

# CNAS' INDUSTRY BULLETIN

**JUNE 2019** 



## THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

**Statutory Body under an Act of Parliament** 



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**MEMBERS IN INDUSTRY COMMITTEE 2018 - 2019** 



## PRESIDENT'S MESSAGE

CMA Amit A. Apte
President
The Institute of Cost Accountants of India

am pleased to note that the Members in Industry Committee is bringing out the June 2019 edition of "CMAs Industry Bulletin". In its objective to enrich the readers about the different segments of our economy, this edition is covering latest developments taking place in Aviation and Power Industry. It also includes article from Industry experts on "Industry 4.0: Opportunities & Constraints" and "Accounts, Records and Audit under GST" and "Public - Private Participation (PPP) in Infrastructure". I hope our members will be immensely benefited with this publication.

I would like to acknowledge the continuous efforts of Members in Industry Committee and resource persons who are contributing with their valuable inputs.

My best wishes to Members in Industry Committee for its all future endeavors.

With Warm Regards,

CMA Amit A. Apte



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# INDUSTRY 4.0: OPPORTUNITIES & CONSTRAINTS



CMA Dr. Rohit Poddar Asst. Manager (Finance) NMDC Ltd. BIOM Kirandul Complex



**Dr. Arun H. Gaikwad**Prof. & Head, Dept. of Commerce
Vice Principal, S. N. Arts,
D.J. Malpani Commerce &
B.N. Sarda Science College
Ahmednagar

he Industry 4.0 represents the 4th generation/ phase of industrial revolution. There was a time when human being was fully dependent on the forest product for their survival. The invention of iron & steel helped them to develop the new methods of agricultural &they moved to the age of green revolution &mass production. The overall coverage & scope of production & sales was started with the domestic market & it reached to the international market. The requirement, need, taste& preference of people changes time to time. It provides the basic idea for the development of new products & services. It shows the path for bringing out the necessary changes in the available tools &techniques of the production. Now we moved to the age of digital technology &the whole world became more dependent on these transformative technologies such as robotic process, Blockchain, Artificial Intelligence (AI), big data analysis, automation & machine learning. Due to this drastic changes & overdependence of people on the technology has certainly raised the concerns among the human being about the future & their existence. Therefore through this paper it has been tried to analyse and develop some insight on the topic of "Industry 4.0: Opportunities or Constrains."

#### Introduction:

The Industry 4.0 represents the 4<sup>th</sup> generation/phase of industrial revolution. It is an initiative, started by the German Government in 2006. The main intention behind the industry 4.0 is to digitise the manufacturing sector to increase the productivity. It has been said by the some experts that what we have seen so far is only accounts for a tenth of what is still ahead. The Industry 4.0 emphasizes the idea of consistent digitization and linking all productive units in an economy. It affects the

way goods are manufactured and services are offered.

There was a time when human being were fully dependent on the forest product for their survival. The invention of water & stem based industries has totally changed the life of human being. To fulfil the need & requirement of people at large it was not possible to remain dependent on the manual method of production. The country who achieved & adopted these innovative technology for their production process become developed early as compared to those who remain dependent on agricultural based activities or the conventional methods of production. The overall coverage & scope of production & sales was started with the domestic market & it reached to the international market. The requirement, need, taste& preference of people changes time to time. It provides the basic idea for the development of new products & services. It shows the path for bringing out the necessary changes in the available tools & techniques of the production. Now we moved to the age of digital technology & the whole world became more dependent on these transformative technologies such as robotic process, Blockchain, Artificial Intelligence (AI), big data analysis, automation & machine learning. The Internet is combining with intelligent machines, production system & processes to form a sophisticated network.

Robots have already replaced human workers in the last revolution. In the future, they will become intelligent, which means they will be able to adapt, communicate and interact. This will enable further productivity leaps for companies, profoundly impacting cost structures, skills landscape and production sites. Smart robots will not only replace humans in simple structured workflows within closed

areas but also expand to complex intelligent tasks in other areas of manufacturing.

In Industry 4.0, robots and humans will work hand in hand, so to speak, on interlinking tasks and using smart sensored human-machine interfaces. The use of robots is widening to include various functions: production, logistics, office management (to distribute documents) and basic customer service.

#### Definition of important term:

Industrial revolution: Industrial Revolution, in modern history, the process of change from an agrarian and handicraft economy to one dominated by industry and machine manufacturing. It is defined as the changes in manufacturing and transportation that began with fewer things being made by hand but instead made using machines in larger-scale factories. This process began in Britain in the 18th century and from there spread to other parts of the world.

*Industry 4.0*: Industry 4.0 is all about optimization of smart, flexible supply chains, factories and distribution models where machines capture and convey more data via machine-to-machine communications and to

human operators. All this aims at enabling businesses to make quicker, smarter decisions, all while minimizing costs.

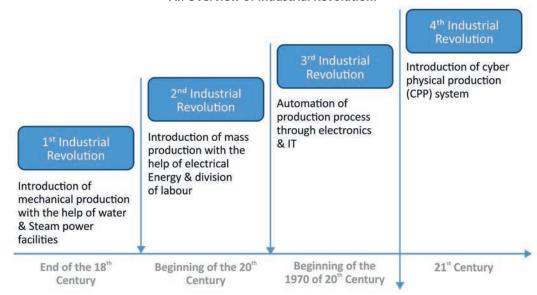
As per the LI YONG, Director General of UNIDO

"Industry 4.0, or the Fourth Industrial Revolution, is bringing about a paradigm shift that will profoundly change the way we work, live and interact and will affect industrialized as well as industrializing economies alike."

Industry 4.0 has highly intelligent connected systems that create a fully digital value chain. It particularly is based on cyber physical production systems that integrate communications, IT, data and physical elements and wherein these systems transform the traditional plants into smart factories.

**Digital Technology:** It is a branch of scientific or engineering knowledge that deals with the creation & practical use of digital or computerizes devices, methods, systems etc. Any information used on a computer or disseminated on a computer is known as digital technology.

