HUMANITARIAN INNOVATION FUND

Final Report for Diffusion Funding

Please try not to exceed 5 pages (Arial, 12pts) excluding attachments

Organisation Name	Humanitarian OpenStreetMap Team

Project Title	**OAM Diffusion**
Partner(s)	
Problem Addressed / Thematic Focus	'Disaster Preparedness', 'Information Management'
Location	Global
Start Date	January 1, 2017
End Date	February 29, 2018
Total Funding	49,969 GBP
Total Spent	49,969 GBP

Reporting Period	**January 1 2017 - Feb 29 2018**
Type of Innovation	**Imagery Sharing Platform**
Project Impact Summary	**OpenAerialMap (OAM) has become the reference platform for finding and sharing openly licensed imagery made available for preparing, responding and recovering from natural disasters. Through the HIF Diffusion project, OAM has increased the number of contributors, increased awareness and use of the imagery, and improved the user experience for uploading and contributing imagery.**

ACTIVITIES CARRIED OUT

1. Describe all the activities carried out. Please attach a workplan or log frame, if these were used.

Expected Results	Planned Activities	Outcomes
Increased volume of imagery shared and available through OAM	Establish partnerships with providers	Established partnership with IOM, WeRobotics, and several other smaller UAV organizations to continuously contribute imagery to OAM. Partnerships in process: DigitalGlobe, Planet, ChinaGEOSS Disaster Data Response.
	Use cases with humanitarian organizations	A blog series is expected in summer of 2018. We've established relationships with a number of humanitarian organizations who will share and document their use of OAM in disaster response.
	Support imagery integration	Supported large imagery integrations including DigitalGlobe Open Data, World Bank Zanzibar imagery, and imagery for disaster activations. An integration with DroneDeploy and OpenDroneMap will be completed in Summer 2018.
Social media presence and publishing promotional material	Communications campaign	A blog was launched alongside an increased presence on social media. Webinars, conferences, workshops were held as a part of in-person communications.
	Explainer video	Explainer video was completed and launched in Spring 2018: https://www.youtube.com/watch?v=7xvo5ilpGXU
	Conference presentations	OAM was presented at over 10 conferences and workshops
Implement interoperability standards and GIS mapping connectors	Participate in GEO/OGC WG	We attended the GEO Data Providers workshop in April 2017 and participated in online discussions throughout the year. We have also participated in Radiant Earth's work to coordinate OGC-related imagery workshops. We have also built out functionality to allow exporting from drone imagery processing software like OpenDroneMap and DroneDeploy.
	Implement standards	OAM implemented the OGC WMTS standard as a part of its web services offering.

We have also conducted a number of user experience improvements to the interface based on a user survey and feedback from UAV providers. We added user accounts to OAM that have greatly increased the usability to upload and manage imagery, as well as, user profile pages that allow UAV pilots and providers to showcase the imagery they have uploaded.

2. If you have made changes or amendments to the planned activities and objectives that have NOT been detailed in an *Agreement Amendment Form*, please list them here.

N/A

ACHIEVEMENTS

3. Has the diffusion been successful?

☐ Completely successful

X Significantly successful

☐ Partially successful

☐ Completely unsuccessful

Please explain further:

Overall the diffusion has been significantly successful. We've seen a tremendous increase in the number of drone companies and pilots uploading their imagery to OAM. The outreach activities and software development has resulted in an improved platform with wider reach. We are not marking as completely successful because we have not integrated as many satellite companies. This is mostly due to the competitive market satellite companies operate within and pushes them to leverage their own platforms instead of using OAM. We mark out a few of the other obstacles below.

MAJOR OBSTACLES

4. Please list the three most significant obstacles faced during the project and describe how they affected the planned activities and results.

