ToR for PEZA EID GIS

Project	EID Information Management System – GIS Component	
Proposed Service Provider	GEOPLAN	available Budget: 10,000 € (equipment, programming, and provision of geodata) Capacity Development: 4,000 €
Background	PEZA is promoting implementation of its Eco-Industrial Development (EID) approach in public and private economic zones. For implementation of EID measures comprehensive information is required, this includes technical data to be stored in a database as well as geographical information to be stored and handled in a GIS.	
Purpose	Purposes of a GIS for implementation of EID measures are: • Visualisation of information stored in the database of the IMS in a spatial context: e.g. presentation of the performance of the zone with regard to environmental qualities; status of utilities (STP interconnection, power lines etc.) • Facilitation of planning and management in the economic zone: e.g. with regard to disaster risk management (spatial display of relevant infrastructures, display of specific risks, risk analysis). • Support of investment promotion: e.g. display of vacant lots and their features on a platform accessible for potential locators.	
System Architecture	The GIS is part of the integrated PEZA EID Information Management System. This system consists of three tiers: 1, a **database** handling locator and zone specific data 2, the **GIS** handling geographical data of the 4 PEZA Public Zones 3, a **content management system** handling the online versions of PEZA's EID Management Manual and documents relevant for PEZA's EID Inititative. The GIS will be featured as follows: • The system will be located on PEZAs MIS-Server at the headquarter. • Remote users will have online access via internet connection. • The system will be linked with the database of the PEZA EID Information Management System. As much information as possible will be stored in the database. Only database information (attributes) specific to the GIS layers or exceeding IMS database structure will be stored in the GIS database.	
System Management	Management of the system will be provided with the following set-up: • **IT issues**: responsible unit MIS (hardware, backup, security, online access functions • **GIS issues**; ESG (standard data catalogue, integrity of spatial data, GIS functionalities, display functionalities, reporting and analysing procedures) • **Local issues**: FISDs (additional local data exceeding the standard data catalogue (e.g. photos; updating of local geographical information); editing of zone specific data	
User Rights	The system will provide user specific access;	

	• **system managers** in the headquarter (ESG, MIS) will have overall rights; • **responsible staff in the ecozones** (FISD, EMD?) will have access and editing rights only to data specific for their zone; • For **locators and potential investors** the system will provide an internet based viewing function (GeoExplorer), displaying only selected information without any possibilities to edit. • For **PEZA managers** the system will provide dashboard functions giving spatial information on the environmental performance of the zone(s) • All users shall have the option to send comments / queries to the system administrator or the specific FISDs.
Procedures for Quality Assurance, updating and publication	For quality assurance a management manual, documentation and a user handbook have to be provided. • The **user handbook** will be the official handbook of the system provider, extended by description of additional features being created specifically for this system. • **Documentation** will be provided for the additional features being created specifically for the system. • The **management manual** will comprise the rules for maintaining the system and ensuring quality and integrity of data. Following procedures will be essential (list to be amended): o updating procedures for geographical information and database o back-up procedures o integrity checks – linkage to IMS; o design and implementation of new procedures / modules o expansion of data catalogue o handling of local data o definition of user and management rights o procedures to change catalogue of data displayed in the GeoExplorer o …
Objectives of the assignment	To establish a GIS as integral part of PEZA's EID Information Management System
Expected Results	R1: GIS structure as part of the EID IMS at national level (for all 4 public zones) is in place. R2: GIS for MEZ 1 is operational R3: PEZA is able to manage the GIS, and to maintain the system and data integrity.
Tasks	T1: deliver and install Manifold GIS System according to the above specifications; edition and nos. of required licenses to be agreed with PEZA and GTZ. T2: Creation and attributation of GIS layers according to the standard data catalogue. (please refer to Annex 1) T3: Creation of standard reporting formats according to the attached list of

