



क्षेत्रीय प्रशिक्षण संस्थान, मुंबई Regional Training Institute, Mumbai



निगमित अभिशासन और वित्त, वाणिज्यिक लेखापरीक्षा और स्वायत्त निकायों के लेखापरीक्षा पर ज्ञान केंद्र

Knowledge Centre for Corporate Governance and Finance,
Commercial Audit and Audit of Autonomous Bodies

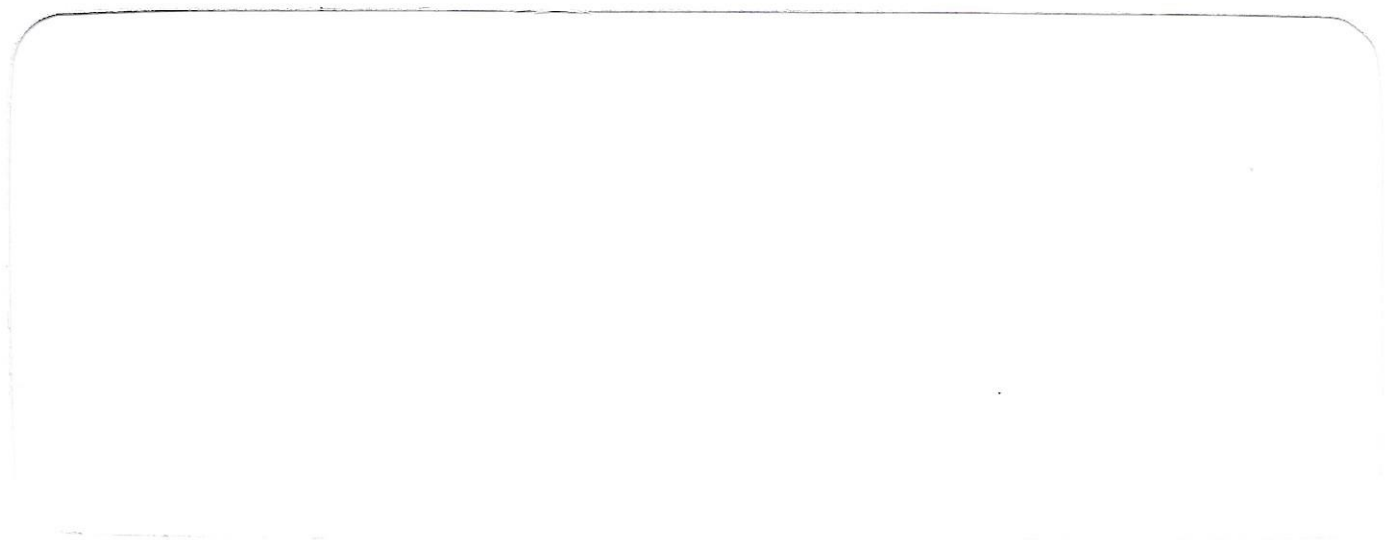
(भारतीय लेखापरीक्षा और लेखा विभाग)
(Indian Audit and Accounts Department)

Case Study on Commercial Audit - Loss due to non-compliance of safety standards

December 2020

Regional Training Institute, Mumbai

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Commercial Audit -
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From the Director General's desk

Regional Training Institute, Mumbai has been designated as Knowledge Centre for Corporate Governance, Finance and Commercial Audit from April 2015 and Audit of Autonomous Bodies since May 2020. In pursuit of excellence in our assigned areas of Knowledge Centre activities, we are bringing out interesting cases studies thereon.


We have drafted our third case study in the new format envisaged by Headquarters. It is on Commercial Audit and is titled "Loss due to non-compliance of safety standards", inspired by Para 5.8 of Report No. 2 of 2019 on PSUs (Social, General and Economic Sectors) on Government of Haryana for the year ended 31 March 2018. For the purpose of the case-let, which projects an imaginary scenario, some more elements like legal implications have been cited, which may not have been relevant in the real-life case.

Usually, when we talk of issuing audit observations on matters like compliance with environmental protection, safety and governance and the need to follow norms thereon, one argument which comes up, is lack of pecuniary impact. Government Audit, by its very nature is one that holds a mirror to the Executive Government and its agencies and at the same time, gives the Legislature competent, a vista on the performance of the Executive. It is implicit that the Executive needs to comply with law established by or under the Constitution, in the form of statute laid down by the Legislature competent, as it reflects the will of the people in a democracy. Similarly, every agency of the Executive too needs to adhere to norms set by the Executive, subject to the will of the Legislature competent, and thereby submit to the interests of the welfare of the people. A PSU, with a mix of separate legal status and implicit government backing, is expected to behave as a model citizen. A PSU cannot seek to absolve itself of its obligation to comply with law established. Similarly, Audit cannot brook any breaches in this regard, on grounds cited by a PSU, such as convenience or ignorance of law or on account of plain complacency or recalcitrance. Hence, it is not the pecuniary, but the salutary and reputational implications of a PSU's breach of law and norms of right conduct, that would have to be seen in Audit. These have important implications on outcome of any government activity and on how ethically it is carried out and how it is perceived to be carried out. Here, audit observations detect significant potential risk factors. Such detection plays a preventive role *vis-à-vis* major catastrophes.

There is an implicit trust placed by citizens that PSUs assigned tasks like bridge construction would follow all laws and norms to ensure their safety. Hence, even one-off instances with nil or relatively smaller monetary effect, concerned with matters of breaches in aspects such as safety, may have to be highlighted in this regard, in the same manner as fraud or corruption, as they involve matters concerning the very safety and security of life and property of common citizens, which are invaluable. It is to this end that a para concerning breach of safety norms has been selected for preparation of this case study.

We have incorporated suggestions of the peer review team on the case study. I am confident that the readers would benefit from the end result.