#### An Overview of Industrial Revolution:



The industrialisation has changed the life of people through the production at large scale with the help of machines instead of hand made. It started with the water &steam based industry & subsequently moved to the electrical energy which had given the birth of mass production. Thereafter the third era of industry

came with the advent of computers and the beginning of automation. In this phase robots and machines has replaced the workforce on the assembly lines. Now we are expected to enter a new world of Industry 4.0, in which computers and automation will come together with remotely connected robotics & computer systems

equipped with machine learning algorithms that can control the robotics with minimum human support.

In general, there are nine key technological components that progressively make up the foundation of Industry 4.0: Autonomous robots, big data, augmented reality (AR), additive manufacturing, cloud computing, cyber security, IoT, system integration, and simulation.

#### Main Characteristics of Industry 4.0:

- 1. Vertical networking of smart production system: customer specific & individualized, plant react rapidly to the changing demand.
- Horizontal integration via a new generation of global value chain network
- 3. Through engineering across the entire value
- 4. Acceleration through the exponential technologies

#### **Industry 4.0: An Opportunity:**

The overall growth of population has created the wide demand of products throughout the world. It requires to match this huge demand through the continuous supply of goods & services at a cheapest rate. It's all given the birth of industrial revolution. As the developed country has moved to the era of industry 4.0 in which the production line is mainly handled through the digital technology. To being the competitive in the global market, the developing country also requires to adopt this technological reforms in their production line. This Industry 4.0 has brought huge opportunities for India to being the global leader by transforming the production cluster. It can be achieved through the proper sinkage between the factors of production & the technological revolution.

In recent time, the Government of India has also created the industrial friendly environment through the implement of positive policy i.e. Make in India, introduction of GST and 100 % FDI allowed under the automatic route for the auto sector. The world is looking towards India, as we have the great potential in terms of supply of easy & cheap work force with the majority of adult population. There is a high demand of product in our country due to having the large domestic consumption base. It provides the benefits of process integration as per the need & preference of the customers. So that the Companies receives the benefits of risk reduction & they can explore the new

opportunity for their growth & development.

#### **Constraints of Industry 4.0:**

Although the industry 4.0 has given the opportunity for growth & development of a country, but there are some constraints which need to be dealt appropriately to avail its actual benefits. Some of the major constraints are as follows:

- Resistance to change: At the initial phase of any change, people resist the adaptation of the same due to their fear factors. Once they get the actual benefits from the changing scenario they start adopting the same. But the initial period is very crucial & it requires to be dealt properly. Till date very few countries has moved on this phase of industrial revolution.
- Cost Effectiveness: As it is totally based on digital technology & it requires the huge investment. Therefore, it is not the cost effective deal for the small company.
- Lack of talent & Skills employees: Although we have the reasonable supply of qualified software professionals, but many of them do not have the required skill set for the smoothly operation of the digital based production setup.
- ➤ Lack of IT Infrastructure: The overall IT infrastructure is still not upto mark to support the industry 4.0 at wide spread. In case of India, the overall access of Internet reached to 26% of its population in 2015 as compare to 10% in 2011. Though there is a significant increase in the overall coverage of internet, it still not able to reach the larger portion of population.
- Unemployment: The rate of unemployment in India is 6.1% as per the survey conducted by National Sample Survey Office (NSSO) between July 2017 and June 2018. As the country is already suffering with the high unemployment rate, the automation may further exaggerate the problem.
- Over dependence on Technology: Day by day, the dependency on technology is increasing. The over dependence of human being on the robotic instrument may lead to mass destruction.
- Others: Lack of standardisation, the risk of Data security& the impact of missing social factor are the other linked constraints which require to be dealt appropriately.

#### **Conclusion:**

The next phase of industrial revolution, Industry 4.0 lies

ahead with greatest opportunities. It requires to provide the necessary support system which will transform the production process from the human interface to the robotic control activities. India, having the competitive edge to become the global leader in the manufacturing sector by exhausting the implied benefits of Industry 4.0.It will create a sustainable ecosystem with qualified employees which supports the energy transition and provide the large-scale customised production. As India has the largest consumer market in the world, it is quite necessary & expected to transform the existing production process to fulfil our demands internally. The country needs to provide necessary infrastructure to increase the overall share of manufacturing in the GDP. The following quote of "Alvin Toffler" looks very significant in terms of Industry 4.0 is -

"The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn" - Alvin Toffler

Hence, India needs to migrate into Industry 4.0 which will pave the path of overall development of a country. It will change the dimension of the current market scenario from the "Push into market" to the "pull from the customers". However, there are many hurdles in its path, but it requires to look into the bigger picture of necessary demand of mass production which will leads towards the growth development of a country.

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The author may be reached at rohitpoddar.jh@gmail.com

# ACCOUNTS, RECORDS AND AUDIT UNDER GST



CMA Md. Rehan
Partner at CKC LLP (Chakraborty Kapoor & Co. LLP)
Cost & Management Accountants
New Delhi

GST is a trust based taxation regime wherein the taxpayer is required to self-assess his returns and determine tax liability in a self-regulated regime of tax administration, therefore this tax regime has provided for a robust audit mechanism to measure and ensure compliance of the provisions of law by the taxpayer."

#### Preamble:

GST Legislation has provided definition of Audit which means "the examination of records, returns and other documents maintained or furnished by the registered person under the GST Acts or the rules made there under or under any other law for the time being in force to verify the correctness of turnover declared, taxes paid, refund claimed and input tax credit availed, and to assess his compliance with the provisions of the GST Acts or the rules made there under"

GST Legislation has provided for three types of Audit –first type is by a practicing Cost Accountant or a practicing Chartered Accountants, Second type is by GST authorities and third audit which is termed as Special Audit which shall be performed by Practicing Cost Accountants or Practicing Chartered Accountants appointed by the Department.

