

E-PROCUREMENT IN ICAR: ISSUES AND CHALLENGES

INTRODUCTION

1.1 In the current era of technological advancement¹ that is taking place all over the world, a new kind of rationalization has been introduced in the public sector by the use of modern information and communication technologies (ICTs). Increasingly the use of ICT tools and applications is leading to transformational shifts in public policy, processes and functions. ICTs are changing the way the government does business for the people. In this context e-government is seen to be a lever for the transformation of government.

1.2 **What is e-Government & how it is different from e-Governance?** E-governance² is beyond the scope of e-government. While e-government is defined as a mere delivery of government services and information to the public using electronic means (ICT), e-governance allows direct participation of constituents in government activities. Blake Harris summarizes the e-governance as the following; E-governance is not just about government web site and e-mail. It is not just about service delivery over the Internet. It is not just about digital access to government information or electronic payments. *It will change how citizens relate to governments as much as it changes how citizens relate to each other.* It will bring forth new concepts of citizenship, both in terms of needs and responsibilities. E-governance will allow citizens to communicate with government, participate in the governments' policy-making and citizens to communicate each other. The e-

¹ UN e-Government Survey 2008 p 1.

² Inter-American Development Bank. © 2007(<http://www.iadb.org/sds/itdev/governance.htm>)

governance will truly allow citizens to participate in the government decision-making process, reflect their true needs and welfare by utilizing e-government as a tool.

1.3 The Government approved the National e-Governance Plan (NeGP), comprising of 27 Mission Mode Projects (MMPs) and 10 components, on **May 18, 2006**. Details of 27 MMPs are as below:

Central MMPs	State MMPs	Integrated MMPs
<ul style="list-style-type: none"> • Banking • Central Excise & Customs • Income Tax (IT) • Insurance • MCA21 • National Citizen Database (NCD/MNIC)/ UNIQUE ID (UID) • Passport, Immigration & Visa • Pension • e-OFFICE 	<ul style="list-style-type: none"> • Agriculture • Commercial Taxes • e-District • Employment Exchange • Land Records • Municipalities • Panchayats • Police • Property Registration • Road Transport • Treasuries 	<ul style="list-style-type: none"> • CSC • e-BIZ • e-COURTS • e-Procurement • Electronic Data Interchange (EDI) For Trade (eTrade) • National E-governance Service Delivery Gateway • India Portal (www.india.gov.in)

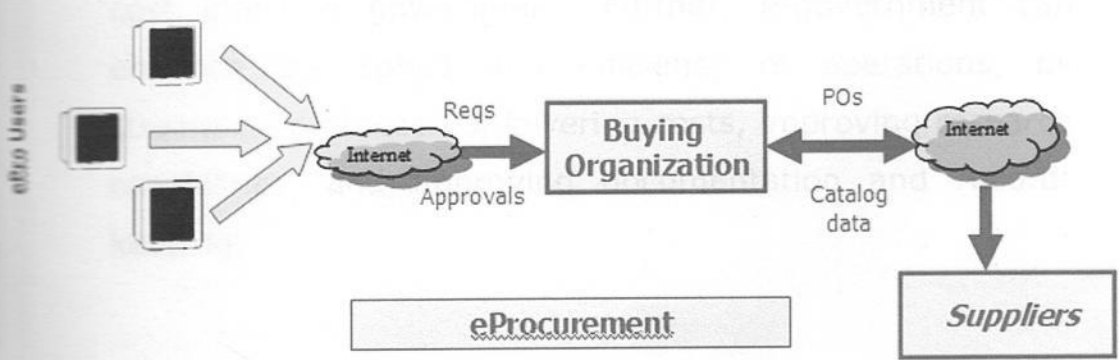
e-procurement is one of the important MMP under NeGP. This MMP is being implemented to ensure that government procurement becomes simplified, transparent and result-oriented. It is being implemented through and in DGS&D, a central purchasing organisation under the Ministry of Commerce and Industry, having core competency in procurement of goods and services.