RTI, Mumbai
10 December 2020


(Alka Rehani Bhardwaj)
Director General
RTI, Mumbai

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Case Summary

The case study is in the form of a fictional story, which involves solving a problem – what should be the scope of an audit observation, considering its legal, financial and salutary implications, from the point of an Assistant Audit Officer. It involves views as to whether a one-off loss is material to be commented upon.

The story is seen from the eyes of the protagonist, Shri Chandrakant, an Assistant Audit Officer of the audit party. Shri Mathew, Senior Audit Officer and Shri Inderjeet, Manager (Operations) of audited company are other characters in this case study.

Disclaimer: The case study has been designed as a story taking place during an audit of a PSU and is meant to provide a glimpse into a case of audit of bridge construction. But, the persons, activities and attitudes attributed to them, names, etc. are either fictional or are partly adapted from/ inspired by disparate instances to suit the purpose of appreciation of challenges, which an officer may face in conducting such audits. This is only a guide to be used in training and should not be considered as being on par with audit reports or regulations or manuals or other instructions for audit.

Case Story**Commercial Audit- Loss due to non-compliance of safety standards****Opening Paragraph**

Shri Mathew, Senior Audit Officer and his Assistant Audit Officer, Shri Chandrakant, were assigned the compliance audit of a company engaged in construction of roads and bridges in the State. The Company had completed 50 projects during the period of audit. The audit party found that all projects were completed well within budget and within time. This included a steel bridge over 'BSB canal'. What captured Shri Chandrakant's eye was that even after commissioning the bridge, the company had to incur cost on a diversion road and for a new bridge on the location, within just over 2 years of constructing the old one. This surprised him, as a bridge built by a PSU should not have needed replacement within such a short span of time.

Background or Context

The facts of the case were as under.

- (i) A steel bridge was constructed in April 2016 at a cost of Rs.2.01 crore, with a load carrying capacity of 100 MT.

- (ii) In May 2016, a heavy vehicle, carrying goods with a gross weight in excess of the carrying capacity of the bridge passed through it and damaged the bridge completely.
- (iii) A diversion road was built at Rs.26.56 lakh for smooth flow of traffic. The steel bridge was dismantled at Rs.5.49 lakh, sold for scrap at Rs.28.19 lakh and a new concrete bridge was constructed at Rs.1.20 crore in June 2018.
- (iv) A committee was appointed by the Company to look into the matter, who in July 2016, observed that the transporter was at fault as he did not follow approved route and suggested that the bridge should have information display about its weight bearing capacity, vertical clearance and heavy-duty height gauge on both sides to prevent over-dimensioned vehicles from plying on the bridge.
- (v) Shri Chandrakant also found that Ministry of Road Transport and Highways (MoRTH), Government of India had issued guidelines, hosted on its website, in January 2013, for restricting load on various bridges and required that bridge building authorities should display details of the bridge and load bearing capacity.
- (vi) Shri Chandrakant reckoned a loss of Rs.2.05 crore, by adding Rs.5.49 lakh and Rs.26.56 lakh to Rs.2.01 crore, being cost of the original steel bridge, net of scrap of Rs.28.19 lakh and flagged the case to Shri Mathew.
- (vii) Shri Mathew read the draft observation and asked why the amount of loss should not be Rs.1.24 crore, as the cost of the replacement bridge (Rs.1.20 crore) and not the cost of the steel bridge lost (Rs.2.01 crore) should be taken. Shri Mathew felt that the loss is the amount incurred for rectifying the damage and restoring the bridge to its earlier condition. Hence, past costs should be treated as sunk costs, which are not relevant for decision making and only costs incurred for restoration should be taken.
- (viii) Regarding the other points, Shri Mathew and Shri Chandrakant met Shri Inderjeet, Manager (Operations) of the Company for discussion.

Main Story

The discussions were on these lines.

Shri Mathew: Taking a balanced view, all your projects have been completed on time and within budget. What concerns us is the case of replacement of the steel bridge on 'BSB canal'.

Shri Inderjeet: Thank You for taking a balanced view of our performance. Most auditors only comment on adverse issues. Since as per your own assessment, there is just one adverse case among the 50 projects worth Rs.1300 crore that we have taken up, I am sure that being a one-off case, you do not perceive it as a systemic defect that runs across all transactions, that is significant enough to report. It was a one-off case occasioned by an unpredictable event that happened subsequent to construction.

Shri Chandrakant: Sir, as part of our audit, we do look at and comment on significant exceptional and outlier cases.

Shri Mathew: Coming to the case that we need to discuss, your own committee has ruled that the transporter was at fault as he did not follow approved route and suggested that the bridge should have information display about its weight bearing capacity, vertical clearance and heavy-duty height gauge on both sides to prevent over-dimensioned vehicles from plying on the bridge. Why were the norms cited by the committee not adopted by the Company?

Shri Inderjeet: Regarding the information display about its weight bearing capacity, vertical clearance and heavy-duty height gauge on both sides to prevent over-dimensioned vehicles from plying on the bridge, the committee suggested these in July 2016, while we constructed the bridge in April 2016. We did not have the benefit of hindsight.

Shri Mathew: What about the MoRTH guidelines of January 2013 for restricting load on various bridges and requiring that bridge building authorities should display details of the bridge and load bearing capacity?

Shri Inderjeet: The MoRTH guidelines of January 2013 clearly lay down the need to take permissions for transport of such heavy loads on such heavy vehicles on specific routes and provides for recovery of damages from transporter in case of breach. As the committee states, the transporter

had not followed the approved route. In fact, the Central Government issued these guidelines and our Department has not circulated them.

Shri Mathew: Could you tell us whether any action was taken for recovery of damages from transporter?

Shri Inderjeet: Yes. We have proceeded against the transporter. I will follow up with our legal section, so that they can look into it.

