

行政院及所屬各機關出國報告

(出國類別：其他)

經濟部標準檢驗局組團赴史瓦濟蘭 王國簽署臺史 MOU 及洽談合作事 宜出國報告

服務機關：經濟部標準檢驗局

姓名職稱：劉局長明忠、倪組長士瑋、賴組長俊杰、
謝簡任技正孟傑、孫科長元平、白科長
玠臻、何技術師文加

出國地區：史瓦濟蘭王國

出國期間：106 年 1 月 17 日至 24 日

報告日期：106 年 4 月 20 日

摘 要

本次應史瓦濟蘭王國商務、工業暨貿易部(商工貿易部, Ministry of Commerce, Industry and Trade)邀請, 由本局劉局長明忠率團出席本(106)年 1 月 19 日召開之本局與該部技術合作會議, 並以「中華民國經濟部標準檢驗局」名銜與「史國商工貿易部法規暨品質基礎建設研發處 (Regulatory and Quality Infrastructure Development Department)」簽署「技術合作瞭解備忘錄 (Memorandum of Understanding on Technical Cooperation)」, 簽署約本以中、英文 2 種官方語言一併作準。

上揭 MOU 內容涵蓋標準化活動資訊交換、實驗室技術人員訓練及消費性產品法規架構諮詢服務等技術性合作, 為彰顯我方對該 MOU 之重視及推動後續各項合作交流活動, 本案另邀請財團法人全國認證基金會、工業技術研究院量測技術與發展中心、中華民國檢測驗證協會等高層代表一行十五人共赴史國簽署 MOU, 並與史方召開技術合作會議, 共同商討未來合作方向。

本次訪史特別拜會我駐史國大使館, 感謝使館協助本案達成簽署不遺餘力, 感謝陳大使經銓親自接待; 另亦拜會史國商工貿易部長, 以及親訪該部轄下之相關單位及實驗室等, 以實地瞭解史國品質基礎建設發展現況, 做為未來雙方合作, 以及本局協助之參考。

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壹、前言

一、本案案由

我國邦交國史瓦濟蘭王國於 104 年 11 月 4 日我國經濟部召開之「第 18 屆臺史經技合作會議」中提出，盼就標準、檢驗、度量衡及認證等領域上予以技術協助與經驗分享，嗣於 105 年 7 月 25 至 29 日由外交部協調史方，派遣相關官員 5 人來臺接受本局安排之品質基礎建設訓練課程，雙方互動良好，並對未來進一步合作達成初步共識。

本局基於協助友邦立場，於 105 年 10 月 20 日由賴組長俊杰、白科長玠臻及侯技正沛霖 3 位代表出席於史國舉行之「第 19 屆臺史經技合作會議」，會中提出「與史瓦濟蘭王國簽署技術合作瞭解備忘錄(MoU)，以協助史方強化品質基礎建設能力及減少技術性貿易障礙」之議題，期透過 MoU 方式建立兩國穩定合作交流機制。

經我駐史國大使館從中協調，105 年 12 月史方表示同意本局所提出之 MoU 版本，並邀請本局劉局長及合作所涉相關法人代表組團於 106 年 1 月間赴史簽署約本，期間雙方完成技術合作會議之召開，雙方同意未來合作將聚焦前述四大領域之能力建構，會後亦拜會相關部會、機關及實驗室等，以進一步洽談合作及進行實地評估。

二、簽署準備與訪史行程

- (一) 本案於 106 年 1 月 9 日奉行政院核准辦理簽署後，並向史方確認簽署 MOU 約本由我方負責製作，於 1 月 12 日函請外交部協助，並於 1 月 13 日取得約本(依簽約主體國名輪先原則，製作同內容共 2 份約本)。
- (二) 為彰顯我方對該 MOU 之重視及推動後續各項合作交流活動，本案除邀請局內相關單位，亦邀請財團法人全國認證基金會、工業技術研究院量測技術與發展中心、中華民國檢測驗證協會等高層代表一行十五人共赴史國簽署 MOU 及進行合作洽談。於 106 年 1 月 13 日並與該等相關單位召開籌備會議，共同研商我方擬提出的合作方向。
- (三) 因史國 1 月初適逢新年假期，本次出國期間乃配合安排自 106 年 1

月 17 至 24 日含路程共 7 日，行程如下：

日期	行程
1 月 17 日 (二)	啟程前往史瓦濟蘭
1 月 18 日 (三)	(1)與史方工作層級討論會議 (2)拜會我駐史國大使館及參加史館大使工作晚宴
1 月 19 日 (四)	(1)簽署臺史 MOU (2)召開技術合作會議 (3)參訪法規暨品質基礎建設研發處(RQID) (4)參訪史瓦濟蘭投資促進局(SIPA)
1 月 20 日 (五)	(1)拜會商工貿易部長 (2)參訪商工貿易部度量衡部處(實驗室) (3)參訪標準局(SWASA) (4)國家實驗室協會(NLAS)簡報 (5)參訪皇家科學及技術園區
1 月 21-22 日 (六、日)	經建參訪
1 月 23 日 (一) 1 月 24 日 (二)	返程回臺

貳、簽署臺史 MOU 及召開技術合作會議

簽署儀式由史國商工貿易部(商工貿易部)部長 Jabulani Mabuza 開場致詞，後續由該部代理政務次長 Siboniso Nkambule、本局劉局長及我駐史瓦濟蘭大使館梁公使仲平接續致詞，雙方人員皆表達對本次順利達成簽署抱以高度肯定，並盼有效提升史方品質基礎建設同時，更有效促進兩國貿易之往來，建立長期、雙贏的合作關係。



圖 1：約本簽署儀式。右為本局劉局長明忠；左為史國商工貿易部代理政務次長 Nkambule。



圖 2：簽署後雙方代表團合影。前排由左至右分別為我駐史國大使館梁公使仲平(前排左二)、本局劉局長明忠(前排左三)、史國商工貿易部部長 Mabuza(前排左四)及該部代理政務次長 Nkambule(前排左五)

前述簽署儀式後，隨即由本局劉局長及史國商工貿易部 N 代理政務次長共同主持技術合作會議，雙方首先就 105 年 7 月及同年 10 月間互派人員參訪及於同年 10 月參加「第 19 屆臺史經技合作會議」史方所提及之合作領域需求(詳如附件 2)逐一檢視，會中歸納出四項可優先合作之議題草案，史方並表示將續依此四項合作議題於 2 個月內完成年度計畫提案送交我方檢視。四項合作議題如下：

- (1) 提供史方認證人員能力培訓：由我國管理系統驗證機構及認證實驗室提供史方實務經驗，搭配認證標準內容辦理相關課程(議題單如第 26 頁)；
- (2) 建議史方派員至我國學習 ISO 電腦化管理系統，並指導其官方驗證機構通過認證(議題單第 28 頁)；
- (3) 協助史方精進現有度量衡基礎，並協助史方評估現有法定計量相關法規及進行實驗室技術交流(議題單如第 30 頁)；
- (4) 協助檢視其標準制定流程，並提供我國制定標準的評估準則及相關標準委員會之組成(議題單如第 35 頁)。



圖 3：臺史雙方召開技術合作會議

參、拜會我國大使館及史國相關部會

1. 拜會我國駐史瓦濟蘭王國大使館：

首抵史國，本局劉局長遂率全體團員拜會我駐史瓦濟蘭大使館，感謝使館全力促成及支持本次合作簽署，陳大使經銓除親自接待，亦分享其派駐史國之豐富經歷，以及我國多年於史國之努力耕耘，對本團掌握史國之整體發展脈絡及需求大有裨補。



圖 4：陳大使(前排左三)與本團人員於使館前合影。前排由左至右依序為工業技術研究院量測技術發展中心副主任國勝、中華民國檢測驗證協會(前)唐理事長明紹、本局劉局長明忠、全國認證基金會許執行長景行、本局賴組長俊杰、本局倪組長士瑋及我駐史瓦濟蘭大使館經濟參事處(前)陳秘書國榮

2. 商工貿易部(Ministry of Commerce Industry and Trade, MCIT)：

由我駐史國大使館經參處(前)陳秘書國榮陪同下，本局劉局長率相關業務主管及法人代表禮貌拜會商工貿易部部長 Jabulani Mabuza，重要內容摘如下：

- (1) 該部主要工作為引領史國經濟發展及創造公平繁榮之商業環境，史國目前在品質基礎建設領域發展仍大幅落後國際發展水準，以

致所生產之產品常無法達到國際市場之安全及品質要求而出口受阻，加上本身為小型內陸經濟體，經濟發展重度依賴外貿，倘無法順利拓銷，對國內經濟影響甚大。

- (2) M 部長對我國願於品質基礎建設領域傳授相關經驗及技術援助表達感謝，期許兩國能持續在此 MoU 架構下穩定交流，達成史王恩史瓦帝三世所訂於 2022 年帶領史國進入第一世界之願景。



圖 5：Mabuza 部長歡迎劉局長拜會，感謝本局協助該國品質基礎建設

3. 商工貿易部法規暨品質建設研發處(Department of Regulatory and Quality Infrastructure Development, RQID)

- (1) RQID 於 1990 年間設立，於 2010-2013 年間訂定「國家法規及品質政策」及相關執行計畫，RQID 遂成為史國主要推動品質基礎建設之政府部門，職掌該國政府於品質基礎建設橫向連結之重要任務，重要工作內容為擔任史國「技術性法規」、「認證」、「品質保證(品質管理)」、「度量衡」、「標準化」工作之推動、協調者及整合者，其處長 Phindile Priscilla Dlamini 女士亦為與本局 MoU 合作案之窗口。



圖 6：RQID 處長 Dlamini (左一) 歡迎本團人員蒞臨，其左方為史國標準局執行長 Zwane

- (2) RQID 內部工作分為三大領域：「認證」、「技術性法規」、「品質推廣」，工作重點如下：
- A. 認證：因其尚無能力執行其國內認證工作，故於 2008 年透過「南部非洲發展共同體(Southern African Development Community, SADC)」，與 13 個非洲小型經濟體共同以「多元經濟體認證機構(multi-economy accreditation body)」方式，成立「南部非洲發展共同體認證服務(Southern African Development in Accreditation Service, SADCAS)」，RQID 即以「國家認證推廣中心(National Accreditation Focal Point, NAFP)」，作為史國與 SADCAS 聯繫之窗口，幫助其境內檢測驗證產業得藉 RQID 負責之 NAFP 獲得 SADCAS 之認證服務，截至目前，RQID(NAFP)已協助境內 4 家實驗室順利通過 SADCAS 之認證（其中為 2 家測試實驗室、1 家校正實驗室及 1 家醫療實驗室），惟 RQID 工作人員表示，以史國實驗室總數約 100 家的比率來看，僅 4 家通過認證，仍有很大的成長空間。此外，因「認證」對史國產業尚屬新觀念，故 RQID (NAFP)目前的認證工作仍著重於教育推廣階段。
- B. 技術性法規：對內負責協調及監督各部會或機關之技術性法規的制

定及執行，對外需確保國內技術性法規符合國際或區域相關組織之要求，如 WTO 相關協定及 SADC 相關協議。鑑於技術性法規涵蓋面向甚廣，雖史國有一跨部會組成之委員會授權 RQID 執行技術性法規協調工作，但囿於種種限制，RQID 尚無法改善其各部會技術性法規間不一致的現況，以及各部會不履行國際或區域相關義務規範的問題，於人力有限下，實際工作限縮為完成年度技術性法規手冊之彙整。

- C. 品質推廣：負責國內所有「品質」相關工作的推廣，例如：於各社會部門推廣「品質文化」的重要性、於國家政策中帶入「品質」的發展需求、制訂品質管理原則(如品質管理系統 Quality Management System, QMS)
- (3) 整體而論，RQID 負責所有與產品「品質」有關之工作，在人力編制單薄下(據悉三大業務之人力配置為 2 人負責認證工作、1 人負責技術性法規工作、1 人負責品質推廣工作)，實難負荷龐大且繁瑣之「總指揮」工作。D 處長感謝本局及法人對合作案投入之努力及建議，本局劉局長敦促 RQID 儘早與相關部門完成年度合作計畫(Roadmap)，俾利後續合作安排。

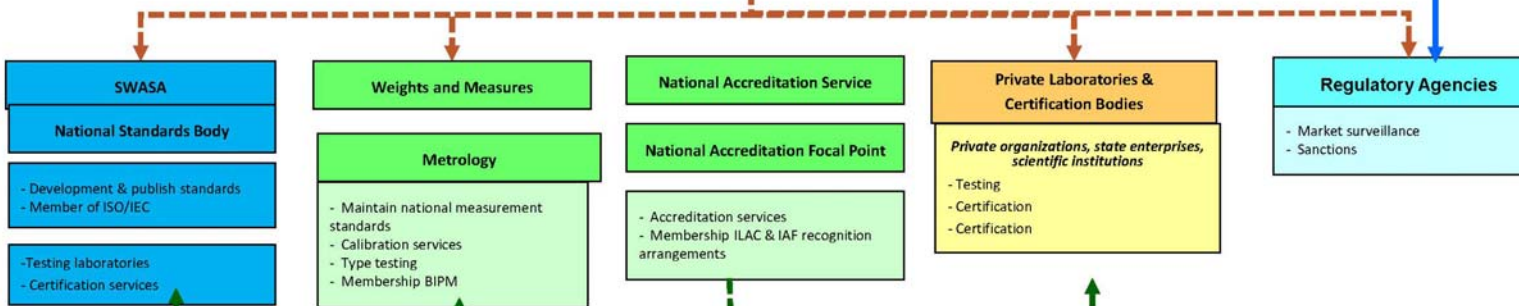
Ministry of Commerce, Trade and Industry (MCTI)



Quality Policy 2010



COORDINATION



JULY 2016

ACCREDITATION

SWAZILAND REGULATORY AND QUALITY INFRASTRUCTURE

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圖 7：本圖說明 RQID 擔任各項品質基礎部門之協調者角色(非組織架構圖)

4. 墨巴本度量衡處(Weights and Measures Department, MCIT, MCIT)

- (1) 隸屬於商工貿易部，實驗室總監為 Mr. Themba Simelane，目前實驗室仍於起步階段，僅有長度、質量及容積標準，已規劃有獨立實驗室空間（僅空房間加空調設備及實驗桌），現有儀器設備僅集中於一間實驗室。



圖 8：史國度量衡處已規劃獨立實驗室空間，但尚未放置設備

- (2) 該部門主要有兩部分業務：1.標準維持與追溯，其中標準件送南非校正追溯；2.執行法定計量業務，對工廠使用的衡器及體積桶等執行檢定/檢查業務。
- (3) 經實地瞭解，史國目前對於標準維持作業及法定度量作業尚未建立標準作業流程及規範，無法進行量測不確定評估、無查核管制機制、對於量測結果也缺乏確效觀念；另外實驗室人員缺乏，先前有派員至南非、坦尚尼亞受訓，但回國後即被業界聘僱，人才無法留用。
- (4) 有關前述問題，雙方於 1 月 19 日技術會議上已有初步討論，嗣本團實地瞭解後，也予其進一步參考建議。S 總監表示實驗室經費有限，光是標準件送南非校正業務便所費不貲，為長遠發展亟需建立本身實驗室能力，本團人員回應考量其實驗室目前之相關規範係參

考南非初步建立，實驗室短期內也需持續仰仗南非技術協助，為發揮臺史合作最大效益，史方應先完成產業發展需求評估並提出合作計畫(草案)，嗣雙方可再做進一步討論。



圖 9：本團人員與總監 Simelane 討論實驗室儀器規格



圖 10：參訪度量衡實驗室合影。前排左四為實驗室總監 Simelane，前排左五為本局劉局長，前排左一為實驗室資深檢查員 Mandla

5. 史瓦濟蘭標準局(Swaziland Standard Authority, SWASA)

- (1) 本次參訪由 SWASA 理事會主席(Chairman of SWASA Council) Dr. Simon Zwane 先生及執行長 Sihle Zwane 女士率其業務主管接待本團。
- (2) SWASA 為商工貿易部監管之半官方機構，業務區分為「技術部門」及「品質部門」，業務內容摘如下：
 - A. 技術部門：負責標準訂定及販售、開辦標準相關訓練課程、WTO/TBT 查詢點工作。至 2016 年底，該部門已有近 60 項國家標準，惟仍遠不及產業發展需求，部門經理表示，追究問題可歸因於缺乏多元領域的技術專家人員，導致委員會議無法順利召開，進而拖緩標準制定流程，另由於該局經費短絀，亦造成相當程度之業務受限，如技術專家津貼來源無法穩定支應等。
 - B. 品質部門：業務內容包含執行產品測試、產品驗證、消費者及大眾利益維護、工業度量衡校正實驗室、裝船前符合性驗證證書發放。該部門經理表示業務最大挑戰在於境內通過認證之實驗室數量太少，此外史國人民低價至上的「反品質文化(anti-quality culture)」也是一大問題，故史國仍有很長的路要走，一方面需進行消費者自身權益教育推廣工作，另一方面亦需由政府建立相關保護性法規，達到遏止不良產品於市面上流通之效用。
- (3) 由於 SWASA 約五成經費來源需靠募款及營收(如標準販售及提供檢測實驗室服務)，故加強產業對檢測服務之需求以及增加受認可之實驗室數量應為其維持財務穩定之主要方法。
- (4) SWASA 雖為半官方機構，但實為史國品質基礎建設之主要執行單位(RQID 為政策規劃)，業務涵蓋「標準」、「(工業)度量衡」、「檢測與驗證」、「消費者保護」及「WTO/TBT 查詢點」之相關工作，與本局職掌範疇最為相似。本局劉局長肯定該局在人力及資源有限下之努力(據悉該局目前尚無自己的辦公室)，並分享過去六十年本

局業務之發展歷程及與其他相關技術性法規主管機關和法人協會之合作方式，盼本局相關成長經驗能幫助 SWASA 工作推展更佳順利，該局 Z 主席及 Z 執行長回應感謝。



圖 11：本局劉局長(左一)與 Zwane 主席(左二)及 Zwane 執行長(左三)會上交換意見



圖 12：本團於 SWASA 目前承租之辦公室大門合影

6. 史瓦濟蘭國家實驗室協會 (National Laboratory Association of Swaziland, NLAS)

- (1) NLAS 主席 Mr. Musa Shongwe 於 SWASA 向本團進行簡報，他同時也是史國水公司(Swaziland Water Services Corporation, SWSC)的品保經理(Quality Assurance Manager)。簡報重點如下：
- A. NLAS 於 2008 年設立，2010 年登記為非營利組織。
 - B. NLAS 主要提供實驗室諮詢服務及技術援助，如舉辦實驗室相關研討會、座談會、專業技術人才培訓課程；提升實驗室設備、技術與品質相關活動；協助實驗室會員通過認證等。
- (2) 總體來說，NLAS 是由相關技術背景之實驗室成員、主管及學生組成，功能類似於我國檢測驗證協會。S 主席簡報內容指出，目前最需要協助部分為提升境內實驗室素質，並協助境內實驗室約 100 家儘快通過認證，此外，希望我國可協助史國建立起獨立認證體系及培養評審員，讓境內實驗室可直接接受認證服務，最後，S 主席指出協會面臨的挑戰尚有：遽增的儀器服務及維持費用、實驗室廢棄物管理問題、資金不足、空間及設備不足等。



