A Review of 2014

Mapping a changing and challenging humanitarian context
MapAction is a humanitarian mapping charity that works through skilled volunteers. Its aim is to save lives and minimise suffering by making the response to humanitarian emergencies as efficient and effective as possible.

When a disaster strikes, MapAction deploys volunteer mapping professionals to the scene to help coordinate the response and get aid to where it is needed most. They help responders understand the ongoing needs of survivors, who may have lost their homes and livelihoods to the emergency.

MapAction’s disaster preparedness activities complement its emergency response by working collaboratively with humanitarian partners to enable an effective response.
It came as no surprise to me that, in typical MapAction style, when the call came to help Ebola-affected communities across West Africa, its dedicated team of volunteer GIS professionals immediately answered the call. Travelling to an unfolding health emergency of this type, with all its uncertainties, must have been an unnerving prospect. It is testament to MapAction’s rigorous training and the robustness of its operational planning that its volunteers, alongside their friends, families and employers, so quickly gave their support to this daunting, but vitally important response.

Remarkably this was not the only challenging deployment that MapAction undertook in 2014. Volunteers also quickly mobilised to help communities affected by conflict and insecurity in Iraq and South Sudan. Such unerring commitment to the humanitarian cause is nothing less than I have come to expect of the MapAction spirit.

This spirit will be important for the organisation over the coming year as it seeks to achieve key milestones in implementing its strategy. By 2019 MapAction aims to double its deployment capacity and extend the type of emergencies it responds to. It is an ambitious plan and will doubtless raise a number of challenges, but by taking these bold steps, I have every confidence that MapAction will broaden its impact and ultimately help more people affected by humanitarian emergencies.

MapAction will need committed support from all of us to achieve its goals, but with the courage and indomitable spirit I have come to know, I have no doubt the team will succeed.

[Signature]
2014 was a sobering year for humanitarian responders. South Sudan’s fragile peace fractured, the Syrian conflict spilled over into Iraq and the Ebola outbreak in West Africa emerged. Natural disasters continued to occur in Paraguay and Serbia amongst many others. Millions of men, women and children found themselves displaced, homeless, and bereaved. As ever it was the vulnerable who suffered most.

It is a great relief that the tide on Ebola seems to have turned but, as with so many crises, we cannot be complacent and must always be prepared.

To this end, we have expanded our preparedness activities, building stronger partnerships with colleagues from the World Bank and World Food Programme, as well as the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). We carried out Geographical Information Systems (GIS) and spatial awareness training with Unicef colleagues and their partners in the Democratic Republic of Congo and we actively contributed to the UN's Disaster Assessment and Coordination team training and simulation exercises.
MapAction’s unique team of highly skilled GIS volunteers demonstrated their professionalism, commitment and flexibility in each of these situations, many using their annual leave to do so. We developed our services to include greater analysis mapping, which has been particularly noteworthy in some of our Serbia, Paraguay and Ebola mission maps. We also introduced our web mapping kiosk, enabling us to provide a local access online capacity to web maps for service users to take away even when the internet is down. And we strengthened our monitoring capacity introducing new methods to capture our contribution to the humanitarian response.

We ended the year aware we had stretched our comfort zone. The humanitarian need demanded it and it looks as though events will continue to demand it. When MapAction was formed over ten years ago, we knew the value of GIS to decision-making but had no idea how this would benefit the humanitarian community. Now, through the dedication and imagination of our volunteers and staff, we know we make an important difference and, with your help, we will continue to do so for the next ten years and beyond.

Roy Wood,
Chair of Trustees
2014 – The Year in Figures

The Mission

**South Sudan**
January 2014
Conflict-related crisis
Affected population: approx. 4.4 million

**Serbia**
May 2014
Floods
Affected population: approx. 1.6 million

**Paraguay**
June 2014
Floods
Affected population: approx. 250,000

**Iraq**
June 2014
Conflict-related crisis

Our Response

- **3 volunteers, 1 staff**
  49 days’ contribution
  Deployment partner: UN OCHA

- **2 volunteers**
  17 days’ contribution
  Deployment partner: UNDAC

- **2 volunteers**
  32 days’ contribution
  Deployment partner: UNDAC

- **5 volunteers**
  59 days’ contribution
  Deployment partner: United Nations

- **Geospatial analysis of the humanitarian impact and priority needs**
- **Mapping support for humanitarian assessment and planning**
- **Information management for needs assessment and humanitarian coordination**
- **Development of systems and mapping templates to support the long-term response**
Liberia
September 2014
Ebola outbreak
Affected population: 9,712 cases, 4,333 deaths*