The objectives of MMP of e-procurement are:

- To establish a one stop-shop providing all services related to government procurement
- To reduce cycle time and cost of procurement

- To enhance transparency in government procurement
- To enhance efficiency of procurement
- To bring about procurement reform across the government

1.4 What is E-procurement? E-procurement³ is the business-to-business or business-to-consumer purchase and sale of supplies and services through the Internet as well as other information and networking systems, such as Electronic Data Interchange and Enterprise Resource Planning. Typically, e-procurement Web sites allow qualified and registered users to look for buyers or sellers of goods and services. Depending on the approach, buyers or sellers may specify costs or invite bids. Transactions can be initiated and completed. Ongoing purchases may qualify customers for volume discounts or special offers. E-procurement software may make it possible to automate some buying and selling. Companies participating expect to be able to control parts inventories more effectively, reduce purchasing agent overhead, and improve manufacturing cycles. E-procurement is expected to be integrated with the trend toward computerized supply chain management. E-procurement software application includes features for supplier management and complex auctions.

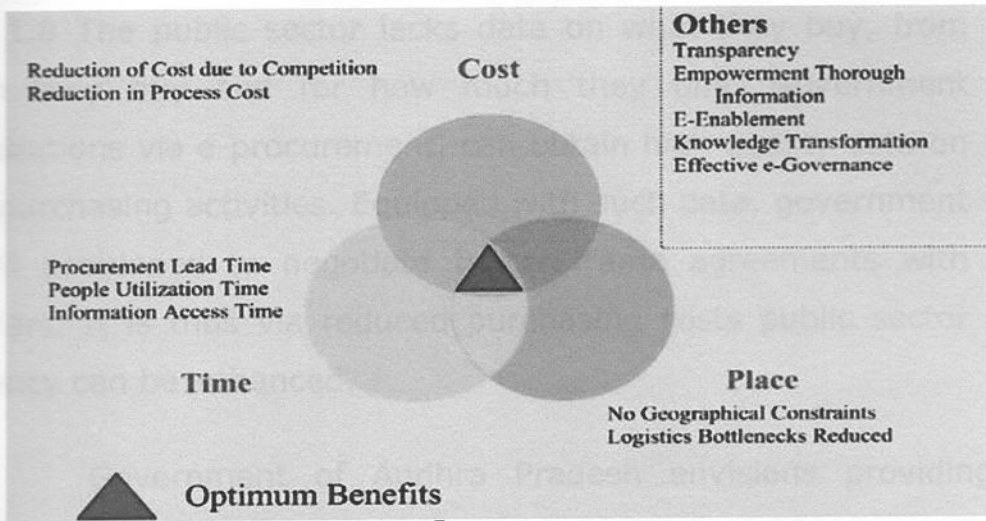


³ <http://en.wikipedia.org/wiki/E-procurement>
⁴ www.bessence.com/resources.html

1.5 There are six main types of e-procurement:

- **Web-based ERP (Electronic Resource Planning):** Creating and approving purchasing requisitions, placing purchase orders and receiving goods and services by using a software system based on Internet technology.
- **e-MRO (Maintenance, Repair and Operating):** The same as web-based ERP except that the goods and services ordered are non-product related MRO supplies.
- **e-sourcing:** Identifying new suppliers for a specific category of purchasing requirements using Internet technology.
- **e-tendering:** Sending requests for information and prices to suppliers and receiving the responses of suppliers using Internet technology.
- **e- auctioning:** Using Internet technology to buy goods and services from a number of known or unknown suppliers.
- **e-informing:** Gathering and distributing purchasing information both from and to internal and external parties using Internet technology.

