FEASIBILITY STUDY REPORT

Use of digital and IT tools to strengthen the delivery, performance and processes of the conformity assessment system and the accreditation system in nine (9) countries in West Africa

STDF/PPG/770

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The findings, interpretations, and conclusions expressed in this paper are entirely those of the author. They do not necessarily represent the view of the Standards and Trade Development Facility (STDF) or any of its partner agencies or donors.

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1 EXECUTIVE SUMMARY

1. The use of digital and IT tools is considered as a response to the new challenges presented by the Covid-19 pandemic. In order to continue to perform their critical work, Accreditation Bodies (ABs) have integrated virtual processes into their activities. Amid the global pandemic, ABs continue to support conformity assessment and accreditation systems for the global marketplace and to meet the regulatory and performance requirements remotely. As the pandemic continues to evolve, digitalization is expected to bring a certain flexibility and efficiency to accreditation processes and training procedures.

2. The main purpose of this feasibility study is to identify the challenges, opportunities, and needs to use Information and Communication Technology (ICT) to strengthen the delivery, performance and processes of the conformity assessment system and the accreditation system in 9 countries in West Africa. ICT is the use of technology for gathering, storing, retrieving, processing, analyzing and transmitting information. It includes software and hardware such as smartphones, handheld devices, laptop computers, desktop computers, drones, video cameras, wearable technology, artificial intelligence, and others[1]

3. An effective use of technology contributes to the success of any AB's role and responsibilities. Digitalization helps ABs better manage all related activities such as training, personnel competence and qualification of assessors. Furthermore, because of new technologies, training is becoming more accessible especially through the internet.

4. Conversely, many problems that occur with the fulfillment of any AB's mandate during this global pandemic can often be traced back to inadequate access to ICT. Limited capability of AB staff to utilize technologies or to access to internet is an obstacle to remote assessment which is their core business.

5. The West Africa Accreditation System (SOAC)[2] is a regional accreditation body covering nine (9) West African countries. Because the measures against Covid 19 have been very limited[3] in West Africa, the use of ICT for assessing Conformity Assessment Bodies (CABS) remotely and for providing online training is appropriate. Moreover, because of political instability in West Africa and travel limitations for both air and ground transportations, the use of digital and IT tools is a strategic decision for SOAC. The use of relevant and appropiate digital and ICT tools can help improve the overall performance and processes of the conformity assessment and the accreditation systems in West Africa and also provide a sound basis for sustainable development initiatives.

6. A study[4] conducted by the West African Monetary and Economic Union (also known under the French acronym, UEMOA[5]), entitled "Assessment of digital uses and national policies on use of digital

[1] IAF MD 4 is a mandatory document for the use of ICT for audit/assessment purposes. Link: https://iaf.nu/iaf_system/uploads/documents/IAF_MD4_Issue_2_Version_3_010220221.pdf

[2] SOAC was established in 2010 as a multi economy accreditation body, by the Regulation No 3/2010/CM/UEMOA, of the Council of Ministers of the Economic and Monetary Union of West Africa relating to the Scheme for harmonization of activities of accreditation, certification, standardization and metrology in the UEMOA comprising of Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo.

[3] According to Table View of The WHO Coronavirus (Covid-19) Dashboard the total vaccine doses administered in the ECOWAS member states still very low (https://covid19.who.int/table)

[4] Étude UEMOA : Évaluation des usages numériques et politiques nationales en matière d'utilisation de masse du numérique dans l'espace UEMOA – Rapport Final, 27 octobre 2020, page 18 sur 344.

[5] Made up of eight West African member states: Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo.

mass in the UEMOA zone", reported that internet penetration rates (corresponding to the percentage of the total population of a given country or region that uses the Internet) vary from one member state to another. Although the internet penetration rate is reliable in some member states, it remains challenging in other countries in the region. Cote d'Ivoire and Senegal have an acceptable internet penetration rate while other member states such as Niger and Guinee Bissau are lagging. The study highlighted that, even for the member states with a higher internet penetration rate, not all regions within countries have a stable internet connection.

7. Nevertheless, stable internet connection is available in the main cities such as national capitals and in those cities with higher economic activities. Most of the CABs are established in these cities.

8. Although remote assessments play a wider role in conformity assessment activities, there are likely to be situations in which a full remote assessment is not feasible, and a hybrid approach is needed. For that reason, there is an increasing demand for hybrid assessments. In order to take advantage of the affordable costs that digital activities allow, while being present in the field, SOAC opted for hybrid assessments and training. Such hybrid activities require SOAC to have most part of members of its team of experts remotely while the other part of the team (usually from a local resource group of qualified persons) to be onsite. This compromise maintains the possibility of having low service costs (no or reduced travel expenses) while retaining the advantages of onsite assessment.

9. Based on the review of similar experiences in AFRAC region, the consultations with accreditation experts and SOAC stakeholders during the feasibility study, combined with recent UEMOA studies in the topic of digitalization (published on 2019 and 2020 and cited in this study) the use of digital and IT tools to strengthen the delivery, performance and processes of the conformity assessment system and the accreditation system in nine (9) countries in West Africa is certainly feasible.

10. To effectively implement this approach and be able to carry out more hybrid assessments and training, it is necessary to have a network of competent experts on the various accreditation standards and schemes of interest for the national Sanitary and phytosanitary (SPS) authorities in each Member State.

2 INTRODUCTION

2.1. Background and context of this Feasibility Study

11. The West Africa Accreditation System (WAAS/SOAC) on behalf of nine countries (the eight UEMOA members: Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, Togo; and Guinea) submitted a Project Grant (PG) application to the STDF, originally entitled "post-COVID-19 voluntary food quality control in West Africa through digitisation" (STDF/PG/770). UNIDO was proposed as implementing partner.

12. The STDF Working Group, at its meeting on 1 April 2021, considered this PG application. The Working Group acknowledged that the PG submitted was interesting, relevant and with high potential, also in the context of COVID-19. Yet, members identified several risks (in terms of the feasibility of a digitalisation program in the region) and indicated areas requiring further clarification (budget, implementation arrangements, among various others). The project application was therefore not

approved. Instead, the STDF Working Group approved a "Project Preparation Grant – PPG" (including preparation of a *feasibility study* and, subject to the findings, a project proposal) . STDF mandated the author of this document, Mr. Rassoulou Diallo, for the task. See his Terms of Reference (TOR) attached.

2.2. Purpose and scope of the assessment

13. The purpose of this feasibility study as articulated in the Terms of Reference (ToR), is to prepare a feasibility study that identify the challenges, opportunities, and needs to use digital and IT tools to strengthen the delivery, performance and processes of the conformity assessment system and the accreditation system in 9 countries in West Africa, which supports consumer health protection and food trade facilitation. The analysis provides detailed information on each country level as well as at a regional level. Depending on these results, and subject to discussion with the STDF Secretariat, the International Consultant may be asked to prepare a project proposal.

3 METHODOLOGY

3.1. Key methodological elements

14. This study was initiated by conducting various desk reviews including:

- Review of previous studies related to the accreditation and conformity assessment system in West Africa
- Review of similar experiences in other regions in which a regional organization (similar to SOAC) is making use of IT tools and digitalization to strengthen conformity assessment processes and systems.
- Review of SOAC experiences regarding digital / virtual training/assessing in West-Africa.
- Review previous and existing programs in West Africa and their experiences regarding the use of digital / virtual tools in West-Africa in order to identify lessons learned as well as areas of complementarity.

15. Following the desk reviews, SOAC headquarters in Abidjan was visited from February 6th to 11th, 2022 in order to Consult stakeholders in the West African Region.

16. This study was carried out using three methodologies. First, a survey was conducted by consulting stakeholders present during an online workshop held from SOAC headquarters in Abidjan on February 9th, 2022. The survey consisted of 12 multiple-choice questions. The aim was to conduct the survey with all attendees to the workshop at the end of the presentations. A stakeholder was defined as a person who is a member of the following committees[6]: ECOCONF, ECOREG, ECOMET and ECORAS. Participants were given 30 minutes to fill in the survey. In order to confirm that all nine (9) countries have participated participants were asked to indicate their organisation and country of origin. Because not all surveys were fully completed, 20 survey results were included in the analysis. A survey report is attached in Appendix 4.

