

# **Loopholes in bid evaluation, procurement procedure and critical analysis of PPRA rules and comparison with USA, Turkey, UK, and Australian procurement models**



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This is to certify that the Final Year Project titled

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procurement models**

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has been accepted towards the requirements for the undergraduate degree.

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## **ABSTRACT:**

The bidding process in Pakistan is done while considering the rules and regulations set forth by PPRA. The PPRA rules give a restricted purview to the bid assessment measure. The inadequacy in the bid assessment of public acquirement has prompted numerous issues and false exercises. Our exploration project surveys the current bid assessment methods of different countries which include the USA, along with the UK, Australia, and Turkey. The obtainment models of the above-mentioned countries are broken down by shredding some highlights on the bidding systems. The relative examination is completed focusing on the acquisition paradigm of different nations and depending upon near investigation some segments of assessment are suggested so that they can be added to the currently followed rules in Pakistan to fill the void and project us to suggest some necessary changes and we additionally do some contextual analyses.



## **1. INTRODUCTION:**

### **1.1. Background:**

The rules made by the PPRA give a restricted range to the bid assessment measure. Currently, the system being followed is very vague, which leaves everything at the circumspection of the client offices. As indicated by the rules enlisted by the procurement authority in Pakistan the procuring agencies are responsible for coming up with a suitable criterion listing all the relative standards or information against which the respective bids will be evaluated.

These rules provided by the authorities are the externalization of the United Nations Commission on International Trade and Law (UNCITRAL) which overlooks the World Bank's recommendations for necessary amendments. This set of rules does not give a strategy for assessment, leaving the assessment at the deliberation of the clients/obtaining organizations for making grants according to their own will. This led to biased assessment, leaving ambiguities for devious exercises, thus complaints coming in from the bidder's side who take part in the whole process.

### **1.2. Purpose of research:**

This project's sole purpose is to dissect the offered assessment methodology for the process of procurement being followed in the mentioned countries and to foster a rule for the process of procurement in our county.

### **1.3. Research questions:**

The project focuses on the development and amalgamation of suitable bid assessment techniques, that might prove helpful if considered while continuing the process of procurement in Pakistan, leading to a pellucid and successful bidding process.

In such a manner, the obtainment models of these countries with exceptional accentuation on assessment of the process of bidding would be properly examined to answer the following

inquiries:

- 1) What strategy rules ought to be consolidated in PPRA rules 2004 offered assessment techniques for public procurement in Pakistan?
- 2) What are the prescribed procedures in U.S., UK, Australia, and Turkey acquisition models that will be feasible for PPRA rules and Pakistan public procurement?

#### **1.4. Importance of research:**

These PPRA rules are inadequate in respect to the bid evaluation process, nonetheless, the absence of insight concerning the bid assessment has in this manner expanded possibilities for false exercises and fights by the ineffective bidders. To look forward to the incentive in exchange for public cash and acquiring straightforwardness along with productivity while procuring, an appropriate assessment strategy in the rules and regulations set forth by the competent authorities is of principal significance to our country. This study would help us identify the assessment strategies of the current acquisition procedures of the USA, Australia, UK, and Turkey while suggesting suitable recommendations for PPRA rules 2004.

#### **1.5. Benefits and limitations:**

This study accentuates assessing the bid assessment methodology of coeval models and suggesting a suitable assessment strategy of bids for the process of procurement in our country. The thorough research would help us discover reasonable bid assessment strategies for consolidation in the existing set of rules by the public authority to bring effectiveness, straightforwardness, and increasing the worth of public money.

This analysis considers writing materials from open sources, which are restricted for subjective investigation. In this way, the results might be somewhat restricted in scope. Nonetheless, these impediments negligibly affect the conclusions. The results of the study would be suitable for all open types of open obtainment s in our country.

#### **1.6. Methodology:**

This project would help give a recapitulation of the requirement of amendments in the process of procurement in our country and a prologue to the existing set of rules. While analyzing the current

rules, the choice along with assessment rules in the corporate area will be concentrated alongside the USA, Turkey, Australia, and United Kingdom acquisition procedures with uncommon accentuation on assessment would be investigated and a relative examination will be done and every one of these important acts for assessing the bid would be suggested to join acquirement strategy of our country making it a suitable system.

## **1.7. Organization of report:**

Our project is divided into six main chapters.

1. The prologue to the research.
2. The review containing the foundation of the existing rules, the assessment criteria of the corporate area, alongside an outline of the procurement procedures of the four countries mentioned above with a focus on assessment standards for the bids.
3. The discussion of the technique of a similar examination of the different referenced models for the bid assessment systems
4. Contextual analyses of Pakistan.
5. The examination of the bid assessment cycle and gives suggestions in such a manner.
6. A summary, conclusion, and zones that can be helpful in future projects.

## **1.8. Summary:**

This section consists of a concise outline for a foundation of examination and flaws in the set of rules about the assessment of bids. It likewise includes the reason, significance, with advantages/constraints of this project. It also gives an outline of the approach being adopted and the organization of the report. This project plans to suggest reasonable rules for the bid assessment process to carry proficiency and straightforwardness to the defense system of procurement and all types of procurement of our country.

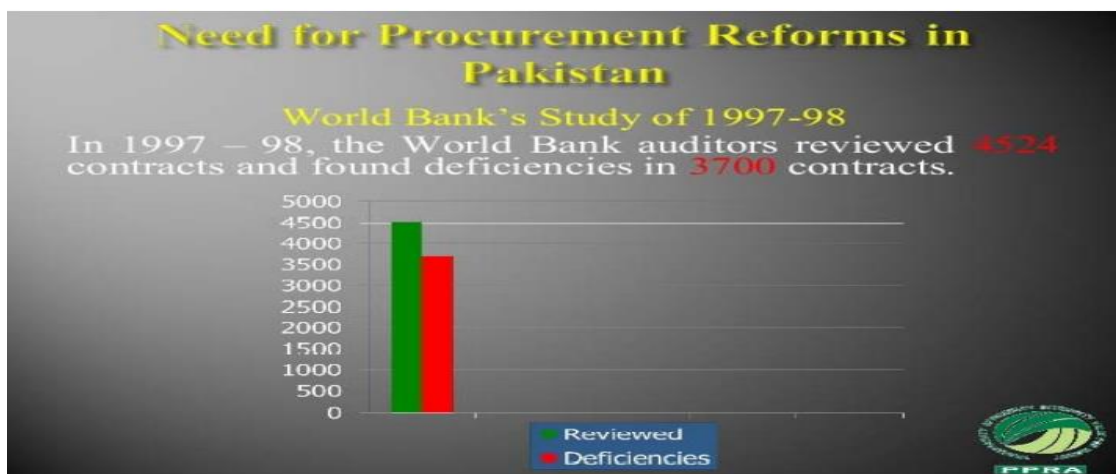
## 2. LITERATURE REVIEW:

### 2.1. Introduction:

This part consists of a literature review and portrays the diverse bidding practices and bid assessment models being adopted in different sectors. It also highlights the need for the changes in the process of procurement in our country and its significance. Additionally, it depicts certain characteristics of the set of rules being followed in Pakistan. The section also covers the different models of the USA, UK, Turkey, and Turkey with exceptional accentuation on assessment systems of the bid.

### 2.2. Pakistan public procurement:

To value the money and a nation with a striving economical state, higher authorities felt the requirement for necessary changes in the system of procurement in Pakistan. The examiners from the World Bank investigated the contracts and the process of procurements and found insufficiencies. Figure 1 shows the detailed investigation. (Pakistan Procurement Regulatory Rules, 2016)



PPRA PowerPoint presentation given to the public procurement representatives of South Asia countries at Islamabad, Pakistan on March 26, 2014 by Alam Zeb Khan.

