

Software Project Management
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Lecture - 49
Contract Management (Contd.)

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Good morning, so, now, let us see the remaining portion of this contract management. We will first see what are the different stages in placing a contract, then we will see some of the terms associated with what contract tendering process or the contract placement process so, we will see the contract checklist. Then we will see this contract management how to manage the contracts.

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These are the different stages in contract placement; first you have to analyze what are your requirements then only you can initiate the what contract process then you will think of how to evaluate the contracts. If you will invite the contracts how to evaluate the contract you have to think of and then after these after making this plan then you can send invitation to tenders or you can send the RF request for proposals RFCs and then you will receive RFCs or this RFCs require request for proposals from different vendors and after receiving then after receiving the proposals, you have to determine what mechanism you will use to evaluate the different proposals.

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So, now let us explain all those steps in detail all those steps in detail. So, first one I have already told you before thinking of something for giving some contract you have to yourself internally you have to analyze the requirements. After analyzing the requirements, you specify what exactly your requirements are. You document you prepare a document for your requirements, you write down all the requirements in a document that we call as SRS software requirements document.

So, normally this requirements document should contain these sections, there should be introduction section that should contain the introduction to this proposal or what are for what is your problem that needs to be automated then description of the existing system and the current environment. Then what is the future strategy or what are the future strategy or plans.

One section should be there the system requirements if you will develop if you will get this what system what are the requirements out of this something might be mandatory compulsory and something might be desirable and then what are the possible deadlines when you are expecting that the firm will give you the product; may be the whole product by one date or phase wise we can give the products in incremental manner and then in any additional information required from the bidders that also we have to put. So, in the requirements document so for the contract you have to prepare the requirements document and the requirement document must contain these sections.

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Requirements

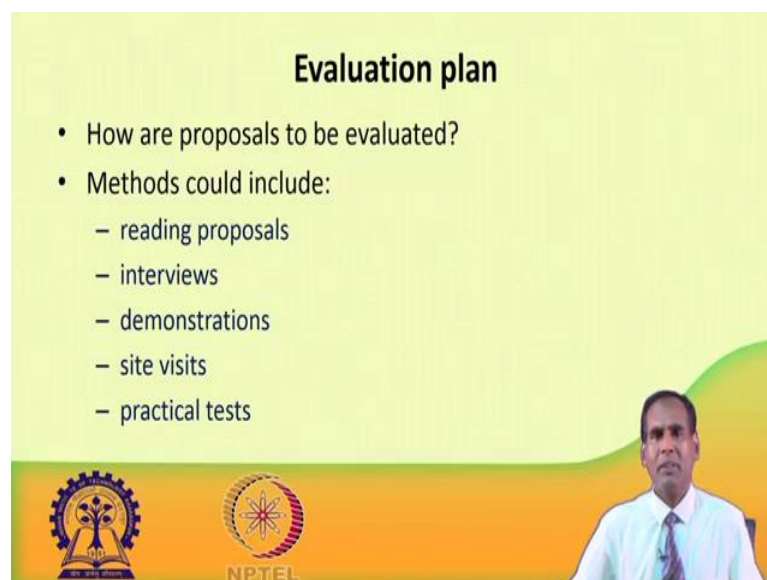
- These will include
 - functions in software, with necessary inputs and outputs
 - standards to be adhered to
 - other applications with which software is to be compatible
 - quality requirements e.g. response times

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So, the requirements will include what? The requirements that you will mention in the requirements document should include functions in software or what are the functions of the software within what and what will the inputs and outputs with all necessary inputs and outputs that should be included. Then standards to be adhered to the software must meet which kind of standard; ISO standard or that WTO standard World Trade Organization standard etcetera. So, the requirements should also contain these standards to be adhered to. Then other applications with which software is to be compatible your once after getting this application it should be what compatible with what other software. Suppose you are trying to what automate.

