



# The Oil Platform Case—Managing Conflicts in a Consortium Relationship

8

Ulrich Hagel

## Contents

8.1	Challenge	230
8.1.1	Set of Facts	230
8.1.2	Operating Procedure	233
8.1.2.1	Author's Explanations	233
8.1.2.2	Reader's Tasks	234
8.2	Decision-Making Process	235
8.2.1	Identification of the Decision to be Made and Evaluation of the Decision-Making Circumstances	235
8.2.2	Preparation of the Decision	238
8.2.3	Making the Decision	239
8.3	Implementation of the Decision	248
8.3.1	External Implementation	248
8.3.2	Internal Implementation	248
8.4	Process Optimization	249
8.5	Actual Execution	251
8.6	Learning Outcome	252
8.6.1	CM Value for the Case Study	252
8.6.2	Case Study Value for the Reader	253
	Appendices	253
	References	256

---

U. Hagel (✉)  
Bombardier Transportation, Berlin, Germany  
e-mail: [ulrich.hagel@de.transport.bombardier.com](mailto:ulrich.hagel@de.transport.bombardier.com)

### Abstract

This case study deals with the warranty case of a Customer under a contract concluded with a consortium consisting of two consortium members. The consortium members have entered into a second contract amongst themselves, the Consortium Contract. In the given situation of delay, the consortium members have to consider both contracts to make an informed decision on how to react. They have to evaluate the consequences of the different options to identify the preferred solution. This entails complex processes: With respect to organization and communication, a considerable number of fields of management as well as a variety of departments and management functions are to be involved; With respect to content, decisions will be made in an interaction of explicit legal rules and implicit social norms. The processes, however, are dominated by risk management considerations. Thus, when deciding whether to start arbitration, the claiming consortium partner performed a Litigation Risk analysis leading to a rational and transparent selection of the Best Alternative to a Negotiated Agreement (BATNA).

Keywords	Consortium, joint and several liability, defects liability, BATNA, decision tree, Litigation Risk Analysis
Principle management topic	Conflict management
Institution	Large company, private, profit
Subject of management	Relationship, enterprise
CM process step	Implement, evaluate
Management field	Risk management, knowledge management, claim management
Contract type	Consortium agreement

Editor's Note: For a full understanding of the CM Model's practical benefit for the case study, the reader may have to peruse at least sect. 1.4.4 and 1.4.5 of Part I. The keywords used above to characterize the area of contract application are explained in the key system preceding the case studies in Part II.

## 8.1 Challenge

### 8.1.1 Set of Facts

Chilli Petrol Ltd. (Customer or C) operates 40 oil platforms around the globe and is headquartered in Bergen, Norway. Atlas Oil Engineering GmbH (A) and Buliburton SA (B) are competitors in plant engineering and plant manufacturing. Both are designing and manufacturing—amongst others—oil platforms. The Customer has entered into a contract for the delivery of 25 oil platforms (Customer Contract) with a consortium (Consortium) consisting of company A and company B (Consortium Partners or Consortium Members). According to the scope of work split between A and B, both parties are responsible for designing different parts of the platform (e.g. A being responsible for the design of the accommodation container, B being responsible for the design of the

drilling equipment). However, when the platforms are designed, both companies manufacture complete platforms. A is responsible for manufacturing and delivering 15 platforms and B is responsible for manufacturing and delivering 10 platforms.

In order to perform the scope of work under the Customer Contract, A and B have entered into a partnership agreement in the form of a consortium (Consortium Contract).

### **Contract Knowledge: Consortium and Consortium Contract**

A consortium consists of two or more companies that work together toward achieving a chosen objective. Each entity within the consortium is only responsible for its designated scope of work under the consortium contract. Therefore, every entity that makes up part of the consortium remains independent in his or her normal business operations and has no say over another member's operations that are not related to the consortium.

Usually, the consortium is led by one of the consortium members, called the **consortium leader**. The duties of the Consortium Leader are solely of an administrative and coordinative character, including:

- Technical, commercial and organizational coordination of the consortium members in the bidding phase and during contract execution;
- Acting as the spokesman in negotiations with the customer, authorities or any third parties which are of joint interest, including preparing the necessary correspondence;
- Submitting the bid for the consortium and coordinating necessary formalities, in particular regarding a potential mandatory registration of the consortium, keeping the necessary books, and, preparing and submitting tax returns for the Consortium; convening, presiding and keeping records of the meetings of the executive body(ies) of the consortium;
- Making proposals for joint insurance coverage for all the consortium members;
- Coordinating the establishment of a joint construction site;
- Coordinating the preparation of progress reports and other documentation to be submitted to the customer;
- Collecting data for invoicing the customer and collecting payments from the customer; and
- Performing any other duties assigned to the consortium leader by the consortium agreement or through a respective resolution or decision of the consortium members.

Within the Consortium Agreement, the partners usually cover the **external relationship** of the consortium as well as the individual partners towards the customer and the **internal relationship** amongst the partners.

For the typical **structure and content** of a consortium agreement see Appendices (Structure of a Consortium Agreement).

As members of the Consortium, A and B have a joint and several liability towards C under the Customer Contract (external relationship), Customer C can either claim the group of the consortium members for performance or payment (joint liability) or, at its choice, any individual (either A or B) (several liability).

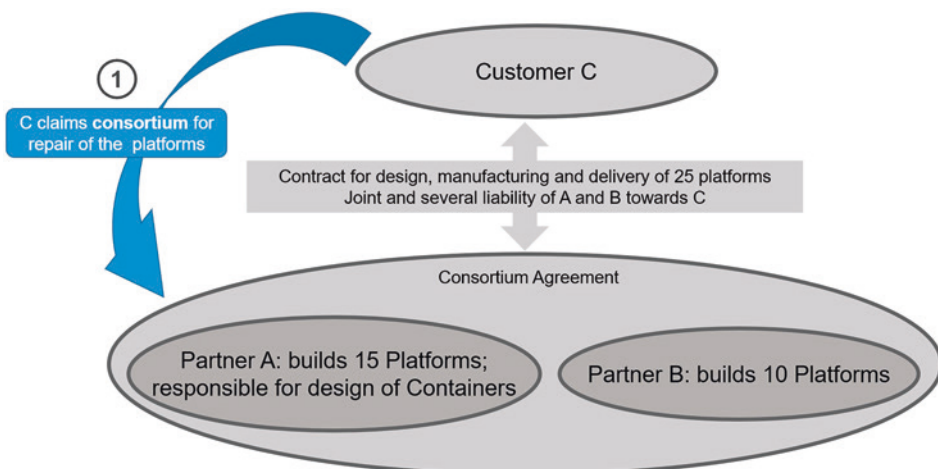
### Contract Knowledge: Joint and Several Liability

Under joint and several liability, the liability for default is enforceable against all of the signatories as a group, or against any one of them up to the full amount of the Customer's claim as an individual at the choice of the enforcing party.

Regarding the internal relationship of the consortium partners, the Consortium Contract stipulates:

- Each party is responsible and liable for its scope of work. The party having delivered the respective platform will rectify all defects on such platform; the costs of rectification, however, shall be borne by the party being responsible for the defect, i.e. having caused the defect.
- The "liability for damages" between the consortium partners is limited to EUR 1 million per event.
- Disputes between the consortium partners shall ultimately be settled by three arbitrators under the Rules of Arbitration of the International Chamber of Commerce.

By way of the consortium leader, the Customer notified the Consortium of a defect of the accommodation containers of the platforms 25 months after delivery by the Consortium.



