Transactions of the VŠB - Technical university of Ostrava

STRUCTURAL AND IMPLEMENTATION ISSUES AROUND THE NEW NIGERIAN LABOUR, SAFETY, HEALTH AND WELFARE BILL (2012): LESSONS FROM UK, USA, AUSTRALIA AND CHINA

Usman ABUBAKAR¹

Review article

Abstract:	This paper, which is the Part II of a bipartite series, critically reviews the structural and implementation issues around the new Nigerian Labour, Safety, Health and Welfare (LSHW) Bill (2012). The study uses the vast Occupational Safety and Health (OSH) management experiences gained by UK, USA, Australia and China as bases for reviewing the LSHW Bill. The paper identifies some of the potential OSH management opportunities, challenges and some practical lessons for countries seeking to adopt a more centralised and result oriented OSH regulatory model. Nigeria is used as a reference case study only; most of the recommendations made may be useful to other developing countries.
Keywords:	Occupational Safety & Health; Regulation & Enforcement; Legislation & Implementation; Developing Countries; Bill & Act.

Introduction

Part I (Abubakar, 2015) of this two-part series reviewed and identified key factors behind the development of the Occupational Safety and Health (OSH) frameworks of UK, USA, Australia and China considering Nigerian as a reference case study. However, that study did not assess Nigeria's OSH standing against the provisions of the new Nigerian Labour, Safety, Health and Welfare (LSHW) Bill of 2012. This paper (i.e. Part II of the series) critically reviews the new LSHW Bill, which was passed by the Nigerian National Assembly (NASS) in 2012 (NASS, Session No. 17, 2012). The new LSHW Bill seeks to repeal the rather weak Factories Act which has so far proved quite inadequate. In particular, this paper sets out to answer the questions, how does Nigerian OSH regulatory system work? What are some of the key concerns associated with the new Bill? What lessons could be learnt from countries with advanced OSH models? And most importantly, how can Nigeria and other developing countries take these lessons on board going forward?

Over the decades, a number of industrialised countries have suffered series of catastrophic work-related disasters. Systematic and random precursors, including human factors, which often combine in some complex ways, are behind most of such incidents (Abubakar et al., 2015a; Abubakar et al., 2015b). These countries have eventually learned their lessons the hard way. They have painstakingly and at enormous costs developed OSH regulatory frameworks, standards and work cultures that could benefit the rest of the world, especially the developing economies. Nigeria, and indeed other developing countries, has no justification whatsoever to repeat such disastrous mistakes. The developing countries have both economic and moral responsibilities to learn lessons from the experiences of those countries affected.

OSH Regulatory & Enforcement frameworks of most developing countries are typically poor relative to those of the so called developed countries. For instance, a number of researchers have identified the deficiencies in the current Nigerian OSH regulatory regime, which include: lack of enabling legislations, underfunding, lack of skilled regulators, etc. (Idoro, 2011; Diugwu et al., 2012; Idubor and Oisamoje, 2013; Umeokafor et al., 2014). Unlike Nigeria, each of UK, U.S, Australia and China has graduated from the use of what may be termed Distributed OSH (DOSH) regulatory framework. DOSH regulatory framework leverages on multiple and less coherent legal provisions dispersed in various related laws such as the Factories, Labour and Compensation laws in addition to national constitution. In the other hand, the Consolidated OSH (COSH) regulatory framework refers to a relatively harmonised

¹ Ahmadu Bello University, Department of Chemical Engineering, Zaria, Kaduna State, Nigeria, usman.abubakar.08@aberdeen.ac.uk

regulatory and enforcement framework which comes with mandate expansion, enrichment of regulations, increased regulator powers, more budgetary allocations as well as enhanced executive and financial independence. These are the pillars of any properly functioning OSH regulatory agency. U.S, UK, Australia and China went through their transition (switched from DOSH to COSH regime) in 1970, 1974, 2002 and 2008 respectively (Milligan, 1971; Parliament, 1974; ILO Office for China and Mongolia, 2012; SWA, 2008). However, OSH management in China, which relies heavily on national laws, is still largely based on the presidential order No.70 of 2002 (ILO Office for China and Mongolia, 2012). Presently, Nigeria, through the Inspectorate Division of the Federal Ministry of Labour and Productivity (ID - FMLP), is still using the DOSH regulatory framework. Currently, Nigeria's OSH regulatory system lacks those rudimentary provisions obtainable under the COSH frameworks (BK and Okafor, 2013; Idubor and Oisamoje, 2013). With these problems deep-rooted in Nigerian OSH management system, it is no coincidence that the OSH performance indices for Nigeria have been so bad.

No doubt, Nigeria has acknowledged the need to review and consolidate its OSH regulatory framework. In fact, such awakening led to the passage of the LSHW Bill in 2012 (Nigerian NASS, Session No. 17, 2012). After making a law, implementation of such law is the next logical step. This often presents some practical challenges with some of them emanating from the legal framework itself due to inadvertent flaws. Identifying and addressing such issues as well as the potential legal pitfalls is very crucial and must be very timely; this paper addresses this research front. Nigeria is only used as a representative case study; the observations and conclusions made at the end of this paper are generic and may be useful to other countries seeking to switch from Distributed to Consolidated OHS regulatory regime.