So, previously this railway reservation system was manually and when it has a given a proposal for automating, it you have to see it has to be compatible with what other things might be see this railway reservation system while you are booking this has to be compatible with this gateway of the banks because the money that you have to pay it has to be done through bank gateway. So, it has to be compatible with that. So, similarly quality requirements or the response times so, what kind of quality you require, how much the response time should be and what should be the throughput all those things must be clearly mentioned in the requirements document.

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Evaluation plan

- How are proposals to be evaluated?
- Methods could include:
 - reading proposals
 - interviews
 - demonstrations
 - site visits
 - practical tests

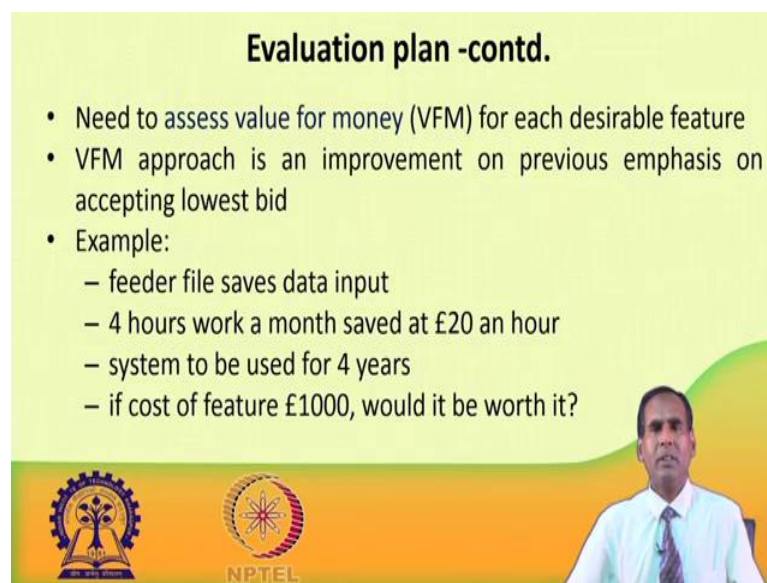
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Then second phase is evaluation plan. You have to think of when the proposals will come from different vendors how to evaluate. So, you have to think how are the

proposals to be evaluated. So, there are different methods that you can use for evaluating the what proposals, you have to plan for them, like just reading the proposals see which one is the best proposal. You can conduct some interviews invite all the what suppliers take an interview from with each of them or demonstrations if you are just purchasing a new hardware or a software call the parties the software the suppliers say them give a demonstration each may be all are present or you may confidentially by one by one you call and let them give their demonstrations.

Another one is site visits what has to be automated. So, what you can do you can tell them that site they may visit your site or you can visit their sites what kind of things they are doing. Based on that you can evaluate and last one is practical test you can tell them they should what give some tests somewhat online test can online demonstration kind of thing they will come to your place you say that we want this give that say test and shows how this is working. So, those kind of things those kinds of methods can be used to evaluate the proposal submitted by different vendors.

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Evaluation plan -contd.

- Need to assess value for money (VFM) for each desirable feature
- VFM approach is an improvement on previous emphasis on accepting lowest bid
- Example:
 - feeder file saves data input
 - 4 hours work a month saved at £20 an hour
 - system to be used for 4 years
 - if cost of feature £1000, would it be worth it?

The slide features a green and yellow background. At the bottom left, there are two logos: the Indian Institute of Technology (IIT) logo and the NPTEL logo. On the bottom right, there is a small inset image of a man in a white shirt and tie, likely the presenter.

So, need to assess, so, in case of the evaluation plan while you are making the evaluation plan while you are making the evaluation plan there is a need to assess value for money. There is a need to assess the value for money or you what you call VFM for each desirable feature. So, for each desirable feature you have to there is a need to assess the value for money and this actually VFM approach is an improvement on previous

emphasis on accepting lowest bid. You see earlier days how the proposals are evaluated just financially. The supplier who has quoted the lowest amount that was selected he was awarded the contract he was getting the contract.

