

## IN THIS ISSUE

- 1 ARA WEEK 2020 – Towards Cleaner Fuels for Cleaner Air
- 2 ARA Storage and Distribution Forum
- 3 The African Union discusses the ARA’s “AFRI Fuel Specifications and Clean Air Roadmap”
- 4 3<sup>rd</sup> Jet fuel workshop, 19<sup>th</sup> November, Accra
- 5 2<sup>nd</sup> Butane Workshop, 5<sup>th</sup>–7<sup>th</sup> August, Dakar
- 5 Debriefing meeting for the Inter-laboratory round robin tests 2018
- 6 Debriefing meeting for the 2018 HSE Audits
- 7 Joint meeting of the RHSEQ and Specification workgroups
- 8 Joint meeting of the Storage & Distribution and Regulations workgroups
- 8 ARA New Members
- 8 Upcoming Events



## NEWSLETTER

Issue No.28 | December 2019

African Refiners & Distributors Association  
جمعية المكررين و المسوقين الأفارقة  
Association des Raffineurs & Distributeurs Africains

# TOWARDS CLEANER FUELS FOR CLEANER AIR

**A**RA WEEK in March next year returns to the major challenge facing the African downstream petroleum sector – how to introduce cleaner fuels across the continent to achieve cleaner air and to reap the health and economic benefits that accrue.

## *Towards Cleaner Fuels for Cleaner Air*

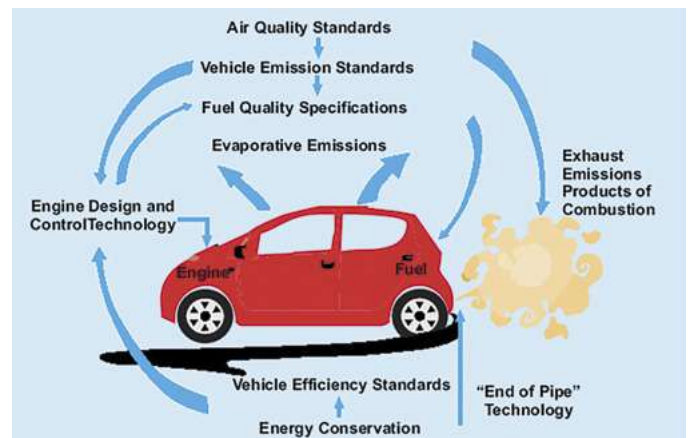
All African downstream stakeholders, including refiners, technology providers, traders, storage companies, bankers, regulators, distribution and marketing companies as well as vehicle manufacturers and environmental specialists will meet to discuss progress on the **ARA’s AFRI CLEAN FUELS ROAD MAP**.

In the last year there has been significant progress in the political support for the AFRI Road Map and its promotion of joint programmes on both fuel quality evolution and vehicle emissions controls. This support recently received significant backing from the African Union who are proposing launch a policy development process to endorse the AFRI programme and its plan for both vehicles and fuels controls, alongside regional, and even pan-African, harmonisation policies.

The impact of global climate change policies and the speed of transition towards a lower carbon African economy on all sectors of the African downstream will also be discussed. Energy transition is expected to lead to change in refining, storage and distribution, port operations, and supply chain processes. Human capital, corporate responsibility, safety, security, and environmental policies will also have to reflect the changing priorities of governments.

**Call for Papers: if you wish to propose a presentation on any of the following topics, please contact [info@afrra.org](mailto:info@afrra.org) before January 17<sup>th</sup>, 2020: clean fuels and vehicles; strengthening**

# 2020 CAPE TOWN, SOUTH AFRICA ARA WEEK 23–27 MARCH



Source SAPIA

**investment for the African downstream in refining, storage and distribution, port operations, supply chain efficiency, human capital, safety, security and the environment; climate change considerations and the impact of energy transition to a low carbon world.**

All delegates will get the opportunity to share solutions to the many challenges facing the future of the African downstream oil industry. Previous conferences have seen more than 600 key players of the North and Sub-Saharan African and International downstream oil industry come together in one place in a unique inter-active environment. This year, even greater participation is expected from representatives from African refineries, government ministries, banks, regulators, importers, distributors, traders, storage companies, marketing companies and refinery equipment & technology suppliers.