[6] Comité Régional d'Évaluation de la Conformité (ECOCONF), Comité Régional de Règlementation Technique (ECOREG), Comité Régional de Métrologie (ECOMET), Système Régional d'Accréditation (ECORAS) de la CEDEAO

17. Second, to gain a better insight into the Use of Digital and IT Tools Feasibility in the UEMOA zone, the consultant attended the Board of Directors[7] meeting held on April 1st, 2022 at SOAC Headquarters and made a presentation to the attendees. In order to get their views about the potential for using digital tools in conformity assessment, open question was asked to the members. A summary of their general comments was recorded by note-taking.

18. The consultant also attended virtually a general assembly held on May 12th, 2022 in Abidjan and used the opportunity to ask the participants and stakeholders their views on the use of Use of Digital and IT Tools Feasibility. Comments on the challenges and opportunities were recorded and reported in section 4.2.

19. Third, a series of zoom meetings and interviews were held with key players in the topic of accreditation and conformity assessment who kindly shared their experiences in remote assessments. List of persons who were consulted is detailed in Appendix 2.

20. The following stakeholders have been consulted throughout the feasibility study and during a workshop held at SOAC headquarters in Abidjan on February 9th, 2022:

- ECORAS FRANCOPHONE: together with the Nigeria National Accreditation Service (NiNAS) and the Ghana National Accreditation Service (GhaNAS), SOAC is one of the three members of the ECOWAS Accreditation System (ECORAS).
- ECOCONF FRANCOPHONE: ECOWAS Community Committee For Conformity Assessment (ECOCONF)
- ECOMET FRANCOPHONE: Community Committee for Metrology
- ECOREG FRANCOPHONE: Community Committee for Technical Regulation (ECOREG): ongoing study with a view to proposing a community regulation on procedures for harmonising technical regulations within ECOWAS.

21. A Board of Directors meeting was held on April 1st, 2022 at SOAC Headquarters. During the meeting the directors stressed out the strong needs of the use of digital and IT tools to respond to the lack of a competent, internationally recognised and resilient West African's conformity assessment system to provide robust, reliable and comparable conformity assessment results to mitigate against barrier to consumer health protection and trade facilitation in the region's agricultural products.

22. A general assembly was held on May 12th, 2022 in Abidjan. The general assembly was followed by a workshop on the development and the funding of accreditation in West Africa to increase the emergence of competent laboratories within the region, Friday May 13th, 2022.

23. Regarding the private sector, three preparatory sessions were held online, on April 28 and 29, 2022 to inform members of the colleges8 (including new members) about SOAC activities and provide status updates. The sessions were also aimed to collect members opinions and recommendations for

[7] The General Assembly and the Board of Directors consist of stakeholders from the public and private sectors of each member state. Representatives of these parties are legal entities from mainly three types of colleges: College A, B and C.
[8] College A includes national accredited bodies, or bodies that may be accredited, or their grouping
College B includes national business trade associations or representative structures of buyers using or which may use the services of College A members
College C includes representatives of the structures defending the public interest.

a better functioning of SOAC. A list of participants, their organization and country is listed in Appendix 2.

24. The National Accreditation Focal Points who promote accreditation in the Member States were consulted. These members are mostly from the eight national standards agencies such as CODINORM Cote d'Ivoire and ASN Senegal.

25. Training in conformity assessment and standardization is provided by SOAC and each of the national standard's agencies such as ANM of Benin and ASN of Senegal. These are mostly also acting as certification bodies. There are also private training providers active in West Africa that were consulted.

26. Finally, members of the Jury of the accreditation award launched to promote accreditation and the use of ICT have been consulted.

3.2 Data collection and Analysis

27. Data collection process was supported by a survey conducted on February 9th, 2022 and series of interviews and meetings between October 2021 and May 2022. Survey results were analysed using Google Form. Meeting responses and interview were recorded taking notes and analyzed.

3.3 Methodological limitations and challenges

28. Only data from 20 respondents were used; therefore, Sampling might not be representative of all SOAC stakeholder from all three colleges. Also, during SOAC general assessment, while all members expressed their points of view, it was noted that some members were more vocal than others.

4 FINDINGS

29. This section provides an analysis of the existing situation, challenges and opportunities to use digital and IT tools to strengthen conformity assessment and accreditation systems in West Africa. The analysis is aimed to broadly contextualize the situation and challenges facing conformity assessment and accreditation system at a regional and national level, including linkages to the implementation of international standards (Codex, IPPC, and OIE) and SPS measures to promote trade, while focusing on the opportunities and needs (including aspects related to IT infrastructure, accessibility, costs, etc.) to use digital and IT tools to strengthen capacity in accreditation, conformity assessment and capacity development processes.

4.1 Existing situation

30. The ECOWAS Regulation C/REG.21/11/10 on the harmonization of the structural framework and operational rules on plant, animal and food safety provides in Article 17, calls for the establishment of a network of laboratories and a network of training institutions. Article 27 further requires the assistance of accredited laboratories to carry out health risk analysis in the Union. Despite the strong need for accredited conformity assessment service in support of Food Safety, the number of accredited Food Safety conformity assessment bodies, such a testing laboratory, certification bodies

and inspection bodies, remains low (less than 50). On the other hand, the need for a robust and internationally recognised competent conformity assessment system is increasing. It is therefore critical to respond to the lack of a competent, internationally recognised and resilient West African's conformity assessment system to provide robust, reliable and comparable conformity assessment results to mitigate against barrier to consumer health protection and trade facilitation in the region's agricultural products. Failure to address these challenges will continue to place consumers' health at risk and disadvantage West Africa's agricultural trade regionally and internationally.

31. The introduction of digitalization within the conformity assessment processes had been strengthen as a result of the recent changes in the international standards on conformity assessment and the need to mitigate against the impact of the COVID-19 pandemic. In 2017, the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) published a revised version of the standard ISO/IEC 17011:2017 "Conformity assessment: Requirements for accreditation bodies accrediting conformity assessment bodies". The new version of the standard has paved the way for the provision of innovative accreditation services by enabling the remote assessment of CABs." To that end, ABs in Africa (SANAS), Europe (COFRAC or BELAC), and America (ANAB or A2LA) have been assessing CABs in West Africa before the pandemic and have continued their assessments since the pandemic. Many CABs are indeed still accredited by foreign ABs and the assessments were mostly done remotely during the pandemic. However, the experiences regarding the use of digital / virtual tools in West-Africa is limited. Both IAF/ILAC and AFRAC have published guidelines for remote assessments to set the expectations and help prevent poor performances. The quality and cost of internet connectivity became a concern as ABs and CABs move toward digital channels to interact with their customers and stakeholders. The availability of technology that is easy to access and use, robust in terms of data security, including confidentiality, and relevant policies and management systems needs to be improved.

32. Despite many issues related to digitalisation in West Africa, the rate of adoption of digital/virtual tools in West-Africa is increasing.

33. Needless to say, there are a small number of studies related to the accreditation and conformity assessment system in West Africa. Most of the articles are linked to strengthening quality infrastructure in the region, such as the UNIDO approach9 and programme developments from various donors like the Economic Community of West African States (ECOWAS10) West Africa Competitiveness Programme (WACOMP), funded by the European Union11.

34. There are many stakeholders12 involved in the accreditation and conformity assessment system in West Africa and the landscape appears to be complex at first glance. Under the auspices of UNIDO, ECOWAS has adopted a regional quality policy and 12 national quality policies (out of 15). A regional quality infrastructure scheme was established and regional standards were adopted.

35. Because SOAC was not a signatory to the ILAC Arrangement, West African laboratory or inspection body's clients require accreditation by specific ABs. Thus, European mainly French speaking countries but also, other African countries, Canadian and American ABs were providing

[9] https://www.unido.org/sites/default/files/files/2018-08/UNIDO_QI_CASE_FINAL_ONLINE_2.pdf
[10] Established on May 28 1975 via the treaty of Lagos, ECOWAS is a 15-member regional group with a mandate of promoting economic integration in all fields of activity of the constituting countries. https://ecowas.int/?page_id=40
[11] https://wacomp.projects.ecowas.int/wp-content/uploads/2021/05/WACOMP-Newsletter-Q2-2020-ENGLISH.pdf
[12] CABs in West-Africa are currently accredited by other African regions or countries, Americans, Canadians and Europeans ABs.

accreditation in West Africa. For over 20 years, foreign ABs have accredited a number of CABs in the UEMOA region under the ILAC-G21:09/2012 Cross Frontier Accreditation — Principles for Cooperation. Moreover, the Covid-19 pandemic didn't stop foreign ABs accreditation activities in the region. Instead, they shifted to remote auditing and increasingly utilized digital technologies during the COVID-19 pandemic driven by necessity. In fact, the needs to continue to delivery accreditation services that align with international requirements forces foreign ABs to rethink their delivery models, embracing digital technologies and innovative approaches.