So, VFM approach is an improvement of this traditional approach which was based on what this lowest bid and some of the examples are they are like a feeder files saves the data input or 4 hours work a month saved if 4 hours are worked a month, then it may save some 20 pound an hour or. So, system to be used for 4 years that is a constraint you put the system to be used for 4 years or if the cost of a feature is 1000 pound then would it be worth it. So, like this kind of considerations it can take. So, basically this evaluation approach is an improvement of the previous approach which was based on emphasizing the lowest bid.

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The slide is titled "Invitation to tender (ITT)" and features a list of bullet points. The first three points are: "Note that bidder is making an offer in response to ITT", "acceptance of offer creates a contract", and "Customer may need further information". The fourth point, "Cons: Different technical solutions to the same problem, so difficult to evaluate", is highlighted in red. At the bottom of the slide, there are three logos: the Indian Institute of Technology (IIT) logo on the left, the NPTEL logo in the center, and a portrait of a man in a white shirt and tie on the right.

- Note that bidder is making an *offer* in response to ITT
- *acceptance* of offer creates a *contract*
- Customer may need further information
- **Cons:** Different technical solutions to the same problem, so difficult to evaluate

Next step is invitation to tender. So, after what deciding that this plan will use for evaluating the proposals then you can what invite a tenders from different vendors. So, note that the bidder is making an offer in response to ITT. So, when we will issue ITT invitation to tender or the we call it as RFP request for proposal. So, in response to the ITT or the response or this RFP what request for proposals, then bidders different firms they can what send offers, they can quote, they can send proposals to you and acceptance of offer creates a contracts they then when a when these proposals will be evaluated after

that which will be what selected. So, that will be awarded that formula would be contract acceptance of the offer creates a contract customer may need further information.

So, what information the firms have mentioned in that proposals that may not be sufficient. So, the customer may need further information. In that case the supplier has to be informed and what information you require more, they have to give those information and then the evaluation of the proposals may take place. The disadvantage that different technical solutions to the same problem may exist. So, for what do you want to solve, the same problem for the same problem different vendors may provide different technical solutions. Then how to evaluate?

It is little bit difficult to evaluate, because for the same problem different technical solutions are quoted by different what vendors. So, but in case of lowest what this lowest bid this problem does not arise, which is having the lowest amount he will award the he will be awarded the contract. But in this case where for the same problem different technical solutions are there it is difficult to evaluate.

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Memoranda of agreement (MoA)

- Customer asks for technical proposals
- Technical proposals are examined and discussed
- Agreed technical solution is MoA
- Tenders are then requested from suppliers based on MoA
- Tenders are judged on price
- Fee could be paid for technical proposals by customer

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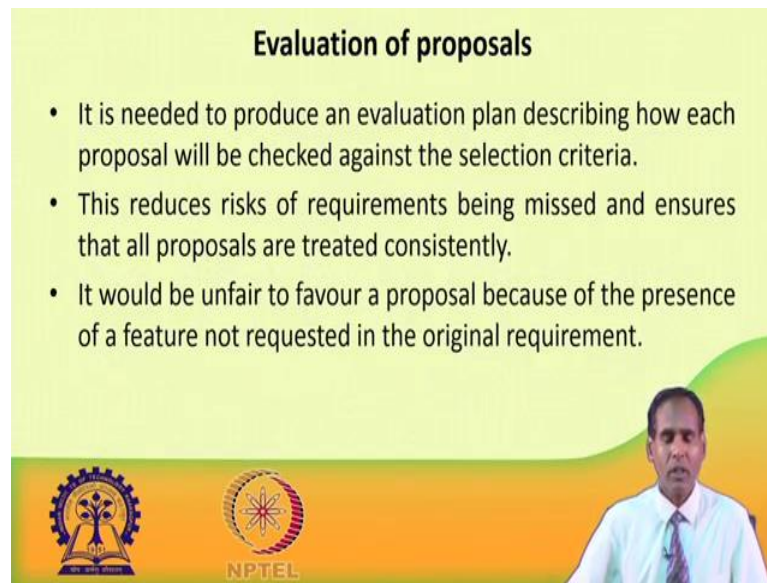
Then in during this what invitation to tender, proposals will be submitted and we have to what know one important document called as Memoranda of Agreement or in short, we call as a MoA. So, here the customer asks for technical proposals. So, the proposal actually can be divided into two parts; one the technical flow part another the financial part. So, the customer may ask for the technical proposals.