圖 13：NLAS 主席 Shongwe (中間看筆電者)向本團簡報協會業務現況

7. 皇家科學及技術園區(Royal Science and Technology Park)

該園區係由我國協助建立，設立目的在協助史國發展工業化產業，園區分為兩大部分「創新育成中心」及「生技園區」。

(1)創新育成中心(Innovation Park)：

該中心作為提升境內科技產業的知識能量、吸引高科技公司投資、協助史國政府科技相關政策推展(如防範網路犯罪措施等)的前導聚落。目前中心已初步完成基礎硬體建設，正著手以知識推廣中心角色開辦訓練課程，以招募及培育科技領域創業家或企業家。該中心目前已對外開放的服務如下：

- A. 國家數據中心(National Data center)
- B. 技術育成(Technology Incubation)
- C. 產業中心(The Business Center)
- D. 最新資訊科技學校(Advanced School of IT)



圖 14：園區公布之空照圖



圖 15：本團實際參觀園區電腦教室

(2) 生技園區(The Biotechnology Park)

位於 Matsapha，佔地 159 公頃，目前已有一簡單服務中心(Service Centre)，負責業務規劃並與史國投資促進局共同合作招商。園區除著重發展醫療及生技相關之領域(如「農業、植物及動物生物技術」、「環境及生物多樣性」及「生物處理、產品研發及生物儀器」等)，亦負責「建立和加強現有機構的基礎設施」等，其負責人 Ms. Busile Dlamini 向本局簡報時亦表達歡迎我國相關檢測驗證及校正實驗室能進駐園區，本團回應將攜回相關資料作進一步研擬。

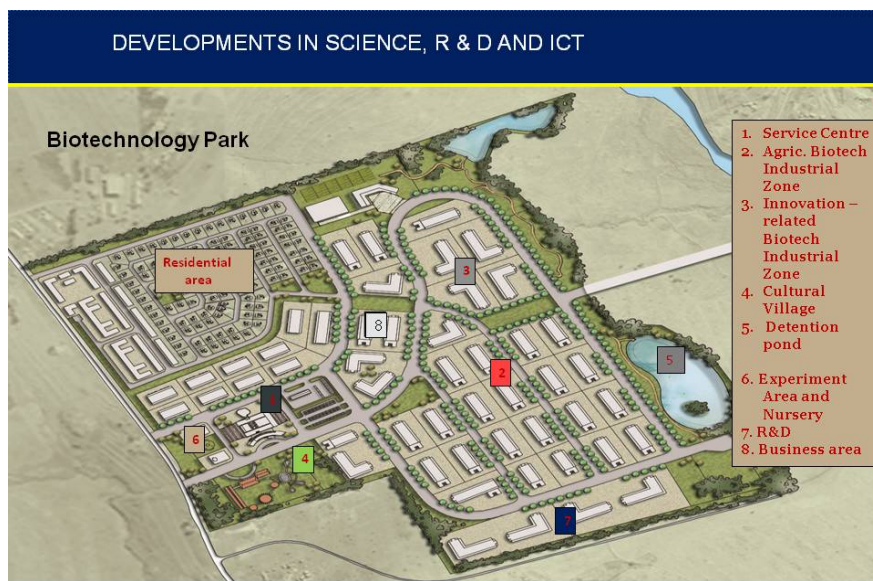


圖 16：服務中心位於園區 1 號位置(左下深灰底方格處)



圖 17：服務中心大門臺史兩國合作紀念牌



圖 18：本團走訪園區鳳梨田

8. 史瓦濟蘭投資促進局(Swaziland Investment Promotion Authority, SIPA)

由該局局長 Phumelele Dlamini 女士親自接待本團，並由其投資促進業務經理 Mr Martin Masilela 簡介說明於史瓦濟蘭投資及貿易現況，參訪重點如下：

- (1) 該局是史國推廣投資及貿易的單位，亦為史國專門協助國外廠商前往投資的單一窗口，可協助取得工廠用地執照。
- (2) 目前我國約有 20 家廠商進駐史國，主要為紡織業，占史國紡織業的 70%，其中規模最大為南緯實業公司。該局希望將紡織業成功經驗複製到其他科技產業，例如資通訊、生物科技業等。
- (3) M 經理歡迎我國檢測驗證廠商赴史投資，以提升史國科技產業技術能力，其提出之主要誘因有：史國與我國簽有投資保障協議，可確保成員國投資獲得保障；可將史國作為直接通往「南部非洲發展共同體」(SADC)、「南部非洲關稅同盟」(SACU)及「東南非共同市場」(COMESA)良好跳板，投資利基可擴及區域內 2.5 億人口的消費市場，商機龐大，可享有區域最惠國待遇。



圖 19：SIPA Masilela 經理簡報



圖 20：SIPA Dlamini 局長(左二)與本團交換意見

肆、結論

鑑於史瓦濟蘭於「標準」、「度量衡」、「檢測驗證」及「認證」等「品質基礎建設」之組織分工較為零散，與我國權責劃分方式亦大不相同，且彼此間橫向協調能力較不足；本次與史國之 MOU，於 105 年 8 月本局即草擬初稿交由史方，惟於同年 12 月初才獲其初步回覆(內容尚未達成共識)，為能加速約本協商程序，有賴我駐史國大使館經參處積極就約本內容與史國跨單位協調，同時，我國各相關單位亦全力配合，籌備各項未來可合作事項，方能於 1 個多月之作業時間組團，並達成 MOU 簽署及召開雙邊技術合作會議等活動。

本 MOU 簽署案為兩國多年緊密關係之成果，同時亦展現史國推動轉型為工業經濟體之決心。若以國家總人口區分，我國約 2352 萬人口，可歸為小型經濟體，史瓦濟蘭人口僅約 100 萬，屬微型國家，在發展國家經濟基礎上，應會遭遇更甚於我國之限制，如較難建立具經濟規模之產業且經濟重度依賴出口外貿等。

由於國家品質基礎建設領域涵蓋廣泛，與產業發展相輔相成，故順應產業建設需求，適時提供足以支持產業之政策或措施，實為史國經濟邁向工業化之路的重要課題，此節有賴其政府精準之判斷能力及政策之靈活度。我國於標準及符合性評鑑領域有數十年之發展，累積了相當的經歷及資源，應可以作為史國政府政策發展之進一步墊腳石。

伍、檢討及建議事項

一、應加強積累技術協助經驗，拓展我國對外合作空間

本次與史瓦濟蘭簽約案，屬近年繼與海灣國家標準組織(GSO)簽署技術合作備忘錄後(105年9月25日簽署)，本局另一重要「技術協助」合作案，且合作內容除標準領域，更擴及至認證、度量衡、檢測與驗證等各大範疇之交流活動，顯示我國於標準及符合性領域，已有被他國認可的技術協助能量，同時亦拓展本局對外之合作空間。

「技術協助」為國際上相當重要的議題，WTO下之TBT協定第11條詳述對開發中國家會員提供技術協助之內容及建議作法，在TBT委員會亦安排主題性討論邀請各國報告年度執行情形。我國自2002年1月1日成為WTO正式會員，迄今已歷14年，在相關議題上之參與仍非常有限，建議可藉與史國合作機會，建立我國對外技術協助之可行模式，並視機會於WTO或其他國際場域分享經歷，展現我國於國際社會之貢獻。

二、技術協助應更多串連本局與相關法人和廠商，以結合整體產業商機

史瓦濟蘭雖為一非洲內陸小國，人口僅100萬上下，惟因地緣因素，與南非及南部非洲國家皆有極為密切之關係，又該國政府與我政府相當友好，對我商於當地發展具相當優勢，建議本案後續與史方之合作，可適時帶入我國利益，如協助我國廠商發掘當地或地區性之商機，或於交流中凸顯我國相對優勢項目或技術，並協助於該國或區域置入等，期能將我國品質基礎建設系統性輸出，並促進雙邊或區域經貿往來。

三、積極執行MOU，與相關單位滾動式檢討合作內容

鑑於本MOU合作領域廣泛，涉及局內各相關單位及外部法人協會，本局(第五組)將視需要召集相關單位共同研討合作內容，預計於雙方穩定交流前，由本局(第五組)擔任總聯絡窗口，負責合作整體推動，俟各項合作交流上軌道後，本局(第五組)可再與相關單位共同研商適當之作法，如發展成工作分組模式，深化各領域同仁或專家之交流，並定期與史方共同檢視成效。

臺史品質基礎建設史方需求及我國回應表

Cooperation Issues Identified by Swaziland in quality infrastructure
between ROC and KOS

史方部門 Proposed by	需求說明 Cooperation issues	我國回應 Response
商工貿易部法規暨 品質基礎建設研發 處 Regulatory and Quality Infrastructure Development, RQID, Ministry of Commerce, Industry and Trade, MCIT, KOS	1. 認證 Accreditation RQID 提出可優先合作事項： (1) 認證稽核員之培訓； (2) 不同專業領域的人員培訓和經 驗交流。 Issues of cooperation identified by the RQID: (1) Training of assessors for accreditation services; (2) Personnel attachments in different areas of accreditation.	議題一 Topic 1 (by TAF)
	2. 品質管理系統 Management System Certification RQID 提出盼協助其品質管理系統之 網路建置。 RQID requested to assist with its establishment of computerized service for management system certification (ISO 9001 and ISO 14001)	議題二 Topic 2 (by BSMI)

史瓦濟蘭國家實驗室協會 National Laboratory Association, NLAS, KOS	1. 希望能建立本國的認證體系及培養評審員。 NLAS identified its challenges are lacking a well-functioning accreditation system and training for associated assessors.	議題一 Topic 1 (by TAF)
	2. NLAS 目前遭遇缺乏訂定量測不確定度的問題。 NLAS is facing the challenges of measurement uncertainties.	議題三 Topic 3 (by BSMI & CMS)
史瓦濟蘭國家標準局 Swaziland National Standard Authority, SWASA, KOS	1. 標準制定 Standards development 希望我國協助檢視其制定流程。 SWASA identified the need of standards development process review in order to enhance its services.	議題四 Topic 4 (by BSMI)
	2. 驗證機構 協助 SWASA 建置符合 ISO 17021 之 ISO 9001、ISO 14001 管理系統驗證機構。 Assist SWASA in establishment of certification bodies complying with ISO 17021 to provide ISO 9001 and ISO 14001 services.	議題二 Topic 2 (by BSMI)
	3. 工業度量衡 Industrial Metrology (1)協助提升史國的度量衡標準及設備採購，包含協助訂定採購設備的規格； Require assistance in improving the Swaziland measurement standard, and assistance in procurement of equipment, including development of specification (2)臺灣度量衡實驗室人員與史瓦	議題三 Topic 3 (by BSMI & CMS)

	<p>濟蘭持續交流。</p> <p>Attachment to Taiwan metrology laboratories by Swaziland metrology personnel.</p>	
<p>商工貿易部度量衡處(計量標準實驗室)</p> <p>Weights and Measures Department, MCIT, KOS</p>	<p>該部門表示希望能優先精進現有質量、長度及容積 3 項校正標準。</p> <p>The Section pointed out its priority is to enhance the 3 existed calibration standards, namely, mass, length and volume.</p>	<p>議題三</p> <p>Topic 3 (BSMI& CMS)</p>
<p>史瓦濟蘭水公司 (SWSC) 測試實驗室</p> <p>Swaziland Water Services Corporation , SWSC, KOS</p>	<p>希望我國協助該國的水量計測試實驗室於認證資格的獲得。協助水量計(法定計量檢定)制度管理、ISO 17025 訓練、辦理水量計能力試驗活動等。The laboratories need to be accredited by the Accreditation body. Requested assistance include in the areas of water meter administering (initial verification of legal metrology), ISO 17025 training, proficiency testing activities, etc.</p>	<p>議題三</p> <p>Topic 3 (BSMI& CMS)</p>
<p>自然資源與能源部之燃料測試實驗室</p> <p>Fuel testing laboratory, Ministry of Natural Resources and Energy, KOS</p>	<p>希望提供油量計測試實驗室認證與 ISO 17025 相關的訓練及諮詢，以及儀器技術的教育訓練。</p> <p>The laboratory requests to provide training and consultation pertaining to ISO 17025 in order to be accredited by the accreditation body. Training for the use of technical instrumentation is also required.</p>	<p>議題三</p> <p>Topic 3 (BSMI& CMS)</p>

List of 4 Topics of Cooperation under the MOU

臺史 MOU 下之 4 項可合作議題

	合作議題 Topics of Cooperation	回應單位 Responded by	提案方 Lead
1	認證人員能力與資源之發展與建置 To develop and establish the personnel competences and resources of accreditation for Swaziland	TAF	RQID (NLAS)
2	協助史方建置電腦化 ISO 管理系統及建立驗證機構 Assistance to the establishment of computerized ISO management system and the establishment of certification bodies	BSMI	RQID or SWASA
3	精進度量衡服務能量 Enhancing capability of metrology services	BSMI & CMS	MCIT or SWASA (NLAS SWSC)
4	制訂標準的評估準則及相關標準委員會之組成 SWASA hopes to know the standards evaluating criteria and the constitution of the related standards committees	BSMI	SWASA

議題 1 Topic 1

名稱：認證人員能力與資源之發展與建置

Topic: To develop and establish the personnel competences and resources of accreditation for Swaziland

回應單位：財團法人全國認證基金會

Responded by: Taiwan Accreditation Foundation (TAF)

背景說明 Background：

1. RQID 提出可優先合作事項 Issues of cooperation identified by the RQID:

- (1) 認證稽核員之培訓；Training of assessors for accreditation services;
- (2) 不同專業領域的人員培訓和經驗交流。Personnel attachments in different areas of accreditation.

2. NLAS 提出希望能建立本國的認證體系及培養評審員。NLAS identified its challenges are lacking a well-functioning accreditation system and training for associated assessors.

回應說明 Response：

為協助史瓦濟蘭於認證與專業人員能力之發展以及認證體系之建置，我方將藉由提供管理系統驗證機構及實驗室認證之實務經驗，搭配認證標準內容辦理下列專題研討會：

1. 管理系統驗證機構認證標準-ISO/IEC 17021-1:2015
2. 實驗室認證標準-ISO/IEC 17025:2005 及 ISO/IEC 17025:2017

上述專題研討會辦理時程及規劃細節將於後續確認。

In order to support Swaziland to develop and establish their personnel competences and accreditation system, we will provide the experiences, based on the related standards, about accreditation of management system certification bodies and laboratories by holding the workshops as follows：

1. Accreditation for Management system certification body — ISO/IEC 17021-1:2015
2. Accreditation for Laboratory — ISO/IEC 17025:2005 and 2017 versions.

會上結論：

1. 上述專題研討會辦理時程、規劃細節以及客座學習之安排等，將於後續再溝通確認。
2. 史方於會上另提出協助其實驗室通過認證部分，我方表示可由我國檢測驗證協會、台灣電子檢驗中心或工業技術研究院量測技術發展中心予以協助，請史方評估需求項目後，反映於年度合作計畫。

議題 2 Topic 2

名稱：協助史方建置電腦化 ISO 管理系統及建立驗證機構
Topic: Assistance to the establishment of computerized ISO management system and the establishment of certification bodies

回應單位：標準檢驗局第五組
Responded by: 5th Division, BSMI

背景說明 Background：

1. 史方 RQID 提出盼協助其品質管理系統電腦化建置。

RQID requested to assist with its establishment of computerized service for management system certification to provide ISO 9001 and ISO 14001 certification services.

2. 史方 SWASW 提出盼我協助建置符合 ISO 17021 之 ISO 9001、ISO 14001 管理系統驗證機構。

SWASA requested to assist with its establishment of certification bodies complying with ISO 17021 to provide ISO 9001 and ISO 14001 certification services.

回應說明 Response：

1. 本局 ISO 管理系統驗證業務，目前建置有「整合驗證業務管理系統」電腦化系統，針對本局 ISO 管理系統驗證業務之評鑑、追查、稽核人員統派、行政管理、稽核人員管理及廠商資料維護等作業流程，均可透過此電腦化系統協助本局相關作業流程之執行及管控；建議史方可派員至本局觀摩及學習相關電腦化系統之設計及作業模式，作為史方建置電腦化系統服務之參考。

For the ISO management certification services, the BSMI provides its services through a computerized system, "Integrated Certification Management System," which assists in tracking and monitoring the operation of audits, surveillance, assignment of auditors, administration, management of auditors, and maintenance of manufacturers' data. The BSMI welcomes personnel from

Swaziland to its office for on-site learning of the system.

2. 本局目前為符合 ISO 17021 國際認證規範之 ISO 9001、ISO 14001 管理系統驗證機構，並自西元 2000 年即通過國際標準認證規範迄今；多年來，本局 ISO 管理系統驗證業務之評鑑、追查、稽核人員統派、行政管理、稽核人員管理及廠商資料維護等作業流程及相關文件化程序表單，均符合 ISO 17021 之認證規範要求；建議史方可派員至本局觀摩及學習 ISO 9001、ISO 14001 管理系統驗證機構之作業規劃、相關流程及文件化程序表單，作為史方建置 ISO 9001、ISO 14001 管理系統驗證機構之參考。

The BSMI has been accredited in accordance with ISO/IEC 17021 since 2000 in areas of ISO 9001 and ISO 14001 management system certification. All relevant procedures, such as assessment, surveillance, assignment of auditors, administration, management of auditors, maintenance of registered companies, and documentation comply with ISO/IEC 17021 requirements. The BSMI welcomes personnel from Swaziland to its office for on-site learning of the operation and SOPs of the certification system.