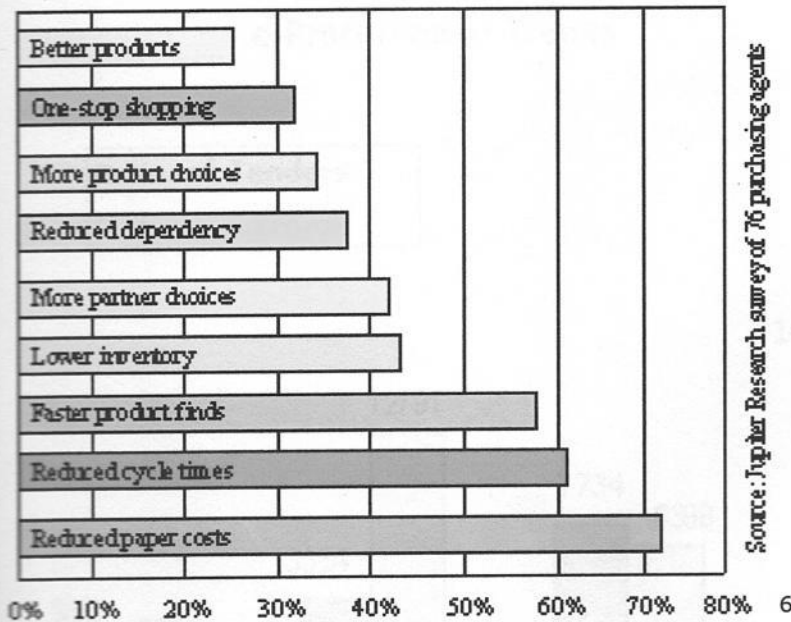
1.6 E-government can contribute significantly to the process of transformation of the government towards a leaner, more cost effective government. Further, e-government can enhance the speed and efficiency of operations, by streamlining processes, lowering costs, improving research capabilities, and improving documentation and record-keeping.



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1.7 E-procurement benefits stem from automating procurement activities and streamlining purchasing workflow, both internally and with vendors.

e-Procurement Benefits

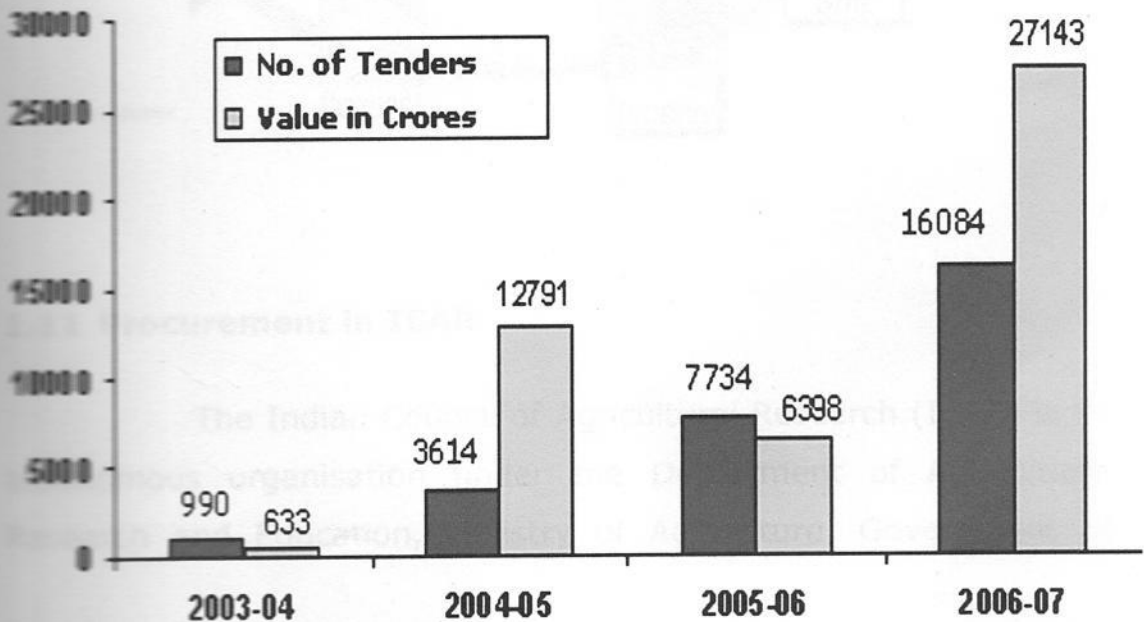


⁵ <http://www.wipro.com/>
⁶ www.clarity-consulting.com

1.8 The public sector lacks data on what they buy, from whom they buy and for how much they buy. Government organizations via e-procurement, can obtain high quality data on their purchasing activities. Equipped with such data, government is well positioned to negotiate better frame agreements with suppliers. It is thus via reduced purchasing costs public sector efficiency can be enhanced.