Then the technical proposals will be submitted by the firms with these technical proposals are examined and discussed, may be examined through a committee internal committee may be some experts you may involved in that committee, then the agreed technical solution in the MoA. So, the technical solution which is agreed by all that will serve as the MoA that is the MoA. Then tenders are then requested from suppliers based on MoA.

So, after this preparing the technical proposal which is now agreed by all and this will serve as the MoA, then technic the tenders are requested from suppliers. Then you advertise it tenders are requested from suppliers based on this MoA, because this contains all the technical details, and this is these are agreed by all then the tenders are judged on price.

So, because now technical proposals are now fixed, they are frozen now the tenders will be judged based on the price, because every vendor has to what quote these technical proposals. They have to provide this technical what details as mentioned in the MoA, then tenders are requested from the suppliers based on the MoA and then after receiving the tenders they are judged based on the price, because now as a uniformity on the technical proposals technical proposal or technical contents have been frozen now. So, then the fee could be paid for technical proposals by the customer, but so, what charge or what amount has been spent in preparing the technical proposal that amount may be paid by what the customer.

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Evaluation of proposals

- It is needed to produce an evaluation plan describing how each proposal will be checked against the selection criteria.
- This reduces risks of requirements being missed and ensures that all proposals are treated consistently.
- It would be unfair to favour a proposal because of the presence of a feature not requested in the original requirement.

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The last step is evaluation of proposals. So, here it is needed to produce an evaluation plan describing how each proposal will be checked against the selection criteria. So, based on what criteria you will select that which is the best firm and the contract will be awarded to that firm. So, that is why it is needed to produce an evaluation plan describing how each proposal you can check, how each proposal will be checked against the selection criteria. So, this will reduce the risks of requirements being missed and ensures that all proposals are treated consistently. So, if you will do you will finalize the selection criteria this will reduce the risk of any requirements being missed and it will ensure that the proposals are treated consistently. There is no consistent in these cases.

It will be unfair to favour a proposal, because of the presence of a feature not requested in the original requirement. So, if in the original requirement or in the MoA one what a feature it is not there, but somebody a quotation a supplier has mentioned that feature and based on that if that proposed feature if you are selecting that vendor then this will be unfair, because it has not mentioned in the original requirement or in the MoA. So, that is why it will be unfair to favour a proposal, because that a feature is not present in the original requirement and since supplier has mentioned in a proposal you have selected him it will be unfair.

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Evaluation of proposals cont...

- An application could be **bespoke, off-the-shelf, or customized**.
- In the case of off-the-shelf packages, the software itself could be evaluated and it might be possible to combine some of the evaluation with acceptance testing.
- With bespoke development, it would be a proposal that is evaluated, while COTS may involve elements of both. Thus different approaches would be needed.

The slide features a green and yellow background. At the bottom left, there are logos for IIT Bombay and NPTEL. On the right side, there is a video overlay of a man in a white shirt and tie speaking.

An application could be of three types. We have already seen in the last class that an application could be bespoke. That means, for a particular user with the off the shelf may be generalized, or it is off the shelf, but it is customized. In the case of off the shelf packages, the software itself could be evaluated and it might be possible to combine what to combine some of the evaluation with the acceptance testing.

But with the bespoke development it would be a proposal, that is evaluated while the COTS this software it may involve the elements of both; that means, elements of bespoke as well as elements of the what off the shelf package ok. Thus, different approaches would be needed because COTS approach uses the best features the features of bespoke and off the shelf methods. So, that is why this so, that is why thus different approaches would be needed ok.

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Evaluation of proposals cont...

The process of evaluation may include:

- Scrutiny of the proposal documents
- Interviewing suppliers' representatives
- Demonstrations
- Site visits
- Practical tests

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Now, let us see what are the steps of the evaluation of the proposals. how you will evaluate the proposals, what are the what is the process. The process of evaluation may include the followings; first you have to scrutinize the submitted proposal documents.