Materials and methods

While Part I (Abubakar, 2015) of this series addressed the past and present issues affecting Nigerian OSH system; this paper considers the next Nigeria's OSH regime with a view to identifying legislative concerns, top priorities and potential challenges in implementing the new LSHW Bill (2012), among others. The study considers the following broad themes:

- Critical review of the new LSHW Bill (2012), with emphasis on the following:
 - overall background, loopholes and structure of LSHW Bill (2012);
 - Agencies established by the LSHW Bill (2012) and their prescribed functions;
 - categorization of OSH management stakeholders;
 - a pictorial representation of the prospective OSH management framework based on the provisions of the new LSHW Bill (2012);
 - Examples of Nigerian agencies governed by specific international treaty(ies).
- Resource scarcity, scope definition for the agencies and potential for jurisdictional conflicts.
- Structural deficiency/loophole with potential to affect the efficiency of the new OSH regulatory regime.
- Prescriptive, Goal setting or Mixed OSH regulatory model way forward.
- Finally, a summary list of the key lessons is given along with suggestions on how each of the highlighted concerns can be addressed.
- References are finally given to facilitate further readings.

Overall, the research outputs are articulated to provide a robust take off ground for Nigeria and other countries seeking to switch from Distributed to Consolidated OSH management model.

Results: Review and Discussions

New Nigerian OSH law, new beginning

Labour, Safety, Health and Welfare (LSHW) Bill (2012) (Nigerian NASS, Session No. 17, 2012), which is a Bill for an Act seeking to consolidate and enhance the mandates of the current OSH regulatory regime, was passed in September, 2012 by the National Assembly of the Federal Republic of Nigeria. LSHW Bill is still awaiting presidential assent at the time of preparing this paper. The Bill is intended to stand as a comprehensive and robust legal apparatus for management of OSH matters in all workplaces - both formal and informal.

In a Plenary Session, the National Assembly considered a total of 112 recommendations raised by the Joint Committee on Employment; Labour and Productivity; Health and Establishment & Public Services. These recommendations served as the bases for the LSHW Bill (2012). In all, the Bill has 15 Parts. Six out of the 112 recommendations were amended, these are: Clauses No. 2, 18, 22, 24, 42

and 93. One recommendation i.e. clause No. 58 was rejected while the remaining 105 recommendations were accepted and passed. LSHW Bill (2012) establishes a central regulatory and enforcement framework comprising the National Council for Occupational Safety and Health (NCOSH), NCOSH Governing Board and the National Institute for Occupational Safety and Health (NIOSH). According to the new Bill, NCOSH will be the focal regulatory and enforcing agency which will be supervised directly by a Governing Board.

A cursory review of the Bill indicates that Part 2 was either skipped in error or assumed to be merged with other part(s) which was not explicitly indicated in the Bill. Part 7 was transposed to the space between Parts 12 and 13. The Bill closes with three Schedules - the First Schedule covers supplementary provisions such as the acceptable quorum for meetings and modalities for slating standing orders applicable to NIOSH and the NCOSH Governing Board. Second Schedule deals with the transitional provisions relating to the employees, assets and liabilities of NIOSH while the Third Schedule gives a rundown of the major hazardous chemicals and installations. Also, according to Part B of the Third Schedule, which provides a summary of the Senate proceedings, Section 91 was considered to be one of the accepted recommendations. However, like Section 58, Section 91 was meant to be left out of the Bill as agreed to earlier which was mentioned in the deliberation notes under Section 91. It was not clear why the Section was later shown to be accepted under the Third Schedule.

According to Section 7(1) of the LSHW Bill (2012), NCOSH Governing Board will be constituted by about 25 members comprising the Board Chairperson; 9 Cognate Federal Ministries; 6 representatives of State Governments (one person from each of the 6 Geopolitical Zones); 2 representatives of the most relevant Employers' Associations; 6 representatives of OSH Professional Bodies/Civil Society Groups and 1 representative of the Executive Secretary of the NCOSH.

On the other hand, NIOSH is a research based institute which will complement NCOSH. The mandate for conflict resolution between regulators and duty holders is assigned to the National Industrial Court of Nigeria (NICN). Main functions of the new quadripartite OSH management system include:

- · Registration of workplaces;
- Development or adoption of OSH legislations, standards and national policies/strategies;
- Enforcement of OSH provisions;
- Inspection of workplaces;

- Research on OSH matters;
- Providing Education, training, enlightenment, consultancy services (to industries, movement agencies and general public);
- Development of OSH national databank;
- Reconciling national and international OSH related interests, treaties and conventions;
- Harmonizing and streamlining the activities of various OSH professional bodies;
- OSH related conflict resolutions among stakeholders.

Each of NCOSH, NIOSH, NCOSH Governing Board and the NICN has varying mandates/powers, ranging from none to full, in carrying out each of the above functions.