**Fig. 8.1** Customer's claim against the consortium

**Table 8.1** Consortium partner's arguments and B's evaluation

Argument of A	Argument of B	Evaluation of B
Defect caused by the Customer C when cleaning the accommodation container	Water should not have hit the wooden floor which is covered by linoleum	80% chance to win the argument that there is a defect
If a defect: no design defect but caused by bad workmanship	Water ingress caused by wrong design of the interface between wall and floor	80% chance to win the argument that the defect is a design defect rather than a workmanship defect
Limitation of liability "for damages" also includes rectification work	Limitation of liability does not apply for rectification work	60% chances to win the argument that the limitation does not apply
C's claim would be time-barred	No, as time-barrage has been suspended by negotiations with C	70% chance to win the argument that C's claim is not time-barred

According to the Customer, the wooden floor of the containers, which is below the linoleum coverage, is rotten due to water ingress. He is claiming for the rectification of the defect. A design of the claim situation is displayed in Fig. 8.1 above.

When the consortium partners address the issue, Company A, being responsible for the design of the container, refuses to repair its 15 platforms. Company B is willing to perform the rectification work due to legal considerations, all the more because the market expects C to place further contracts on oil platforms soon. In the subsequent discussion, the partners exchange arguments for their positions as outlined in Table 8.1 above.

The project manager of Company B (Project Manager) now considers B's options to proceed. Table 8.1 above also displays the Project manager's evaluation of the chances to win the respective argument.

## 8.1.2 Operating Procedure

### 8.1.2.1 Author's Explanations

The case at hand deals with a conflict between two consortium partners concerning an obligation to rectify a defect in the Consortium's work. Consequently, it relates to two contracts: the Customer Contract concerning the duty to rectify; and the Consortium Contract when it comes to the issue of which of the consortium partners is under this obligation and to which extent. Both contracts, one relating to a transaction, one to a business cooperation, are in the implementation phase (**CM process step implement**). The decision-making processes will thus be influenced by the contractual provisions of the two contracts.

All the decisions to be made under Tasks 1. to 3. (see below under Sect. 8.1.2.2) are strongly related to **risk management** as they have a direct impact on the profitability of the project. They are also impacted by strategic considerations of company B and thus by corporate management. The contracts in this situation work as a source of risk as well as a risk management device.

The Project Manager must decide how to deal with certain situations. To make an informed and conscious decision, he has to identify the factual and legal decision-making circumstances and evaluate their relevance for the case at hand (**knowledge management**). Both contracts are crucial sources of information.

### 8.1.2.2 Reader's Tasks

You are the Project Manager of B. Process the tasks listed hereunder based on the contract clauses, Table 8.2 below.

**Task 1: Decide whether B wants to rectify the defects notified by C on (i) the 10 platforms of B or (ii) on all 25 platforms or (iii) not at all.** (Level of difficulty: Medium)

**Task 2: Assuming B has repaired all 25 platforms: Assess whether to claim against A for compensation of the incurred repair costs of EUR 5 million.** (Level of difficulty: Low)

**Task 3: Assuming B has claimed against A: After tough negotiations, A is making a final offer (“take it or leave it”) to pay B an amount of EUR 1.2 million to finally settle B’s claim. Would you accept A’s proposal based on your evaluation of the arguments raised by A during the negotiation?** (Level of difficulty: High)

**Table 8.2** Tabular listing of argument probability

Argument of A	Argument of B	Evaluation of B
Defect caused by the Customer C when cleaning the accommodation container	Water should not have hit the wooden floor which is covered by linoleum	80% chance to win the argument that there is a defect
If a defect: no design defect but caused by bad workmanship	Water ingress caused by wrong design of the interface between wall and floor	80% chance to win the argument that the defect is a design defect rather than a workmanship defect
Limitation of “liability for damages” also refers to rectification work	Limitation of liability does not apply for rectification work	60% chances to win the argument that the limitation does not apply
C’s claim would be time-barred since warranty period is two years	No, due to state law time-barrage has been suspended by negotiations with C	70% chance to win the argument that C’s claim is not time-barred

## 8.2 Decision-Making Process

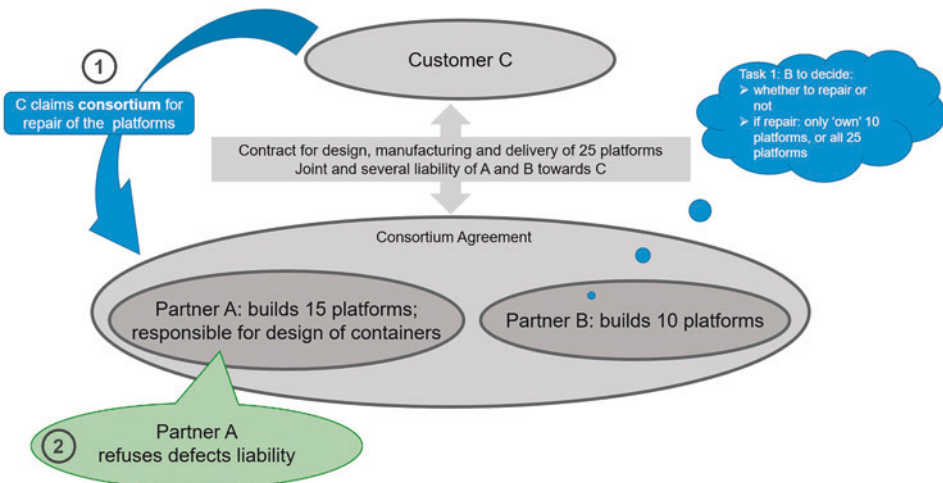
### 8.2.1 Identification of the Decision to be Made and Evaluation of the Decision-Making Circumstances

**Re Task 1: Decision whether to repair the containers and if yes on how many platforms. Fig. 8.2 below**

The consortium consisting of A and B is facing a claim from C to repair the floor of the accommodation container on all 25 oil platforms. A has already decided on how to react and has rejected C's claim. B now has several options:

- (a) Not to react at all ("wait and see");
- (b) Join A in rejecting C's claim;
- (c) Repair B's own 10 platform;
- (d) Repair all 25 platforms.

As B is a private company with the business purpose of generating profit, decisions to be made are based on whether they make commercial sense. Any decision to repair the platforms will have an immediate negative impact on cost, profit and cash. So, naturally there is a tendency to decide against doing the repair (as A did). However, when making such a decision, B must first evaluate the case at hand and thereafter the advantages, disadvantages and potential consequences (immediate, mid-term and long-term) of all the alternatives. In evaluating the case at hand, B will analyze whether C is entitled to the repair of the accommodation containers. Such entitlement can either be based on the



**Fig. 8.2** B's decision whether to repair

contract or the underlying applicable law. As C is claiming for the repair of an alleged defect, the concept of defects liability needs to be verified by B.

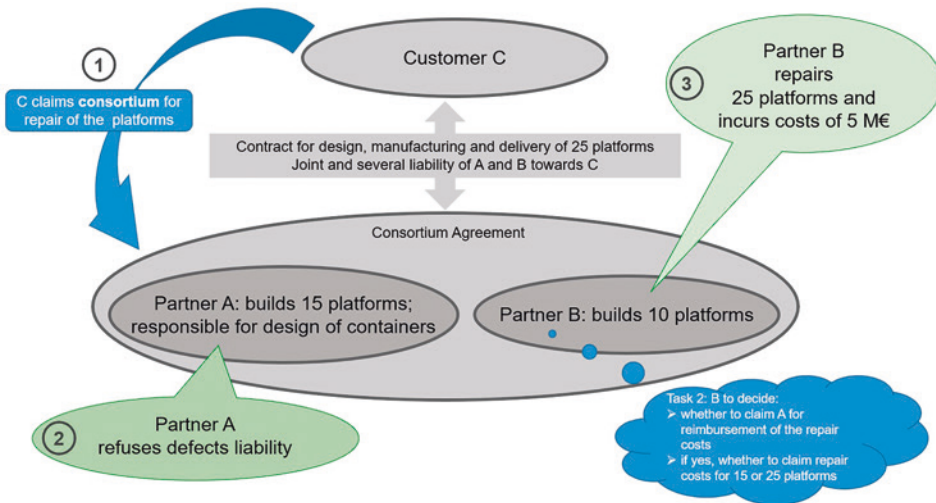
### Contract Knowledge: Defects Liability (Warranty)

**Defects liability** means all liabilities and obligations arising out of or relating to the repair, rework, replacement or return of defective Goods or Services ('Business Products'), or any claim for breach of warranty with respect to any Business Products.