會上結論：

史方希望再增加 ISO 22000 相關課程，本局表示可一併與 ISO 9001 及 ISO 14001 辦理。

議題 3 Topic 3

名稱：精進度量衡服務能量

Topic: Enhancing capability of metrology services

回應單位：標檢局及工研院量測技術發展中心

Responded by: BSMI and Center for Measurement Standards/CMS

背景說明 Background：

史國提出希望優先合作事項：

1. 協助提升史國的度量衡標準及協助訂定採購設備的規格(SWASA)；
2. 臺灣度量衡實驗室人員與史瓦濟蘭人員持續交流(SWASA)；
3. 優先精進現有質量、長度及容積 3 項校正標準(MCIT)。另遭遇缺乏認證及訂定量測不確定度的問題(NLAS)；
4. 協助史國的水量計測試實驗室於認證資格的獲得。協助水量計(法定計量檢定)制度管理、ISO 17025 訓練、水量計能力試驗活動等(SWSC)。
5. 史國自然資源與能源部之燃料測試實驗室，希望提供氣量計測試實驗室認證與 ISO 17025 相關的訓練及諮詢，以及儀器技術的教育訓練。(MNRE/FTL)

Priorities for cooperation proposed by Swaziland:

1. To assist Swaziland in improving their measurement standard and assist the development of purchase specification. (SWASA)
2. Attachment to Taiwan metrology laboratories by Swaziland metrology personnel. (SWASA)
3. To improve the 3 existing calibration standards, namely mass, length and volume, and help the laboratory staff enhance their technical skills, for example, in evaluating the measurement uncertainty. (MCIT, NLAS)
4. To assist the water meter testing laboratory under the SWSC to be accredited. Requested assistance include in the areas of water meter administering (initial

verification of legal metrology), ISO 17025 training, proficiency testing activities, etc. (SWSC)

5. The gas meter testing laboratory of MNRE/FTL requests to provide training and consultation pertaining to ISO 17025 in order to be accredited by the accreditation body. Training for the use of technical instrumentation is also required.(MNRE/FTL)

我方回應 Response:

一、標準檢驗局與量測中心就上述需求的回應立場

- (一)、標準檢驗局及量測中心可協助提升史國的度量衡標準及採購設備規格訂定諮詢；
- (二)、標準檢驗局及量測中心人員與史國人員持續交流，提供必要諮詢與訓練；
- (三)、量測中心可協助精進現有質量、長度及容積 3 項校正標準，協助加強人員專業能力；
- (四)、標準檢驗局可提供臺灣水量計計量管理制度法規及作法，作為史瓦濟蘭王國參考；量測中心可提供 SWSC 對於水量計測試實驗室認證的相關訓練及諮詢；
- (五)、量測中心可提供史國自然資源與能源部之燃料測試實驗室進行油量計測試實驗室認證的相關訓練及諮詢。

1. General feedback regarding the above issues raised by Swazi side:

- (1) The BSMI and the CMS could jointly assist and work with Swaziland officials to improve their measurement standard infrastructure and to set up purchase specification of instruments.
- (2) The BSMI and the CMS could offer necessary training and consultation to Swaziland officials by means of, but not limited to, exchange delegates between two sides.

- (3) The CMS could assist Swaziland to improve existing calibration standard in mass, length and volume, and provide training courses for Swaziland personnel to boost up its technical expertise.
- (4) The BSMI could provide regulations and control measures of metrology regulatory control system in Taiwan as reference. The CMS could offer training courses and consultation for the water meter testing laboratory of SWSC to fulfill the ISO 17025 accreditation requirements.
- (5) CMS could offer training courses and consultation for the gas meter testing laboratory of MNRE/FTL to fulfill ISO 17025 accreditation requirements.

二、依據史瓦濟蘭王國之民生與經貿需求，初步擬訂下列工作項目，以精進度量衡服務能量：

- (一)、量測中心協同史瓦濟蘭王國商務工業暨貿易部，就法定計量與工業計量進行需求調查分析，調查分析項目包含計量參數、量測範圍、不確定度需求等級，及對史瓦濟蘭王國之民生安全與經貿發展之影響。
- (二)、史瓦濟蘭王國派遣 2 至 3 位計量技術人員來台，停留約 3~4 週，由量測中心提供相關項目之計量技術精進訓練，訓練內容包含：
 1. 就現有長度、質量、容積三計量領域，精進研習：量測原理、計量追溯、不確定度評估、量測系統品保管制、技術評審員技能等；
 2. 就未來擬新建或擴充的量測系統，協助訂定儀器設備的採購規格；
 3. 協助史瓦濟蘭水公司之水量計檢定技術精進與符合性評鑑要求 (ISO17025)訓練，及水量計能力試驗活動規劃諮詢與建議。
 4. 協助史國自然資源與能源部之燃料測試實驗室進行油量計測試實驗室認證的相關訓練及諮詢。

2. To meet the social and national needs in the development of economy, safety

and environment, we drew up the following work plan to enhance the capability of metrology services in Swaziland:

- (1) The CMS would work with the Ministry of Commerce, Industry and Trade (MCIT) of Swaziland to do a survey and analysis to identify the urgent needs in legal and industrial metrology. Results of the survey and analysis will include: measured (quantity intended to be measured), measuring range and level of uncertainty, and the impact to the social and economy of Swaziland;
- (2) The CMS could provide 3 to 4 weeks training program for 2~3 Swaziland experts in selected metrology areas. This training program contains the following tailor-made courses:
 - A. For the existing metrology services in length, mass and volume of the Swazi side, the CMS provide courses of measuring principle, metrological traceability, uncertainty evaluation, and skills to be a technical assessor.
 - B. For new measuring systems or additional instruments that Swazi side intends to purchase, CMS may provide assistance to set up purchase specification of instruments and give further planning advice from laboratory layout to accreditation.
- (3) For Swaziland Water Services Corporation (SWSC), the CMS may assist and work with its colleagues to improve technical skills, and provide training on the conformity assessment based on ISO 17025 to fulfill the accreditation requirements. Proficiency testing could also be assisted via proper arrangements of the participants.
- (4) For MNRE/FTL, THE CMS would assist and work with its colleagues to improve technical skills, and provide training on the conformity assessment based on ISO 17025 to fulfill the accreditation requirements.

三、標準檢驗局負責度量衡器(包括水量計)之計量管理，管理制度有型式認

證、檢定及檢查，水量計須通過型式認證及檢定後才可以販售及使用，標準檢驗局亦會檢查使用中水量計。標準檢驗局可提供臺灣水量計計量管理制度法規及作法，作為史瓦濟蘭王國參考，未來可就史瓦濟蘭王國所需要了解部分進行交流。

3. BSMI is responsible for legal measuring instrument regulatory control (includes water meters) which control measures includes type approval, verification and inspections. Water meters should be approved and verified before sale or usage and should be inspected by the BSMI when in use. Therefore, the BSMI may provide copies of regulations and control measures in terms of metrology regulatory control system in Taiwan as reference. In addition, two sides may exchange further information according to the Swaziland demands in the future.

四、如史瓦濟蘭王國需要，量測中心可派遣度量衡專家短期駐史瓦濟蘭指導。

4. If necessary, provision of a metrology expert from THE CMS may be considered to temporally stay at Swaziland for on-site consultation.

會上結論：

請史方依產業及民生需求再提出優先合作領域。

議題 4 Topic 4

名稱：協助檢視其標準制定流程，並提供制訂標準的評估準則及相關標準委員會之組成

Topic: Assistance to its national standards development as well as to provide the standards evaluating criteria and the constitution of the related standards committees

回應單位：標準檢驗局第一組
Responded by: 1st Division, BSMI

背景說明 Background：

1. SWASA 表示其標準數量不多，制定 1 個國家標準需時約 18 個月，希望我國協助其檢視標準制修訂流程。

SWASA expressed that their national standards are limited and takes about one and half years to develop one standard. SWASA hopes the BSMI can provide assistance to review its procedures of national standards development.

2. SWASA 表示希望了解 BSMI 標準制定之評估準則，並希望了解該準則係由外部或內部委員會予以決定，及該委員會之組成為何？

SWASA hopes to know the criteria for evaluating standards to be developed by BSMI. Is this done by an outside committee? How is it constituted?

回應說明 Response：

一、有關我國標準 CNS 制定流程部份

Regarding the procedures of developing national standards (CNS) in Taiwan：

- (1) ISO 國際標準之制定程序包含提案階段、籌備階段、委員會階段、徵詢階段、批准階段及公布階段 6 個階段。(如附錄 1)

The procedures of ISO international standards development include 6 stages, which are “Proposal stage”, “Preparatory stage”, “Committee stage”, “Enquiry stage”, “Approval stage” and “Publication stage”. (Annex 1)

- (2) CNS 國家標準之制修訂係依據「標準法」及「國家標準制定辦法」之規定，並符合 WTO TBT 附件 3 有關「擬訂、採行及適用標準之良好作業典範」之原則，CNS 國家標準之制修訂與 ISO 程序相近，包含建議、起草、徵求意見、審查、審定及公告 6

大程序（如附件 2）。每一種國家標準制定之時間約為 1 年，截至 2016 年 12 月 31 日為止，現行標準總數為 14,375 種。

The legal framework for the development of the National Standards of the Republic of China (CNS national standards) mainly includes “The Standard Act” and “The Regulations Governing the Establishment of National Standards”, which are complied with the principles laid down in the Annex 3 of the WTO TBT Agreement. The procedures of CNS national standards development include 6 stages, similar to those of ISO, which are “Submitting a proposal”, “Drafting”, “Soliciting comments”, “Review”, “Final Review” and “Approval and promulgation”. (Annex 2) It takes about one year to develop one CNS national standard. By the end of December, 2016, there are 14,375 CNS national standards.

- (3) 本局非常樂於與史方經驗分享並協助檢視其國家標準之制定流程，為使討論更加具體，建議史方提供其國家標準制定流程之相關資訊，BSMI 將於檢視史方流程後，提供建議。

The BSMI is pleased to share our experience and provide assistance on reviewing the procedures of SWASA’s national standards development. In order to make the discussion more concrete, it is recommended that SWASA also provides information about your national standards development procedures. After reviewing the procedures, the BSMI will provide further recommendations.

二、有關 BSMI 標準制定之評估準則部分：

- (1) 依據國家標準制定辦法第 2 條：「任何人、機關、法人或團體得向標準專責機關提出制定、修訂或廢止國家標準之建議。」，惟為有效運用政府資源，BSMI 業已建立國家標準制定評估原則，亦即如屬配合國家政策、產業發展、市場管理等需求以及社會關切議題所需之標準者，將列為優先制定之國家標準。

Regarding the criteria for evaluating of standards to be developed by BSMI, according to Article 2 of “Regulations Governing the Establishment of National Standards”: “Any person, legal entity, government agency or organization may submit a proposal to the government agency in charge of standards for the establishment, amendment, or rescission of national standards.” However, for more effectively utilizing the government resources, the BSMI has set up the evaluation principles for national standards development. That is, for those standards under the needs of national policy, industry development, market management and social concerns will be evaluated as highly priority.

- (2) 依據標準法第 6 條，目前本局設有國家標準審查委員會，係屬內部委員會並負責審議國家標準相關事項，其組成及職責如下：國家標準審查委員會係由標準相關之產、官、學、研代表所組成，任期二年，主要依據前述之國家標準制定評估原則，審定國家標準建議案及國家標準草案。

According to Article 6 of “The Standards Act”, the BSMI has established the National Standards Review Council as an internal committee to review matters relevant to national standards. Its constitution and duties are as follow: The National Standards Review Council consists of representatives from standards-related organizations, groups, experts and scholars, with tenure of two years. Its main duty is to examine the proposals of national standards and final review the drafts of national standards based on the evaluation principles for national standards development mentioned above.

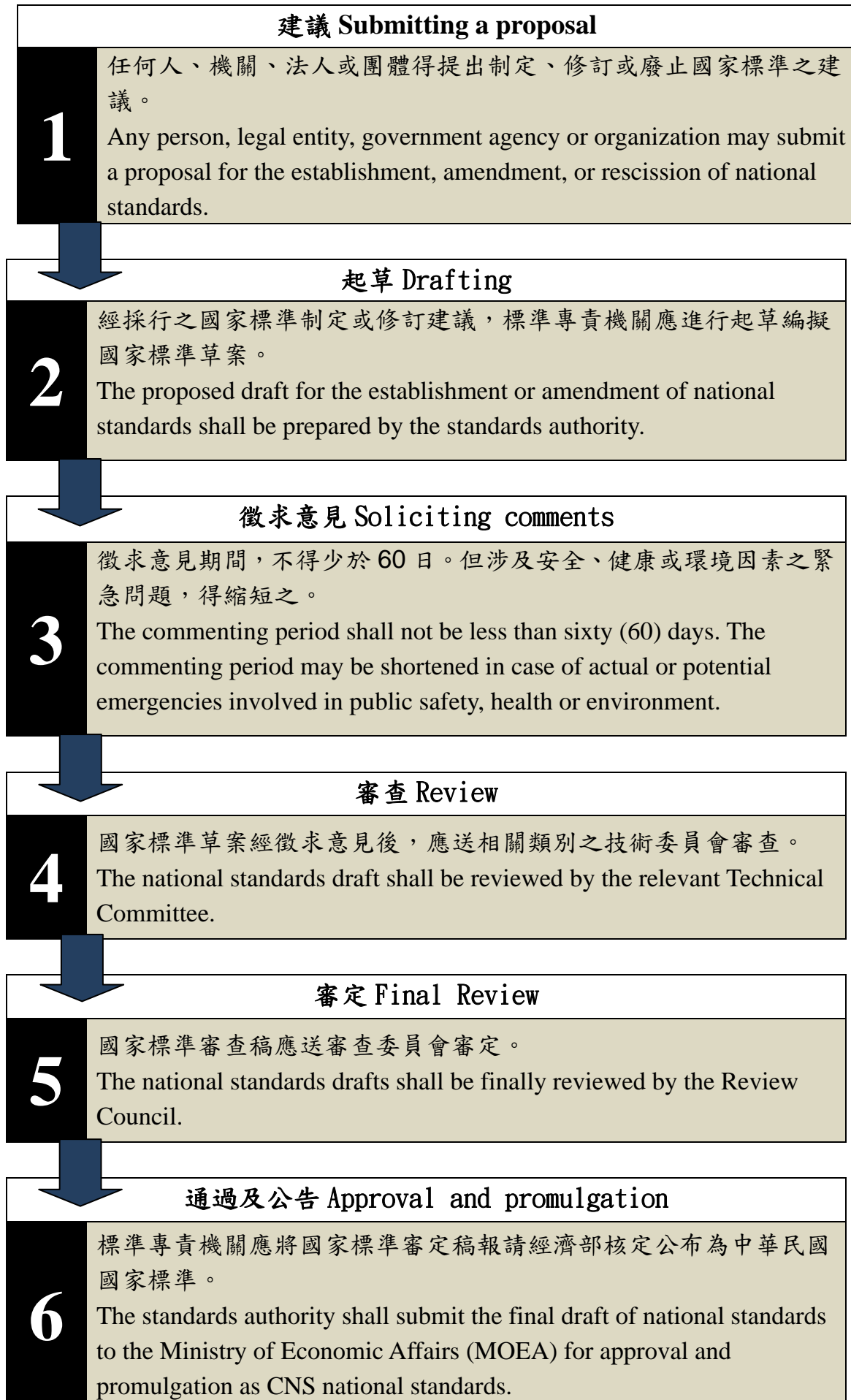
會上結論：

SWASA 特別指出其標準制訂無法快速回應產業迫切需求，本局允諾將再提供 SWASA 本局加速標準制定流程作法(以 CNS 21500「專案管理指引」為例)。

ISO 標準制定流程
ISO standards development procedures



CNS 國家標準制定流程 CNS national standards development procedures





REGULATORY AND QUALITY INFRASTRUCTURE DEVELOPMENT DEPARTMENT

BY

RQID STAFF

BACKGROUND INFORMATION



-
- Established in the mid 1990's as the precursor of the National Standards Body (SWASA).
 - In 2010 – 2013: developed the National Regulatory & Quality Policy and Its Implementation plan

Backbone of the sections activities



INTERNATIONAL LEVEL

- WTO/TBT AGREEMENT

REGIONAL LEVEL

- SADC TRADE PROTOCOL ON TRADE
- COMESA TREATY ON TRADE

NATIONAL LEVEL

- NATIONAL REGULATORY AND QUALITY POLICY (NRQP) 2010
- STANDARDS & QUALITY ACT (2003)

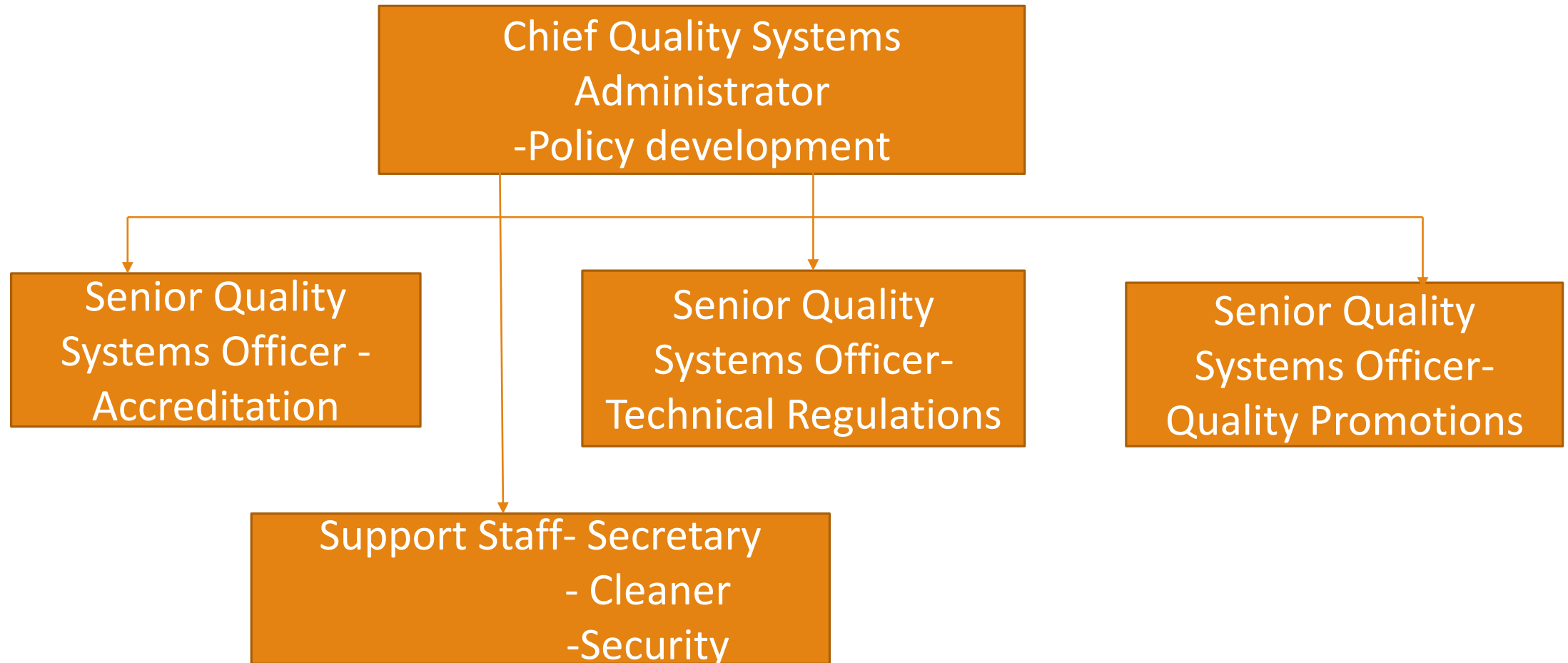


RQID LEGISLATIONS

- The Technical Regulation and Quality Infrastructure Bill of 2015
- Technical Regulations and Framework Bill- 2014



RQID Organogram





Vision and Mission

- Vision: To have developed a high quality infrastructure comparable with the top international model by the year 2022
- Mission: To enhance the productivity of the Swaziland industry and the competitiveness of the Swaziland products in the domestic and global market and **creating a level playing field for trade and commerce through** the provision of standards related services and technical regulatory framework with the aim of contributing to the socio-economic development of Swaziland, thereby raising the standard of living of the citizenry.