In this article, we shall discuss the requirements of Audit as derived from definition of audit given in the legislation itself which is not merely the "True & Fair view" but focused on compliance of provisions of legislation with the underlying spirit of self-regulation exercised by a tax payer.

#### Regulation under GST law for Records and Audit

According to Section 35 of CGST Act, every registered person shall keep and maintain all records at his principal

place of business. Principal place of business is the place which is mentioned in the certificate of registration. Where more than one place of business specified in certificate of registration, accounts and records of each place of business shall be maintained at such additional place of business.

Section 35 also says, every registered person whose turnover during a financial year exceeds the prescribed limit (which is 2 Crores at present) shall get his accounts audited by a Practicing cost accountant (CMA)or a Practicing chartered accountant (CA) and shall submit a copy of the audited annual accounts, the reconciliation statement duly certified, in FORM GSTR-9C.

## The accounts and records are specified in rule 56 of GST Act

Rule 56 says: Accounts and Records shall be maintained separately for each activity namely

- manufacturing
- trading and
- provision of services

#### List of records suggested under GST law

#### **Inward Supply Records:**

This is also records for input tax credit. Inward supply records include:

- Raw material purchase register:— Raw material register should be recorded item wise. Records for imported and domestic items should be recorded separately. Suggested to contain the following:
  - ❖ Item's name

- HSN code
- GSTIN and name of supplier
- applicable GST rate
- taxable value and tax amount
- status whether purchases are from registered or unregistered dealers
- Traded goods purchase register:— Traded goods register should be recorded item wise. Records for imported and domestic items should be recorded separately. Suggested to contain the following:
  - Item's name
  - ❖ HSN code
  - GSTIN and name of supplier
  - applicable GST rate
  - taxable value and tax amount
  - status whether purchases are from registered or unregistered dealers
- Register for services received:— Register for services received should be maintained separately for each service. Records for imported and domestic services should be recorded separately. Suggested to contain the following:
  - Nature of service received
  - GSTIN and name of supplier
  - applicable GST rate
  - taxable value and tax amount
  - status whether services received from registered or unregistered dealers
  - status whether reverse charge is applicable
  - status whether ITC is claimed in 3B or not
- Register for purchase of consumables:—
   Consumable goods register should be recorded item wise. Records for imported and domestic items of consumable goods should be recorded separately. Suggested to contain the following:
  - ❖ Item's name
  - ❖ HSN code
  - GSTIN and name of supplier
  - applicable GST rate
  - taxable value and tax amount
  - status whether purchases are from registered or unregistered dealers
  - status whether ITC is claimed in 3B or not
- Register for Credit Notes and Debit Notes issued by vendors
- Register for Purchase of Capital Goods

#### **Procedure of Audit of Inward Supplies**

To conduct GST Audit of Inward Supply, an auditor has to Verify register of inward supplies item/service-wise to ensure eligibility or in-eligibility of ITC. Verify whether any inward supply is under reverse charge. If so, verify whether tax liability of reverse charge has been paid through cash ledger as liability of GST under reverse charge can only be paid through cash ledger.

Verify such register with purchase invoices of suppliers. Determine whether purchase invoices of all such suppliers have been prepared in accordance with GST Law mentioning GSTN number of business.

Verify whether pro-rata credit is taken in case of short receipt or partial quantity rejection as ITC is not available on material rejected, destroyed or short received.

Register of inward supplies should contain supplier's name, supplier's GSTIN, Invoice No. &date, items Name, items HSN code, GST rate, taxable amount and tax Amount.

Verify lists or credit notes received from vendors to reverse ITC claimed.

Verify reversal of Input Tax Credit if supplier has not been paid within 180 days from issue of invoice date as per rule 37. Aging report of vendors may be verified to check compliance.

Verify reversal of ITC as per Rule 39-reduction in ISD credit on receipt of credit note from ISD distributor

Check reversal of ITC as per Rule 42-reversal of ITC on input goods or services purchased due to making exempted supplies or not using for business purposes. Check Receipt of these goods or services & ITC Status.

Verify reversal of ITC as per Rule 43-reversal of ITC on capital goods due to making exempted supplies or not using for business purposes. Verify receipt of these capital goods ITC Status.

Tax payers have to keep records of input used in supply for such goods or services as input tax credit is not available on supply of exempted goods or services\*\*\*. Where input Tax credit is not identifiable to individual exempted goods or service then total value will be pro-rated for disallowance of Input Tax Credit e.g. input tax credit of capital goods producing both exempted and taxable goods may not be identifiable to individual production of exempted goods or taxable goods etc.

Already mechanism to reverse input tax credit is available under ITC rule.

Verify whether ITC under goods or services mentioned under section 17 (5) (blocked credit) has not been availed. E.g. Cab services, food and beverages, life insurance etc. These can be verified through nature of purchase/expenses in purchase register.

Check Reversal of ITC on excess credit taken due to an error by registered persons on carry forward of CENVAT balances from old regime in TRAN I: check credit taken in TRANS 1 w.r.t last returns filed under old regime. Return compliance in last six months prior to 01.07.2017.

Check reversal of ITC on excess credit taken due to an error by a person who was not registered under old regime on stock held on 01.07.2017 in TRANS II: Also verify whether tax credit taken on stock is not older than one year as on 01.07.2017.

Explanation: Expenses should preferably be booked under identifiable heads which enables easy distinction as to applicability of ITC e.g. purchase of insurance should be clearly identifiable in purchase register as life insurance, medical insurance, factory insurance, fire insurance, transit insurance etc. so that easily eligibility of ITC can be verified.