Figure 1 Graph for requirement of procurement changes in Pakistan

Accordingly, the proposal put forward by the World Bank are as follow:

- Authorizing a law for the process of procurement abiding by the guidelines of the model of the United Nations commission of International Trade and Law.
- To make an autonomous administrative organization comprising of prepared and expert staff.
- To keep the administrative office to planning strategies, documentation, and rules and guidelines.
- To retain the administrative organization from the award, of contracts. (Rules, 2014)

Some of the reasons that made it important to change the process of procurement in Pakistan are as follow:

- The preexisting set of rules were outdated and not viable with the current market.
- The rules did not meet the standards of international models and criteria.
- They were for the most part containing systems about development and supply bidding.
- Services procurements were disregarded by these standards.
- These rules could not forestall debasement in the obtainment.
- No framework to reconsider and refresh the standards, in the event of prerequisite by the client organization.
- Different types of blunders and blames other than being obsolete brought about different disputes, grumblings, and other cases.

### **2.2.1. Public Procurement Regulatory Authority (PPRA):**

Due to the suggestions, a Regulatory Authority for the process of procurement was set up, setting out the establishment for a legal system shredding light on the procurement in our country:

- The set of rules will apply to every government procurement organization.
- The head strategy for the whole process would be under the procedure of open bidding.
- The acquisition of a value of \$1,000 or more must be publicized.

As per these rules, reasonableness, straightforwardness, productivity, accomplishing an incentive for cash, and being affordable are the essential components of procurement (PPRA rules, 2004)

### 2.3. PPRA rules:

This regulatory authority was set up via an enactment in the year 2002 and the standards proclaimed in the year 2004 and along these lines turned into the Pakistan Procurement Regulatory Authority Rules also known as PPRA. The principal point of the competent authority to offer proposals to the public authority taking everything into account. A portion of the applicable areas of these principles is depicted underneath. (PPRA rules, 2004)

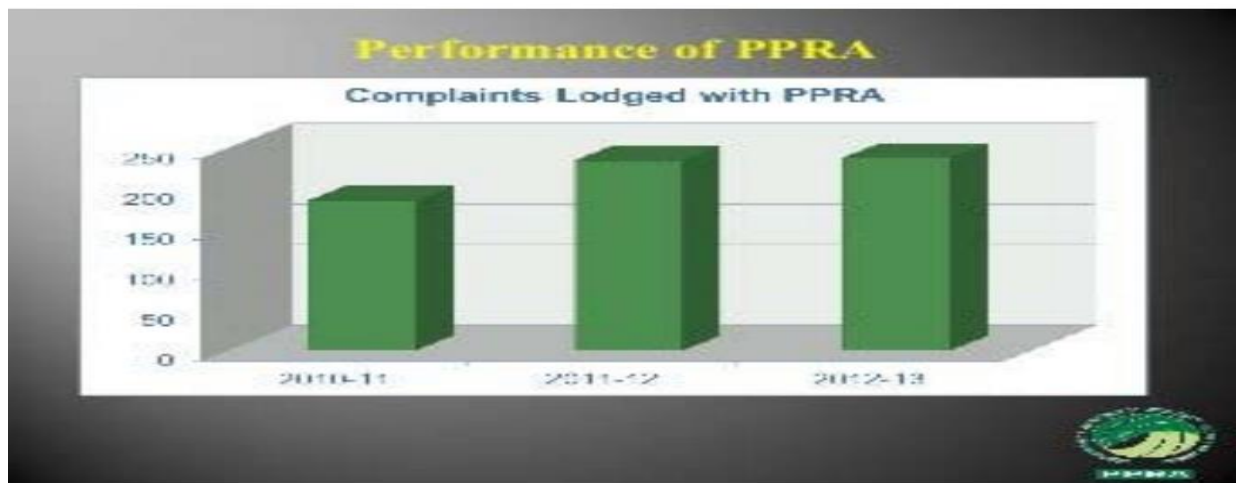


Figure 2 Complaints lodge with PPRA

#### 2.3.1. Procurement Planning:

Rule no 8 till 11 gives an outline with regards to the arranging of different substances that ought to be done. The standards present for the obtaining organizations that the prerequisites should be quite sensible, also ought to be generally promoted well ahead of time, and the publicizing implies should incorporate the PPRA authority site. The principles additionally express that the client's office ought to be nonexclusive and that brands ought not to be utilized to try not to support certain organizations. (Pakistan Procurement Regulatory Rules, 2016)

#### 2.3.2. Pre-qualification of Suppliers:

Rule no 15 implies that pre-qualification of the parties involved in the process of bidding must be considered by the procuring agency, the fact that makes it necessary to do so is that only the competitive bidders can be invited to submit their bids so that if anyone of them is awarded the

contract it does not lead to any mishaps or irregularities in the project later. The procuring agency while performing prequalification ought to think about the past execution, required insight, monetary standing, limit, and ability as far as man and machinery or equipment, the management, and some other related criteria whichever suits the client organization. (Pakistan Procurement Regulatory Rules, 2016)

### **2.3.3. Opening of Bids:**

Rule no 28 clarifies bid openings. It indicates that the offers must be made public at a predetermined location, date, and time and that they must be opened at least 30 minutes after the cutoff time. It goes on to clarify that the offers should be begun at a meeting where the bidders or their legal delegates are present. (PPRA rules, 2004)

### **2.3.4. Evaluation Criteria:**

Rule no 29 implies the fact that the procuring office ought to set up the assessment measures for evaluating the bids, along with which such rules should be referenced in the initial documents. Under any type of circumstance, the organization neglects to give assessment rules in the offering records, the acquirement would be declared null and void. Moreover, rule 30 clarifies that offers made in different currencies, at correlation the costs ought to be changed over into one standard currency. Rule no 35 portrays that the assessment criteria defending acknowledgment or dismissal of the offers be distributed 10 days before awarding the bis to any of the bidders. (PPRA rules, 2004)

### **2.3.5. Open Competitive Bidding Procedure:**

As per rule, no 30 specified by the competent authority, the following kinds of methodology for bidding are proper:

- Bidders submit their bids in a single envelope that includes both the pricing and technical proposals. Many procurements are done following this technique.
- Bidders send two sealed envelopes at the same time, one with the technical proposal and the other with the pricing proposal, both included in a single outer envelope.
- Procedure for Bidding Bidders submit two sealed envelopes simultaneously, one carrying the Technical Proposal and the other the Price Proposal, encased together in an outer single

envelope, in the Two-Stage: Two-Envelope bidding method. (PPRA rules, 2004)

### **2.3.6. Acceptance of Bids:**

Rule no 38 depicts the fact when assuming there would never be different standards/guidelines in argument, the lowest assessed bid ought to be acknowledged. Principle 39 further states that the procuring office should provide a performance guarantee from the chosen bidder of no more than 10% of the contract value.

## **2.4. Components for bid evaluation:**

Primary segments for evaluating bids will be studied in several modern procurement and acquisition models, and via a similar analysis, these will be recommended for joining and implementation in the PPRA regulations. The key portions are illustrated in the sections that follow.

### **2.4.1 Market Intelligence:**

Competitive intelligence alludes to examining the capacity and collecting data regarding the market to satisfy client's necessities along with determining a specific fragment to comprehend the danger along with the chances easily accessible in the current trade-offs. (Handfield, 2006, p. 2). Having an insight into the market makes it the most ideal approach which helps in diminishing expenses and dangers as costs can change hugely inside the market. Sometimes the price for a certain product does vary up to a great extent in the same market. Knowing the market facilitates the client while:

- Looking for the elements in the current market that decrease the hazards and create better chances for obtaining a certain item.
  - Discovering the market along with the advancements satisfying client's requests.
  - Understanding different imperatives and conditions about the acquisition of a specific item.
- (2002, p. 3)

### **2.4.2 Suitable Contract:**

An agreement can be characterized as a legal understanding among at least two people to frame a lawful affiliation or relationship (Burton, 2007). The determination of a reasonable agreement for



item conveyance or administrations is of vital significance while choosing the kind of agreement it ought to be remembered by the client organization what is in their best interest that fulfills their requirements and to avoid the things that may be a liability while keeping options open in case things turn out to be different. The provisions in the agreed contract are to be involved in such a way that it keeps the client away from the risks and does not leave any negative impact on the organization.

