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Code of Ethics for Engineers

Sustainability of Public Service Organizations

Over the last decade, IC Centre for Governance has been organizing training and interactive programs on Ethics in Governance with focus on Public Services. As part of this initiative, it has evolved the following Organizational Vision:

"We resolve to commit ourselves to serve the people of our nation by providing an ethical, honest, professionally sound, accountable, humane, and truly participative system of Governance'.

A vision can be realized only if it is based upon a "Code of Ethics". In this article, we have presented a generic Code of Ethics for Engineers which can be suitably adapted by any Organization engaged in Public Services.

Before going into the details of the Code, we wish to highlight the following aspects:

- 1) For ease of understanding, the Code has been divided into two parts. Part I covers the Guiding Principles while Part II covers the actual Code of Ethics.
- 2) There is a thin line which divides a Code of Conduct from a Code of Ethics. While the former is considered mandatory and enforceable, the latter is perceived as a guideline which is advisable and recommended. In practice, there is significant overlap between the two codes, making the distinction sometimes difficult. Therefore, while writing this Code of Ethics, we have attempted to prepare a complete and comprehensive document which fulfills both the purposes. The basic point to be kept in mind is that Compliance to laws

and regulations as well as to the policies of the Organization is an essential and mandatory requirement. The remaining aspects are ethics and values-based recommendations which are needed to build a reputed, efficient and sustainable organization. It is up to the Management of the Organization to define the extent of corrective or punitive actions in case the recommendations are not followed. From our perspective, an incentive-based system is preferable. The careers of employees, who diligently pursue the Code of Ethics, should be given a boost.

- 3) Engineers usually constitute a significant part of any Organization which deals with public services. Unlike doctors, a defined and standard Code of Ethics is not available for them. Therefore, while preparing this document, we have laid specific emphasis on the expectations from engineers and other technical staff.
- 4) The prepared document is generic in nature. It may need to be modified and adapted to meet the specific requirements of the Organization. This is possible through an intensive interaction in the form of a two or three day workshop with representatives drawn from the Management, Ethics Office (or Compliance/Vigilance departments), HR department and Engineering Division.
- 5) After defining a Code of Ethics, the next logical step is to create an appropriate organizational structure and formulate commensurate policies. The organization structure and the policies govern the smooth and effective functioning of the entire system. The existing policies of the Organization may either need to be modified or re-written to be in harmony with the Code of Ethics. In this respect, the services of ICCfG may be availed.
- 6) One of the critical aspects of implementation of a Code of Ethics is to conduct awareness programs and provide training to the employees. Here it is important that the employees not only understand the contents of the Code but also imbibe and internalize Values and Ethics such that conformance to

the Code becomes a pleasant and satisfying routine and not an enforced and painstaking ordeal. The ICCfG conducts regular training sessions on "Inner Governance" and these could prove invaluable in pursuit of this objective.

Part I: Guiding Principles

1. Behavioural Requirements

The success and reputation of an Organization is determined by the behaviour and performance of its employees at all levels of the organization. An illegal or inappropriate behaviour of even a single employee can cause significant damage. The Organization therefore emphasizes the importance of compliance to the law and ethical behaviour in each and every activity. All employees, irrespective of their position in the hierarchy, must earn respect through exemplary personal behaviour and promote a culture based upon the four basic pillars of honesty, transparency, efficiency and responsibility.

The Organization has laid down the following principles and expects that they will be the foundation for all its activities:

- a) Compliance to the applicable laws.
- b) Conformance to the rules, policies and guidelines of the Organization.
- c) Respect for the personal dignity, privacy and personal rights of every individual.
- d) No discrimination with respect to caste, creed, culture, colour, race, ethnic background, religion, sect, belief system, age, disability and gender.
- e) Zero Tolerance to violence, coercion, harassment, molestation, or any other offensive behaviour.
- f) Excellent team building. This includes working together constructively and harmoniously to achieve the set objectives.

The Organization calls upon all its employees to live by the above principles so that we can together build a strong, excellent and highly respected organization based upon top performance with the highest ethics.