Then you may have to conduct interview with the suppliers or their representatives, then you may request them to if it is not clear they may give some demonstrations, they may do some what site visits or he may do go for site visits and also he may go for the practical test, you say them, you show us all those things here practically. So, he may getting conduct some practical test and based on this practical test who can show the best results you can award the contract to them.

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Evaluation of proposals cont...

- The proposal documents provided by the suppliers can be scrutinized to see if they contain features satisfying all the original requirements.
- Clarification might be sought over certain points. It is important to get a written, agreed, record of these clarifications.
- The customer might take initiative by taking minutes of meetings and then writing afterwards to the suppliers to get them to confirm their accuracy.
- A supplier could, in the final contract document, attempt to exclude any commitment to any representations made in pre-contract negotiations – the terms of the contract need to be scrutinized for this. Where there is an existing product, there could be a demonstration.



So, the proposal documents provided by the suppliers they can be scrutinized to see if they contain all the features as mentioned in the MoA, which are satisfying all the original requirements. If they have missed some of the points then clarification might be sought over certain points. It is important to get a written agreed record of these clarifications, do not accept something verbally or orally.


It has to be what agreed and recorded the customer might take some initiative by taking the minutes of the meetings the customer what he might take the initiative by what preparing or taking minutes of the meetings and then writing afterwards to the suppliers to get them to confirm their accuracy. So, after recording the minutes, you can send them to the suppliers in order to get them to confirm their accuracy.

A supplier could in what the final contract document attempt to exclude any commitment he may what attempt to exclude some of the commitment to any representations made in the pre contract negotiation. That is the term and terms of the contract needed to be scrutinized for this, but where there is an existing product it should go for demonstration.

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Evaluation of proposals cont...

- A frequent problem is that while an existing application works well on one platform with a certain level of transactions, it does not work satisfactorily with the customer's ICT configuration or level of throughput.
- Demonstrations might not reveal this problem. Visits to operational sites already using the system, could be more informative.
- In the last resort a special volume test could be conducted.



A frequent problem which that while an existing application works well on one platform with a certain level of transactions it does not work satisfactorily with the customers ICT configuration or level of throughput. So, one what existing application, it is working on one platform may be windows, but while you are taking to the customer site and that is based on Unix. So, that what application may not work or the throughput may not be same or the response time may not be same.

So, demonstrations might not reveal this problem. So, these kind of things demonstration might not this kind of problem problems demonstrations might not reveal. So, these things can be what better what evaluated if you will make visits to the operational sites, visits to operational sites already using the this system could be more informative and you can get more idea which will help you in selecting the firm. In the last resort a special volume test could be conducted. So, similarly at last a volume test you should conduct and then you can what see which proposal or which yes which proposal passes this volume test and that may be selected for awarding the contract.

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Evaluation of proposals cont...

- Finally, a decision is made to award the contract to a supplier.
- The reason for following a structured and objective approach to evaluation is to demonstrate that the decision has been made impartially.
- A project manager cannot be expected to be a legal expert – needs advice.
- BUT must ensure that the contract reflects true requirements and expectations of supplier and client.



So finally, a decision has to be made to award the contract to a supplier. The reason for following so, now, let us see why will follow such a structured and objective approach to do the evaluation, because we want to demonstrate that the decision that has been made that is impartial that is unbiased. A project manager please remember a project manager he cannot be expected to be legal expert.

It needs advice. So, there might be some legal what affairs. So, the project manager cannot be a legal expert he needs advice but ensure that the contract reflects the true requirements and expectations of supplier and client. So, whatever the contract you are finally, awarding that should reflect the true requirements of the client and the expectations of both the suppliers and the clients.

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Contract checklist

- **Definitions** – what words mean precisely e.g. ‘supplier’, ‘user’, ‘application’
- **Form of agreement** - For example, is this a contract for a sale or a lease, or a license to use a software application? Can the license be transferred?