#### **2.4.3. Evaluation Criteria:**

Evaluating the bids is the process of analyzing those offers that are put in by the parties involved in the process of bidding to avail the award of the contract. Assessing the bid is essential for inferring the fact that the process of procurement or agreement involving the competent supplier would be fruitful for the respective organization. Therefore, assessment of offers lies at the hand of the procuring organization keeping in mind various standards which help to decide such as the criteria of low price, cost of total ownership, giving scores based on a checklist, or considering the value of services being obtained at the best price. (Crouch, 2002) This set of rules have been depicted exhaustively above ((FAR), 2016). Another strategy which includes the worth continuum is likewise utilized for haggling with the different bidders making it easier for the organization to get the most incentive. Best worth continuum tradeoff is utilized to acknowledge the low cost or a much more reasonable cost, whichever is to the greatest advantage of the buyer or the public authority.

#### **2.4.4. Competition:**

The process of procurement has several fundamental components, and an upgrading contest might be the most important one. It leads to the arranging and effective administration without any exception for the quality of items. It additionally helps in empowering development. Once the competition is involved, better things along with the best administrations could be obtained for a financially minimal price. The competition among the many providers facilitates the client in getting better quality, execution, good quality items along with the administrative efficiency. According to the rules of procurement, if the process is done competitively it leads to utilizing the money of taxpayers for what it is worth. (CPR 5.1,2014; page no 16)

### 2.4.5. Cost/Price Analysis:

Price examination means to assess the price put forward by a specific bidder concerning every cost which is obtained by different bidders for the same items or administrations. The price investigation is generally completed for industrially accessible items. ((FAR), 2016)

The analysis done based on cost is the assessment for the bid price in cases where it seems difficult to adapt the process of examining the complete price for the project, keeping in mind the expense required of different components than the cost. The expense examination is completed to analyze the cost and non-value variables which do not include the cost to conclude that the agreement will be reasonable as far as economy and execution is concerned. ((FAR), 2016)

The cost analysis is generally completed for technical and non-commercial products. In the public sector of procurement, to analyze the cost value alludes to examining procurements done in the past as far as costs, statistical surveying, and backing administrations gave by the bidders or providers. The expense/value investigation of the offers helps in the underlying assessment and shortlisting of bidders and subsequently gives accommodation is dynamic.

## 2.5. Turkish procurement system

Public Procurement Authority governs the system of procurement of turkey. public procurement authority follows specific rules or laws known as the law of public procurement. The dedication of this law is to create some rules and arrangement which will be followed in the process of procurement. For organizations that are under public law, and for that procurement processes which are computed by the public find, this law is binding. The figure given below shows the basics of the Turkish procurement model. The figure is taken from a website known as “The development program of united nations”.



Figure 3: The development program of United Nation

Situations that will be included or not Are stated by the law. The following lists are included in Turkish procurement according to procurement law.

- City or town governments, the organizations or foundations related to city or town governments, administrations with a special budget, public administrations.
- State economic organizations like state economic firms and public companies
- Social security institutions
- Administrations having particular budgets such as High Agency presidency of the Culture of Ataturk, Foundations if most of their resources belong to public administration (Turkish Public Procurement Law, 2002).

And the following lists are excluded.

- livestock products by the establishments and Procurement of farming contained within this law are excluded.
- Procurements of services and items through guaranteed contracts and agreements are not included.
- Without taking into consideration this regulation the state economic companies can purchase fuel or other energy sources to generate electricity
- There are some services, items, and materials that are used for international and local sports. These are purchased by sports federations. They are not included.
- To provide coal aid to poor families. services, items can be purchase from coal fields. Such purchases are not included.
- through importing, liquefied Natural gas Can be purchased by Petroleum pipeline collaboration which is also known as “BOTAS” in turkey language. Such purchases are not included.
- Procurement processes that relate to redesigning and renovation of cultural belongings of foundations are not included.
- Services, items, and materials that are purchased for national research and development projects are not included.

- Procurements that are linked to, counterterrorism, national defiance, intelligence, and determined by the pertinent ministry are excluded.
- Procurement processes for emergency reaction plans are not included.
- A process of procurement that is related to cultural heritage is not selected.
- Purchasing of services, items, and materials from establishments that are punishment execution or jailor houses are not included (Turkish Public Procurement Law, 2002).

### **2.5.1. Primary Principles:**

To confirm that the bidding process is done with equity, honor, and justness there are some principles in Turkish procurement which are given below.

- For ensuring clearness, competition, confidentiality, public control, trustworthiness, equal opportunity, the contracting establishments are responsible. The contracting establishments will also be responsible for the efficient use of resources.
- When a satisfactory relationship is not expected between items and services then their purchase cannot be combined in the same procurement process
- to avoid threshold values the process of procurement cannot be divided into a small no of groups.
- The primary methods of procurement for the bidding that are held using this law are restricted procedure and open procedure. Other procurement methods can be used only under some conditions which are given in detail in the procurement law of turkey.
- If there is not a sufficient budget available, then the procurement procedure cannot be started.
- There may be work that will require a positive report of its impact on the environment. Before the start of any procurement process a positive environmental impact, the report must be shown. However, a procurement process because of urgency in case of any natural disasters (Turkish Public Procurement Law, 2002).

### **2.5.2. Bidder Commission:**

The contracting officer is the main authority for the preceding of the procurement process (Turkish Public Procurement Law, 2002). His work starts with appointing a bidder commission. There are at least five members in the bidder commission. The members of the bidder commission cannot be even. There should be four peoples of related contracting foundations and one chairperson. Two out of four people must be expertise on the matter. For accounting and finance staff At least one person must be liable. The commission may work the minimum number of qualified persons if it is provided. In case when the committee members do not have the required qualifications or expertise, expertise from other contracting foundations or agencies can be invited by the contracting officer.

The bidder commission decides by majority voting. The commission cannot take any decision if there is any absentee. All people in the bidder commission are responsible for the vote which they give, decision and result. Any person in commission must justify his vote if he is not agreeing with any decision, because in case of any fraudulent activity that clarifications can be used to reach the target or right point. Therefore, it is necessary to the kept record of this dispute or arguments. All members of the commission must sign the decision showing their full names. "Turkish law of public Procurement, 2002"

### **2.5.3. Records of procurement proceedings**

For all kinds of processes of procurement, the documentation of the procurement must be kept in record. these documentations include:

- Authorization certificate of approximated cost from contracting officer
- Announcement
- the notices to the public
- Documents of the bidder, Application documents of the bidder
- Bidder commission decision documentations (Turkish Public Procurement Law, 2002).

#### **2.5.4. Estimated Cost and Threshold Values:**

Before the proceeding of procurement of any project, the contracting agency should do complete research about the price and then approximate the price. Value-added tax should be excluded from the approximated price. It must be provided with its justifications. The law regulates some of the threshold values while taking into consideration the estimated cost. These threshold values have not been updated for many years. The estimated cost should stay secret. It is not given in an advertisement. It can only be shown to those who are officially connected with the bidder commission (Turkish Public Procurement Law, 2002).

#### **2.5.5. Qualification Rules:**

The bidder must submit some documents like statements of the bank, or he may give the proof he is working as a recorded member. Sometimes, the bidder may be asked to show that they are eligible for the process of procurement.

The bidder can be eliminated from the process of procurement because of the reasons or regulations like:

- The main reasons for which the bidder can be eliminated from the process of procurement are Bankruptcy and court proceeding involvement. Bidder should be economically and fanatically stable for participation in process of procurement.
- The Contracting foundation can ask the bidder to provide documents regarding their economic and financial condition and can ask for equity and debt amount in the case when a bidder is from another country.
- A country should pay the required social security and taxes of its country to participate in process of Turkish procurement.
- A bidder will not be selected for the process if he has been involved in any intentional misconduct during a project in the last five years.
- A bidder will be eliminated from the process if the bidder submits any wrong information. The required documents must be submitted for selection in the Turkish procurement process.