2. Corruption

Corruption is the abuse of a position of strength, power, authority, status or trust to get or give material or non-material benefits/advantages to which there is no legal entitlement. Corruption can take place in all walks of life. Prominent examples are the Government, politics, judiciary, private sector and even non-profit organizations, associations and foundations.

The Organization has a Zero Tolerance policy to Corruption. Accordingly:

- a) Employees are not permitted to take, demand, accept, obtain or be promised benefits/advantages. This does not apply to the acceptance of occasional gifts of purely symbolic value or meals reasonable in value that are consistent with local customs and practices. Any other gifts, meals or entertainment must be refused.
- b) Employees are not permitted to directly or indirectly offer, promise, grant or authorize the giving of money or anything else of value to any individual or any Government/private organization to obtain an improper benefit/advantage.

Above all, every employee must realize that a clean and corruptionfree working environment not only enhances the image, efficiency and productivity of the Organization but it also increases his/her own work motivation, job satisfaction and quality of life.

3. Money Laundering

Money Laundering is the process of concealing the nature and source of money and deceptively integrating it into the main stream of commerce. This money is usually connected with criminal activities such as bribery, drug trafficking, extortion and terrorism. Through money laundering, criminals try to convert dirty money into legitimate (clean) money without having to identify its owner or origin.

It is the Organization's intention to conduct business only with reputed companies, consultants and business partners who are involved in transparent and lawful activities and whose funds are derived from legitimate sources.

4. Procurement and Dealing with Suppliers

The objective of the Organization is to be world-class in procurement on a strong ethical base. The employees, who are entrusted with procurement activities, must have a strong professional and ethical approach for fair dealings with all suppliers.

In turn, the Organization expects its suppliers to act in accordance with the following principles:

- a) Comply with all applicable laws.
- b) Follow clean, fair and transparent business practices devoid of any corruption, formation of cartels or infringement of Intellectual Property Rights.
- c) Offer products based upon latest proven technology.
- d) Prohibit child labour as per applicable local laws.
- e) Take adequate steps for the safety and health of their employees.
- f) Act with high responsibility with respect to environmental protection. Conformity to local and international norms is essential.
- g) Promote a culture of compliance and integrity among their sub-suppliers.

Procurement based upon ethics establishes faith and trust between the buyer and supplier. This reflects in long-term sustainable partnerships which benefit not only the organizations and their employees but the entire society as well.

5. Interface with Third Parties

The Organization often outsources activities to third parties. Examples of such third parties are service providers, consultants, clearing agents, data management firms, consortium partners etc. Since these third parties execute work on behalf of the Organization, they are perceived by the outside world as an integral

part of it.

The Organization is held responsible and liable for the actions of these third parties. It is therefore necessary to carry out careful checks on their integrity. These integrity checks must be carried out not only at the time of selection but also at regular intervals. The checks can also be event-driven.

6. Sponsorship, Donations, Memberships

Sponsorship is a contribution made by the Organization (the Sponsor) for an event which is hosted by a third party. Examples of such events are sporting events, entertainment shows, seminars and workshops. In return for the contribution, the Organization receives several benefits. These could include the advertisement of the brand/logo, mention in the opening/closing addresses, participation in panel discussions and some tickets to the event.

Donations are voluntary contributions for social, humanitarian, educational, cultural or scientific causes without requiring anything in return.

Sponsorship and Donations should be clearly distinguished from Memberships. In case of a membership, a contribution or fee is paid to an Industry Association (such as CII, FICCI, ASSCHOM) or a technical Society (such as ISO, IEEE, IEMA) or a social/cultural Center (such as IHC, IIC, a reputed Club). These memberships are primarily meant to:

- a) Deepen the understanding of business and economic scenario.
- b) Discuss common issues and try to find solutions.
- c) Share best practices.
- d) Increase awareness and knowledge of latest technologies.
- e) Enhance people to people contact.

7. Conflict of Interest

All employees should take official decisions in the best interest of the Organization and not based on their own personal interests. A Conflict of Interest takes place when an employee engages in activities to advance his personal interests at the expense of the Organization's interests.