Besides the legal evaluation whether C, assuming the accommodation containers are defective, is entitled to claim rectification (repair) or only damages and whether such a claim might be time-barred, B will need to do a technical evaluation whether there is a defect under the legal definition and if yes, what kind of defect (design, material, workmanship). B will further have to analyze the contract as well as the applicable law with respect to the defects liability obligations. Based on this evaluation, B will also have to consider the overall business relationship with C as well as with the consortium partner A. In addition, B will have to consider the reputational consequences with respect to all other business relationships by creating a precedence.

### Re Task 2: Assess whether to claim against A for compensation of the incurred repair costs of EUR 5 million. Fig. 8.3 below

Assuming that B has decided to repair all 25 platforms and incurred costs amounting to EUR 5 million, B needs to decide whether to back-charge those costs to the consortium



**Fig. 8.3** Customer's claim against the consortium: B's decision whether to claim compensation

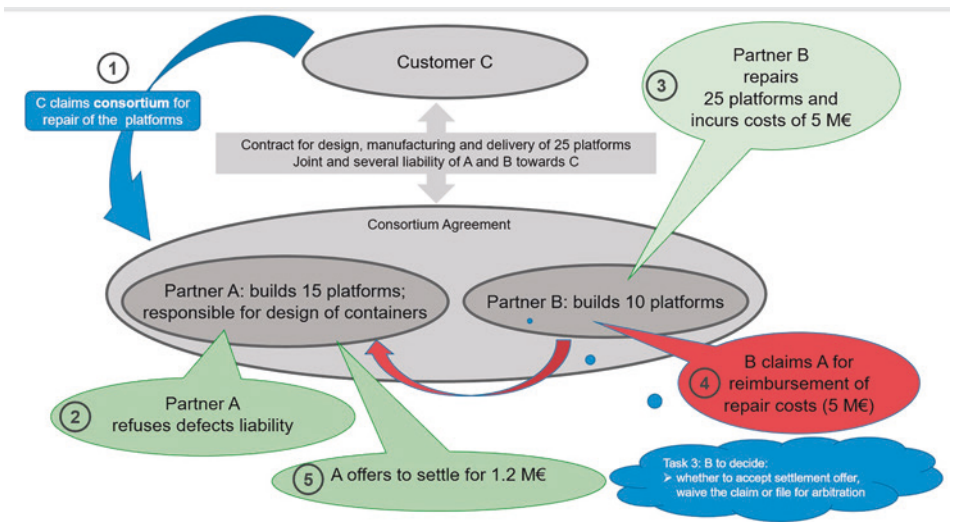


partner A. As A has already rejected option of repairing the containers, B cannot count on any goodwill from A and would thus only decide to file a claim against A based on a contractual/legal entitlement. B will also need to decide whether to back-charge the full amount for all 25 platforms (EUR 5 million) or only for the 15 platforms built by A as A has failed to repair its platforms (EUR 3 million).

**Re Task 3: Should B accept A’s proposal to settle its claim for EUR 1.2 million? Fig. 8.4 below**

Now that B has repaired the platforms, incurred costs of EUR 5 million and has decided to claim cost compensation in the full amount of EUR 5 million from A, the parties must enter into settlement negotiations. A offers to settle the claim of B for EUR 1.2 million. B must decide whether A’s settlement proposal in the amount of EUR 1.2 million should be accepted and the claim be closed. This is a primarily commercial decision. B will have to first look at the alternatives to accepting the settlement proposal. Unless B has a commercially better alternative (BATNA) than settling for EUR 1.2 million, B will decide to pursue this opportunity.

**Contract Knowledge: BATNA**  
 BATNA stands for **B**est **A**lternative to a **N**egotiated **A**greement, which is the most advantageous alternative course of action a party can take if negotiations fail and an agreement cannot be reached.  
 For **further reading**, see [8].



**Fig. 8.4** B’s decision whether to accept A’s settlement offer

Without A's contribution, B has the following alternatives:

- (a) Accept the settlement proposal;
- (b) Waive its claim against A;
- (c) File for arbitration to let the arbitration tribunal decide on the claim.

Obviously, option (b) is not a better alternative to accepting the settlement and will thus not be chosen by B. In order to decide whether option (c) is more favorable than accepting the settlement proposal, B will need a detailed evaluation of the expected outcome of the arbitration as well as the investment costs to achieve such an outcome.

### **8.2.2 Preparation of the Decision**

In order to prepare for the tasks described above in Sect. 8.2.1 and to perform the respective evaluation, the Project Manager will **need the following information**:

#### **Re Task 1: Decision whether to repair the containers and if yes on how many platforms.**

- (a) Information on the facts to determine the root cause of the rotten floors of the accommodation containers.
- (b) The Contract between the Consortium and the Customer on the delivery of the oil platforms. Such information is needed to evaluate whether the Consortium is obliged to rectify the oil platforms and, whether any claim from C against the Consortium or any member of the Consortium (due to the joint and several liability) would be time-barred.
- (c) Provisions on Defects Liability as well as time-barrage under the law applicable to the Contract with Customer C. Such information is needed to verify to what extent contractual provisions apply or the provisions of the underlying applicable law and whether the law is mandatory or dispositive.
- (d) Information on Customer C, especially with respect to (potential) new business. This is needed to see whether the decision can only be based on a legal evaluation or whether further aspects need to be considered.

#### **Re Task 2: Assess whether to claim against A for compensation of the incurred repair costs of EUR 5 million.**

- (a) The Consortium Contract in order to determine the responsibility and liability of the consortium members and thus of the partner A as well as any potential limitation of liability.
- (b) The documentation of costs incurred for the repair of the 25 platforms to evaluate the available evidence supporting B's argument on the quantum of the claim.

- (c) The documentation of negotiations with C to reject A's argument of time-barrage.
- (d) A list of (potential) witnesses regarding costs incurred, defect (including technical expert opinion) and negotiations with Customer C to (i) support the settlement negotiations with consortium partner A, and (ii) be prepared for an arbitration should the settlement negotiations fail.

**Re Task 3: Should B accept A's proposal to settle its claim for EUR 1.2 million?**

- (a) An evaluation of probabilities to win its arguments to evaluate the value of its claim;
- (b) The investment costs to run legal proceedings.

Tasks 1–3 relate to **knowledge management** and **risk management** as all decisions need to consider the alternative scenarios and balance the chances and risks associated with it.

The **decision process** is a sequence of steps. The decision for task 1, for instance, requires the following steps: gather information (see above) ->define/re-evaluate the options at hand ->list pros and cons and further consequences of each option ->run analysis and determine the preferred option ->identify potential roadblocks for such option ->check whether such road-blocks can be eliminated/mitigated (if not, choose a different option) ->take an informed decision and implement such decision

### 8.2.3 Making the Decision

**Re Task 1: Decision whether to repair the containers and if yes on how many platforms.**

- (a) **Pros and cons** for possible repair work: Table 8.1 above delineates the advantages and disadvantages of each of B's decision options relating to the possible repair work which have been outlined under Table 8.3 below. B will make its decision on the basis of this analysis.

B's decision whether to repair the platforms or whether to join A in rejecting the repair is not solely to be determined on contractual/legal ground. Business relationship and upcoming business needs to be considered by B as well.

- (b) **Decision:** Taking into consideration the potential liability of the Consortium towards C, the likelihood of a design defect caused by A, the fact of a joint and several liability of the consortium members towards C and potential upcoming business with C, B may decide to repair all 25 platform as requested by C.

