003) and agreed in principle.

3. Discussion

There was particular concern over accelerated corrosion with age (as the thinner the material, the more rapidly the allowable diminution margin percentage disappears) especially where coatings have broken down. There is also a disincentive for any spend on maintenance of the structure of a ship within a few years of its statutory scrapping date.

Council discussion by correspondence had evolved to the position of substantive proposals – summed as follows (3095_ABa, 2 June 2003):

1. Enhance the Intermediate Survey in Z10.1, Z10.3 and 10.4 for Tankers after 2nd Special / Renewal Survey to the same level (scope of work) as the preceding Special / Renewal Survey). This corresponds to the latest revision to UR Z10.2.
2. At Annual Survey of ballast tanks with substantial corrosion, the overall survey is to be replaced by close-up survey with thickness measurements of the exposed area.
3. Proposed to task WP/SRC to re-consider the acceptance criteria for the rating FAIR further. For this, eliminate FAIR, leaving only GOOD and POOR redefined as appropriate.
4. Proposed to task WP/SRC to explicitly require close-up survey of Suspect Areas identified at the previous Special Survey.

Council 47 discussed the proposals(June 2003) as follows:

1. Definition of FAIR
   Council 47 agreed that “FAIR” would be retained as a rating and that GPG should instruct WP/SRC to redefine FAIR, so that there would be a clear differences between FAIR, POOR and GOOD. It was also agreed that for oil tankers the Intermediate Survey following Special Survey No.2 would have the same scope as Special Survey No.2(Z10.1). WP/SRC should also clarify the definition of satisfactory repair.

   Based on the strong majority, Council agreed to discuss with Industry annual surveys of ballast tanks when coating is found in LESS than GOOD condition at special survey, with the objective to encourage the owner to carry out repairs and maintenance of coating to GOOD condition.

   DNV and NK stated that they could not accept a requirement for annual surveys of ballast tanks when the coating condition is less

than GOOD and proposed that GOOD be changed to FAIR (3095_IGc, 30 June 2003)

2. ABS' proposed amendments to Z10.1(annual examination of BWTs in certain conditions) were approved.
3. C 47 agreed that the BWT coating requirements (Z10.1.2.2.3) for intermediate Survey after SS 2 should be the same extent to the previous SS.
4. Given the substance of the changes, the revised Z10.1 should be shown to Industry before adoption.
5. A guidance for coating repairs needs to be developed by WP/SRC with reference to TSCF Guidelines.

Following Council 47, the draft text of Z10.1(Rev.12) was distributed to Industry and discussed at the IACS/Industry meeting on 29 August 2003. Industry indicated that UR Z10.1(Rev.12) is acceptable, provided that appropriate IACS guidelines on coating repairs are developed.

The Small Group on Coating (SG/Coating) under WP/SRC prepared draft guidelines on coating repairs and considered the definitions of GOOD / FAIR / POOR. The SG/Coating did not change the definitions and found that the Guidelines provide useful clarifications on the definitions and criteria in achieving an industry wide uniform judgement of coating conditions as well as what is needed to restore GOOD conditions.
Further, an IACS/Industry JWG/Corrosion was established and met in February 2004. The outcome is (3095_IGh, 4 June 2004):

- Draft Guidelines on Coating Repair (IACS REC 87)
- Draft UR Zxx (mandatory coating of cargo tanks on oil tankers)
- Draft UI SC 122 (Rev.2) – mandatory coating of ballast tanks

4. Others

1. Z10.11.2.2bis - Definition of "Combined Cargo/Ballast Tank. …as a routine part of the vessel's operation and will be treated as a Ballast Tank. ...". By so amending, Z10s do not need to repeat "Ballast Tanks *and Combined cargo/salt water Ballast Tanks*" in addressing the ballast tanks. Hence, all the references to "*and Combined cargo/salt water Ballast Tanks"* were deleted.
2. Z10.1.2.2.1.2: The aim of the examination is ~~to be sufficient~~ to discover substantial corrosion…
   Comparable changes are to be added to other UR Zs wherever the same sentence occurs.
3. "IACS Guidelines for Coating Maintenance & Repairs for Ballast Tanks and Combined/Ballast tanks on Oil Tankers" are referenced where relevant.
4. Comparable changes are to be added to UR Z10.3 and Z10.4, after adoption of Z10.1(Rev.12).

Attached: Memo on Coating Matters (GPG Chairman)

9 June 2004
Prepared by the Permsec

Appendix 1 to Annex 1: MEMO on Coating matters

1. Background and discussion within IACS on UR Z10.1 (draft Rev.12) between 29/01/03 and 14/08/03

In view of the survey experience with oil tankers, it was proposed that all ballast tanks should be examined, routinely and uniformly, at annual surveys on ESP tankers exceeding 15 years of age. IACS should amend UR Z10.1 to require the examination of ballast tanks on such ships at each annual survey. This is simple, clear and thorough and not subject to interpretation. (2242_ABq dated 29/1/03)

Then, ABS modified the proposal asking, for tankers subject to URs Z10.1, Z10.3 and Z10.4, exceeding 15 years of age, that the current requirement - pertaining to annual examination of Ballast Tanks adjacent to cargo tanks with any means of heating - be deleted and replaced by a simpler and more stringent requirement that all Ballast Tanks be subject to survey at each subsequent annual survey where either substantial corrosion is found within the tank or the protective coating is found to be in less than GOOD condition and the protective coating is not renewed at special survey or intermediate survey. This will ensure that all Ballast Tanks with substantial corrosion or protective coating which is not in GOOD condition at the time of special survey or intermediate survey will be examined at each subsequent annual survey on tankers exceeding 15 years of age. (2242_ABzb dated 14/3/03)
This was later expanded to include all tanks used routinely for ballast water, both ballast-only and cargo/ballast tanks (2242_ABzc dated 14/3/03).

