

EXCLUSIVELY PREPARED FOR WGIC MEMBERS

# POLICY WATCH

October 2019 | Monthly Edition | Issue 7

A newsletter that highlights policies, plans, programs and progress in the global geospatial community.

*In focus this month are:* ►



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## Foreword

The October issue of Policy Watch largely focuses on two thematic areas – data privacy and security (Bahrain, Nigeria, and USA), and drone policies and regulations (Belgium, Denmark, France, and USA (Kansas, Oklahoma, and Virginia)).

The interest in personal privacy protection continues to grow globally with more jurisdictions, like Bahrain and Nigeria developing legislation and/or regulations to address the issue. The WGIC Policy Committee, chaired by Arnout Desmet (TomTom) with Members from Oracle (Jim Steiner), Riegl (Jim Van Rens) and Spatial Vision (Zaffar Mohamed-Ghouse) has undertaken an effort to survey major markets around the world and their respective personal privacy protection environments. In these surveys, the European General Data Protection Regulation (GDPR) is used as a baseline for comparison, and in this issue of Policy Watch, we see that Nigeria has done the same thing with its Nigeria Data Protection Regulation (NDPR), including penalties for infractions.



From 2018 to 2019, there has also been significant growth in policies pertaining to drones, UAVs, and their operation. While many countries have taken different approaches to establish these policies and/or regulations, there appear to be some commonalities among the features included in many of the regulations. For example, promotion of new technology; ensuring safety of driver and others in surrounding areas, licensing; registration; restricted areas; and line of sight are among these common features.

To ensure the growth of investment in UAVs, and accelerate the growth of related technologies, many countries are also initiating UAV-based innovation clusters.

These clusters provide locations, subsidies, investments, and many other perks to companies that choose to operate their businesses in these areas. Sponsors, budgets, aims, and specific details for each of the following clusters are included in this issue – Belgium, Denmark, France, and three States in the U.S. – Kansas, Oklahoma, and Virginia. Interestingly, these last few State examples continue the trend of downscaling these efforts to smaller geographic areas.

Please join me in reviewing the advancements described herein.

A handwritten signature in blue ink that reads "Barbara J. Ryan". The signature is written in a cursive, flowing style.

Barbara J. Ryan

## SPACE

## Nigeria – National Space Agency Gets New Leadership

The central space agency for research and development in Nigeria, the National Space Research and Development Agency (NASRDA), has appointed Halilu Ahmad as their new acting Director-General.



Source: africanews.space.com

An expert in Geosciences and Geomatics, Halilu Ahmad is also part of the Nigerian Delegation to United Nations Committee on Peaceful Use of Outer Space (UN-COPUOS), the Group on Earth Observations (GEO), and several other large geospatial organizations.

The appointment has been made to help the country achieve its vision to develop and apply space science and technology for all socio-economic development.



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**DATA  
PRIVACY**

## Bahrain - Data Protection Law Rolled Out

**O**n the 1st of August 2019, Bahrain rolled out its Personal Data Protection Law. Under this law, customers and consumers have the right to both share and withhold personal information from companies whose services they use. In this regard, any data that needs to be collected, processed, used, and/or distributed requires the consent of the data owner.

This new regulation is currently in draft form and still open for comment. Although the law has been launched, there has been no official announcement regarding the formation and establishment of a Personal Data Protection Authority to oversee the Law's implementation.

This, however, does not impact the actual implementation of the Law, as it has been launched nationally as a royal decree. This law includes all those living and working in Bahrain, local businesses, and also people who do not reside there but have their data processed from Manama, Bahrain.

Non-compliance with data privacy has been a growing concern for the country, and thus, harsh fines have been imposed. "The law stipulates severe penalties, including criminal liabilities for non-compliance, with up to one year in prison and a fine of between BD1,000 and BD20,000."