	reports (zone and object specific) (please refer to Annex 2). T4: Programming and establishing a GIS-Viewer (GeoExplorer) for display of maps and reports via the internet. T5: Capacity development of PEZA staff according to attached course characterisation form. (Annex 3 to the ToR) T6: Provision of hands-on training (technical support) to PEZA after having handed over the system (until end of August, 2009) T7: Quality Assurance, Documentation and Reporting
Outputs / Deliverables	D1: Manifold GIS including handbook D2.1: standard GIS layers and related georectified picture data including documentation for MEZ1 D2.2: provisional empty standard GIS layers for CEZ, BEZ, BCEZ D3.1: Standard reporting procedures including printing functions functional for all four zones (zonal level) D3.2: Standard reporting data for display via GeoExplorer for specifc objects D4: GeoExplorer with a set of standard layers and reports, one version for PEZA Managers, one Version for external users. D5.1: Training Courses D5.2: Training Material D6: Support log D7.1: GIS Management Procedures (draft procedures to be delivered by PEZA, service provider will check feasibility and efficiency and propose revision if required) D7.2: Documentation of procedures, geoexplorer and programmed reports, training materials etc. D7.3: Inception Report (initial assessment), 1 Progress Report (tasks implemented, achievements, problems encountered, adjustments made); 1 Final Report (problems encountered, lessons learned, adjustments made, training report according to course characterisation format (Annex 3 of this ToR),
Technical proposal	The technical proposal shall give a comprehensive overview on essential specifications of the system, on expected problems, bottlenecks and shortcomings and propose strategies to tackle these. In addition the proposal shall clearly identify technical and organisational requirements of the service provider to properly execute the tasks. The technical proposal shall also provide justification for the various cost position.
Financial proposal	Financial proposal shall consist of two separate parts: Part 1: hardware, programming and data production; Part 2: capacity development including hands-on training (= technical support after handing over the system) The financial proposal should comprise the following positions: Part 1: • Purchase of software • GIS mapping and data production

	• Programming and installation • Documentation • Administration • Supplies, communications (incl. justification) • Miscellaneous • Reimbursable costs: o Travel (no of person, flights, unit rates) o Per diems (no of days, unit rate) o Accommodation (no of overnight stays, unit rates) Part 2: • Preparation of training materials • Printing costs • Training costs • Hands-on Training • Reimbursable costs: o Travel (no of person, flights, unit rates) o Per diems (no of days, unit rate) o Accommodation (no of overnight stays, unit rates)
To be provided by PEZA	Following information / standards will be provided by PEZA (list to be amended): • database structure of the IMS • technical data, standards, security issues of PEZA server and PEZA ISO 9000 TQM • standard data catalogue (to be further elaborated in discussion with the service provider); including provisional code plans (see Annex 1) • list of required GIS and display functions (e.g. dashboard) (see annex 2) • list and contact details of responsible staff (MIS, ESG, FISD) • Look-up-table locators / lots as described in Annex 1 / Layer: lots (the LuT can provide all information on the specific locator available with PEZA; however data consistency with the IMS / Establishment section has to be ensured (to be coordinated with IT STE)) • spatial information (maps, CAD files if any, cadastre information etc) for production of GIS layers • distance to CIP / Airport from main gate • distances to nearest Hospital / Fire Stations / Police Stations from the various gates and their names and addresses (to be stored in IMS database)
Scope for Capacity Development	For proper establishment of the GIS comprehensive capacity development will be required. Target Groups and scope of CapDev: **responsible GIS Manager and deputy** (ESG): • Has to understand GIS philosophy and set-up; • be able to draft new functionalities (implementation might be executed

	with external support) • be able to use GIS and ensure data integrity • has to perform duties under system management **IT Manager and deputy** (MIS): • basic understanding of GIS requirements in terms of IT technology **local GIS officer and users** (FISD-MEZ, EMD): • use of functionalities • data management and editing Capacity development shall be implemented through training courses, hands-on training and provision of technical support. Training materials and users manual shall be provided by GEOPLAN in hard and softcopy.
Schedule	Implementation and capacity building have to be executed before end of August, 2009.