ABS further reviewed the issue of the survey of salt water ballast spaces and combined cargo/salt water ballast spaces with ABS' governing bodies in light of recent casualties and survey findings on other tankers. Their review found an increasing amount of coating breakdown/failure and subsequent rapid wastage in key structures after Special Survey No. 2, i.e. after 10 years of age. These conditions are most prevalent in the under deck structure and the side shell structure in way of the deep loadline. In a number of cases the serious wastage has caused fracturing of the under deck longitudinals and in some cases fracturing has extended to the main deck structure. This led ABS to refine proposed amendments to URs Z10.1, Z10.3 and Z10.4 to require (2242_ABzf dated 9/5/03):

a. For Tankers exceeding 10 years of age

> Salt Water Ballast Spaces and Combined Cargo/Salt Water Ballast Spaces. For tankers exceeding 10 years of age, salt water ballast spaces and combined cargo/salt water ballast spaces are to be internally examined at each subsequent Annual Survey where substantial corrosion is found within the tank or where the protective coating is found to be less than GOOD condition and protective coating is not repaired. Internal examination to be an Overall Survey.

b. For Tankers exceeding 15 years of age:

Salt Water Ballast Spaces and Combined Cargo/Ballast Spaces. For tankers exceeding 15 years of age, salt water ballast spaces and combined cargo/ballast spaces are to be examined internally at each subsequent Annual Survey. Where substantial corrosion is found within the tank, or where the protective coating is found to be in less than GOOD condition and the protective coating is not repaired then in addition to an Overall Survey, under deck structure and the side shell structure in way of the deep loadline is to be subject to Close-up Survey.

NK and BV replied that the proposed amendments made by ABS need to be substantiated in a transparent manner with technical data that ABS may possess and put forward for further assessment and discussion. (2242_NKn dated 14/5/03 and 2242_BVz dated 16/5/03)

DNV (2242_NVn dated 2/6/03), having carefully considered the practical consequences of taking the ship off-hire for gas freeing etc. and being concerned about the difficulties to have these surveys executed in a safe manner and whether the intended safety benefits in implementing the proposed extended scope of the annual survey of Ballast tanks will be met, **proposed the following alternative measures** which would be as effective and may not have such delaying effects to the ship:

1) Enhance the Intermediate Survey in UR Z10.1, 10.3, and 10.4 for Tankers after the 2 Special / Renewal Survey to the same level (scope of work) as the preceding Special / Renewal Survey. (This will correspond to the latest revised requirements of UR Z10.2 for Bulk Carriers.)
2) At Annual Survey of ballast tanks with substantial corrosion the overall survey should be replaced by close up survey with thickness measurements of the exposed area. (An overall survey of these tanks does not give sufficient information of the development of the areas with substantial corrosion.)
3) Further we will not fail to mention that the WP/SRC has proposed to extend the close up survey in cargo and combination tanks to 30% from the 3 Special / Renewal Surveys.
4) **Experience has shown that the coating condition rating category FAIR has a tendency to be stretched too far into the POOR condition. We will therefore propose that we task the WP/SRC to reconsider the acceptance criteria for the rating FAIR further.**
5) We do also question the need for redefining the definition of combination tanks, particularly since the category I tankers which are the ships that normally are fitted with these type of tanks are to be phased out 2 to 4 years from now. However DNV will not oppose to such a redefinition.

DNV requested Members to consider the above as an alternative to the ABS proposal, bearing in mind that we ought to present this to the industry prior to deciding.

ABS (3095_Aba dated 2/6/03), having further considered its earlier proposals in light of NVn, submitted a revised proposal for consideration by Council at C47 and replied to the above 5 DNV proposals as follows:

1) ABS fully supports this proposal.
2) While ABS agrees with this proposal, it is in fact already provided for in Z7 (3.2.3) and Z10.1 (3.2.5.1)--which require that "Suspect areas (which include any area where substantial corrosion is found) identified at previous Special Survey are to be examined. Areas of substantial corrosion identified at previous special or intermediate survey are to have thickness measurements taken." To us, this implies that close-up survey of these areas is to be done at annual survey in conjunction with the thickness measurements. However, we can

agree to tasking WP/SRC to explicitly require "close-up" survey in this connection and to amend Z7, and all the Z10's, appropriately to make this explicit, if there is majority support for this.

3) We agree that this has been put forward to GPG by WP/SRC via 0237hNVb, 27 May. However, these additional CAS close-up survey requirements do not apply to salt water ballast tanks; only to cargo oil tanks and combined cargo/ballast tanks.

4) We agree with this assessment and we propose that the only way to eliminate the subjectivity and raise the standard is to eliminate the category "FAIR" completely; leaving only "GOOD" and "POOR" redefined as follows:
"GOOD -- condition with no breakdown or rusting or only minor spot rusting.
POOR -- any condition which is not GOOD condition."

5) ABS does not agree with this proposal. We are particularly concerned that we need a very thorough and robust survey regime for these tankers precisely because they are subject to mandatory phase out over the next several years. We are very concerned that without additional IACS requirements, these tanks will receive little or no inspection and maintenance by owners or others after their last special or intermediate survey, if no substantial corrosion is found at that time. Rapid, localized wastage in way of deteriorating coatings may pose significant hazard if the survey regime is not further tightened as we are proposing.

In conjunction with the above comments on DNV proposals, ABS further considered their previous proposal in ABzf and modified it as follows:

- **ABS simplified the proposal to require annual examination of all salt water Ballast Tanks and combined Cargo/salt water Ballast Tanks irrespective of age, when either substantial corrosion is found within the tank or the protective coating is found to be in less than GOOD condition and is not repaired.**
- the requirement for annual (close-up) examination of salt water ballast tanks and combined tanks is already required in Z10.1 (3.2.5.1). ABS proposed adding it to 2.2.3 for clarity and emphasis so that all the conditions which may lead to annual examination of such tanks are listed together in one place.
- Since the principal problem that we are trying to address is rapid, localized corrosion in way of breakdown or deterioration of the protective coating, we are proposing that the coating condition should be found and kept in "GOOD" condition to obviate the need for annual examination. **The attached proposal is made together with the proposals in items 3.1 (intermediate following Special survey 2 to have same scope as prior Special survey) and 3.4 (eliminating "FAIR" and redefining "POOR" as any condition other than "GOOD" condition.**

ABS requested to decide on a course of action at C47 for tightening the survey regime for tankers. They agreed that industry be informed of Council's decisions in this regard prior to IACS making the decision public, but IACS should maintain its independence and take decisive action in this matter. Debate with industry can only lead to delay and to a watering down and compromising of these important requirements.