#### **Outward Supply Records:**

**Outward supply records are also records of tax liability.** Outward supply records include:

- Register of Tax Invoices:— Tax invoices should be serially issued and recorded for domestic supply and export supply containing the following information:
  - HSN/SAC Code with item/service name of goods or services supplied
  - Invoice No. and date
  - GSTIN and name of recipient
  - Place of supply
  - Type of supply
  - applicable GST rate
  - taxable value and tax amount
  - status whether reverse charge is applicable
  - status whether tax liability is paid though 3B or not
- Register of Bills of Supply; in case of supply of exempted goods or services:—Bills of supplies should be serially issued and recorded for domestic supply and export supply containing the following information:
  - HSN/SAC Code with item/service name of goods or services supplied

- Invoice No. and date
- GSTIN and name of recipient
- Place of supply
- Type of supply
- Exemption status
- ❖ Total value
- Register of Credit Notes and Debit Notes issued serially maintained with reference to original documents against which it was issued
- Register of receipt and refund voucher serially issued and recorded
- Register of goods sent free of cost (FOC) as sample or gift
- Register of goods sent on approval basis on delivery challan
- Register of related party/distinct person supplies

#### **Procedure of Audit of Outward Supply**

To conduct GST Audit of outward Supply, an Auditor has to verify whether supply of goods or services are correctly classified as per approved HSN or SAC Code classification list. Verify applicable tax rate according to HSN or SAC Code.

For this, outward supplies need to sorted on HSN or SAC code and verify whether GST Rate has been applied uniformly as prescribed.

Verify invoicing procedure of the registered person. Verify whether correct type of GST is charged with respect to place of supply. Review supplies of exempted goods or services, export of goods or services, or supplies applicable to reverse charge. Verify related party/distinct person transaction and its valuation procedure.

Check valuation of outward supplies as per rule 27 to 35 of GST rule as applicable

In case where capital goods or plant and machinery of business is sold on which ITC is availed, verify the date of inward supply and the date of outward supply of capital goods to assess liability. Where such capital goods or plant and machinery of business is sold before five years of use, assess liability as follows:

(Total value of ITC / 5years) x No. of years remaining = ITC to be reversed or the tax on the transaction value of such capital goods or plant and machinery determined under section 15, whichever is higher.

Verify delivery challan details issued for supply of Semi Knocked Down (SKD) goods, free of cost (FOC) goods, free samples, gifts or branch transfer within state for the same GSTIN.

Verify non-returnable gate passes- removal of goods for testing, scrap or otherwise (as sample). Verify whether liability of GST is paid on such goods. If liability of GST is not paid, then ITC reversal to be checked on such goods.

Cross verify outward supplies with supplies furnished in GSTR 1 and GSTR 3B to establish any tax liability.

#### Goods Sent on Job work Records:

- Delivery Challan Details for sending and receiving the goods
- Register of rejection /scrap at job workers end
- Register of capital goods sent for Job Work
- Register of Delivery Challan for sending and receiving the Capital goods
- Register of Dies, Moulds, Jigs & Fixtures Provided to Job worker
- Register of rejection /scrap at job workers end

#### Procedure of Audit of Goods Sent on Job work

To verify details of goods sent on Job Work, an Auditor has to check delivery challan for goods sent on job work.

Verify ITC-04 has been filed regularly every quarter with respect to due dates of every filing or extension thereof

Ensure that pending challans for goods with job worker has not exceeded 360 days for manufacturing goods and 3 years in case of capital goods.

Verify whether stipulated time for return of goods sent on job work has not expired. If stipulated time i.e. 1 year in case of inputs sent to job worker and 3 years in case of capital goods has expired then, list out all such pending challans' Qty., HSN code, taxable value for computation of liability of GST and interest payable on the same. Interest to be calculated from the date on which goods were initially sent to job worker i.e. the date of delivery challan.

#### Procedure of Audit of Goods Sent on Approval Basis

For sales subject to customer's approval. goods must be accepted or returned back within one year.

Verify whether sales subject to customer approval has been supplied on delivery challan. For Audit of such supply, verify such challans and ensure that they are not pending for more than one year. If goods were sent in previous regime then time period shall not be more than 180 days.

List out such challans for determining tax liability & interest. Currently interest rate is 18% per annum i.e. 1.5 % per month (the interest has to be calculated from the next day on which tax was due in the month when the goods were dispatched through delivery challan)

#### **Stock Register Records:**

This is again very important register from both records and audit perspective

#### Stock Register Records, If Tax Payer is a Manufacture:

Every registered person manufacturing goods shall maintain periodical records stock register of raw material consumption, consumable consumed, and production showing quantitative details with HSN code, applicable GST Rate and value used in manufacture.

#### Stock register format of Raw Materials

#### Opening balance of raw materials and other Inputs

Add: Receipt of Raw Material and other Inputs Less: Raw Material and other Inputs Consumed in Manufacture or production Less: Raw Material and other inputs Lost/Stolen/Destroyed/Written off or Disposed

Less: Scrap/By-product and wastage thereof Closing balance of raw materials and other Inputs goods

#### Recommended to format for Raw Material Consumption register

Date of Issue for Production	RM Code	Raw Material Name	HSN Code of Raw Material	GST Rate on RM	Qty. Consumed in Production of Finished Goods	UOM	RM Rate Per Unit	Value of RM Consumed	FG HSN Code	FG Item	Remarks
17/03/19	ABC123	Item 1	1234	5%	13	KG	17	221	4356	FG 1	Taxable
17/03/19	ABC334	Item 2	1234	12%	18	Mtr	190	3420	6754	FG 1	Taxable
17/03/19	ABC678	Item 3	3445	18%	17	SFT	189	3213	9878	FG 1	Taxable
18/03/19	ABC123	Item 1	1234	28%	16	Ltrs	15	240	8778	FG 2	Exempted
18/03/19	ABC334	Item 2	1234	12%	201	Mtr	190	18090	8778	FG 2	Exempted
19/03/19	ABC123	Item 1	1234	5%	13	KG	17	221	4356	FG 1	FOC
19/03/19	ABC334	Item 2	1234	12%	18	Mtr	190	3420	6754	FG 1	FOC
20/03/19	ABC678	Item 3	3445	18%	17	SFT	189	3213	9878	FG 1	FOC

Note: Input Tax Credit is not available in case of raw material or inputs lost, destroyed, written off or disposed and needs to be disclosed separately and accounted for.