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So, let us quickly see some of the what contract checklist or the some of the terms associated with the tendering process. So, you must give proper definition to the terms such as what do what is who is a supplier, what does what is meant by a supplier, who is an user, who what is an application proper definition should be there in the tender. Similarly the form of agreement you must specify for example, is this a contract for a sale or for a lease kind of thing or this is a license, just a permission to use a software application, can the license be transferred to another what party or another what person. So, all those forms of agreement must be what properly explained.

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Contract checklist

Goods and services to be supplied –

- **Equipment and software to be supplied:** this should include an actual list of the individual pieces of equipment to be delivered, complete with the specific model numbers.
- **Services to be provided:** This would cover such things as
 - Training
 - Documentation
 - Installation
 - Conversion of existing files
 - Maintenance agreements
 - Transitional insurance arrangements

The slide features a green and yellow gradient background. At the bottom, there are logos for an institution and NPTEL. A small inset image of a man in a white shirt and tie is visible in the bottom right corner.

Then you can show that another term is goods and services to be supplied. So, as an organization you might require some goods or services. So, will see two things that equipment and software to be supplied. So, if you are what hiring or if you are purchasing some equipment and software, then this should include one actual list of the individual pieces of equipment; what are the individual pieces of equipment to be delivered? Do not write just server exact model number with exact specification and the different what components of the server that has to be clearly mentioned. So, it has to be complete with this specific module number version numbers etcetera.

So, similarly if you are going for what purchasing or hiring some services, this should cover such things as whether the service requires some training and whether that will be provided by the firm or not. Documentation, installation, conversion of existing files during automation, maintenance agreements, for how many years the supplier will provide free maintenance may be 1 year 2 year 3 year etcetera. Similarly, warranty and transitional insurance arrangements for how many years the firm will be at the insurance. So, all those things must be specified while you are going for what purchasing goods and services.

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The slide is titled "Contract checklist - continued" and is set against a light green background with a yellow-to-orange gradient at the bottom. It features a bulleted list under the heading "Ownership of software". The list includes four items: "Can client sell software to others?", "Can supplier sell software to others? Could specify that customer has 'exclusive use'", "Does supplier retain the copyright?", and "Where supplier retains source code, may be a problem if supplier goes out of business; to circumvent a copy of code could be deposited with an escrow service". At the bottom left is the logo of Anna University, and at the bottom center is the NPTEL logo.

Contract checklist - continued

- Ownership of software
 - Can client sell software to others?
 - Can supplier sell software to others? Could specify that customer has 'exclusive use'
 - Does supplier retain the copyright?
 - Where supplier retains source code, may be a problem if supplier goes out of business; to circumvent a copy of code could be deposited with an **escrow** service

Similarly, what is who is the owner of the software ownership of the software that also has to be clearly mentioned, can the client sell the software to others is it possible, can the software can the supplier sell software to others, could specify that customer has

exclusive use, if he is yes you have to see otherwise see there are two possible whether the supplier can sell or cannot sell.

So, it could specify that the customer has exclusive use or not. Does the supplier retain the copyright or it is given to the customer that has to be also clearly mentioned. Where supplier retains the source code may be a problem if the supplier returns the source code may be a problem because if the supplier goes out of the business to circumvent a copy of code could be deposited with an escrow service.

So, this is a serious problem if now your relationship good and if next time the supplier does not give the contract then he will create problem and the source code with him you are just having the using the application. So, you cannot what do your jobs you will be in serious problem, because any maintenance etcetera you cannot easily do because the source code is lying with the supplier.

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Contract checklist - continued

- **Environment** – for example, where equipment is to be installed, who is responsible for various aspects of site preparation e.g. electricity supply, back up facilitation etc.?
- **Customer commitments** – for example providing access, supplying information

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Similarly, environment for example, where equipment has to be installed what is the environment, who is responsible for various aspects of the site preparation like the power supply back up facilitation etcetera this is who is responsible that has to be clearly mentioned. Similarly customer commitments for example, providing access supplying information and approving the intermediate results etcetera. So, customer what are the customer commitments that is also should be properly mentioned in the contracts.