Unlike NIOSH, which will be under the Minster of Labour and Productivity, NCOSH is a non-ministerial body reporting directly to the President, (Section 22 of the LSHW Bill (2012) as amended) (Nigerian NASS, Session No. 17, 2012). Also, budget of NCOSH will be appropriated by the National Assembly (Nigerian NASS, Session No. 17, 2012). In addition, NCOSH has the mandate to generate incomes through regulatory citations and voluntary donations. Based on the provisions of the new Bill, this study highlights some of the specific functions of each of NCOSH and NIOSH including some of the joint mandates. These functions/mandates are briefly described in Tab. 1. It is important to note that this is a cursory extraction exercise and is by no means intended to be holistic.

In summary, while NCOSH is designated as the central regulatory and enforcement (i.e. the Executive) arm of the new quadripartite OSH management regime, NIOSH, which is to be supervised by the Minister of Labour and Productivity, will provide research based OSH related recommendations, supports NCOSH towards the development of a National Information Management System (NIMS) and also oversee the workplace health issues in collaboration with the Federal Ministry of Health. The Governing Board is mandated to supervise the activities of NCOSH. NICN, on the other hand, has the mandate to resolve disputes between the regulators and the duty holders.

Tab. 1 Some specific and joint functions of the NCOSH & NIOSH based on LSHW Bill (2012) (Nigerian NASS, Session No. 17, 2012)

NCOSH	NIOSH	NCOSH and NIOSH
To be headed by an Executive Secretary (ES) (Section 14 (1), of the LSHW Bill (2012)), NCOSH is a largely operations- oriented body that develops, enforces OSH regulations and sets standards applicable to all workplaces (among other functions) except those governed by specific international conventions and treaties, (Sections 12–13).	To be headed by a Director General (DG) (Section 102(1), of the LSHW Bill (2012)), NIOSH is a research oriented body that identifies and recommends OSH standards as well as enabling OSH regulations and policies to prevent workplace injuries and illnesses (Sections 102–104). NIOSH is also mandated to liaise with the Federal Ministry of Health to regulate, monitor and evaluate medical practices with a view to promoting occupational health (Section 106).	Both the ES and the DG are to be appointed by Mr. President on the recommendation of the Minister of Labour and Productivity. Normally, each of the ES and the DG will hold office for a term of 4 years in the first instance and may be re-appointed for a further term of 4 years and no more. (Sections 14 (1 & 2)); 102 (1 & 2), of the LSHW Bill (2012)).
NCOSH is required to prepare and submit September 30 th report to the President, (National Assembly is no longer a recipient of this report based on Section 22 as amended). But NCOSH should submit estimate of its expected incomes and expenditure for the incoming year to the National Assembly (Section 20).	NIOSH is required to submit September 30 th report to the National Assembly, Minister of Labour and Productivity and the President (Section 104).	R & D on OSH, education, trainings and conducting public enlightenment programmes (NCOSH- Section 96, NIOSH- Section 103).
Does not prepare June 30 th report.	Each of NIOSH and Ministry of Labour and Productivity to prepare and submit a report before June 30 th of every year to the President detailing activities in the preceding year and future plans/ requirements. The President transmits such report to the National Assembly (Section 110).	Development of standards including concepts and terminology interpretations.
NCOSH to establish the National Information Management System (NIMS) as a database holding relevant OSH incidents which shall be linked to the National Health Information Systems (NHIS) (Section 12(1)).	NIOSH to support the development of NIMS by working in partnership with the Federal Ministry of Health to provide relevant occupational accidents, injuries and disease information in the medical facilities nationwide (Section 105).	Inspection (NIOSH conducts inspection on behalf of the Minister of Labour (Section 102 (1) pursuant to Section 99).
Unlike NIOSH, NCOSH is not required to submit industry-wide status report after two years of its start-up.	On behalf of the Minister of labour, NIOSH to review and publish industry wide status of the effect of chronic or low-level exposure to industrial materials, within two years of start-up of the institute and annually thereafter.	Budgets for implementation of the LSHW Bill (after enactment) to be appropriated by the National Assembly (Section 111) for each of NCOSH and NIOSH.
NCOSH will be supervised directly by a Governing Board which will be headed by a Chairperson. The Board, which will operate on part-time basis, is saddled with the responsibility to check and regulate the NCOSH, formulate national OSH management framework and grants specific approvals, as appropriate, to NCOSH, among others.	Functions of NIOSH will be overseen directly by the Minster of Labour Matters who the DG represents (Section 102 (1)).	In an event where a duty holder contests enforcement or citation, such conflicts between NCOSH/NIOSH and the concerned duty holder are to be entertained by the National Industrial Court of Nigeria.

A close look at the new Bill reveals a national OSH regulatory strategy that is more articulate and coordinated. Overall, LSHW Bill (2012) seeks to usher in an overarching and more enabling OSH regulatory regime. For instance, LSHW Bill (2012)

covers construction industry which was not enshrined in the Factories Act, makes provisions for more stringent fines, longer jail terms for contraveners and confers more succinct & enabling powers to the regulators. In addition, the new management

and answerability structure offers more budgetary expenditure and executive independence to the new regulatory system. The new Bill brings together a number of OSH management stakeholders with diverse backgrounds and degrees of engagements and sets out to establish stronger coordination and interactions amongst the stakeholders. For the purposes of this study, OSH management stakeholders in Nigeria have been divided into four broad categories, thus:

- a) Agencies/organizations governed significantly by International Treaties/Conventions;
- b)Government agencies with devolved mandate for specific risk management;
- c)Other national stakeholders;
- d)International stakeholders.