Every registered person manufacturing goods shall maintain periodical records of input services received showing proportionate value of such service utilized and applied to a product in manufacturing activity i.e. taxable goods production, Exempt goods production and goods supplied as free sample free of cost (FOC) etc.

Input tax credit on input services used in manufacturing of goods are usually common for taxable and exempt goods or otherwise so input services should be applied on individual manufacturing of products on pro-rata basis as mechanism is available in ITC rule.

For example, a machine can produce both taxable and exempt goods so input tax credit on purchase of such machine should be applied on individual product on prorate basis.

## Finished goods (production/purchase) stock register format:

#### **Opening Finished Goods**

Add: Finished Goods Manufactured During the Month

Less: Finished Goods Lost/Stolen/Destroyed/ Written Off or Disposed (No ITC Available on Raw Material Consumed)

Less: Finished Goods Supplied FOC as Sample or gift (No ITC Available on RM Consumed)
Less: Finished Goods Supplied

**Closing Finished Goods in Balance** 

#### Stock Registering case of Service Provider

Every registered Service Provider shall maintain accounts details showing details of services utilized and quantitative details of goods used in provision of services.

## Stock Register of input goods for provision of service

(Each Service-wise details of input goods in stock to be maintained showing HSN code, GST Rate, Qty and Value.):

## Opening Balance of input goods for Provision of Service

Add: Purchase of input goods Less: input goods Lost/Stolen/Destroyed Less: Service-wise consumption of input goods

Closing Balance of input goods in hand for provision of Service

Note: No ITC is Available on Input Purchase if such goods

are lost stolen or destroyed

#### **Stock Register For Traders**

Audit of traders are relatively easier than manufacturer of goods/service provider

Every registered Trader of Goods shall maintain accounts details of each goods traded showing HSN Code, GST Rate, Qty. of Traded Goods with value as Followed:

#### **Opening Balance of Traded Goods**

Add: Purchase of Traded Goods

Less: Lost/Stolen/Destroyed/Written Off (No

ITC on Purchase)

Less: Traded Goods Supplied FOC for Sample

or Gift (No ITC on Purchase) Less: Traded Goods Sold Closing Balance of Traded Goods

#### **Procedure of Audit of Stock register**

Verify whether all stock register is maintained for each traded goods containing proper HSN code, UOM, Qty. GST Rate, and Value.

Verify whether traded goods supplied free of cost (FOC) for Sample, Gift or lost/stolen/destroyed/written off is maintained separately. Verify reversal of ITC on such goods.

Verify authenticity of disclosures given by registered person for lost/stolen/destroyed/written off of goods.

#### Related Party/Distinct Person Transaction Record:

Register of Related Parties/distinct person transactions should be maintained separately. Ensure valuation methodology is in accordance with GST valuation rules.

## Persons shall be deemed to be related if they fall under any of the categories below:

- An Officer/ director of one business is the officer/director of another business
- If Businesses are legally recognized as partners
- An employer and an employee
- If Any person holds at least 25% of shares in another company either directly or indirectly
- One of them controls the other directly or indirectly
- They are under common control or management
- The entities together control another entity
- They are members of the same family

Persons shall be deemed to be distinct person if having multiple registration against same PAN number.

## Procedure of Audit of Related Party/Distinct Person

Verify related party transactions. Verify whether goods or services are supplied to related party/distinct person as per valuation rules. Verify cost of production or procurement, if goods or services are supplied to related parties/distinct person as per valuation rule 30 cost of production + 10%.

#### **Record of Returns Filed**

In Records of GST return includes:

- GSTR 3B
- GSTR 1
- GSTR 2A
- ITC 4
- GSTR 9

## To conduct GST Audit of returns filed, an auditor has to

- Verify liability of GST and ITC Availed in GSTR 3B returns
- Verify GSTR 1 return (invoice wise) filed. Verify whether it is matching to GSTR 3B (summary) and supplies as booked in books of accounts
- Verify all amendments in Invoices in GSTR 1
- Verify Invoice Serial Documents Numbers and Challan Serial numbers are properly recorded in GSTR
- Verify all ITC in GSTR 3B is claimed correctly and Reconciled with books of accounts and GSTR 2A.
   Verify whether ineligible inputs are there claimed in GSTR 3B.
- Verify all liability under reverse charge is paid through cash ledger

## Form 9C Part A for reconciliation and B for certification

GSTR-9C is an annual Audit form and it has two major parts, Part A for reconciliation and Part B for certification of Audit report. Instruction of reconciliation is provided by the department vide Notification No. 49/2018 – Central Tax dated 13<sup>th</sup> September 2018 and further amendment made by Notification No. 74/2018 – Central Tax dated 31<sup>st</sup> December, 2018.

Part A is divided into 5 basic parts as follows:

Pt. I Basic details of the tax payers

Pt. II Reconciliation of Turnover declared in Audited

Annual Financial Statement with Turnover declared in Annual Return (GSTR9): An auditor has to report reconciliation of GSTR 9 with Financial Statement and report reason of un-reconciled balance, inconsistencies and deviations.

Pt. III Reconciliation of tax paid: Reconciliation of rate wise liability and amount payable thereon and reason for unreconciled amount with GSTR 9 shall be reported by Auditor.

Pt. IV Reconciliation of Input Tax Credit (ITC): An auditor has to report reconciliation of ITC availed as per audited Annual Financial Statement for the State/ UT (For multi-GSTIN units under same PAN) and GSTR 9 and report any deviation and exception with respect to applicable law.

Pt. V Auditor's recommendation on additional Liability due to non-reconciliation. An Auditor has to quantify the amount of tax payable if any, with respect to deviation, exception and inconsistencies with the law.