NK agreed to task WP/SRC to reconsider the acceptance criteria of "FAIR" for clearly define the border between "FAIR" and "POOR" condition. However, **NK strongly opposed the elimination of "FAIR" coating condition from UR Zs** because this can not resolve to remove subjectivity of coating assessment. The three-categorization system of coating condition should be retained. (3095_NKa dated 5/5/03)

Outcome of C47

At **C47**, it was agreed that "Fair" would be retained as a rating and that GPG should instruct WP/SRC to redefine "Fair", so that there would be a clear differentiation between "Fair", "Poor" and "Good". It was also agreed that for oil tankers the Intermediate Survey following Special Survey No.2 would have same scope as Special Survey No.2 (Z10.1). WP/SRC should also clarify the definition of satisfactory repair.

Based on strong majority support Council agreed to discuss with Industry annual surveys of ballast tanks when coating is found in LESS than GOOD condition at special survey, with the objective to encourage the owner to carry out repairs and maintenance of coating to GOOD condition.

This matter should be discussed with Industry prior to adoption of any UR by Council.

In a final summary, the Chairman proposed that a constructive dialogue with Industry should take place on the IACS proposal as set out in WP1 plus maintaining 3.2.5.2 modified to say that ballast/combined ballast/cargo tanks will be subject to annual survey when considered necessary by surveyors.

After discussion in the JWG (Industry/IACS), GPG should propose final rules for this matter to Council, including acceptable repair definition.

F**UA 17:** *To instruct WP/SRC to develop guidance on coating repairs and more precise definition of "Fair" coating condition.*

Once approved, these requirements should be incorporated into Z10.3 and Z10.4.

FUA 15

1) *To prepare a draft revision to UR Z10.1 incorporating C 47 decisions:*
   - *The definition of "FAIR" remains as it is;*
   - *ABS proposed amendments to Z10.1 (annual examination of BWTs in certain conditions) were approved;*
   - *C47 agreed that the BWT coating requirements (Z10.1.2.2.3) for Intermediate Survey after Special Survey No.2 should be the same extent to the previous Special Survey.*
   - *Given the substance of the changes, the revised UR Z10.1 should be shown to Industry (OCIMG/Intertanko first among others) before adoption for their review and comments.*
   - *A guidance for coating repairs needs to be developed by WP/SRC with reference to TSCF Guidelines.*

2) *GPG Members are to confirm the draft revision to Z10.1 in consultation with their WP/SRC members by correspondence. See 3095_IGa of 13/06/03.*

According to C47 FUA 15, GPG Chairman circulated (3095_IGa dated 13/6/03) draft amendments to UR Z10.1 as agreed in principle at C47.

Having received a number on comments, GPG Chairman (3095_IGb dated 27/6/03) informed that the Council Chairman confirmed that GPG is not to amend the principles agreed at C47, i.e. we are not empowered to change "GOOD" to "FAIR" as proposed by DNV and NK, nor to amend the definitions of "FAIR" and "POOR" as proposed by DNV.

DNV's intention to possibly lodge a reservation was noted, however the matter should be raised at Council and not be dealt with by GPG. An amended draft text incorporating the non-substantive changes proposed by Members was circulated.

DNV said that its understanding was that the draft should be circulated to the Industry (ICS, INTERTANKO, and BIMCO) prior to adoption by Council. (3095_NVc dated 30/6/03)

GPG Chairman (3095_IGc dated 30/6/03) circulated a draft amendment of UR Z10.1 for Council's agreement and use in discussions with the industry associations.
The draft was generally agreed by GPG but individual Members have requested that the following matters (which were deemed to be outside the remit of GPG in this task) be brought to Council's attention for further consideration:

1 DNV and NK stated that they can not accept a requirement for annual surveys of ballast tanks when the coating condition is less than GOOD and propose that GOOD be changed to FAIR.
2 In connection with item 1 above, DNV also propose to amend the definitions of FAIR and POOR in order to raise the standard of FAIR.

Council Chairman (3095_ICb dated 14/8/03) concluded that Council has agreed that the draft amendments to UR Z10.1 attached to IGc reflect Councils' decision taken at C47 and that they be circulated to industry associations.
Perm Sec was therefore invited to submit the draft to OCIMF and INTERTANKO in view of discussion at the IACS/ industry meeting on 29 August.

2. Discussion with Industry (29/08/2003 – 11/10/2003)

As requested by Council, the whole matter was presented to Industry during the "general matters" meeting with IACS held on 29 August 2003; comments from Industry were requested. In the following an extract from the minutes of the meeting (see message 3100aIAb dated 5 September 2003):

_____ from Meeting minutes _____

4. & 5. Annual surveys of ballast tanks and IACS guidelines on coating repairs

M. Dogliani introduced the matter (see Items 4&5 in Appendix).

A. LinoCosta gave a presentation to show where concerns and decisions stand: too many cases when coating was considered fair at SS but problems occurred just after one/two years.

N. Mikelis commented on draft amendments to Z10.1 (Rev.11) stating that the extent of annual survey is not clear; it should be limited to the affected zones, e.g. coating breakdowns, only.
M. Guyader clarified that, in this draft amendments, it is expected an overall survey of the whole tank and a close up survey of the affected zones.
N. Mikelis noted that, in the draft amendments to Z10.1 (Rev.11), the intermediate survey at 12.5 years would have the same scope as the previous special survey and that needed a justification. See 7 a).
M. Dogliani said that Z10.1 (Rev.11) was adopted in August 2003 and will be introduced into IACS Societies' Rules over the next year.

Conclusions:
4.1 Industry shared IACS concerns on coatings and, in general, agreed with the draft amendments to Z10.1 (Rev.11) suggesting also extending them to Z10.2 on bulk carriers

4.2 Industry agreed that a guideline for surveyor on coating would greatly improve uniform application of so-amended Z10.1 including issues such as how to consider load bearing elements when judging GOOD/FAIR/POOR status and how to consider bottom pitting in connection with GOOD conditions
4.3 Industry will more precisely comment, by the end of September, the draft Z10.1 so as for IACS to finalise the matter, as planned, for the Council's December meeting.