**To learn more about how to attend ARA WEEK 2020 and information on ARA membership and sponsorship opportunities contact the ARA on [info@afrra.org](mailto:info@afrra.org).**

# ARA STORAGE AND DISTRIBUTION FORUM

21–22 NOVEMBER 2019, ACCRA, GHANA



**I**n 2015, whilst retaining the logo ARA, the Association changed its name to the African Refiners and Distributors Association to reflect the increased involvement of marketing and distribution companies with the work of the ARA. The ARA also established an annual “Forum” dedicated to the storage and distribution sector (shipping, importing, storage, transport, marketing and regulation). The meeting was designated a Forum so as to encourage debate and sharing of global best practice down the African supply chain in an inter-active environment.



130 people from 23 countries attended the 6<sup>th</sup> annual Forum held in the Holiday Inn hotel in Accra, Ghana. The event was hosted by the National Petroleum Authority represented by Managing Director Alhassan Tampuli. After a warm introduction, Mr. Ali Nuhu Abeka, Ghana’s Acting Director of Downstream Petroleum, on behalf of Ghana’s Energy Minister, gave delegates an insightful overview of Ghana’s momentous journey to becoming an oil and gas producer. He also highlighted the challenges facing Ghana’s three oil refineries, and the potential need for an extension to the quality waivers under which they are currently operating.

The theme of this year’s Forum was “Towards a sustainable, responsible supply chain” and all the topics addressed by the speakers were focussed on this theme.



After opening remarks by the ARA president Anibor Kragha, Hippolyte Bassolé presented a report on behalf of the ARA Storage and Distribution Workgroup and focussed on environmental and product quality control as well as the development of African

storage infrastructure. Esther Anku, speaking on behalf of the NPA, Ghana’s petroleum regulator, then presented the challenges facing regulators in Africa including the need to ensure a fair playing field for all operators along the supply chain to boost investor confidence. After a brief review by Zoubida Benmouffouk, ARA, of the recommendations of the jet fuel handling and operations workshop that preceded the Forum, Gary Still of CITAC Africa addressed the challenges and opportunities of the rapidly growing LPG market in Africa. His presentation was complemented by presentations by NPA Ghana, and NSPC, Nigeria on the topics of cylinder recirculation and the growth in the Nigerian market.

The challenges of truck transport of petroleum products was a recurring theme of the conference with presentations by AMEND, Woodfield and Borderless who addressed the issues of road safety, police and customs checks, and changing some of the cultural impediments to the free, safe movement and storage of product around Africa – with a focus on practical solutions to improving work processes and improving efficiency.

Technology designed to maintain storage tank integrity was presented by Parlym, Soudotec, HMT and Total with interesting presentations about the new software designed to track and control all aspects of storage and transport operations.

ARA consultant Tony Ogbuigwe updated participants on the study completed by CITAC Africa on how to improve product quality in the 15 ECOWAS countries. He explained that the presentation to ECOWAS Ministers had been delayed and discussed the difficulties faced by countries that have found themselves unable to follow the lead taken by Ghana to move import specifications to 50ppm gasoil and gasoline.

On day 2, Rob Cox of IPIECA presented the outlook for the implementation of the new IMO regulation requiring the use of 0.50% sulphur maximum bunker fuels for international shipping from 1<sup>st</sup> January 2020. He explained that there will be both major opportunities and challenges for African bunker suppliers (including the refineries) and their clients, and that the transition period will be particularly challenging as the revised logistic and operational processes are put in place, both on-shore and on-ship. He stressed that there would need to be a significant improvement in communication between buyer and seller on the source and blending of such fuels in the future to avoid risk of ship failure at sea due to noncompatible fuels.