Shri Mathew: Why was the steel bridge ultimately replaced by a concrete one?

Shri Inderjeet: It was a cheaper replacement. It would be rust-proof, though built over a canal. It serves the same purpose.

Shri Mathew: Then, why was steel chosen for construction in the first instance? Is their weight-bearing capacity the same?

Shri Inderjeet: Weight-bearing capacity is the same. But steel has some advantages like being light-weight and the damaged portion can be scrapped.

Shri Mathew: OK. We will keep your views in mind.

(The audit party returned to their cabin).

The SAO and the AAO discussed the matter amongst themselves as follows.

Shri Mathew: I am glad you handled the balanced view argument well with the emphasis on outliers.

Shri Chandrakant: An auditor's silence conveys different meanings to different segments. On the one hand, we have auditing theory which talks about reasonable assurance and limited assurance. In accounts audit of companies, we issue 'Nil' comments certificates when we do not find anything significant to add to the CA's audit. When we do not comment on the accounts, it doesn't necessarily mean that everything is clean. It is only that our sample may not have covered other transactions or that we do not find it necessary to add to the CA's report.

At the same time, at a practical level, public perception is that if audit doesn't point out anything, then the company is functioning smoothly. But, where a company is facing bad press, the general public may opine that audit is not up to the mark.

We already have time-bound audits, norms of materiality and so on, based on which we may have to adopt small samples and many observations are not escalated into audit reports. Secondly, our job is not to praise the Executive, which is the task of the information and publicity departments of the Executive government. Rather, we have to be critical about detected areas of non-compliance, so that the Legislature competent can exercise supervision thereon. If we interpret balanced view as considering overall performance of audited entity, I feel that we would not be able to point out significant instances of deviations, *albeit* one-off ones, which is in fact the public expectation from Audit. In compliance¹ and performance² audit, definitely, we have to speak our mind and not, in effect, give them a discharge, by remaining silent, merely because the issue is not widespread. Sir, I believe balanced reporting is more about reporting based on both set of facts, those pointing out to the issues and those pointing out to the genuine efforts made by the entity to resolve them. It may not be necessary to go ahead and report on good practices. In any case, even a single instance involving possible threat to human life, as in case of road safety, should in my view, be highlighted.

Shri Mathew: I can only say that you are entitled to your views. But the effort is always to integrate theory and practice in audit. But on one thing, I agree with you, that balanced reporting does not mean that we should stop commenting on outliers, especially those with legal, safety or fraud and corruption implications. In my native place, Kerala, there was a case of poor construction of a flyover recently, which was rendered unusable within 3 years of construction³. Day in and day out, we hear news of human casualties in bridge collapses. We hear of new or replacement bridges being

¹ Para 182 of ISSAI 4000 Compliance Audit Standard states- For a balanced and objective view, the evaluation process entails considering all evidence provided in relation to the audit findings.

² Para 121 of ISSAI 3000 Performance Audit Standard states- Being balanced means that the audit report needs to be impartial in content and tone. All audit evidence needs to be presented in an unbiased manner. The auditor needs to be aware of the risk of exaggeration and overemphasis of deficient performance. The auditor needs to explain causes and the consequences of the problems in the audit report because it will allow the reader to better understand the significance of the problem. This will in turn encourage corrective action and lead to improvements by the audited entity.

³ <https://www.indiatoday.in/india/story/kerala-palarivattom-flyover-rebuilt-less-than-3-years-after-inauguration-1599684-2019-09-16> (As of 2 December 2020 - 16:50 hours)

constructed out of public money rendered partly or entirely unusable again and again. I personally feel, it would be our service to society and to humanity if such cases are highlighted. We may not be able to control the load of vehicles that run on a bridge. But, considering these realities, we can definitely insist on safeguards to forewarn users and to provide for construction robust enough to withstand a much larger margin of weight than that originally planned.

Coming to the point on hand, having worked in Report Section in the past. I think that answers to the following queries would be sought of us. Be prepared.

1. What is the basis for whether the loss should be Rs.2.05 crore or Rs.1.24 crore, especially when steel was replaced by concrete?
2. What is your view on commenting on one-off cases, especially when the amount is too small, considering overall transactions and the need for balanced reporting?
3. What is your view on the adequacy of legal action against the transporter?
4. Audit criterion adopted seems to be committee's observations. If we cite committee's suggestions of July 2016 for commenting on a construction completed in April 2016, will this not result in benefitting from hindsight?
5. Another audit criterion adopted seems to be MoRTH guidelines (*relevant extracts enclosed as Exhibit-I*), which are only hosted by Central Government on the website. Would they apply to a State PSU, if they have not been duly circulated?
6. My personal conviction notwithstanding, the emphasis of the para seems to be more on bridge safety than on the financial impact. Should Audit concern itself with this? Is it within our scope and mandate?

As Shri Chandrakant, what replies would you give on these matters?

Teaching Notes

1. Synopsis

The case study intends to convey the view that a PSU may also be involved in projects that are usually associated with Civil departments like PWD and would have to be audited from the same point of view. Even one-off cases of poor construction, inadequate safeguards or non-compliance with norms may result in huge damages and threaten human life and property. The case intends to provide solutions through the views of the protagonist as to what could be the lapses which could be pointed out and the loss sustained on the entire episode.

2. Teaching Objectives

To give participants a realistic portrayal of discussions and views which a commercial audit or works audit team could face while auditing an infrastructure construction project/ company.

3. Learning Objectives

The learning objectives envisaged through discussion of this case study are to:

1. Assess measurement of loss and damages
2. Decide on whether to point out one-off cases in audit
3. Examine if all possible remedies have been exhausted to mitigate damages
4. See how to avoid perceptions of benefitting from hindsight
5. Learn how to select and defend appropriate audit criteria
6. See if Audit can step into the realm of commenting on matters like social outcome of failed infrastructural projects.