- A Turkish procurement law prohibits the following company or individual from participating procurement process.
- If the bidder or company has been declared bankruptcy
- If the bidder or company has been restricted from participation in procurement
- The bidder or company having any position in process of procurement.

#### **2.5.6. Contract Types:**

The following procedures apply in the Turkish procurement process.

- direct procedure
- Open procedure
- restricted procedure

The details about these are given below.

- In an open procedure, any bidder or company can participate in Bidding for the award of contract.
- The contracting foundation takes a pre-qualification test before submitting bids in the restricted procedure. Any bidder who has passed this test can offer bids.
- In case when no bids are received in an open or restricted procedure, then negotiated method can be chosen.
- Contracting foundations use direct procedures when the company must deal with only some specific bidder. No need for an advertisement indirect procedure (Turkish law of public Procurement, 2002).

#### **2.5.7. Cost Analysis and Competition**

On one side procurement of turkey encourages competition while on the other side local businesses are involved in procurement processes of government which is very important for their existence. That is why the contracting agency can give preference to small companies or bidders. For evaluating bids there is no specific cost analysis method in the Turkish procurement model. The

non-price factors can be weighted only on the permission of the bidder commission and the chairman of the bidder commission can invite expertise if there is not enough expertise in the bidder commission. Therefore, Cost analysis of bidder can happen only according to expertise ideas (Turkish Public Procurement Law, 2002).

#### **2.5.8. Bid Evaluation and Awarding Contracts:**

There are two stages in the bid evaluation process of the Turkish procurement model:

The documents submitted by bidders are checked in the first stage to check whether they are complete or not. If the documents are not complete, then bidders are given some to complete the documents and if the bidders complete the documents within time, then they can join the process in the next stage.

- After the first stage, the documents are reviewed to check that weather these documents are above or below the criteria of qualification. secondly, conditions that are determined in bidding documents and the capacity of bidders to fulfill the contract are evaluated.
- After stage two, the contracting foundation should award the contract to the bidder which is economically most advantageous. However, it is not only decided by price factors. The non-price factors can be considered by the bidder commission. These factors can be efficiency, cost of maintenance, and technical benefits.

In case when the bidder commission gives the contract to a bidder other than the most advantageous then they must justify the factors based on which they award the contract bidder commission gives the decision to the contracting officer After getting a justified decision. He has the right to accept the decision right or reject it. If the bidder appeals, then the contracting officer must indicate the reasons for cancellation (Turkish Public Procurement Law, 2002).

### **2.6. Procurement system of Australia**

(CPR, s) Known as Rules of procurement of commonwealth regulates this system. In the Australian procurement model, these rules are the main regulators. There is web-based guidance in these rules to which helps government foundation to do procurement of things which they need. This web-based guidance also guides resource management which gives information to



stakeholders of procurement about changes in the system of procurement. From (CPR, s), The services and goods by relevant agency of government is procurement. The fields which are not treated as procurement in this system are given below. procurements that are conducted for resale, Investments, loans. (Commonwealth Procurement Rules. (2014). Public Procurement Law of Australia. Consult Australia. (2015).

### **2.6.1. Prequalification Factors:**

In this model to confirm that the bidders fulfill minimum requirements for procurement the government agency that needs procurement of services and goods can set conditions for participation in the procurement. For example, the agency can ask for checking of bidder financial or legal conditions. The authority can ask the bidder to show the detail of his past work in similar projects, for keeping quality procurement high.(CPR,s, 2014)

### **2.6.2. Types of Contracts:**

Limited bidding, Open bidding, and prequalified bidding are the procurement methods that are used in the procurement model of Australia.

- In open bidding, any bidder or company can participate in Bidding for the award of contract.
- In pre-qualified bidding, companies having the potential of doing the project are invited. The procurement process can be fastened with this method.
- In limited bidder, a limited no of companies is invited for bidding. This method is used when the process of procurement does not fulfill the conditions for restricted or open bidding.(CPR,s, 2014)

### **2.6.3. Value for Money:**

One of the main and most important rules of the procurement system of Australia is Achieving value for given money (CPR, s2014, p no 11). Explanation of the aims of procurement is the first step of the Australian procurement system. The facts which the officials should take into consideration before the start of the process are:

- scope of the business
- Scale of business
- Budget
- stakeholder inputs,
- Market competition

From the comparison of the end-user requirements and industry offering as shown in fig 4, the concept of value for given money can be applied.



**Figure 4: Value for money**

To confirm that value for given money has been realized and applied through the process, the following requirements should be provided by the procurement.

- Procurement should use public resources ethically and most economically to discourage discrimination and encourage competition.
- to provide fair decision-making, Procurement should be as open as possible.
- Procurement should justify that it is not against the general policies of the government of Australia. (CPR,s, 2014)

#### **2.6.4. Competition in procurement model of Australia:**

“Value for money” Guarantees competition in the procurement model of Australia. The law of procurement of Australia states that procurements should discourage discrimination and encourage competition (CPR, s 2014, page no 16). The process of procurement must be done with fairness. Government entities should give an advantage to small and medium-sized businesses against high-volume enterprises. The government agencies met up to ten or eleven percent of their needs from small local deals (CPR, s 2014, p no16).

#### **2.6.5. Cost Analysis:**

These are the factors that should be considered by the contracting firms during in procurement process of Australia.

- The standard and quality of goods which are to be procured.
- The adjustability of the goods to be procured to modifications in future effectiveness, Conformability.
- The effect of these factors either financial or non-financial should be evaluated by the agency as cost and benefit analysis.

#### **2.6.6. Bid Evaluation and Award of contract:**

The basic evaluation method in the Australian model is the value for money concept. The contract should be awarded to the firm which gives the best “value for money”. The contract should be awarded to a firm that is legally eligible and can perform the work. For public benefits, the procurement agencies can reject the offer of any company.

#### **2.6.7. AusAbider:**

Australian government’s procurement information system is the long version of “AusBidder”.it is a centralized web-based facility, and it can broadcast information related to processing procurements. (Car, s 2014, p no 19).” abider” can be used as a tool to communicate with relevant companies.

## 2.7. Procurement model of USA:

The federal system of procurement is used by the United States and this system seeks to realize four aims. Firstly, it tries to fulfill the need of user agencies qualitatively. Second, it tries to reduce administration costs as much as possible. Third, it aims to provide equal opportunity to every contracting agency participating procurement agency. Lastly, it guarantees that the procurement process is by public objective.(FAR, Subpart 1.102)

### Procurement process:

This consists of five phases we will discuss one by one.

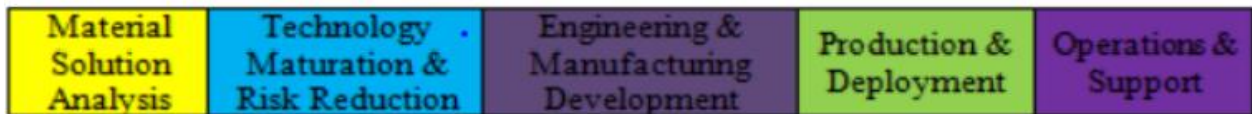


Figure 5: Phases of procurement

### 2.7.1. Analysis of material solution

The basic aim of this phase is to provide potential solutions for a given requirement. It conducts estimates to effectiveness, suitability, and life cycle cost. It also gauges the system's suitability and affordability.

#### a. Risk Reduction and Technology Maturation

This phase is initiated to reduce the risk of technological, engineering, and life cycle cost. It also includes the establishment of the future technologies that need to be incorporated into the future systems. Further development in the future with risk reduction is included in this phase.

#### b. Engineering and Manufacturing Development:

This phase is the official start of the procurement process. In this phase, capacity is developed to start production. The aim of this phase is the completion of system development, testing, and evaluation before starting of next phase.

#### c. Development and Production:

The main purpose of production and development is to acquire mission capabilities, and this consists of sub-phases.

- **Low-Rate Initial Production:**

The purpose of low initial rate production is to obtain operational capabilities to satisfy the requirements of the mission, to get required assets for initial assessments.

- **Full Rate Development and Production:**

After low-rate initial production, full-scale development is started with full capacity through contract.

