Appendix to item 14 Report to the 42ND General Assembly FIG Working Week 2019, Hanoi, Vietnam

Africa FIG Regional Development Network (ARN) Report of Activities 2018

1. Overview and Purpose

This is the Chair's report, during the last year of the term 2015- 18, on the workshop activity of the Africa FIG Regional Network (ARN), in 2018.

The key purpose of ARN is to enable the surveying profession in Sub Saharan Africa to deal with social responsibility in terms of contributing to achieving the UN Sustainable Development Goals (SGDs). In this regard, the role of the surveyors as change agents engaging with the politicians is important.

The Africa Network through workshop activities will consider and present new and creative tools and other means to revitalise and strengthen Land professional members within Sub Saharan Africa. The focus will be led by FIG Member Associations to build the capacity of the surveying association and individual surveyors to act as agents of positive change and encourage the process of development and growth for the benefit of Africa and its people.

This is the final year of this ARN term, the next 2019- 2022 we are so pleased to welcome to hand over the leadership to the newly elected chair, Jennifer Whittal (UCT) and Peter Newmarch (SAGI) who we are sure will continue to strive to optimise and continue the network's deliberations in Africa.

Key workshop activities undertaken in 2018

2. Cooperation

Central to the activities of the ARN is the cooperation and collaboration with a range of stakeholders, including FIG Member Association, the Young Surveyors Network and Corporate members.

This year (2018) we cooperated specifically with **ESRI-Southern Africa** to hold our annual ARN capacity development workshop their support both financially and with cutting edge content enabled a highly successful workshop at the Tlotlo Hotel and conference Centre in Gaborone, Botswana.

3. 2018 Seminar organisation

Every year, ARN partners with an African FIG member to host the ARN workshop activities. In 2018 the opportunity arose to cooperate with Botswana Institute of Geomatics (BIG).

The Networks terms of reference allowed for 3 workshops throughout the period 2015-2018, and it is with great and sincere thanks to **President Jakoba Kgopolelo** of the Botswana Institute of Geomatics who proposed and led on this additional ARN gathering.

The BIG conference "Geo-spatial Technology Impacts: Shifting the Paradigm IN Africa" was held in Gaborone Tlotlo Conference Centre, Botswana 17-19th October 2018. It innovatively was based on a 3 day template providing 2 days of morning roundtables, and 2 afternoons of participatory workshops.

Importantly the conference was preceded by the 1st African Young Surveyors meeting, that sought to deliberate on their own administrative issues; but also crucially a one day workshop titled: "Fitting Africa's Needs: The Young Surveyors in a Smart World" The full report can be seen here [Link TO YSN REPORT]

Welcomed by **President Jakoba Kgopolelo**, the ARN conference high profile opening included the delivery of key notes and welcome speeches from **Mr Tshepo Mophuting the Deputy Permanent Secretary from the Ministry of Land Management, Water and Sanitation services, w**ith Dr D Dumashie providing an overview of FIG and highlighting the importance of our Members work in Smart Cities [Link to ddd presentation]

The ARN workshop brought together a record 100 land professionals drawn from Botswana land professionals and also a range of professionals from the FIG family from across the continent including a particularly large contingent from Zimbabwe (great to see you all!), as well as attendees from West and Southern Africa.

The conference focus on Smart Cities in the context of SDG11 was coordinated by BIG President, Jakoba Kgopolelo, Lopang Maphale and Olebogeng Molefhi. The afternoon participatory workshops were designed by Vice President Diane Dumashie who facilitated the training workshop assisted by Carsten Bjornsson (ESRI Southern Africa); Importantly ARN collaborated with the Africa Young Surveyors, supported on this occasion by Kwabena Asiama, Lore Kelvin Sereetsi, Jakoba Kgopolelo and significantly although not able to attend, Sam Kingsley.

Finally, **Emma and Lone**, staff of BIG ensured the workshop progressed smoothly, and who were indispensably on logistical arrangements prior and during the workshop.

4. 2018 Seminar deliberations

The workshop focus concentrated on the theme Smart Cities, and the role of the African Geomatics Professions within it. Specifically, the impacts of the ever changing geospatial technologies and how they can be utilised to best contribute to the challenges and opportunities of the Sustainable Development Goals. It appealed to those wishing to have an understanding of the emerging global trend in Smart cities and how this interfaces with land governance and our role.

The tone was set in the opening morning's key notes, in particular the **Deputy Permanent Secretary** highlighted the important role of the private sector working with government, emphasising the government's ambition to continue to engage; but with demands comes certain responsibilities – notably, expectations must be clearly considered by all parties.

Ultimately we know that as land professionals there is a need to shift our own paradigm of skills and working; we understand the need to act to ensure our relevance in the fast changing technological world. The framework to achieve the deliberations used interactive panel discussions that stimulated and set the conference scene, complimented by some remarkable presentations, and followed by participatory workshop, we explored the need to shift-understood our context- thought how we engage- and importantly how we may deliver geospatial technologies.

The conference was coordinated by the masters of ceremonies, **Lopang Maphale**. In her opening key note presentation, **Diane Dumashie** posed two questions that became the focus of the afternoon deliberations. As **President Jakoba Kgopolelo** reminded us, this is a Working- workshop, with lively inputs needed (and given) by the participants.

In the context of SDG11 - Smart cities and Sustainability, the highlights from the ARN 2 day deliberations follows:

On workshop Day 1 - In the context of governments:

The conference unfolded with a dynamic plenary session on the role of African government in advancing Geospatial Technologies that are fit for purpose. Our panellists: **Peter Newmarch, Abednico Maphuru, Carsten Bjornsson,** and **Chris Williams-Wynn** provided a platform for lively debate including thoughts around:

- Recognising the need to engage with politicians, but given that their political tenure/ time horizon is relatively short; there is a need to engage with the civil servants,
- Noting that around the world, there are increasing declarations from cities that they are to become 'smart'; we need to understanding and clarify what Smart means, it requires clear definition if the public and private sectors are to address the arising urbanisation issues
- If Smart cities in our Africa context means: a 'way of enabling modernisation and natural development' we need to proactively work toward this agenda scuh as outlined in the Smart Africa Strategic Vision.