A panel discussion involving regulators from Nigeria, Ghana, Tanzania and Malawi grappled with the many challenges faced by regulators, including the design and implementation of market-reflective price structures. The discussion was one of the most interesting of the Forum. The question of why many governments do not create independent regulators was expressed and a call for the wider use of this approach was suggested by all delegates.

The final session of the conference looked at the future of the African downstream with a presentation by IPIECA, the global oil environmental group, and CITAC on how, and when, some of the

longer-term trends in the global market will impact the African downstream. With the climate change debate influencing rapidly the energy transition policies of the developed world, the question was asked whether this will impact Africa, and when? This is a debate set to continue at ARA WEEK 2020 being held in Cape Town, South Africa next year, beginning on March 23<sup>rd</sup>.

The ARA President, Mr. Anibor Kragha, closed the Forum by thanking all attendees for an excellent, and open debate, which led to a challenging agenda for the Association in the future as it works towards promoting a sustainable, responsible African petroleum downstream supply chain.



## THE AFRICAN UNION DISCUSSES THE ARA'S "AFRI FUEL SPECIFICATIONS AND CLEAN AIR ROADMAP"



**The President and Executive Secretary of ARA participated in a two-day Workshop hosted by the African Union Commission on 10–11 December 2019 at the AU Headquarters in Addis Ababa. Present at the Workshop were 19 representatives of AU stakeholders (Member States, Regional Economic Communities and NGOs), the ARA and supporting institutions.**

The purpose of the workshop was to discuss a draft of the study on the socio-economic benefits of the adoption of ARA's "AFRI Fuel Specifications and Clean Air Roadmap" by the African Union. The Roadmap aims to improve fuel quality and, in conjunction with stricter vehicle emissions regulation, achieve clean air in Africa. The Director of Infrastructure and Energy at the AUC, Mr. Cheikh Bedda, highlighted the importance of a continental approach to develop the right fuel specifications and vehicle standards with an ambitious, yet achievable roadmap.

Harmonisation of fuel specifications could boost Intra-African trade and is an essential key to sustainable economic development throughout the continent. An additional benefit is that common

specifications discourage illegal activity such as smuggling and tampering with product quality, as indicated in the study. As population grows and urbanisation increases, there is an immediate need to develop policies regulating vehicle exhaust emissions and fuel specifications across the continent. However, as emphasised during the workshop, it is important to consider issues regarding the cost of investment required by African refiners to secure the support of the member states. Furthermore, challenges outlined by stakeholders included vehicular control mechanisms, timeframe for quality adjustments for refineries, and cost-effective methods for production and/or importation of fuel with higher specifications.

The feedback obtained from the workshop discussions will assist the ARA in finalising the report in support of the adoption of the AFRI specifications roadmap by the AU. The ARA is convinced that a pan African approach with the backing of the AU would be invaluable in promoting a coordinated and structured implementation of the AFRI roadmap to achieving clean air. The final draft of the report will be produced in early 2020 and presented to the AU for validation and adoption.

# 3<sup>RD</sup> JET FUEL WORKSHOP HELD 19<sup>TH</sup> NOVEMBER 2019 IN ACCRA, GHANA

**The 3<sup>rd</sup> Jet fuel workshop drew together almost 60 participants from 13 countries: Ghana, Côte d'Ivoire, Nigeria, Senegal, Mauritania, Burkina Faso, Sierra Leone, Malawi, France, UK, Tanzania, Togo, the Congo and Algeria.**

Participants were mainly African refiners who produce local jet fuel, and operators involved in the supply-chain, such as storage companies, transporters and end-users.