1.9 Government of Andhra Pradesh envisions providing good governance by establishing a COMMITTED, ACCOUNTABLE, RESPONSIVE, INSPIRING, NATIONALIST, GENUINE Government - CARING Government. e-Procurement is one of the vehicles used in reaching the goal of CARING governance. e-Procurement.gov.in will provide services like e-Procurement, e-Tendering, e-Selling and e-Auctions. Details of their e-procurements trends are as below.

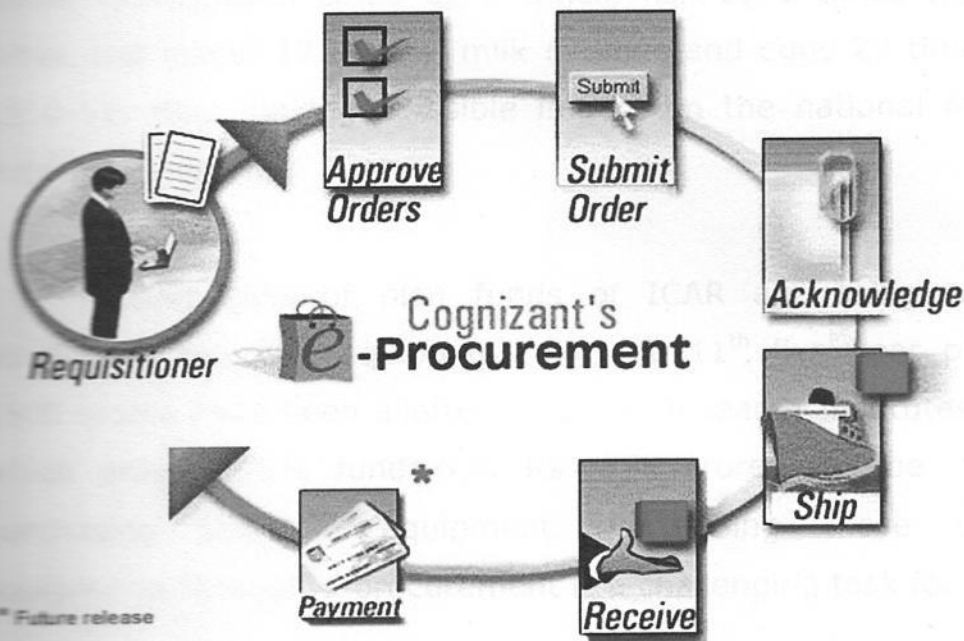
e-Procurement Trends



E-procurement via enhancing transparency and accountability in the purchasing process is expected to reduce corruption.

1.10 e-Procurement cycle

e-Procurement solution addresses the entire gamut of procurement functions in the procure-to-pay cycle ranging from placing material requisition with the purchase department to interfacing with the Payment department for making payment to the supplier. This solution predominantly solves the MRO or indirect procurement complexities in the retail business.



1.11 Procurement in ICAR

The Indian Council of Agricultural Research (ICAR) is an autonomous organisation under the Department of Agricultural Research and Education, Ministry of Agriculture, Government of

⁷ <http://myacademy.cognizant.com/>

India. The Council is the apex body for coordinating, guiding and managing research and education in agriculture including horticulture, fisheries and animal sciences in the entire country. With over 90 ICAR institutes and 45 agricultural universities spread across the country this is one of the largest national agricultural systems in the world.

The ICAR has played a pioneering role in ushering Green Revolution and subsequent developments in agriculture in India through its research and technology development that has enabled the country to increase the production of foodgrains by 4 times, horticultural crops by 6 times, fish by 9 times (marine 5 times and inland 17 times), milk 6 times and eggs 27 times since 1950-51, thus making a visible impact on the national food and nutritional security.

