***Query No. 31***

***Subject:*** ***Determination of discount rate for calculating value in use for impairment of assets as per AS 28.***[1]

## A. Facts of the Case

1. A company (hereinafter referred to as the 'company'), a public sector enterprise, is the largest shipping company in India owning and operating about 80 ships in India as well as in international waters. The company owns fleet of ships consisting of various types and of different sizes to cater to diverse business requirements. For the company, every ship is a cash generating unit (CGU). The operating life of a ship owned by the company is normally 25 years.

2. The querist has stated that as required by Accounting Standard (AS) 28, 'Impairment of Assets', valuation of each ship is carried out through an international firm to determine its selling price as on 31st March every year. In case the selling price is less than the written down value (WDV) of a particular ship, net cash inflows for the remaining life of that ship are estimated keeping in mind cyclical nature of the industry. The net cash inflows for the first five years are based on the charter hire rates projected by the internationally acknowledged organisation. For the subsequent years of balance life of the vessel, such projections are not available and charter hire rates are estimated by the management keeping in view the cyclical nature of shipping industry. These net cash inflows are then discounted @ Weighted Average Cost of Capital (WACC) of the company for that particular year using Capital Asset Pricing Model (CAPM) to arrive at Net Present Value (NPV) of future cash inflows. In case the NPV of future inflows is less than the WDV of a ship, provision is made for impairment of that ship. The company has been following this practice of ascertaining impairment loss, if any, consistently for the last few years after AS 28 was made mandatory for the companies. The statutory auditors every year carry out the audit of the company's impairment exercise as mentioned above to confirm that same is as per the provisions of AS 28.

3. The company followed the same procedure for determining impairment loss in the financial year 2012-13 also. The issue of how the company carried out impairment exercise was discussed in detail with the statutory auditors. During discussions, the statutory auditors accepted the company's estimates of future cash flows and working of WACC using Capital Asset Pricing Model. However, they pointed out that the company has not complied with paragraphs 50 and 51 of AS 28 pertaining to the discounting rate applied to the future cash flows. The observation of the statutory auditor was as follows:

> *"On the review of the Report on the implementation of AS 28 received today evening we state as under:*
>
> > *On our understanding of AS 28 and as per the statement given by the management expert on discount rate (on page 6 of the report) which states that "For impairment of an individual asset or portfolio of assets, the discount rate is the rate the*

[1] Opinion finalised by the Committee on 11.4.2014.

*company would pay in a current market transaction to borrow money to buy that specific asset or portfolio."*

*Also vide paragraph 49, AS 28 states " The purpose is to estimate, as far as possible, a market assessment of:*

*(a) the time value of money for the periods until the end of the asset's useful life; and*
*(b) the risks that the future cash flows will differ in amount or timing from estimates.*

*The Management expert has stated that "As informed, the rate was 6%. Hence a rate of 6% was considered ..." which is WACC of the Corporation.*

*Further, paragraphs 50 and 51 of AS 28 state as follows:*

*"50. As a starting point, the enterprise may take into account the following rates:*

*(a) the enterprise's weighted average cost of capital determined using techniques such as the Capital Asset Pricing Model;*

*(b) the enterprise's incremental borrowing rate; and*

*(c) other market borrowing rates.*

*51. These rates are adjusted:*

*(a) to reflect the way that the market would assess the specific risks associated with the projected cash flows; and*

*(b) to exclude risks that are not relevant to the projected cash flows.*

*…"*

*In view of the above requirement of AS 28, kindly reconsider the discount rate which would be justifiable and acceptable to all the interested parties."* (Emphasis supplied by the querist.) (Copy of audit query has been supplied by the querist for the perusal of the Committee.)

4. On the auditors' observation, the management conveyed to them that it has an option of taking WACC as discounting rate as per paragraph 50 of AS 28 and also explained the reasons why the discounting rate, viz., WACC does not need further adjustment for various risks as stated in paragraph 51 of AS 28. The management also submitted to them a note dated 25.05.2013 (a copy of which has been supplied by the querist for the perusal of the Committee) on how the company has complied with AS 28. Despite this, the statutory auditors qualified their report stating that *"The company has not complied with the requirements of AS 28 - Impairment of Assets, issued by the Institute of Chartered Accountants of India (ICAI) the effect of which is unascertainable"*. The statutory auditors have not provided clear description and specific details as

to which paragraphs of AS 28 have not been complied with. It may appear to a reader that the company has not carried out impairment exercise at all. (Emphasis supplied by the querist.)