Item	Title	Industry recommandation	IACS/ M. Dogliani Introduction
4 & 5	Annual survey of ballast tanks IACS guidelines on coating repairs	NN	**1. IACS is considering the following:** - **amend UR Z10.1 (draft circulated to Industry) to the effect that in case at Special Survey or Intermediate Survey the coating in a ballast tank is found less than GOOD, either GOOD conditions are restored or the tank's coating is inspected at each annual survey;** - **develop IACS guideline to assist an uniform application of the so modified (if adopted) UR Z10.1; the guideline should address which repairs are necessary to restore GOOD conditions from FAIR and POOR respectively and which are the criteria for the restored (after repair) situation to be rated as GOOD.**

_____ End of extract from minutes _____

INTERTANKO commented (see R. Leslie email to GPG dated 25 September 2003):

- expressing their concern for the draft Z10.1 and underlining

a) targeting: concerns that, if not properly dealt with, Z10.1 would target all ships and not just those which need intervention; the view was expressed that guidelines would probably solve the matter;

b) definition: indicating that the current definitions of GOOD, FAIR and POOR is not clear enough and that the matter would be even worst with GOOD and NON GOOD; again it was indicated that guidelines could solve the matter;

c) expertise: expressing doubts on IACS' surveyors expertise and ability to judge coating conditions; in this respect they (hiddenly) suggest that IACS position is unclear when we say that we are not competent to judge the coating during construction but then we are competent to judge coating during operational life. Even if not explicitly stated, the impression is that also in this case guidelines would help.

Additionaly, INTERTANKO suggested a (quite detailed) set of assessment criteria.

The matter was then finally addressed at the TRIPARTITE Meeting (held in Soul on 29/30 September 2003). There Industry agreed that the way forward was the (joint) development of IACS guidelines (see minutes attached to message 3100_RIe dated 11 October 2003, an extract of which is reproduced below).

_____ Extract from the TRIPARTITE minutes _____

Industry is concerned by the definition of GOOD/NOT GOOD in relation to coating repairs and acceptance criteria. Industry agreed that new guideline on this, which IACS is already producing, was the way forward.

_____ End of the extract from the minutes _____

3. Further developments

a) from the above, it was concluded that, provided the guidelines are sound, Industry would accept the concept of Z10.1 (draft) Rev. 12, therefore an IACS team and a JWG were established in order to progress the matter of the guidelines (among other related matters).

b) the team of IACS experts on coating developed draft guidelines and provided recommendations to GPG on the way forward (attached to message 3095bNVc dated 20 November 2003).

c) the guidelines were discussed within the JWG with Industry (see draft minutes circulated within GPG with messages 3095cIGd and 3095cIGe both dated 13 March 2004)

d) further suggestions and comments (as requested at the meeting) were provided by Industry (not circulated to GPG)

e) Bulk Carrier Industry is recommending that similar guidelines are developed in due time also for bulk carriers

f) at DE47 and MSC78, IMO is asking Industry and IACS to develop (compulsory) performance standards for coating of newbuilding (double hull spaces of DSS Bulk Carriers), a matter which is, indirectly related to the above one.

1 June 2004
M. Dogliani
IACS GPG Chairman
IACS JWG/COR Chairman

Appendix 2 to Annex 1: DNV proposal to Z10.1, Z10.3 and z10.4

Sent Monday, July 4, 2005 4:45 pm
To Gil-Yong <gilyonghan@iacs.org.uk>
Cc
Bcc
Subject Fw: 1060gNVs; WP/SRC - Task 102 - Harmonization of UR Z 7 and Z 7.1
Attachments Doc1.doc 25K

----- Original Message -----
From: "Debbie Fihosy" <debbiefihosy@iacs.org.uk>
To: "CCS" <iacs@ccs.org.cn>
Cc: "IACS Permanent Secretariat" <permsec@iacs.org.uk>
Sent: Friday, June 03, 2005 2:52 PM
Subject: FW: 1060gNVs; WP/SRC - Task 102 - Harmonization of UR Z 7 and Z 7.1

Forwarding as requested

-----Original Message-----
From: Arve.Myklebust@dnv.com [Arve.Myklebust@dnv.com]
Sent: 25 May 2005 15:49
To: AIACS@eagle.org; iacs@bureauveritas.com; iacs@ccs.org.cn; johnderose@iacs.org.uk; iacs@dnv.com; iacs@gl-group.com; gilyonghan@iacs.org.uk; helenbutcher@iacs.org.uk; efs@iacs.org.uk; krsiacs@krs.co.kr; richardleslie@iacs.org.uk; external-rep@lr.org; clnkiacs@classnk.or.jp; terryperkins@iacs.org.uk; iacs@rina.org; iacs@rs-head.spb.ru; colinwright@iacs.org.uk
Subject: FW: 1060gNVs; WP/SRC - Task 102 - Harmonization of UR Z 7 and Z 7.1

25 May 2005

To: Mr. B. Anne, Chairman of IACS Council,
cc: Council Members, IACS Perm. Sec.

Ref.: My mail NVr dated 20 May 2005

DNV have further studied the amendments to UR Z10.1, Z10.3, and Z10.4, and as a result are presenting the following as a compromise solution:

General comment:
From the comments by other Members it is obvious that there is reluctance to accept annual surveys of ballast tanks with a common plane boundary to heated cargo tanks in the case where the coating is in good condition. This is particularly unreasonable as at the same time we enhance the Intermediate survey of Tankers between 10 and 15 years to also include examination of all ballast tanks, meaning that all ballast tanks will be close up surveyed with 2-3 years intervals from the ship is 10 years old, with the possibility for the surveyor to require thickness measurements and testing of the tanks to ensure the structural integrity of the tanks if necessary.
It is also proposed for the Intermediate survey between 5 and 10 years, to increas the scope from representative to all ballast tanks, a requirement DNV find to strict, and require that we here keep the original text.
If a ballast tank is found to have coating in GOOD condition at the renewal or intermediate survey, a deterioration of the tank beyond structural reliability is very unlikely even if the tank has a common plane boundary to a heated cargo tank.