Around 25% of plan funds of ICAR are being used for purchasing scientific equipment. For the 11th five year plan, Rs. 1500 crores have been allotted to these Research Institutes, out of which around 25% funds i.e. Rs. 375 crores will be used for purchasing scientific equipment. Purchasing these scientific equipments through e-procurement is a challenging task for ICAR.

STATEMENT OF PROBLEM

1.12 Central Vigilance Commission vide their order No.98/ORD/1dated 18th December, 2003 communicated that in order to bring about greater transparency in the procurement and tendering processes there is need for widest possible publicity and issued following instructions:

(i) In addition to the existing rules and practices regarding giving publicity of tenders through newspapers, trade journals and providing tender documents manually and through post etc. the complete bid documents along with application form shall be published on the web site of the organization. It shall be ensured by the concerned organization that the parties making use of this facility of web site are not asked to again obtain some other related documents from the department manually for purpose of participating in the tender process i.e. all documents up to date should remain available and shall be equally legally valid for participation in the tender process as manual documents obtained from the department through manual process.

(ii) The complete application form should be available on the web site for purposes of downloading and application made on such a form shall be considered valid for participating in the tender process.

(iii) The concerned organization must give its web site address in the Advertisement/NIT published in the newspapers.

(iv) If the concerned organization wishes to charge for the application form downloaded from the computer then they may ask the bidding party to pay the amount by draft/cheques etc. at the time of submission of the application form and bid documents.

While the above directions must be fully complied with, efforts should be made by organizations to eventually switch over to the

process of e-procurement/ e-sale wherever it is found to be feasible and practical.

Department of Expenditure, Ministry of Finance vides OM no.8 (5)/E.II (A)/2006 dated January 10th, 2007 has now made e-procurement **mandatory** for all government departments w.e.f April 1, 2007, with the following **minimum compliance norms**:

- All communication between indenting officers and potential vendors/ suppliers/service providers shall be conducted 100% electronically, **using email** and standardized formats and templates to be used uniformly within each ministry. At appropriate stage of tendering process, this communication shall be placed in the public domain with digital access.
- More specially, as minimum acceptable disclosure norms, all tender notices, tender documents/enquiries and information regarding award of contracts/acceptance of tender must be placed on the website for information of general public.
- An electronic database of all the suppliers shall be created, by requiring all the suppliers already registered with the Ministry/Department, to furnish their details online at the web-site.

Implementation of above mandatory e-procurement is not only required minimum IT infrastructure in terms of

telecommunications, internet bandwidth, PC density, e-procurement application software and trained manpower but also required e-enabling of suppliers. Security issues in implementing e-procurement are also very important. Since these mandatory Government orders are applicable to all Ministry/Department including their offices situated all over India, it is important to study the problems in implementation of e-procurement and suggesting a roadmap for its effective implementation.

OBJECTIVE

1.13 The objective of e-procurement system introduced by Government of India is to procure goods at an optimum price, of the specific quality, at the right time in a cost effective, efficient and transparent manner. The objectives of the study are:

- To understand the concept and benefits of the e-procurement system introduced by Government of India.
- To identify issues/ problems/ challenges in effective implementation of e-procurement system in ICAR.
- To suggest a proper roadmap for accelerating the e-procurement system in ICAR.

JUSTIFICATION OF THE STUDY

1.14 Mandatory e-procurement introduced by Government is being implemented in ICAR. However it lacks basic Know-how especially in terms of e-procurement application software. Some of the ICAR institutes also lack even basic IT

infrastructure in terms of telecommunications, internet bandwidth, PC density. Therefore, there is a need for study.

1.15 This study/report shall be useful to Indian Council of Agricultural Research for developing a e-procurement roadmap for it's headquarters as well as its research institutes situated all over India for effective implementation of e-procurement. The study shall also assist in estimating the basic minimum requirements in terms of IT infrastructure i.e. telecommunication, internet bandwidth, PC density, e-procurement application software and also trained manpower.

RESEARCH QUESTIONS

- Is the available IT infrastructure in terms of telecommunications, internet bandwidth and PC density adequate to meet the requirement?
- What are the specific manpower and security problems in implementing e-procurement in the ICAR?
- Do we have appropriate e-procurement application software in place to implement the programme?
- What should be the roadmap to overcome the obstacles in implementing e-procurement?