**d. Support and Operations:**

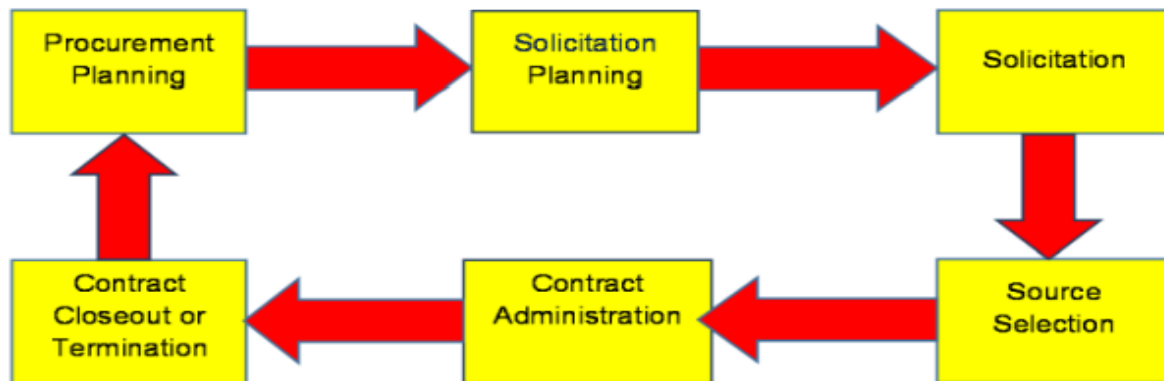
The purpose of this cycle is to support the contract project maintenance and its operations even after its production is complete. This may be lifetime operations if the production item is relevant.

**2.7.2. U.S procurement Phases:**

There are different phases of US procurement phases. We will discuss all of them one by one. (Garrett,2006)

**1). Procurement Planning:**

This process involves how and when to procure the required material to create deliverables. The following diagram will illustrate the steps.



**Figure 6:Six stages of procurement process adapted from Randon and Keith**

**2). Solicitation Planning:**

It entails product documentation product requirements and its sources. The requirement must be mission and operational-related. It also identifies the minimal requirement of the required set

program. Procurement output is the result of this phase.

**3). Selection of source:**

This phase involves the selection of potential bidders among bidders, and it is done by the source selection authority. The evaluation factors are combine of cost, non-price factor, technical analysis, experience, etc. The result of this phase is the potential contractor.

**4). Administration of contract:**

This phase is about managing the relationship with the supplier. It also includes managing disputes, contract modification, work completion, and payment to the contractor.

**5). Closeout of contract:**

This phase is about the completion of the contract and any outstanding issues. It also ensures both parties have completed their obligation and documented the contract accordingly and involves the release of contract retention and final payment.

**2.7.3. Procedures:**

Sealed bidding negotiated bidding and simplified acquisition procedure are for the procurement of goods of services and goods having cost below 150,000 dollars(FAR part 13). These three are the required procedures in the US procurement system.

- 1). Sealed bidding is used when the contract is awarded based on price. In this type of contract government and bidders do not need to meet to discuss anything. (FAR 6.402(a))
- 2). The main reason for using competitive bidding is for potential future modifications of contracts. It can also be used to procure materials outside the US. (FAR 6.402(b9fa))

**2.7.4. Alternative Bids:**

In some cases, bidders are allowed to submit alternative bids and it uses both competitive and non-competitive forms of bids.

**a). Competitive bidding:**

Following are examples of competitive bidding.

**1). Sealed Bidding:**

These kinds of bids are evaluated without discussions, and it includes both price and price-related factors.

**2). Lowest Price technically accepted:**

In this kind of bidding, price is given priority lowest price is given preference while technical superiority is not the main factor of consideration.

**3). Highest price technically superior:**

In this kind of bidding technically superiority is given preference and price is not the main factor of consideration.

**b). Non-competitive bidding:**

This is the method in which procurement is done through the sole source.

**Sole source:**

The only contractor that can provide required products and services, but written justification is mandatory. (FAR 6.302-1)

**3). Other than the full or open competition:**

- a). When there is the availability of a single source
- b). When there are some international treaties between two different countries
- c). To promote small local businesses
- d). When there is the situation of war, crime, and emergency.

**2.7.5. Best Value Continuum:**

In US procurement System there are two different source selection trade-off processes and the lowest price selection. The trade-off process is used when the lowest price is not the main aim. The lowest price selection is used when the price is the priority, not technical superiority. Moreover, small business activity is also used to protect small businesses. (FAR 15.101)

**2.7.6. Cost Analysis:**

In the US procurement model, the contracting is allowed to choose the process. If the contracting agency selects a trade-off process the trade may occur between price and non-price factor. The contracting agency will decide the significant factors. (Garrett, 2016)

However, if the contractor selects the lowest price process cost analysis is carried out and the lowest bidder is given a contract, but the contract must complete the prerequisite of the bid.

**2.7.7. Evaluation of bid and awarding contract:**

It varies from case to case depending on the needs of the user agency. But they make sure any

process does not limit competition anyway and prefer bidder meets the requirement set by the user agency. Cost price analysis is carried out, in some cases experience is given preference while in some cases technical superiority is given preference.

### **2.7.8. Contract Types:**

US procurement uses fixed type and cost price contracts, we will discuss them one by one.(World class contracting (Ch 08 by Gregory A .Garret,2010)

#### **1). Cost fixed contracts:**

In this type of contract profit depends on two factors

- a). Savings of cost becomes contractor profit.
- b). Overrun of cost results in contractor reduction of profit or increase in losses.

#### **2). Cost contracts:**

These types of contracts are converse of the first type of contracts.

- a). Saving of cost goes to the government.
- b). Overrun of cost is paid by the government.

## **2.8. UK Model of Procurement:**

UK procurement model consists of different stages. We will discuss each stage one by one.

### **2.8.1. Principles of Prequalification of Procurement:**

In UK procurement model contracting authorities must be transparent to ensure free and fair competition. According to this model, a bidder can be excluded from the procurement process if he tries to prevent competition in the procurement. However, the bidder should be given enough time to defend himself. (Public Contract Regulations,2015)

### **2.8.2. Types of contracts:**

There are five types of contracts that can be chosen in the UK procurement model.

- a). Open procurement
- b). Restricted procedure
- c). Competitive procedure
- d). Competitive Dialogue



e). Innovative partnership

(Public Contract Regulations,2015, Part 2, Section 5)

### **2.8.3. Competition:**

It is required to have at least three bidders submit their bids to ensure competition and prevent monopoly. The contracting agency may set some standards or requirements for procurement.

(Public Contract Regulations,2015,Part 2 Sub, Section 5)

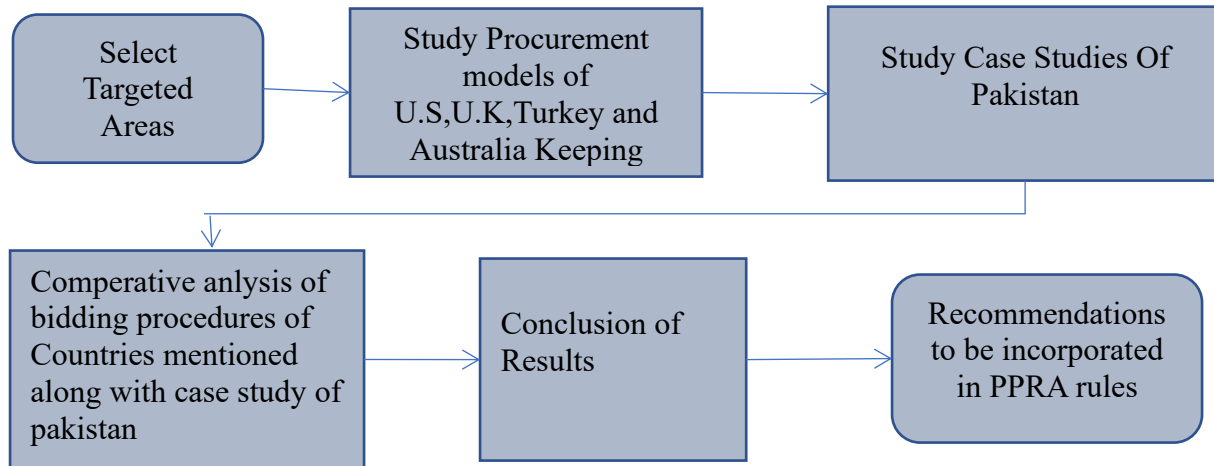
### **2.8.4. Evaluation of Bid and Awarding Contracts:**

Three main criteria contracting agencies used while evaluating bids are the formal experience of the bidder, technical skills of bidders, and financial condition of the bidder. Furthermore, the contracting agency may ask for bank account statements, records of work, etc. The contracting agency also considers the risk that the user company offered. (Public Contract Regulations,2015,Part 2 ,chapter 2,Section 5,Subsection 7.67)

## **2.9. Summary:**

In the literature review, we discussed different procurement models of countries like the US, UK, Turkey, and Australia. We will do some comparative analysis of these countries which will serve as a guideline to incorporate some of these rules in our PPRA rules.