5. In this connection, the querist has drawn the attention of the Committee to paragraphs 50 and 51 of AS 28. As per paragraph 50 of AS 28, the enterprise can take into account enterprise's WACC determined using techniques, such as, CAPM. The company has consistently done the same during the previous years. Further, as per paragraph 51 of AS 28, the above rate is to be adjusted:

(a) to reflect the way that market would assess the specific risks associated with the projected cash flows; and

(b) to exclude risks that are not relevant to the projected cash flows.

Consideration is also given to risks such as country risk, currency risk, price risk and cash flow risk.

6. The querist has also stated that the company has already taken into account aforesaid risks while projecting future cash flows and finds no reason to make adjustments to WACC as stated below:

*A) Country risk:* Country risk refers to the risk of investing in a country, dependent on changes in the business environment that may adversely affect operating profits or the value of assets in a specific country. For example, financial factors such as currency controls, devaluation or regulatory changes, or stability factors such as mass riots, civil war and other potential events contribute to companies' operational risks. Ships are moving assets. Freight / charter hire rates are determined by international supply and demand. India is a democratic country and has liberal economic policies. India's rating by international credit rating agencies has been certified as ‘stable’. The company does not foresee any development which affects stability of India, e.g. mass riots, civil war, etc. Since there is no country risk involved, no adjustment is felt necessary in WACC.

*B) Currency Risk:* A form of risk that arises from the change in price of one currency against another. The greater part of the company’s revenue is booked and earned in USD as per standard shipping practice. The foreign currency earned is deposited in various bank accounts in foreign countries. This takes care of the company’s expenditure in foreign currencies and creates a natural hedge against possible currency fluctuations. In view of this, no currency risk is envisaged in future cash flows and therefore, no adjustment is required in WACC.

*C) Price Risk:* There is a risk that freight / charter hire rates may go down in future. Shipping is a cyclical industry and freight / charter hire rates depend upon demand for and supply of ships available in the market. The rates go up and down as and when tonnage available in the market goes down or up. Keeping this factor in mind, projected cash flows were adjusted, i.e., increased in some years and reduced in some years. The operating life of a ship is long, i.e., 25 years. Moreover, the company owns diversified fleet of bulk carriers, tankers, offshore supply vessels, chemical carriers, etc. which operate in different segments of markets (Indian as well as International) and this spreads the price risk as all segments may not experience price fluctuation at the same time or of the same level. Thus,

it is not felt that further adjustment is necessary in discounting rate as the price risk is already covered in projected cash flows.

*D) Cash flow risk:* It is the risk that a company's available cash will not be sufficient to meet its financial obligations. The company's operations in the past two decades have always made substantial cash profits and never faced any cash flow problem. Despite operational losses in the years 2011-12 and 2012-13, the company generated enough cash to meet its financial obligations. The Internal Rate of Return (IRR) of ships scrapped during last 3 years has been between 9 to 14 percent substantiating the fact that historically, the actual net cash inflows during ships' lifetime are much more than the cost of the vessel. With the shipping industry, which is dependent on international economy, expected to turn around in coming 1-2 years, the company expects that the cash flows will improve significantly in future. Since no cash flow risk is foreseen, no adjustment is felt necessary in discounting rate.

7. The querist has further referred to paragraph 47 of AS 28 which, inter alia, states that ***"The discount rate(s) should not reflect risks for which future cash flow estimates have been adjusted."*** As explained above, the company has ensured to adjust future cash flow estimates to reflect possible risks, viz., currency and price. It is for this reason that discounting rate adopted by the company, viz., WACC for the year 2012-13 does not need any adjustment to reflect these risks again. With the above clarification, the company feels that it has complied with the provisions of AS 28 in its letter and spirit. Since the statutory auditors have given a serious qualification on the accounts of the company on non-compliance of an important Accounting Standard like AS 28 without providing specific reason, the management considers it a very serious issue particularly when the same auditors audited the earlier two years' accounts and did not qualify even though the same methodology was adopted for calculation.