SCOPE/LIMITATIONS/DELIMITATIONS

1.16. The scope of the study of e-procurement in ICAR covers a very large canvas and it is not possible to deal with all its institutes, which are more than 95 in numbers. It is therefore

proposed to limit the study to 15 numbers of institutes and since, nature of work done in the other institutes are similar, whatever is implementing in these institutes, can be replicated in the others also.

LITERATURE REVIEW

1.17. The research is mainly based on available literature and studies on the subject. This has been mainly sourced from DGS&D, a central purchasing organisation under the Ministry of Commerce and Industry, having core competency in procurement of goods and services. NeGP i.e. National e-Government Programme of Ministry of Communication, Central Vigilance Commission, Ministry of Finance. Information Technology and National informatics Centre (NIC) etc. Annual reports of these departments, their various other relevant publications and economic survey have been pursued to obtain requisite facts and figures. In course of study, a thorough review of literature on the subject has been carried out. Details of references are given at the end.

An extensive use of electronic media has been carried out to perceive the development in e-procurement nationally and internationally. Lots of literatures along with facts and figures are available on internet related to implementation of e-procurement in India and abroad. Accordingly, their websites have also been visited. Details of websites visited under references.

METHODOLOGY

1.19. The study will be based on a combination of analytical, observational and experimental methods that includes collecting primary data through Questionnaires, secondary data, interviews, consultations and detailed discussions with the senior officers from some of the ICAR Institutes. Besides this, my personal experiences as Dy. Secretary (GAC), ICAR Headquarters dealing with procurements.

1.20. Questionnaire: A questionnaire is being designed for obtaining necessary primary data. This will be intended at three target groups related to ICAR viz. Directors of the Institutes, Administrative Officers dealing with procurements and Finance Officers dealing with payments. Accordingly, questionnaires are being designed for soliciting responses. The thrust of the question is to get the first hand information of the issues involved in the implementation of e-procurement, major factors or constraints giving rise to these issues such as infrastructure, manpower problem etc.

Interviews:

1.21. The questionnaires will serve as a guide during interviews and discussion with the various senior government officers. Apart from these questionnaires, interviews will also be conducted at the senior level administrators and some knowledgeable and key functionaries in the field to throw light on the existing and futuristic e-procurement requirements.

Developing a roadmap:

1.22. On the basis of important issues and problems that will be identified from the aforesaid collection of primary and secondary data and information, a roadmap for implementing e-procurement

in ICAR will be arrived at. The recommendations will be given keeping in view specific issues and constraints confronted in the field.

CHAPTERISATION SCHEME

Chapter 1: Introduction – Dissertation outline

This chapter throws light on statement of problem, objectives justification, research questions, limitations, literature review, methodology, and Chapterisation.

Chapter 2: e-Procurement in ICAR - conceptual framework

The concept of e-procurement, its various facets and requirements such as communication infrastructure, hardware, software and application software etc will be the part of this chapter.

Chapter 3: Human Resource – skill gap

This chapter will deals with human resource special reference to people skills for operating new e-procurement solutions. Analyse the gap and recommend how to bridge the gap.

Chapter 4: E-Procurement – security issues

This chapter will examine the fundamental security issues in implementation of e-procurement and suggest technology solutions for taking care of security issues and also discuss PKI.

Chapter 5: Analysis of data & Discussion

The analysis of data will be detailed in this chapter to enable a proper appreciation of the critical factors in the implementation of e-procurement in ICAR. What are the various

issues and obstacles in the path of progress towards e-procurement in India? What are the critical factors governing its effective and successful implementation and what is the e-readiness in ICAR vis-à-vis this? These are some of the subjects which will be discussed in this chapter.

Chapter 6: Roadmap

What would be an ideal e-procurement roadmap for ICAR? What are the areas for strategic thrust and policy emphasis or modifications? This is mainly based on analysis and discussions carried out in this chapter.

Chapter 7: Conclusions

The basic findings and conclusions of the study form the coverage of this chapter.