



**Memorandum of Understanding**  
between  
**WATER & AGRICULTURE DIVISION of**  
National Engineering Services of Pakistan (NESPAK)  
and  
**DEPARTMENT OF SPACE SCIENCE**  
University of the Punjab

**1. Purpose**

The purpose of this **Memorandum of Understanding** (MoU) is to create and maintain an effective working relationship between National Engineering Services of Pakistan (NESPAK) and University of the Punjab with the overall aim to achieve the goal of enhancing Space Based Geographic Information System and Satellite Sensing applications, Geospatial technologies and data development. This can be achieved through the following specific activities:

- Help in improving the Geo-Spatial Database Development i.e., cadastre data and landuse development of Pakistan's major cities.
- Promoting new technologies to achieve the maximum benefit of Space Applications in the field of Satellite sensing and Geographic information System to map the mega cities and develop the attribute data to facilitate the various government departments for multipurpose analysis.
- Supporting each other in achieving the overall goal of Public Private Partnership (PPP) in Land use development and cadastre mapping sector.
- Research collaboration and writing joint research papers and publications.
- Long term monitoring of the ongoing and future projects.

**2. Preamble**

**Whereas** NESPAK focuses on the promotion of commercial geospatial database development and cadastre mapping of Lahore and Karachi.

**Whereas** Department of Space Science, University of the Punjab focuses on the quality research-based co-operation, dissemination of its knowledge-based expertise and solutions to the research, development and professional sectors.

**Recognising** that there are considerable avenues for synergies, collaboration and mutual support between NESPAK and Department of Space Science, University of the Punjab;

**Whereas** both NESPAK and Department of Space Science, University of the Punjab, hereafter referred to as the "**parties**" intend to support each other's work and promote a working relationship for the benefit of promoting cadastre mapping landuse development in Pakistan.

**3. Definition of the Contractual Parties**

**3.1. NESPAK Engineering Services of Pakistan** NESPAK (Pvt.) Limited is Pakistan's premier consultancy organization. NESPAK enjoys the reputation of being one of the top engineering consultancy organizations in Asia and Africa. NESPAK was established in 1973 as a private limited company by the Government of Pakistan. The objective of its creation was to create a pool of talented engineers, attain self-reliance in engineering consultancy and replace foreign consultants. Currently NESPAK has total strength of over 4500 employees.

**3.2. University of the Punjab**, Department of Space Science (DSS), University of the Punjab, Lahore.



Pakistan, which is a major educational and economic driver in Punjab and flourishing as a highest seat of learning and disseminating quality education in various advanced academic pursuits in space science applications in various scientific disciplines such as Agriculture, Forestry, Drought, Natural Disasters Management (Floods, earthquakes, Landslides etc.), Environmental monitoring, Planning and development, **Landuse/Landcover Urban management, Cadaster mapping**, Potential dam site selection, monitoring and Management, Land suitability and soil analysis, hydrology and ground water analysis and much more using State of the art Space Applications, Satellite sensing, Drone (UAVs), Geographic information system and multisource data.

#### **4. Mutual Responsibilities**

Both Parties, agree to:

- Endeavour to the best of their capabilities to promote research and share information on the opportunities, specifically in sectors identified herein. In this regard, representatives of the Parties shall interact frequently electronically or otherwise;
- Provide technical and logistical support to each other as and when required;
- Acknowledge support provided by the other party in implementation of cadaster mapping and Landuse development interventions by using of logos of both parties, joint project proposals, joint research and surveys etc.;
- Share lessons learnt in other spheres e.g. database development, geospatial analysis, parcel mapping drone surveys and areas not mentioned above;
- Cooperate in any other area or activity, which is mutually agreed upon by both parties subsequent to signing of this MoU.

##### **4.1. Responsibilities of University of the Punjab:** Department of Space Science, University of the Punjab, within its territorial jurisdiction, agrees to:

- Support NESPAK in establishing relationships with multinational companies (MNCs) and Corporate Sector to engage them in Corporate Social Responsibility and commercial Space Based Geographic Information System and Satellite Sensing related initiatives;
- Conduct comprehensive surveys to obtain attributes data for cadaster mapping and landuse development of Lahore and Karachi city.
- Seek the possibility of collecting cadaster records from various departments in collaboration with NESPAK;
- Jointly develop educational/informational material and research articles/publications for the promotion of commercial Space Based Geographic Information System and Satellite Sensing related activities;
- Work in close collaboration with NESPAK in implementing joint interventions e.g. joint project proposals.
- Capacity building of NESPAK's staff and investors alike;
- Use of drones to assist NESPAK in dealing with land use development and parcel mapping.
- Regular sharing of Space based data and satellite imageries with NESPAK for further analysis.