DNV finds it particularly unreasonable to have this requirement to apply to double hull tankers for the following reasons:
- these ships have double hull and the risk of pollution is here much reduced,
- the double hull is constructed with small spaces giving improved structural reliability,
- almost all double hull tankers below VLLC have heated cargo tanks, and all ballast tanks have common plane boundaries to these tanks, meaning that this requirement will apply to a major part of the tanker fleet in the future,
- the ballast tanks of double hull tankers are so designed that a general examination of these tanks will be identical to a close up survey,
- survey of ballast tanks of double hull tankers will mean either gas freeing of all cargo tanks or at least dropping the inert gas pressure of all cargo tanks in addition to proper airing of all ballast tanks.

Since the single hull tankers will be faced out in the near future, and for clear political reasons, DNV will as a compromise proposal to keep paragraph 2.2.3.1 and 4.2.2.2 in Z 10.1 as amended by Council (ref. IAo) but amend it to not include 2.2.3.1.e, 4.2.2.2.e and last paragraph of 3.2.5.1 in Z10.3 and Z10.4. In addition we request that the original text of 4.2.2.1 is kept.
If BV, ABS and other Members can accept this DNV is willing to drop our reservation presented at C49.
DNV's proposal will then be as follows:

Z10.1:

2.2.3.1: This paragraph can be accepted as is for the reasons stated above.
3.2.5.1: This paragraph is accepted as amended.
4.2.2.2: This paragraph can be accepted as is for reasons stated above.

For other comments to Z10.1 see NVo and NVp.

Z10.3:

2.2.3.1.e to be deleted.
3.2.5.1 delete last paragraph
4.2.2.1 the original text to be kept."For tanks used for water ballast ---"
4.2.2.2.e to be deleted

Z10.4

2.2.3.1e to be deleted
3.2.5.1 delete last paragraph
4.2.2.1 the original text to be kept, "For tanks used for water ballast --"
4.2.2.2.e to be deleted.

For details see attached document where the text for the requirements in Z10.3 and Z10.4 that DNV will accept is stated.

Best Regards

Arve Myklebust
on behalf of
Terje Staalstrom
DNV IACS Council Member
<<Doc1.doc>>

****

Annex 2 to TB (Harmonization Z10s)

WP/SRC Task 114 "Clarify the procedure of verification and signature of the thickness measurement report"

Item No.	Item	ABS	BV[1)]	CCS	CRS	DNV	GL	IRS	KR	LR	NK	RINA	RS
1	**Verification onboard**	**.**											
1.1	Minimum extent of measuring points for direct verification by attending surveyor specified	No	No	No	No	No	No	No	Yes	No	No	Yes	No
1.2	Preliminary TM record to be signed upon completion of the measurements onboard	Yes	Yes [7)]	Yes	No (copy taken)	No[3)]	No[6)]	Yes	Yes	Yes	Yes	No[8)]	No
2	**Final TM report**												
2.1	Signature of all pages in TM record required	No	No	No	Yes	No	Yes	Yes	No	No	No[5)]	Yes	Yes
2.2	Signature of 'cover' ('general particulars') page only	Yes	Yes	Yes	No	Yes	No	No	No[4)]	Yes	Yes	Yes	No
2.3	Measuring points verified by attending surveyor required identified in TM record and signature of the corresponding pages required	No	No	Yes Without signature	Yes	No	No	No	Yes	No	No	No	No

2004-04-20

[1)] Instructions not clear regarding signature of the thickness measurement record

[2)] Signature on front and last page, stamp on all other pages, or signature on each page (IACS TM forms)

[3)] Upon completion of measurements onboard a draft report in electronic format (DNV TM template, including operator's notes as relevant) to be given to attending surveyor

[4)] Signature of cover page, pages of meeting record and pages of attended measuring points

[5)] Each page to be signed in case of 'loose-leaf' type record

[6)] Preliminary TM record has to be passed to the Surveyor, signed by the Operator

[7)] The only measures which the Surveyors can certify exact are those for which that they have seen the results on the screen of the apparatus. That means in fact few points in comparison with the numbers of recorded measures.

8) The Surveyor reviews the TM record for completeness and assessment of TM readings, but no signature required.

Annex 3: **Technical Background**
(May 2005)

UR Z7s and Z10s (Corrosion Prevention System)

1. Objective:

To clarify whether the survey of anodes is a class matter, and if so, whether acceptance criteria for anode should be developed.

2. Method: GPG by correspondence (5037_)

3. Discussion

3.1 BV initiated GPG discussion as follows:

Paris La Défense, 8 Mars 05

1 - We have noticed that, in the draft UR Z's (7.1, 10.1 to 10.5) issued further to the WP/SRC Task 102, the original sentence "......the examination may be limited to a verification that the hard protective coating remains efficient....." has been replaced by ....that the corrosion prevention system remains efficient....". in a number of paragraphs (such as , for instance, Z 7.1, 4.2.3.1 a) ; Z 10.2 4.2.3.3 ;), in line with IMO Res.A744(18).

2 - However, a corrosion prevention system is defined, in the same UR Z's and in IMO Res.A744(18) , as being either a full hard protective coating or a full hard protective coating supplemented by anodes.

3 - The above would mean that the survey of the anodes is a classification matter.

4 - However, whereas coating conditions are defined as good or fair or poor, there are no criteria in the IACS URs and IMO Res. A744(18) for the anodes condition.

5 - Assessing the anodes condition to confirm that they "remain efficient" looks to BV to be a quite difficult task for the ships in service Surveyor.

6 - Member's view and interpretations on the following would consequently be appreciated:

- do Members consider that the above requirements in IACS URs imply that survey of anodes is part of the classification ?
- do Members consider that the above requirements in IMO Res. A 744 (18) imply that survey of anodes is mandatory?
- if yes, what is the acceptance criteria to conclude that the anodes" remain efficient" ?