4. Training programme in which this case-let can be used

Commercial Audit, audit of construction and public infrastructure companies, as also in civil works audit.

5. Target Audience

Auditors to SAOs of Commercial Audit and Works Audit

6. Protagonist

The protagonist of this story is Shri Chandrakant, AAO, who has to prepare for potential queries from report section on a proposed audit observation.

7. Relevant readings

1. Circulars and guidance on construction of bridges issued by central⁴ and state departments and agencies
2. Reports of internal committees on progress of projects and on damage control measures
3. Media reports on instances of damages to public works
4. Records on repeated works undertaken with respect to same project within a short span of time
5. ISSAI 3000 Performance Audit Standard
6. ISSAI 4000 Compliance Audit Standard

8. Teaching Plan and analysis

The participants can be organised into groups of 4-5 members each.

8.1 Case Plan

Reading Time:	0-15 minutes
Introduction and setting up the situation:	15-25 minutes
Discussion of Background:	25-40 minutes
Evaluating the alternatives:	40-55 minutes
Discussion of ‘what happened’:	55-65 minutes
Case wrap-up takeaways:	<u>65-75 minutes</u>
Total:	<u>75 minutes</u>

8.1.1 Introduction and setting up the situation

Sl. No.	Requirements	Compliance
1.	What is the situation	It is a situation involving the need to prepare for queries that may be raised by report section on a prospective audit observation
2.	Why is it serious/important?	It has implications involving road safety and damages to public property. It could set a precedent on commenting on one-off cases and on matters with perceived benefit of hindsight.
3.	Who are the stakeholders or parties involved?	The immediately proximate parties involved are the audit party, the company, report section, the transporter and users or persons located or travelling near bridges. Later, it may involve the State Reports Wing (Commercial Audit Section), HQ, CAG, State Legislature, Committee on Public Undertakings, the general public and so on, depending on whether the matter is escalated.
4.	Who is the main protagonist?	It is Chandrakant, the AAO.

⁴ Reference can be made to the website of Ministry of Road Transport and Highways, Government of India- <https://morth.nic.in/> in this regard.

Sl. No.	Requirements	Compliance
5.	What is the dilemma that he/she is faced with?	He has to prepare for potential queries from report section on a proposed audit observation. The replies have implications on quantification and sustenance of the para, both in terms of being one-off and in terms of materiality of amount. The aspect of hindsight needs to be addressed satisfactorily. It also has social implications. The dilemma is whether these aspects will be good enough to be considered for the report, lest it may set a precedent for not including such observations.

8.1.2 Discussion of Background

Sl. No.	Requirements	Compliance
1.	Issues faced by the protagonist, and its causes.	The issue faced by the protagonist is to see how to prepare for potential queries from report section on a proposed audit observation. The protagonist's audit criterion may be viewed as one based on hindsight. The observation may be rejected as an aberration in a company that has performed well within budget and timelines.
2.	Stepping back a little, what, if anything, could have been done to avert the crisis?	As far as audit is concerned, sensitisation of personnel on the significance of observations based on social outcome and propriety, as opposed to money value and systemic issues alone would have dispelled many of the doubts and concerns regarding acceptability of this observation. As far as the company is concerned, complying with norms and taking action for preventing breaches by transporters and other third parties would have prevented the damage.
3.	What were some of the deeper issues that resulted in this situation?	Some of the deeper issues that could have resulted in this situation are: (i) Poor planning, since steel bridge was replaced by concrete bridge. The construction material was apparently not selected consistently or based on need. (ii) No significant action was initiated or followed up against the transporter. It could either mean that the transporter could not be blamed to a great extent or that the company was lax in taking action. (iii) Prospects of insurance were not considered. (iv) The fact that a single instance of heavy load transport felled the bridge within a month might indicate poor quality of construction in the first place. (v) It might also indicate lack of planning based on prospective transport volume and weight. (vi) There could be more such cases where norms were not followed, which did not come up for scrutiny as a mishap had not (yet) happened.

8.1.3 Evaluating the alternatives

Sl. No.	Requirements	Compliance
1.	What are the decision maker's available options	i. He could opine that recovery should be initiated against contractor and the matter watched.

Sl. No.	Requirements	Compliance
		<p>ii. He could comment on the prevailing situation and establish the lapse with reference to non-compliance of building norms. Instead of arguing benefit of hindsight, the Company could have pre-empted the mishap, by being cautious enough and displaying the details given in the guidelines, in the first place.</p> <p>iii. He could ignore it as a one-off case without systemic implications and could appreciate the company's performance on budget and timelines in the report.</p>
2.	How should he/she evaluate amongst these options i.e., what are the important criteria?	<p>1. For recovery, the legal opinion on tenability of the claim and extent of action taken could be seen.</p> <p>2. Criteria for establishing lapse would be MoRTH guidelines, the expectation that a company in the industry should have been aware of the possibility of such events and must have provided for the safeguards suggested by the committee. He would then have to establish that the committee recommendations should have been known to the company before-hand, being in the industry.</p> <p>3. From a human point of view, the case itself could be an indicator for numerous other projects where such preventive action was not taken. Only because a mishap has not happened, the other cases may not have been highlighted. In such cases, the MoRTH guidelines and committee report emerge as audit criteria for auditing all projects from the point of view of road safety compliance. The margin for error, especially when it comes to safety, should be Nil, as it concerns precious human lives.</p>
3.	What plan of action could be recommended	There could be numerous perspectives on the questions. Some of these are given in the notes to discussion questions.

8.1.4 Enhanced learning in the process

Sl. No.	Requirements	Compliance
1.	By evaluating the situation, the course of action, and the consequences, students can develop the tacit knowledge that their peers gained from experience	This is the purpose of the case study. It will help them go through the same phases of decision-making which audit parties would go through in the field and in report section.
2.	Students can be encouraged to relate personal experiences to the situations encountered by protagonists in the case scenarios	This is expected to come up as part of the discussion on questions.