**Re Task 2: Assess whether to claim against A for compensation of the incurred repair costs of EUR 5 million.**

- (a) **Analysis:** Usually, claims are placed with a maximum plausible position ("MPP"), not to lose credibility but to anchor as much as possible.

**Table 8.3** Pros and cons for B's decision options whether to repair

Option	Advantages (pros)	Disadvantages (cons)	Potential consequences
No reaction	No immediate action required No costs and cash-out	Customer will be disappointed and may claim rectification	<p>Chance: Customer will not pursue the claim any further</p> <p>Risk:</p> <ol style="list-style-type: none"> <li>1. Customer takes legal action which will cause costs on top of repair costs</li> <li>2. Customer repairs the platforms/gets the platforms repaired by third party and claims for cost compensation. Such cost is likely higher than B's cost</li> </ol>
Join A in rejecting claim	Alignment with consortium partner	Customer will be disappointed and may claim rectification	<p>Chance: Customer will not pursue the claim any further</p> <p>Risk:</p> <ol style="list-style-type: none"> <li>1. Customer takes legal action which will cause costs on top of repair costs</li> <li>2. Customer repairs the platforms/gets the platforms repaired by third party and claims for cost compensation. Such cost is likely higher than B's cost</li> </ol>
Repair own 10 platforms	Risk of not getting compensated by A will be reduced	Unhappy Customer can still claim for repair of the remaining 15 platforms	<p>Chance: Customer will not pursue the claim on the remaining 15 platforms any further</p> <p>Risk:</p> <ol style="list-style-type: none"> <li>1. Customer takes legal action related to the 15 unrepaired platforms which will cause costs on top of repair costs</li> <li>2. Customer repairs the 15 platforms/gets the 15 platforms repaired by third party and claims for cost compensation; such cost is likely higher than B's cost</li> </ol>
Repair all 25 platforms	Happy Customer	Risk that A will not compensate for the costs incurred	<p>Chance: Customer will notice difference in behavior of competitors A and B and will take this into account in future projects</p>
Option	Advantages (pros)	Disadvantages (cons)	Potential consequences

**Explanation: Anchoring**

Anchoring is a cognitive bias that describes the common tendency to use the first piece of information offered (the ‘anchor’) as a reference when making decisions. Once an anchor is set, other judgments are made by adjusting away from that anchor, and there is a bias toward interpreting other information around the anchor. For example, the initial amount claimed sets the standard for the rest of the negotiations, so that any settlement lower than the initial claim amount seem more reasonable even if they are still higher than the real claim value.

For **further reading**, see [1], Chap. 11.

B has incurred costs of EUR 5 million which is documented and can be proven. B can further build a line of argumentation justifying the right to full compensation of B’s costs by A. Thus, B has a plausible position.

- (b) **Decision:** As claiming against A is the commercially preferential solution, B will decide to place a claim against A. Since B has a plausible line of argumentation, B will claim cost compensation in the amount of EUR 5 million from A.

**Re Task 3: Should B accept A’s proposal to settle its claim for EUR 1.2 million?**

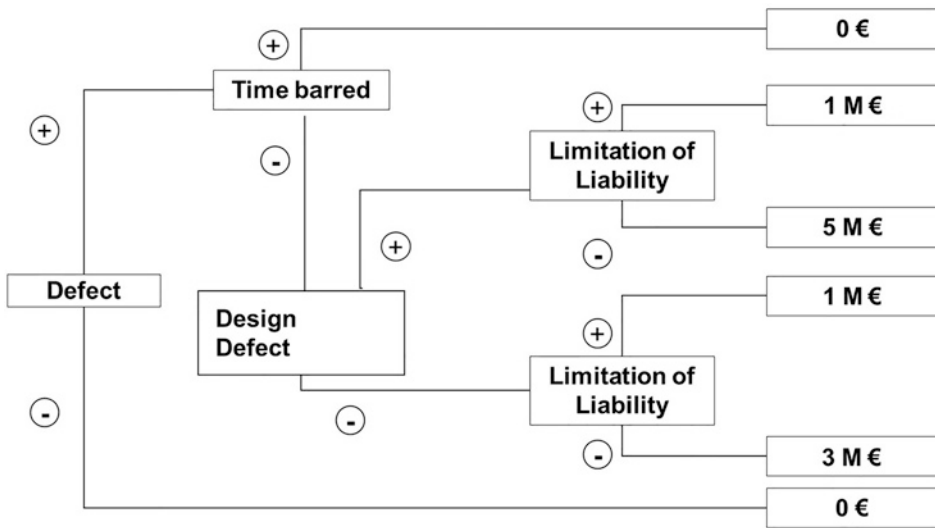
- (a) **Litigation Risk Analysis:** As A has made a final settlement proposal, B needs to evaluate whether accepting such a settlement proposal is better than pursuing arbitration under the consortium agreement.

In order to evaluate the chances of its claim, B can perform a Litigation Risk Analysis based on a Decision Tree, which will be described step by step.

*Step 1: Building up the tree*

The Decision Tree must be built specifically for the dispute at hand. To do so, all issues relevant to the outcome need to be identified. Such issues form the ‘nodes’ of the tree where the arbitrators will have to make a decision. The order of the decision nodes needs to ensure that all relevant aspects are considered before the end of a branch.

Unless there are nodes where one of the possible answers leads to a direct result (usually a dismissal), the decision tree starts with the main fact-based issue (e.g. defect, delay or infringement), followed by some legal pre-conditions, and ending with the quantum. In the example at hand, B’s claim will not be successful if it turns out there is no defect at all and the rotten floor was caused by Customer C. B’s claim will also be dismissed if C’s claim was time-barred since, in this case, B repaired the platforms without a legal obligation and thus B will not be able to back-charge A. However, if there is a defect, the question whether it is a design defect is relevant and, only in the case that there is a liability, the question of a limitation of liability needs to be answered. In consequence, the decision tree for the case at hand looks as shown in Fig. 8.5.



**Fig. 8.5** Decision tree without probabilities

Even though there is a defect in **scenario 1**, a judge would dismiss the claim if it is time-barred. In this case, the outcome (“scenario value”) for B would be EUR 0.

In **scenario 2**, there is a defect, the claim is not time-barred, the defect is a design defect and the limitation of liability kicks in. In such a case, the scenario value (i.e. potential award) is EUR 1 million.

The best case for B is **scenario 3**, in which there is a defect and it is a design defect, the claim is not time-barred and the limitation of liability is not applicable. In this case, the scenario value for B is EUR 5 million.

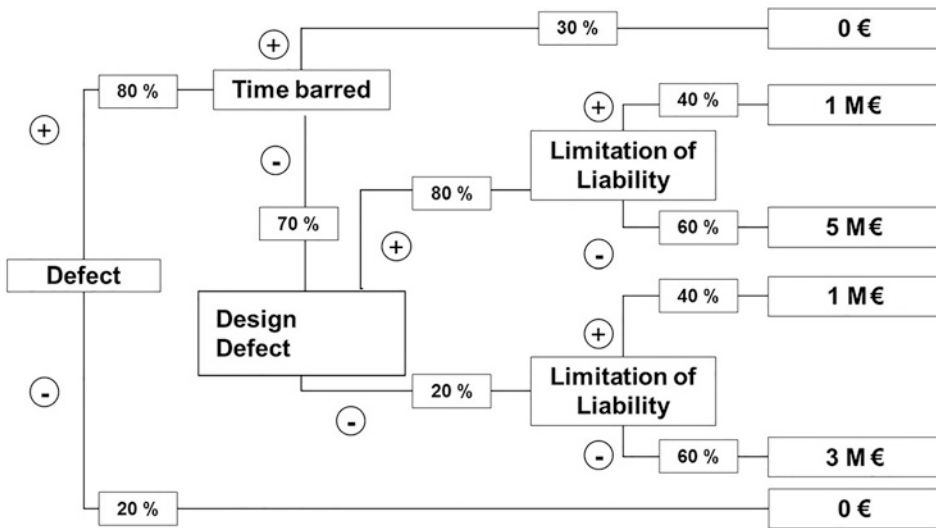
In **scenarios 4 and 5**, Customer C’s claim is not time barred and there is a defect. However, it is not a design defect but a workmanship defect with the consequence that each consortium partner is responsible for the containers it produced (A: 15 containers, corresponding to repair costs of EUR 3 million; and B: 10 containers, corresponding to repair costs of EUR 10 million.). In scenario 4, the limitation of A’s liability applies, whereas in scenario 5, it does not. The scenario value of scenario 4 is EUR 1 million and the scenario value of scenario 5 is EUR 3 million.