8. Handling of Assets

The Organization provides a large number of diverse assets for use by the employees to enable them to perform their duties in the best possible manner. Such assets include buildings, furniture, fixtures, telephones, stationery, computers, software, copying machines, printers and other tools. The assets are meant for doing the work of the Organization and not for personal use or gain.

9. Confidentiality of Information

Confidential or propriety information is generally provided to a restricted group of persons within the Organization. Information, which is available in the public domain, is not considered confidential information. This includes the information on the website, printed literature, advertising material, annual statements etc. It must however be kept in mind that all such information is to be considered as confidential until the date of release.

As part of both personal and work ethics, employees are expected to maintain confidentiality even after the termination of the employment relationship.

10. Environment, Health and Safety (EHS)

The Organization is committed to protect the environment and thereby create cleaner, greener and healthier living conditions. It also assigns the highest priority to the health and safety of the employees and the public.

The Organization expects adherence to the following requirements as a minimum:

- a) Compliance with applicable laws, regulations and standards.
- b) Proper escape routes and evacuation facilities at all its locations (offices, warehouses, workshops, service centers, sites, etc). These should be clearly identified and marked.

- c) Provision of functional fire-fighting and life-saving equipment as well as basic medical facilities at all locations.
- d) Conducting of regular employee awareness programs and drills for handling emergencies.
- e) Training of adequate number of employees to manage emergencies efficiently.
- f) Regular checks on the quality of water and food served at the location.
- g) Responsible and safe use of equipment and facilities by all employees.
- h) Proper maintenance to ensure efficiency, cleanliness and greenery.
- De-cluttering of workplaces through frequent disposal of unnecessary paper, outdated documents, obsolete assets, etc.
- j) Personal commitment of the top Management by undertaking regular "inspection" walks through the locations.
- k) Carrying out of periodic and event-driven EHS audits.

11. Complaints and Whistle-blowing

Any aggrieved employee has a right to lodge a complaint with his/her Manager, the HR department, the Ethics Office, and the Union. Complaints usually range from poor working environment, inadequate infrastructure, inefficient operations, rude behavior, irritating conduct and discriminating actions to graver issues such as molestation and acts of violence.

While complaints relate to specific incidents or a sequence of them, Whistle-blowing is the act of raising an alarm (also referred to as "Blowing the lid off") when a significant and/or systemic violation of the Code of Ethics is discovered. This could, for example, include falsification of account books, accepting bribes from suppliers, approving inferior designs and quality, preparing ambiguous and misleading technical documents, leaking confidential information to external parties, clandestinely selling scrap material at a project

site etc. Whistle-blowing is not limited to the employees of the Organization. It can also be initiated by an external party which interacts with the Organization.

If the internal channels of the Organization, such as the Management, the HR department or the Ethics Office are perceived to be inadequate, a complaint or an alarm can be raised directly to the Organization's Ombudsman, who is an external person meant to ensure maximum possible impartiality.

Complaints and Whistle-blowing actions can be submitted both confidentially and anonymously without fear of any reprisal. The Organization is committed to investigate all such issues and to simultaneously maintain secrecy by not revealing the identity of the Complainant/Whistle-blower. All documentation is also kept confidential to the extent permitted by law.

While the Organization is committed to take adequate corrective measures, it also expects that frivolous, misleading or manipulated issues will not be raised in the form of complaints or whistle-blowing actions.

12. Implementation and Monitoring

The Management firmly believes that the "Code of Ethics" should be an integral part of all activities of the Organization. The Code of Ethics provides the ethical, social and legal framework to ensure a clean, transparent and efficient working environment.

A special department "Ethics Office" has been set up within the Organization to effectively implement and monitor the Code of Ethics.

With the full support of the Management and HR functions, the Ethics Office will ensure that the Code of Ethics is implemented and followed by all employees of the Organization. The following specific guidelines shall apply:

- a) Every employee shall undergo training in the Code of Ethics so that he/she understands and practices it.
- b) Refresher training courses will be conducted every three years.