Mandate

- The Department is tasked with the development of the **legal and institutional framework** and **infrastructure** for standardization, Technical Regulations, Quality Assurance, Accreditation and Metrology to achieve its mission.



Activities

- Development and Implementation of the National Regulatory and Quality Policy
- Development and Implementation Technical Regulations Framework/Act.
- Provision of Accreditation Services through the National Accreditation Focal Point (NAFP).
- Quality Promotion – development of QMS, Quality Promotion

ACCREDITATION



by

Sthembiso Dlamini



Swaziland National Accreditation Focal Point

- Swaziland has a National Accreditation Focal Point (NAFP)?
- NAFP were established after the Southern African Development Community (SADC)- Council of Ministers Committee (CMC) realized that accreditation is an essential service.
- SADC is made of 15 Member States
- Most Member States have a small industry in the SADC region and cannot not have a sustainable accreditation body
- CMC suggested the establishment of a multi- economy accreditation body which services the accreditation needs of SADC Member states. The name of the Accreditation body is called the Southern African Development in Accreditation Service (SADCAS). SADCAS is based in Botswana and it services the accreditation needs of the 13 member states except South Africa and Mauritius.
- Each member State was required to establish a NAFP



What is a National Accreditation Focal Point?

- It is an office responsible for accreditation activities in a Member State
- It is the administrative link between the Southern African Development Community in Accreditation Service (SADCAS) and clients/potential clients in a Member State.



NAFP-Swaziland

- Was established in 2008
- Housed in the Ministry Of Commerce, Industry and Trade under the Regulatory and Infrastructure Development Department
- Manned by two Officers, Ms Sthembiso Sybil Dlamini and Ms Phindile Priscilla Dlamini

Responsibilities



- National Accreditation Focal Points (NAFPs) are responsible for the coordination, administration, promotion and marketing of accreditation within Swaziland.
- Act as a link between CABs in Swaziland and SADCAS- the multi-economy accreditation body.

Achievements



- Conducted accreditation awareness campaigns since 2008
- Accreditation of 4 laboratories (2 testing laboratories, 1 calibration laboratory and 1 medical laboratory)
- Received NAFPA awards for being the most effective NAFPA in the region for four consecutive years.
 - - 2013 received the First runner Award
 - - 2014 received the NAFPA Award
 - - 2015 received the NAFPA Award
 - - 2016 received the NAFPA Award
- Facilitated training of conformity assessment bodies personnel on ISO /IEC 17025 and ISO/IEC 17020, One technical assessor courses
- Successful Commemoration the World Accreditation Day every year
- Contributed Articles to SADCAS newsletter.



CHALLENGES

- Accreditation is a fairly new concept in SD
- Limited capacity of personnel
 - National Accreditation Focal Point
 - Laboratories, Inspection bodies and Certification body
 - Lack of laboratory equipment to most of the Government laboratories
- Swaziland has approximately 100 labs but only 4 are accredited
- Financial constraints-Limited budget for accreditation activities



Areas of Collaboration

- Capacity building of Laboratory, inspection and Certification bodies personnel
- Capacity building on Technical Assessor
- Capacity building of the NAFP
- Development of the National Accreditation legislation

THANK YOU



TECHNICAL REGULATIONS



by

GEORGINA SHABANGU

MAIN RESPONSIBILTY



-
- Coordinating and overseeing the development and implementation of Technical Regulations by the various Ministries / Departments and Agencies in the country



TECHNICAL REGULATIONS OFFICE.....CONTD

OTHER RESPONSIBILITIES:

- Identification of new legislations.
- Alignment of Technical Regulations to international requirements.
- Ensuring that notification through WTO is done.



TECHNICAL REGULATIONS OFFICE... CONTD

MANDATE:

- It carries its mandate through the National Technical Regulations Liaison Committee (TRLC) which is an interministerial committee that advises on the development and implementation of technical regulations



CURRENT SITUATION

- No harmonized way of developing, implementing, enforcing and reviewing Technical Regulations.
- Lack of common approach by regulatory departments/ agencies in development and implementation of Technical Regulations.
- Most Technical Regulations do not comply with WTO TBT and SPS agreement, SADC protocol on Trade TBT and Good Regulatory Practice.



CURRENT SITUATION CONTD.....

- No knowledge of Regulatory Impact Assessment (RIA) by regulators.
- No Regulatory Impact Assessment conducted when developing Technical Regulations.
- Poor notification to WTO.



WHAT HAS BEEN DONE SO FAR

- Developed a Technical Regulations Framework Bill which is at Legal Vetting Stage at the AG's Office.
- Established the Technical Regulations Coordination Office.
- Compiled and printed a Technical Regulations Booklet which contains all existing Technical Regulations in the country.



AREAS OF COOPERATION

- Train the TR Office on Technical Regulations.
- Create awareness to legislators on the Technical Regulations Framework (TRF).
- Train regulators on TRF.
- Train regulators on Regulatory Impact Assessment (RIA).
- Yearly Update of the TR Booklet.
- Establish a web based notification system.



THANK YOU

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QUALITY PROMOTIONS



By

MICHAEL MAHLALELA

QUALITY PROMOTION UNIT





QUALITY PROMOTION UNIT

Began to be fully operational following approval of the National Regulatory and Quality Policy in 2010 and the Implementation Plan in 2013.

Promotes culture of quality in all sectors of society

Encourages incorporation of quality aspects in the development of National policies in areas such as health care, environment, education and food safety



QUALITY PROMOTION UNIT

- **Promotes** adoption of quality principles for instance those found in management systems e.g. the Quality Management System (QMS).



QUALITY PROMOTION UNIT

Activities include

- Carrying out awareness workshop meetings on QMS
- Educating the public during our annual Swaziland International Trade Fair (SITF) on quality issues
- Hosting Workshop Trainings on quality matters
- Running mentoring sessions for the MCIT QMS Representatives
- Have created awareness in some Government Ministries/Departments e.g Public Service, PEU



Quality Management System

- **Focus** is on the
 - Government Ministries/Departments
 - Public Enterprises i.e. the Parastatals
- RQID is **currently helping the**
 - Departments in the Ministry of Commerce, Industry & Trade (MCIT) in the development and implementation of the Quality Management System- since the Ministry is pioneering the the development and implementation of the Quality Management System(QMS)

PHASES OF THE QUALITY MANAGEMENT SYSTEM



1. Development phase

activities

- Awareness creation on QMS
- Training on the standard- ISO 9001
- Mentoring sessions
- Launch of the QMS
- Awareness creation to other ministries e.g. Public Service, PEU

PHASES OF QMS (Cont.....)



2. **Pre-implementation phase** – the stage in which the ministry is currently in

Activities

Conduct visits to check for readiness of implementation

1st Visit cycle

2nd Visit cycle

3. **Implementation phase**

4. **Internal Audit phase**

5. **Management Review phase**

6. **External Certification phase**



AREAS OF COOPERATION

- DEVELOPMENT AND IMPLEMENTATION OF A WEB-BASED QMS.
- CONDUCTING QUALITY MANAGEMENT INTERNAL AUDIT TRAINING FOR THE MCIT QMS DEPARTMENTAL REPRESENTATIVES - NEED FOR EXTERNAL ASSISTANCE IN TERMS OF A RESOURCE PERSON
- TRANSITION FROM THE ISO 9001:2008 TO ISO 9001:2015
- RAISING AWARENESS CREATION TO ALL PUBLIC ENTERPRISES ON THE QUALITY MANAGEMENT SYSTEM
- WORKING TOWARDS CERTIFICATION IN ISO 9001:2015 STANDARD.

Ministry of Commerce, Trade and Industry (MCTI)



Quality Policy 2010

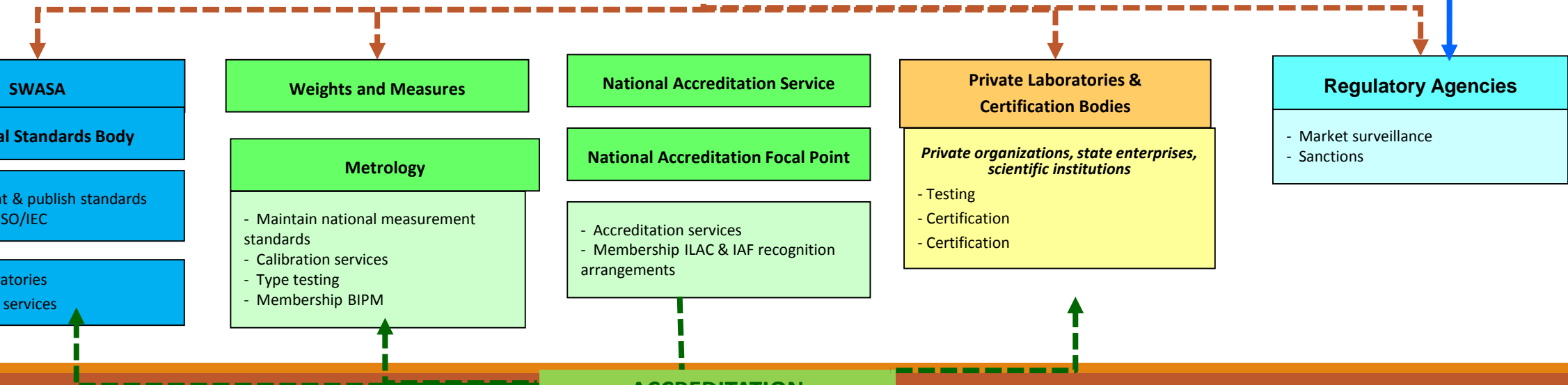
Regulatory and Quality Infrastructure Development (RQID)
Office of Technical Regulation

- Coordination of technical regulation activities and agencies
- International and regional cooperation

Ministries (Various)

- Technical Regulation Development
- Notification

COORDINATION



SWASA
National Standards Body

- Development & publish standards
- Member of ISO/IEC

-Testing laboratories
- Certification services

Weights and Measures
Metrology

- Maintain national measurement standards
- Calibration services
- Type testing
- Membership BIPM

National Accreditation Service
National Accreditation Focal Point

- Accreditation services
- Membership ILAC & IAF recognition arrangements

Private Laboratories & Certification Bodies

Private organizations, state enterprises, scientific institutions

- Testing
- Certification
- Certification

Regulatory Agencies

- Market surveillance
- Sanctions

ACCREDITATION



THANK YOU FOR LISTENING

SIYABONGA



The Swaziland Standards Authority



2nd Floor, Smithco Industrial Business Centre, King Mswati
3rd Avenue 11th Street West, Matsapha Industrial Site

Tel: 25184633/10
Fax: 2518 4526

www.swasa.co.sz
info@swasa.co.sz



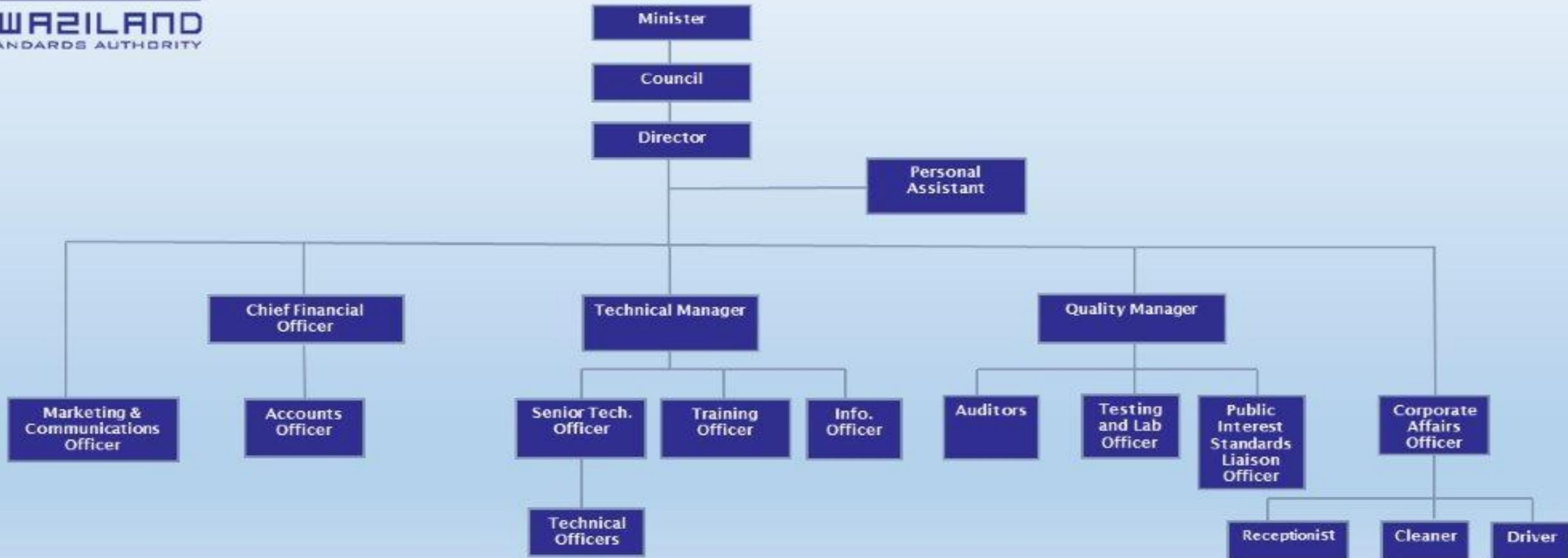
THE GOVERNMENT OF THE KINGDOM OF SWAZILAND



- Government parastatal (Ministry of Commerce, Industry & Trade)
- Enabling Act - Standards and Quality Act No. 10 of 2003
- The National Standards Body (NSB) of the Kingdom of Swaziland
- Certification Body



SWASA ORGANOGRAM



MISSION & VISION



To promote quality principles and facilitate the use of standards to reduce technical barriers to trade and investments, ensure a sustainable Swazi economy, safeguard the nation's health, safety and environment.



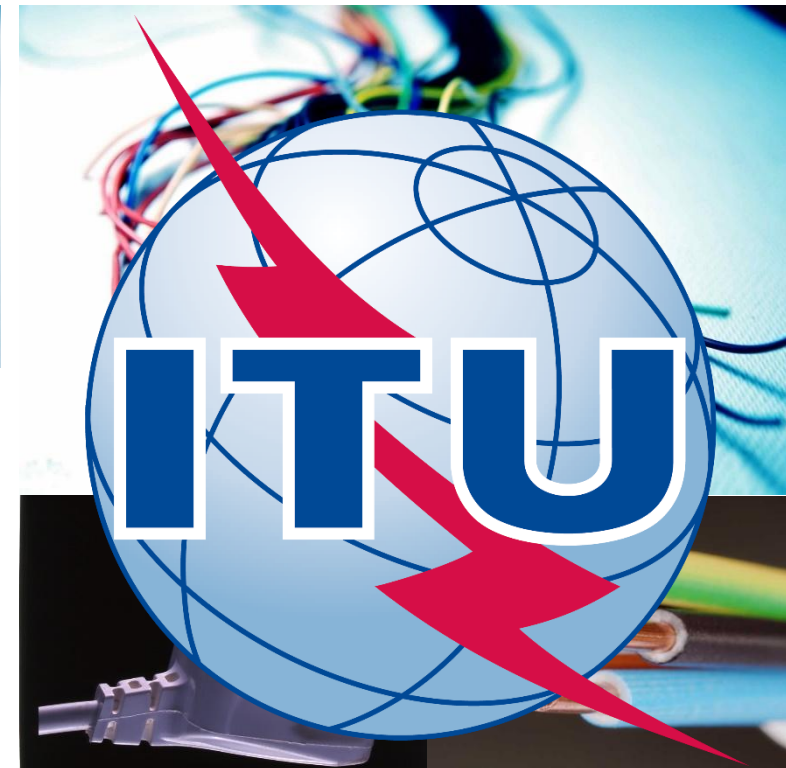
To be the recognized center of excellence and preferred supplier for services relating to the use of standards in Swaziland and beyond.