The worst case for B (besides scenario 1) is **scenario 6**, in which there is not even a defect. The scenario value is EUR 0.

This first step of building the Decision Tree provides a comprehensive overview of the nodes to be decided by a judge/arbitrator as well as the respective results. As can be seen, the potential awards of an arbitration tribunal can be EUR 0, EUR 1 million, EUR 3 million or even EUR 5 million.

B's evaluation of the own arguments	
80%	chance to win the argument that there is a defect
80%	chance to win the argument that the defect is a design defect rather than a workmanship defect
60%	chances to win the argument that the limitation does not apply
70%	chance to win the argument that claim of C is not time-barred

**Fig. 8.6** B's evaluation of the own arguments



**Fig. 8.7** Decision tree with probabilities

*Step 2: Adding probabilities*

The second step is the most difficult part as percentages need to be identified at each scenario branch, representing the probability that a court or arbitration tribunal will follow the respective argument. As per the task, B evaluates the chances to win its arguments as depicted in Fig. 8.6 above.

Inserting the respective probabilities into the decision tree would lead to the decision tree shown in Fig. 8.7 above.

For each node, the probabilities need to add up to 100%. (Node 1 “Defect”: yes (“+”) 80% + no (“-”) 20% = 100%).

*Step 3: Running the calculation*

The next step is pure mathematics. The probability of each claim scenario will be calculated by multiplying the individual probabilities comprising that claim scenario. In the example, for claim scenario 1 (defect yes but claim time-barred), the

Claim Scenario	Individual Probability				Compound Probability	Scenario Value	Scenario Expected Value
1	80%	30%			24.00%	0 €	0 €
2	80%	70%	80%	40%	17.92%	1,000,000 €	179,200 €
3	80%	70%	80%	60%	26.88%	5,000,000 €	1,344,000 €
4	80%	70%	20%	40%	4.48%	1,000,000 €	44,800 €
5	80%	70%	20%	60%	6.72%	3,000,000 €	201,600 €
6	20%				20.00%	0 €	0 €
					100%	Expected Value of Claim	1,769,600 €

**Fig. 8.8** Claim scenarios and calculation of the expected value

compound probability equals 24% because the first outcome (defect) was assessed with 80% and the second outcome (time-barred) with 30% ( $80\% \times 30\% = 24\%$ ). In other words, there is a 24% chance of claim scenario 1 occurring.

Similarly, the compound probability of claim scenario 2 is:  $80\% \times 70\% \times 80\% \times 40\% = 17.92\%$ . The overview of all scenarios is shown in Fig. 8.8 above:

With the compound probabilities of the claim scenarios, the expected values of the scenarios can be calculated by multiplying the compound probability with the scenario value. In the example Fig. 8.7 above, the likelihood that a court awards EUR 5 million (scenario 3) is 26.88%, thus the expected value of such scenario is EUR 1.344 million ( $26.88\% \times \text{EUR } 5 \text{ million}$ ). In order to get the expected value of the claim in total, the expected values of all claim scenarios need to be added up. In the example, the expected value of the claim is EUR 1.769 million (see Fig. 8.8 above). The expected value will not be awarded by any court as only EUR 0, EUR 1 million, EUR 3 million, or EUR 5 million can be awarded, but it is an average value of a simulation of 100 awards on the specific case. It considers the uncertainties and the different probabilities.

#### *Step 4: Considering the investment costs*

The Project Manager has to decide whether to pursue a claim in a formal dispute resolution process, or whether to enter into a negotiated settlement. For such decision, the expected value of the claim, as determined above, is not sufficient. The Project Manager needs to consider the costs to be invested in a formal proceeding as well as a potential reimbursement of such costs by the opponent (to the extent B wins the proceedings). The cash-flow of all such costs is a further aspect, the Project Manager should take into consideration. In order to get a decision by the arbitration tribunal (award), B needs to file a request for arbitration against A. This will cause costs on both sides. In order to file the request for arbitration as well as to run the arbitration proceedings, B will hire external lawyers. A will also be represented by external lawyers, which B might have to compensate A for in the case that B loses the arbitration. In addition, the administration fees of the arbitration institute need to be paid as well as the arbitrators. The parties (A and B) will incur their own further costs (transactional costs as well as opportunity costs).



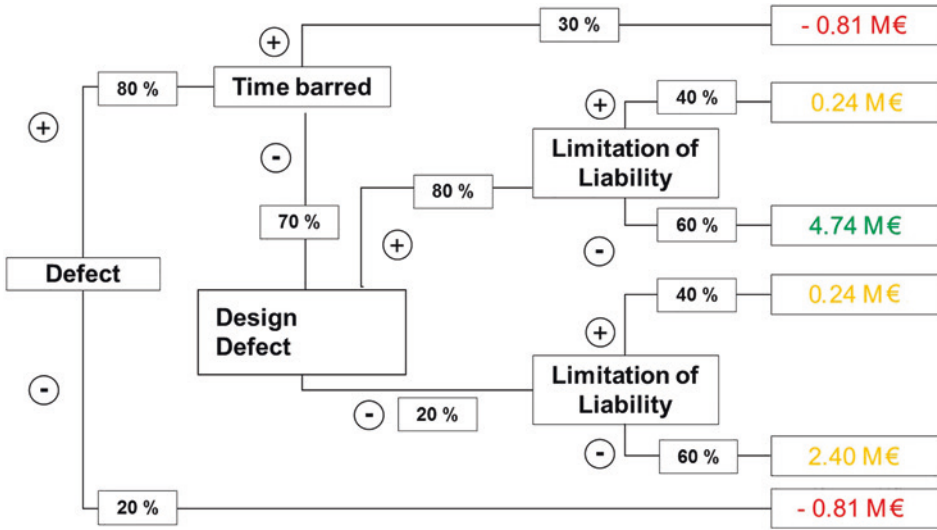
In the example, ICC arbitration has been chosen. With an amount in dispute of EUR 5 million and 3 arbitrators, the administration fee is EUR 45,015, the fees for the arbitrators are in the range of EUR 98,000 to EUR 425,700, which would lead to a worst case scenario of EUR 0.470 million (EUR 45,000+EUR 425,700). Since the ICC cost calculator works with US Dollars, for simplification, an exchange rate of 1:1 is assumed. Based on the German Lawyers Compensation Act (RVG), each of the external lawyers can charge EUR 41,260. Assuming the arbitration will have two rounds of written statements with 3 months each, a further 3 months for preparing evidence (witnesses and experts) and 2 months for hearings and post hearing briefs, each party will incur internal costs of EUR 264,000. The internal costs are calculated based on the assumption that the claim team, consisting of members of different functions, will spend 200 h/month for 11 (not consecutive) months at an hourly rate of EUR 120 (see for further details [2] and Fig. 8.9 below). According to Art. 38 (4) ICC Rules, “the final award shall fix the costs of the arbitration and decide which of the parties shall bear them or in what proportion they shall be borne by the parties.” Art. 38 (5) ICC Rules states: “In making decisions as to costs, the arbitral tribunal may take into account such circumstances as it considers relevant, including the extent to which each party has conducted the arbitration in an expeditious and cost-effective manner.” [3] In the worst case, this means that all costs (administration, arbitrators and external lawyers; further relevant costs are not considered in the example, e.g. experts, reimbursable costs of the parties, such as in-house counsel costs.) are to be borne by the losing party.

