



TELECOMS & TECHNOLOGY CITIZENSHIP AWARENESS ROADMAP (TATCAR)

A Compilation to Aid Tech Businesses' Compliance to Government
ESG Guidance and National Sustainable Development

Table of Contents

Executive Summary	02
Preamble: ESG In Tech.....	03
ESQ in Nigeria Today.....	03
Developing Guidelines in Compliance with Key Public Sector and Regulator Guidance.....	04
Table 1: Nigerian Tech Citizenship Regulations, Laws and Policies.....	04
Introducing The Telecom & Technology Citizenship Guidelines.....	05
Table 2: Description of Tatcar Guidelines.....	06
Appendices.....	12
Appendix 1: Institutional References	
Appendix 2: Text References	



Executive Summary

TTSWG is a multi-stakeholder network of corporate organisations committed to the development of the telecoms and technology sector through global best practices, innovation and thought leadership in business sustainability. The group is a collaborative effort aimed at yielding joint action amongst key stakeholders via various strategic partnerships, policy formulation/advocacy, events and programmes.

This document is a compilation by Telecommunication and Technology Sustainability Working Group (TTSWG) of ESG topics culled from the ICT (Information and Communication Technology), and related industries' regulatory agencies, the Nigerian Exchange Group (NGX), and international ESG/Sustainability standard setting organisations, Global Reporting Initiative (GRI) Standards and the International Sustainability Standards Board (ISSB) of the International Financial Reporting Standards (IFRS).

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Current TTSWG members and partners include: 9Mobile, Airtel, ALTON (Association of Licenced Telecoms Operators of Nigeria), Arnergy Solar Ltd, Backbone Connectivity Network Limited, GDI

Innovations, HP, IHS Towers, MainOne, Mobicure, MTN, NAJCOM Technologies Limited, NASENI (National Agency for Science and Engineering Infrastructure), Phase3 Telecoms, Quomodo Systems, Raeanna Limited, Royal Power & Energy Limited, Smile Communications Nigeria Limited, Suburban FiberCo, SystemSpecs Limited, TBO Consulting, Vesselnet & Zinox Technologies Limited.

TTSWG has a vision to champion a sustainable and profitable telecoms and technology sector for national development. Achieving this requires an integrated approach to implementing sustainability systems in the sector through capacity building, standard setting and associating. In order to spearhead the sustainable development of the telecommunications and technology sector in Nigeria, we found the need for the creation of sustainability standards/guidelines that technology, infrastructure and telecommunications companies can benefit from.

This document contains a compilation of existing governmental and regulatory provisions to encourage adherence to the adoption of best practices

relating to Economic, Environment, Social and Governance (EESG), and is proposed to enhance compliance to government and best practice regulation. While the E for Economic is pretty evident for businesses, the Environment, Social and Governance (ESG) aspects will need more intentionality, considering the meteoric rise and thus impact of the industries.

The document does not intend to reinvent the wheel or introduce new concepts; it aims to help companies of all sizes identify which metrics are key to their sustained growth and will aid compliance to existing legal and societal expectations.

TTSWG has a vision to champion a sustainable and profitable telecoms and technology sector for national development.

Preamble: Sustainability and ESG in Tech



In recent times, telecommunications and technology products and services have become vital for humans just as they play an integral role in connecting businesses and transmitting and processing information across the globe. This fundamental benefit provides an opportunity for the sector to become a force for positive change.

However, the sector is not immune to the numerous factors influencing the business landscape; one of which is the need for a consistent drive for intentional and responsible business practices. According to research, the emissions generated by the sector are pursuing an upward trajectory, with developing countries such as Nigeria being major contributors. Similarly, this sector is the major contributor of radiation and other environmental pollutants. Add to this, the fact that investment in infrastructure is projected to increase significantly to address the needs of an underserved and increasing population and a technology savvy generation.