Five model examples on each of the four categories are given in Fig. 1. It is important to note that this schematic does not portray hierarchy or complete intra-communication flow directions. Provisions of the LSHW Bill (2012) are applicable to all workplaces except those agencies established for the purposes of meeting specific international treaties or conventions (see Section 3 of the LSHW Bill (2012) (Nigerian NASS, Session No. 17, 2012)).

LSWH Bill does not explicitly name such agencies. However, typically, some of these specialised agencies could be as shown in Tab. 2:

No doubt, the new OSH regulatory regime will have to work closely with all the stakeholders mentioned above including those agencies governed by certain international treaties (examples are given in Tab. 2). International treaties or conventions usually specify generic criteria which could be considered by member countries as bare minimum depending on the extent to which the convention is ratified. For instance, like Nigeria, UK is a signatory to the Convention on International Civil Aviation (CICA) which sets out to regulate aviation safety, among others. However, performance standards setting/revisions, inspections and regulation of offshore helidecks are carried out jointly by the UK Civil Aviation Authority (CAA) and the UK HSE even though UK CAA is mandated to enforce the CICA (UK Civil Aviation Authority, 2013). Other high OSH risk yet quite specialised agencies are: the Nigerian Railway Corporation and the Mining industry. Regulating OSH in these sectors will require significant inputs from the resident experts in each of the sectors in question. Identification of such agencies and defining the common grounds devoid of trespass is one of the key issues to address upfront. This issue and a range of other potential OSH management challenges and possible ways forward are discussed in the following sections.

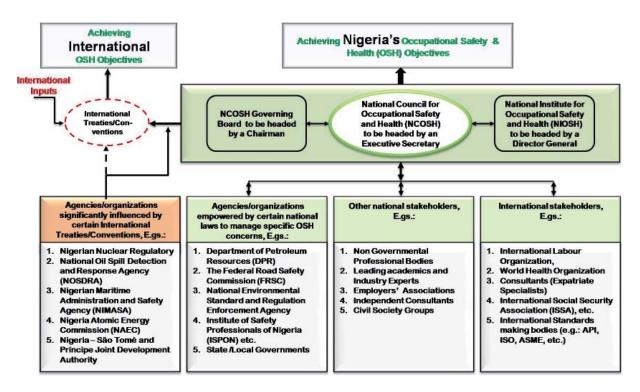


Fig. 1 An Outlook of the Prospective Nigerian OSH Management Framework Reflecting the Provisions of the New Bill (LSHW Bill (2012)

Agency governed by specific Int'l agreement/ convention/Treaty	Example(s) of International agreement/ convention/Treaty	
Nigerian Nuclear Regulatory	Convention on Early Notification of a Nuclear Accident, signed in 1987 ratified and enforced in 1990 (International Atomic Energy Agency, 2014) and Convention on Nuclear Safety, signed in 1994 ratified and enforced in 2007(International Atomic Energy Agency, 2015).	
• National Oil Spill Detection and Response Agency (NOSDRA)	International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC 90) (Nwilo and Badejo, 2006).	
Nigerian Maritime Administration and Safety Agency (NIMASA)	International Convention for the Safety of Life at Sea (1974), signed 1981 which was ratified in 2004 (Federal Republic of Nigeria, 2004).	
• Nigeria Atomic Energy Commission (NAEC)	Comprehensive Nuclear-Test-Ban Treaty (CTBT), open for signatures in 1996; Nigeria signed CTBT in 2000 and ratified same in 2001 (Comprehensive Nuclear-Test-Ban Treaty (CTBT), <i>http://ctbto.org/specials/who-we-are/</i>).	
• Nigeria – São Tomé and Príncipe Joint Development Authority (specifically, OSH management in the Joint Development Zone i.e. Bight of Bonny)	Nigeria and the Democratic Republic of Sao Tome and Principe Bilateral Treaty (2002) (Nigeria–São Tomé and Príncipe Joint Development Authority, <i>http://www.nstpjda.com/#</i>).	

Tab. 2 Examples of Nigerian agencies significantly influenced by international treaty(ies)

Resource scarcity, ill-defined scope and jurisdictional conflicts

According to Section 3 of the LSHW Bill (Nigerian NASS, Session No. 17, 2012), with the exception of Government agencies governed by international treaties or Conventions, the Bill applies to all workplaces, employees and employers including the self-employed (Section 30 (3)) as well as the local Government employees (Section 95). In addition, with the exception of the Compensation Act (2010) and the Factories Act (Cap Fl 2004), which are specifically named and exempted in Sections 30(3) and 93 respectively, the LSHW Bill does not explicitly name other exempted bodies or extant legal provisions that should remain in force after the kickoff of the new law. This scope is not only particularly extensive; its boundaries also appear to be loosely defined. The implication is that the new regulatory agencies will need huge amount of resources in terms of trained multidisciplinary workforce and commensurate financial budgets which may not be available for an agency of that standing. Secondly, there is the potential for the new OSH regulatory regime to find itself squaring up with a number of agencies in the course of discharging its mandates.