Further investment costs may need to be considered, depending on the specific circumstances. They may include opportunity costs, interests, further transactional costs and costs of taking evidence. As these investment costs vary significantly, they are not included in the calculated example.

Considering the investment costs for the arbitration minus the reimbursable costs in each claim scenario will lead to different expected arbitration values. If B wins the full claim amount of EUR 5 million as well as the cost award, the internal costs of EUR 264,000 are still not reimbursable and need to be deducted from the scenario value reflecting the net result of the award. In the calculation displayed in Fig. 8.10 below,

Type of Costs	Amount based on a claim amount of 5,000,000 EUR	Advances	Reimbursable	Worst-Case
Administration Costs	ICC: 45,015 USD Arbitrator Min. 98,301 USD Arbitrator Max. 425,700 USD	A and B share 370,000 USD	yes	470,715 EUR
Lawyers	41,260 EUR	A and B	yes	82,520 EUR
Transactional Costs	264,000 EUR	A and B	no	264,000 EUR
<b>Total</b>				<b>817,235 EUR</b>

**Fig. 8.9** Investment costs and cash-flow for arbitration



**Fig. 8.10** Decision tree with probabilities including investment costs

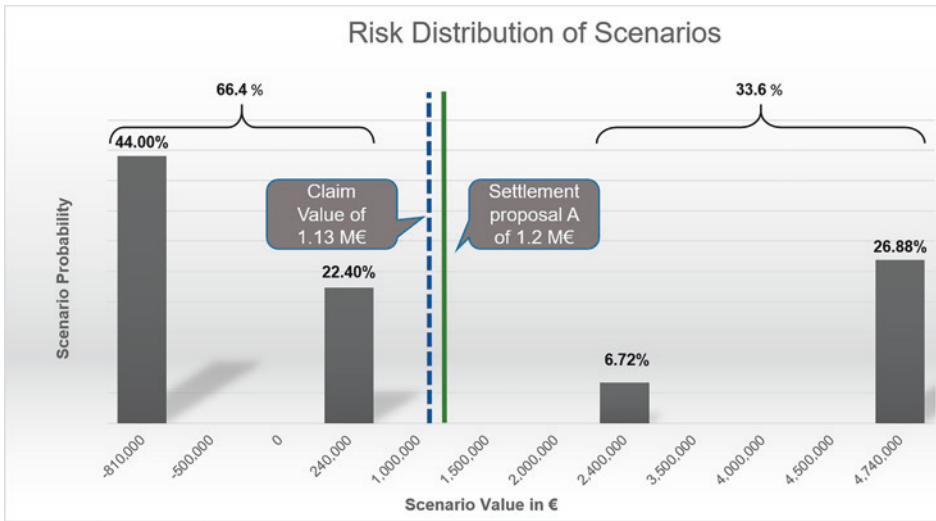
Claim Scenario	Individual Probability				Compound Probability	Scenario Value	Scenario Expected Value
	80%	30%	80%	40%			
1	80%	30%			24.00%	-810,000 €	-194,400 €
2	80%	70%	80%	40%	17.92%	240,000 €	43,008 €
3	80%	70%	80%	60%	26.88%	4,740,000 €	1,274,112 €
4	80%	70%	20%	40%	4.48%	240,000 €	10,752 €
5	80%	70%	20%	60%	6.72%	2,400,000 €	161,280 €
6	20%				20.00%	-810,000 €	-162,000 €
					<b>100%</b>	<b>Expected Value of Claim</b>	<b>1,132,752 €</b>

**Fig. 8.11** Claim scenarios and calculation of the expected value including investment costs

the cost allocation follows the ratio of win/lose. The decision tree considering the investment costs is also shown in Fig. 8.10 above:

Considering the investment costs, the expected value decreases by EUR 0.63 million to EUR 1.13 million (see Fig. 8.11 above):

The Project Manager should also consider the risk probabilities of the potential results of an arbitration. The graph delineated below in Fig. 8.12 perfectly demonstrates that, even though in average a positive outcome of EUR 1.13 million is to be expected, the likelihood of incurring a loss of EUR 0.81 million is pretty high with 44%. The likelihood of getting more than the expected value is only 33.6%, whereas the likelihood to get less is 66.4%. However, in the event that the award is above the expected value, it will either be EUR 1.25 million or even EUR 3.59 million more



**Fig. 8.12** Risk distribution

than expected. In case the award is below the expected value, it will either deviate by EUR 0.89 million with a still positive outcome (EUR 0.24 million) or by EUR 1.94 million and a negative result (EUR 0.81 million).

With any settlement above EUR 1.13 million, B is on average better off settling the dispute, rather than fighting it through arbitration. However, if A incurs further costs prior to the settlement, those costs need to be taken into account. In addition, the risk distribution can also not be ignored. There is a higher likelihood to get less than the expected value and a high risk of even incurring a (further) loss of EUR 0.81 million.

- (b) **Decision:** Based on the above analysis, it is recommendable for B to accept A's ("last and final") settlement proposal. The chances to get a better result through arbitration are pretty low. Assuming B has to follow IFRS accounting rules, the booking of an opportunity under the EAC (Estimate at Completion) in a higher amount than the amount proposed for settlement by A will also not be an option as the EUR 1.13 million are the correct estimated value.

#### **Explanation: Estimate at Completion (EAC)**

**Estimate at Completion** is a method to forecast the total costs of a project, based on the costs incurred to date and the estimated costs to complete the project.

For **further reading**, see [4].

## 8.3 Implementation of the Decision

### 8.3.1 External Implementation

#### **Re Task 1: Decision whether to repair the containers and if yes on how many platforms.**

The implementation of the decision to repair the oil platforms does not require any contract amendment. The Project Manager of B has to inform Customer C about the decision to repair the accommodation containers to (i) avoid any further action from C (whether self-repair activities or legal actions) and (ii) coordinate the repairs with C.

#### **Re Task 2: Assess whether to claim against A for compensation of the incurred repair costs of EUR 5 million.**

After having decided to claim against A for cost compensation, the Project Manager will have to inform A accordingly. Usually such information is done by a claim letter containing the facts, the legal entitlement and the claim amount with a period for payment.

#### **Re Task 3: Should B accept A's proposal to settle its claim for EUR 1.2 million?**

B will have to inform A that the settlement offer is accepted. In such situations, the parties usually draft and sign a settlement agreement, explaining which claim has finally been settled by which payment.

### 8.3.2 Internal Implementation

#### **Re Task 1: Decision whether to repair the containers and if yes on how many platforms.**

When the decision to repair the containers has been made, the Project Manager has to inform the affected functions to buy the necessary material (**Procurement**) and to perform the repair work (**Projects**).

However, the Project Manager should document all aspects of the decision-making process in order to avoid liability of the board members ('Business Judgment Rule').

#### **Contract Knowledge: Business Judgment Rule**

The reason for this rule is to acknowledge that the daily operation of a business can be risky and controversial. Therefore, the board of directors should be allowed to make decisions without fear of being prosecuted. The business judgment rule further assumes that it is unfair to expect the people managing a company to make perfect decisions all the time. If the courts believe that the board of directors acted rationally in a particular situation, no further action will be taken against them.

**Re Task 2: Assess whether to claim against A for compensation of the incurred repair costs of EUR 5 million.**

Depending on B's claim management policy, internal approval might be needed before sending out the claim letter. A strategy needs to be agreed upon internally regarding how to address the claim. These processes and activities will be handled by the **Project Manager** or, if company B has such a function or department, by or with the support of **claims management**.