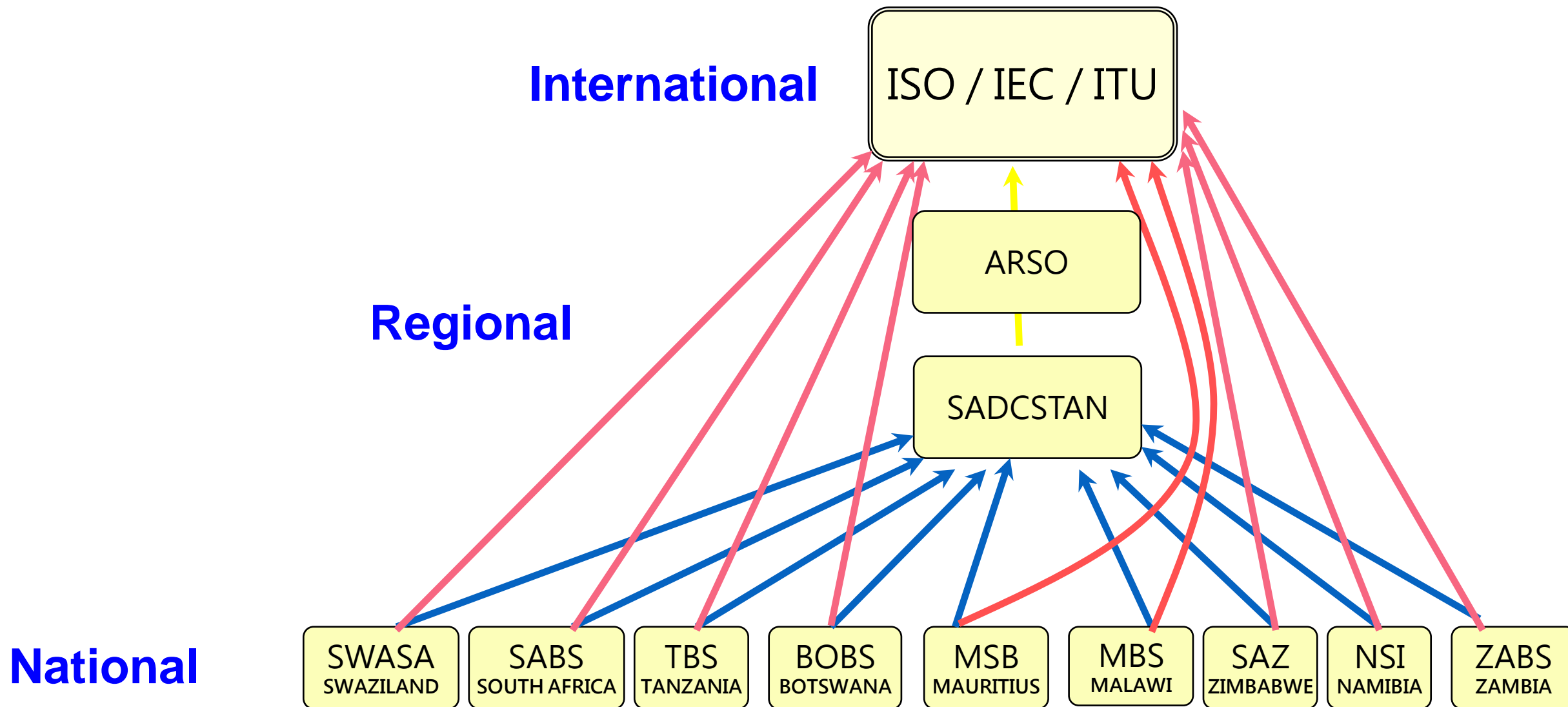
International Organization for Standardization



International Electrotechnical Commission



International Telecommunications Union



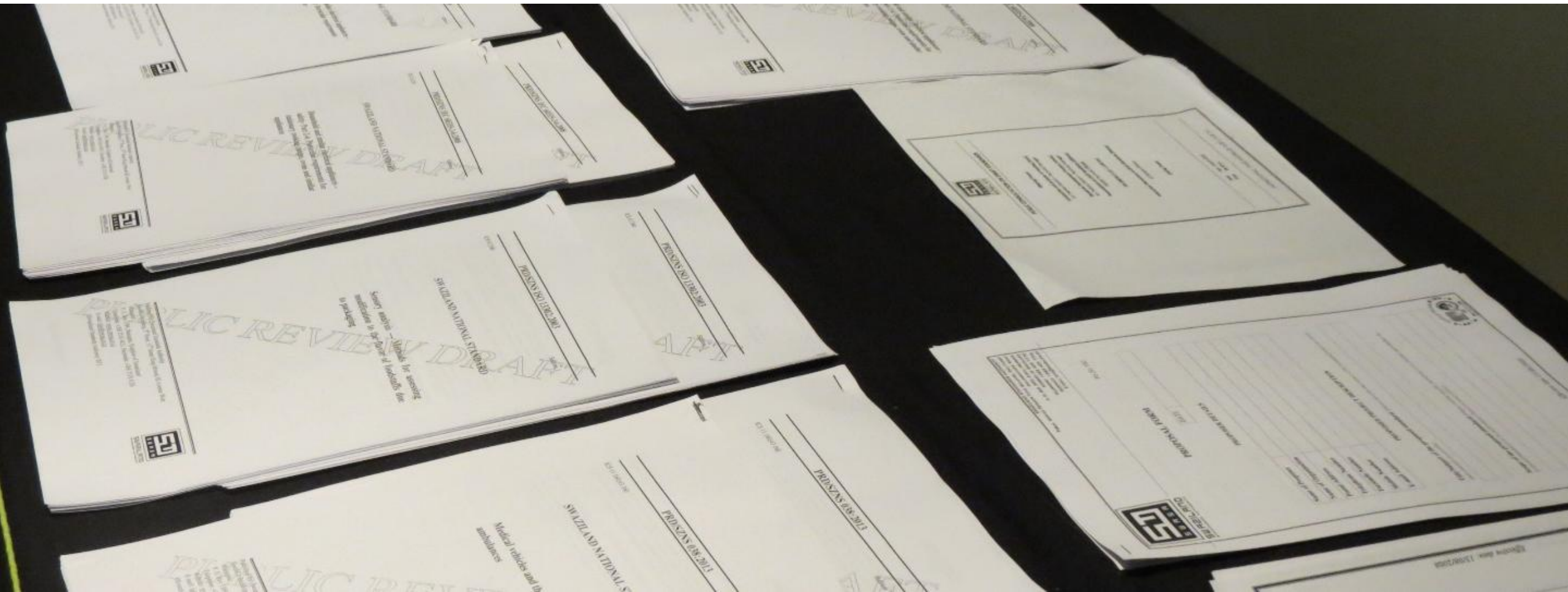


Technical Department

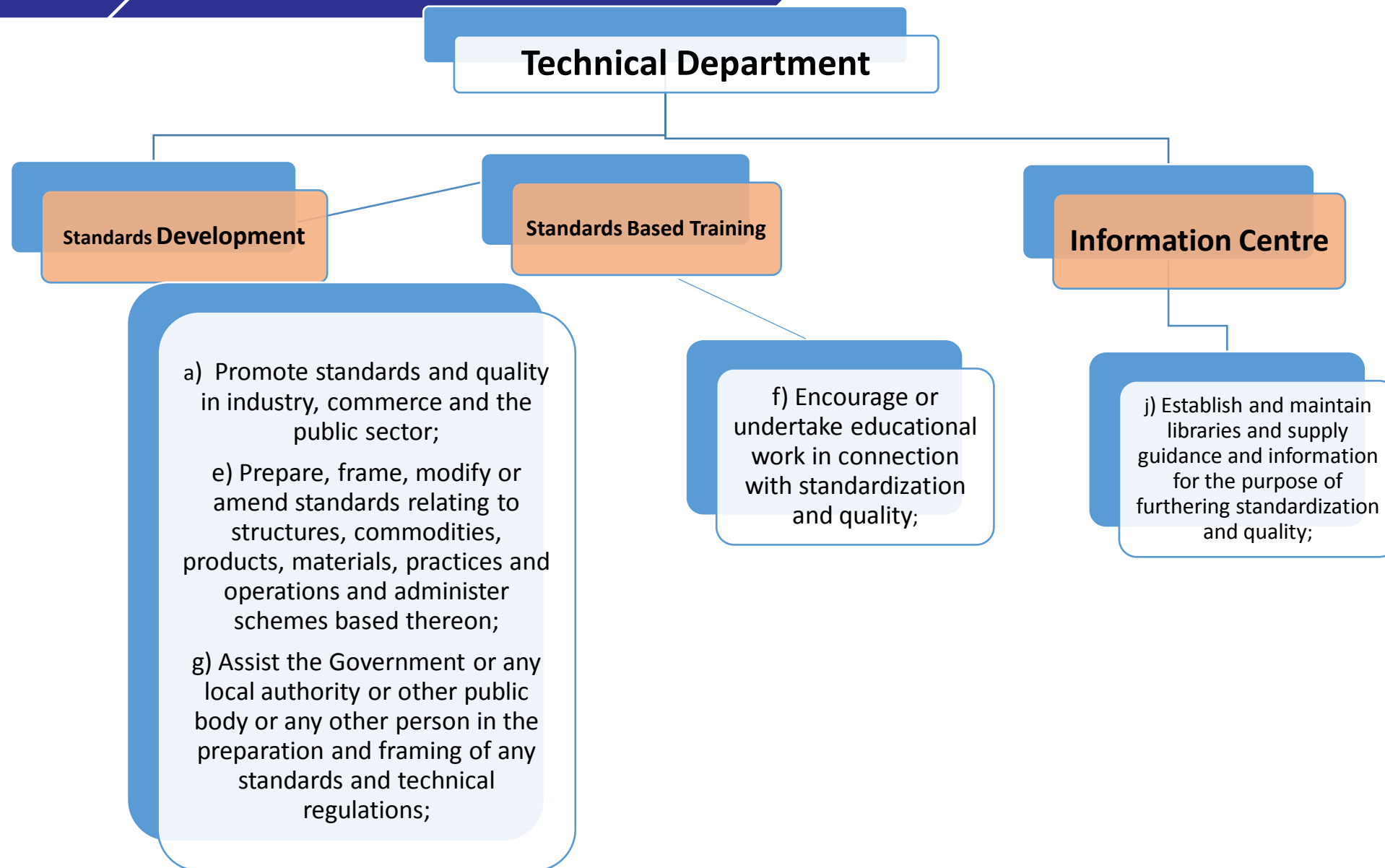
- Information Dissemination
- Standard Sales
- Standards Based Training
- WTO-TBT National Enquiry Point

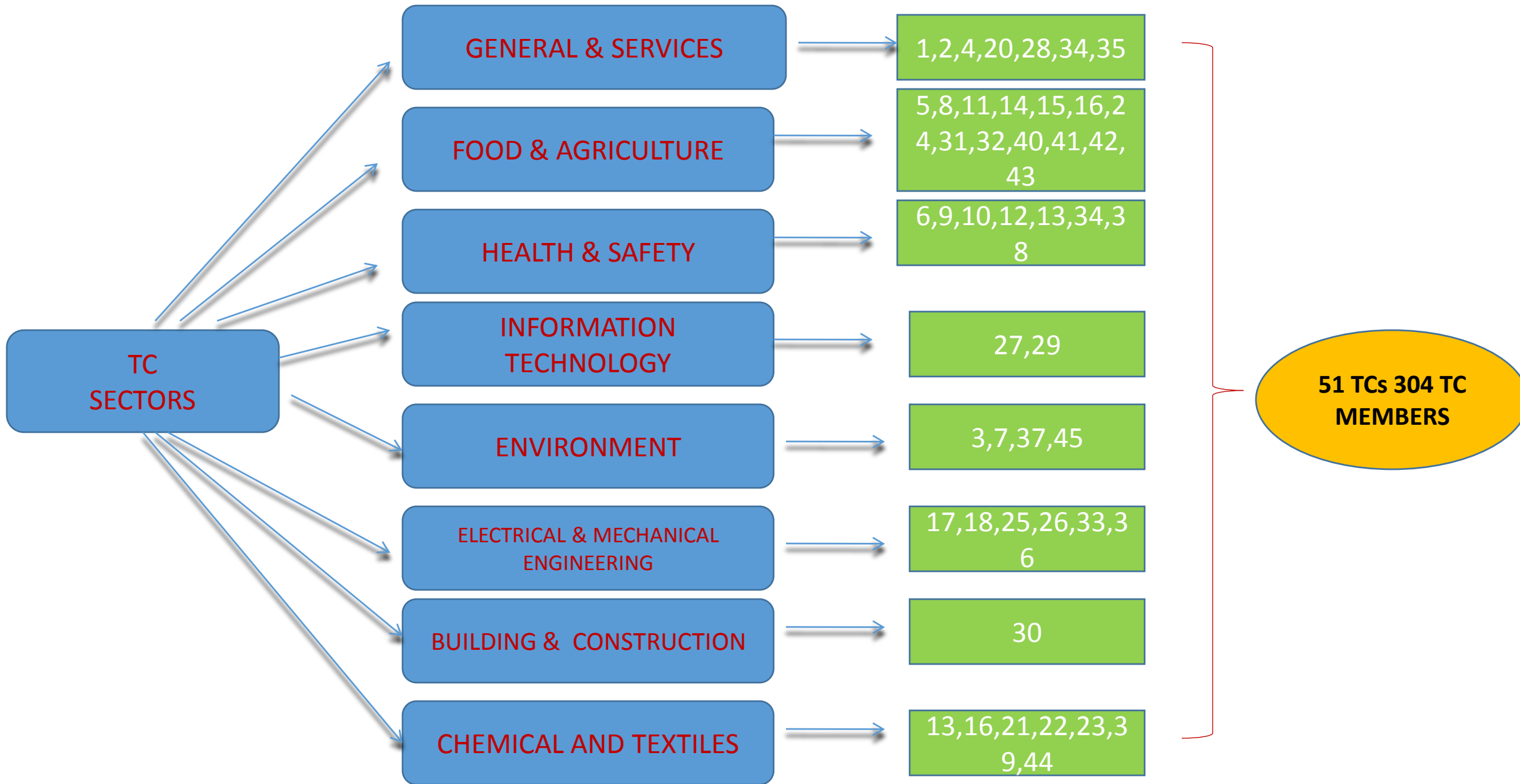
Quality Assurance Department

- Product Testing Facilitation Services
- Certification Services (MS & Products)
- Consumer Liaison / Protection
- Metrology Services*
- Pre-shipment Verification of Conformity*

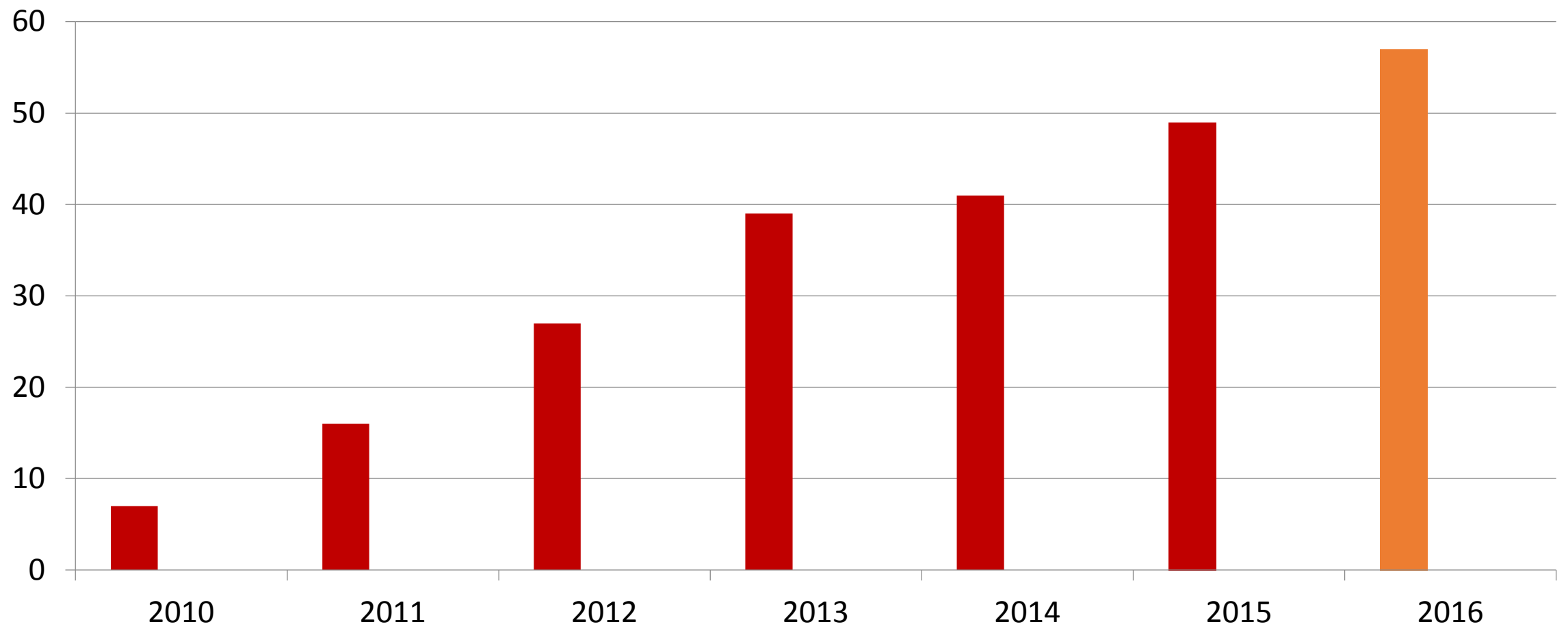


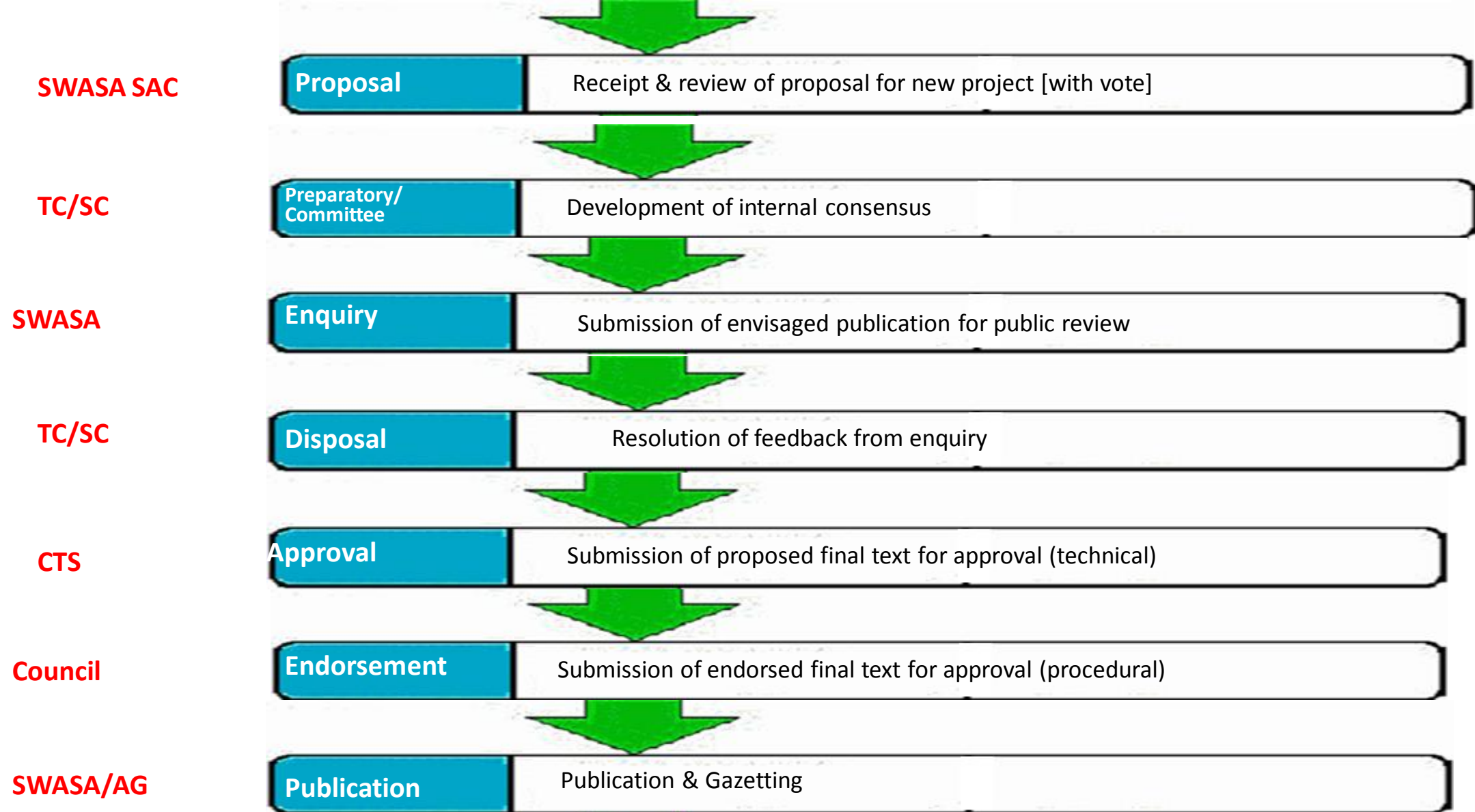
Technical Department





Published Standards





Challenges

- Payment of TC allowances unsustainable
- Lack of technical experts in some sectors
- Resource constraints to adequately address all requests for standardization
- Limited capacity on participation in international standardization
- Limited uptake of published standards
- Weak linkages between NSB and Regulators