#### References:

- Central Goods and Services Tax (CGST) Rules, 2017 – CBIC
- CGST (Central Goods and Services Tax) Amendment Act 2018
- Central Goods and Services Tax (CGST) Rules, 2017
- 4. GST Notification No. 49/2018 Central Tax

The author may be reached at rehan@cmackc.com

# PUBLIC-PRIVATE PARTICIPATION (PPP) IN INFRASTRUCTURE



**CA Amit Kumar** Chartered Accountant Hyderabad

#### Introduction

eveloping road networks in a timely and costeffective fashion plays an important role in economic development. In recent years, the government has extensively adopted the public private partnership (PPP) approach in road development. Today, India has the distinction of having the largest PPP programme globally in the roads sector. PPP strategy holds promise for infrastructure creation if the financing piece is tied up.

More than 560 road projects comprising a total length of 45,000 km with an estimated investment exceeding ₹200,000 crore have been awarded on PPP basis so far by the Centre and various state governments (As per Economics Times). Also, a new PPP was announced last month to promote private investments in affordable housing to help achieve the "housing for all" target by 2022.

#### Classification of PPP Infrastructure project

PPP road projects broadly fall in one of the two categories of **Toll or Annuity**, though many recent projects are being implemented under a hybrid annuity model. Toll and annuity projects vary mainly in the way the developers recoup their investment. In the former, the road developer collects toll from the users, whereas in the case of the latter, the developer receives predefined annuity payments from the government. While the private developer assumes the demand risk in toll projects, it is not the case with annuity projects. With more than 75% of the PPP projects being implemented using the toll model, it remains the preferred approach for policy makers.

A basic difference between the toll and annuity projects is

in the risk-reward equation. In the case of **annuity projects**, the developer does not assume any demand risk, but the upside is capped. However, in **toll projects**, the private developer assumes the demand risk, but would also benefit if the traffic growth is more than what is assumed.

#### Investment in toll projects

While PPP in roads has multiple objectives, the fundamental reason for going for the PPP route in India is that it helps to attract private sector capital. Private developers will consider bidding for toll-based PPPs if they see a sensible risk-reward balance, because the private sector by its very nature will pursue the path of higher returns rather than settle for modest returns. If the scales can be tipped towards private sector investing in toll projects, it would reduce the fiscal burden on the public sector. Toll projects in general are characterized by longer stretches, and therefore higher project costs. They also have more structures as compared to annuity projects, indicating that they could have a higher degree of complexity. But the estimated unit project costs are lower, indicating that developers are able to achieve economies of scale associated with longer stretches. The average value of state domestic product indicates that toll projects are seen in those states that are more developed and where economic activity is higher, indicating the possibility of higher toll collections. It shows that annuity projects have higher debt levels indicating that lenders perceive a lower risk in such projects. But, more importantly, we can also see that private developers are willing to invest higher equity provided the expected returns from the project are also higher. The higher number of toll projects bears further testimony to the willingness of private developers to undertake the risk.

#### Why PPPs are Successful?

Liberating a project from budgetary and public debt constraints can work wonders. Let's assume that a toll road project is approved, a concession contract is prepared, and companies bid on it. The bidders need to plan for two phases: engineering, procurement and construction (EPC), and a longer phase of operation when toll revenue is collected to recover incurred costs and expected returns.

There are plenty of uncertainties in both phases, but especially during EPC, which may last three-seven years, depending on the project. Given the risks in this phase, capital markets demand that it be financed with more equity than debt and have an expected internal rate of return that often reaches 18% or higher. When construction is completed and the road put into operation, the lower risks and stable cash flows allow for more debt financing by a different set of more conservative investors.

So, the project involves quite sophisticated financial engineering. Almost always, such plans cannot be realized unless the government provides guarantees against geological or traffic risks. Negotiating such agreements often adds four years to the project to get to the so-called financial closing before any physical work is done. In addition, there are so many details to be negotiated and supervised that opportunities for malfeasance by government officials abound.

An alternative is to concentrate the role of the private sector in the latter phases of the project. The best option may be for the government to build the road and sell the concession for operation and maintenance. This allows the government to cash out and reinvest the resources in pre-investment and EPC, thus recycling scarce public capital more quickly while cutting out the most expensive and slowest parts of private involvement.

For other projects, such as the development of tourism areas, the government must incur significant public infrastructure costs if it is to make them bankable. Recovering these costs would require participating in the project or co-investing with the private sector through some financial vehicle that also manages the project on behalf of the government.

## Glance over successful Modal of Public-Private Participation

After the privatization of the Delhi and Mumbai airports in 2006, the PPP approach has been adopted for airports

across the country. While the new airports in Navi Mumbai and Goa have been won by GVK Power and Infrastructure Ltd and GMR Infrastructure Ltd respectively, the state owned Airports Authority of India (AAI) has won the right to build the new Bhogapuram airport in Andhra Pradesh. (Source: Economics Times).

In addition, the government is also working to farm out operations at Jaipur and Ahmedabad airports on a PPP basis.

#### Current Issue with PPP Infrastructure

In the last few years, it has been an open secret that the response from developers to new projects has been poor. Since many of the PPP road projects have begun operations only recently, it is too early to comment on the gap between the actual and projected traffic estimations made by the developers. However, what has happened is that the estimated project costs have significantly escalated in the case of toll projects, hitting the project economics. While there is negligible difference in the case of time overruns, the difference in the case of cost overruns is quite significant. A comparison of the actual unit costs is even starker: the average actual unit cost for toll projects has been ₹2.94 crore per lane-km, whereas for annuity projects, it is lower by 32% at ₹1.99 crore per lane-km (Source: As per Economics Times).

#### Conclusion

The PPP model has delivered mixed results in India, given problems on account of overextended balance sheets, contract disputes, land acquisition problems and lack of a dispute resolution mechanism. Stalled projects, in turn, have saddled banks, especially public sector lenders, with large bad loans.

A panel headed by former finance secretary Vijay Kelkar mandated to redraw the contours of the country's public private partnership (PPP) model in December 2015 recommended ending a one-size-fits-all approach in dealing with project-specific risks and advocated independent regulators (As per Economics Times).

