



## Regulation and Operations meeting #3 UAS Coordination Technical Working Group

09 Dec. 2020

### Tour de table

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Opening remarks by Olivier welcoming everyone to third session of the Regs and Ops group

Introduction on the agenda of the day:

*Olivier:* this sessions focus will be more on the operation workstream rather than the regulation; representatives from the regulatory of the Civil Aviation in Malawi, as well as some drone project implementing partner will present today to see if they can assist, support, and provide technical assistance to the government with the implementation of drone delivery program in in Malawi (Village Ridge as well as UNICEF have been involved in supporting the Civil Aviation and the Minister of Health since the very beginning). The presentation will feature a documented (toolkit) that the Government of the Ministry of Health and led by the regulatory stakeholder have developed in collaboration with many partners in country.

*Aim of the presentation:* have an internal discussion on whether the document can be generalized and adapted to the participants different operation countries, and how? The base of discussion will be the document/toolkit, where this group can develop what it still needed to really advance the operation of drone cargo.

*Presenting:* Charles (secretary of the National Drone Steering committee)

Background to the toolkit: it is the work of The National Remote Piloted Aircraft Technical Working Group from Malawi. This is a grouping of various key stakeholders at national level and is chaired by Civil Aviation and we have a mix of representatives in there from various government departments (Health, Civil Aviation itself, environment, Academia, private sector drone companies, local drug companies and others).

The idea of the technical Working Group was to facilitate coordination of an RPA development in the country. The RPA tool kit or handbook collects information on:

- Guidance on the operation of drones: the regulations in terms of what are the requirements for one to operate a drone, what type of drone and what type of location, also with transporting, what type of products and so on:
  - o Summary of what various players in the country have learnt over time to work as a source document where anyone coming in would be able to find the information, they need in order for them to have a successful operation and find a lot of operational and

administrative requirements. Example: one critical part of the Malawi drone ecosystem is that it has the drone testing corridor, this allows untested operators to do to safely test their drones there and before Civil Aviation can authorize them to fly. In the toolkit and before flying a drone in populated areas, you will be able to find information in terms of what do you need to get the authorization to go into the testing corridor? Who should you contact and so on?

- And then the bigger chunk of it is also some guidance which is Section 3 (administrative and operational requirements). This is essentially just looking at the administrative requirements it would take in order to fly a drone in the testing corridor or outside the testing corridor (approvals needed, processes, requirements from the Revenue Authority... etc)
- There is more than one organization or institution providing the authorization, so It would be helpful to just list those and include the contact information.
- The next section is looking at essentially how to engage stakeholders from the national level down to community level. Most drone operators may be private companies or entrepreneurs, do not have the experience in terms of how to work with government and community structures and so this section summarizes the stakeholders at the various levels of the country.
- The operation checklist that drone operators are required to have.
- The common issues that various operators have experienced in countries to try to give newcomers a heads up in terms of some of the challenges that they would face in country and the measurements they can take to avoid them. One case in point apart from the Civil Aviation and maybe and Minister of Health is the is the role of the Telecommunications Regulator Authority. This were not in the original list of stakeholders, but after having discussions and issues arising from the radio frequency interference, we discovered that we needed to bring them on board.
- Supplementary information; when operating in country, there are templates in the toolkit/document that others have used, for example for emergency standard operating procedures, one could look at that and adapt it for their own use.
- List of cause of various appendices, including contact list; for example, if one want to reach out to National Science Research Commission, which are the contact people and so on

#### Discussion:

##### *Feedback on the toolkit by users:*

Tautvydas (from UNICEF who has been in Malawi for about a year now and has been directly involved with it's the development of this document): I think from the structure point of there is not much to add. Regular RPA tool kit helped us consolidate all the knowledge for majority of the knowledge that was collected throughout two years and really helped accelerate the use of drones in in Malawi so that we could start mainstreaming or streamlining some of the processes. There are places where the toolkit could be improved, It could go beyond the operations and tap more into the regulatory environment.

*Zuheb:* I think this is a fantastic step in the direction of formalizing our operations. Some of the key things that I think that we still need to focus on is around this interaction and engagement formalized between the operators and the agencies that are procuring and servicing these

operations, and then the agencies that are with the government regulating and monitoring, and to whom we are providing these services. This means that naturally it's not a coherent and congruent system, which means that there are some weak links in the chain, so just some things to consider as we as we go forward.