Sustainability and ESG in Nigeria Today

Sustainability and ESG awareness embedment for business longevity remains a critical issue in the corporate sector, and as a framework, it directly captures the areas organisations are to build their strategy on and likewise report on. The Nigerian Ministry of Environment provides oversight over all federal regulations pertaining to the environment, including environmental impact assessments. However, even with their immense contributions to matters that revolve around sustainable

national development, there is yet to exist a guidance document specifically for sustainability of technology and telecommunications businesses in Nigeria.

There is also the matter that there is separation between what is considered material, typically financial, without taking into cognisance the global milieu's shift towards dual materiality - financial and non-financial metrics, which include the relevance of society, the environment, economic and governance processes to a business' success.

There is a need for ICT businesses, an intrinsic part of a progressive nation, to understand the importance of compliance to government and regulator guidance, covering EESG as part of the bigger picture of increasing positive impact, limiting negative impact, and thus fostering national development.

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Developing Guidelines in Compliance with Key Public Sector and Regulator Guidance

In developing the guidance, the TTSWG Secretariat researched deeply into the expectations of government and the specific leanings of regulators, matching them to international best practice EESG metrics that are material to the Nigerian ICT context. We took into cognisance, the past and current challenges, as well as emerging trends.

The agencies and regulators whose guidance laws, regulations and policies we used in this compilation are:

1. **NCC** – Nigerian Communications Commission (an agency of the Ministry of Communications and Digital Economy)
2. **NITDA** – National Information Technology Development Agency (an agency of the Ministry of Communications and Digital Economy)
3. **NESREA** – National Environmental Standards and Regulations Enforcement Agency (an agency of the Federal Ministry of Environment)
4. **FMSTI** – Federal Ministry of Science, Technology, and Innovation
5. **NGX** – The Nigerian Exchange Group

Table 1 below shows how we mapped the relevance of the EESG metrics that we have proposed in this document, to recommendations/requirements from the aforementioned regulators and agencies.

Table 1: Nigeria Tech Citizenship Regulations/Laws/Policies

Regulations/Laws/Policies		Nigerian Regulators and Agencies Guidance				
		NCC	NITDA	NESREA	FMSTI	NGX
Governance	Anti-Competitive Behaviour	✓	✗	✗	✓	✓
	Transparency and Integrity	✓	✓	✗	✓	✓
	Reporting	✓	✓	✓	✓	✓
Economy	Procurement Practice	✗	✓	✗	✓	✓
	Economic Performance	✓	✗	✗	✓	✓
	Tax	✓	✓	✓		✓
Environment	Materials	✗	✗	✓	✓	✓
	Energy	✓	✗	✓	✓	✓
	Water and Effluents	✗	✗	✓	✓	✓
	Emissions	✓	✗	✓	✓	✓
	Waste	✗	✗	✓	✓	✓
	Supplier Environmental Assessment	✗	✗	✗	✗	✓

Society and Human Resources	Employment	✓	✓	✗	✓	✓
	Work Relations	✓	✓	✗	✗	✓
	Occupational Hazard and Safety	✓	✓	✓	✗	✓
	Training and Education	✓	✓	✓	✓	✓
	Diversity, Equality, and Inclusion	✓	✓	✗	✗	✓
	Non-Discrimination	✓	✓	✗	✗	✓
	Forced or Compulsory Labour	✗	✗	✗	✓	✓
	Indigenous Communities	✗	✗	✓	✗	✓

Introducing the Telecoms & Technology Citizenship Awareness Roadmap (TATCAR)

The Telecoms & Technology Citizenship Awareness Roadmap (TATCAR) is a value-driven initiative for the benefit of ICT companies which value the importance of thinking beyond present profitability in order to build strong institutions and a macro economy that stands the test of time.

The TATCAR is made of twenty-one indices covering Governance, the Economy, the Environment and the Society with its human resources. These indices are entirely culled from the official constitutions, regulations, guidance, and laws of key government ministries, departments and agencies and regulating bodies of the industries that can be used by the different parts of the value chain: Technology and Telecommunication Companies, Operator Companies, Original Equipment Manufacturers (OEM), Value-Added Service Providers (VAS), TowerCos, the Academia, and Civil Society Organisations.