To a very large extent, the new Bill reflects the features of the U.S OSHA Act of 1970 but fails to adopt some of the scoping provisions articulated in that Act. For instance, Section 4 of the U.S OSHA Act (Milligan, 1971) clearly spells out exempted jurisdictions such as Atomic Energy Acts which established the defunct Atomic Energy Commission (now called Nuclear Regulatory Commission) and Workmen's Compensation Acts. The section, which is titled "Applicability of this Act", gives a rundown of the excluded extant laws and this is very important.

Similarly, UK identifies three broad categories of OSH enforcing bodies namely: the HSE which is the central OSH regulatory body, the local Government authorities and 'Others'; scope of each of these agencies is relatively well defined as highlighted below:

• HSE,UK (the OSH focal authority)

HSE mainly covers workplaces that have broad national implications such as: factories, farms, building sites, mines, schools/colleges, and power generation systems, central & local Government premises as well as oil & gas installations.

• Local Government authorities

Local Governments cover certain local business units such as shops, hotels, restaurants, leisure premises, nurseries/playgroups, pubs/clubs and places of worship. The local Governments authorities also cover dangerous buildings (built), as well as issues such as pollution and poor food hygiene matters.

• 'Other' enforcement Agencies

The 'Other' category of enforcement agencies comprises: (a) agencies with mandate to enforce OSH regulation based on specific international conventions and (b) those enforcing OSH regulations based on specific national regulations. Examples under sub-category (a) are: maritime OSH laws (enforced by Maritime and Coastguard agencies) and nuclear/atomic safety laws

(enforced by the Office for Nuclear Regulation). Examples under sub-category (b) are: road traffic laws (enforced by Police), railway OSH laws (enforced by Office of Rail Regulation) and waste disposal & contaminated ground laws (enforced by Environmental Agency), etc. (UK HSE's responsibilities, *http://www.hse.gov.uk/contact/authority.htm*).

A special functional delegation and scoping approach may be seen in Australian model where the central OSH **body** (SWA) is limited to OSH policy and regulations making activities only. Enforcement is the reasonability of the states and territories. This appears to be similar to the situation in China where considerable enforcement powers are devolved to the regional Governments and provinces. Overall, each of these countries appears to handout relatively clear scope to their respective OSH focal regulatory body.

Systematic scoping is very necessary for proper functioning of the focal OSH regulatory body. This will allow the body to focus its finite resources on those strategic areas with broad national impacts and also forestall potential functional conflicts among related agencies which were also established by some legal pronouncements.

A legal loophole with potential to undermine the proposed OSH databank (NIMS)

Sections 11(1) and 105 of the LSWH Bill stipulate the need to establish a dedicated OSH databank called the National Information Management System (NIMS) which shall be linked to the National Health Information Systems (NHIS) (Section 12(1)). Section 35(2) requires that work-related accidents resulting in death or permanent disability must be reported to NCOSH within 7 days of occurrence, which is reasonable. However, Section 35(1) requires employer to report certain incidents such as accidents that incapacitated an employee for 3 or more days and dangerous occurrences before 31st of March, every year. With this very large time allowance, reports could potentially sit idly with the employers for nearly a year. This is not good practice especially in this age of IT where the duty holders may only be a few clicks away from the NIMS website. With this provision, NIMS may only be able to hold complete records for incidents that occurred within the preceding administrative year. Potentially, this problem could stand as one of the major factors to militate against the development of the new platform at least in terms of currency.

Now, to put this into perspective, in the UK, an incident must be reported within 10 days of its occurrence and maximum of 15 days if such incident incapacitated the worker for more than 7 days (UK HSE, http://www.hse.gov.uk/riddor/ when-do-i-report.htm). In the U.S, work-related death must be reported to OSHA within 8 hours and any occupational accidents resulting in inpatient hospitalization must be reported within 24 hours (USA OSHA Record Keeping System, https:// www.osha.gov/recordkeeping/). Clear and rational instructions like these are essential for efficient data gathering.

Prescriptive or goal setting OSH regulatory model

The prescriptive (or rule based) model sets OSH performance criteria for the duty holders and also defines means of achieving the set targets. On the other hand, the goal setting (or safety case) approach sets target and shifts the onus of proof of compliance to the duty holder who is responsible for creating the risk initially. The proposed Nigerian OSH regulatory framework as enshrined in the LSWH Bill is predisposed largely towards the U.S OSH management model, which is fundamentally prescriptive. UK and Australia on the other hand have OSH regulatory regimes that are largely goal setting. However, Unlike Australia, which has recently adopted the goal setting approach, UK has tried the model for about 40 years now. U.S has also implemented the prescriptive approach for over 40 years. This provides a simple unidimensional basis for comparing the goal setting and the prescriptive OSH regulatory models. The annual fatal accident rates of UK and U.S are 0.74 and 3.5 per 100, 000 employees in 2011(U.S. Bureau of Labor Statistics (BLS), 2012; UK HSE, http://www.hse.gov.uk/ statistics/pdf/fatalinjuries.pdf). UK seems to be doing quite well in terms of this measure which is one of the most vital OSH performance metrics used around the world.