Sierra Leone
October 2014
Ebola outbreak
Affected population: 11,974 cases, 3,799 deaths*

Ghana, Regional Ebola response
November 2014
Ebola outbreak
Affected population: Regional total: More than 25,000 cases and more than 10,400 deaths across all affected countries*

4 volunteers, 2 staff
60 days’ contribution
Deployment partner: United Nations and International Humanitarian Partnership

4 volunteers
63 days’ contribution
Deployment partner: Department for International Development (DFID)

2 volunteers
41 days’ contribution

Information management systems to coordinate the response
Geospatial analysis to support strategic decision-making
Data management and analysis for the regional Ebola response

Source: WHO, as of 1 April 2015
Towards the end of 2014 a major focus of MapAction’s work was to help tackle the Ebola outbreak which was having such a devastating impact on communities across West Africa. This is an insight into our response in Sierra Leone, one of the countries hardest hit by this crisis.

According to the World Health Organization more than 3,700 people have died in Sierra Leone since the outbreak began, though the number of new cases is declining, and schools have reopened.

MapAction played a significant role in providing vital mapping data during the heart of the crisis. Ant Scott was one of the MapAction team of four volunteers deployed to Sierra Leone in our 50th emergency operation. The team arrived at a critical phase in the response. He explains:

“Our first job was to clarify MapAction’s role, talking to DFID, the Sierra Leonean government, UK military and others to find out how we could be most useful. There were lots of stakeholders involved, so we attended daily briefings throughout...
the deployment to make sure we were coordinating our efforts effectively.”

There were two sides to the data operation. The demand side involved case reporting – confirming how many suspected and confirmed Ebola cases there were, mainly from Ministry of Health sources. The supply side covered the availability of Ebola assessment and treatment resources. The key data was analysed and published in maps and other information products.

The staff in the National Emergency Response Centre (NERC) needed to know how to allocate resources – and they couldn’t do that properly if the data was unreliable. There were a number of organisations providing data, some of it conflicting, and it was a major task to assess the quality of this data, to reconcile it, then summarise it, often updating it daily.

“During MapAction’s four-week mission in Sierra Leone” says Ant, “we set up robust systems, so that when we left we were able to hand over to local staff to use the same processes to carry on updating the information. This was vital for those involved in the fight against Ebola.”
Iraq: a complex and changing humanitarian picture

In the summer of 2014 the world’s news agenda was dominated by the advance of non-state groups across northern and central Iraq, which resulted in the proclamation of the Islamic State at the end of June. By this time, an estimated 1.2 million civilians had fled sectarian violence from this spill-over from the Syria conflict.

In response to this growing humanitarian need, MapAction despatched a volunteer team to support the international response to the crisis. The United Nations’ centre of operations was in the process of shifting to the city of Erbil in Iraq’s Kurdish Region. MapAction was asked to help to set up an emergency operations room there and to provide mapped information as a crucial tool in coordinating the multi-agency response.

United Nations and other aid agencies in northern Iraq faced the challenge of responding to an extremely fluid and confusing situation, with reports of displaced people from more than 600 locations, which changed daily. Situation mapping therefore became vital for humanitarian operations planning, as well as for the actual routing of relief assistance on the ground. This included, for example, a 38-truck convoy carrying 938 tonnes of life-saving aid which was routed, a colleague at the World Food Programme later reported, based on MapAction’s mapped analysis.
MapAction delivered an essential service in difficult circumstances, providing humanitarian actors responding to the crisis with access to vital maps and data.

Craig Williams
Chief, Field Information Services
United Nations OCHA
It is widely acknowledged amongst the disaster response community that being prepared in advance of an emergency speeds up the response when a disaster strikes. It also ensures that communities can recover as quickly as possible. In MapAction’s area of expertise this equates to having better information management, in particular higher quality data, at our fingertips before an emergency happens.

MapAction has been at the vanguard of information management for emergency preparedness at the international level, and more recently has shared its expertise with national agencies in particularly vulnerable countries. Some useful first steps in this preparedness activity include (i) data sourcing, (ii) relationship building and (iii) training.

(i) Data sourcing involves establishing what data sources are available and which agencies in-country may be useful partners during an emergency. MapAction has a programme of initial reconnaissance missions (or recces) which document this knowledge.

MapAction volunteers have completed 36 priority recces for countries vulnerable to a humanitarian emergency since the start of this work. In 2014 these included Indonesia and Bangladesh – two countries highly prone to disasters. Volunteers helped to gather the typical background data that is required in the first stages of an emergency response – such as administrative boundaries, transport networks, current population statistics and health data.