36. The widespread recognition of a need for remote assessment during the Covid-19 pandemic was not unique to the foreign ABs. Throughout the pandemic, SOAC personnel were able to schedule remote activities taking into account the level of risk related internet availability and connectivity, using their knowledge of the West African region and their experience from previous remote assessments. They were able to prevent undesired impacts and potential failures using documented remote assessment SOAC procedures and AFRAC, ILAC-IAF guidelines one remote assessments.

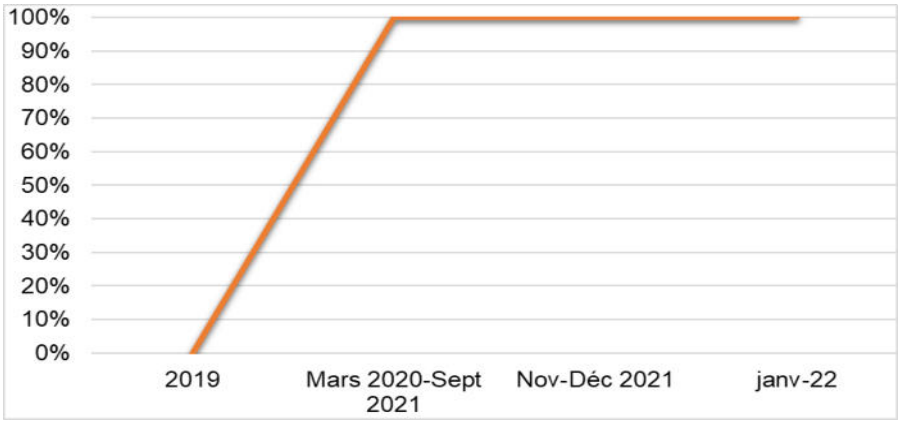
37. As stated in SOAC procedure P18, accreditation services are accessible to all CABs within the UEMOA region, regardless of their size or affiliation. Similarly, access to SOAC services is not dependent on the size of the applicant, the number of applicants already enrolled in the programs, or the affiliations of the organization or its location in the SOAC operational area. Nor does SOAC accreditation depend on the number of conformity assessment bodies already accredited.

38. Since the pandemic, SOAC has operated its accreditation programs using digital and IT tools. Despite challenges, as described in section 4.2, the regional accreditation was successful on meeting its obligations. As evidence, SOAC has conducted remote assessment of ASN which confirmed the interoperability of the two systems. Nevertheless, the remote activities were not optimal and opportunities for improvements were noted as described in section 5 and 6 of this report.

39. While SOAC is well versed in full remote auditing since the pandemic, one of its strengths in term of virtual activities has been the use of digital and IT tools combined with the presence of a local expert/assessor when performing remote assessments. From March 2020 to March 2022, SOAC has carried out 45 of these hybrid assessments. Measuring the number of hybrid assessments carried out since the beginning of the pandemic (March 2020), it is safe to conclude that it became the preferred approach SOAC put forward. Hybrid assessments were performed using a mixture of virtual tools such as Zoom platform, emails, WhatsApp and presence of a local focal point member13. According to SOAC, the value of the use of the hybrid assessments resides in its potential to provide flexibility to achieving its objectives. Therefore, the AB believes that hybrid assessment is the new approach to establish.

[13] https://www.soacwaas.org/assets/medias/local/PFNA_2018.pdf

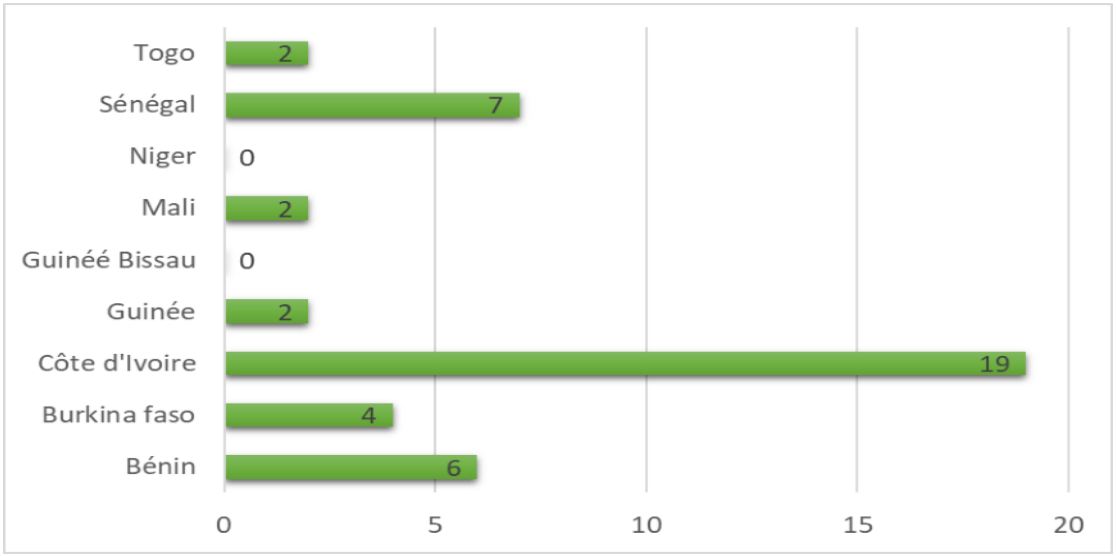
Figure 1. Percentage of remote assessments carried out by SOAC since 2019



Source: SOAC assessments database. March 9, 2022.

40. According to a report issue by the Internal Audit Foundation and AuditBoard, the question "when do we return to normal?" has largely been replaced with "how do we capitalize on the lessons learned over the past months to further empower and support the hybrid workforce moving forward?" For SOAC, the use of the hybrid assessments was a mitigation plan to risks that may arise from its remote activities. These hybrid assessments complement full remote activities.

Figure 2. Number of remote assessments carried out by SOAC per country since the beginning of the Covid-19 pandemic



Source: SOAC assessments database. March 9, 2022.

41. The fact remains that there are differences between UEMOA member states when carrying out assessments (figure 2). The accreditation demand is not the same per country. Nevertheless, all the assessments were done remotely since all the CABs are in the capitals where Internet is available.

42. The survey conducted during a virtual workshop held from Côte d'Ivoire (at SOAC's Headquarters) to present the draft feasibility study to stakeholders showed that the majority of the participants[14] (from different sectors, laboratories, certification bodies for voluntary standards) held strongly positive views of remote techniques in the future.

43. According to the survey, 40% said the quality of the internet connection during their SOAC evaluation was optimal, 60% said the connection was average or acceptable. The respondents' experience of remote techniques during SOAC assessment was indeed very encouraging for the feasibility of the use of digital and IT tools because none of the respondents mentioned a poor quality of the internet connection during their evaluation.

44. The participants were very positive on the use of digitalization and online tools. Given that 100% of the respondents have participated in remote assessment, their responses can be considered based on their own experience. Thus, the availability of existing IT platforms/infrastructure at the CABs already accredited by SOAC to support a potential project involving digitalisation was adequate. The quality of online connection was not a limitation to the feasibility of remote assessment to SOAC accredited CABs during the Covid-19 pandemic. The internet connection bandwidth and the hardware capability of the CABs did not impact SOAC online assessment process to the point of inefficiency. Since these organisations already have access to acceptable quality of internet connection, the focus during reaccreditation should be to enhance current virtual environments of SOAC. An online or a hybrid reaccreditation/re-assessment is duly feasible.

45. The assessment of SOAC's digital platform conducted during the week of February 7th, 2022 shows that the regional AB methods to electronically access CAB's quality management system (QMS) documents during accreditation assessments, lacks efficacy. The UEMOA regional accreditation body has to improve its digital environment to better deal with software and hardware. It is however to be noted that the CABs that need SOAC services are mostly located in national capitals in the main West African cities with higher economic activities. These CABs have the right conditions in place for the application of full remote assessment methods or with a combination of on-site methods. According to the IAF MD 415, the feasibility of remote auditing also depends on the online connection quality. A weak bandwidth or limited hardware capability may slow the process to the point of inefficiency. The audit process may be affected by the speed at which the auditee can access and show evidence by video, or through a tablet or computer. Whenever, inter-operability with each of the 9 countries is challenging, e-mails and/or WhatsApp are used to provide records.