A dozen topics were covered, grouped into four broad subject areas:

- Organisation and handling of jet fuel: experience, constraints and opportunities in the storage and transport sector, measures taken to ensure efficiency and effectiveness, whilst supplying airlines with product that meets quality regulations, and ensures competitiveness
- A presentation of required standards by the Energy Institute (EI) and the JIG to illustrate the importance of proper procedures and the potential impact in case of non-compliance; it was an opportunity to remind all of the rigour required to apply the procedures and to follow up on all updates
- Return of experience on incidents and lessons to be drawn from to ensure product quality and integrity, safety and reliable operations.
- Quality assurance and the instrumentation needed to ensure absolute rigour in monitoring product throughout the jet fuel supply chain.

As well as attracting a significantly higher number of participants, this 3<sup>rd</sup> Jet fuel workshop also stimulated much discussion and exchanges between participants.

During the round table that followed the meeting, the following observations were noted:

- To continue to implement recommendations made by the previous meetings. The ARA will help the operators concerned to approach decision centres
- The ARA will give priority to jet fuel in round robin inter-laboratory testing.
- The ARA will make every effort to ensure there are as many participating laboratories as possible
- The ARA will start discussions with EI and JIG on how to share international standards with its members (means, intellectual property?).
- To explore how to broaden the profile of participants of this workshop to include more regulatory bodies and airlines (adapting the agenda, dedicated day,...)

- Encourage members to actively contribute to the work of the EI and JIG: Rigorous standards such as those drawn up by JIG help to improve fuel quality
- With the help of JIG, the ARA will organise training on the EI 1530 standard

Adopting international standards (and in particular EI 1530) linked to a system of inspection is necessary and indispensable.

As a reminder, the sector is bound by numerous international standards that govern operations linked to the various parts of the supply chain:

- JIG 1 : Aviation fuel quality control for into plane fuelling services
- JIG 2 : Aviation fuel quality control for airport depots and hydrants
- JIG 4 : Guidelines for aviation fuel quality control for smaller airports
- ATA 103 : Standard for jet fuel quality control at airports

In addition, many international standards governing products or installations are managed by other organisations such as ASTM, EI/API, EI/HM.

These standards safeguard and protect operators, enabling them to :

- To operate their airports (JIG 1/2)
- Require supply chain operators to adhere to a standard (IE/ JIG 1530)
- Undertake supply chain risk assessment (JIG HSSE MS)

The sheer number of stakeholders involved throughout the chain requires the availability of laboratories accredited for these measures; developing and upgrading them is an effective way of ensuring the monitoring and traceability of jet fuel. It was emphasised that jet fuel is subjected to numerous types of analysis throughout the supply chain:

- Refinery Quality Certificate (RCQ) essentially a certificate of origin for jet fuel
- Certificate of Analysis (CoA) – for mixed batches and re-batched product
- Recertification Testing (RT) – when there is a possibility of cross-contamination, to check the quality
- Release Certificate (RC) – operational document (density, aspect)

Finally, the experts stressed the importance of meeting these standards and setting up rigorous inspection systems to safeguard this complex supply chain:



- An audit should be carried out by highly qualified professionals at least once a year.
- This audit should include not only operations management and follow-up of recommendations but also ensure that they are implemented.

These systems exist and contribute to the reliability and security of the jet fuel supply chain.

The experts also stressed the obligation of airport authorities to ensure that operators follow the appropriate standards to assure aviation safety.

It is essential to increase the participation of regulators and decision-makers in symposia to raise awareness and seek their support for implementation, as well as to raise awareness amongst local / regional actors and public authorities, to improve the situation.

## 2<sup>ND</sup> BUTANE WORKSHOP HELD ON 5<sup>TH</sup>–7<sup>TH</sup> AUGUST 2019 IN DAKAR



**I**n the course of this meeting 50 participants from 10 countries took part in highly fruitful discussions, resulting in the following recommendations:

- The ARA should write to regional and state entities to make them aware of the various recommendations arising from workshops, particularly those on butane;
- Draw up a document summarising best practice in transportation of gas cylinders and make stakeholders aware of them;
- Educate customs authorities and to promote increased monitoring of the movement of gas cylinders from one country to another;
- Share return of experience in the construction and operation of storage and distribution depots;
- Privilege assistance and training between stakeholders in the LPG supply chain;
- Educate distributors on new potential supply opportunities

arising from natural gas discoveries;

- Encourage states to support the construction of strategic storage to sustain and secure market supply;
- The ARA to develop and to promote a policy in respect of bottle & LPG subsidies, adequate transportation allowance for each geographical area, and support for regional depots and secondary filling stations, with a view to reducing the use of biomass for domestic use...).