(ii) Relationship building – National agencies or aid agency development programmes often keep data of better quality than globally available GIS data. It is more up-to-date, complete and richer in content. Increasingly such information is more available through web portals such as Geonode (e.g. those created by the World Bank Open DRI programme with whom MapAction also collaborates), but

• DRR – Disaster Risk Reduction
MapAction also ensures it has a current record of key agencies where data can be accessed on a request basis. This helps build relationships with agencies in disaster-prone countries to ensure better cooperation when an emergency happens. It also helps to build standardisation of data during emergencies and better data sharing amongst all responders.

(iii) Training is an important element of preparedness work ensuring that information management focal points for national agencies have tools, templates and processes in place to assist in the event of a disaster. In 2014 we carried out a preparedness mission at the request of the Government of Mali in preparation for a potential further Ebola outbreak. This included setting out a proposed information management structure and assessing training requirements.

Similarly MapAction carried out training in the Democratic Republic of Congo at the request of Unicef. Two MapAction volunteers travelled to Goma to train 32 Unicef staff and partners in mapping skills, geospatial analysis and data management processes.
As MapAction rises to new and different humanitarian challenges, we need to ensure that our team has the skills and experience to be able to deploy safely and deliver our much-needed service with all the complexities of an unfolding humanitarian crisis.

During 2014 MapAction dedicated 32 days of bespoke training for our volunteers. In March we undertook a comprehensive assessment of volunteer skills to identify expertise we could draw on for training, as well as to identify specific training needs. Following this, volunteers were invited to share specialist knowledge in modules at MapAction training weekends. Volunteer trainers also drew on key field experience to train their counterparts, ensuring when they next deploy they can benefit from the lessons learned from past deployments.

MapAction’s training is also outward-facing, learning lessons from our partners and from the changing technical and humanitarian spheres in which we operate. In 2014, for example, we were joined at our annual simulation exercise, by colleagues from the International Humanitarian Partnership, UNDAC, DFID, OCHA and the American Red Cross.

Beyond our own in-house training programme, MapAction staff and volunteers also participated in the INSARAG (International Search and Rescue Advisory Group) international simulation exercise in Costa Rica. In doing so, we had the opportunity to both test our own methodologies in a life-like scenario and also demonstrate our services to humanitarian partners.
Analysing our impact

While MapAction can readily report the number of maps it produces during an emergency, how do we assess their usefulness to humanitarian responders and, ultimately, to those affected by a disaster?

Monitoring and evaluation is routine in aid delivery programmes, but in MapAction’s field – information products and services – rigorous methods of impact evaluation are poorly developed. Our outputs and benefits are less tangible and measurable than, say, emergency food or medical provision. We operate within a network of information providers and aid agencies, so we can rarely establish simple cause-and-effect links. Moreover humanitarian emergencies are challenging contexts in which to be carrying out painstaking data collection or scientific comparisons.

After discussion with DFID evaluation specialists, MapAction is drawing on a logic model that explains how the charity’s planned actions contribute to its ultimate humanitarian goals, setting out causal linkages and (often hidden) assumptions. Crucially, this ‘theory of change’ establishes credibility through existing studies, published literature, and MapAction’s existing body of experience. As a result, MapAction’s effectiveness in an emergency can to some extent be evidenced simply by the fact that it responded in an intended and appropriate way.

Further evidence specific to the mission comes from a ‘contributions analysis’: to what extent have products and services contributed to quicker, more efficient and more effective humanitarian outcomes? We might ask which key actors used a particular map? How much did this influence their decision-making? What difference did this make for funding or aid programming? And ultimately, to what extent did this help people affected by the crisis?

These methods have been used for MapAction’s Ebola response and will become routine for future missions, underpinning our reporting and accountability needs, as well as improving our own organisational learning and development.
Collaboration is the cornerstone of our work. We work in partnership with a range of humanitarian responders in the field, but we couldn’t do this without a wide range of partners who help us make it happen.

In 2014 we continued our strategic partnership with the UK Government’s Department for International Development, without which much of our work would not have been possible.

We benefitted from the support of a wide range of charitable trusts that made generous grants so we could deliver more.

We received generous support from a number of companies and organisations that gave financial support, provided gifts in-kind and released their employees so they could volunteer with MapAction.

We reaped the rewards of all the hard work of supporters who raised sponsorship to take on all sorts of physical challenges, from running marathons to climbing Kilimanjaro.
A special thank you to...