### 3. METHODOLOGY



#### 3.1. Introduction:

This chapter will describe how this research project is conducted. This study overviews the procurement models of various countries like the US, UK, Turkey, and Australia have discussed PPRA rules and comparative analysis is carried out to provide guidelines for our PPRA rules.

#### 3.2. Data sources:

Different country's procurement models like the US, UK, Australia, and Turkey are the main source of data. To have better understanding different bid evaluation procedures are also discussed. PPRA rules along with world bank recommendations are also discussed. Furthermore, a comparative analysis is carried out to provide guidelines to be incorporated in PPRA rules.

#### 3.3. Data analysis:

PPRA rules define that the evaluation criteria should be set by user agency which led to many fraudulent activities, so some reforms need to be incorporated in PPRA rules. For reforms we will use some of the world's best procurement models of various countries like the US, UK, Turkey, and Australia will also discuss case studies of Pakistan. After discussing each model, we will do

some comparative analysis of these countries with PPRA rules and will provide recommendations to be incorporated in PPRA rules.

### **3.4. Summary:**

This chapter provides a methodology of research and describes the main data sources for it. It also discussed that how mentioned data will be analyzed for incorporation in PPRA rules. This part of the research gives an analysis of contemporary models and gives recommendations to be incorporated in PPRA rules.

## **4. RESULT AND DISCUSSION:**

### **4.1. Introduction:**

This section provides an investigation with contrasting different purchasing patterns of the U.S, turkey, Australia, UK. Following a similar investigation, accepted procedures continued in the above procurement models will be removed and their consideration during PPRA rules as core values used for community procurement for Pakistan be suggested. Relative investigation of USA, UK, Australia, Turkey models concerning the evaluation of bid cycles as well as the proposal for different segments in the next sections for PPRA rules recommendation.

### **4.2. Comparative analysis for bid evaluation criteria:**

#### **4.2.1. Market Intelligence:**

Some specific rules are available at the Turkish model system that involves the clean history of debt, tax-free and proper payments of the security in the name of the state that helps in making the proper history of the bidding candidate. Most of the time bidder is asked for its bank statement as a check to identify that the bidding candidate can sustain the whole project in term of financial basis. These details are essentials for all the candidates. There is also a proper check where the procurement committee if finds any certain ambiguity and caught the bidder in providing the misleading documents, will result in instant cancellation of the bid. Similarly, the nepotism factor is considered as an important point as most of the time the bidder is not allowed to bid if there is a relative of bidder inside the bidding committee. Similarly in the Australian model, the bidder committee which requires to procure some goods can also provide some set of rules where the bidder can easily work on the project to meet the basic requirement which will help in approving the bid market.

US model is a model in which there is a strict need for market evaluation and research where the bidder can easily make sure that the project can be of worth. Market research criteria and

conditions are easily explained in the FAR part 10 outlines. Similarly, the CPRG also gives guidelines for market research analysis. The US model has strong roots in the market research clause as this helps the government to make the products available that are commercial and non-developmental. Similarly, they are also important as they provide the details and specifications which the government or procuring agency needs to be used s (The Public Contracts Regulations 2015, Part 2, Chapter 2, Section 5, Sub-Section 5). Similarly, the UK model has different criteria as the UK model has only one reason to being excluded by preventing the competition in the procurement process. However, there is a chance that the bidder may be given enough time and chances to speak for itself.

#### **4.2.2. Assessment Standards:**

Two stages are considered in the Turkish procurement model. The first stage comprises the document preparation and submission where documents are analyzed by the competent authorities. Similarly, proper time is given to the incompetent bidder to fulfill the requirements of the bidder to continue the bidding process for itself. When the first stage is completed the second stage continues and the bidder is considered based on their qualification criteria as mentioned by the competent authorities. Whoever fulfills the second stage the best one is selected, and the bid is awarded to them. However, there is a situation where the best bidder is qualified based on the price factor. However, sometimes the bidder commission can also search for the best bidder by non-price factor. These factors can vary but they may depend on the benefits, efficiency, quality, and other variable factors. The procurement agency assigns the monetary values of the non-price factor that helps in the proper understanding of the price comparison and the non-price scenarios.

The value for money concept is being used in the Australian model where major importance is given to the value instead of money and quality. When the bidding documents are done, and the bids are opened the bid is awarded to that person who shows that he can provide the best value for money project. However, there is a restriction that the bid is not given to the person which is ineligible to bid though his project shows the value for money. Public interest is considered as an important factor in the selection of the bidder as this shows that the government agency can avoid any person and cancel his bid for the public interest and can give the bid to the person which is in the best of the public interest.

US procurement model is based on the two steps of bid evaluation which is being used and initiated by the Federal Acquisition Regulations. These steps are that the competition should not be limited and there should be proper competition in the bidders for the whole project. Similarly, the bidder is preferred which follows all the guidelines given by the government to the bidder. Cost and price ratio and experience is an important factor in the evaluation of the bidder. However, the factors can vary on the variation of cases by the government agency. The cases can be based on the calculation of the technical analysis sometimes and the experience on the other hand. The best value continuum is considered the most important factor for the evaluation criteria and procurement process. If we discuss the best value criteria, we can see that two factors govern the continuum which is the Lowest Price Technical acceptable, and the High price Technically superior. The trade-off factor is used by the government which helps in finding the best suitable project other than the lowest possible financial bid or by the highest price technical superiority. These are a good standard and are helpful for the government to find the best bidder in the pool. Care must be taken while fulfilling the criteria as this will provide transparent bidding standards and the contract will be less vulnerable.

Three criteria are used in the UK model while evaluation the bidder which are the financial status of the contestants, technical skills of the bidder, and the professional experience of the bidder. These authorities also consider some other factors like the social, environmental, and non-price factors of the bidder.

#### **4.2.3. Cost Evaluation:**

The cost analysis method of the evaluation of bids is not included in the Turkish model. But to some extent, it has been observed that the bidder commission holds the right for the selection based on non-price factors. However, there are some special conditions where the commission members are not experts in these cases the chairman can call a group of experts for their assistance. Hence all work under the supervision of the experts. In the Australian procurement model, the procured goods quality, adaptability of the good, and its future modification can be a factor along with the efficiency factor which can be an important consideration for the project prosperity. Similarly, for the cost-benefit analysis, the project details can be verified for the financial and non-financial analysis of the project. This shows that the Australian model is suitable where they work in the best of the public interest. Similarly in the US model of procurement, the selection agency has the

authority to select the best opportunity and process for the situation. Similarly, the committee can also accept the offers of the high price bid unless it has the potential for providing value for money to the project. This shows that the US model is also based on the public interest.