The author may be reached at caamitk975@gmail.com

## **Industry Focus - Aviation**

#### Introduction

The civil aviation industry in India has emerged as one of the fastest growing industries in the country during the last three years. India is currently considered the third largest domestic civil aviation market in the world. India has become the third largest domestic aviation market in the world and is expected to overtake UK to become the third largest air passenger\* market by 2024^.

#### **Market Size**

India's passenger\* traffic grew at 16.52 per cent year on year to reach 308.75 million in FY18. It grew at a CAGR of 12.72 per cent during FY06-FY18.

Domestic passenger traffic grew YoY by 18.28 per cent to reach 243 million in FY18 and is expected to become 293.28 million in FY20E. International passenger grew YoY by 10.43 per cent to reach 65.48 million in FY18 and traffic is expected to become 76 million in FY20E.

In FY18, domestic freight traffic stood at 1,213.06 million tonnes, while international freight traffic was at 2,143.97 million tonnes.

India's domestic and international aircraft movements grew 14.40 per cent YoY and 9.40 per cent YoY to 1,886.63 thousand and 437.93 thousand during 2017-18, respectively.

During Apr 2018-Feb 2019, passenger\* traffic in India stood at 316.51 million. Out of which domestic passenger traffic stood at 252.92 million while international traffic stood at 63.59 million. Total freight traffic handled in India stood at 3.25 million tonnes during the same time.

During Apr 2018-Feb 2019, domestic aircraft movement stood at 1.98 million while international aircraft movement stood at 0.42 million.

To cater to the rising air traffic, the Government of India has been working towards increasing the number of airports. As of March 2019, India has 103 operational airports. India has envisaged increasing the number of operational airports to 190-200 by Fy40.

Further, the rising demand in the sector has pushed the number of airplanes operating in the sector. As of July 2018, there were nearly 620 aircraft being operated by scheduled airline operators in India. The number of airplanes is expected to grow to 1,100 planes by 2027.

#### Investments

According to data released by the Department of Industrial Policy and Promotion (DIPP), FDI inflows in India's air transport sector (including air freight) reached US\$ 1,817.23

million between April 2000 and December 2018. The government has 100 per cent FDI under automatic route in scheduled air transport service, regional air transport service and domestic scheduled passenger airline. However, FDI over 49 per cent would require government approval.

India's aviation industry is expected to witness Rs 35,000 crore (US\$ 4.99 billion) investment in the next four years. The Indian government is planning to invest US\$ 1.83 billion for development of airport infrastructure along with aviation navigation services by 2026.

Key investments and developments in India's aviation industry include:

- AAI is going to invest Rs 15,000 crore (US\$ 2.32 billion) in 2018-19 for expanding existing terminals and constructing 15 new ones.
- In June 2018, India has signed an open sky agreement with Australia allowing airlines on either side to offer unlimited seats to six Indian metro cities and various Australian cities
- The AAI plans to develop Guwahati as an inter-regional hub and Agartala, Imphal and Dibrugarh as intraregional hubs.
- Indian aircraft Manufacture, Repair and Overhaul (MRO) service providers are exempted completely from customs and countervailing duties.

#### **Government Initiatives**

Some major initiatives undertaken by the government are:

- In February 2019, the Government of India sanctioned the development of a new greenfield airport in Hirasar, Gujarat, with an estimated investment of ₹1,405 crore (US\$ 194.73 million).
- As of January 2019, the Government of India is working on a blueprint to promote domestic manufacturing of aircrafts and aircraft financing within the country.
- In January 2019, the government organised the Global Aviation Summit in Mumbai which witnessed participation of over 1,200 delegates from 83 countries.
- In January 2019, the Government of India's released the National Air Cargo Policy Outline 2019 which envisages making Indian air cargo and logistics the most efficient, seamless and cost and time effective globally by the end of the next decade.
- In November 2018, the Government of India approved a proposal to manage six AAI airports under public private partnership (PPP). These airports are situated in Ahmedabad, Jaipur, Lucknow, Guwahati, Thiruvananthapuram and Mangaluru. AAI received 32 technical bids from ten companies.
- In February 2018, the Prime Minister of India launched the construction of Navi Mumbai airport which is

expected to be built at a cost of US\$ 2.58 billion. The first phase of the airport will be completed by end of 2019.

- The Government of Andhra Pradesh is to develop Greenfield airports in six cities-Nizamabad, Nellore, Kurnool, Ramagundam, Tadepalligudem and Kothagudem under the PPP model.
- Regional Connectivity Scheme (RCS) has been launched.

#### **Achievements**

Following are the achievements of the government during Fv18:

- In September 2018, Jharsuguda Airport in Odisha and Pakyong Airport in Sikkim were inaugurated. Pakyong airport is Sikkim's first ever airport and AAI's first Greenfield airport construction.
- In December 2018, Kannur International Airport was inaugurated making Kerala the only state in India to have four international airports.

#### **Road Ahead**

India's aviation industry is largely untapped with huge growth opportunities, considering that air transport is still expensive for majority of the country's population, of which nearly 40 per cent is the upwardly mobile middle class.

The industry stakeholders should engage and collaborate with policy makers to implement efficient and rational decisions that would boost India's civil aviation industry. With the right policies and relentless focus on quality, cost and passenger interest, India would be well placed to achieve its vision of becoming the third-largest aviation market by 2020.

Note: \* - International and Domestic, ^ - As per International Air Transport Association (IATA) forecasts.

**References:** Media reports Press Releases, IBEF, Press Information Bureau, Directorate General of Civil Aviation (DGCA), Airports Authority of India (AAI), Interim Union Budget 2019-20.

Disclaimer: This information has been collected through secondary research and the Institute is not responsible for any errors in the same.



