# SENIOR GIS/REMOTE SENSING OFFICER - UKRAINE

(Reference: 22|UKR|SGISO01)

## BACKGROUND ON IMPACT AND REACH

REACH was born in 2010 as a joint initiative of two International NGOs (IMPACT Initiatives and ACTED) and the United Nations Operational Satellite Applications Programme (UNOSAT). REACH's purpose is to promote and facilitate the development of information products that enhance the humanitarian community's decision making and planning capacity for emergency, reconstruction and development contexts. REACH facilitates information management for aid actors through three complementary services: (a) need and situation assessments facilitated by REACH teams; (b) situation analysis using satellite imagery; (c) provision of related database and (web)-mapping facilities and expertise.

IMPACT Initiatives is a humanitarian NGO, based in Geneva, Switzerland. The organisation manages several initiatives, including the REACH Initiative. The IMPACT team comprises specialists in data collection, management and analysis and GIS. IMPACT was launched at the initiative of ACTED, an international NGO whose headquarter is based in Paris and is present in thirty countries. The two organizations have a strong complementarity formalized in a global partnership, enabling IMPACT to benefit from ACTED's operational support in its fields of intervention.

We are currently looking for a Senior GIS/Remote Sensing Officer to support our teams in Ukraine.

**Department**: REACH

**Position**: Senior GIS or Remote Sensing Officer

**Contract duration**: 6 months

**Location**: Ukraine, base TBD

Starting Date: ASAP

## COUNTRY PROFILE

Following the escalation of the conflict in Ukraine on February 24th, 2022, military hostilities have caused widespread damage to infrastructure and houses, hundreds of civilian deaths, disrupted markets and essential services, and precipitated massive displacement within Ukraine and into neighbouring countries. Present in Ukraine since 2014, IMPACT is working across the country to provide humanitarian actors with rigorous data and in-depth analysis to ensure aid interventions are timely, appropriate, and relevant.

## POSITION PROFILE

IMPACT is seeking a candidate with a strong technical background, who has previous experience of working in the GIS/Cartography/Remote Sensing sphere. More specifically, the candidate should have experience of working on at least one of: collection and processing of socio-economic data; analysis of satellite imagery with different spatial and spectral resolution for the purposes of change detection, and agricultural monitoring. The candidate should understand concepts of cartographic design and be experienced in presentation of the results of spatial analysis using static and interactive mapping products.

Under the supervision of the relevant Research Manager and the Senior DRR Specialist or GIS/Data Specialist, the SGISO is responsible for providing technical backstopping for the activities within the unit they are assigned. Depending on the background and experience of the candidate, this will be either a) **the Inter-Sectoral Unit**, where the SGISO will provide spatial analysis support to the Humanitarian Situation Monitoring (HSM) team, or b) the **Disaster Risk Reduction Unit**, where the SGISO will support the Damage Assessments, Agriculture Analysis, or Hazards and Environmental Risks teams. Within these teams, the SGISO will be responsible for the application of geographic information systems in Ukraine, including relevant aspects of research design, support in designing data collection tools, ensuring (spatial) data quality, geospatial analysis, drafting of maps, and production of web maps and information management systems. In coordination with the relevant RMs and Specialists, the SGISO is required to support assessment planning in line with project and program objectives and with IMPACT's research cycle and other relevant guidelines.

The position is based in Ukraine, with the specific base to be discussed with the candidate.

## RESPONSIBILITIES

The responsibilities of the SGISO include the following:

- 1) RESEARCH PLANNING:
- In coordination with relevant assessment officer(s), support assessment planning in line with project and program objectives and with IMPACT's research cycle and other relevant guidelines;
- Contribute to draft assessment ToRs with a specific focus on the analysis plan, and related mapping, as well as data management plan;
- Develop geo-spatial analysis of assessment areas to be used in developing daily assessment plans, field movement plans and accompanying operational maps for field teams;
- In coordination with relevant assessment officer(s), support construction of quantitative sample.
- 2) REMOTE SENSING RESEARCH IMPLEMENTATION
- Harmonisation of available data through Secondary Desk Review (SDR) in the form of static maps, interactive dashboards or Web Maps;
- Plan and develop satellite-based modelling techniques (e.g. natural hazard susceptibility) which
  highlight hazards and risks for the country. Understand, maintain and improve models already present
  and running, in order to use them upon request;
- Suggest and conduct satellite-based analyses, such as rapid damage assessments, change
  detections, natural disaster mapping, and time series. Such activities will be based on a variety of
  different sensors including multispectral optical sensors, SAR sensors and very high resolution optical
  sensors;
- Liaise with IMPACT HQ on the procurement of UNOSAT services and satellite imagery.
- 3) GIS RESEARCH IMPLEMENTATION
- Ensure that collected data is properly geo-referenced, enabling the production of maps and related products;
- In coordination with relevant assessment officer(s), document all changes in data collection that lead
  to a modification in the agreed TORs, ensuring that the IMPACT CC and IMPACT HQ are informed
  and agree on the modifications.
- 4) DATA MANAGEMENT, CLEANING AND ANALYSIS