- c) Once every year, all employees will be required to sign an undertaking in their individual capacities that they abide by the Code of Ethics.
- d) It is mandatory for all new joinees to undergo training in the Code of Ethics and sign an undertaking to abide by it before starting any work for the Organization.
- e) A similar undertaking is also necessary from all Third Parties, Associates and Affiliates of the Organization.

The implementation shall be monitored throughout the Organization in all its departments, offices, locations, workshops and project sites. The Management is committed to address and rectify any deviations or violations swiftly. It also expects the full commitment and support of the employees.

The success and accomplishments of the employees are intrinsically dependent on the ability of the Organization to deliver high quality, efficient, economical, timely and satisfactory service to the public based upon the Code of Ethics.

Part II: Code of Ethics

1. General Behavioral Expectations

The following professional behaviour is expected from engineers and technical staff:

- a) To take decisions based upon the safety, health and welfare of the public as well as the impact on the environment.
- b) Undertake a technological task only if qualified, trained and experienced to accomplish it.
- c) Accept responsibility for the outcome and consequences of decisions, designs, drawings and application.
- d) Assign high priority to innovation and quality to achieve best results.
- e) Promptly point out technical challenges and deficiencies so that timely corrective actions can be taken.
- f) Be honest and realistic in seeking credit for oneself as well

- as in acknowledging the contributions made by others.
- g) Be fair and impartial in all technical assessments, approvals and inspections.
- h) Prepare clear and comprehensive documentation based upon sound technical principles.
- i) Not to leverage technical knowledge and technology for unfair gain or advantage
- j) Reject all forms of bribery; it is often disguised as "Technical" recognition, appreciation or award.
- k) Constantly strive to improve technical knowledge and increase technological competence.
- Share knowledge which is not confidential or proprietary and assist co-workers in their professional development.

2. Corruption

While complying with the Zero Tolerance policy on corruption, employees responsible for hiring consultants, contractors, third parties etc. (collectively referred to as Organization's Partners) should take the following actions:

- a) Properly evaluate the reputation and qualifications of the Organization's Partner.
- b) Ensure that the Organization's Partner understands and will abide by the anti-corruption policy of the Corporation.
- c) Include suitable clauses and provisions in agreements and contracts which protect the Organization.
- d) Report immediately to the Ethics Office or Ombudsman any pressures (or incentives) to hire a non-conforming Partner.

3. Money Laundering

All employees should abide by applicable money laundering laws and procedures that are designed to detect and prevent suspicious forms of payments and transactions. In particular, employees should note and report the following:

a) Large cash transactions, particularly those exceeding Rs.

20000/-.

- b) Multiple split cash transactions.
- c) Payments to different bank accounts of the same contractor.
- d) Requests from suppliers to make part payments to third parties such as consultants and agents.
- e) Requests from domestic suppliers to make payments in foreign bank accounts.
- f) Involvement of agents at any stage of a contract.
- g) Execution of contracts through a long and complex chain of outsourcing.

Employees should maintain proper records of all transactions. While taking over or handing over projects midway during execution, a proper status analysis needs to be undertaken and recorded.

4. Procurement and dealing with suppliers

The Organization expects its employees to act in accordance with the following principles:

- a) Comply with the laid-down policies for procurement.
- b) Carry out business in an atmosphere of trust, honesty and good faith.
- c) Create and nurture a culture of courtesy and integrity in dealings with suppliers.
- d) Encourage active and fair competition.
- e) Refuse personal gifts and favours.
- f) Declare if any vested interest exists in a supplier. Declaration should also be made if a close relative or friend is working with a supplier.
- g) Buy products and services at the right price from the right source in the right quantity. In addition, conformity to specifications and timely delivery are essential.
- h) Make efforts to negotiate a transparent, equitable and mutually acceptable deal in order to minimize the possibilities of

- controversy, claims and arbitration at a later date.
- i) Invoke liquidated damages and penalties only if justified. Do not use them as coercive levers to pressurize suppliers.
- j) Promptly report to the Ethics Office any misconduct or malpractice such as the offering of bribe by a supplier.
- k) Employ the latest internet-based tools for procurement such as e-Tendering, e- Auction, etc.
- l) Implement a regular and independent monitoring system for feedback and improvement.
- m) Cooperate with trade, industrial and professional associations to promote clean and sound procurement practices.