46. SOAC document C04 describes SOAC's requirements for confidentiality and impartiality. Additionally, a variety of follow-up activities were conducted remotely. SOAC's responses to AFRAC evaluation report including corrective actions to the findings raised during the remote activities and online meetings were performed without any risks to the validity of the evaluation. The security and confidentiality of electronic or electronically transmitted information (data in storage, data in transit, and data in use) was not compromised during the remote evaluation and was appropriately managed by both AFRAC and SOAC. In fact, the witness SOAC assessment of three accredited laboratory which is part of AFRAC evaluation activity was also conducted remotely and thus, determined to be feasible.

[14] Participants include all UEMOA member state
[15] mandatory document for the use of ICT for audit/assessment purposes

4.2. Challenges

47. There are various challenges in establishing a regional project that aims at using digital and IT tools to strengthen conformity assessment and accreditation systems in the West African. Regardless of whether accreditation is carried out onsite or remotely, ABs must meet a set of requirements in terms of safety, security to better deliver their services. It is clear that internet connectivity, electricity reliability and IT security in West Africa need to be adequately addressed to deliver confidence and reliable results from remote activities.

48. Challenges of Sharing Confidential Information requires adequate security measures to be taken to protect data. This includes sharing data and keeping them confidential, regardless of format used. During remote activities, data to be processed are communicated daily using emails or other medium. Procedures are discussed with the CAB representee to obtain an agreement.

49. Dealing with unexperienced CABs might raise performance issues related to body language and human connections, reliability, efficiency, interoperability. Trust building is challenging during initial accreditation assessments. In fact, maintaining trust between the assessment team and CAB personnel or getting supporting evidence of very specific operational procedures are challenging. It is often noted that some misunderstandings are likely to arise between the AB and the CAB because of limitations and lack of experience. In-person processes are presumed to be more informative and richer form of communication than virtual interactions as they allow participants to better assess both verbal and non-verbal interactions.

50. The main challenge reported during the general assembly held in Abidjan was related to the sustainability of funding accreditation fees and assessment costs. Accreditation still inaccessible to many CABs within the region due to the application fees. Among other challenges raised during the round table, the lack of affordable calibration provider within the SOAC area was clearly pointed out a barrier to meeting the accreditation requirements. Another pain point that the participants and stakeholders have identified was related to onsite training fees and travel coast to attend the events. Failure to address these challenges will continue to limit access to accreditation and minimize the performance of the CABs.

51. To enable remote assessments both the assessment team and the auditees need to find their mutual interest and willing to cooperate. Building key relationships between assessment team members and the CABs is one of the biggest challenges for SOAC. As stated in the OECD Digital Economy Outlook 2020 Supplement titled Digital Transformation in the Age of Covid-19 – Building Resilience and Bridging Divides, Covid-19 has raised the bar and opened new divides. According to the OECD Outlook, there are persistent skills gaps across demographic groups and countries, with people of higher skill or income levels making better use of the Internet and online activities, and being better able to access knowledge, job opportunities, and health and education services. Addressing the digital gender divide remains an important policy goal, as well: women more frequently experience job stress associated with frequent computer use at work (OECD, 2020d), and skills in high demand in digital intensive sectors are more frequently displayed by men (OECD, 2018).

4.3. Opportunities to use digital and it tools to strengthen conformity assessment and accreditation systems in West Africa.

52. Despite the challenges posed by the Covid-19 pandemic, there are opportunities to use digital and IT tools. The introduction of digitalization within the conformity assessment processes will reduce travel cost and increase affordability of accreditation and certification services.

53. As stated by many of the stakeholders, the utilisation of digital technology within the SOAC accreditation assessment process and training space would ease access to the required expertise irrespective of where they reside and would speed up the process for obtaining accreditation and provide relevant authorities with a transparent mechanism which allows for greater control of time and the approval and acceptance of conformity assessment bodies and the results provide by them.

54. Also, to understand what the CABs need and embrace the project, SOAC would present to applicants how best to deliver remote services to meet those needs and rethink how it executes its operations.

55. Similar experiences were IT tools and digitalization to strengthen conformity assessment processes and systems took place, were reviewed. The review of the African Accreditation Cooperation (AFRAC16) experiences in the use of IT tools and digitalization to strengthen conformity assessment processes and systems was conducted during this feasibility study. A fruitful discussion was held with AFRAC representative on Friday, October 15, 2021. Like SOAC, AFRAC's objective is to provide internationally recognised and accepted accreditation support to industry and to contribute to the protection of health and safety of the public and the protection of the environment. The aim of AFRAC is to facilitate trade and contribute to the improvement of Africa's competitiveness within the global market. AFRAC provides a consistent methodology for the use of ICT that is sufficiently flexible and non-prescriptive to complement or substitute traditional evaluation techniques. Focused on providing internationally recognised and accepted accreditation and building capacity in accreditation cooperation in Africa, AFRAC has issued a document in remote auditing17.

56. Because of the Covid-19 pandemic, SOAC 2021 peer evaluation was carried out remotely by AFRAC using its document in remote auditing. The multinational AFRAC peer evaluation team18 did not express any significant concern to the good conduct of the use of digital and IT tools throughout all the evaluation activities. The use of ICT by AFRAC during the 2021 SOAC evaluation included teleconference meetings (using audio, video and data sharing), evaluation of documents and records (using remote access, recording of information and evidence, pictures, video and audio recordings). The peer evaluation was also carried out using visual/audio access to remote or potentially hazardous locations. The witness assessments were done observing the use of remote assessment techniques in use by the SOAC.

57. SOAC procedure P18 define the requirements for conducting remote assessments and applies to all SOAC accreditation schemes. The use of digital and IT tools to strengthen the delivery, performance and processes of the conformity assessment system and the accreditation system has

[16] AFRAC is a cooperation of accreditation bodies (national and multi-economy)
[17] M004-02 AFRAC Policy and procedure in remote evaluation.
[18] AFRAC peer evaluation team members were from Mauritius, New Zealand, Botswana, South Africa, Morocco, Nigeria, Benin, Egypt and Ivory Coast.

evolved and increased as a result of the Covid 19 pandemic, particularly in light of shifting work practices.

58. An IAF presentation19 on the Top 10 Predictions on Auditing Food Systems in 2030, mentioned that industry 4.020 will demand more data, 5G will deliver more data, and auditing will be more data-driven. The Internet of Things (IoT) with smart factories will collect financial and operational information. From a conformance and compliance perspective, data will drive a lot of automation for audit-related requirements from an organization and its associated parties. The auditor will need to be skilled in data analysis. The skills required would be creative and analytical thinking, strong and effective communication, data mining, data cleaning, and data mapping.

59. These predictions suggest a definite need of technology. In short, the current virtual environments of SOAC and the digital technologies and communications infrastructures of some of the UEMOA member states pose a challenge to the delivery, performance and processes of the conformity assessment system and the accreditation system in West Africa. Upgraded technological capability will be required for SOAC to move toward offering an efficient online services and better face the post pandemic era like other accreditation bodies around the world.

5 CONDITIONS REQUIRED TO MAKE A POTENTIAL REGIONAL PROJECT FEASIBLE

60. It is important to look at beyond the various challenges and opportunities in establishing a regional project that aims at using digital and IT tools to strengthen conformity assessment and accreditation systems in the West African. There is a number of necessary conditions to be considered to make a potential regional project feasible.

5.1 Political support

61. The global outbreak of COVID-19 has accelerated the use of digital technology and changed how organisations operate and deliver services. Both pubic and private sectors in West Africa have undergone a significant transformation over the last two years. The shift to working from home has become a fact in the UEMOA member states. The use of remote meetings is a common practice at all levels, including with Heads of State, Ministers, etc. The pollical support to working remotely has been seen as a response to overcome the challenges posed by the pandemic. For example, meetings are held remotely by videoconference at the level of the ECOWAS and UEMOA commissions. In addition to the governments, educational institutions have advocated online learning; universities, and colleges are rethinking the way they deliver classes. Ongoing commitment to digitalization is growing within the member states.