Sl. No.	Requirements	Compliance
3.	Learn that trade-offs are a part of real life decision making	There are multiple views. Management views and the prospects of report section's views too need to be taken into account. The matters of hindsight, insurance, action to be taken, relevance of criteria, sustainability and relevance of observation could be subject to trade-offs, unlike the clear-cut case of non-compliance with norms.
4.	Emphasise the importance of the underlying assumptions when comparing options	The assumptions could be on inadequacy of planning for choice of material, assessment of traffic volume, risk analysis followed by implementation of safeguards and on whether the company could predict or suggest corrective steps even before such events happened (pre-emptive damage controls). Assumptions are made on whether insurance could have been availed and on whether litigation for recovery could be beneficial.

8.1.5 What happened

Sl. No.	Requirements	Compliance
1.	Discussion of the actual course of events after the point at which the case ends	<p>The guidance note requires that in case of audit paras or audit observations taken up for preparation of case study, the conclusion should not be made known to the participants or included in the material being circulated to the participants. The issue is discussed as a hypothetical one. Hence, only an imaginary/ idealistic ending is indicated in the “What happened” segment, that:</p> <ol style="list-style-type: none"> 1. Litigation was initiated against the transporter for damages resulting from deviating from approved route 2. Action was taken to introduce safeguards relating to ingress of vehicles into all bridges constructed by the company 3. A checklist was set into planning documents of projects to ensure that transport volume and load analysis, risk analysis and safeguards and insurance were in place, as also a policy for choice of material for construction. 4. Protocols for maintaining a log book with high resolution geographical co-ordinates of each project, recording all repairs/ replacements of same/ similarly located asset, which will help in detecting frequent expenditure on same asset and frequent independent safety and technical audits of all constructions on rotation basis, with periodic assessment by reputed institutions like IITs was introduced by the Executive. Law and contract conditions were brought in, providing that in the event of faults being found, responsibility would be immediately fixed and recoveries made from all parties involved, including private sector contractors and negligent certifying agencies (e.g., for defective certification as safe or unsafe), in addition to financial penalties, blacklisting, civil obligations and criminal liability, irrespective of whether actual loss has been sustained or not.
2.	Give students a sense of closure	The “What happened” segment would give a sense of closure.

Sl. No.	Requirements	Compliance
3.	May not always have information of the actual outcome (that is the nature of cases)	In the instant case, the trainer would have actual information of the actual outcome and the knowledge that a report has been approved with similar observation. But participants would be given a sense of closure only as a narration of the end of this story, without relating it to any audit observation.

8.1.6 Case Wrap-up and takeaways

Sl. No.	Requirements	Compliance
1.	Summarise the case discussion	A summing up section is included below.
2.	Closing it does not require you to give any correct answers or solution to the case	This is taken into account. More emphasis is on discussions on alternative courses of action.
3.	Link it back to the teaching and learning objectives.	Summing up links to the teaching and learning objectives.

9. Takeaways on possible responses

1. What is the basis for whether the loss should be Rs.2.05 crore or Rs.1.24 crore, especially when steel was replaced by concrete?

There could be different arguments in favour of both alternatives. One could say like is to be compared to like. Hence, as the Company has taken a decision to go for concrete, the cost of concrete construction should be taken into account. Some may ask that if concrete was to be used, why was steel used in the first instance? Hence, cost of the steel bridge was wasteful. Some may say concrete was apt considering possibility of rust as it was built across a canal. Some may say the change was made only to reduce cost of damage control and not in accordance with what was most apt. One could conclude that Rs.2.05 crore, being the value of what was lost and spent, should be considered, while the concrete bridge exists and its cost cannot be considered a loss. But, a majority may agree that planning on material to be used has been *ad-hoc*.

2. What is your view on commenting on one-off cases, especially when the amount is too small considering overall transactions and the need for balanced reporting?

(i) Many may feel that the Company is using the ideas of balanced reporting and one-off instance, to avoid owning up for its clear fault. Some participants may opt for the balanced reporting criterion and state that the one-off deviation does not reflect the overall performance of the company on budget and timeline parameters. Many may feel that as the matter is one concerning road safety,

even one deviation resulting in a mishap is an indicator of possible undetected safety issues in other cases, which may not have been highlighted, as no mishap (yet) means no financial impact, but it is, all the same, a disaster waiting to happen.

(ii) There could be a view that there is a huge reputational risk for the Company, if it chooses to disregard the audit finding as a one off case and carries a mistaken notion of it not being a systemic issue, which it essentially is.

3. What is your view on the adequacy of legal action against the transporter?

(i) Though the transporter has breached approved route, no follow-up action or litigation appears to have been taken up for recovery of the damages. Some of the participants may feel that some of the blame is with the company, as appropriate notices on weight-bearing capacity were not put up and hence, the transporter cannot be blamed. Some may feel that the very fact that permissions for such vehicles are route-specific and the route has been breached, the lapse is entirely that of the transporter. Besides, MoRTH guidelines allow recovery of the sum of damages.

(ii) An odd remark may come up that litigation involves the jurisdiction of Courts and may even pave the way for a complete police investigation into the matter, including chances of intentional sabotage leading to damages to the bridge, if any, which may identify culprits and improve chances of recovery.

(iii) Some may feel that “targeting” the transporter may “adversely impact transport business”. Some may feel that as both are to blame, both must share the damage. Some may invoke third party damages clause of transporter’s insurance, but on being informed that the amount recoverable may be as low as Rs.6000 to a maximum of Rs.7.50 lakh⁵ and may also involve litigation to prove loss, they may feel that this option may not be worthwhile.