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## Nigeria – Nigeria Data Protection Regulation Launched

**N**igeria's National Information Technology Development Agency (NITDA) has recently issued the Nigeria Data Protection Regulation. This policy, while containing some different features, has been modeled on the European Union's General Data Protection Regulation (GDPR). An important distinction from GDPR is the rights allocated to the data subjects, i.e., the consumers.

- In this regard, the data subjects (consumers) can: object to the dispensation of personal data for marketing purposes;
- access personal data (and have personal data relocated to another data controller where feasible);
- attain information about the processing of personal data;
- have their personal data deleted (where specific criteria are met);
- have their personal data corrected;
- restrict the processing of personal data (where specific criteria are met);
- withdraw consent to the processing of personal data; and
- complain to the NITDA or another relevant regulator.

Similarly, the Regulation also consists of Penalties that can be imposed on data users in case of breach of policy. These penalties are as follows:

- For data controllers "dealing with more than 10,000 data subjects," a fine of 2% of the annual gross revenue of the preceding year or 10 million Naira, whichever is greater; or
- For data controllers, "dealing with less than 10,000 data subjects," a fine of 1% or 2 million Naira, whichever is greater.

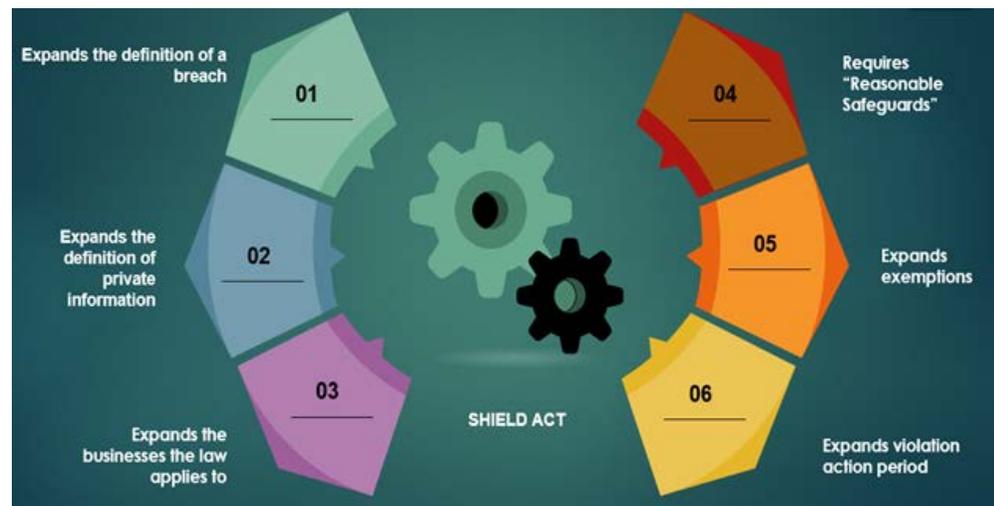
As one of the larger economies in Africa, local, national, and international business are now required to implement data privacy procedures, resulting in the NDPR and GDPR taking similar steps to ensure data privacy.

**DATA  
PRIVACY**

## USA – NYC Launches SHIELD Act

**O**n the 30th of July, New York City (NYC) signed into law its Stop Hacks and Improve Electronic Data Security (SHIELD) Act. This new Act updates the NYC approach to Data Privacy.

This update includes the following:



Phases that should be adopted by companies, depending on their current status, to ensure alliance with the Act are:

- deleting private information after it is no longer needed;
- designating for the security program a person, or persons;
- frequently testing and monitoring the effectiveness of data controls, systems, and procedures;
- training employees in the security program; and
- assessing risks in network and software design.



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**DRONES**

## Drone Policies and Economy

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**T**his past year (2018-2019) has seen massive growth in the investment of Unmanned Aerial Vehicles (UAVs) or Drones, resulting in a speedy evolution of the policies that govern UAVs.

Understanding international drone legislation is crucial in the current economy to determine which countries will be the most open to the use of delivery drones, and what precedent is set for late-acting countries to adopt their own legislation.