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Contract checklist - continued

- **Acceptance procedures** – Good practice is to accept a delivered system only after user acceptance tests.
- Part of the contract would specify such details as the time that the customer will have to conduct the tests, deliverables upon which the acceptance tests depend and the procedure for signing off the testing as completed.

The slide features a green and yellow background. At the bottom left, there are two logos: the Indian Institute of Technology (IIT) logo and the NPTEL logo. On the right side, there is a small video feed of a man in a light blue shirt and tie, who appears to be the speaker.

Acceptance procedures, that good practice it accepted delivered system only after user acceptance test. So, you have to carry out the user acceptance test. So, when the user acceptance test will be there, who will be who will perform the user acceptance test all those things should be clearly mentioned all those things should be clearly mentioned in the contract.

Part of the contract would specify such details as the time that the customer will have to conduct the tests ok. So, part of the contract would specify such details as the time that the customer will have to what conduct the test, deliverables upon with the acceptance test they depend on and the procedure for signing of the testing what is the procedure for signing of the testing as completed all those things must be clearly mentioned in the contracts.

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Contract checklist - continued

- **Standards to be met** – This covers the standards with which the goods and services should comply.
- For example, a customer could require the supplier to conform to the ISO 12207 standard relating to the software life cycle and its documentation (or, more likely, a customized sub-set of the standard).

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Contract checklist

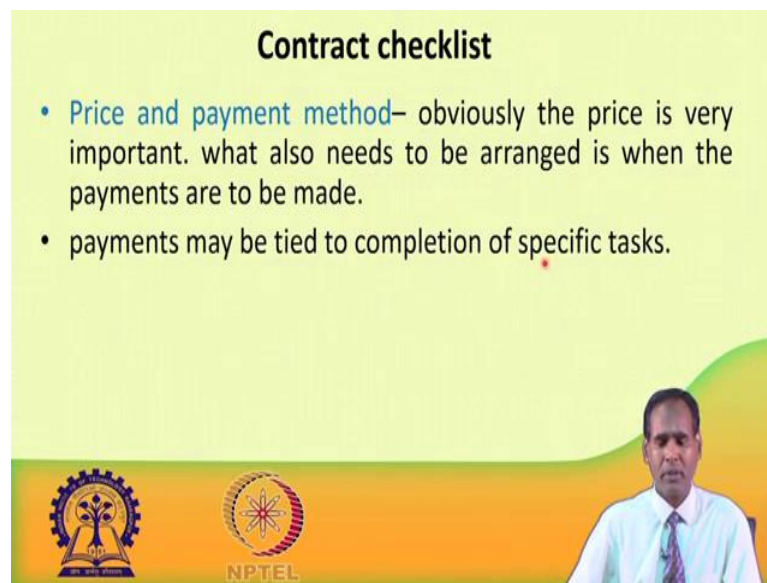
- **Project and quality management** – the arrangements for the management of the project must be agreed. These include the frequency and nature of progress meetings and the progress information to be supplied to the customer.
- **Timetable of activities** – This provides a schedule of when the key parts of the project should be completed

A small inset image of a man in a white shirt and tie speaking, positioned in the bottom right corner of the slide. To his left are two circular logos: the first is the logo of Anna University, and the second is the NPTEL logo.

Similarly what standards to be met? The product should meet ISO standards or the product should meet that WTO standard that World Trade Organization standard etcetera. That also has to be clearly mentioned in the contracts. Then project and the quality management, the arrangements for the management of the project must be agreed ok. The arrangements for the management of the project must be agreed by the what client as well as the supplier.

These include the frequency and nature of for the progress meetings and the progress information to be supplied to the customer. So, all those things should be clearly mentioned there and timetable of activities like this will provide a schedule of when the key parts of the project should be completed. The different milestones when they will be achieved a clear-cut timetable a what, unambiguous time table a complete time table of this different activities should be mentioned in the contract.

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Contract checklist

- **Price and payment method**– obviously the price is very important. what also needs to be arranged is when the payments are to be made.
- payments may be tied to completion of specific tasks.