## B. Query

8. In the light of the above, the querist has sought the opinion of the Expert Advisory Committee on the following issues:

(i) Whether the company has complied with paragraphs 50 and 51 of AS 28 by adopting WACC as discount rate.

(ii) Whether statutory auditors' qualification, "the company has not complied with the requirements of AS 28 - Impairment of Assets, issued by the ICAI the effect of which is unascertainable" without providing clear description and specific details as to which clauses of AS 28 have not been complied with is appropriate.

## C. Points considered by the Committee

9. The Committee notes that the basic issue raised in the query relates to determination of discount rate to be used for determining value in use as per AS 28. The Committee has, therefore, considered only this issue raised by the querist in paragraph 8 above and has not examined any other issues that may be contained in the Facts of the Case such as, identification of CGU, determination of cash flows, correctness in determination of WACC, whether there existed

indicators for impairment as per AS 28, etc. The Committee also presumes from the Facts of the Case that the asset's value in use materially exceeds its net selling price.

10. The Committee notes that in the extant case, WACC has been calculated by the company using CAPM. The Committee also notes that ordinarily WACC is calculated by assigning weights to the rate of return on debt capital and rate of return on equity capital. Under CAPM, return on equity is an estimate of an equity investor's required rate of return for a given risk level associated with an investment and the same is arrived at by considering the risk free rate of return and market risk premium adjusted by systematic risk. As regards determination of discount rate to be applied to future cash flows for calculating value in use, the Committee notes the following paragraphs of Accounting Standard (AS) 28 'Impairment of Assets', notified under the Companies (Accounting Standards) Rules, 2006:

> ***"47. The discount rate(s) should be a pre tax rate(s) that reflect(s) current market assessments of the time value of money and the risks specific to the asset. The discount rate(s) should not reflect risks for which future cash flow estimates have been adjusted.***
>
> 48. A rate that reflects current market assessments of the time value of money and the risks specific to the asset is the return that investors would require if they were to choose an investment that would generate cash flows of amounts, timing and risk profile equivalent to those that the enterprise expects to derive from the asset. This rate is estimated from the rate implicit transactions for similar assets or from the weighted average cost of capital of a listed enterprise that has a single asset (or a portfolio of assets) similar in terms of service potential and risks to the asset under review.
>
> 49. When an asset-specific rate is not directly available from the market, an enterprise uses other bases to estimate the discount rate. The purpose is to estimate, as far as possible, a market assessment of:
>
> (a) the time value of money for the periods until the end of the asset's useful life; and
> (b) the risks that the future cash flows will differ in amount or timing from estimates.
>
> 50. As a starting point, the enterprise may take into account the following rates:
>
> (a) the enterprise's weighted average cost of capital determined using techniques such as the Capital Asset Pricing Model;
>
> (b) the enterprise's incremental borrowing rate; and
>
> (c) other market borrowing rates.
>
> 51. These rates are adjusted:
>
> (a) to reflect the way that the market would assess the specific risks associated with the projected cash flows; and

(b) to exclude risks that are not relevant to the projected cash flows.

Consideration is given to risks such as country risk, currency risk, price risk and cash flow risk.

52. To avoid double counting, the discount rate does not reflect risks for which future cash flow estimates have been adjusted.

53. The discount rate is independent of the enterprise's capital structure and the way the enterprise financed the purchase of the asset because the future cash flows expected to arise from an asset do not depend on the way in which the enterprise financed the purchase of the asset."

From the above, the Committee notes that the discount rate to be applied should be an estimate of the rate of return that the market would expect on an equally risky investment. This rate is estimated from the rate implicit in current market transactions for similar assets or from WACC of a listed enterprise that has a single asset (or a portfolio of assets) similar in terms of service potential and risks to the asset under review as per paragraph 48 of AS 28. Thus, the Committee is of the view that determination of discount rate is a matter of estimation and judgement considering various factors related to the assessment of the time value of money and risks specific to the asset under review. In the absence of the aforesaid rate, the company may use its WACC as the discount rate, as adjusted to reflect the way that the market would assess the specific risks associated with the projected cash flows and to exclude risks that are not relevant to the projected cash flows, as per the requirements of paragraph 51 of AS 28. The Committee is further of the view that while using the company's own WACC as the discount rate, there are certain considerations including the following that should also be kept in mind:

(i) WACC is a post-tax rate and AS 28 requires to use a pre-tax rate for determining value in use. Accordingly, it should be adjusted to a pre-tax basis.