Working in response to question one, "As a profession do we do enough to be part of this [Smart city] reality?"

Working in groups this question was unpacked, 'Agenda for Actions' were devised, with further work using rapid assessments, followed by presentations and rapid critique within the market place in order to form the basis of work in the second day.

On workshop Day 2 - In the context of Smart Cities

With enthusiasm and momentum created from the previous day, the conference went straight into progressing our deliberations, with an opening plenary focusing on shifting the paradigm to develop African Smart Cities and Communities. The panellist included **Diane Dumashie, Jakoba Kgopolelo, Maje-Maje** and **Muhammad Mansur Kabir**. They provided thought leadership in what it means to develop and plan smart cities. The subsequent Q& A discussion concluded:

- It is clear that an African model is needed, and importantly the conference considered that there is momentum across the continet for this to evolve by involving multiple stakeholders drawn from civic society, government and the private sector.
- Importantly this evolution considered for the first time, the *interconnectivity of the City; with Smart Villages.*

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• The opportunity is for our profession to be the voice of geospatial technologies; but can our Member Associations truly lead the way?

To address the second question "What is the shift required in our profession?

The afternoon participatory workshop started with **Carsten Bjornsson (ESRI Southern Africa**) providing a detailed presentation designed to excite, prompt and engage our thoughts. **Carsten** provided a detailed insight into the importance of geospatial technologies with the impactful range on offer. True to the workshop theme, GIS underpins city planning in all aspects: Data gathering, data analysis, Data design involving and bringing community along at every step.

We discovered important pointers including ESRI's Africa Geo portal, SMART Africa cities blue print and Open Street Mapping, **Kevin (Botswana)** and **Willy Frank Sob (Cameroon)** provided an over view of this initiative, spearheaded across the continent by Willy; but led in Botswana by Kevin- they explained an amazing application of this tool to the full range of the SDG's (with the exception of SDG 14- watch this space).

Armed with this thought provoking knowledge, in their groups participants designed 'rapid' infographics to illustrate what shift is required in our profession as it relates to City themes such as transportation (intelligent road networks, connected cars and public transport), public utilities (smart electricity, water and gas distribution), education, health and social care, emergency services, and public safety.

During the plenary presentations, these were overviewed by **Carsten Bjornsson** (ESRI), noting that the groups had successfully:

- Understood the multiplicity of smart city planning,
- Clear beginnings to focus on where our professional relevance truly lies in various aspects of geospatial technologies, and
- And, certainly grasped the application of geospatial technologies- that importantly we own in our professional discipline

The workshop outcome: Engaging and participation is an important design feature of the ARN workshops, accordingly our deliberation steered us to the question, "*Are we being smart enough, about being smart?*

Our deliberations suggested that we did gain confidence, that our skill set is in evidence and, that there is also still much to do, including:

- Clear messaging and articulating our skills,
- Keep our skills relevant with continuous professional development,
- Being 'brave' to go into new areas, with the right professional development, and to be adaptive and agile.

Above all,

• Identify what could the role of our respective Member Associations be. Can they strategies to engage?

The workshop outcome is to **challenge** each of our participating Member Associations:

• To draft an engagement strategy over the up coming months,

- To be presented at the next ARN meeting, to share lessons learnt and ideas within our network
- Noting that we as Individual professionals, it is our support within our own respective Associations is apramount to progress this further.

BIG organsied a further day tour to the **Department of Surveys and Mapping** (Ministry of of Land Management, Water and Sanitation services) kindly hosted by **Abednico Maphuru, Deputy Director**. The department staff generously gave their time to show the group, the Botswana modern project, LAPCAS (Improvement of Land Administration, Procedures, Capacity and Systems in Botswana) to see the department structure and processes, the cadastral information systems and the land information system plot and Plan module. It was rounded of by a lovely ceremony of appreciation from the Deputy Director to FIG. On behalf of all, Vice President Diane Dumashie gave her sincere thanks to the Department.

In addition, BIG ensured rest and relaxation and organised a further tour to wind down at the **Mololodi Nature Reserve** where they hosted a special traditional braai and a fantastic sunset game drive to view giraffe, zebra, deer, roe buck and a tortoise!

5. Workshop Closing remarks

This was the last workshop that Diane Dumashie chaired, her closing remarks are transcribed:

"The network is about equipping Land professionals to better contribute to society, to do this requires professionals to understand, adapt and embrace the future. Within the SDG's and having ethics underpinning everything that Land professionals do this workshop has considered the opportunity land professionals could make.

"I am so pleased to have shared with you the deliberations around this topic. I am so pleased to see your enthusiasm and demonstrative will to grasp this subject, and I hope you will all continue to step up to the challenge. For our profession will need to be proactive in this continually evolving geospatial technological world.

My sincere thanks to, **President Jakoba Kgopolelo** of the **Botswana Institute of Geomatics**, his team, **Olebogeng, Lopang, Emma** and **Lone** and those other behind the scenes with whom we have not met.

And, it is with great pleasure to welcome and hand over to **Jennifer Whittal** as our new ARN chair; and I look forward to continue to be involved as a participant so active in the Africa region. It has been a wonderful to make new friends, meet existing friends and make new ones.

Dr Diane Dumashie FRICS FIG Vice President Chair Africa FIG **Regional Development Network 2015-18**