##### **4.2. Responsibilities of National Engineering Services of Pakistan:** NESPAK, within its territorial jurisdiction, agrees to:

- Work closely with Department of Space Science, University of the Punjab in introducing commercial Space Based Geographic Information System and Satellite Sensing related Projects;



- Support University of the Punjab's strategies designed to enhance the capacity of investors (associated with NESPAK) for business development;
- Facilitate the provision of data and information from its relevant sections/departments, for any mutually agreed tasks in the MOU;
- NESPAK will facilitate the students of University of the Punjab for research on its project areas.
- NESPAK will provide operational support, logistic support, data sharing and any other assistance as and when required for the agreed projects among both parties.

#### **5. Financial Arrangements**

Both parties agree that financial arrangements i.e. the provision of funds for the scope of work as mentioned in the Section 4.1 and Section 4.2 will be decided individually on the basis of each activity and in accordance with the mutually agreed work plan. For activities which have financial implications, both parties will agree in advance, which will be on No Profit No Loss basis, on agreeable circumstances. In this scenario, both parties hold intellectual property rights to all sorts of knowledge products.

#### **6. Communications and Trademarks**

Any specific discussions or negotiations resulting from this Memorandum of Understanding (MoU) will be subjected to the terms of any agreements entered into force between NESPAK and University of the Punjab. Unless otherwise agreed in writing, each of the parties will keep any information exchanged under this Memorandum of Understanding in strict confidence and will not without the written consent of the owner of such information disclose, allow access to, transmit, transfer or make it available to anyone else for any use whatsoever. Announcement of the signing of the MoU or initiatives undertaken under the MOU will be made by the written consent of both parties.

This MoU is intended solely to provide a framework for implementing the relationship described herein, but does not itself create legally enforceable rights or obligations for either party or its members and is not a legally binding agreement.

Both the Parties will ensure that the trademarks that are planned to be used in any of the campaign must be approved prior to their usage. Also the communications plan at minimum should outline target audience, media prioritization and content.

#### **7. No Detrimental Activity**

Both the Parties (NESPAK and Department of Space Science, University of the Punjab) will not engage themselves in any activity during the term of this MOU, which may be against the mission of each other.

#### **8. Conflict prevention and resolution within the engagement**

In the event of any dispute, difference, or question which may at any time arise between the Parties hereto or any person claiming under them, touching or arising out of or in respect of this MoU or the subject matter thereof, the Parties shall amicably settle the same in a spirit of mutual goodwill and in the best interest of project.

#### **9. Adherence to Ethical Code of Conduct**

Both parties will adhere to the following code of conduct and ethics, which describes how we should relate to our missions, the world and ourselves.

9.1 Wherever possible, seek dialogue and avoid confrontation.



- 9.2 Respect the diversity of the peoples of the world. They will not discriminate or pre-judge others on cultural, social, ethnic and religious grounds.
- 9.3 At all times conduct themselves in a manner, which brings credit to Parties and enhances the efficiency and effectiveness of our organizations. We will seek to minimize any adverse environmental impact of our activities, and make sure that they comply with the environmental protection legislations.
- 9.4 In their daily life, both at work and in their private time, they will practice and promote what we preach by doing all they can to reduce pollution / waste and wherever possible use renewable / recyclable materials; they will also encourage all those with whom they interact to do the same.
- 9.5 Advocate best environmental practices through actions and refrain from practices that harm the mission and goals of both Parties;
- 9.6 Not engage media on issues, including those related to cadaster mapping but not limited to it, which are controversial in nature.
- 9.7 Not make statements, which contradict our mission and goals.

#### **10. Term of the MoU**

The implementation period of this MoU would be effective from May-2021 to May-2023

#### **11. Early Termination**

Either party shall have the right to terminate this MoU after giving 30 days prior notice in writing to the other party. If either party terminates the MoU, steps shall be taken to ensure that the termination does not affect any prior obligation, project or activity already in progress.

**Signed this on 31<sup>st</sup> Day of May, 2021**

Signed by for and on behalf of the  
**UNIVERSITY OF THE PUNJAB**

Signed by for and on behalf of the  
**WATER & AGRICULTURE DIVISION, NESPAK**

  
**Prof. Dr. Niaz Ahmad Akhtar (S.I.)**  
Vice-Chancellor

  
**Mansoor Ali**  
General Manager/Head

**Department of Space Science, PU**

  
**Prof. Dr. Syed Amer Mahmood**  
Chairman