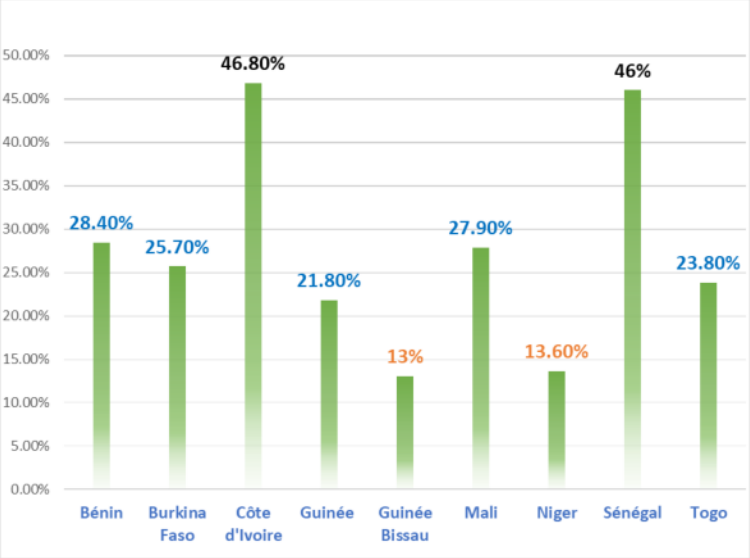
62. In conformity assessment, organisations who traditionally rely in onsite activities understood that obtaining and maintaining accreditation would only be possible remotely. For example, during the pandemic, at SOAC, 90% of the business activities (training and accreditation assessment) were done remotely, including AFRAC peer evaluation. UEMOA member states officials well recognized the need to SOAC to adapt the new realities.

[19] Presented by Colin Christmas, IAF Food Working Group Co-convener
[20] Industry 4.0 is the digital transformation of manufacturing/production and related industries and value creation processes

5.2 Fast and reliable Internet access

63. Interconnectivity between UEMOA member states exist and are reliable but requires more investments. As stated in a second UEMOA report[21] the overall cost of the project to improve and secure international interconnections is estimated at 68 billion FCFA. Clearly SOAC should not be waiting after this project to fully implement it use of digital and IT tools project. As more investments secured, the interconnectivity between UEMOA member states improves and internet penetration rate becomes significant.

Figure 3. Internet penetration rate within the UEMOA zone[22]



64. Senegal and Côte d'Ivoire have a penetration rate of mobile internet close to 50% while Burkina Faso, Niger and Guinea-Bissau stand out for their low penetration rate.

65. Fast and reliable connectivity facilitates interactions between SOAC and CABs. Connectivity has steadily improved in West Africa, over time; mobile broadband subscriptions are significantly increasing. According to comparative summary table of ICT within UEMOA zone, all member states have 4G technology (figure 4). The fourth generation of mobile wireless technology is widely used by SOAC assessors and its accredited CABs. While the new generation 5G is faster and more reliable, the 4G network technology can easily support remote assessments and online training in West Africa. The 4G technology was designed to accommodate a large volume of cellular devices and data-heavy internet activities. The 4G technology was also designed for the IoT and as a result, is reliable during assessment teleconference meetings using audio, video and data sharing such as Zoom and Microsoft Teams. Since 4G is available in all UEMOA member states, the connectivity factor should therefore become somewhat irrelevant for SOAC customers in the medium term, as for now conformity assessment and accreditation activities are mostly located in geographical areas where internet is widely available.

[21] État des lieux de l'infrastructure régionale / identification des liaisons manquantes et secours / capacités aux frontières dans l'espace - UEMOA DP n° 02/2019/DSAF/DAC (rapport final)
[22] https://datareportal.com

Figure 4. Comparative summary table of ICT within UEMOA zone[23]

	Bénin	Burkina Faso	Côte d'Ivoire	Guinée-Bissau	Mali	Niger	Sénégal	Togo
Nombre d'acteurs (2020)								
Opérateurs fixes	1	1	2	0	3	2	3	1
Opérateurs mobiles	2	3	3	2	3	4	3	2
FAI	10	13	3	0	7	3	3	3
Technologies								
2G/3G	✓	✓	✓	✓	✓	✓	✓	✓
4G	✓	✓	✓	✓	✓	✓	✓	✓
FTTx	✓	✓	✓	✗	✓	✗	✓	✓
Taux de pénétration (%) [248]								
Fixe voix	0,29%	0,36%	1,12%	NA	1,09%	0,51%	1,95%	0,57%
Mobile voix	84,1%	96%	139%	NA	112,0%	49,05%	109,4%	81,91%
Internet fixe	0,21%	0,07%	1%	NA	0,46%	0,14%	1,06%	0,42%
Internet mobile	52,83%	30,41%	61,76%	NA	31%	38,24%	69,40%	61,33%
Mobile money[249]	73,3%	45,9%	87,2%	35,4%	31,6%	12,4%	41,2%	45,2%
Taux de couverture [250]								
3G (% de la population)	80%	32%	91%	44%	60%	24%	85%	91%
Indices								
IDI[251]	1,94	1,90	3,14	1,48	2,16	NA	2,66	2,15
Connectivité mobile[252]	39,4	31,3	46,2	25,1	30,8	19,3	41,7	34,7
Cybersécurité[253]	0,485	0,400	0,456	0,055	0,085	0,094	0,305	0,087

5.3 Access to cloud file storage and file sharing

66. Free cloud-based storage services are used by CABs to access and store assessment files. This constitutes an opportunity to proceed with remote assessment or online training, although it has its limitations because storage capacity is limited. To optimise the process SOAC may need in long term to purchase a cloud technology that provides servers, bigger storage capacity, secured networking, remote computing and email services. In short and medium term, both SOAC assessors and customers are well served because of the easy access to cloud-based technology such as Microsoft or Google cloud.

5.4 Availability of a reliable electricity supply

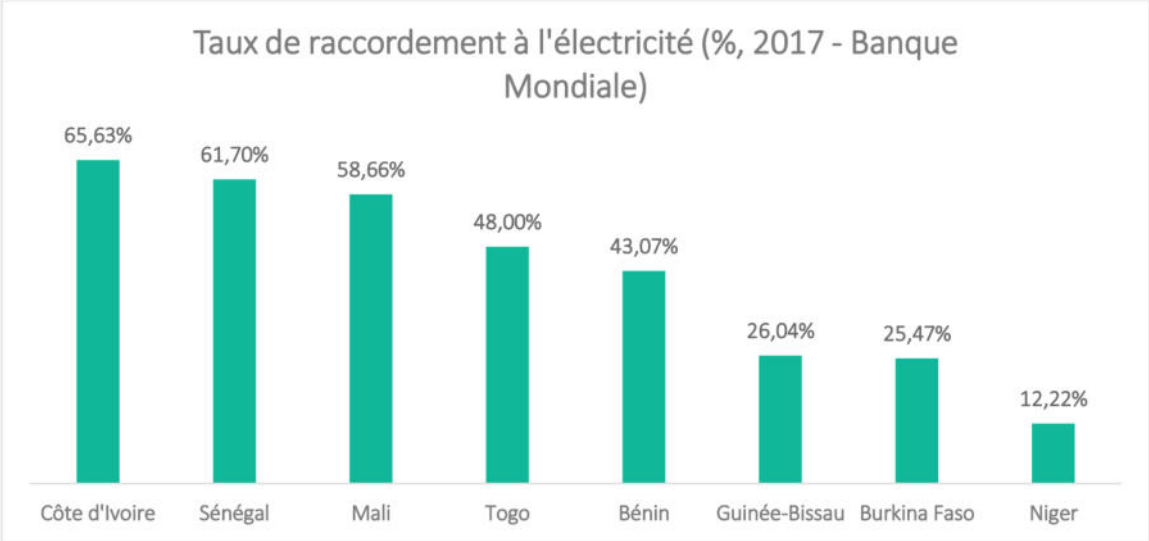
67. A reliable electricity supply is one of the necessary conditions for remote assessing and online training. Low rates of electrification in UEMOA member states are limitations to the use of digital and IT tools in the region. Some of the member states (Niger, Burkina Faso and Guinee-Bissau) have a very low rate of electrification. Fortunately, the most common practice during SOAC assessment is the use of smartphones, laptop computers which also function with chargeable batteries. Also, because

[23] Table is from UEMOA report: Évaluation des usages numériques et politiques nationales en matière d'utilisation de masse du numérique dans l'espace UEMOA. Rapport final - 27 octobre 2020

most of the CABs are located in the urban areas, access to electricity is not a serious obstacle to remote auditing. Although a steady power supply is a challenge to the regional quality and conformity assessment infrastructure, the energy shortages do not seriously jeopardize the effective application of remote audit methods for many CABs.