	Title	Course code
1	INTRODUCTION TO SZNS ISO 9001:2015	QMS01
2	SZNS ISO 9001:2015 QUALITY MANAGEMENT SYSTEMS (QMS)	QMS02
3	INTERNAL AUDITING SZNS ISO 9001:2015	QMS03
4	SZNS SANS 16001:2013 WELLNESS AND DISEASE (HIV and AIDS AND TB) MANAGEMENT SYSTEMS	HAMS01
5	SZNS ISO 14001:2015 ENVIRONMENTAL MANAGEMENT SYSTEMS (EMS)	EMS01
6	SZNS OHSAS 18001:2007 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM (OHSAS)	OHSAS01
7	SZNS SANS 10330:2007 A HAZARD ANALYSIS AND CRITICAL CONTROL POINT (HACCP) SYSTEM	FS01
8	SZNS ISO 22000:2005 FOOD SAFETY MANAGEMENT SYSTEMS	FS02
9	SZNS ISO/IEC 17025:2005 GENERAL REQUIREMENTS FOR THE COMPETENCE OF TESTING AND CALIBRATION LABORATORIES	CA01
10	GLOBAL GAP – Integrated Farm Assurance	GAP01
11	HAZARD IDENTIFICATION AND RISK ASSESSMENT TECHNIQUES	OHSAS02
12	INCIDENCE INVESTIGATION TECHNIQUES	OHSAS03

1. In-house training -
Mainly large business
and government
2. Scheduled trainings –
Run throughout the
year
3. Specialized training –
Especially for groups
of SMEs



Challenges

- Need for diversification of skills
- Increase uptake of training
- Lack of accreditation
- Lack of professional printing equipment

Information Centre

- Collection of local and international standards, codes of practice and methods of test for reference purposes
- Standards and quality assurance reading materials (Books, Magazines, CD-ROM, DVD)
- The official WTO/TBT Enquiry Point for Swaziland
- Standards sales of National and International Standards

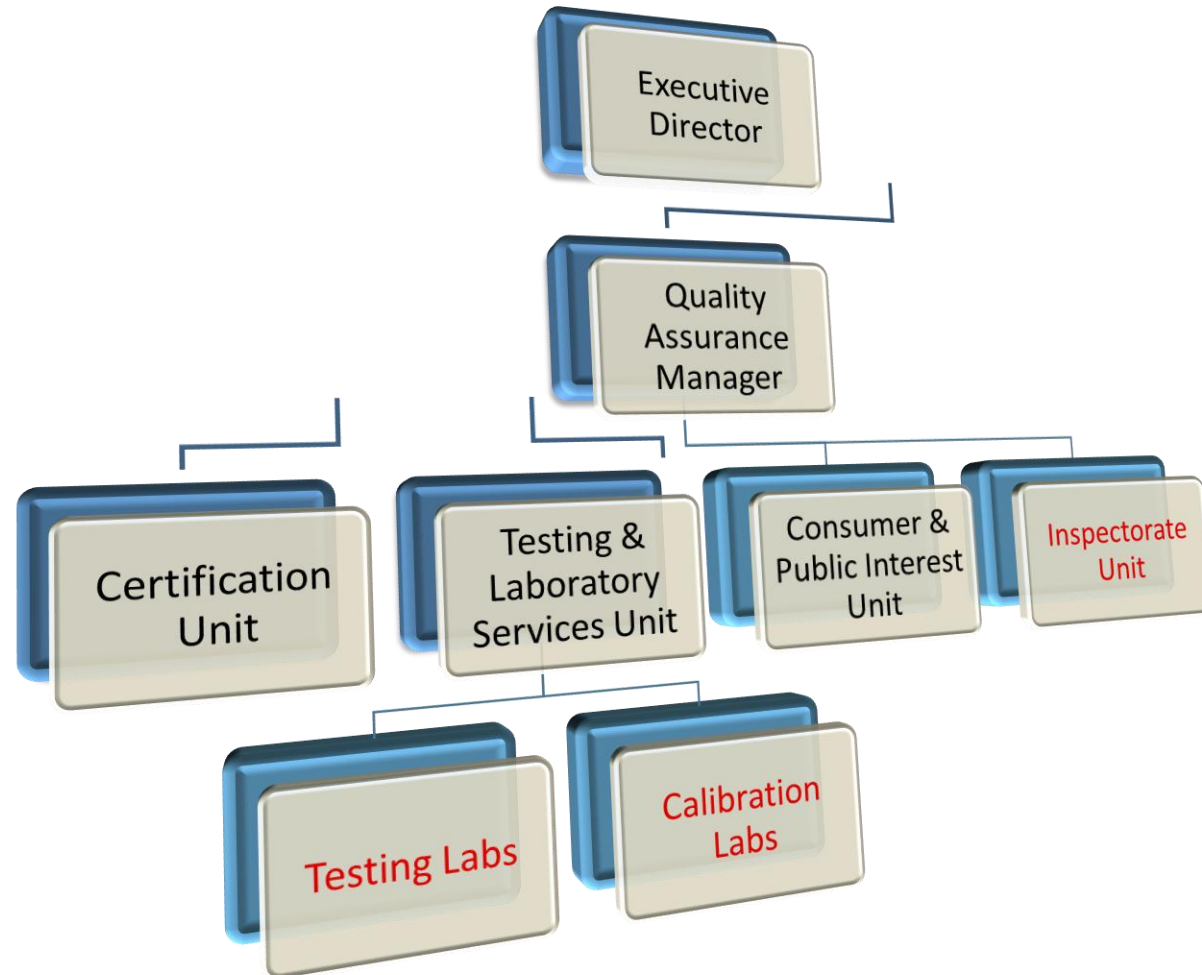
Challenges

- Limited use of the library facility
- Lack of online search catalogue of standards
- Low turnaround times for delivery of standards
- Lack of system for online sale of standards



Quality Assurance

QAD Structure



Quality Assurance Department Functions

- The Consumer and Public Interest Unit receives and resolves consumer complaints
- Informs the technical department of the standards needed in the market to safeguard the health and safety of consumers.

Operations of Consumer and Public Interest Unit

- Managing the Toll-free line.
- Resolve all reported complaints
- Refer complaints to relevant Authorities
- Convert consumer interests into adequate technical standard proposals, comments, objections etc.
- Keep up-to date with local and international developments on consumer issues e.g. New issues on the international agenda
- Keep an up-to-date legal register.

Achievements

- Purchasing of the Toll-free lines in 2009 has had an increase in complaints reported and resolved.
- Communication with suppliers has been made easier.

Challenges

- Swazi consumers have an anti-quality culture, detected from their purchasing habits.
- The ignorance of the consumers: they need to be educated on their rights to safe and healthy products and services and on standardization.
- Inadequate financial resources.
- The absence of a consumer protection legislation in the country makes suppliers non-cooperative when resolving complaints.

Future Outlook

- To increase Consumer awareness in Swaziland through Road Shows aimed at educating consumers on their rights to healthy and safe products.
- Increase consumer awareness on the importance of standards and conformity assessment through Newspaper articles amongst other activities

Operations of Testing and Laboratory Services Unit

- Facilitate testing of products for the successful running of the SWASA Product Certification Scheme and facilitate testing of samples upon client requests;
- Active participation in the operations of National Laboratory Association of Swaziland (NLAS) and hold Secretariat position;
- Identification of accredited laboratories to partner with (locally and internationally);

Achievements

- Establishment of the Microbiology laboratory at the Ministry of Agriculture premises in Manzini and successful procurement of equipment for the laboratory (UNIDO Project)
- Securing premises for the metrology (mass) laboratory at Luyengo UNISWA campus and commencement of procurement process for laboratory equipment (UNIDO Project)
- Re-launching of the National Laboratory Association of Swaziland (NLAS)

Challenges

- The lack of testing laboratories is a major challenge, big companies prefer to deal directly with laboratories than allowing the office to facilitate.
- Lack of accredited laboratories in Swaziland to make facilitation more convenient
- Some locally produced products currently do not have standards
- Funds for the environmental conditioning of the lab space at Luyengo Campus

Challenges

- Capacity building for the Testing and Laboratory Services Officer to enhance her skills and competence
- Absence of a trained Metrologist to operate the Mass Metrology Laboratory

Future Outlook

- Food Microbiology laboratory and Mass Calibration laboratory fully functional
- Implementation of ISO 17025 and accreditation of the two established laboratories
- Running of water Proficiency Testing Scheme in collaboration with NLAS

Future Outlook

- Establishment of testing laboratories
 - Food Chemistry and Microbiology laboratories
 - Electronics laboratories
 - Civils laboratories
 - Materials testing laboratories
- Establishment of metrology laboratories
 - Volume
 - Temperature
 - Pressure
 - Length
- Establishment of SWASA Proficiency Testing Scheme
- Getting all laboratories accredited to ISO 17025

Operations of Certification Unit

- Provide certification in the following management systems:
 - Quality Management System (ISO 9001)
 - Environmental Management System (ISO 14001)
 - Occupational Health and Safety (OHSAS 18001)
 - Food Safety Management System (ISO 22000 and HACCP)

Management Systems

SZNS ISO 14001 Environmental Management Systems



SZNS ISO 9001 Quality Management Systems

SZNS ISO 22000 Food Safety Management Systems



SZNS 18001 – OHSAS Occupational Health & Safety

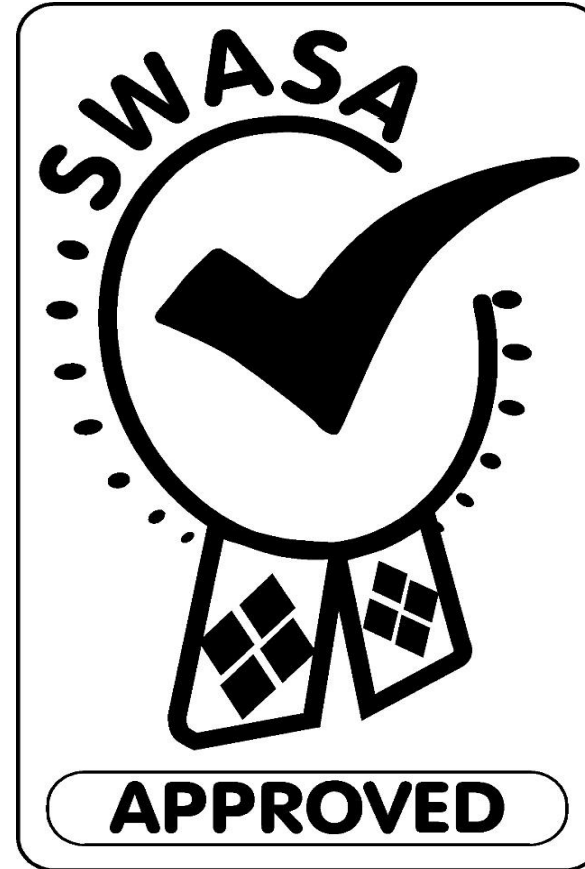
SZNS SANS 10330 Hazard Analysis & Critical Control Points(HACCP)



SWASA QUALITY MARKS

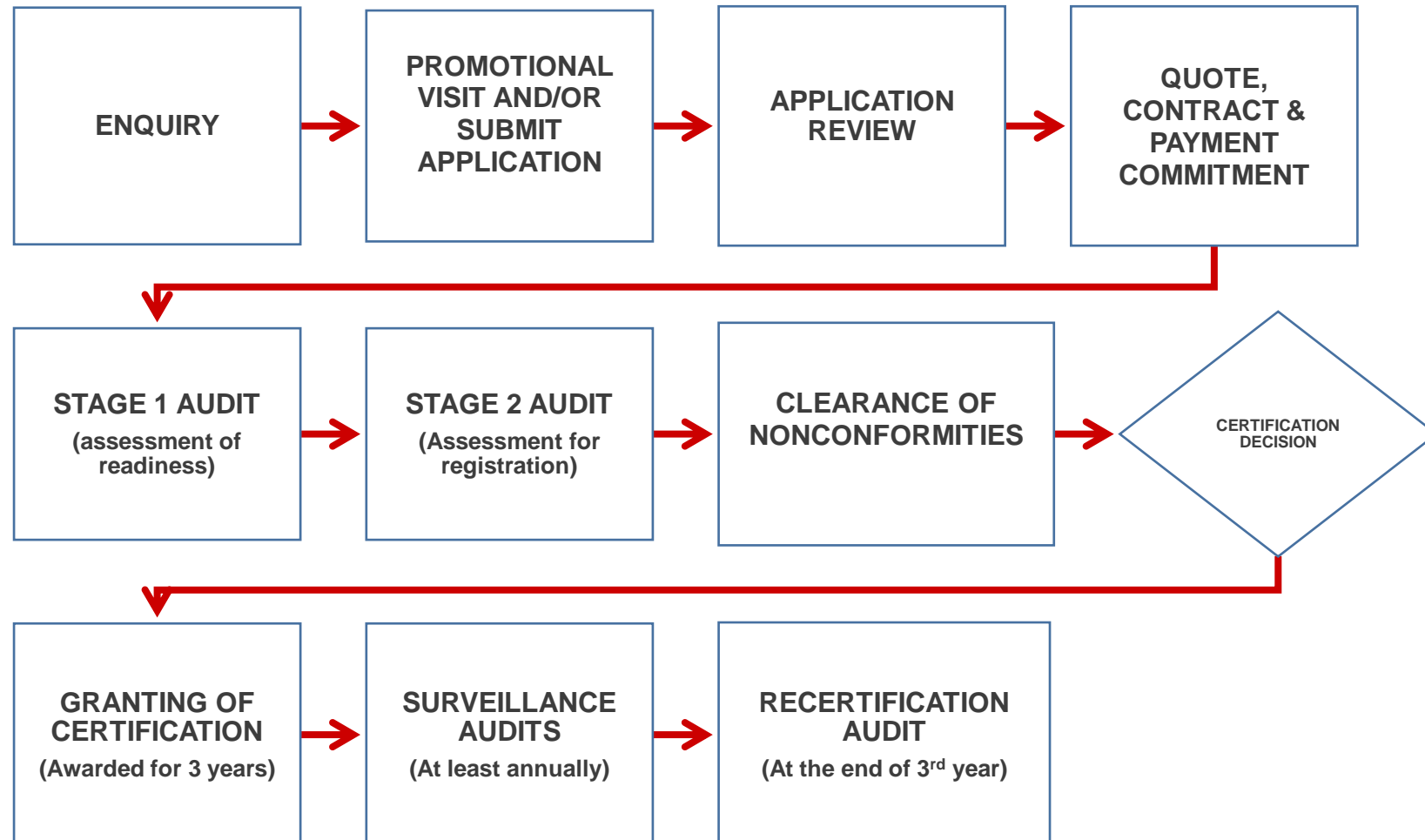


Lihawu Mark



Ligcebesha Mark

Certification Process



Achievements

- Endorsement of Certification Quality marks
- Seven certification projects: Four clients successfully audited and certified and two clients were unsuccessful.
- Completion of ISO 9001 Lead Auditor Course
- Alignment of the Certification Body's documentation to ISO/IEC 17021-1:2015

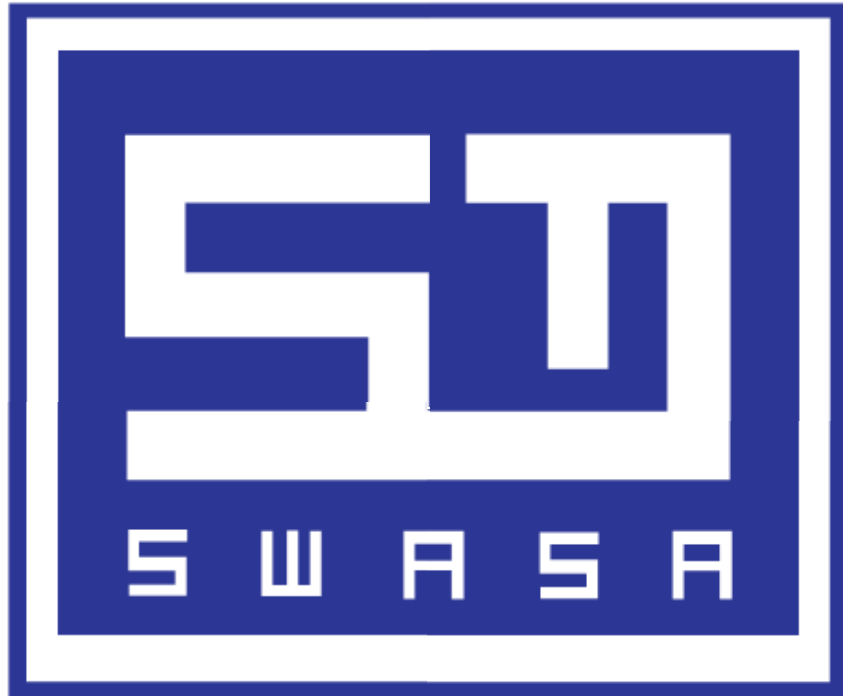
Challenges

- Companies prefer to use other accredited certification bodies
- Shortage of Lead Auditors in Food Safety, QMS and OHSAS
- Certification body running at a loss due to outsourcing of lead auditors. This is caused by the absence of certified lead auditors in the organization and country.

Future Outlook

- Increase the number of certification clients
- Registration of lead auditors with IRCA/SAATCA on ISO 9001 and ISO 22000
- Accreditation of SWASA certification body to all Management Systems
- Establishment of an Inspectorate Unit
- Development of Auditors and Inspectors

Contact Us



SWAZILAND
STANDARDS AUTHORITY

SWAZILAND STANDARDS AUTHORITY
2nd Floor, Smithco Industrial Business Centre
Plot No. 471, King Mswati 3rd Avenue
11th Street West, Matsapha Industrial Site
P.O. Box 1399, Matsapha
Telephone: +268 2518 4633/ 2518 4610
Facsimile: +268 2518 4526
Email: info@swasa.co.sz
www.swasa.co.sz

Thank You!