The participants requested that the ARA moved forward with these recommendations so as to help local and regional decision-makers develop further LPG growth.

Butane is an increasingly high-demand consumer product with a complex value chain and the participants requested that another workshop be held next year, and that the implementation of the action plan be monitored .

## DEBRIEFING MEETING FOR THE INTER-LABORATORY ROUND ROBIN TESTS 2018, HELD ON 11<sup>TH</sup> JULY 2019 IN OUAGADOUGOU

**T**he meeting, chaired by Mr Daouda KEBE, leader of the RHSEQ Work Group, presented the results and conclusions from the latest round of round robin tests. A total of 28 people from 10 companies based in 6 different countries participated in the meeting.

Despite the postponed deadline for results, only 8 of the 16 laboratories who initially signed up to the campaign submitted their results. Consequently, only 182 samples were analysed instead 352; as indicated in previous campaigns, the main constraints are transportation and customs formalities. Participants stressed that is desirable to include as many members as possible in the inter-laboratory testing campaign.

SONARA ran the testing campaign, preparing and supplying samples free of charge.

The following conclusions arose from the 2018/19 test campaign:

- Testing started in July 2018. 16 laboratories out of 30 were retained to take part in the testing campaign. Registration forms were received from 53.3% of recipients;
- The cost of the 2018 campaign was just over €20,000. This figure, borne by the ARA, includes only the costs linked to administration, IATA packaging, inter-airport transportation costs, and “Sample Management” charges from SGS-Cameroon. All costs linked to the preparation of samples were borne by SONARA-Cameroon;

- In view of the difficulties encountered by some participants to get samples released by customs authorities in their respective countries, the deadline for returning results could not be respected. All results were finally received in January 2019, when the process of collating results and statistical analysis started. The final report on the round robin testing campaign was published in April 2019;

Analysis of laboratory performance was based on the following criteria (ISO 5725 & ISO 13528) :

- Cochran's test: intra-laboratory variance (repeatability);
- Grubbs' test: Variation of a given result from the inter-laboratory average beyond the critical threshold (outlier extreme value);
- Analytical exclusion test: expression of result not in accordance with the test standard used;

- Z-score: laboratory bias expressed as the number of standard deviations from the mean;
- CADI, Corrected Index of implementation Difficulty of a method.

Detailed quantitative and qualitative analysis of the results are available to participants on demand to [info@afra.org](mailto:info@afra.org).



## DEBRIEFING MEETING FOR THE 2018 HSE AUDITS HELD ON 12<sup>TH</sup> JULY 2019 IN OUAGADOUGOU

**T**his meeting was chaired by Mr Daouda KEBE, head of the RHSEQ Work Group, and reviewed the HSE cross-Audits carried out whose objectives were as follows:

The objective of these audits was as follows:

- Evaluate aspects of prevention and risk management for managers, implementation of operations, personnel management, maintenance and management of HSE activities;
- Determine, by visiting different zones, how rules and procedures are applied in practice;
- Exchange good practice in HSE management between the respective sites;
- Identify strong points and areas for improvement;

They were carried out compared to a HSE reference standard currently being validated at ARA level, covering the following five (5) areas:

- Area 1 Leadership and management;
- Area 2 HSE;
- Area 3 Operations;
- Area 4 Maintenance;
- Area 5 Human Resources;

In addition to the detailed findings and recommendations, participants noted the constraint related to the problem of occupational health and safety management for subcontractors; A Company Safety Improvement Manual (MASE) would allow for a preventive approach and for the strict minima necessary for the establishment of a health safety and environment management risk prevention system that covers the five areas to be observed.