68. The acquisition of an uninterruptible power supply (UPS) by SOAC (figure 5) to overcome brief power outrage or power surge is a short-term power solution when the input power source fails. The on-battery run-time of SOAC is reliable but only sufficient to protect hardware and mitigate the risk of internet interruption. It is a basic technology and not cost effective. Making it easier for the West-African regional AB may be necessary in long term. Efforts to secure access to electricity are to be aligned with the important goal of ensuring SOAC's operational flexibility and efficiency during the Covid-19 pandemic and post pandemic. Acquiring a bigger UPS system or a generator should be part of the capacity building needs and plans as it will also help the regional AB to continually meet the safety regulations.

Figure 5. Electricity connection rate in UEMOA in 2017[24]



[24] Data are from UEMOA report: Évaluation des usages numériques et politiques nationales en matière d'utilisation de masse du numérique dans l'espace UEMOA. Rapport final - 27 octobre 2020

Figure 6. SOAC current UPS system

5.5 Necessary personal attributes to enable the use of digital technology

69. In August 2021, IAF, ILAC and ISO concluded a joint survey to assess the support of the use of remote techniques in remote audits, assessments and evaluations. According to the joint IAF/ILAC/ISO survey of more than 4000 participants[25], 80% of the respondents agreed that remote procedures give the same confidence as on-site audits, 91.5% felt that a substantial increase in remote techniques will stimulate the use of new processes and 97.5% agreed to some extent that new technologies and alternative techniques should be used. Despite the difference in the number of respondents, these results are in line with the responses obtained in the survey conducted during the workshop held at SOAC HQs and previously mentioned in this report. The global pandemic has clearly ushered the participants positivity on the use of digitalization and online tools.

70. To effectively benefit from the use of digital technology, ABs and CABs need to ensure that their staff have the personal attributes to conduct their operations. Such operations are carried out by qualified personnel who normally have enough experience to demonstrate that they have the personal attributes. Positive and negative feedback are sought after each SOAC assessment to improve teamwork and trust. The ability to communicate clearly, work well with others and exercise impartiality, during assessments for example, also determine the effectiveness of the use of digital technology. Ensuring assessment teams have the required soft skills facilitates the good conduct of the operations and is one of the main drivers to opt for a remote assessment.

[25] https://ilac.org/latest_ilac_news/use-of-remote-techniques-supported-by-iaf-ilac-iso-survey/
ILAC-IAF-ISO_Survey_Report_Aug_2021.pdf
Remote_Survey_Full_Article.pdf

5.6 Confidentiality and security of information

71. Appropriate measures to ensure confidentiality should be considered. Taking into consideration security and confidentiality matters to avoid inappropriate use or handling of information should be assessed to determine the risks involved and implement mitigation plans, as needed. Local and international regulations and requirements are to be taken into consideration. Accordingly, both SOAC (as a signatory to the ILAC Multilateral Recognition Arrangement) and UEMOA member states are aware of the security and confidentiality needs.

72. A key success factor will be to have in each of SOAC Member States a strong network of qualified local experts/assessors in order to carry out hybrid assessments. Conducting hybrid assessments reduce the risk of technological breakdowns or lack of transparency of the conformity assessment body during the assessments.

6 ASSESSMENT OF OPTIONS NEEDED TO ENHANCE SOAC IT SYSTEM

73. In this new world of Covid-19 pandemic and post pandemic, a strategic adoption of digital technology is a must. ABs are taking security measures to protect confidential information of their accredited CABs. Although a remote or hybrid operational model introduces unique challenges, it can also be a valuable benefit to conformity assessment and accreditation systems.

74. Taking into account the lessons learned26 from SOAC experiences regarding digital / virtual training/assessing in West-Africa and in order to pursue post pandemic opportunities, the conformity assessment system and the accreditation system digitalization is recommended. As CABs get more comfortable with the online process, SOAC will take advantage of an enhanced ICT system and more reliable Internet to meet its objectives. In order words, potential regional project based on the use of digital and IT tools to strengthen the delivery, performance and processes of the conformity assessment system and the accreditation system in 9 countries in West Africa, is feasible but requires upgrading SOAC ICT system in order to achieve a better performance.

75. To that end, three options were assessed for further analysis during this phase.

- Option 1: Services delivered remotely at 100%: full built-in system $ 175,000
- Option 2: Services delivered remotely at 100%: using existing platforms like Microsoft $ 70,000/year.
- Option 3: Hybrid services partially onsite and partially remotely: use an upgrade version of SOAC system and capacity building of expertise in each country.

[26] Changing how SOAC operates requires the AB to continually challenge the status quo and cultures, experiment and get comfortable with failure in order to improve, and delivers value to its CABs.

Option 1 Services delivered remotely at 100% : using a full built-in system	**Notes / Comments**
Description of Option	Develop an automate accreditation processes that allows CABs to interact with SOAC and its assessors. Open to more functionalities for SOAC services. Develop a training platform that allows to deliver trainings remotely in each SOAC country.
Option Evaluation Criteria	
Alignment with Desired Business Objectives	Integrate with other SOAC business needs and services such as customer management, assessment planning and follow-us, accounting, human resources and training.
Technical Fit to Target Enterprise Architecture	Based on SOAC experience, the scope and objectives of the overall architecture and the technology architecture are known to SOAC.
Costs (One time cost / purchase)	Consultant to design, build, and implement the platform: 298 days at 50 000 FCFA per day = 14 900 000 FCFA or $ 25,000[27]. Two (2) on-premises servers and expenses including maintenance $ 60,000[28] Equipment (software, applications and hardware (smartphones, laptop computers, desktop computers): $ 90,000. This is based on the interviewed conducted during the assessment of SOAC digital platform. Estimated total of $ 175,000.
Recurrent costs (maintenance or fees per month)	None
Legal / Regulatory Fit	SOAC property
Impact	SOAC will be in position to develop more accreditation and capacity building programs and access more regions within the UEMOA member states
Potential Risks that impact the ability to Deliver Desired Business Outcomes	Limited maintenance program, Potential loss of data, Limited back-up services.
Fit to Project Constraints	If the server is not available because of maintenance, the platform is inaccessible to SOAC assessors and CABs.
Rationale for Recommending further Analysis	Except during regular maintenance, the platform is available 7 days a week. The platform can be further developed as SOAC needs evolve.
Overall Viability	**Long term viability option due to internalisation maintenance skills**

Option 2 Services delivered remotely at 100%: using existing platforms (Microsoft 360 Enterprise)	**Notes / Comments**
Description of Option	Purchase Microsoft 365 Enterprise license for SOAC employees and its contract assessors. Although there are other platforms, SOAC staff has the experience of using Microsoft.
Option Evaluation Criteria	
Alignment with Desired Business Objectives	Allow SOAC to carry out hybrid services to leverage benefits of both remote and onsite activities, some of SOAC employees and assessors to work where and how they want, including a platform where they can meet, chat, call, and collaborate in one place and the others to be onsite.
Technical Fit to Target Enterprise Architecture	Built-in automation, and powerful insights to streamline accreditation business processes, custom apps for other SOAC needs and services. A tried and tested product that works and is used by many clients. Procure and setup immediately. No need for long development process. This should

[27] USD
[28] Based on web search.

	be reflected below. Software is continually being refined, improved, further developed. That's another advantage. All clients / users benefit.
Costs (One time cost / purchase)	$58/user per year. With SOAC employees and its qualified assessors and collaborators, it is estimated to be around $ 70,000/year. This includes 232 persons (separated in groups of 8).
Recurrent costs (maintenance or fees per month)	With SOAC employees and its qualified assessors and collaborators, it is estimated to be around $ 70,000/year.
Legal / Regulatory Fit	SOAC property
Impact	SOAC will be in position to develop more accreditation and capacity building programs and access more regions within the UEMOA member states
Potential Risks that impact the ability to Deliver Desired Business Outcomes	Limited maintenance program, Potential loss of data, Limited back-up services.
Fit to Project Constraints	If the server is not available because of maintenance, the platform is inaccessible to SOAC assessors and CABs.
Rationale for Recommending further Analysis	Except during regular maintenance, the platform is available 7 days a week. The platform can be further developed as SOAC needs evolve.
Overall Viability	**Long term viability option due to internalisation maintenance skills**