## **Industry Focus - Power**

#### Introduction

Power is one of the most critical components of infrastructure crucial for the economic growth and welfare of nations. The existence and development of adequate infrastructure is essential for sustained growth of the Indian economy.

India's power sector is one of the most diversified in the world. Sources of power generation range from conventional sources such as coal, lignite, natural gas, oil, hydro and nuclear power to viable non-conventional sources such as wind, solar, and agricultural and domestic waste. Electricity demand in the country has increased rapidly and is expected to rise further in the years to come. In order to meet the increasing demand for electricity in the country, massive addition to the installed generating capacity is required.

In May 2018, India ranked 4th in the Asia Pacific region out of 25 nations on an index that measures their overall power.

#### **Market Size**

Indian power sector is undergoing a significant change that has redefined the industry outlook. Sustained economic growth continues to drive electricity demand in India. The Government of India's focus on attaining 'Power for all' has accelerated capacity addition in the country. At the same time, the competitive intensity is increasing at both the market and supply sides (fuel, logistics, finances, and manpower).

Total installed capacity of power stations in India stood at 350.16 Gigawatt (GW) as of February 2019.

#### Investment scenario

Between April 2000 and December 2018, the industry attracted US\$ 14.18 billion in Foreign Direct Investment (FDI), accounting for 3.48 per cent of total FDI inflows in India.

Some major investments and developments in the Indian power sector are as follows:

- In November 2018, Renascent Power Ventures Pte Ltd acquired 75.01 per cent stake in Prayagraj Power Generation Company Limited (PPGCL) for US\$ 854.94 million.
- In August 2018, Kohlberg Kravis Roberts & Co (KKR) acquired Ramky Enviro Engineers Limited for worth US\$ 530 million.
- In April 2018 ReNew Power made the largest M&A

deal by acquiring Ostro Energy for US\$ 1,668.21 million.

#### **Government Initiatives**

The Government of India has identified power sector as a key sector of focus so as to promote sustained industrial growth. Some initiatives by the Government of India to boost the Indian power sector:

- As of September 2018, a draft amendment to Electricity Act, 2003 has been introduced. It discusses separation of content & carriage, direct benefit transfer of subsidy, 24\*7 Power supply is an obligation, penalisation on violation of PPA, setting up Smart Meter and Prepaid Meters along with regulations related to the same.
- Ujwal Discoms Assurance Yojana (UDAY) was launched by the Government of India to encourage operational and financial turnaround of Stateowned Power Distribution Companies (DISCOMS), with an aim to reduce Aggregate Technical & Commercial (AT&C) losses to 15 per cent by Fy19.
- As of August 2018, the Ministry of New and Renewable Energy set solar power tariff caps at Rs 2.50 (US\$ 0.04) and Rs 2.68 (US\$ 0.04) unit for developers using domestic and imported solar cells and modules, respectively.
- The Government of India approved National Policy on Biofuels - 2018, the expected benefits of this policy are health benefits, cleaner environment, employment generation, reduced import dependency, boost to infrastructural investment in rural areas and additional income to farmers.

#### **Achievements**

Following are the achievements of the government in the past four years:

- India's rank jumped to 24 in 2018 from 137 in 2014 on World Bank's Ease of doing business - "Getting Electricity" ranking.
- Energy deficit reduced to 0.7 per cent in FY18 from 4.2 per cent in Fy14.
- As of April 28, 2018, 100 per cent village electrification achieved under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY).

#### **Road Ahead**

The Government of India has released its roadmap to achieve 175 GW capacity in renewable energy by 2022, which includes 100 GW of solar power and 60 GW of wind power. The Union Government of India is preparing a 'rent

a roof' policy for supporting its target of generating 40 gigawatts (GW) of power through solar rooftop projects by 2022.

Coal-based power generation capacity in India, which currently stands at 191.09\*GW is expected to reach 330-441 GW by 2040##.

India could become the world's first country to use LEDs for all lighting needs by 2019, thereby saving ₹40,000 crore (US\$ 6.23 billion) on an annual basis.

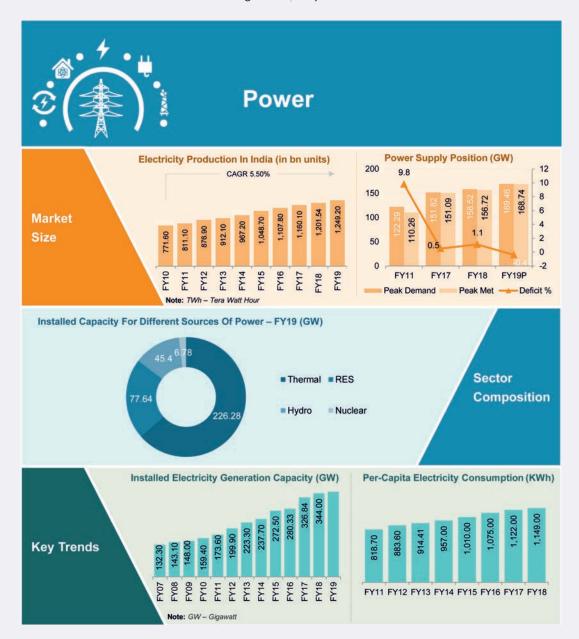
All the states and union territories of India are on board to fulfil the Government of India's vision of ensuring 24x7

affordable and quality power for all by March 2019, as per the Ministry of Power and New & Renewable Energy, Government of India.

Note: # - BMI Research, CMD, Coal India Limited, \* - as of February 2019.

**References** - Media Reports, Press Releases, IBEF, Press Information Bureau (PIB), PE Roundup – August'18 report by EY.

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## THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

### **Statutory Body under an Act of Parliament**

www.icmai.in

#### Headquarters

CMA Bhawan, 12 Sudder Street, Kolkata - 700016 Ph: +91-33-2252 1031/34/35/1602/1492

#### **Delhi Office**

CMA Bhawan, 3 Institutional Area, Lodhi Road, New Delhi - 110003 Ph: +91-11-24666100