QUESTIONS





MINISTRY OF COMMERCE INDUSTRY
AND TRADE



WEIGHTS AND MEASURES
(METROLOGY)
SECTION



CONTENTS

- ❑ Background
- ❑ Legal basis
- ❑ Vision & mandate(Objectives)
- ❑ Scope & functions of Legal Metrology
- ❑ Benefits of Weights and Measures
- ❑ Future Requested technical Assistance
- ❑ Conclusion

BACKGROUND



- ❑ The Weights and Measures (Metrology) Section in Swaziland was established in the mid-70' s
- ❑ Its aim was to provide trust & confidence in Legal Metrology measurements -as well as those used in industries
- ❑ Initially it embraced: legal, industrial – and elements of scientific metrology for ensuring traceability of measurements
- ❑ Yet with the birth of Standards Act the industrial metrology has shifted to SWASA

BACKGROUND (continued)



- ❑ Has served as a foundation/ precursor institution of standardization activities in Swaziland
- ❑ In this regard it has played a significant advocacy in Government that saw the birth of a wider standardization activities in the Kingdom of Swaziland
- ❑ Yet it worth noting that along the way it has been neglected; hence the need for its upgrading can not be overstated

LEGAL BASIS



- ❑ Weights and Measures Order of 1975(Repealed in 1991)
- ❑ Metrology Act, 1991
- ❑ And the Metric System Order of 1973.
- ❑ There are technical regulations and specifications that ensure the technical part of verifying measuring instruments used in trade are carried properly.

FUNCTIONS/MANDATES



- ❑ The department is mandated to supervise and control metrology in trade, exercising regulatory function that provides consumers, trade and industries with metrological support service that ensures equitable and uniform trade dealings conducted on the basis of measurement – and the promotion of International System of units (SI) through:
 - Verifications
 - Calibrations
 - Inspections
 - Conducting relevant workshops/trainings
 - And enforcement of metrology law

SCOPE OF Measurement



- ❑ Mass
- ❑ Length
- ❑ Volume
- ❑ Active measurement scope are mass and volume
- ❑ Length still need some enhancement
- ❑ Yet all the scopes need further enhancemen

SCOPE OF MEASUREMENT (C0nt.d)



- ❑ Through a study made by UNIDO the Unit has been mandated to retain the National Standards of the Kingdom of Swaziland
- ❑ Thus through the Measurement Units And Standard Bill the Unit will serve as the National Metrology Institute(NMI) housing the Legal and Scientific metrolo



OBJECTIVES

Objectives includes:

- ❑ Level playing fields commercial transactions
- ❑ Support for industry manufacturing measurement capabilities
- ❑ International confidence in trade measurements
- ❑ Consumer protection
- ❑ Control of fraud e.t.c

ACHIEVEMENTS



- ❑ Annually verifications/calibrations are conducted through the country to ensure the Act is complied with;
- ❑ Upgrading and Extension of metrology laboratories at Matsapha has been completed;
- ❑ Some laboratories furniture and equipment procurement has been approved by Government;
- ❑ (2) Metrology Officers in 2015 has been sent for long term metrological studies in Tanzania (Business Educational College of Tanzania);
- ❑ Installation of security systems has been approved by Government.

ACHIEVEMENTS (Cont.d)



- ❑ A draft Metrology Act has been produced through a UNIDO project that aims to repeal the Metrology Act of 1991.
- ❑ Inculcated in this new draft Law is the expansion of the legal metrology scope that will ensure more areas that affects health, safety, environment—and consumers are addressed.

CHALLENGES:



- ❑ Lack of enough equipment which is being addressed;
- ❑ Shortages of staff which is also being addressed– but may require administrative /political lobbying for it to succeed;
- ❑ Not enough laboratory space in all the regions;
- ❑ Exodus of qualified staff;
- ❑ Currently using some old TR, hence the need to upgrade them is of great need.
- ❑ These TR will have to address both the scientific and legal metrology

FUTURE TECHNICAL ASSISTANCE NEEDED



- Technical assistance in the form of training to enhance our present measurements capabilities (Length, Mass and Volume)
- Attachments to advanced metrology institutions to augment our measurement practicalities
- Attachment of metrology expert in our local institution to instilled metrology current measurement methods / procedures e.t.c
- And to advise on current good legal legislations/ specifications ideal for a developing country

FUTURE TECHNICAL ASSISTANCE NEEDED (CONTINUED)



- ❑ Provision of equipment in new areas of metrology(e.g. Temperature and Pressure)
- ❑ And as well as training on those areas

CONCLUSION



- We highly believe that with BSMI and other ROC Structures technical assistance the metrology section technical competence and its service will be upgrade and augmented.



THANK VERY MUCH FOR LISTENING
AND MAY THE
ALMIGHTY GOD RICHLY BLESS YOU.



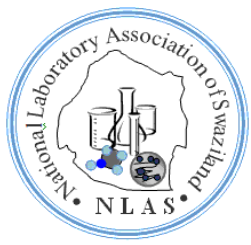
Introduction to NLAS

by Chairman

Musa Shongwe

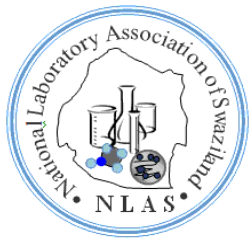
Quality Assurance Manager

Swaziland Water Services Corporation



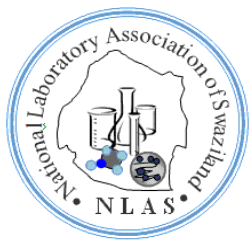
Outline

- Who we are
- Objectives
- Membership
- Partners
- Recent activities
- 2016-17 Calendar
- Future Outlook
- Challenges



Who we are

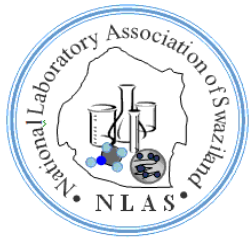
- Not for profit organization for laboratories/stakeholders in Swaziland
- Established in 2008 and legally registered as an NGO in 2010
- Registered office:
 - National Laboratory Association of Swaziland
 - P.O. Box D281
 - The Gables
 - Ezulwini
- Physical address:
 - Swaziland Standards Authority
 - Plot 471, 2nd Floor SmithCo Building
 - Matsapha Industrial Estate



Who we are

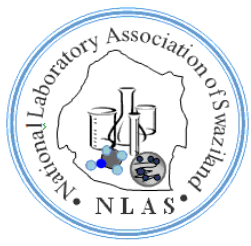
BANKING DETAILS

Account Name: National Laboratory Association of Swaziland
Bank: Nedbank Limited
Branch: The Corporate Place
Account Number: 020000606608



Who we are

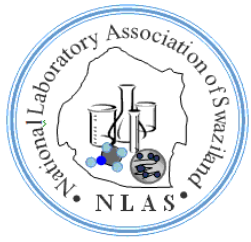
- Chairperson: Musa Shongwe
- Vice Chairperson: Thokozani Mvubu
- Secretary: **Bongile Dlamini**
- Treasurer: **Nomcebo Ngwenya**
- Member: Khosi Shongwe
- Member: Bulelo Vilakati
- Thabiso Nsibandwe: ex officio (UNIDO)
- Sithembiso Dlamini: ex officio (NAFP)



Who we are

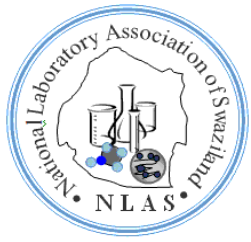


Excellence in measurement service



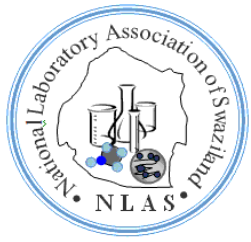
Objectives

- To provide a forum for consultation, knowledge/info/resource sharing, advice and support on laboratory issues
- To assist in interpretation of accreditation requirements, to identify generic national accreditation needs & seek for assistance
- To provide a mechanism for technology/skills transfer amongst members through workshops, seminars, etc.
- To support improvements in laboratory quality infrastructure, assisting member facilities towards attaining accreditation
- To reduce TBT's and to enhance Swaziland's economic growth through quality



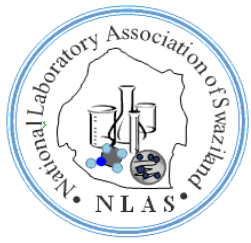
Membership

- Financial year: April – March
- Labs: testing, medical, calibration
- Individual:
 - Working: E100
 - Student: E100
- Organizational: labs – E500
- Corporate: Non-laboratory entity (e.g. supplier, etc.) – E500
- Benefits:
 - Participation in NLAS activities (workshops, PTS, etc.)
 - Training courses
 - Networking
 - Personal growth – to leave a mark in the quality field



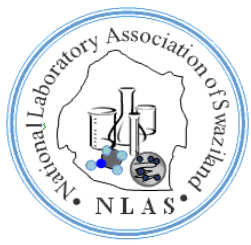
Partners

- Swaziland Standards Authority (SWASA)
- UNIDO
- National Accreditation Focal Point (NAFP – RQID, MCIT)
- SADC Regional Laboratory Association (SRLA)
- BSMI
- ??



Recent activities

- Quarterly Workshop: June, September 2016
- Lab Business Management Training: July 2016
- Strategic Planning: August 2016
- Laboratory Survey: September 2016



Recent activities – Cont'd

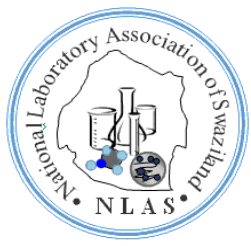
- Quarterly Workshops topics:
 - Document control according to ISO 17025
 - Quality control charts
 - Method validation (overview)
 - Laboratory waste management
 - NLAS strategy presentation



Recent activities



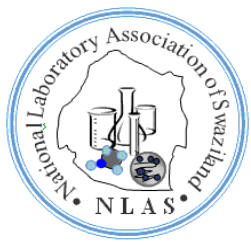
Excellence in measurement service



Recent activities



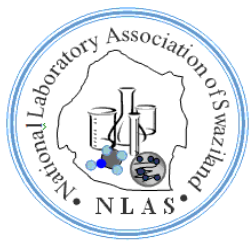
Excellence in measurement service



Recent activities



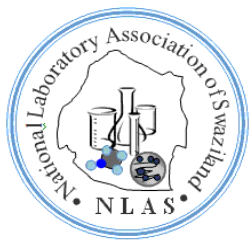
Excellence in measurement service



Recent activities



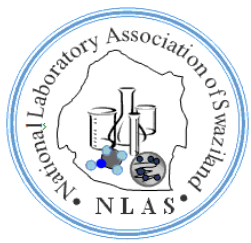
Excellence in measurement service



Recent activities



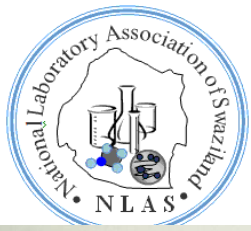
Excellence in measurement service



Recent activities



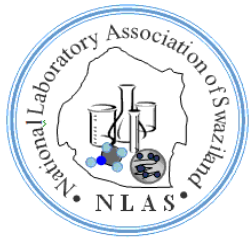
Excellence in measurement service



Recent activities

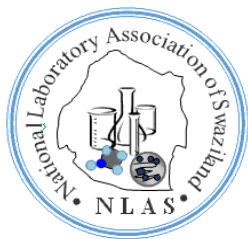


Excellence in measurement service



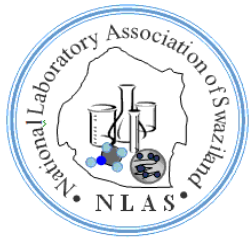
2016 – 17 Calendar

- Workshops: quarterly
- Laboratory Survey
- Newsletter: biannual
- Laboratory Business Management Course
- Strategic Plan
- NLAS Business Plan
- MoUs
- PTS
- AGM



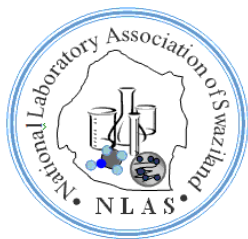
Challenges

- Steep equipment service & maintenance fees
- Laboratory waste management
- Laboratory staff turnover
- Capacity gaps: Method validation, Uncertainty of measurement, quality management tools, laboratory management, etc.
- Financial constraints, low membership, slow economic growth
- Time constraints – no dedicated office and personnel



Future Outlook

- Enhanced communication: website, brochures, etc.
- Increased membership and influence in the quality infrastructure of Swaziland and beyond
- PT scheme
- Training/consultancy services
- NLAS viability
- Coordinated lab equipment maintenance
- Coordinated lab waste management
- Licensing of labs/lab practitioners
- Laboratory Quality awards
- More labs accredited
- Economic growth



Thank you!

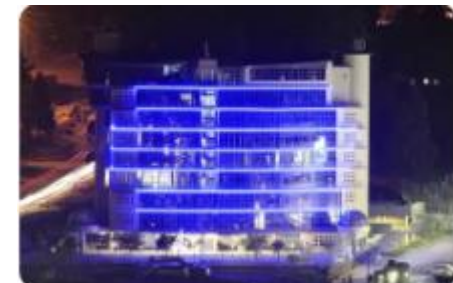
“There are two primary choices in life: to accept conditions as they exist or accept the responsibility for changing them”

Denis Waitley



Destination Swaziland

INVESTING AND TRADING IN SWAZILAND



MBABANE 2017

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OUTLINE



1. ECONOMIC OVERVIEW

2. WHY INVEST IN SWAZILAND?

3. OPPORTUNITIES BY SECTORS

4. INCENTIVES

5. SETTING UP A BUSINESS IN SWAZILAND

6. SWAZILAND TRADE WITH TAIWAN

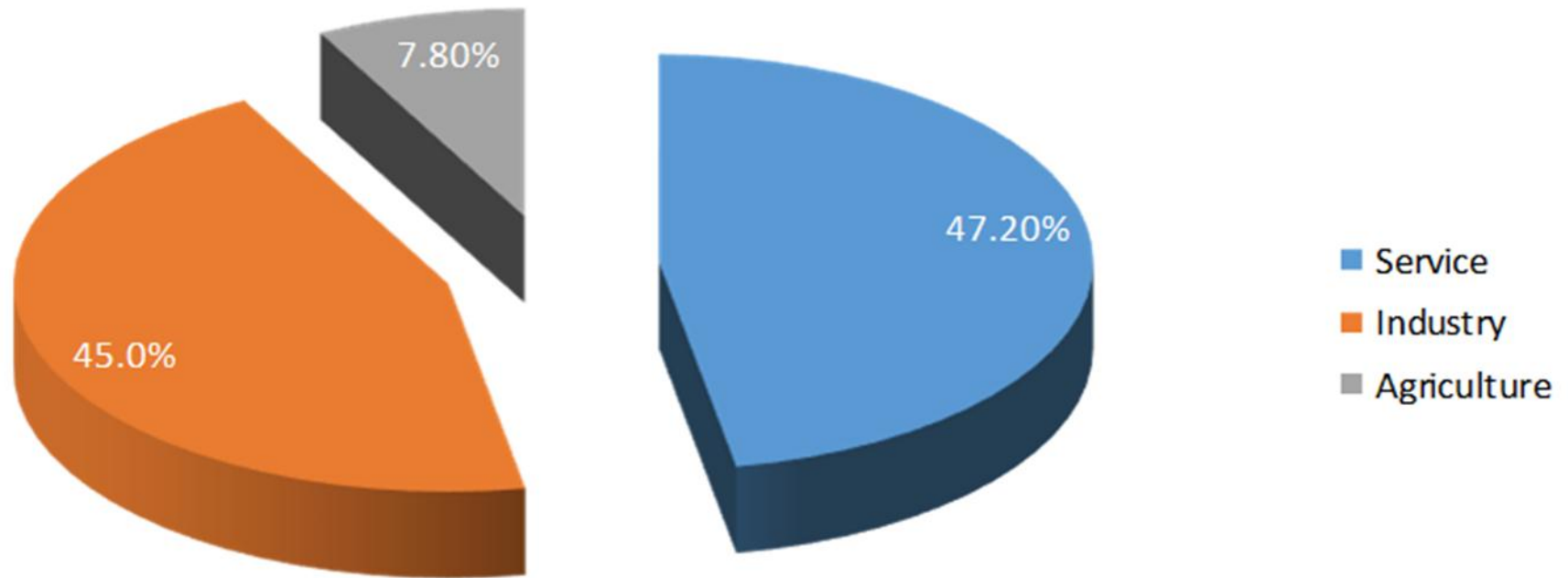
7. SWAZILAND OUTSIDE BUSINESS

8. CONTACTS

1.1 SWAZILAND AT A GLANCE

Capital	Mbabane
Population	1.3 million
GDP Growth	1.7% (2015)
Real GDP	US\$3.7 billion
Inflation	5% (2015)
Languages	Siswati and English
Literacy Rate	89% (2015)
Prime Lending Rate	9.25% (2015)

GDP COMPOSITION

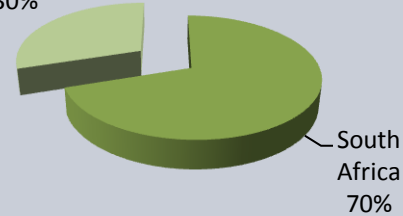


TRADE PROFILE (estimates)

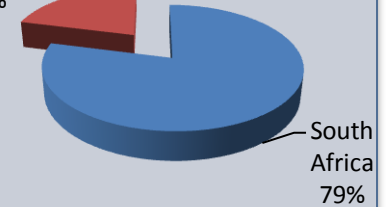
TRADE BALANCE



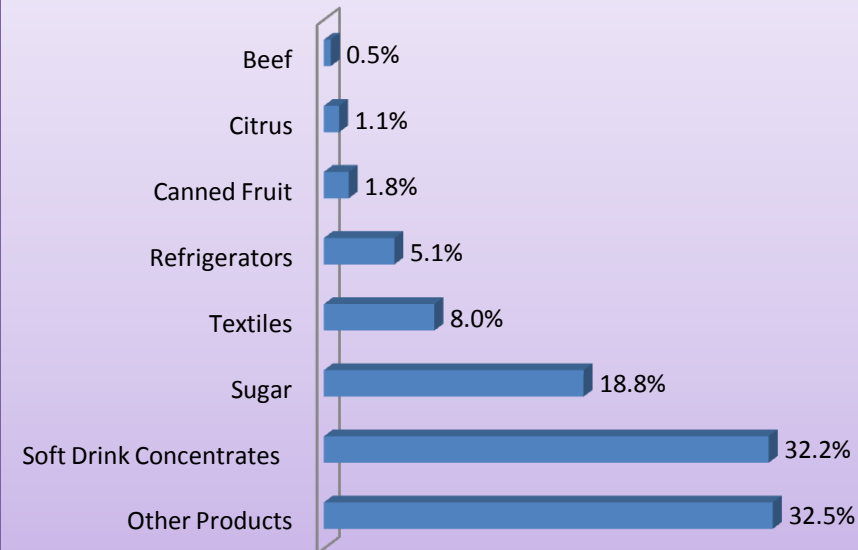
Rest of the World 30% IMPORTS



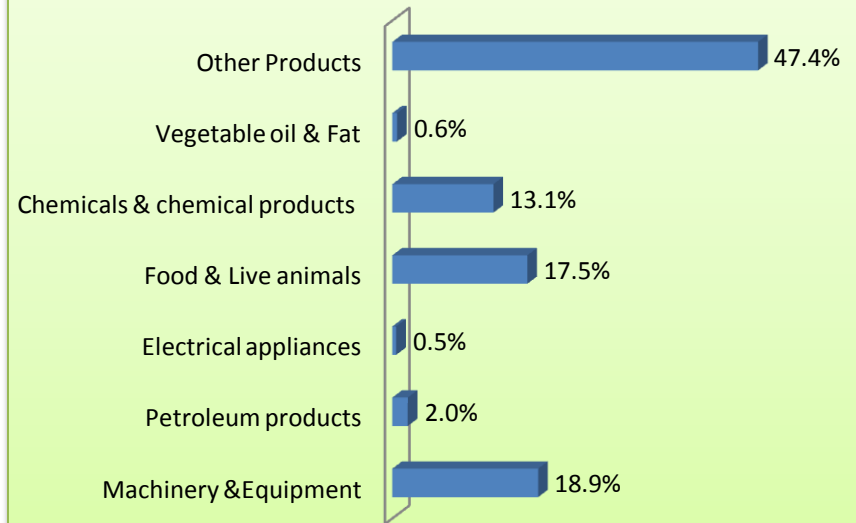
Rest of the World 21% EXPORTS



AVERAGE EXPORTS: US\$ 1.8 BILLION



AVERAGE IMPORTS: US\$1.98 BILLION



Investment and Trade status quo



- Around 20 Taiwanese Companies operating in Swaziland
- Predominantly textiles sector followed by packaging
- Recently some drive to diversity into agribusiness and electronic assembly
- Employing over 12,000 workers in the textile sector

2.1 SWAZILAND WORLD RANKINGS



Ranked 11th out of 53 countries in the abundance of qualified skills and competitively priced work force – Literacy index of Africa 2014

Ranked 8th out of 46 countries in the Sub-Saharan African region for stable and free business environment – Index of Economic Freedom 2014

Ranked 44th out of 144 countries in the world on advanced infrastructure – Global Competitiveness Report 2015

2.3 WHY INVEST IN SWAZILAND CONTN'D



1. Quality Support Infrastructure and Utilities:

- Quality Roads Infrastructure (72% Paved Roads Network), Quality and Guaranteed supply of utilities; Consistent Supply of Power (70 % Grid Coverage), Information Communication Technology, ADSL Broadband- Migration from 3G to 4G LTE.