Option 3 Hybrid services: use an upgrade version of SOAC Internet & Accelerated Mobile Pages; IT applications system plus capacity building of expertise in each country. "SOAC Platform"	**Notes / Comments**
Description of Option	Use an upgrade version of SOAC Internet & IT applications system plus capacity building of expertise in each country
Option Evaluation Criteria	
Alignment with Desired Business Objectives	Allow part of the SOAC employees and assessors to work where and how they want, including a platform where they can meet, chat, call, and collaborate in one place and have the other part onsite. To leverage benefits of both remote and face-to face methodologies.
Technical Fit to Target Enterprise Architecture	Enhance and integrate with other SOAC business needs and services such as customer management, assessment planning and follow-us, accounting, human resources and training.
Costs (One time cost / purchase)	Total estimate of $ 4, 473; this includes the upgrade of the Internet; it will allow to widely cover the needs to deliver the remote services.:

Services	Suppliers	Subscription	Current package specifications	Current Package Total amount (CFA)	Superior package specifications	Superior package (n+1)
Website						
Web host	LWS	Yearly	150 GO	303 590	250 GO	460 631
IT applications						
Video Conference	ZOOM	Yearly	2 subscriptions / 100 participants / 3 white boards / 5GO cloud storage	193 050	2 subscriptions / 300 participants / unlimited white boards / 5GO cloud storage	256 000
Cloud	ADRIVE	Yearly	500 GO/25 users	113 000	1TB /50 users	225 000
Remote desktop	ANYDESK	Yearly	4 remote offices	344 520	4 remote offices	344 520
Webinars designing and management	SYSTEM IO	Yearly	5000 participants	212 544	5 000 participants	212 544
Internet by optical fiber	ORANGE	Yearly	Internet fibre 200 Mb/s	720 000	Internet fibre 300 Mb/s	1 380 000
Website Host at IT applications yearly costs			**1 890 000 XOF**		**2 879 000 XOF**	
			$ 2, 937		**$ 4, 473**	

Recurrent costs (maintenance or fees per month)	None
Legal / Regulatory Fit	SOAC property
Impact	SOAC will be in position to develop more accreditation and capacity building programs and access more regions within the UEMOA member states
Potential Risks that impact the ability to Deliver Desired Business Outcomes	Limited maintenance program, Potential loss of data, Limited back-up services.
Fit to Project Constraints	If the server is not available because of maintenance, the platform is inaccessible to SOAC assessors and CABs.
Rationale for Recommending further Analysis	Except during regular maintenance, the platform is available 7 days a week. The platform can be further developed as SOAC needs evolve.
Overall Viability	**Long term viability option because it is currently being used by SOAC**

76. Options assessment

- Developing a new software can become very complex, expensive and time consuming. Therefore, option 1 is not retain.
- Attention should be drawn to the possibility that some of the applications used in the web platform and services provided by Microsoft 365 are subject to patent rights. SOAC will be responsible for identifying any or all such patent rights. Details of any patent rights identified during the use of the applications and the services must be managed by SOAC. Monthly fees can become quite costly. Lack of autonomy when using Microsoft 365 is a limitation because of internet reliability and due to its high dependence on internet compare to a web-based platform. Therefore, option 2 is not retain.
- With the current COVID-19 crisis, SOAC sifted to digital mode for the provision of its services, According to SOAC, about 90% of the services are offered remotely. SOAC services are mainly limited to training and accreditation assessments. In order to deliver its services remotely, SOAC currently bears annual costs of approximately $ 2, 937 using the following applications are 4 as follows: ZOOM (for remote exchange platform, ANYDESK (to secure remote work desks), ADRIVE (cloud for data storage) and SYSTEM. IO (as an online training platform). The Internet is ensured via an optical fiber of 200 Mb/s.

  In the framework of the project, SOAC could upgrade most of its computer network applications for a total estimate of $ 4, 473; this includes the upgrade of the Internet; it will allow to widely cover the needs to deliver the remote services.

  Although power outages are rare in Côte d'Ivoire (average power outage time less than 3 hours per month, source Ivorian electricity company), as a preventive measure, SOAC has also invested in an electrical autonomy system based on rechargeable batteries.

  The capacity building approach in each state with a view of having a pool of local experts is a good fit for the hybrid accreditation services. Once trained, the local experts will be mobilized to carry out training and evaluations. The option 3 is retained by SOAC because of all the elements listed above.

7 ENSURING OF POTENTIAL USAGE FROM BENEFICIARY COUNTRIES

77. The opportunities offered by digital technologies pushed West African governments to deploy large scale project, creating the conditions for digital boom to deliver faster services. Among the projects, l'Agence des Services et Systèmes d'information (ASSI) of Benin[29], l'Agence des technologies de l'Information et de la Communication (AGETIC)[30] of Mali, l'Agence Nationale pour la Société de l'information (ANSI)[31] of Niger and Sénégal Numérique[32] are exemples of the gouvernements commitments and initiatives in digital transformation. The national agencies have been in service for many years and have gained solid experience in new technologies. Access to the knowledge, education, and training in new technologies has been facilitated by the creation of these agencies. The UEMOA States will be in a position to make full use of the SOAC platform (Internet & Accelerated Mobile Pages and IT applications system) when developed.

8 FINAL CONCLUSION

78. The ECOWAS Regulation C/REG.21/11/10 on the harmonization of the structural framework and operational rules on plant, animal and food safety provides in Article 17, calls for the establishment of a network of laboratories and a network of training institutions. Article 27 further requires the assistance of accredited laboratories to carry out health risk analysis in the Union. Despite the strong need for accredited conformity assessment service in support of Food Safety, the number of accredited Food Safety conformity assessment bodies, such a testing laboratory, certification bodies and inspection bodies, remains low. On the other hand, the need for a robust and internationally recognised competent conformity assessment system is increasing. It is therefore critical to respond to the lack of a competent, internationally recognised and resilient West African's conformity assessment system to provide robust, reliable and comparable conformity assessment results to mitigate against barrier to consumer health protection and trade facilitation in the region's agricultural products. Failure to address these challenges will continue to place consumers' health at risk and disadvantage West Africa's agricultural trade regionally and internationally. A potential project proposal aiming to enhance the competencies and resilience of the Food Safety conformity assessment system in nine West African economies is needed and is recommended.

79. The Covid 19 crisis has increased the digital initiatives. To meet its mandate and remain competitive SOAC will need to adopt more strategies including digitalisation. As SOAC grows and develops new programs and schemes, more users will connect to the accreditation body's systems over the internet.

80. Internet access and energy power in the beneficiary countries vary. However, because most of the CABs are located in the urban areas, access to electricity is not a serious obstacle to remote auditing and stable internet connection is available in the main cities such as national capitals and in those cities with higher economic activities. Most of the CABs are established in these cities. Therefore, a potential regional project based on using digitalisation and IT tools to strengthen the delivery,

[29] https://assi.bj/
[30] https://agetic.gouv.ml//
[31] https://ansi.ne/
[32] https://senegalnumeriquesa.sn/

performance and processes of the conformity assessment system and the accreditation system in 9 countries in West Africa is feasible and should be considered.

81. Taking into account the level of development of IT within the West African region, SOAC continues to adopt hybrid remote services. The use of an upgrade version of current SOAC platform (Internet & Accelerated Mobile Pages and IT applications system) combined with a capacity building of expertise in each country is highly viable option due to its scalability and flexibility. For beneficiary countries to work with such system they will need a strong network of expertise in training and assessment specifically in the field of food safety. That is why, a capacity building program has to be developed taking advantage of digitalisation that reduces travel costs and Covid-19 pandemic obstacles.

82. The main SPS problem to tackled would be the low number of accredited CABs in West Africa due to accreditation cost and delays in the carrying out conformity assessment activities. SPS authorities are fully aware of the role CABs can play in assisting them carry out their mission. In fact, official SPS authorities increasingly rely on the results of testing, certification and inspection delivered by these CABs. The use of CABs however requires the SPS authorities to ensure that they are competent to perform their tasks and their processes are reliable. Consequently, there is an increasing demand for impartial attestation of the CABs competence. Such attestation is provided by ABs in their role of assessing the technical competence and integrity of the CABs in accordance of applicable standards and regulations and thereby facilitating national and cross-border trade, as pursued by trade authorities and organizations.