#### **4.2.4. Contract Types:**

Turkish model comprises the various procedures which are used as a part of the procurement model. These contracts involve open procedures, restricted procedures, negotiated procedures, and direct procedures. Open procedures are the method in which anyone can submit the bid for gaining the contract. The restricted method comprises of the contracting agency examination before submission of the bid, this is done to check the legality of the bid and its forms. A negotiated bid is a type where neither open nor restricted bids are used and are negotiated with the person. The agency can select one of its own choices in the direct procedure. For this bid, the contracting agency does not advertise the bid in the newspaper.

In the Australian model, the procurement types which can be used for the procurement of the project can be the open bidder, prequalified bidder, and the limited bidder. The open bidding the same as the previous one in the Turkish model where any bidder can bid for the project. The prequalified bidding is the process where the invited persons are invited, and the potential bidder is selected from them. Limited bidders are used when the prequalified bidder and the open bidder do not meet the criteria and one or two persons are asked to make the best offer, they can ask.

In the USA procurement model, the sealed bidding negotiated competitive proposals and simplified acquisition procedure are used for the bidding procedure and procurement. Sealed bidding is the procedure for the project where the committee and bidder do not need, and the selection is based on the lowest amount of the project. Most of the time bids are opened in front of the bidder and the selection is made. The main reason due to which the negotiated competitive proposals are used is because there is a possibility of future modification. Negotiated competitive proposals are used for the government agency that requires something to be procured outside of the US.

UK model comprises of 5 procedures which are as follows: open procurement, competitive procurement, competitive dialogue, innovation partnership, and restricted procedure. These methods are used, and any company can provide the bid on an open basis. However, in other

procedures only invited companies can submit bidders.

#### **4.2.5. Competition:**

In terms of competition, the Turkish procurement model mostly provides opportunities to the locals to create a better job opportunity for the local people and mostly bidders are selected from the local Turkish bidder. However, this is used for local companies and pure competition can be catered for this scenario.

Value for money is the main factor that ensures the competition in the people for the Australian procurement model. According to the Australian bidding model, procurement should be based on competition, and discrimination is avoided in any case. The main goal is to create a transparent model for procurement. But in some cases, small businesses and locals are supported to provide opportunities to the locals and government entities are used to support the locals as well. Similarly, from analysis, we observed that the government was able to receive 10% of the needs from the local businesses.

US bidding process is based on FAR part 6 and FAR subpart 6.5 in which the explanation was given based on the open and full competition. This was explained and advocated by the enhancement of the public competition. Similarly, they preferred open competition to obtain the best value for the taxpayers. Best value Continuum was considered as the best method applicable to the competitive process. The method was simple and transparent. The government agencies could select one or two combinations of the sources that are the tradeoff process and the minimum price selection process. The trade-off method is used by the agencies when the lowest price bid is not the concern. Similarly, the lowest price procedure is used when the lowest price is the concern among the accepted offers. Similarly for the encouragement of the small businesses. Small business Act is used that helps in providing a fair share to the local business.

In the procurement model of the UK, we have the condition where three competitors are required to start the bidding procedure. They submit the bid and then the procurement procedure starts after that. Market research is necessary and is assisted by the law. Due to the presence of the preliminary research of market consultation the standards are set for the procurement. Distortion of the competition cannot be used for the consultation. The analysis of the procurement models is discussed in the given figure.



**Table 1: Analysis of procurement model**

<b>Analysis Topics</b>	<b>Turkish Model</b>	<b>Australian Model</b>	<b>U.S Model</b>	<b>U.K model</b>
<b>Market Intelligence</b>	<ul style="list-style-type: none"> <li>• Clean debt history</li> <li>• Free of tax and other payments to the state</li> <li>• Relative of the procurement staff cannot participate</li> </ul>	<ul style="list-style-type: none"> <li>• Contracting agency set rules.</li> <li>• Financial, legal, or former experience can be asked</li> </ul>	<ul style="list-style-type: none"> <li>• Strictly required.</li> <li>• FAR Part 10</li> <li>• The Contract Price Reference Guide volume 1-5</li> </ul>	<ul style="list-style-type: none"> <li>• No strict rules</li> <li>• Getting information before setting the requirement is required</li> </ul>
<b>Competition</b>	<ul style="list-style-type: none"> <li>• Small local businesses may be prioritized</li> </ul>	<ul style="list-style-type: none"> <li>• At least 3 participants needed.</li> <li>• Small business may be prioritized</li> </ul>	<ul style="list-style-type: none"> <li>• Open limitless competition</li> </ul>	<ul style="list-style-type: none"> <li>• At least 3 participants needed</li> </ul>
<b>Suitable contract</b>	<ul style="list-style-type: none"> <li>• Open procedure</li> <li>• Restricted procedure</li> <li>• Negotiated procedure</li> </ul>	<ul style="list-style-type: none"> <li>• Open procedure</li> <li>• Prequalified procedure</li> <li>• Limited procedure</li> </ul>	<ul style="list-style-type: none"> <li>• Sealed bidding procedure</li> <li>• Simplified acquisition</li> </ul>	<ul style="list-style-type: none"> <li>• Open procedure</li> <li>• Restricted procedure</li> <li>• Competitive procedure</li> <li>• Competitive dialogue</li> </ul>

			<p>procedure</p> <ul style="list-style-type: none"> <li>Negotiated competitive procedure</li> </ul>	<ul style="list-style-type: none"> <li>Innovation partnership</li> </ul>
<b>Evaluation criteria</b>	<ul style="list-style-type: none"> <li>Assessment of price and non-price factor</li> <li>Economically most advantageous bidder</li> </ul>	<ul style="list-style-type: none"> <li>Value for money</li> <li>The best offer can be rejected only for public interest benefits</li> </ul>	<ul style="list-style-type: none"> <li>Best Value Continuum</li> <li>Limitless competition</li> <li>Entity's requirement</li> </ul>	<ul style="list-style-type: none"> <li>Professional former experience</li> <li>Financial situation of the bidder</li> <li>Technical skills</li> <li>Social environmental price factors</li> </ul>
<b>Cost/ Price Analysis</b>	<ul style="list-style-type: none"> <li>No specific analysis method</li> <li>Bidder commission is allowed to weight the</li> </ul>	<ul style="list-style-type: none"> <li>The quality and the adaptability of procured goods are evaluated.</li> <li>Procurement agency evaluates</li> </ul>	<ul style="list-style-type: none"> <li>Contracting agency selects the best way to procure, and then appropriate</li> </ul>	<ul style="list-style-type: none"> <li>The cost Assurance and analysis Service evaluates the cost</li> </ul>

	non-price factor	price/nonprice factors	analysis method is applied	
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**4.3. Recommendation and conclusions on performing REASONABLE**

**evaluation:**

The analysis of the procurement model of the various countries is done in this research paper which involves the countries of the United State, United Kingdom, Turkey, Australia. Five major recommendations need to be discussed which involve the market intelligence, competition, evaluation criteria, suitable contract, and price/cost ratio concerning PPRA rules.

**4.3.1. Market Intelligence:**

The specification of the product that is being used for the project and required by the bidding agency is easily covered by having proper knowledge of the market intelligence. This is important as a detailed analysis was made on the market intelligence by the US FAR and CPRG. This helps in providing better product procurement and helps in making the project more valuable. PPRA rules should involve the procurement market intelligence clauses as discussed by the US procurement policies.

**4.3.2. Competition:**

Competition plays an important role in providing better quality at feasible rates. The procurement model of the UK and Australia approves the competition clause as they allow more than 2 bidders to bid so that the bidder commission can select the best party for the project and can award the bid to them. This will help in achieving the best value for money for the taxpayers. PPRA rules should involve the competition clauses as discussed by the UK and Australian procurement policies.

**4.3.3. Suitable Contract:**

There is only one type of contract which is the fixed contract for the PPRA rules and regulations. However, in the other models, there is flexibility where it depends upon the risk factor that can be

possible and can be catered in terms of the cost-type procedure. PPRA rules should involve the various contract clauses as discussed by the UK and UK procurement policies. This will help in giving the best value for money project to the people of Pakistan.