Each country has developed a different approach to forming necessary regulations. Most regulations, however, contain the following similar features:

- Promotion of new technology;
- Ensuring safety of driver and others in surrounding areas;
- Licensing;
- Registration;
- Restricted Areas; and
- Line of Sight

To ensure the growth of investment in UAVs and further the growth of technology at an even more accelerated rate, many countries have initiated UAV-based innovation clusters.

These clusters provide locations, subsidies, investments, and many other perks to companies that choose to operate their businesses in these areas.

Selected clusters are listed below:

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## EUKA in Belgium

**Year Launched – 2013**

**Agencies- EUKA**

**Cluster Vision/Aims:**

EUKA is the Flemish drone cluster that brings the drone industry and end-users together to create a business platform through targeted partnerships with various federations, knowledge institutions, and governments. EUKA works according to the 'triple helix' model and aims to create a hotbed for innovative, drone-related ideas in Flanders. Through events, learning networks, seminars, and creative sessions, EUKA facilitates the sharing of knowledge and experience necessary to provide the new drone economy with the opportunities it needs to grow. Received Flemish Innovative Business Networks (IBN) recognition as a drone cluster organization (2017), previous to which it was an innovation centre under the same name.



**Mission:**

To cater to drone market needs, including:

- Legislation, safety, privacy, licenses;
- Guidance for drone suppliers and end-users;
- Co-creation and idea to market;
- Matchmaking; and
- International cooperation.

**Members:**

- End-users: construction, surveillance, agriculture, transport, logistics, mapping, media;
- Drone industry: hardware, software, services, integrators; and
- Partners: industry federations, knowledge institutions, and government.

**Stakeholders-** European Aviation Safety Agency (EASA), UVS International (UVSI), the Global Unmanned Aircraft Systems Traffic Management Association (GUTMA) and others.

**DRONES****Unmanned Aerial Systems Cluster in Denmark****Year Launched – 2012****Agencies-** Danish Civil Aviation Administration, Member of UVS International a European Non-Profit Organisation.**Cluster Vision/Aims:**

“Combining the efforts of a vibrant testing environment with a strong UAS ecosystem in the international league, we want to accelerate the drone innovation and use hereof – with the aim of creating Denmark’s fastest-growing market within 5 years as well as bringing drones and people together as trusted friends. Part of our vision is that Denmark should aim to be a first-mover country for enhancing people’s senses through groundbreaking drone technology – in favor of citizens and society.”

**Key Details:**

To cater to drone market needs, including:

- Legislation, safety, privacy, licenses;
- Guidance for drone suppliers and end-users;
- Co-creation and idea to market;
- Matchmaking; and
- International cooperation.

**Members:**

- End-users: construction, surveillance, agriculture, transport, logistics, mapping, media;
- Drone industry: hardware, software, services, integrators; and
- Partners: industry federations, knowledge institutions, and government.

**Stakeholders-** European Aviation Safety Agency (EASA), UVS International (UVSI), the Global Unmanned Aircraft Systems Traffic Management Association (GUTMA) and others.

## DRONES

- An international Test Center with Beyond Visual Line of Sight(BVLOS) testing capabilities;
- Cluster Facilities:
  - Sharing and taking part in projects;
  - Knowledge sharing between research institutions, companies and private and public user organizations;
  - B2B matchmaking;
  - Working together with other clusters;
  - Making relevant networking opportunities available by hosting theme-conferences;
  - Marketing the Danish drone industry at international conferences; and
  - Sharing industry news and exciting projects.
- The Danish national industry cluster for drones includes 150 members (manufacturers, operators, universities and public authorities);
- Companies located at the Business Park:
  - Integra Aerial Services;
  - Scandinavian Avionics;
  - Sky Level;
  - Lorenz Technology;
  - European Aircraft Sales;
  - Kapetair;
  - Makker; and
  - QuadSATAn.
- International Test Center with BVLOS testing capabilities;
- September of 2016 the Danish Government launched the first-ever national strategy for drones, a strategy which UAS Denmark proposed in their road map 2015 – 2017;
- **New Project- innovation on wings-** The project is divided into three tracks. Market Development, Technology Development, and Clarification and Networking. With the three tracks, the project is all about enterprise innovation - from idea to test and testing - and from technology to business development; and
- Testing started with Boeing in 2011, before the official year of founding in 2012.
- **Progress to date:**
  - The creation of "The Danish Drone forum."
  - Rapid growth in UAS operators - With the establishment of