3.2 The majority of GPG Members replied that they did not include requirements for anodes in their class rules.

LR / ABS / DNV / KR / NK / RINA / RS were of the view that the condition of any anodes fitted should be recorded for information purposes as the survey of anodes is neither a classification matter nor a mandatory requirement in IMO A.744(18) and has no impact on future surveys (5037_LRa**). [**Note; LR further clarified that “Whilst I agree that the performance of anodes is not normally a class matter LR does require that as part of Special Survey on oil tankers : "The attachment to the structure and condition of anodes in tanks are to be examined ." Therefore we cannot say that 'the survey of anodes is not a classification matter'**. 5037_LRb]**

However, GL said that “for GL, anodes are a matter of class and as such are subject to plan approval as well as surveys. In case of missing or worn-out anodes we issue a condition of class”(5037_GLa&b).

CCS advised that its rules have a general requirement relating to anode survey, which is only conducted, through sampling, during construction, docking survey or where there is a definite requirement for the survey of ballast tanks.

NK proposed that the following footnote be added to Z7s and Z10s:
“The survey of anodes is not a classification matter.” No majority support was achieved.

4. Conclusion

RINA suggested to simply amend the definition of "Corrosion Prevention System" in paragraph 1.2.9 of UR Z7 (and, of course, the paragraphs in all the other UR Zs containing the definition of "Corrosion Prevention System") in order to eliminate any reference to anodes. This proposal would leave room for Societies willing to include additional class requirements for anodes to do so in their Rules.

GPG agreed.

RINA proposed amendments to paragraph 1.2.9 of UR Z7 and corresponding paragraphs in all other UR Zs (5037_RIb, 6 April 2005)

1.2.9 Corrosion Prevention System

A corrosion prevention system is normally considered ~~either:~~ a full hard protective coating.
~~.1 a full hard protective coating, or~~
~~.2 a full hard protective coating supplemented by anodes.~~
Hard protective coating is usually to be epoxy coating or equivalent. Other coating systems may be considered acceptable as alternatives provided that they are applied and maintained in compliance with the manufacturer’s specifications.
Where soft coatings have been applied, safe access is to be provided for the surveyor to verify the effectiveness of the coating and to carry out an assessment of the conditions of internal structures which may include spot removal of the coating. When safe access cannot be provided, the soft coating is to be removed.

Annex: Council Chair’s conclusive message.

6 May 2005
Permsec

Annex. (5037_ICb, 15 May 2005)

To : All IACS Council Members
c.c : Mr. R. Leslie, IACS Permanent Secretariat

Ref. Mr G-Y. Han's message IAa dated 6 May 05
Message ICa dated 6 May 05
Admiral R.E. Kramek's message ABb dated 13 May 05

Paris La Défense, 15 May 05

1 - All Members have agreed with the texts attached to Mr Han's message.

2 - Further to ABS comments the reference to anodes is to be deleted in Annex I and in tables IX (IV) and IX(II).

3 - further to ABS questions regarding what IACS plan to do regarding IMO and A.744(18) further to IACS deletion of reference to anodes from the UR Z7's and UR Z10's it is to noted that:

The Item 1.2.9 in UR Z1O.1 and relative items in these URs states
1.2.9 10 Corrosion Prevention System: A corrosion prevention system is normally considered either:
.1 a full hard protective coating, or
.2 a full hard protective coating supplemented by anodes.
Hard Pprotective Ccoating is to usually to be epoxy coating or equivalent. Other coating systems may be considered acceptable as alternatives provided that they are applied and maintained in compliance with the manufacturer's specification.
Where Soft Coatings have been applied, safe access is to be provided for the surveyor to verify the effectiveness of the coating and to carry out an assessment of the conditions of internal structures which may include spot removal of the coating. When safe access cannot be provided, the soft coating is to be removed.

- therefore the anodes are not considered as the main means of protection against the corrosion It is only a supplement;

- there is no provision in UR Z7's and Z10's to evaluate the level efficiency of the anodes;

- there is no specific requirements in case of lack of efficiency of the anodes.

The experience has shown that ballast tanks only protected by anodes are subject to corrosion when the anodes are becoming less efficient.

The anodes are active only when immersed by sea water. Therefore the upper part of the ballast tanks are not protected when the ballast is full of water and the ballast is not protected when it is empty..

The ships operators are reluctant to replace the anodes especially in upper part which request fitting of scaffolding fo welding the anode supports to the structure.

The above arguments justify the reasons why IACS consider that the anodes are not class item.

4 - These arguments can be used by IACS Members attending the WG bulk carriers at MSC 80 to try to obtain deletion of the reference to anodes in A. 744(18).

Best regards,

Bernard Anne
IACS Council Chairman.

Survey Panel Task 22 – Amend applicable URZ7s and Z10s to align Close-Up Survey and Thickness measurements to be carried out at the same time and location allowing for a more structured control of the thickness measurement process.

Technical Background

Z7(Rev.12)
Z7.1(Rev.3)
Z10.1(Rev.13, para.1.4 & 7.1.3)
Z10.2(Rev.18, para. 1.4 & 7.1.3)
Z10.3(Rev.8, para. 1.4 & 7.1.3)
Z10.4(Rev.3, para. 1.4 & 7.1.3)
Z10.5(Rev.2, para. 1.4 & 7.1.3)

1. **Objective**

To amend the applicable URZ7s and Z10s to align Close-Up Survey and Thickness measurements to be carried out at the same time and location allowing for a more structured control of the thickness measurement process.

2. **Background**

IACS QC findings, through audits of numerous Societies, which indicated concerns over Surveyor attendance and control of thickness measurement processes.

3. **Methodology of Work**

Survey Panel members through correspondence.

4. **Discussion**

To align Close-up survey requirements and thickness measurements in the applicable URZ7s and URZ10s, in accordance with PR19, all Panel members agreed through correspondence and a final vote at the fall Survey Panel meeting, that URZ7, Z7.1, Z10.1, Z10.2, Z10.3, Z10.4 and Z10.5 should include in the applicable sections of the noted URs as proposed by the Survey Panel the wording " In any kind of survey, i.e. special, intermediate, annual, or other surveys having the scope of the foregoing ones, thickness measurements of structures in areas where close-up surveys are required, shall be carried out simultaneously with close-ups surveys."

5. Implementation

The Survey Panel is of the view that the Members need 12 months from the adoption date to implement these amendments into their class rules. Assuming that GPG and Council approve to the amendments, the Survey Panel would propose January 2007 as an implementation date.