The Guidelines are sectioned as follows:

Guideline Title	Acronym	No. of Indicators
TATCAR Governance Guidelines	TGG	4
TATCAR Economic Guidelines	TEG	3
TATCAR Environmental Guidelines	TEnG	7
TATCAR Society & HR Guidelines	TSG	7

As not all material topics are of equal importance, and the emphasis within a report is expected to reflect their relative priority, the term materiality, especially in sustainability reporting, is the principle which determines what relevant topics are essentially important that it is necessary to report on them.

Table 2: Description of TATCAR Guidelines

TATCAR Governance Guidelines (TGG)

TGG.1: Anti-Competitive Behaviour

These are business practices that prevent, deter, or reduce competition in a market, and they include activities like group boycotts, price fixing, and exclusive dealing contracts or trade association rules.

Recommendation:

Companies are encouraged to have a set of criteria applicable to their own business activities and that is considered by an authority or by general consent as a basis of comparison and which things are judged against. This will help regulate practices in the business sphere and lessens competition that can interfere with the competitive process in a market.

TGG.2: Transparency and Integrity

This guideline covers the need for transparency, integrity, lawfulness, accountability, responsiveness, and the absence of corruption and wrongdoing. All these are interconnected concepts that engenders trust and encourages growth.

Recommendation:

Companies are encouraged to govern and conduct themselves with all sense of responsibility, transparency, and accountability by having a system of rules and practices that promotes those values. There should be transparency at all levels, accountability in decision-making processes, as well as reliable, consistent, and quality data, underpinned by integrated whistleblowing policies and procedures. It is recommended that boards of companies have oversight of Sustainability and ESG issues.

TGG.3: Reporting

Reporting is the voluntary, solicited, unsolicited or required disclosure of financial and non-financial performance to stakeholders. It helps create more efficient internal processes, build trust with consumers, and appeal to investors that are interested in the ESG (environmental, social and governance) framework.

Recommendation:

Companies must demonstrate a commitment to transparency as well as measuring impact to improve performance through reporting. They are to report about their impacts on the economy, the environment, and society, while complying with all applicable requirements and preparing their reports in accordance with relevant national and global standards. It is recommended that reporting frequency be annual and timely - in the first three fiscal years of the company.

TGG.4: Collaboration and Partnerships

This guideline caters to the need for companies to imbibe collaboration and partnership representative of Goal 17 of the UNSDGs

Recommendation:

Companies are encouraged to embrace partnerships and collaborations with stakeholders across their supply chain, value chain, sector and society to deepen corporate sustainability and ensure ESG compliance.

TATCAR Economic Guidelines (TEG)

TEG.1: Economic Performance

This includes the economic value generated and distributed (EVG&D) by an organisation; its defined benefit plan obligations; the financial assistance it receives from any government; and the financial implications of climate change.

Recommendation:

Companies must take every legitimate action to manage revenues for the benefit of their key stakeholders. They must keep proper track of revenues, operating costs, credit from loans, staff payments and benefits, financial community obligations as well as statutory payments.

TEG.2: Tax

Taxes are compulsory payments or charges that are collected by local, state, and national governments from individuals or businesses to fund government spending, or to cover the costs of general government services, goods, and activities. Tax payment is crucial for all companies as governments utilise them to finance social projects.

Recommendation:

Companies need to make full and voluntary disclosure of their transactions under relevant tax laws and should comply with tax laws and regulations by timely and accurate payment of taxes and filing and reporting these appropriately.

TEG.3: Procurement Practice

Procurement Practice addresses all activities involved in obtaining the goods and services a company needs to support its business operations. It largely includes sourcing of items, negotiation, purchase, as well as receiving and inspecting goods procured.

Recommendation:

It is recommended that companies have written policies on the manner in which they acquire goods and services. Processes should be in place for implementing, monitoring, incentivising, and applying punitive measures on matters relating to sustainable procurement.