As A has already rejected any responsibility for the defects, the claim letter needs to address all issues of the above decision tree and the reasons why B believes the branch of the decision tree leading to full compensation in the amount of EUR 5 million is correct. B will attach the respective documentation to the claim letter with respect to the merits of the case as well as its quantum. Based on the agreed upon strategy, the Project Manager needs to collect all documents and draft a claim letter to A.

The **Legal Department** needs to review the draft, double-check required formalities and may add some legal references to the Consortium Agreement and the Master Contract with Customer C.

**Re Task 3: Should B accept A's proposal to settle its claim for EUR 1.2 million?**

The implementation of the decision to accept A's settlement proposal is strongly influenced by corporate management and in particular by governance considerations.

The **Legal Department** needs to get involved to draft or review the settlement agreement with A. The settlement agreement must mention the parties involved in the agreement, the background of the settlement, the amount to be paid by A and the issues covered by the settlement agreement. The Legal Department will also ensure that the settlement agreement will be signed by authorized signatories of both companies (governance).

The **Finance Department** will need to issue an invoice once the settlement agreement has been signed by both parties and to monitor the payment of A (cash-in for B). The Finance Department will also need to make sure the situation is appropriately booked.

Depending on company B's internal policies, the **Project Manager** might need further internal approval before accepting the settlement proposal from A. Furthermore, the Project Manager, or any other responsible person according to B's claim management policies, needs to update the claim database, if any (governance).

---

## 8.4 Process Optimization

**Re Task 1: Decision whether to repair the containers and if yes on how many platforms.**

There is hardly anything that could have been done differently.

In the case at hand, it is clear that the floors of the containers need to be repaired, however, the parties are of different opinions on who should perform the rectification work and/or who should pay for it. None of the parties wants to move first, being concerned with admitting responsibility ('First-Move-Barrier') and having to assume the (full) cost. Such a deadlock situation can be avoided by a contract clause, which provides for a quick dispute resolution process, which could either foresee a Dispute Adjudication Board or an Adjudication.

In both cases, the different opinions would be heard quickly by an independent Party and a decision on how to proceed would be rendered which is preliminary binding on the contract parties. If one of the parties does not agree with the decision, it must object within a defined period. However, the decision still needs to be followed until a Court/ Arbitration Tribunal has rendered a finally binding decision. Such a clause would allow the project to proceed but grants the party access to justice, if needed.

### **Contract Knowledge: Adjudication and Dispute Adjudication Board**

**Adjudication** is a process by which the parties involved in a dispute submit their differences to the decision of an impartial person (adjudicator) or group appointed by mutual consent or statutory provision. The adjudicator's decision is binding unless or until the dispute is finally determined by court proceedings, arbitration or by agreement of the parties via negotiation or mediation. If a party chooses to pursue subsequent proceedings, the dispute will be heard afresh—not as an 'appeal' of the adjudicator's findings.

For **further reading**, see [5].

**Dispute Adjudication Boards** are standing boards selected at the beginning of the project and are provided with the necessary and updated project documentation. Thus, the board can quickly render a preliminary binding decision as it does not need to get familiar with the project details.

### **Re Task 2: Assess whether to claim against A for compensation of the incurred repair costs of EUR 5 million.**

The problems in the dispute at hand have been caused by imprecise provisions in the Consortium Contract ('liability for damages'). A clearer wording of the limitation of liability (so called 'cap') clause could have avoided the different interpretations of A and B. Rectification costs under defects liability obligations should be excluded from the limitation of liability as otherwise a consortium partner could refuse performing (costly) repairs and refer to the cap on liability. A preferable solution is presented under 2., Article X.3.5 in the Materials below. Since the **Legal Department** is responsible for drafting and negotiating the consortium contract, it should adapt its consortium contract template or its review requirements concerning templates of business partners accordingly.

On the other hand, the dispute results from different views on the underlying facts and their technical evaluation (defect in design or defect in workmanship; not negotiations in the legal sense). B would have had a better claim position if the negotiations with the Customer on the repair of the accommodation containers had been documented properly. With complete documentation, A could not make the argument that negotiations in the legal sense have not been taking place and that C's claim for repair is time-barred. Documentation is the task of the **Project Manager**.

**Re Task 3: Should B accept A's proposal to settle its claim for EUR 1.2 million?**

Decisions on whether or not to accept settlement proposals in claim situations can only be avoided by preventing claims in the first place or by not entering into any settlement negotiations. The first option is the goal of a good contract and commercial management but can hardly be achieved 100%. Not entering into settlement negotiations only makes commercial sense if better alternatives are available. The options at hand are (i) waiving the claim, which does not seem to be a better alternative for B and (ii) filing a lawsuit right away against A. The latter option might be a better alternative if B has a very strong case and can get an award in due course. Thus, in the given case, B had no better alternative to act.

---

## 8.5 Actual Execution

In the case at issue, B repaired all 25 oil platforms, incurred EUR 5 million repair costs and claimed against A for these costs. After a written rejection of B's claim, the parties met for a claim negotiation. A made the offer to settle the claim with a payment of EUR 1.2 million which was refused by B as B did not apply the Litigation Risk Analysis but evaluated the chances by averaging out the probabilities of the single arguments, ending up with an overall win probability of >50% and thus expecting the value of the claim to be at least EUR 2.5 million. Based on such an evaluation, B considered A's 'final' offer to be too low and started the arbitration process. Technical experts were heard, and the arbitration tribunal was convinced that the defect was at least caused by bad workmanship of both A and B. The arbitral tribunal was not convinced that the defect was a design defect because the experts had contradicting opinions. Based on the burden of proof, the arbitration tribunal decided based on the *non liquet* situation against B (who has the burden of proof). The tribunal awarded that A must compensate B with EUR 3 million and the costs of the arbitration are to be borne by A for 3/5th and by B for 2/5th.

B got lucky with the decision not to accept A's settlement proposal but it ran a high risk of getting less than the proposed EUR 1.2 million.

## 8.6 Learning Outcome

### 8.6.1 CM Value for the Case Study

The case study demonstrates that the CM Model allows a systematical approach to a situation in which a manager has to respond to a situation in project execution which affects two separate contracts, here a Customer Contract and a Consortium Contract. The options for the decisions to be made during project execution are limited based on the contractual provisions agreed upon at the end of the CM process step draft. The possibility that defects may occur during project execution was identified during contract drafting and was reflected in both contracts.

However, a contract only contains consequences for certain situations and assigns responsibilities (passive clauses). The dispute however arose based on (i) the underlying facts and (ii) the interpretation of some contractual provisions. The CM Model can be used in this situation to identify the BATNA which is based on the information available (knowledge management) as well as the litigation risk analysis (risk management).

#### **Contract Knowledge: Active, Passive and Contextual Clauses**

Contract clauses can be differentiated by active clauses (which describe the roles and responsibilities with respect to contract performance), passive clauses (which describe the consequences of non-performance) and contextual clauses (which describe the context).

For **further reading**, see [6], pp. 123, 366 and 522; [7], p. 84 et seq.

The comparison of the actual execution and the result of the Litigation Risk Analysis shows that the latter is only a tool to evaluate the value of the claim under consideration of a potential investment. It cannot predict the decision of a specific arbitration tribunal but is based on the average of a hundred decisions. It helps, however, to make an informed decision and gives a good legitimation for any decision made. It also shows potential outcomes and their likelihood. In our case, the chance of receiving EUR 3 million was estimated with 6.72% which means that almost 7 arbitration tribunals out of a hundred would decide likewise. The tribunal deciding the case (actual execution) was one of them.

The CM Model also helps increase awareness of the need to transform crucial experiences made in business execution through a lessons learned approach. Such deployment of knowledge management may contribute to the optimization of future transactions and thus support risk management and management of the transaction.



## 8.6.2 Case Study Value for the Reader

The reader learns about the performance of a contract by more than one party and the link of two contracts (Customer Contract and Consortium Contract) based on the same facts. He gains insights into the handling of situations after the contract has been signed in which the partners do not agree on the interpretation of facts and provisions and thus the respective consequences under the two contracts. He gets to know the legal concepts of defects liability, joint and several liability and dispute resolution as well as the decision tool of a litigation risk analysis.