### *Questions*

*Harrison:* I think the value that you've really demonstrated here has been the comprehensive engagement and leadership of from a variety of stakeholders both within Malawi and externally. And it really was something we leaned on at the World Economic Forum when we put together our toolkits heavily with this experience, so we really appreciate that. The more that we can get this toolkit highlighted externally the more helpful and useful it would be. How does the RPA counsel sort of allow for greater risk in the Sky in order to sort of offset the greater risk to the Community? How do you make that argument?

*Tautvydas:* what we did is because in our DCA, the Department of Civil Aviation has this guideline. For RP operations we sit together with them and created a list of requirements that they think are essential for safe drone operation, which include emergency procedures, con-ops, checklists, communication links, navigation and a lot of different things that go into technical and operational side and then embedded them for the corridor process. Whenever a company would come into the corridor, the Civil Aviation would go through that checklist during their scrutineering session in the and there would be kind of reiterative process within the corridor until Department of Civil Aviation is satisfied that drone operator meets all the requirements. After that they would be issuing an RPA license for BDLOS operations outside the corridor in a geography or area, and they would be issuing and no time to other participants of airspace so that they are aware that there is drawn operation happening. Another very important thing, and that was a very quick fix, but we created a big WhatsApp group for Malave drone operations where we would add various regular meant operators as well as drone operators to be able to coordinate each and every flight, and sometimes especially in the Coma Island case, unmanned and manned aviation shared the same arrival and departure airport

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*Olivier:* I encourage participants to download the toolkit and are really look at it carefully in a way to see how can we leverage and adapt it to increase its reach and how accelerate potentially the integration of drones as an additional mode of transportation in the context of the delivering the vaccine.

### *Regulatory discussion*

*Zuheb:* From a regulatory perspective, we have a long and complex work cut out in front of us. Just as recently as yesterday, when I was speaking with the folks from the UK, there was a lot of interest across the entire ministry there to learn more and help develop regulations in, particularly in the context of development and humanitarian efforts. So, this is now beginning to become as far as I'm seeing a very vocal need and disaster will not wait or crises will not wait for us to be able and ready. It is on us to have the right mechanisms in place and to end to have procedures that allow us to

work together and build on each other's strengths to be able to deliver the services that we that we enter deliver.

*Leslie Carey:* from the ICAO perspective we want to encourage and do the best we can to facilitate the implementation of regulations around the world and harmonized regulations to the greatest extent possible. The harmonization is what makes it possible for companies to go into different countries and effectively conduct similar types of operations or even if the operations are not similar, the fact that they can set up and do humanitarian work in one country and scientific research or commercial applications in other countries, the basic requirements all being the same. Therefore, we need to get those regulations implemented around the world but resources to do this are extremely scarce. At ICAO, while it is approved for us to be doing the work, the Member States of ICAO did not provide us any funding to do it, which means we can only do a bit on the side, however, we don't have the ability to go out and help states on implementation.

*JC:* The idea that when we talk about unmanned aviation we are talking about aircraft and we should not shy away from that term. Aircraft is the one term within the ICAO framework for all the Member States that allows for that harmonization to be created, when talking about treaties or protocols that come into play regarding those documents that interlace the global fabric of aviation. It's based on the term aircraft, and so even though we're starting in a new as a new entrant (Unmanned aviation) at some point in the future we can project there is going to be some harmony, there's going to be some integration and with that in mind, if we maintain the same terminology that will put us in better stead going forward.

*Olivier:* we are facing two recurring problem across the different geographies where we work, first the actual local Civil Aviation authorities don't have the actual resources to develop that regulation and adopt them. Second problem how can ICAO contribute to the rollout and the implementation when there is no funding? I'm wondering if together we can influence donor communities, partners and I would love to hear Harrison's view also how can we try to unlock some resources for this this gap that's actually slowing down the space.

*Leslie:* the only way to have this situation change will be if there are outside partners who contribute funding to know specifically on this subject. So, whether funding comes from donor states or donor organizations? Or just simply partners who can say we will have funding for. The people. The human resources. If ICAO can in turn provide some training to those human resources and those human resources will then go out and do training. And rollout assistance for states. Now we're very used to doing that in all sorts of aviation topics, but so far there's just been. No support, no financial support. On the aspects related to UAS.

*Charles:* I just wanted to emphasize that we know that the Civil Aviation do not have enough staff and resources and this type of coordination also is very helpful for Civil Aviation to be able to accommodate this new technology that is not even for many of them in their original.

### Closing the session

If you have any questions regarding any of the above, please send an email to Zuheb or Olivier.

Next meeting will be focused on regulation

Next meeting is on **10 February 2021**