In addition to the above, engineers and other technical staff are expected to comply with the following guidelines as well:

- n) Assign high priority to technical suitability, quality, reliability, availability, technology, safety, health, environment, compliance to local and international standards, capital and operating expenditures, proper and comprehensive documentation, ease of maintenance, trouble-shooting, obsolescence, availability of spare parts and service aspects.
- o) Frame impartial technical specifications which do not favour specific suppliers.
- p) Prepare clear and unambiguous specifications so that technical evaluations can be done in a fair manner without scope for misunderstandings.
- q) Specify technical features which are feasible.
- r) Desist from over-specifying, over-engineering and unnecessary redundancy.
- s) Ensure that no intellectual property rights are violated.
- t) In case a mistake or a discrepancy is found in the technical specifications, accept it and promptly issue an amendment.
- u) Recognize and reject the lures of lucrative jobs, training, awards and domestic/foreign trips.

- v) Be fair, open, impartial and professional while making technical comparisons, giving recommendations, approving drawings and documents, assessing claims, undertaking inspections and during all other stages of the award and execution of contracts.
- w) As far as feasible, insist on secure paperless communication and e-documentation.
- x) Store all relevant information, reports, evaluations and other documents in secured e-repositories.
- y) Work together with colleagues to form target-oriented teams and share technical knowledge, expertise and experience for mutual benefit.

5. Interface with Third Parties

To pass the integrity check, the responsible employees should ensure that the third party fulfills the following requirements as a minimum:

- a) It commits to the Code of Ethics of the Organization.
- b) It ensures Compliance to all applicable laws, regulations and industry standards.
- c) It should not have any criminal record.
- d) In case of any suspicion of non-compliant behavior, it cooperates with the Organization in a transparent manner and supports all investigations.
- e) It prepares documents properly without any falsification.
- f) It realizes that the Organization has zero tolerance to non-Compliance. In case of such an eventuality, the Organization reserves the right to demand immediate remedial measures and/or terminate the contract.
- g) If the third party cascades its activities to other parties, the above stipulations apply to such parties as well.

The fulfillment of the above requirements is necessary for a clean, smooth and efficient interface with the Organization.

6. Sponsorships, Donations, Memberships

In general, the following guidelines apply for Sponsorships:

- a) All sponsoring contributions must be transparent, justified and based upon a written agreement.
- b) The amount of contribution must be commensurate with the consideration offered by the event host.
- c) No sponsorship should be made to obtain any personal advantage for an individual.
- d) Cash transactions are not permitted.

The following guidelines apply for Donations made by the Organization:

- e) Donations can be made only to not-for-profit Organizations which are registered with the Government. A proper receipt for the payment is necessary.
- f) Donations to individuals are not permitted.
- g) The planned use of the donation must be clear and the reason for the donation must be justifiable and documented.
- h) No payment should be made in cash or into any private account.
- i) No donation should be made to any outfit whose interests conflict with the goals of the Country or the Organization.
- j) Payments, disguised as donations, are prohibited.

The following guidelines apply for memberships:

- k) Membership of only recognized, reputed and registered Organizations is permitted.
- l) Membership of suspicious, dubious or banned outfits is prohibited.
- m) All memberships must be transparent and documented.
- n) Cash payment of membership fees is not allowed.

7. Conflict of interest

The following guidelines apply: -

- a) Employees are not permitted to use, for their personal contracts, individuals/companies with which they have dealings as part of their work with the Organization. This is to prevent that they derive any benefit in their personal contracts due to their official positions.
- b) Employees should not have any commercial interests in any business partner of the Organization (for example, a supplier or a service provider). A stake holding of up to 2% of the total equity in listed companies is permissible. Beyond this figure, the stake holding must be disclosed to the Organization.
- c) Employees should not participate in sideline activities that prevent them from fulfilling their official duties and responsibilities. Occasional sideline activities, such as writing articles or delivering lectures etc. will be permitted after seeking permission of the Supervisor. Permission will not be granted, or may be revoked, if any sideline activity is detrimental to the interests of the Organization.