In fact, U.S appears to be looking towards UK's OSH management model i.e. a largely goal setting regime. For instance, the U.S president had issued an executive order (No. 13563) in January 2011 tasking the OSH stakeholders to consider the prospects for U.S to adopt a more goal setting approach since the current largely prescriptive framework has not been quite successful (US Expert Forum, 2012). It is important to note that that presidential order came after testing the prescriptive model for about 45 years. Nigeria and indeed other developing nations have valuable lesson here.

Characteristically, the goal setting approach tends to put lesser burden on the regulators in terms of technical proficiency. It also encourages the duty holders to own the risk and be creative in developing risk management strategies. With this arrangement, the regulator focuses on the broad policy making, reviewing safety reports and enforcing legal provisions. However, this does not in any way preclude the need and importance of competent and well-resourced OSH regulars. For instance, failure of the UK military aircraft, i.e. the RAF Nimrod MR2 (XV230) in 2006 in the airspace of Afghanistan is a typical example of what could happen if regulators are incompetent or have no adequate access to requisite expertise. In this case, a flawed safety case was hastily approved. A postaccident investigation team found that this misstep was among the root causes of the accident. The investigation revealed that the safety case which was submitted to the regulators to secure approval was actually riddled with errors and fundamentally defective in terms of facts and representation which were never picked up during the review exercise (Charles Haddon-Cave OC, 2009). All the 14 people on board died as a result of this accident.

On the other hand, it is important to note that the goal setting regulatory regimes tend to put extra pressure on the inspectors in certain ways. For instance, inspectors would have to go through the safety case of nearly every asset prior to inspection visits and assess the workplace against its specific safety case report, this can be very demanding. The usual generic checklists are of little use here. Relative costs of implementing the goal setting regime, especially on the SMEs is another very important issue to consider. With these pros and cons in sight, it is clear that crafting out an optimised blend of these regulatory models would require some efforts.

Unlike the present section, which focuses mainly on identification of problems, opportunities, and general comparative reviews; the following section summarises the key practical lessons and also answers the essential questions of implementation. Most importantly, leveraging on the experiences of the countries referred to in this paper and Part I of this series (Abubakar, 2015), a number of recommendations are also made and highlighted accordingly.

Conclusions: Lessons to Learn

Need for systematic scoping

Giving the extent of coverage and the way in which the jurisdictional boundaries of the LSHW Bill

(2012) are defined, systematic scoping is necessary to forestall potential conflicts amongst related agencies and resource based limitations. Therefore as a minimum, there is the need to, right from the outset, clearly identify the functional boundaries of the following:

- Agencies with mandate to uphold specific international treaties, conventions/ agreements (examples are given in Fig. 1 with further details given in Tab. 2);
- Agencies/organizations governed by national laws and empowered to carry out certain functions with OSH related features (examples are given in Fig. 1);
- Specific OSH regulatory functions need to be delegated to the Local Government Authorities (for instance, in the UK, local authorities cover certain businesses, examples are given in Section 3.2);
- Above all, clearer lines of demarcation between the mandates of NCOSH and NIOSH, including the common grounds, should be drawn (some guidance notes are given in Tab. 1).

It is paramount to find out means of shading delegable responsibilities and focusing the finite resources on those strategic workplaces that have broad national outlook and impact. However, care must be taken to avoid overstretching this provision which could easily result in mandate abdication.

There is also the need for NCOSH, NIOSH and the NCOSH Governing Board to, within first 2 - 3 years after take-off, set up a critical review committee which shall be charged with the responsibility of identifying potentially conflicting and/or duplicated legislations which may be sitting in various Ministries, Departments and Agencies across the country. Findings of such committee would provide basis for amendment of the incoming OSH Act (LSHW Act), this is necessary in order to foster harmony and coordination.

NIMS development - a priority

Development of a rich and reliable NIMS is pivotal to the success of the new regulatory regime and should be a top priority. A number of issues will need to be addressed; some of these issues are highlighted hereunder:

• The provision that an employer is required to report certain incidents such as accidents that incapacitated an employee for 3 or more days and dangerous occurrences before 31st of March of every year (Section 35(1) LSHW BILL) (Federal Republic of Nigeria, 2012) is ill-defined and potentially counterproductive. With this provision, an incident that occurs in April could,

by law, remain unreported for nearly a year. Large number of incidents may be sitting unreported in organizations. In other words, NIMS may only be able to hold complete data sets for a preceding year; this makes it one year out of date by default. This is a considerable legal loophole and needs to be duly addressed (see subsection 3.3 for additional notes on how the UK and U.S handle this issue).