TECHNICAL BACKGROUND

UR Z7.1 (REV. 4) AND UR Z7 (REV.13)

SURVEY PANEL TASK 39 – Amend URZ7.1 to align with the requirements of URZ10.2 and URZ10.5 in accordance with SOLAS reg. II-I/23-3 and II-1/25 regarding Water level detectors on single hold cargo ships other than bulk carriers, and to propose to IMO that these requirements be included in relevant sections of IMO resolution A.948(23).

1. **Objective**

To amend UR Z7.1 Section 2.6 and 3.3 to include survey requirements related to SOLAS reg. II-I/23-3 and II-I/25 and to propose to IMO that these requirements be included in relevant sections of IMO resolution A.948(23).

2. **Background**

GPG member from LR requested that URZ7.1 should be amended to meet SOLAS regulations II-I/23-3(entry into force :1 January 2007) and II-I/25 (entry into force: 1 January 2009)

3. **Methodology of Work**

Survey Panel

4. **Discussion**

Survey Panel members at the spring 2006 meeting discussed how to address these changes in a similar manner as were carried out in Survey Panel Task 11 for URZ10.2 and Z10.5, for URZ7.1. During the discussion, the member from RINA proposed that URZ7 also be amended to refer to the applicable changes in URZ7.1.
All members agreed and made necessary amendments to URZ7 section 1.1.5 and added note 5 as far as the implementation date.
For URZ7.1 it was agreed that sections 2.6 and 3.3 be added to add these additional requirements.

5. Implementation

The Survey Panel is of the view that the Members need 12 months from the adoption date to implement these amendments into their class rules. Assuming that GPG and Council

approve to the amendments, the Survey Panel would propose July 2007 as an implementation date.

Submitted by Survey Panel Chair,
13 July 2006

Permanent Secretariat note:

- Council approved URZ7.1 Rev.4 and URZ7 Rev.13 on 17 August 2006 (5031fICb).
- In addition to the proposed changes a typographical error was corrected in Table 4 of UR Z7.

Technical Background

URs Z7(Rev.15), Z7.1(Rev.5), Z7.2(Rev.1), Z10.1(Rev.15), Z10.2(Rev.26), Z10.3(Rev. 9), Z10.4(Rev.6), Z10.5(Rev.8) – November 2007

Survey Panel Task 1 – Annual Review of Implementation of IACS Resolutions

1. Objective

To review IACS Resolutions annually and discuss or propose amendments as deemed necessary.

2. Background

This proposed amendment to all URZ7s and URZ 10s was raised by the Panel member from DNV due to Owners crediting tanks concurrently under intermediate and special survey.

3. Methodology of Work

Survey Panel members through correspondence.

4. Discussion

The Panel member from DNV raised the issue of Owners having the ability of crediting spaces and thickness measurements only once in a 54 month interval, due to the availability of concurrent crediting of spaces and thickness measurements due to the flexible time window that is currently allowed between the intermediate survey and the special survey.
After a presentation and discussion lead by the DNV Panel member, all Survey Panel members agreed to the argument given by DNV, and further agreed to make the necessary changes in all URZ7s and URZ10s where Owners are not allowed to concurrently credit surveys and thickness measurements of spaces.

5. Implementation

The Survey Panel is of the view that the Members need 12 months from the adoption date to implement these amendments into their class rules. Assuming that GPG approve to the amendments, the Survey Panel would propose January 2009 as an implementation date.

Submitted by Survey Panel Chairman
22 October 2007

Permanent Secretariat note (December 2007):

During GPG discussion DNV proposed that *"since this matter will be discussed between Owner and Class mainly in connection with the forthcoming Special Survey, DNV would prefer to locate this text, not only as part of Intermediate Survey, but also as a new text for the Special Survey."* This was supported by BV, ABS, RINA and KR.

The revised documents were approved, with DNV's proposal and an implementation date of 1 January 2009, on 15 November 2007 (ref. 7690_IGb).

Technical Background

URs Z7(Rev.16), Z7.1(Rev.6), Z7.2(Rev.2), Z10.1(Rev.16), Z10.2(Rev.27), Z10.3(Rev.11), Z10.4(Rev.7) and Z10.5(Rev.9) - March 2009

Survey Panel Task 62:

A) Harmonization of UR Z10.1, Z10.2, Z10.4 and Z10.5 with UR Z10.3 with respect to items 5.5.4.4 and 5.6.2.

B) Harmonization of UR Z7, Z7.1, Z10.1, Z10.2, Z10.3, Z10.4 and Z10.5 with UR Z7.2 with respect to the definition of the corrosion prevention system and with respect to the footnote 1 related to semi-hard coatings.

C) Harmonization of the definition of Ballast Tank in UR Z7(Rev.14)

1. Objective

A) Amend the texts of items 5.5.4.4 and 5.6.2 in Unified Requirements Z10.1, Z10.2, Z10.4 and Z10.5 in order to align them with those in UR Z10.3, in which they were changed while performing Task 55, whereas in the other UR Z10s they were kept unchanged on the grounds that this change was out of the scope of Task 55.

B) Amend the definition of "Corrosion Prevention System" and include a Footnote 1 related to semi-hard coatings in Unified Requirements Z7, Z7.1, Z10.1, Z10.2, Z10.3, Z10.4 and Z10.5 in order to align them with those adopted in UR Z7.2, when this new UR was issued.

C) Amend UR Z7 (Rev. 14) in all items where the term "Ballast Tank" is used in order to get them harmonized with the definition itself.

2. Background

The task, as regards item A), was triggered by a Member Society, while performing Task 55, on the grounds that this part was out of the scope of the task and then should have been dealt with in a separate task.

The task, as regards item B), was triggered as a consequence of the "New Business action item 2" of the Minutes of the September 2008 Survey Panel meting, for sake of harmonization of the various URZs.

The task, as regards item C), was triggered as a consequence of the "Task 54-Examination of Double Bottom Ballast Tanks at annual surveys" of the Minutes of March 2008 Survey Panel meeting, for sake of harmonization of the definition of Ballast Tank in UR Z7(Rev.14).