(ii) Company's own WACC is based on its capital structure which may be different from the typical capital structure of market participants.

(iii) Discount rate as per AS 28 should reflect the risks specific to the asset and not the risks relating to the entity as a whole.

As regards adjustment of discount rate for various risks such as, currency risk, price risk, country risk, cash flow risks, etc., the Committee notes that as per the provisions of AS 28, the effect of the variability of cash flows can be reflected in either of the two ways: (i) the expected value of cash flows can be adjusted for risk and the adjusted figure (the certainty equivalent) discounted at a risk-free rate, or (ii) the expected value of cash flows can be discounted at a risk-adjusted rate. Thus, the discount rate should not reflect risks for which future cash flow estimates have been adjusted.

11. The Committee notes from the Facts of the Case that the querist has also analysed various risk factors that have been considered while determining projected cash flows (refer paragraph 6 above). At the outset, the Committee wishes to point out that since country risk, currency risk, price risk and cash flow risks have not been explicitly explained in AS 28, there may be various other factors related to these risks apart from what has been explained by the querist in paragraph 6 above. Further, for evaluation of various risks while determining future cash flows, various factors need to be considered in the view of the Committee. For example, the querist has stated that the greater part of the company's revenue is booked and earned in USD, whereas the expenditure is incurred in various foreign currencies in which the company is operating and accordingly, it is stated that this creates a natural hedge against possible currency fluctuations and in view of this, no currency risk is envisaged. The Committee is of the view that just due to earning a greater part of the company's revenue in USD does not necessarily create a natural hedge against foreign currency fluctuations for the company which is operating in various countries and also earning and incurring expenditure in the currencies of those countries. Accordingly, the risk from such possible currency fluctuations also needs adjustment in the future cash flows or the discount rate, if material. Similarly, while evaluating country risk, it is not only the risk of the country in which the company is domiciled but also the risks prevailing in the countries in which the company operates should be considered.

12. With regard to the auditors' qualification without providing clear description and specific details, the Committee notes paragraphs 16 and 17 of Standard on Auditing (SA) 705, 'Modifications to the Opinion in the Independent Audition's Report', which is stated below:

> "16. When the auditor modifies the opinion on the financial statements, the auditor shall, in addition to the specific elements required by the SA 700 (Revised), include a paragraph in the auditor's report that provides a description of the matter giving rise to the modification. The auditor shall place this paragraph immediately before the opinion paragraph in the auditor's report and use the heading "*Basis for Qualified Opinion*", "*Basis for Adverse Opinion*", or "*Basis for Disclaimer of Opinion*", as appropriate. ...
>
> 17. If there is a material misstatement of the financial statements that relates to specific amounts in the financial statements (including quantitative disclosures), the auditor shall include in the basis for modification paragraph a description and quantification of the financial effects of the misstatement, unless impracticable. If it is not practicable to quantify the financial effects, the auditor shall so state in the basis for modification paragraph. ..."

From the above, the Committee is of the view that the auditor should include a paragraph in the auditor's report that provides a description of the matter giving rise to the modification (qualification).

## D. Opinion

13. On the basis of the above, the Committee is of the following opinion on the issues raised by the querist in paragraph 8 above:

(i) Determination of discount rate is a matter of estimation and judgement considering various factors related to the assessment of the time value of money and risks specific to the asset under review. Therefore, the Committee is of the opinion that if the company has taken into account all the factors related to determination of discount rate as discussed in paragraphs 10 and 11 above, the company would be correct.

(ii) With regard to the auditor's qualification without providing clear description and specific details, the Committee is of the view that the auditor should include a paragraph in the auditor's report that provides a description of the matter giving rise to the modification (qualification), in accordance with paragraphs 16 and 17 of SA 705.