- Ensure that all collected data is stored in line with IMPACT's Data Management Guidelines, and with the ToRs (data management plan Annex);
- Ensure that spatial data is revised and cleaned, and that all revisions are recorded;
- Conduct spatial analysis on collected data as per ToRs;
- Ensure that data and its spatial analysis are validated by IMPACT HQ before product drafting stage;
- Ensure that data and its analysis do not contain personal or other sensitive information and are validated by IMPACT HQ before sharing to external parties;
- Ensure the quality and accuracy of technical information provided as well as the confidentiality and protection of collected information.
- Development and maintenance of country-level databases for the consolidation of all assessment-related and GIS data in country.

## 5) DRAFTING OF PRODUCTS

- Ensure accurate linkages between spatial databases and assessment data;
- Maintain regular communication with IMPACT HQ on progress and deadlines for GIS products;
- Ensure the drafting of timely and accurate GIS products, which comply with IMPACT's guidelines

## 6) EXTERNAL ENGAGEMENT

- Link with relevant partners to consult and involve them in the GIS components of a research cycle;
- Represent IMPACT in relevant meetings/working groups and support the presentation of research findings through GIS inputs to relevant third parties in order to enhance their use and impact;
- Follow up on issues identified by partners or during meetings/working groups;
- Promote an active use of datasets, GIS products and research findings by partners and the broader humanitarian community for their decision making.

#### 7) CAPACITY BUILDING

- In coordination with the Research Manager and GIS Specialist, support the development and implementation of capacity training plans for GIS and other team members, particularly on remote sensing capacities;
- Be available to provide regular support and technical backstopping.

## 8) ACCOUNTABILITY TO COMMUNITIES AND BENEFICIARIES

The SGISO is responsible for ensuring that all interactions Ukrainian communities are conducted in a respectful and consultative manner. Due attention must be paid to ensuring that communities are adequately consulted and informed about IMPACT programme objectives, activities, beneficiary selection criteria, and methodologies. This is the responsibility of every IMPACT staff member.

## 9) CONFIDENTIALITY AND DATA PROTECTION

The SGISO will maintain the strictest confidentiality on all data collected and related processes. He/she will actively take measures to prevent the unauthorized sharing of any information and data belonging to IMPACT and its partners, or collected during his/her assignment with IMPACT.

## REQUIREMENTS

- ❖ Academic: Excellent academic qualifications, preferably including a Master degree related to GIS, Remote Sensing, Data Science, Geography or related disciplines;
- Theoretical knowledge: Should have remote sensing theoretical knowledge on projection, raster resolution, type of satellite images, band combination etc.;
- Research skills: Advanced experience with geo-spatial information management and analysis, and excellent spatial analysis skills;
- ❖ Software skills: Advanced knowledge of ESRI suite software (ArcPro, ArcMap, ArcGIS Online); good knowledge of Google Earth Engine; advanced knowledge of Microsoft office including Excel; knowledge of R, STATA, Python or equivalent statistical software an advantage; knowledge of Adobe Suite, particularly InDesign and illustrator an asset;
- Knowledge of remote sensing tools: Good knowledge of tools such as ESA SNAP, Orfeo Toolbox, GRASS, Erdas imagine;
- ❖ Years of work experience: At least 3 years of relevant working experience;
- Familiarity with aid system: Experience in a complex humanitarian emergency is not required, but is an asset;
- Communication/reporting skills: Excellent communication and drafting skills for effective reporting;
- Multi-tasking skills: Ability to multitask with tight deadlines, on numerous research cycles;
- **Level of independence:** Proven ability to work independently;
- Cross-cultural work environment: Ability to operate in a cross-cultural environment requiring flexibility;
- **Experience in geographical region:** Past experience in the region is desirable;
- Language skills: Fluency in English required, competency in Ukrainian or Russian an asset;
- Security environment: Ability to operate in a complex and challenging security environment.

## **CONDITIONS**

- Salary defined by the IMPACT salary grid; educational level, expertise, hardship, security, and performance are considered for pay bonus
- ❖ Additional monthly living allowance provided in country by IMPACT's partner ACTED
- ❖ Food and lodging provided at the organisation's guesthouse/or housing allowance (depending on contract length and country of assignment)
- Transportation costs covered, including additional return ticket + luggage allowance
- Provision of medical, life, and repatriation insurance + retirement package