Then on the price and payment method; obviously, the price is the most important item in your contract. So, what also needs to be arranged is when the payments are to be made. Whether the payment will be made a monthly or whether the payment will be paid payment will be made quarterly or half yearly or yearly or when some milestone is achieved. Some deliverable they have made then only we will make the payment or on increment basis that has to be clearly mentioned. Payments may be tied to completion of some specific task say when task A is completed then you release say 10 percent when task B is released completed then what release another 20 percent like this. So, payments can also be tied to the completion of some specific task or events.

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Contract management

Some terms of contract will relate to management of contract, for example,

- Progress reporting
- Decision points – could be linked to release of payments to the contractor
- Variations to the contract, i.e. how are changes to requirements dealt with?
- Acceptance criteria

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Then we will quickly see about the contract management. So, some terms of contract will relate to management of a contract ok. So, some terms of the contract will relate to the management of the contract for example, about progress reporting, how frequently you can report the progress. That should be clearly mentioned.

Some decision points decision points may be some of these what you can say decision points could be some of the milestones, it could be linked to release of payments to the contractor; that yes testing is completed release say 50 percent, then installation is completed another 25 percent like this. So, decision points or these what we can say milestones they could be linked to release of payments to the contractor. So, when the variations to the contract that is how are changes to requirements dealt with.

So, these were the original what requirements mentioned, after some days some changes are made to requirements. So, how these changes to the requirements will be dealt with by these what supplier that also should be mentioned. So, that is a part of the contract management. Similarly what should be the acceptance criteria as I have already told you should go for user acceptance test and if it is successful then you can accept you can accept otherwise you can reject. So, what is the acceptance criteria that also should be clearly mentioned.

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How would you evaluate the following?

- usability of an existing package
- usability of an application yet to be built
- maintenance costs of hardware
- time taken to respond to requests for software support
- training

IIT Bombay NPTEL

How do you evaluate the followings like, what is the usability of the existing package? A package is there what is adjusting what is the usability of the existing package? Similarly, usability of an application yet to be built an application it is first application is existing what is the usability? Similarly, an application is yet to be developed, what will be its usability? Maintenance cost of hardware this software will not run alone it will request some hardware. So, what maintenance cost will be required for the hardware?

Similarly, what time will be taken to respond to requests for software support? So, you are facing some problems and you are informing the supplier who was delivered the software how much time they will take to respond to your query to a request for providing the details what service or the support. So, that time also is very much important.

Similarly training in order you are purchasing a new software your end users do not know how to run it so, you require some training. So, that training should be include as a part of the what contract they should give free training to the users and that fee they might be charge in the what their proposal, but training should be free for what educating the users how to use the software. So, also all those things you should evaluate while what looking at the contracts while evaluating the contracts.

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Contract management cont ...

- Contracts should include agreement about how customer/supplier relationship is to be managed e.g.
 - *decision points* - could be linked to payment
 - *quality reviews*
 - *changes to requirements*

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Contracts should the contracts should include some agreement about how the customer supplier relationship is to be managed is very much important the contracts, it should include the agreements that how what is what should be the relationship between customer and supply relationships and how it will manage.

For example, if decision points or milestones and what should be the decision points based on where the payment will be released. Some of the quality reviews what should be the quality of the software or the intermediate products there as given by the supplier when I change to requirements if, because in what organization changes will must occur. So, if there is a for every change, they will say that we require money very much difficult. So, minor changes they should do it freely and whenever there will be some major changes how they will charge the price. So, that also should be clearly mentioned in the agreement.

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Summary

- Explained the different stages in contract placement
- Discussed the typical terms of a contract
- Explained some terms of contract which relate to management of contract

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References :

1. B. Hughes, M. Cotterell, R. Mall, *Software Project Management*, Sixth Edition, McGraw Hill Education (India) Pvt. Ltd., 2018.

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So, today we have discussed the different stages in contract placement. Then we have discussed the typical terms of a contract, the checklist of the what contracts. We have also explained some terms of a contract which relate to the management of contract. So, these are the references we have taken.

Thank you very much.