3. Discussion

The task was carried out by correspondence. All the amended texts for the affected URs were prepared by the Survey Panel Member who had chaired the PT on Task 55, in accordance with the Form A approved by GPG. In addition to the objectives outlined in the Form A, an amendment was added to item 1.3.1 of UR Z10.2 and UR Z10.5 in which the reference 3.2.3.6 in the last item of the list was replaced by 3.2.3.10 as can be correctly verified in the text.

The amended URs were circulated to all Survey Panel Members for review, comments and agreement. The texts of the URs were unanimously agreed by all Members.

4. Implementation

The Survey Panel is of the view that the Member Societies need at least 12 months from the adoption date to implement these amendments into their class rules/procedures. Therefore, in the first version of all amended URs the following implementation sentence should be proposed:

Changes introduced in Rev .xx are to be uniformly applied by Member Societies and Associates for surveys commenced on or after [not less than 12 months after the adoption by GPG/Council].

Since it is common practice and convenience to have implementation dates either on 1st January or on 1st July of the year, the Survey Panel proposes the 1st July 2010 as implementation date, if GPG/Council approve the URs not later than 30 June 2009.

Submitted by Survey Panel Chairman
28 February 2009

Permanent Secretariat notes (April 2009):

1. The amended URs were approved by GPG on 18 March 2009 (ref. 7718bIGd).
2. During the typesetting process it was noted that para 5.1.5 of UR 7.2 was inconsistent with the amended URs and so following consultation with the Survey Panel this was also amended at this time.
3. Regarding the implementation date, GPG agreed to use 1st July 2010 provided that it was consistently used for the amended URs.

Technical Background for UR Z7.1 Rev.7, July 2011

1. Scope and objectives

Review the requirement for repairs within IACS UR 7 and UR 10 series, in particular the requirement for Prompt and Thorough Repair, with a view to developing wording that would permit a temporary repair and the imposition of a Recommendation/ Condition of Class under specific and controlled circumstances, and in accordance with PR35.

2. Engineering background for technical basis and rationale

There are instances, for example a localised, isolated and very minor hole in a cross-deck strip, at which a suitable temporary repair, for example by welding or doubling, and the imposition of a suitable short term Recommendation/ Condition of Class for permanent repair at a later date, are considered very adequate methodology for dealing with the defect.

Current IACS Requirements in the UR Z7 and Z10 series, for Prompt and Thorough repair, would not permit this to be an option, the defect would have to be permanently Promptly and Thoroughly repaired, which might require removing cargo, moving to a repair berth and staging inner spaces.

Under the Requirements of IACS Procedural Requirement PR 35 the methodology of Temporary Repair and imposition of a suitable short term Recommendation/ Condition of Class for permanent repair at a later date is fully permissible.

3. Source / derivation of the proposed IACS Resolution

Based upon discussion within the IACS Survey Panel.

4. Summary of Changes intended for the revised Resolution:

Following the definition of Prompt and Thorough Repair in the Unified Requirement, a new paragraph is proposed to be added:-

“1.3.3 Where the damage found on structure mentioned in Para. 1.3.1 is isolated and of a localised nature which does not affect the ship's structural integrity, consideration may be given by the surveyor to allow an appropriate temporary repair to restore watertight or weather tight integrity and impose a Recommendation/Condition of Class in accordance with IACS PR 35, with a specific time limit.”

5. Points of discussions or possible discussions

a) The points of discussion are as indicated in Sections 2 and 4 above.

b) Discussion took place on whether to prepare this amendment as a Unified Interpretation of IMO Resolution A.744(18)/UR Z7 and Z10 series, finally it was agreed to make direct amendment to the relevant URs.

c) It is proposed that this amendment be submitted directly to the IMO DE/MSC Committees for consideration of amending directly IMO Res. A744(18)

6. Attachments if any

None

Technical Background for UR Z7.1 Rev.8, Oct 2011

1. Scope and objectives

Double Skin General Dry Cargo Ships are increasingly common and are of a completely different structural configuration to the conventional single skin General Dry Cargo Ship.

The scope and objective was to review and examine UR Z7.1 with a view to adding Double Skin General Dry Cargo Ships to the list of exempted ship types under Para 1.1.1. on the basis that their double skin configuration afforded significantly enhanced protection to the cargo holds.

2. Engineering background for technical basis and rationale

The design of General Dry Cargo Ships has been evolving over the last 20 years. Modern multipurpose general cargo ships are designed around containers configuration, ie with double skin. They are primarily intended to carry other cargoes and only occasionally carry containers. However, because of the double skin configuration the risks associated with carriage of other cargoes are significantly lower than for an older single skin general cargo ship (the side shell and frames are protected from the impact of cargo handling by the double skin).
UR Z7.1 was introduced in June 2002 (as Z10.6) and focussed on traditional General Cargo Ship Construction, with tween-decks and single skin. The drawings (Figs 1 and 2) of Z7.1 indicate this structural configuration.
IMO Resolution MSC 277(85) Para 1.6.1 also makes the distinction that double-skin general dry cargo ships are of significantly different construction from conventional general dry cargo ships.
The Survey Panel is of the view that the traditional risks associated with the single skin configuration of General Cargo Ship are mitigated in the double-skin design, and as such, they should be exempted from the requirements of UR Z7.1, given their strong similarity to Container Ship design.

3. Source / derivation of the proposed IACS Resolution

IACS UR Z7.1

4. Summary of Changes intended for the revised Resolution:

In IACS UR Z7.1, para 1.1.1, the existing list of ship types exempted from the requirements of UR Z7.1 is to be augmented by the addition of:-

- general dry cargo ships of double side-skin construction, with double side-skin extending for the entire length of the cargo area, and for the entire height of the cargo hold to the upper deck.

5. Points of discussions or possible discussions

Discussion was held on the following aspects:-

a) The extent of double skin required – it was agreed that this would apply only to General Cargo Ships with complete double-skin for the entire length and height of the cargo area.
b) River-Sea Navigation ships – it was agreed that these ship types did not form a specific sub-type of the General Cargo Ship group and that all General Cargo Ships have some river-sea capability. Pure river navigation general cargo ships were considered outside the remit of IACS.
c) The carriage of bulk cargoes aboard such ships was considered in view of the propensity for grab and other damages associated with these cargoes, however, general opinion was that the double skin arrangements mitigated this.

6. Attachments if any

None