## DRONES

UAS Denmark (November of 2012) The Danish Public Transport Authority had only approved 15 UAS operators, today that number is approaching 250. Furthermore, many of the newest members of UAS Denmark are businesses providing operator services such as the inspection of buildings, media projects as well as the use of photogrammetric services used for surveys and creating 3D models of buildings and terrains.

- Support from the Danish Innovation Fund
  - Innovation Fund Denmark has as of December 2015 included 16 million for UAS projects, in which most of the companies participating are members of UAS Denmark (DTU Space, Aalborg University, Sky-Watch, Reseiwe). The projects include developing a maritime drone as well as producing a drone that will fly indoors.
- Funding from the Danish Research Reserve
  - Securing better framework conditions for the Industry also includes the work to allocate more funds for research and projects. Funding of 10 million DKK was secured from The Danish Research Reserve in 2015.
- The launch of a national strategy for drones.

**Budget** – 26 million DKK OR 3.96 million USD (2015).

**Members** - 150 national and international members comprising manufacturers, operators, universities and public authorities.

**DRONES****Remotely Piloted Aircraft Systems in France (AETOS)**

**Year Launched** – 2010

**Agencies-** Supported by THALES and the Regional Council, Innovation Development Agency of Nouvelle-Aquitaine.

**Cluster Vision/Aims:**

Develop and promote regional skills, and make New Aquitaine the national leader in drones and drone systems;

Facilitate access to the national market and export for Aquitaine industrialists, thanks to a cluster dynamic (coordination of actions, global offer and centralized contact for customers of sets and subassemblies); and

Bring together collaborative Research & Development projects.

**Budget** – 1.387 million Euros (2017) (5 projects funded in 2017 for a total amount of € 535,000) or the Drone City (3 projects funded in 2017 for a total amount of € 752,000).

**Members:** 100 national and international members comprising manufacturers, operators, universities and public authorities.



In Nouvelle- Aquitaine (southwest France)

**DRONES****Unmanned Aerial Systems Cluster Initiative of Oklahoma and Kansas, USA**

**Year Launched** – 2015 (Formulation began in 2014).

**Agency /Promoter:**

- **U.S. Small Business Administration** – Founded on July 30, 1953, the U.S. Small Business Administration delivers loans, loan guarantees, contracts, counseling sessions and other forms of assistance to small businesses. It launched the Development Capital Networks in 1997; and
- **Development Capital Networks (DCN)** - Launched in 1997 to provide specialized products, services, management, and training to help build innovation economies at the community level.

- **Mission:**

The UAS Cluster Initiative will contribute to the accomplishment of the strategic goals of Oklahoma and Kansas by:

- Providing practical training in technology commercialization to UAS entrepreneurs;
  - Attracting angel capital, venture capital and private equity to UAS entrepreneurs;
  - Making some of the world's best UAS technologies available to UAS entrepreneurs;
  - Accelerating the planning and launch of UAS startups;
  - Promoting regional research parks and testing facilities for UAS;
  - Enabling established companies to connect with leading technologies and emerging startups; and
  - Enabling UAS industry cluster participants to share best practices with other cluster managers and make good use of federal investments.
- **Strategic Goals:**
  - UAS Business Plan Competition;
  - Comprehensive Multi-institution Curriculum Guide;
  - Attracting the National Angel Investor Network;