- Getting the right inputs in terms of quality and number requires much more than a sophisticated online data collection and presentation platform. Success of the NIMS will also depend on the extent to which the duty holders and the general public are engaged. As a minimum, the following questions need to be properly addressed: What incident should be reported? How should the incident be reported? Who should report the incident? Where the incident report should be sent to? And when the incident must be reported? The answers to these questions should be made very clear to both the duty holders and the general public.
- The new OSH regulatory agencies should also endeavour to be among the interest groups canvassing for timely enactment of the Whistleblower protection Bill which is still not in effect in Nigeria. Speedy development of NIMS will, no doubt, require the Whistle-blower protection law which is currently awaiting presidential assent (at the time of preparing this paper).

Standardization of definitions

There is the need to align concepts and terminology definitions with international best practices. This is necessary otherwise comparing Nigeria's future standards and OSH management performance metrics to international outputs will be very difficult. Article No. 4 of the ILO Convention requires any country that signed and ratified the Convention to formulate, implement and periodically review a coherent national policy on occupational safety, occupational health and the working environment. Nigeria ratified this convention in May 1994 (ILO, 1981). Such standardization and alignment would provide stronger basis for fruitful engagements between Nigeria and other countries which is good for speedy OSH development. In addition, this would help foster uniform understanding among all OSH stakeholders including the general public.

In addition, to aid compliance, there is the need to clearly draw lines between generic standards, which are applicable to all workplaces, the so called vertical standards (which are industry specific), performance standards and other approved codes of practice. This is necessary to forestall ignorance - based violations.

Shortage of technical resources - need to partner with relevant bodies

No doubt, the new OSH regulatory regime will present high demand for OSH specialists. Both the regulators and the employers will need such experts as full time, part time staff members and/or as independent consultants; Nigeria has huge deficit here. Going by the recommendation of the ILO, the new regulatory regime will need no less than 1300 inspectors and about the same number of other staff members that are not functionally designed as inspectors such as policy advisers, technologists, legal advisers, information and communication specialists, statisticians and economists, scientists and medical experts (Abubakar, 2015). There is therefore the need to recruit and train people at home and abroad through some form of collaborations with international stakeholders especially the OSH focal authorities, research institutions and centres with track records of OSH development. Joint research & publications and knowledge exchange by co-organizing conferences, seminars, workshops and streaming of selected talks in form of webinars, podcasts, etc. are a key to addressing this problem. Federal Ministry of Education may also be encouraged to introduce tailored OSH topics in the curricula of certain courses across the country. In addition, through special consultations, Government Ministries, Departments and Agencies such as the Petroleum Technology Development Fund, National Information Technology Development Agency (NITDA) and the Federal Ministry of Education, which have the mandate to sponsor the studies of eligible Nigerians in some areas, may be encouraged to train more people in OSH related courses. In particular, NITDA has the mandate to sponsor IT related programmes, this could be very useful for the development of the NIMS which is stipulated by the LSHW Bill.

Need to regulate consultancy services and create central directory

Many duty holders may not have the resources in terms of time and/or depth of expertise required to manage risks and/or demonstrate compliance with the OSH regulations, and this normal. Practically, contracting consultants is about the only option left for them. Evidently, compliance with OSH regulations is heavily dependent on consultancy services. This means that OSH consultancy services

need to be closely monitored and regulated. Otherwise, duty holders are left at the mercy of uncertified and undocumented consultants which will eventually result in poor compliance. This problem has the potential to hamper the success of any OSH regulatory regime. Thus, it is the responsibility of the regulatory and enforcement agencies to ensure that the space is not flooded with substandard consultancy services.

Therefore, in collaboration with relevant professional bodies, the OSH regulatory agencies need to screen out and qualify all OSH consultants against certain standards which shall be interactively developed by the stakeholders. A web-based searchable directory should be created to hold the profiles of all certified consultants including the name(s) of the professional body(ies) that had qualified the consultant. A number of professional bodies, such as the Institute of Safety Professionals of Nigeria National (ISPON) (which is a technical arm of the National Industrial Safety Council of Nigeria) and Nigerian Institute for Industrial Security (NIIS) have already created online lists of their registered members. These lists and others that are not yet live need to be vetted, harmonised and centralised.

Need for more customised blend of goal setting & prescriptive regime

Regardless of the issues discussed in Section 3.4, overall, it appears that a largely goal setting regime could be a better option for Nigeria at this point in time. Such model should be designed to resonate with the current technical development level and worker performance culture in Nigeria along with the strategic need to encourage SMEs. Invariably, such exercise is going to be iterative, hedged with trials & errors, learning and subsequent updating.

Keeping an eye on costs vs. benefits of OSH maintenance

There is moral, legal and financial dimension to OSH management and each of these must be recognised. OSH management authorities should therefore keep an eye on 'regulation, enforcement and compliance costs' vs. 'benefits gained'. This is very important especially when dealing with Small and Medium-sized Enterprises (SMEs) which tend to run on very tight financial margins. Misapplication of OSH regulations can easily bankrupt these vulnerable businesses. One way of addressing this problem is to adopt a risk and evidence-based regulatory approach which targets the most risky workplaces. Also, simplifying both the content and size of the OSH regulations through some form of sectorial grouping would aid compliance. Thus, the duty holders are not made to laboriously go through voluminous OSH documents or forced to contract consultants in order to comply. To check against the cost- benefit issue, it is therefore necessary for both NCOSH and NIOSH to, right from the beginning, clearly set out key performance and impact measurement indices.