The Company Safety Improvement Manual (MASE) :

- To define the minima required for the implementation of a health, safety and environment management risk

prevention system covering : the commitment of the company management, professional competence and qualification of staff, preparation and organization of work, measurement of results, gap analysis and corrective actions, monitoring and permanent commitment;

- To reflect the desire to formalise a preventative approach for subcontractors;
- To define the requirements to be implemented in the five areas constituting this risk prevention system;

Workplace health and safety management is recognised to be a problem for all subcontractors. All companies using the system are convinced that MASE can bring a solution to this problem in the short, medium and long term.

The conclusions were presented as a series of recommendations:

- The ARA to validate the HSEQ frame of reference and to make it available to all Members;
- For Members to implement the action plan in all the audited sites;
- Each site audited to report to ARA the status of the implementation of recommendations;
- Get Social Security support and funding in the respective countries involved for a better implementation of MASE;
- Add training for HSEQ auditors to the programme for 2020 and organise a seminar on Health and Safety at work; Setup and feed an ARA database;
- Set up and feed an ARA HSEQ database;
- Schedule audits for the designated sites.



# JOINT MEETING OF THE RHSEQ AND SPECIFICATION WORK GROUPS, HELD ON 20<sup>TH</sup> SEPTEMBER 2019 IN LUSAKA

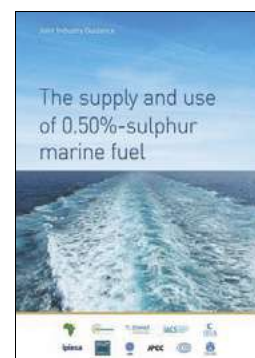
**T**his meeting, whose aim was to discuss progress on activities common to both the RHSEQ and Specifications Work Groups, also included presentations from ACFA and ACELA, NPA and AXENS, and was attended by 23 participants from 13 companies spread over 9 countries.

Mr Evans Mauta, Specification Work Group leader, gave a summary of the action plan and recommendations arising from the meeting held in March 2019 in Cape Town where he topics discussed were:

- Developments on AFRI-6 : discussion concentrated on the key parameters for both diesel and gasoline. The full content of the discussion is available on demand from [info@afrra.org](mailto:info@afrra.org), but will be openly discussed at ARA WEEK 2020, following the ARA/AU discussions in December 2019
- The additives guidance policy document, in English, is almost finished and a final version will be drawn up and is planned to be presented to the Executive Committee in January for approval. A French version should be made available.
- Regional harmonisation: Regions are making progress in identifying harmonised specifications as a means of moving towards a cleaner, more efficient, environment through cleaner fuels and vehicle exhaust emission controls. This is demonstrated by the fact that there have been regional meetings in some parts of Africa, focusing on cleaner fuels, vehicles and the environment. As an example, UNEP, in collaboration with APINA (Air Pollution Information Network for Africa) and SADC (Southern African Development Community) organised a workshop to discuss regional harmonisation of low sulphur fuels and vehicle emissions in the region, which was held on 6<sup>th</sup> and 7<sup>th</sup> June 2019 in Boksburg on the outskirts of Johannesburg, South Africa. There was also meeting held in June in Cairo, Egypt on the theme of cleaner fuels and the environment, and ECOWAS also has launched a similar project.
- A report was presented on the actions undertaken by the ARA as well as the meeting on the regional harmonisation of fuels, held with the AU in Addis-Ababa in May 2019. During this meeting there was also discussion of progress on the ARA/AU study on the effects of fuel quality in Africa (see page 3).