In Nouvelle- Aquitaine (southwest France)

## DRONES

- Introducing Angel Investors to UAS Entrepreneurs;
- Attracting the Global Venture Capital Industry;
- Introducing Venture Investors to UAS Entrepreneurs;
- Attracting Technology from Federal Labs;
- Attracting Technology from Universities;
- UAS Technology Showcase;
- Mentoring and Acceleration Service;
- Training for Manufacturers in Methods of Open Innovation;
- Networking Events Support;
- National Forum on Cluster Strategies and Federal Resources;
- Create a Website of Regional Research Parks and Testing Facilities;
- Provide Oklahoma AAS Council with Guidance;
- Provide Oklahoma Aeronautics Commission with Guidance; and
- Leverage SBIR (<https://www.sbir.gov/about/about-sbir>) -Small business innovation research.

### Key Details:

- Serving manufacturers, investors, and entrepreneurs throughout the 77 counties of Oklahoma and 105 counties of Kansas;
- Under Governor Fallin's leadership, the Unmanned Aerial Systems (UAS) Council was created in 2011 in Oklahoma;
- The Kansas counties are home to many aerospace firms, and South Kansas is an Investing in Manufacturing Communities Partnership (IMCP) initiative. Led by the U.S. Department of Commerce;
- The UAS Cluster Initiative will be serving manufacturers, investors and entrepreneurs in the Choctaw Promise Zone (inside Oklahoma, Native American land). The goals of the Promise Zone (Federal Program) include attracting private investment, improving affordable housing availability, improving educational opportunities, reducing serious and violent crimes, and assisting local and tribal leaders in navigating federal programs and cutting through red tape;
- Annual forums.

**Proposed Budget** – USD \$500,000, awarded to Development Capital Networks (DCN), which serves as manager for UASCI, by the US Small Business Administration (US SBA) (2015).

**Stakeholders** – Lead Stakeholder: Vince Howie - Aerospace & Defense Director, Oklahoma Department of Commerce.

The Oklahoma Air & Spaceport has the only FAA-approved space flight corridor in the National Airspace System not within restricted airspace or Military Operating Area. It is one of 10 in the U.S. with an FAA Launched Site Operator License.

## Emerging Drone Industry Cluster Initiative in Virginia, USA

**Year Launched** – 2016 (3-year program).

**Agency** – Appalachian Regional Commission (ARC) and Aurora Flight Sciences.

### Cluster Vision/Aims/Goals:

- Students and professionals can learn about sensor operations and the data the drones collect;
- Besides training drone workers, the award will allow Aurora Flight Services to perform work on a significant contract with the National Oceanic and Atmospheric Administration (NOAA). Aurora's Centaur aircraft will be taking gravity measurements for the NOAA's GRAV-D project; and
- Focus on other UAV applications like inspecting utility poles, cellphone towers and other infrastructure, which may include mines.



**Budget** – USD \$3.1 million (2016) (Appalachian Regional Commission's (ARC) \$2.2 million Aurora Flight Sciences provide \$880,000) and award of USD \$15 million (This award to Wise's Industrial Development Authority as part of the second round of POWER initiative grants, which total USD \$28 million and will support 42 economic and workforce development projects in 13 States. POWER involves ten federal agencies that help areas affected by job losses in coal mining, coal power plant operations, and coal-related supply-chain industries.)

**Stakeholders-** Appalachian Regional Commission (ARC), Aurora Flight Services.

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### Clusters for UAVs:

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<http://www.aetos-aquitaine.fr/>

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<http://www.aetos-aquitaine.fr/p1-2-10-reglementation.html>

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<https://www.uasdenmark.dk/politik/nationalt-fokus/national-strategi>

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<https://www.uasdenmark.dk/uas-denmark-international-test-center-and-drone-cluster>

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<https://www.uascluster.com/>

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World Geospatial Industry Council