References

- ABUBAKAR, U. 2015: An overview of the occupational safety and health systems of Nigeria, UK, USA, Australia and China: Nigeria Being the Reference Case Study, *American Journal of Educational Research*, vol. 3, no. 11, p. 1350–1358.
- ABUBAKAR, U.; SRIRAMULA, S.; RENTON, N.C. 2015a: Stochastic techno-economic considerations in biodiesel production, *Sustainable Energy Technologies and Assessments*, vol. 9, p. 1–11.
- ABUBAKAR, U.; SRIRAMULA, S.; RENTON, N.C. 2015b: Reliability of complex chemical engineering processes, *Computers & Chemical Engineering*, vol. 74, p. 1–14.
- UK Civil Aviation Authority, 2013, CAP 437-Standards for Offshore Helicopter Landing Areas, Civil Authority.
- BK, A.; OKAFOR, C.C.: "Occupational Health, Safety and Environment (HSE) trend in Nigeria." (2013).
- Charles Haddon-Cave QC (2009): An independent review into the broader issues surrounding the loss of the RAF Nimrod MR2 Aircraft XV230 in Afghanistan in 2006, http://www.hse.gov.uk/offshore/ageing/kp4-nimrod.pdf.

Comprehensive Nuclear-Test-Ban Treaty (CTBT): http://ctbto.org/specials/who-we-are/ Accessed March, 2016.

- DIUGWU, I.A.; BABA, D.L.; EGILA, A.E. 2012: Effective Regulation and Level of Awareness: An Exposé of the Nigeria's Construction Industry.
- Federal Republic of Nigeria, 2004: International Convention for the Safety of Life at Sea (Ratification and Enforcement) Act, p. http://www.placng.org/new/laws/I26.pdf.
- IDORO, G.I., 2011: Comparing occupational health and safety (OHS) management efforts and performance of Nigerian construction contractors, *Journal of Construction in developing Countries*, vol. 16, no. 2, p. 151–173.

- IDUBOR, E.E.; OISAMOJE, M.D. 2013: An exploration of health and safety management issues in nigeria's effort to industrialize, *European Scientific Journal*, Vol. 9, no. 12.
- ILO: Occupational Safety and Health Convention, 1981 (No. 155), http://www.ilo.org/dyn/normlex/en/f?p=NOR MLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312300:NO.
- ILO Office for China and Mongolia, National Profile Report on Occupational Safety and Health in China (2012),http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/policy/ wcms_186991.pdf.
- International Atomic Energy Agency, 2014, Convention on Early Notification of a Nuclear Accident, p. http://www.iaea.org/Publications/Documents/Conventions/cenna_status.pdf.
- International Atomic Energy Agency, 2015, Convention on Nuclear Safety, http://www.iaea.org/Publications/ Documents/Conventions/nuclearsafety_status.pdf.
- MILLIGAN, J. 1971: Occupational safety and Health Act of 1970, Public Law 91-596, Wash State Univ Ext Em.

Nigeria-São Tomé and Príncipe Joint Development Authority, http://www.nstpjda.com/#, Accessed March, 2016.

- NWILO, P.C.; BADEJO, O.T. 2006: Impacts and management of oil spill pollution along the Nigerian coastal areas, Administering Marine Spaces: International Issues, p. 119.
- Nigerian National Assembly (NASS), Labour, Safety Health and Welfare (LSHW) Bill (2012), no. Passed by the 7th NASS, 2 Session, No. 17.
- Parliament, U. 1974: Health and Safety at Work etc. Act 1974.
- SWA: Safe Work Australia Act 2008 C2009A00084: http://www.comlaw.gov.au/Details/C2009A00084/ Download .
- U.S. Bureau of Labor Statistics (BLS): National Census of Fatal Occupational Injuries In 2011 (Preliminary Results) Released in 2012: http://www.bls.gov/news.release/archives/cfoi_09202012.pdf.
- UK HSE: Health and Safety Executive Statistics on fatal injuries in the workplace in Great Britain: 2014 Full-year details and technical notes, http://www.hse.gov.uk/statistics/pdf/fatalinjuries.pdf.
- UK HSE, I. R.: http://www.hse.gov.uk/riddor/when-do-i-report.htm, Accessed March, 2016.
- UK HSE's responsibilities: http://www.hse.gov.uk/contact/authority.htm, Accessed March, 2016.
- UMEOKAFOR, N.; ISAAC, D.; JONES, K.; UMEADI, B. 2014: Enforcement of occupational safety and health regulations in Nigeria: An exploration, *European Scientific Journal*, vol. 3, p. 93–104.
- US Expert Forum on the Use of Performance-Based Regulatory Models in the U.S. Oil and Gas Industry, Offshore and Onshore, https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FEDERAL_REGISTER&p_id=23267, Accessed March, 2016.
- USA OSHA Record Keeping System, https://www.osha.gov/recordkeeping/, Accessed March, 2016.