- MARPOL : As has been regularly reported to ARA Members, the International Maritime Organisation's MARPOL regulations will apply a global cap of 0.5% sulphur for marine fuels from 1st January 2020. This change will have an impact on all product values as refiners adjust to the new demand, and the logistic and economic demands of supplying compliant fuels with widening sulphur differentials and tightening compliance regimes. Product stability and compatibility of compliant fuels are major concerns, and it was mentioned that the MARPOL effect would increase relative prices for low sulphur diesel across Africa. The ARA has been part of a joint shipping/oil industry initiative, requested by the IMO to produce Joint Industry Guidelines for the supply and use of compliant bunker fuel. This has now been published and is available, free, through the IPIECA website (<http://www.ipieca.org/resources/good-practice/joint-industry-guidance-on-the-supply-and-use-of-050-sulphur-marine-fuel/>).



In the absence of Mr Daouda Kebe, Mrs Zoubida Benmouffok chaired the meeting of the RHSEQ (Refining, Health, Safety, Environment and Quality) Work Group.

There was a presentation on the debriefing meeting for the round-robin inter-laboratory tests, and also on the debriefing meeting on safety audits. For further information, see pages 5–6.

A presentation by Hendrik Fisher of ACFA and ACELA, focused on information about the inclusion of specifications for oxygenates in the standards. After a lively discussion, it was decided that the footnote to the AFRI specification table should be revised to send the appropriate message to all stakeholders, including regulators, on the risk that poor storage and logistic infrastructure could lead to potential contamination of water supplies. This means that the question of the potential impact of oxygenates on the African supply chain will have to be covered without prejudicing the benefits of the incorporation of these molecules into the final product with proper logistic controls and regulatory enforcement.

A presentation, by AXENS, demonstrated how to improve the performance of refinery units without the need for investment (catalyst optimisation, operating conditions, digital solutions...) by using remote assisted data monitoring.

Finally, NPA Ghana gave a presentation on national standards for petroleum products in Ghana, the level of conformity between imports and local production, the challenges of clean fuel supply and the way forward .

# JOINT MEETING OF THE STORAGE & DISTRIBUTION AND REGULATIONS WORK GROUPS, HELD ON 20<sup>TH</sup> NOVEMBER 2019 IN ACCRA

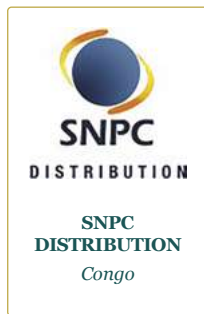
**T**his meeting, whose aim was to discuss progress on activities and challenges common to both the Storage & Distribution and Regulations Work Groups, was attended by more than 40 participants from 12 companies spread over 9 countries.

Mrs Alpha Welbeck from the National Petroleum Authority (NPA Ghana) and Mrs Alinafe Mkavea from the Malawi Energy Regulatory Authority (MERA) gave presentations to the Regulations Work Group. This was followed by a general discussion on the different approaches of regulated and unregulated pricing of petroleum products in the supply chain, led by Mrs Ester Anku from the NPA.



## NEW MEMBERS

**T**he ARA is delighted to announce that **ARSE** (Niger), **MERA** (Malawi) and **SNPC Distribution** (Congo) have become Members of the ARA.



## UPCOMING EVENTS

### # WORK GROUP MEETINGS

**21 March 2020**  
**Specifications, Refining & HSEQ, Regulation and Storage & Distribution Meeting**  
*Cape Town, South Africa*

### # MEETINGS


**23 January 2020**  
**Executive Committee**  
*Geneva, Switzerland*

**22 March 2020**  
**Executive Committee**  
*Cape Town, South Africa*

### # ARA WEEK

**23 to 27 March 2020**  
*Cape Town, South Africa*



 **Registered Office:** ARA, 1200 Geneva, Switzerland  
**Operational Headquarters – Abidjan:** Lot 70 Rue des Cannas – Ilot 6 B Danga Sud – Cocody Danga – Abidjan – PO BOX: 08 BP 2565 ABIDJAN 08 – Cote d'Ivoire

VISIT [WWW.AFRRR.ORG/EN/EVENTS](http://WWW.AFRRR.ORG/EN/EVENTS) FOR MORE DETAILS