(iv) Some may, at this stage, suggest that insurance could have been considered by the Company itself for the bridge. Some may cite CPWD⁶ Works Manual Clause 14.6.1 (2019 version) to cite that “Government property, both movable and immovable, should not normally be insured. No subordinate authority, therefore, shall undertake any liability or incur any expenditure in connection with the insurance of such property without prior consent of the Ministry of Finance in the case of immovable property.” For this, some may respond that being a PSU, a separate legal entity, they may be exempt from this and can avail insurance.

⁵ <https://www.policyholder.gov.in/PrintFaqList.aspx?CategoryId=78>

⁶ Central Public Works Department

(v) Some may feel that if the company had availed insurance, the insurance companies themselves would have deployed their risk assessment team before issuing insurance policy. Their expertise would have helped in risk appraisal and mitigation at the planning stage itself. Similarly, due to subrogation rights, any litigation for recovery would also have been supported or taken over by the insurer after paying the company insurance claim for damages.

(vi) In any case, many may feel that, there must be some documents to prove that there was a sincere effort on the part of the company to examine the legal route for recovery of damages, and to obtain a legal opinion on the prospects of recovery, failing which an observation can be taken.

4. Audit criterion adopted seems to be committee's observations. If we cite committee's suggestions of July 2016 for commenting on a construction completed in April 2016, will this not result in benefitting from hindsight?

(i) Many would agree that many audit observations are perceived as taking advantage of hindsight and Audit has successfully disproved this on every occasion. In the instant case, some participants may feel that it is sufficient to cite MoRTH guidelines as these are not controversial. Some may feel that the committee has brought out suggestions, which would not be entirely new or hitherto unknown. Surely, the committee would have taken inputs from some established criteria like MoRTH guidelines. It is possible that they would have only re-iterated these as own suggestions. Even if this is not the case, brainstorming on possible risks and mitigation thereof could have been resorted to at the planning stage, rather than after damage has been sustained.

(ii) Some participants may feel that the guidelines themselves would not be something new, that the Company can claim ignorance of. In fact, it may be possible that views of Companies in this sector, like the audited entity, would themselves have been the main inputs for these guidelines.

(iii) Participants could opine that one could see if the suggestions have been implemented in other projects subsequently. One could conclude that proper planning entailed risk assessment and remedial measures, especially as the MoRTH guidelines had already indicated the prospects of heavy vehicles and procedures relating to bridge construction, which needed to be adhered to and should have naturally inspired management to carry out their own risk assessment based on the same.

5. Another audit criterion adopted seems to be MoRTH guidelines, which are only hosted by Central Government on the website. Would they apply to a State PSU, if they have not been duly circulated?

(i) Participants may opine that the operating officers must have the domain knowledge and the insight to reasonably foresee risks and, in any case, cannot plead ignorance of publicly hosted norms on matters of safety. Irrespective of whether they are issued by Central or State Governments, or whether they are officially circulated, it is of relevance to construction activity and to safety. Hence, sincerity of purpose would demand that these are complied with. One view that could arise at this stage is that the fact that the Company has completed projects timely and within budget may in fact mean that the construction has been hasty, without complying with requisite norms and not spending on safety norms.

(ii) More so, a view may emerge that while one has to adhere to safety norms in the manner stipulated, the project planners must go a step further and assess traffic volume and weight before going ahead with construction. They should also provide for a margin of additional volume and weight of traffic as it may increase in the future. Bridges must be constructed according to expected traffic, rather than traffic being regulated according to bridge restrictions.

6. My personal convictions on the topic notwithstanding, the emphasis of the para seems to be more on bridge safety than on the financial impact. Should Audit concern itself with this? Is it within our scope and mandate?

(i) Some may feel that deviations from safety norms should be pointed out as and when observed even if no mishap has occurred and there is no consequent financial impact. This would have a salutary effect. It would preserve the reputation and trust of PSUs. It may also save human lives and property. Some may feel that this is beyond the scope of CAG audit, as it is a technical matter. Some may counter this by stating that CAG can audit compliance to norms-financial or otherwise as we audit legality of transactions as well. There may be an odd view that not complying with safety norms may have, overall, led to savings to the PSU as costs thereon are not incurred.

(ii) Some of the participants may opine that the poor planning or poor quality of construction leading to the bridge falling within a month, is in itself, a cause of concern. Some participants may narrate their experience or views about news of a crashing bridge leading to punitive measures against some employees of PSUs/ departments, but the private sector contractors and the technical auditor, who have profited from the construction and certification as also, the planners who were responsible for its defective or inadequate design, without providing for future growth in traffic volume and weight or mandatory safety measures, may go scot-free.

(iii) At least one participant may see a grand design behind such episodes. He may feel that one mishap involving a bridge may pave the way for hastily declaring a number of other bridges as unsafe, as a knee-jerk reaction, out of the need to create the impression that the matter has been taken seriously, or for some other reason. In some cases, reputed institutions like IITs would be requested to assess bridges, but only at this late stage; while in many other cases, good or bad, old or new, they may be certified unsafe, routinely. Even if it is genuinely proved that all such bridges were indeed unsafe, especially those built or repaired recently, it only reflects on the overall failure in planning, construction, maintenance, supervision and/or periodic certification of bridges, which means it was not a one-off case after all. In any case, it would lead to inconvenience to citizens when so many bridges are declared unsafe, closed and demolished at the same time, without opening alternative routes. This in turn would lead to scope for using this as a pretext for justifying *ad hoc* construction of diversion roads and awarding contracts therefor on ‘emergent’ and ‘preferential’ basis of selecting contractors and then for construction of new bridges of equally doubtful quality and technical audit certification, possibly through “friends” in the same cartel of contractors, who had built and certified the broken bridge in the first place. This would set in motion, a vicious circle of awarding a network of construction and certification contracts to preferred parties, only for their ease of business, purely because one bridge was not constructed properly, either intentionally or out of negligence. This would lead to cascading effects on road safety as also huge financial implications. Construction of bridges, instead of producing a capital asset, that spans chasms of space and generations in time, would become a recurring, routine, replacement type of revenue expenditure.