Our Royal Patron, Prince Harry
The Department for International Development
The Hans K Rausing Trust
The Dulverton Trust
Esri-UK
The John Younger Trust
Mr Jörg Pilawa
Mr Alistair Storey
Mr Paul van Riel
Mr Farhad Vladi
Landmark Information Group
Ordnance Survey

And all the amazing people who have given so generously of their time and money to support MapAction’s work.

We would also like to thank the following organisations that released staff to volunteer on MapAction missions in 2014:


MapAction is a small, friendly organisation, staffed by people like us, so it is extremely easy to work with. Everything MapAction does is geared towards its core mission, so there’s no waste, politics or egos involved. Everyone who works there shares an infectious, common purpose and we always want to do as much as we can to support them.

Dr Richard Waite,
Esri-UK
Last year MapAction identified three key objectives to reinforce our response to a growing and changing demand. Next year we aim for further consolidation and development of our activities in each of the three main areas.

**Strategic Aim 1**

We have made progress in being a leading provider of mapping services at the front end of the world’s major emergencies as our timely response to South Sudan, Iraq and the Ebola crisis demonstrates and as we worked with others to deliver mapped analysis to humanitarian responders in each of these crises.

In 2015 we will maintain and strengthen our relationships with existing partners and expand the partnerships we support. This will enable us to support UN agencies, governments, regional actors and non-government organisations responding to humanitarian crises.

- We will continue to respond to rapid onset emergencies but will also provide assistance in conflict-related crises.
- We will develop the ability to support crises for the first eight weeks of an emergency with the development of a transition team to follow volunteer deployments where needed.
- We will expand the entry points for emergency response by developing new partnerships so that we can provide services at all levels of an emergency response wherever it is most needed.
Strategic Aim 2

In 2014 we strengthened our collaboration with others on technical development. We worked with the private sector to develop our web mapping Kiosk and built relationships with the World Bank and World Food Programme to expand our disaster preparedness activities.

In 2015 we will expand our preparedness activities, gaining a greater understanding of existing disaster management and information management systems in vulnerable countries and reviewing where we can add value. With our partners, we will particularly target Asia Pacific and Latin America and the Caribbean and where feasible, will review how we conclude emergency missions to build better preparedness for the next emergency. We will strengthen our own data preparedness and our data collaboration with others during response and we will provide innovative technical solutions to provide service users with an even better service.

- We will carry out preparedness assessment, training and follow up missions in three countries.
- We will carry out a thorough review of our data management strategy ensuring it delivers up to date and relevant data as it is needed by us and others.
- We will develop a product catalogue which serves other data providers automatically so ensuring a much greater reach of our products to agencies responding in affected countries or remotely.
**Strategic Aim 3**

MapAction has continued to transfer mapping and information management know-how to international and national responders over the past year through a number of simulations and training exercises with UN and National Disaster Management colleagues.

In 2015 we will assess our contribution and added value and will seek out partnerships to collaborate on training services.

Internally MapAction will continue to develop its resilience as an organisation: consolidating its IT system, developing its fundraising capacity and evolving its team training and deployment models to make sure they remain relevant for a fast changing world. In facing these changes the core of the organisation remains its people and the culture of an organisation founded around a kitchen table. Our dedicated team of professional volunteers will be at the heart of our work, demonstrating their commitment and talents in the most extreme circumstances.

Last year we gained new supporters, expanded our community of online supporters and gained the confidence of new trusts and foundations. But we still need to do more and we look forward to welcoming your support.
MapAction has three full time staff, five part time staff and the assistance of two part time specialists. Governance is carried out by an independent Board of Trustees, ensuring accountability. Annual reports and accounts are submitted to the UK Charity Commission.

### Income and Expenditure

#### 2014 financial activity*

#### Income 2014

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<th>Source</th>
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<td>Trust and Private Donors</td>
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#### Expenditure 2014

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<tr>
<td>Disaster Preparedness</td>
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<td>Capacity Building</td>
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<td>Governance Costs</td>
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<tr>
<td><strong>Total</strong></td>
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*subject to audit
Glossary

GIS
Geographical Information Systems, mapping technology that allows the user to create and interact with a variety of maps and data sources.

OCHA
Office for the Coordination of Humanitarian Affairs, part of the United Nations Secretariat responsible for bringing together humanitarian actors to ensure a coherent response to emergencies.

Photo credits

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For further information about how you can support MapAction’s work, please contact Chloe on 01494 56 88 99 or email: fundraising@mapaction.org.

Acknowledgements
Thank you to all MapAction supporters that have made a difference to the speed with which aid has reached men, women and children in times of urgent need.

esri UK
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