The case study allows the reader to analyze the nature of a dispute occurring between consortium partners during project execution and to evaluate the claim value, whether for purposes of booking risks or for evaluating the BATNA in settlement negotiations. The reader also learns about the difference of the expected value, i.e. claim value as per litigation risk analysis, and the potential outcomes of a dispute which can be awarded by an arbitration tribunal.

---

## Appendices

### Excerpts of Relevant Clauses of a Consortium Contract

#### Article 1: Definitions

“**Agreement**” means this consortium agreement and its Annexes.

“**Consortium Member**” means any party to this Agreement.

“**Contract**” means the contract for the Project awarded by the Customer to all Consortium Members.

#### Article X: Liability

##### X.1 Liability towards the Customer

To the extent provided for in the Contract or in the law governing the Contract, the Consortium Members shall be jointly and severally liable to the Customer for performance of the Contract. As among themselves, each Consortium Member shall be liable for its Scope of Work.

##### X.1.1 Liability for Delay

...

##### X.1.2 Liability for Defects

The Consortium Member having caused a defect will be liable for this defect and any resulting claims of the Customer. However, any remedial work shall be executed subject to the terms of the Contract and subject to Article 13.3.1, by the Consortium Member in whose Scope of Work it is located or occurs.

### X.1.3 Mitigation by Consortium Members

If the Customer has or can reasonably be expected to become entitled to a claim for non-compliance with the Contract and the Consortium Member responsible for this claim (“Responsible Consortium Member”) is unable or unwilling to avoid, mitigate or resolve it and if the claim can be avoided, mitigated or resolved by measures initiated by the other Consortium Member not responsible for the claim (“Non-Responsible Consortium Member”), the Non-Responsible Consortium Member may make every reasonable effort to avoid, mitigate or resolve the claim, to the extent that the claim is likely to adversely and materially affect the Consortium or Non-Responsible Consortium Member.

### X.1.4 Other Liability

...

## X.2 Liability towards Third Parties

...

## X.3 Liability of the Consortium Members with respect to each other

### X.3.1 Allocation of cost for remedying Defects

If a Consortium Member must execute remedial work pursuant to Article X.1.2 without being liable for the respective defect, the Consortium Member who caused the defect shall advance or, in any event, indemnify the Consortium Member who must execute the remedial work for the direct costs, regardless of any right to seek reimbursement under any insurance policy. The direct costs shall include overheads, expenses for establishing the cause of and the responsibility for the defect, for additional measures necessitated as a result of the defect, for changes in the Scope of Work of the other Consortium Member necessitated by correction of such defect, and for repeat inspections or acceptance or other tests.

### X.3.2 Design Changes and Design Freeze

...

### X.3.3 Reimbursement of expenditure

The Responsible Consortium Member shall reimburse Non-Responsible Consortium Member for the direct costs and corresponding overheads, and the profit margin, incurred by the other Non-Responsible Consortium Member in avoiding, mitigating or resolving any claim in accordance with Article X.1.4

The same shall apply if a Consortium Member executes remedial work for a defect caused by another Consortium Member pursuant to Article X.1.2, in which case the direct costs shall additionally include expenses for establishing the cause of and the responsibility for the defect for additional measures necessitated as a result of the defect, for changes in the Scope of Work of the other Consortium Member necessitated by correction of such defect, and for repeat inspections or acceptance or other tests.

### X.3.4 Other Damage caused to other Consortium Members

...

### X.3.5 Limitation of Liability

Each Consortium Member's liability pursuant to this Article X.3 shall be limited to EUR 1 million per event. (Clearer alternative: This cap on liability shall not apply to any liability pursuant to Article X.3.3). In the event of a liability pursuant to Article X.3.3 (first paragraph), unless explicitly provided otherwise, no Consortium Member shall be liable to another Consortium Member for loss of profit, loss of use, loss of data or information, loss of contracts or business opportunities or any punitive damages.

The foregoing limitations and exclusions of liability shall apply to the extent consistent with mandatory law and regardless if the basis of the liability is contractual or non-contractual, or is based on breach of contract, breach of warranty, negligence, strict liability, tort or any other legal theory and shall also apply for the benefit of employees, agents, subcontractors and sub-suppliers of the responsible Consortium Member.

## Structure of a Consortium Agreement

Content of a typical structure of a consortium agreement according to [9]:

- ARTICLE 1: DEFINITIONS
- ARTICLE 2: RELATIONSHIP OF THE MEMBERS
- ARTICLE 3: PREPARATION, WITHDRAWAL RIGHT
- ARTICLE 4: PARTIES' SCOPES OF WORK
- ARTICLE 5: CHANGES, REDUCTIONS AND ADDITIONS
- ARTICLE 6: PROJECT SCHEDULE
- ARTICLE 7: MANAGEMENT OF THE CONSORTIUM, EXPENSES
- ARTICLE 8: MEMBERS' RESPONSIBILITIES DURING CONTRACT PERFORMANCE
- ARTICLE 9: FINANCIAL OBLIGATIONS, PAYMENTS, CONSORTIUM ACCOUNT
- ARTICLE 10: REPORTS AND BOOKS OF ACCOUNT
- ARTICLE 11: TAXES
- ARTICLE 12: INSURANCES
- ARTICLE 13: PATENTS, INTELLECTUAL PROPERTY
- ARTICLE 14: CLAIMS MANAGEMENT
- ARTICLE 15: DEFAULT OR INSOLVENCY
- ARTICLE 16: CLAIMS BY THE CLIENT OR THIRD PARTIES
- ARTICLE 17: WARRANTIES
- ARTICLE 18: LIABILITY BETWEEN THE MEMBERS
- ARTICLE 19: SECURITIES
- ARTICLE 20: FORCE MAJEURE AND SIMILAR EVENTS
- ARTICLE 21: CONFIDENTIALITY

---

ARTICLE 22:	NOTICES, COMMUNICATION
ARTICLE 23:	CORRESPONDENCE, COMMUNICATIONS
ARTICLE 24:	DISPUTE RESOLUTION
ARTICLE 25:	TERM OF THE AGREEMENT
ARTICLE 26:	PROPER BUSINESS PRACTICE
ARTICLE 27:	MISCELLANEOUS PROVISIONS

---

## References

1. Kahneman, D. (2011). *Thinking fast and slow*. London: Penguin.
2. Hagel, U. (2017). Costs and benefits of mediation in B2B conflicts. In T. Trenczek, D. Berning, & C. Lenz (Eds.), *Mediation und Konfliktmanagement*. Baden-Baden: Nomos.
3. International Chamber of Commerce. (2017). ICC rules of arbitration, Paris.
4. Babar, S., Thaheem, M., & Ayub, B. (2017). Estimated cost at completion: Integrating risk into earned value management. *Journal of Construction Engineering and Management*, 143(3).
5. Hagel, U. (2017). The value add of legal departments in dispute resolution. In K. Jacob, D. Schindler, & R. Strathausen (Eds.), *Liquid legal: Transforming legal into a business savvy, information enabled and performance driven industry* (pp. 237–273). New York: Springer International.
6. Cummins, T., David, M., & Kawamoto, K. (Eds.). (2011). *Contract and commercial management—The operational guide*. Norwich: Van Haren.
7. Haapio, H., & Siedel, G. (2013). *A short guide to contract risk*. Oxon: Gower.
8. Kim, P. H., & Fragale, A. R. (2005). Choosing the path to bargaining power: An empirical comparison of BATNAs and contribution in negotiations. *Journal of Applied Psychology*, 90(2), 373–381.
9. Mahnken, V., & Kurtze, M. (2018). Plant construction and the ICC consortium agreement. *Construction Law International*, 13(1).