Obstacle	Impact of Obstacle
1. Difficulty with a developer	The interactions and difficulties we had with a developer caused delays in completing work, hiring a new developer, and then redoing some work.
2. Delays in coordinating a location for capturing drone footage	Caused delays in developing the explainer video

3. Integrating with satellite imagery providers	Many satellite imagery providers are willing to share imagery manually but have not integrated with OAM through automatic methods

5. Please indicate what steps were taken to address these obstacles and whether the solutions were effective.

Solution	Effective?
1. We hired a new developer that was able to work on completing the activities and engaging in the project in ways that supported the work in what we needed.	Yes
2. We coordinated with the World Bank and their team in Fiji and Tonga regarding a film location. We were able to partner with them to film while they were flying test flights with the Tonga National Emergency Management Office.	Yes
3. We have worked with a larger consortium of imagery providers through Radiant Earth to establish a newer API spec. Imagery providers are working to implement this spec. OAM will work to support integration through the new API spec.	Yes

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AUDIENCE IMPACTED

6. Indicate the audiences, including affected population as well as the humanitarians, that have been targeted by the diffusion project and describe how their behaviour may have been impacted.

During the project we focused on three main audiences:

1. UAV pilots and commercial companies
2. NGO/Governments looking to use data from OAM
3. Satellite companies

Through our engagements with UAV companies and NGOs, we've seen improvements in uptake during the project. On a weekly basis, imagery is being uploaded by pilots and organizations. During major crises, for example Hurricanes Irma and Maria, OAM supported the regional disaster response efforts as a platform for sharing imagery from the region. Both UAV and satellite imagery was shared via OAM.

With NGOs, we've significantly engaged in the WFP UAV Working Group where OAM has been seen as a place for coordination of imagery across humanitarian actors. We've also seen significant uptake by NGOs looking to store and access the imagery they collected through projects. Organizations like the Indonesian Red Cross, GlobalMedic, and the International Organization for Migration have all begun to use OAM for their UAV activities.

Through all our conferences and workshops, OAM was very well received and people have been highly engaged in OAM and its potential use.

Contribution statistics:

	unit	1/1/2017	20/07/2017	30/09/2017	29/02/2018	Overall Increase	%
Number of providers		28	65	131	170	142	507%
Number of images		3,029	3,309	4,938	5,438	2,409	80%
Number of sensor types		28	70	132	163	135	482%
Total Area (only HOT images)	KM2	354,291	414,488	588,431	608,374	254,083	72%
Total file size (only HOT images)	GB	73	98	245	290	217	297%
Total Area (all OAM connected buckets)	KM2	140,106,077	140,166,274	140,340,217	140,366,637	260,560	0.19%**
Total file size (all OAM connected buckets)	GB	507	532	679	813	306	60%

** OAM combines both satellite and UAV imagery and the total area of UAV imagery is very small in comparison to satellite imagery.

Web Analytics:

	1 Jul 2016 - 31 Dec 2016	1 Jan 2017 - 1 Jul 2017	2 Jul 2017 - 31 Dec 2017
Total Sessions	19,801	36,331	45,760
Avg weekly sessions	733	1,397	1,830

***OPTIONAL:* PARTNERSHIPS AND COLLABORATION**

***If** you received HIF funding with partners or collaborators, please answer questions 7 and 8.*

7. How and why did the partnership change during the course of the project?

N/A

8. Are there plans to continue your partnership, either while continuing this innovation or on other projects?

☐ Yes, with this innovation

☐ Yes, with another project

☐ Maybe

☐ No

Please describe further:

NEXT STEPS

9. Is the project or innovation now to be replicated or scaled up?

X Yes, we will scale up in the same or similar context

☐ Yes, we will scale up within our organisation (including running more pilots or trials)

☐ Yes, we will replicate the innovation/project in another context or country

☐ Yes, the innovation/project will be replicated or scaled up by another organisation or stakeholder

☐ No

If you answered yes to question 9, please answer 9b:

9b. What model are you pursuing to scale up or sustain your innovation?

X Applying for more donor funding

☐ Selling the innovation or patent

☐ Cost recovery (for example, selling your service or being paid as a consultant to implement the innovation)

☐ Innovation to be taken up by organisation or government as a standard and included in ongoing planning and core funding by them

☐ Other_____

Please describe further:

We are currently continuing to pursue additional donor funding at the moment. We believe that additional funding directly from donors can support training and capacity building within organizations and communities that can use OAM, and help continue to evolve OAM to meet users' needs. By continuing to engage donor organizations we can further understand and develop OAM to meet the end user needs and be taken up by an organization or government as a standard and receive funding directly from the user.