83. For decades, West African CABs have been using foreign ABs to prove they have an effective quality management system in place and their competence to carry out their tasks can be trusted. Unfortunately, despite the West African CABs willingness to get recognized, access to the foreign ABs still limited. The number of accredited CABs in the region remains very low due to the high cost (in terms of application fees, the travel expenses and the assessor's travel time) and delays in carrying out conformity assessment activities by foreign ABs. In fact, as of June 2022, there are less than one hundred accredited CABs in UEMOA countries with a population of approximately 120 million. The objective of this STDF technical assistance program would be to help solve the accreditation access limitations and foster the number of accredited CABs in West Africa.

84. To address this problem, SOAC was created in 2018 and was established as the only body authorized to accredit in the UEMOA member states. The presence of SOAC in the region has made it possible to shorten the processing times for accreditation. SOAC has set itself the objective of offering accreditation services at affordable costs while aligning itself with the international standards established by AFRAC, ILAC and IAF.

85. At the same time, the COVID-19 crisis has accelerated the uptake of digitalization around the world. UEMOA member states and private organizations in the West African region have increased their digital capacities in order to ensure, in particular, continuity of service. Because of this new dynamic created by COVID-19 global outbreak, it is more obvious for organization both public and private to justify investments in new technologies.

86. To ensure continuity of service, many organizations have been forced to make the necessary investments in a short space of time and quickly train their staff in this new way of working. For SOAC, as an AB covering at least 8 West African countries, this anticipation at the level of each State greatly facilitates the use and of digital technology and increasingly integrating remote conformity assessment

methodologies into its services. SOAC has also naturally adapted to this new situation because more than 90% of its activities are now carried out using digital remote working tools. In addition to accreditation assessments, digitization is also becoming more popular for holding remote meetings and organizing e-training using videoconferencing platforms.

87. Furthermore, as part of the STDF PPG 665 “Piloting the use of voluntary third-party assurances (vTPAs) in West Africa”, a pilot experiment is currently underway in Mali and Senegal with a view to reducing official controls, especially when companies are certified on the basis of certain private standards. One of the bottlenecks of this approach is the high cost of certifications, specifically the international private ones, for companies in the region, which are generally SMEs or VSEs with limited means.

88. To date, cost related to the accreditation of certification bodies (CBs) fees remain high for organizations in West Africa. To lower the cost and make accreditation assessments more cost effective for food certification, SOAC aims to accredit locally CBs against ISO IEC 17065 standard, national / regional food schemes (such as HACCP) or international private schemes (such as BRCGS, Global Gap, BIO, etc.).

89. With the approach of hybrid services (partially onsite and partially remotely) using an upgrade version of current SOAC infrastructure combined with capacity building of expertise in each country, the expected results for a potential regional project (to be explored and detailed much further in the project proposal) would include:

90. Capacities of Food Safety CABs strengthened through digitisation.

- Based on online trainings, Capacities of CABs strengthened and allowing their accreditation by SOAC, including laboratories, certification bodies for systems, persons and products in the Food Safety sector.

- Number of trainee assessors of Food Safety CAB accreditation trained in each member state and currently being deployed.

- Number of certification bodies partially supported remotely in deploying internally food safety management systems ;

- Number of remote assessments involving assessors remotely trained in Food Safety CABs in the Food Safety sector

91. More capacities for West Africa food companies to respect food safety requirements

- Acceptance of the results of conformity assessment facilitated by the SOAC's signature of the Mutual Recognition Arrangements of AFRAC, ILAC and IAF for Food Safety related areas of application after peer evaluation partially done remotely.

- Schemes in place in the field of Food Safety certification, including HACCP and private certifications (ISO 22000, FSCC 22000 etc.).

92. Enhanced dialogue between relevant stakeholders for compliant agricultural production, including through digitisation

- Digital platform for exchange and sharing of experience between the ECOWAS accreditation system and conformity assessment system and the SPS Competent Authorities.

Develop policies, standards, guidelines and procedures documents

- The public and private sectors are made aware of the benefits of using accredited CAB services, including laboratories and certification bodies to boost agricultural exports.

Appendix 1 – References

No.	Reference Document Name	Location e.g., file number, Web address, etc.	File Volume No. or date
1	Étude UEMOA : Évaluation des usages numériques et politiques nationales en matière d'utilisation de masse du numérique dans l'espace UEMOA	http://www.uemoa.int/sites/default/files/bibliotheque/20200818_-_etude_uemoa_services_numeriques_-_rapport_provisoire_version_finale.pdf	Rapport Final, 27 octobre 2020, page 18 sur 344
2	État des lieux de l'infrastructure régionale / identification des liaisons manquantes et secours / capacités aux frontières dans l'espace	http://www.uemoa.int/sites/default/files/bibliotheque/rapport_final_-_etude_infrastructure_regionale_uemoa_0.pdf	UEMOA DP n° 02/2019/DSAF/DAC (rapport final)
3	Étude des TIC en tant que catalyseur des chaînes de valeurs régionales, identification des besoins de qualité liés aux services TIC	To Be Attached	August 2020
4	Sénégal numérique et croissance inclusive - Une transformation technologique pour plus d'emplois de qualité – Groupe de la Banque Mondiale	https://openknowledge.worldbank.org/handle/10986/36860?locale-attribute=fr	2021

Appendix 2 – List of key persons consulted during the study

No.	Name	Title and Organization	Date
1	Ron Josias,	AFRAC chair	Friday, October 15, 2021
2	Reinaldo B. Figueiredo	ANSI National Accreditation Board (ANAB) Vice President Conformity Assessment Strategy and Chair ISO's Committee on Conformity Assessment (CASCO)	Thursday, November 4, 2021
3	Colin Christmas	IAF Food Working Group Co-convener	Friday, February 18, 2022

	NOM ET PRENOM	ORGANISME	SECTEUR PRIVE	PAYS
1	Raymond ADJAKPA	Chambre de Commerce et d'Industrie du Bénin (CCIB)	X	Bénin
2	Jean KABORE	Société des Fibres Textiles (SOFITEX)	X	Burkina Faso
3	Idrissa KABORE	Chambre de Commerce et d'Industrie du Burkina Faso	X	Burkina Faso
4	Ousséini OUEDRAOGO	Assiation Burkinabé de Management de la Qualité (ABMAQ)	X	Burkina Faso
5	Aka KOUAME Franck	Bureau Normes Audit BNA)	X	Côte d'Ivoire
6	Wilfried KOUAME	Bureau Normes Audit BNA)	X	Côte d'Ivoire
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13	Aboubacry BARO	Association Sénégalaire de Normalisation (ASN)	X	Sénégal

14	Papa Sam GUEYE	Fondation CERES LOCUSTOX	X	Sénégal
15	Aimé de Dieu Tchinguili	Conseil National Patronat	X	Togo
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		Deli B. AZODA	DPQN	Côte d'Ivoire

[33] College A includes national accredited bodies, or bodies that may be accredited, or their grouping
[34] College B includes national business trade associations or representative structures of buyers using or which may use the services of College A members
[35] College C includes representatives of the structures defending the public interest.

Appendix 3 – Glossary

Term	Definition[36]
Accreditation	Third-party attestation related to a conformity assessment body conveying formal demonstration of its competence to carry out specific conformity assessment tasks
Accreditation Body	authoritative body that performs accreditation
Certification	Third-party attestation related to products, processes, systems or persons
Conformity Assessment Body	Body that performs conformity assessment activities, excluding accreditation
Peer Assessment / Evaluation	Assessment of a body against specified requirements by representatives of other bodies in, or candidates for, an agreement group
Conformity Assessment Body	Body that performs conformity assessment activities, excluding accreditation

Acronym	Name in Full
AB	Accreditation Body (ies)
AFRAC	African Accreditation Cooperation
CAB	Conformity Assessment Body (ies)
ECOWAS	Economic Community of West African States
IAF	International Accreditation Forum
IEC	International Electrotechnical Commission
ILAC	International Laboratory Accreditation Cooperation
ISO	International Organization for Standardization
SOAC	West Africa Accreditation System
SPS	Sanitary and phytosanitary
STDF	The Standards and Trade Development Facility
UEMOA	Union Economique et Monétaire Ouest Africaine
vTPA	voluntary third-party assurance
WHO	World Health Organization

[36] From ISO/IEC 17000:2020(en)

Appendix 4 – Survey report

Enquete_Evaluation
à distance SOAC- SO

Enquete_Evaluation
à distance SOAC- SO

Revision History

Version Number	Description	Date Modified	Author
Draft V.01	Use of Digital and IT Tools Feasibility Study Report	2022-07-08	Rassoulou Diallo

Authority Signatures

Prepared by: _____
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