#### **4.3.4 Evaluation Criteria:**

LPTA is the standard that is being followed by the PPRA commission for the evaluation of the bid. The best value continuum is used by the US model for their evaluation of the bidders. Similarly, US model also uses price and non-price factor that helps agency for the options of LPTA or more price superiority bids. Non-price factors are also considered in the Turkish model in coordination with the price factor evaluation. PPRA rules should involve the evaluation criteria clauses as discussed by the USA and Turkish procurement policies.

#### **4.3.5. Cost/Price Analysis:**

This type of analysis helps in the initial stage of the bidder selection as this provides an analysis of the potential supplier and bidder that can help in making the decision easy for the bidder agency. The total cost of ownership and weighed scoring are done by the corporate sectors that are essentially important and provides a better analysis of the bidders. These clauses need to be involved in PPRA rules and clauses for better analysis before selecting the suitable bidder.

#### **4.4. Review:**

To summarize our research, we have seen the comparative analysis of the models of the above-given countries with PPRA rules and recommendations will be given to the PPRA clauses that will help in finding the suitable options for the PPRA. The above given five models should be selected as a good source of the recommendation for the PPRA rules and clauses.

## 4.5. Case study

These are the certain case studies that needs to be identified. these case studies are based on the factors which are discussed in the below section:

### 4.5.1. Case study 1:

Construction of infrastructure including Allied facilities for new Islamabad international Airport metro Bus Service Package-1-Peshawar more to G-13:

<b>Market Intelligence</b>	As NLC is well reputed organization having experience in these kinds of projects so in area of market intelligence this project suits NLC, but the thing can be more competitive if incentives that NLC has as it is state owned organization can be provided to another bidder.
<b>Competition</b>	The client is given right to accept or reject bid without giving justification. For fairness like Turkish model bidder commission gives reason for disqualification. This needs to be incorporated in PPRA rules.
<b>Suitable contract</b>	As bidding was open for everyone so standards followed properly.
<b>Evaluation Criteria</b>	In this project bid was awarded to lowest bidder but some other options like best value continuum were available in which we consider both price and non-price factor
<b>Cost/Price analysis</b>	Total cost of ownership or weight scoring is recommended to give best better results. TCO (It helps to calculate direct and indirect cost) Weighted scoring is designed to set criteria on cost versus benefits basis and then ranked by their final score.

**Table 2:Construction infrastructure for new Islamabad International Airport**

#### 4.5.2. Case study 2:

This case study is the construction project of ring road Lahore. The details of these project based on the factor listed above have been discussed.

<b>Market Intelligence</b>	If we talk about the market intelligence it was clearly mentioned that a company who works in accordance with the rules of PPRA is eligible to be a part of their bidding process. Another thing that we noticed that only three of these posts required a professional market intelligence up to a certain level, apart from that there were no such strict rules that the company must follow if it qualifies the criteria given by the employer.
<b>Competition</b>	The next thing was the competition during the bidding process it was up to the employer to choose the number of companies who he/she wanted to Invite to come forward with their bids. The employers are given every right to accept or reject at any time before the award of contract without justification on grounds this makes it difficult for small corporations to make it to the top tier.
<b>Suitable contract</b>	Competitive and restricted procedures are suitable for this type of project.
<b>Evaluation Criteria</b>	If we talk about the evaluation criteria for the bidder low cost bid were given the highest preference with the higher response rate without keeping in mind public benefit and another thing that was neglected during this whole process what is the environmental effects and its evaluation report that was no specific set of technical evaluation laws set forth that distinguish one bidder from another each bidder is given a set of rules and he is required to come up with a technical evaluation of his own.
<b>Cost/Price analysis</b>	While considering the cost price analysis it was mentioned that the lowest bidder would be given preference while evaluating the bids alternative methods such as the weighted attributes of the bidder would have been much more effective I which the price benefits pressures are considered in percentages and the one with the highest rate is given priority.

**Table 3: Construction project of Ring Road, Lahore**

## **5. CONCLUSION:**

The focus for our research paper was the comparative analysis of the models which were given above and now these are the questions upon which we will address the bid evaluation criteria.

### **5.1. Research Queries:**

Analysis and comparison were the sole reason of this research project and the models that we discussed helped in providing the guidelines for the PPRA rules that needs to be recommended to PPRA. These are the few questions that were being asked and were answered through these recommendations.

- a). what are the guidelines that need to be used in PPRA rules for procurement in Pakistan?
- b). what should be the recommendations for the best procurement model that needs to be aligned with the PPRA rules for procurement in Pakistan?

The bid evaluation process is the main component of this research for the PPRA rules recommendation. Various models of various countries were used for the analysis and recommendation for the PPRA rules. The models include the Australian, Turkish, USA, UK models. After that we shortened the five-procurement model in them and provide analysis for 5 parameters of the project which are as follows:

#### **5.1.1. Market Intelligence:**

- a. we need to involve market intelligence as a proper clause in PPRA rules as this will provide the best value for money.
- b. US procurement model should be used in terms of the market intelligence factor as it is the best one for that.

#### **5.1.2. Competition:**

- a. competition factor provides the best value for money for the agency hence it should be involved in PPRA.

b. Australian model and UK model are effective and should be selected for the PPRA clause.

**5.1.3. Suitable Contract:**

a. cost-reimbursement provides low risk and should be added to PPRA rules.

b. US and UK procurement model contract types are important for PPRA rules.

**5.1.4. Evaluation Criteria:**

An a. tradeoff technique and best value technique can be used as an evaluation criterion for PPRA.

b. best value continuum non-price factor should be used in the PPRA clauses.

**5.1.5. Cost/price Analysis:**

1. Ownership cost and technical score should be considered as an analysis in the PPRA rules.

2. Analysis of the financial status of the supplier needs to be included in PPRA.

All these factors should be included in the PPRA rules, and this will help in achieving the cost-effectiveness of the project and its efficiency will be increased by adding these clauses in the PPRA clauses. Figure shows the recommendation in terms of the component for the evaluation of the bid.

<i>Components of Bid Evaluation</i>	<i>Recommended Model of Procurement</i>
Market Intelligence	United States Procurement Model
Competition	Australia and United Kingdom Procurement Model
Suitable Contract	United States and United Kingdom Procurement Model
Evaluation Criteria	United States and Turkish Procurement Models
Cost/price analysis	Corporate/Private Sector Procurement Procedures

**Figure 7: Recommended Components of Bid Evaluation**

**5.2. Regions intended for Additional Study:**

Improvement is a never-ending process, and this can be used as a first step for the change in the



PPRA rules to make the clauses more transparent and the whole procedure better and useful.

### **5.2.1 Banning or else Exclusion of contractor:**

blacklisting of the bidders is being discussed in the PPRA 19 rule. However, no proper reason was given about the basis on which they were put on the defaulter list or disbarred. This causes a great concern that what was the reason and is the government system is as effective as shown. However, in the models of the US proper reasons are being listed and the cause of the blacklisting of those contractors was disclosed which provides the transparency of the agency. This section was FAR section 9.4 in which the blacklisted company, as well as the reason behind that, was given. Similarly in this section, the proper procedure for debarment and blacklisting of the specific candidate is given.

### **5.2.2. Restriction upon Negotiations:**

negotiation was banned by the PPRA rule 40 with the lowest bidding person. This causes an increase in the price of the bidders. Revision of this rule is required as this rule decreases the chances of the transparency of the procurement agency. This is because the UK and USA models accept these clauses and allow the negotiation with the bidder and supplier in the initial and final stages. This also helps in the reduction of the risk that can be possible before contract awarding time.

### **5.2.3. Education of Procurement Employees:**

Training is important in any organization before they perform their duties. This is an important factor for organizational growth and sustainability. PPRA clauses should also involve the rules for the proper training for the agency executives and workers. US procurement agency made this training compulsory for working the department of procurement of defense. Similarly, Defense Acquisition University provides the proper training to the individuals working in procurement agencies of the United States. PPRA should take its role and follows the guidelines which are being provided by the DAU and DAWIA. This can help in saving the cost of any errors that may be possible without any training. Similarly, the transparency can be increased as these studies also involve the teaching of ethics which can help in letting the workers know the right and wrong path and its consequences.

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