8. Handling of assets

The following guidelines are applicable for the use of the Organization's assets:

- a) Employees should not willfully deface, damage or destroy any assets.
- b) Assets should not be modified or upgraded without the specific written consent of the Supervisor and Administration department.
- c) All assets should be used by following the correct operating procedures and due care should be taken to ensure their optimum functioning.
- d) Any malfunction, damage or theft of an asset should be promptly brought to the notice of the Supervisor/ Administration department.

- e) Excessive use of assets which can lead to significantly increased costs, high wear and tear as well as lowering of productivity should be avoided.
- f) As long as no statutory regulations are violated, electronic communication (E-mail) and electronic storage of records should be encouraged. The use of paper should be restricted to only what is necessary.
- g) Periodic cleaning of unnecessary and outdated records and documentation should be undertaken.
- h) Employees should verify that tools are properly calibrated and proper records have been maintained. It should also be ensured that periodic checks and inspection of specific assets, such as fire extinguishers, are undertaken.
- i) Employees are not permitted to make files, audio/video recordings, and reproductions etc. of events or occurrences which are not related to the Organization's activities.
- j) No information or Software may be viewed, copied, transmitted, retrieved or downloaded that incites hatred, discrimination, violence or any other criminal acts. This applies also to pornography and sexually offensive material.

9. Confidentiality of information

In general, the following information will be considered as confidential, the divulging of which is considered unethical.

- a) Internal structures, processes, policies, guidelines, reports, workflows and proceedings.
- b) Details of Assets, including file and data storage locations.
- c) Presentations, strategic plans, cost structures, financial data and figures.
- d) R&D data, innovations, intellectual property and improvement suggestions. This also includes knowledge repositories and data banks.
- e) Details of offers received and their evaluations.
- f) Contracts with suppliers, service providers, consultants etc.

- including prices along with terms & conditions.
- g) Project-specific information including plans, cost calculations, schedules, technical designs/documentation, site equipment, EHS (Environment, Health and Safety) measures.
- h) Records of public dealings, feedback, complaints and corrective actions.
- i) Reports of internal/external audits.
- j) Personal data of employees

10. Environment, Health and Safety (EHS)

The guiding principles are given below:

- a) Reduce pollution of air, soil and water.
- b) Ensure the lowest possible emission of greenhouse gases.
- c) Conserve energy and water.
- d) Handle raw materials and other resources in a responsible manner by avoiding overuse and misuse.
- e) Minimize use of paper and plastics to the bare essential.
- f) Manage waste properly, which includes recycling and reuse.
- g) Create safe, clean, hygienic and healthy working environments.
- h) Ensure quick and professional response in case of medical emergency.
- i) Never allow time pressure to take priority over safety.

In addition to the above, the following guidelines are specifically applicable for engineers and technical staff:

- Use latest environmental-friendly and efficient technologies and equipment.
- Ensure that environmental compatibility, health and safety are an integral part of the planning, design and implementation of all projects.
- l) Disclose in writing all known impacts on the environment of assigned duties and responsibilities.

- m) Inform in writing in case the engineer's judgement is overruled such that safety and health are jeopardized.
- n) Insist that suppliers and service providers also comply with the applicable standards on EHS.
- o) Undertake adequate measures for fire protection and industrial disaster prevention.
- p) Transport and store hazardous goods after taking all due precautions.
- q) Undertake all necessary measures for protection against harmful radiation.
- r) Treat effluents to make them harmless before releasing them to nature.
- s) Cooperate with Government agencies to develop and improve policies for furthering the cause of EHS in all aspects of public life.
- t) Undergo and encourage training and certification in EHS standards such as ISO 14001 and OHS AS 18001