(iv) On hearing this hypothesis, many may feel that it would be too far-fetched and fanciful. Few may feel that it is plausible and of them, some may offer solutions in the form of maintaining a log book with high resolution geographical co-ordinates of each project, recording all repairs/ replacements of same/ similarly located asset, which will help in detecting frequent expenditure on same asset and frequent safety audits and technical audits of all constructions by members of independent professional bodies of architects and engineers, on rotation basis, not only before, during and immediately after construction, but along with routine maintenance checks as well, with periodic assessment by reputed institutions like IITs. In the event of faults being found, responsibility could be immediately fixed and recoveries made from all parties involved, including private sector contractors and negligent certifying agencies (e.g., for defective certification as safe or unsafe), in addition to financial penalties, blacklisting, civil obligations and criminal liability, irrespective of whether actual loss has been sustained or not. This would have a salutary effect and

improve transparency and reputation of public works transactions, as also protect human life and property, as discussed above.

(v) Some may feel that all this would add to cost and needless regulation and may lead to new power centres and scope for new sets of “certifying contractors” developing. Some may counter this argument by stating that assessment by reputed institutions like IITs will prevent commercial interests from developing. Some may compare it with the recent provisions relating to rotation of audits and fixing of responsibilities on negligent statutory auditors and may point out that technical and safety audits are of much greater and direct significance to human life and property and hence may require similar stringent norms.

(vi) The discussion may conclude with the need for social outcome-based audit of government activities as well as omissions, which would make this part of CAG’s mandate. Financially, it is a preventive audit, which may stop such mishaps and consequent damages from occurring. There can be no compromise with safety involving human life and property. Gravity of non-compliance cannot be measured by the damage caused, but by the damage it could have caused.

10. Conclusion- Summing Up and What happened

10.1 Summing Up

We can say that the participants would have waded into discussion on:

- Works audit for auditing infrastructure construction
- Measurement of loss and damages
- Whether to point out one-off cases in audit
- Whether all possible remedies have been exhausted to mitigate damages
- How to avoid perceptions of benefitting from hindsight
- How to select and defend appropriate audit criteria
- Whether Audit can step into the realm of commenting on matters like social outcome of failed infrastructural projects

We can conclude that there is a significant social outcome of commenting on such issues.

10.2 What happened

To provide a closure to the case, we could surmise that the para is fit to be placed before the Legislature and narrate that an imaginary ending to the story could be that the executive consequently took the following action.

1. Litigation against the transporter for damages resulting from deviating from approved route
2. Introduction of safeguards relating to ingress of vehicles into all bridges constructed by the company
3. Setting a checklist into planning documents of projects, to ensure that transport volume and load analysis, risk analysis and safeguards; and insurance were in place, as also a policy for choice of material for construction.
4. Introduction of protocols for maintaining a log book with high resolution geographical co-ordinates of each project, recording all repairs/ replacements of same/ similarly located asset, which will help in detecting frequent expenditure on same asset and frequent safety audits and technical audits of all constructions by members of independent professional bodies of architects and engineers, on rotation basis, not only before, during and immediately after construction, but along with routine maintenance checks as well, with periodic assessment by reputed institutions like IITs; bringing in law and contract conditions, providing that in the event of faults being found, responsibility would be immediately fixed and recoveries made from all parties involved, including private sector contractors and negligent certifying agencies (e.g., for defective certification as safe or unsafe), in addition to financial penalties, blacklisting, civil obligations and criminal liability, irrespective of whether actual loss has been sustained or not.

Actually, it is inspired by a printed para in Report No.2 of 2019 on PSUs (Social, General and Economic Sectors) - Government of Haryana- Chapter V- Para 5.8, with some additional and imaginary discussion on quantification, insurance, construction material, relevance to Audit, social outcome impact and a hypothesis on causes and proposed remedies. The para is given on the next page. But, it must not be circulated to participants⁷.

⁷ As per Headquarters' Guidance Note on Developing and Utilising Case studies dated 17 November 2017, Note 1

5.8 *Loss due to non-compliance of safety measures*

Due to non-compliance of safety measures as per the guidelines of Ministry of Road Transport & Highways, Government of India, the Company suffered a loss of ₹ 2.05 crore.

Ministry of Road Transport & Highways (MoRT&H), GoI issued guidelines (January 2013) for restricting load on various roads and bridges and required that bridge building authorities should display the details of the bridge and its load bearing capacity.

The Company got constructed (April 2016) a steel bridge on Bhalaut Sub branch canal in Sonapat at a cost of ₹ 2.01 crore, having load carrying capacity of 100 MT. However, information regarding the load bearing capacity of the bridge was not displayed near the bridge by the contractor nor the Company. In May 2016, a multi-axle extra-long vehicle carrying heavy load in excess of the capacity of the bridge, passed through it and damaged the bridge completely. The Company had to construct a diversion road at a cost of ₹ 26.56 lakh for smooth flow of traffic. The Company constituted (June 2016) a Committee for suggesting ways and means to avoid such failures in future. The Committee observed that the transporter was at fault as the approved route was not followed and suggested (July 2016) that the bridge should have bridge information display on both sides giving details of the design load and vertical clearance and heavy duty height gauge should be installed on both sides of the bridge to prevent over dimensioned vehicles from plying on the bridge. Since the steel bridge was damaged completely, the Company dismantled it at a cost of

₹ 5.49 lakh and sold it as scrap for ₹ 28.19 lakh. The Company has now constructed (June 2018) a new reinforced cement concrete bridge at a cost of ₹ 1.20 crore.