TATCAR Environmental Guidelines (TEnG)

TEnG.1 Materials

For companies that utilise raw materials, principles, practices, and regulations that can ensure the proper extraction, use, and eventual disposal of such materials must be put in place.

Recommendation:

It is advised that companies are transparent with their acquisition and use of any materials required for their business operations or activities. Materials should be adequately sampled and labelled with respect to their effect on the environment in order to guide their handling for both safe use and disposal.

TEnG.2 Energy

As industries consume energy, there is a need for the development and use of sustainable power for national development.

Recommendation:

Companies should be encouraged to promote the use of safe, clean, and efficient energy through developing and deploying sustainable energy technologies. Infrastructure and human capabilities should as well be developed for the acquisition and development of appropriate energy technologies.

TEnG.3 Water and Effluents

This guideline is concerned with liquid wastes produced by industries and discharged into a body of water.

Recommendation:

An industry that discharges wastewater and effluents should be required to treat their effluent to the required standard and should furnish the National Environmental Standards and Regulations Enforcement Agency (NESREA) with the composition of treated effluents while also ensuring the assimilation of discharged effluent into the receiving water.

TEnG.4 Emissions

Emissions that result from energy generation causes great havoc to the environment and this guideline is concerned about emission reduction and pollution abatement in industries.

Recommendation:

It is recommended that companies ensure that reasonable measures are put into place to reduce pollution, limit scope 1 emissions, and mitigate the effects of their activities on the environment relating to scopes 2 & 3 emissions. All emissions-generating activity should be adequately monitored and remedied with sustainable alternatives to ensure levels of emissions are kept at barest minimum.

TEnG.5 E-Waste

Electronic Waste or E-waste refers to discarded electronic devices or electrical equipment that have reached the end of their useful life, including waste electrical and electronic equipment (WEEE) or end-of-life (EOL) electronics. This guideline focuses on reducing pollution, limiting emissions, and mitigating the environmental impact of e-waste.

Recommendation: Companies should design electronic products for sustainability, prioritising durability, repairability, and upgradability, whilst utilising eco-friendly materials. They should also implement proper e-waste management practices, including collection, recycling, and safe disposal, whilst embracing extended producer responsibility. Additionally, companies should promote consumer awareness by providing clear information on the environmental impact of e-waste, educating about proper disposal methods, and establishing take-back programmes.

TEnG.6 Waste

This includes solid waste, suspended solids, discarded packaging materials, waste plastic products etc., from industries.

Recommendation:

Every industry should identify toxic and hazardous solid wastes by establishing a system of sampling and labelling waste that are dangerous to public health and the environment. They should also see to the detoxification and safe disposal of solid wastes and research into strategies for possible reuse or recycling of wastes.

TEnG.7 Supplier Environmental Assessment

This indicator recognises the negative environmental impacts that are caused or contributed to by an organisation, or that is linked to the activities, products, or services directly connected to its relationship with a supplier.

Recommendation:

It is recommended that companies should report their environmental performance to their stakeholders in a forthright and transparent manner and this should include the assessment of potential environmental risks associated with their business activities or operations.

TATCAR Society & HR Guidelines (TSG)

TSG.1: Worker Relations

This is merged with the expectations about 'Employment' from Table 1 and it describes a relationship between two parties regulating the provision of paid labour services and based on a contract where one party is an employee and the other is the employer.

Recommendation:

Companies are encouraged to maintain a fair and responsible relationship with paid workers in terms of welfare, good working conditions, and appropriate remuneration, and should have a system of regulations and practices that ensure that agreements that binds employment relations are not broken unfairly.

TSG.2: Occupational Hazard and Safety

Occupational Health and Safety refers to the health and safety of employees, suppliers, contractors, etc. It also takes into consideration contravention of safety regulations in child labour as captured by 'Employment' and 'Forced or Compulsory Labour' in Table 1.

Recommendation:

It is necessary that regulations aimed at safeguarding the health and wellbeing of employees, contractors, etc. be put into place and strictly adhered to by all companies to ensure proper welfare and safety.