2 . Stable and good industrial relations regime:

- Good employer- employee relation and efficient dispute resolution mechanisms

3. Safe and peaceful environment:

- Low risk country

2.4 WHY INVEST IN SWAZILAND CONTN'D



4. Strong investor protection framework:

- Signatory to MIGA, ICSID, UNCTAD should translates to confidence to investing in the Kingdom of Swaziland.

5. Stable and Sound Financial Institutions:

- Balanced financial intermediation constituting banks with international footprint, robust regulatory framework, as well as flexible exchange controls – free repatriation of profits

6. Strong business Support from government

- Demarcated and serviced industrial land around the country
- Government prioritizes a conducive investment and trade climate for investors (IRM)
- Fiscal and non fiscal incentives

7. Extended Market Access - to regional communities and other trading blocks

8. Other

Endowed with abundant natural resources – locally available input for other industries and other primary factors of production

2. WHY SWAZILAND?; PROXIMITY TO MAJOR PORTS



KEY DISTANCES

Swaziland To:

- Maputo +/- 180km
- JHB 400km
- Richards Bay 350km
- Durban +/- 550km



4. INVESTMENT PROTECTION



PIPELINE AGREEMENTS (DTAA)

- Zambia
- Seychelles
- Kenya
- Zimbabwe
- Botswana
- Namibia
- Kuwait
- Equatorial Guinea
- Turkey
- South Korea

INVESTMENT PROTECTION AND PROMOTION AGREEMENTS

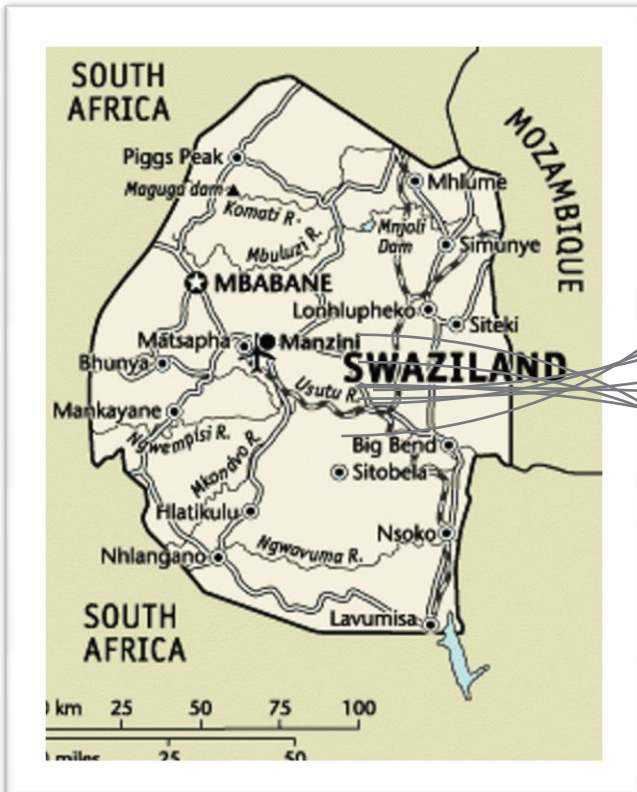
- United States of America
- **Republic of China on Taiwan**
- United Kingdom
- Germany
- Mauritius
- Kuwait

DOUBLE TAXATION AVOIDANCE AGREEMENTS

- **Republic of China on Taiwan : Income** - **(1998)**
- UNITED KINGDOM: Income & Capital - (1994)
- SOUTH AFRICA: Income - (2004)
- MAURITIUS: Income & Capital - (1968)
- SOUTH AFRICA: Income - (1972)
- SWEDEN: Income & Capital - (1968)
- LESOTHO - (2012)

5. EXTENDED MARKET ACCESS

- **Generalized System of Preferences (GSPs) - accessing Australia, Canada, Japan, New Zealand, US, EU and the Russian Federation**



- **SACU – 60m pple**
- **COMESA – 360m pple**
- **SADC FTA– 250m pple**
- **SADC -EPA (EU)**
- **SACU- MERCOSUR**
- **EFTA**
- **INDIA**
- **COMESA+SADC+EAC (Tripartite)**

- **Expanding to other trade blocs: Asia, Middle East, etc**

INCENTIVES

Incentive	Description
1. Development Approval Order (Income Tax Order Section 69 (2)(a)-(e))	Corporate tax reduction at the maximum rate of 10% for ten years, applicable only in Manufacturing, Tourism and International Services after due evaluation for qualification
2. Hotel Allowance 14(1)(h)	Initial allowance of 50% of the capital expenditure in connection with the erection or beneficial improvement of a hotel (during the year of assessment for the first use of the hotel or beneficial improvements on an existing one) Annual allowance of 4% for the succeeding years, with total allowance not to exceed the total expenditure.

INCENTIVES CONTINUED

Incentive	Description
3. Repatriation of Profits	The liberalized foreign exchange mechanisms also allow full repatriation of profits and dividends of enterprises operating in the country. Repatriation is also allowed for salaries of expatriate and capital repayments.
4. Legal Protection of Investments	Investments in Swaziland are protected from undue expropriation under the Swaziland Investment Promotion Act of 1998. In addition, Swaziland is a member of Multilateral Investment Guarantee Agency (MIGA) of the World Bank which provides for added legal protection of investments.
5. Five year work permits	These are available for expatriate Directors.



INVESTMENT OPPORTUNITIES BY SECTOR



MANUFACTURING

Agribusiness Hub

The collage includes images of fresh produce, a wooden pallet, a computer monitor, and various industrial products.



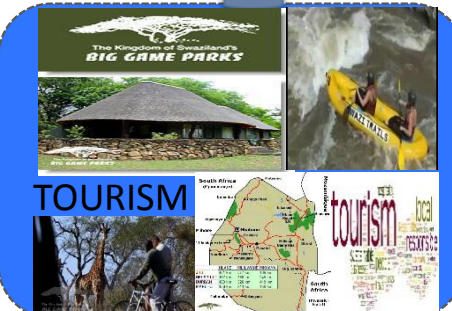
FINANCE

The collage features Swaziland 200 Shillings banknotes, stacks of cash, and a modern office building.



RESEARCH AND DEVELOPMENT

The collage shows a scientist using a microscope and a laboratory setting.



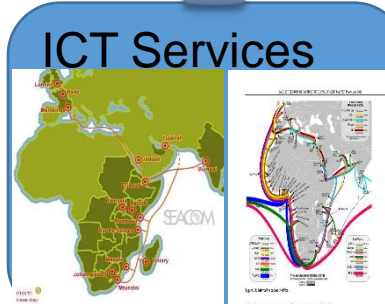
TOURISM

The collage includes a thatched hut, a person on a bicycle, a map of Swaziland, and a person in a yellow kayak.



EDUCATION

The collage depicts a person carrying books and a graduation cap over a globe.



ICT Services

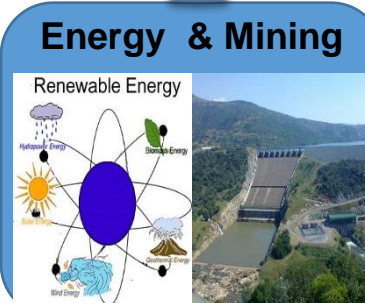
The collage shows a map of Swaziland with ICT service locations and a network diagram.



AGRICULTURE

Organic Farming

The collage features images of cows, a tractor, and a greenhouse.



Energy & Mining

Renewable Energy

The collage includes a diagram of renewable energy sources and an image of a dam.



Transport & Infrastructure

King Mswati III International Airport

The collage shows a large, modern airport terminal building at night.

DEVELOPMENTS IN SCIENCE, R & D AND ICT

Biotechnology Park



1. Service Centre
2. Agric. Biotech Industrial Zone
3. Innovation – related Biotech Industrial Zone
4. Cultural Village
5. Detention pond
6. Experiment Area and Nursery
7. R&D
8. Business area

Residential area

SETTING UP A BUSINESS IN SWAZILAND



SERVICES OFFERED BY SIPA

One Stop Shop Support Facility for Investors, Free of Charge Incorporation service

- Free facilitation service Company Registration (**only statutory fees apply**)
- Work Permits
 - Up to 5 years for Directors (**Statutory fees apply depending on number of years applied for**)
- Trading License (**statutory fees apply depending on the industry applied for**)
- Assistance with Factory or work space identification

Innovation Park



- Call Centres
- Business process outsourcing (BPOs)
- Software development
- Manufacturing and assembly of hardware ICT components

ENERGY



Local demand for power 220MW, supply 20-30%

Investment in a Hydro Power Station of 60-140 MW

- Flexible feasibility study arrangements

300 MW Thermal Power Plant



3. Solar Photovoltaic

4. Bio Mass (small scale)

5. Pockets for wind Generation

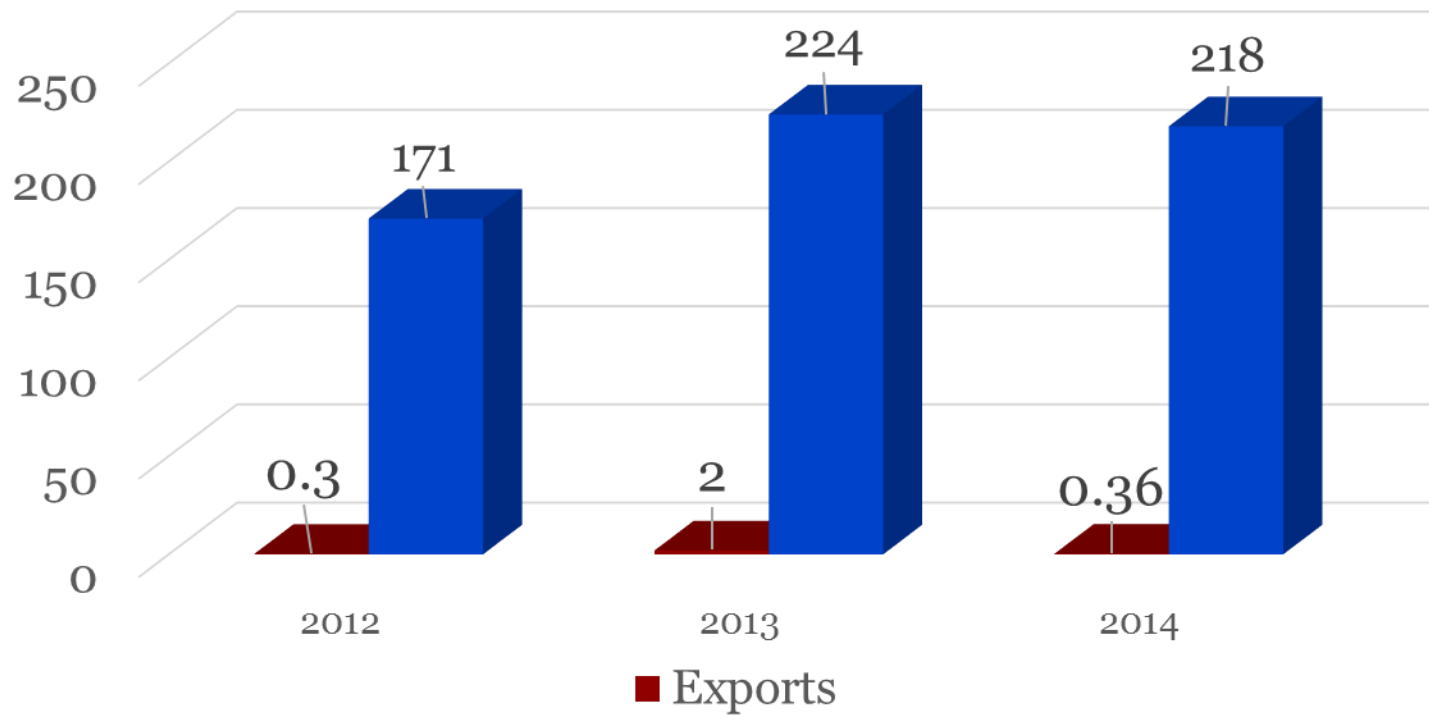
Regionally Demand

-**SADC** projected 96 0000 Megawatt by 2027 but current supply is 56 000 Megawatt
-SAPP pool plan 2009 presents seamless opportunities

BILATERAL TRADING WITH TAIWAN



Swaziland Bilateral Trade with Taiwan



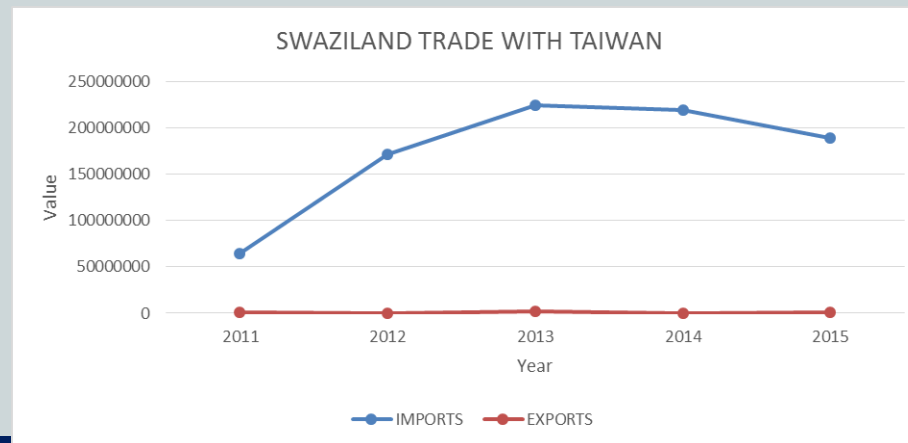
Swaziland – Taiwan Trade



- Swaziland overall trade balance was negative between 2009 and 2012
- Positive between 2013 and 2014
 - In 2014, trade surplus stood at E2.3 billion (approximately USD165 million)
- However, trade balance for Swaziland to Taiwan negative between 2011 and 2015
 - Trade deficit at E173 million (about USD12.4million)
- **Major imports include (SRA classification)**
 - **Cotton (knitted or crocheted)**
 - **Machinery and mechanical appliances**
 - **Man-made filaments**
 - **Other vegetable textile fibres, paper yarn and woven fabrics of paper yarn**
 - **Inorganic chemicals, organic/inorganic compounds of precious metal etc.**
 - **Tanning or dyeing extracts, tannin & their derivatives, dye pigments & other colouring matter, paints and varnishes, putty and other mastic, inks**

Swaziland – Taiwan Trade

- Top exports to Taiwan
 - Wool, fine and coarse animal hair, horsehair yarn and woven fabric (textile handcraft)
 - Edible fruits and nuts, peel of citrus fruit or melon (citrus)
- Swaziland - Taiwan trade graphical expression:



Products key for export to Taiwan



- **Products with comparative advantage:**
 - Fresh and processed fruits & vegetables
 - Fresh and processed beef, poultry, pork
 - timber and timber products
 - Mineral products
- **Products with competitive advantage:**
 - Textiles and apparel
 - Handcraft
 - Processed food products
 - furniture

Challenges



- Taiwan remains a relatively unknown market for Swaziland exporters. The same applies to the Asian market.
- Swaziland's exports are mostly driven by existence of preferential market access so that the products are able to compete. Taiwan does not offer any preferences due to lack of any existing trade arrangement with Swaziland,
- Exporters already sending their products to Taiwan and Asia have highlighted issues of very stringent Sanitary and Phytosanitary (SPS) requirements,
- The requirements for packaging and labelling to be written in mandarin makes such costs to be very high,

RECOMMENDATIONS



- More collaboration between industry players e.g. Chamber to Chamber MoU
- More Transparency in terms of PSS requirements
- Capacity Building Initiatives
-

7. SWAZILAND OUTSIDE BUSINESS



Adventure, Culture & Entertainment

- Rooted in deep culture – scheduled national cultural events
- Scheduled entertainment events (Bushfire Festival, Fun Fairs)
- National Museum
- Walking/Hiking/Trails/Caravan/ Mountain biking (approximately 15 areas)
- Water Rafting
- Casinos & Gambling (x 3)
- Golfing (4x18 holes and 1x9 holes golf courses)
- Camping (approximately 10 safe & secure camping sites)
- Swazi Arts & Craft (more than 15 centres of “**Made in Swaziland**” Artworks)
- Wildlife & Bird viewing (The Big Five, 6 nature reserves)
- Horse Riding
- Fishing (4 places)



CONTACTS

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SIYABONGA, THANK YOU

Swaziland

Africa's New **Promise**