Thus due to non-compliance of safety measures as per the guidelines of MoRT&H, GoI, the Company suffered loss of ₹ 2.05 crore¹⁶. The Company stated (January 2019) that no separate guidelines were issued to field offices as the same were available on the website of MoRT&H, GoI. Had the Company installed the vertical clearance barricade and displayed the bridge information, it could have avoided the entry of the vehicle.

The matter was referred (June 2018) to the Government; their reply was awaited (May 2019).

Exhibit-I

Extracts from MoRTH Guidelines dated 24 January 2013

**GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT & HIGHWAYS**

Transport Bhawan,
1, Parliament Street
New Delhi – 110001

Telefax : +911123310950

Dated :24th January 2013

No.RW/NH- 35072/1/2010 S&R(B)

To

1. The Chairman, National Highways Authority of India, G-5 & G-6, Sector -10, Dwarka, New Delhi – 110 045
2. All Principle Secretaries/Secretaries/Engineer-in-Chiefs/Chief Engineers dealing with National Highways and other category of roads
3. The Director General(Border Roads), Seema Sadak Bhawan, Ring Road, Naraina, Delhi Cantt., New Delhi.
4. The Director General (Works), Central Public Works Department, Nirman Bhawan, New Delhi – 110 001

Subject: Movement of Over Weight and Over Dimensional Consignment (OW/ODC) - Guidelines reg.

Madam/Sir,

Exponential growth in infrastructure sector in general and power sector in particular has led to construction of thermal/hydro/ nuclear power plants in different land-locked parts of the country in the recent past. This has led to significant increase in frequency of Over Weight and Over Dimensional Consignment (OW/ODC)being transported by road . As per the instant practice for movement of OW/ODC, Road Transport (RT) Wing of the Ministry accords approval for registration of the trailer with maximum safe laden weight and dimensions in exercise of the power conferred by sub-section 3 of Section 58 of the Motor Vehicle Act 1988. This approval is subject to the following conditions:

- (i) The operations of the trailer shall be done only sparingly.
- (ii) Load restrictions of various roads stipulated by the Public Works Department/Local Authorities/National Highway Authority of India/Boarder Roads Organization will be observed and permission of such authorities will be obtained every time the vehicles are put on the roads. Each of the such movement will be approved and closely monitored by the concerned road authorities in State/Union Territory/National Highway Authority of India/Boarder Roads Organization from safety point of view.
- (iii) The vehicle should display all danger flags and lights, preferably the vehicle should be preceded and followed by a vehicle displaying prominently that a heavy load is passing.
- (iv) Coupling of the trailers along the width of the road (side by side)shall not be permitted.
- (v) The programme of the movement of the trailer should be intimated at least ten days in advance to the Executive Engineers concerned and their clearance obtained.
- (vi) The trailer shall be registered individually and not as a combination.
- (vii) If so directed by the Public Works Department of a State/Union Territory/National Highway Authority of India/Boarder Roads Organization, the loaded vehicle will not be allowed to pass over the bridges on the roads in that State/Union

Territory and in such cases applicants will have to make their own arrangements to cross the rivers/nallas.

(viii) They would need to obtain permission each and every time before moving on a particular route from concerned State or Union Territory authorities/National Highway Authority of India/Boarder Roads Organization enroute in view of the oversized cargo. For each such movement, the timing should be prescribed by the concerned authority.

(ix) They would adhere to the speed limits prescribed by the authorities in State/Union Territory/National Highway Authority of India/Boarder Roads Organization.

(x) The said vehicles should be moved without any hindrance to the normal flow of traffic.

(xi) The maximum speed of the trailer for movement on the road shall not exceed 10 kms/hour.

(xii) The trailer shall be painted for the entire width by yellow and black zebra strips on the front and rear sides duly marked for night time driving /parking suitably by red lamps at the front and rear and red flags on both the sides during day time to indicate the extreme position of the vehicle clearly. In addition the entire overhang shall be covered with a red reflector/reflective tape to facilitate clear vision of overhang at night time.

(xiii) The owner of the trailer would be liable to pay such amount to the Government of State/Union Territory/National Highway Authority of India/Boarder Roads Organization or any other affected person where any damage is caused to the roads or road structures/other road users/person directly or indirectly due to the movement of the trailer.

(xiv) The owner of the trailer will observe restrictions ordered by the State/Union Territory Government/National Highway Authority of India/Boarder Roads Organization time to time in this regard.

(xv) The owner of the trailer will give an advance intimation to such authority or officer specified by the State/ Union Territory Government /National Highway Authority of India/Boarder Roads Organization regarding each movement of such vehicle.

(xvi) A specific entry in Registration Certificate is to be made that the trailer owner in case of each and every movement will be required to take the permission of concerned Authority i.e. State Govt./Union Territory Govt./National Highway Authority of India/Boarder Roads Organization.

2. As per the condition stipulated while according approval for registration of the trailer, the owner of the trailer need to obtain permission each and every time before moving on a particular route from the concerned State/UT authorities/NHAI/BRO enroute. It has been reported that due to delay on account of permission from the concerned authorities , there are delays in movement of the trailers. This delay may perhaps be due to non-availability of guidelines for movement of OW/ODC. Since bridges are critical and vital link of the road network and safety of the same is of the concern for the road authorities.

5. Bridge authorities to implement bridge information display system as suggested in Table-3 below) for bridges with span length exceeding 20 meters for better compliance of orders.

Table-3 Bridge Information Display

Name Of Bridge/ Crossing	
Location/Chainage	
Name of River	
Type of Superstructure	
Type of Bearing	
Type of Foundation	
Carriageway width	
Span Arrangement	
Year of Construction	
Design Live Load	
Bridge has been rehabilitated earlier or not	
Name of Controlling Authority	
Address of Controlling Authority	
Contact Telephone Number	
Published on	Date:

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