TSG.3: Training and Education

This guideline is concerned with the availability of training to bridge knowledge gaps and promote awareness among employees and other stakeholders including the general public.

Recommendation:

Companies are encouraged to make adequate provisions for equipping their staff and where necessary, educating the public on any matter, issue or topic that can enhance, promote, or guide awareness.

TSG.4: Diversity, Equity and Inclusion

This guideline supports diversity, inclusiveness, and fair work practices for underrepresented groups including women, persons living with disabilities and the youth.

Recommendation:

Companies should respect diversity and seek or pursue social equity and inclusion. It is recommended that companies ensure fair levels of diversity by prioritising equitable representation in their operational structure including the composition of their board.

TSG.5. Non-Discrimination

This guides against the act and result of treating persons unequally by imposing unequal burdens or denying benefits instead of treating each person fairly on the basis of individual merit.

Recommendation:

Companies should have written rules and policies against discrimination to ensure that there exists a safe and conducive work environment.

TSG.6: Indigenous Communities

Engaging communities that are impacted by business activities is a key aspect of social responsibility required from businesses.

Recommendation:

Companies should endeavour to positively and equitably engage with local/indigenous communities that may be impacted by their activities, doing all within their capacity to respond to the needs and concerns of those communities affected by their presence and activities. Sustainable community investments should also be prioritised.

TSG.7: Customer/Client Privacy

Due to use of client information and data within the technology and telecoms sector, this guideline has been added with a focus on maintaining the integrity of customer data and other information.

Recommendation:

Companies must ensure that all data in their custody is treated with utmost integrity and with all accountability.

Appendix 1: Institutional References

Name	Nature	Established	Purpose
Nigerian Communications Commission (NCC)	Government Office	1992	A regulatory authority for the telecommunications industry in Nigeria.
National Information Technology Development Agency (NITDA)	Public Service Institution	2007	This is the ICT policy implementing arm of the Federal Ministry of Communication and Digital Economy of the Federal Republic of Nigeria (FMCDE).
National Environmental Standards and Regulations Enforcement Agency (NESREA)	Environmental Agency (Federal Government)	2007	The aim of this agency is to "ensure a cleaner and healthier environment for Nigerians". It is an independent body of the Federal Ministry of Environment.
Federal Ministry of Science, Technology, and Innovation (FMSTI)	Government Ministry	1980	The mission of the Ministry is to enhance the pace of socio-economic development of the country through appropriate technological inputs.
Federal Ministry of Environment (FME)	Government Ministry	1990	Has a mandate to address environmental issues and to ensure the effective coordination of all environmental matters in the country.
Nigerian Exchange Group (NGX)	Stock Exchange	1961	An integrated market infrastructure in Africa, championing the development of Africa's financial markets.
United Nations Global Compact (UNGC)	Framework & Mechanism	2000	Non-binding pact initiated by the United Nations to encourage businesses and companies worldwide to adopt sustainable and socially responsible policies and to report on their progress.
International Telecommunication Union (ITU)	International Governmental Organisation (IGO)	1865	A specialised agency of the United Nations responsible for various matters concerning information and communication technologies.
African Telecommunications Union (ATU)	International Governmental Organisation (IGO)	1977	A specialised agency of the African Union, previously referred to as the Organisation of African Unity. It holds a crucial role in promoting the advancement of information and communication technologies infrastructure and services throughout the continent.

GSM Association (GSMA)	International Industry Organisation	1995	A non-profit industry organisation that advocates for the interests of mobile network operators globally. The organisation plays a crucial role in representing the mobile industry.
Global Reporting Initiative (GRI)	International Independent Standards Organisation	1997	An international independent standards organisation that assists businesses, governments, and other organisations in comprehending and communicating their impacts on issues such as climate change, human rights, and corruption.
International Sustainability Standards Board (ISSB)	International Independent Standards Organisation	2022	A standard-setting body established under the IFRS Foundation. Its purpose is to create and develop financial reporting standards related to sustainability, specifically catering to the needs of investors for sustainability reporting.

Appendix 2: Text References

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